EXPLORING THE POTENTIAL CONTRIBUTION OF ORGANIC COMMUNITY FOOD GARDENS FOR SUSTAINABILITY: THE PERSPECTIVE OF CULTIVATORS AND CONSUMERS

by

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Exploring the potential contribution of organic community food gardens for sustainability: the perspective of cultivators and consumers

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I further declare that I have not previously submitted this work, or part of it, for examination at Unisa for another qualification or at any other higher education institution.

SIGNATURE

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ABSTRACT

The exponential rise in global organic food product sales indicates a transformative shift in consumer preferences towards healthier, more sustainable, and environmentally conscious food choices. This qualitative study, grounded in an interpretivist paradigm, explored community food gardens' potential contribution to sustainability based on cultivators of such gardens and consumers' position on organic food products' consumption in general. The research aimed to mitigate consumer barriers and enhance environmental, social, and economic sustainability for cultivators. Findings revealed South African consumers associated the term 'organic' with health and environmental benefits but stressed the need for accessible. affordable, and trustworthy organic food products. Consumers' views on organic community gardens support sustainability, local engagement, and combating food scarcity. Cultivators emphasised fresh, nutritious produce and proposed educational programmes to overcome identified barriers. A holistic approach can optimise marketing opportunities, integrating word-of-mouth, online presence, education, and accessibility. The study recommends comprehensive consumer education, curricular integration, non-governmental organisation-led initiatives, transparent cultivator practices, supportive government policies, engagement with certification bodies, and targeted awareness campaigns to enhance consumer purchase intent and sustain local organic community gardens.

KEYWORDS

organic; community gardening, sustainability, sustainable development, consumer behaviour, purchase intent, South Africa, certification, sustainable agriculture, cultivation.

SUMMARY

This study investigates the largely unexplored debate surrounding organic versus nonorganic food products in South Africa, particularly focusing on the potential impact of organic community gardens in achieving Sustainable Development Goals (SDGs). With a commitment to addressing social (SDGs 2, 3, and 15), environmental (SDGs 2, 12, 13, and 14), and economic sustainability (SDGs 8 and 9), the research explores the perspectives of both community garden cultivators and South African consumers. A community garden is perceived as a collectively utilised and public area where residents in the nearby vicinity collaborate in tending, harvesting, and upkeeping a space dedicated to the cultivation of food. The study highlights these spaces' critical role in improving food availability for the local community and potential contribution towards meeting SDGs. While recognising the growing trend of organic consumption in South Africa and its global significance, the study aims to shed light on the potential benefits and contributions associated with organic community gardens. The investigation considers factors such as consumer and cultivator perceptions and barriers to organic cultivation and consumption, emphasising the need for understanding both cultivators' and consumers' perspectives to uncover marketing opportunities in the organic food product market.

Extensive literature has examined various facets of the SDGs and the interconnected social, economic, and environmental pillars constituting these goals. While past research has shed light on the significance of community gardens and the broader context of organic food products, the South African link between organic community gardens and their multifaceted contributions to sustainable development remains largely unexplored. Thus, the investigation aims to provide a comprehensive understanding of the potential market and challenges associated with organic community gardens, offering valuable insights for sustainable development initiatives in South Africa. The research is justified by its alignment with global sustainability priorities, the surge in the organic food product market, and the imperative to bridge the gap between organic food production and consumer purchase intent of these products.

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The study adopts an interpretivism paradigm and employs a qualitative research methodology to fulfil its objectives. This paradigm is chosen due to the human (consumers and cultivators) focus of the study. Furthermore, qualitative research, known for its descriptive, exploratory, and contextual nature, is deemed appropriate to gain a comprehensive understanding of perceptions, knowledge, and barriers related to the purchase and cultivation of organic food products. Moreover, the interpretive approach recognises the socially constructed nature of reality, emphasising multiple interpretations rather than a single, observable reality. In addition, purposive and snowball sampling methods are used to select both consumer and cultivator participants, involving community food garden projects managed by cultivators in the Western Cape, South Africa. The inclusion criteria for both cultivators and consumers included age requirements (above 18) and specific involvement or interest in community gardens or organic food products. However, it should be noted that the study faced limitations related to the COVID-19 pandemic, which impacted the availability of cultivators, as the Western Cape government was unable to sustain community gardens during this time. Moreover, consumer participants were recruited through social media (Facebook), using a separate profile and email for researchrelated communication to maintain confidentiality. Semi-structured, self-administered interviews were conducted online due to pandemic restrictions and were recorded with participants' consent. Twenty consumer and four cultivator interviews were conducted, and participants' anonymity was maintained. Thereafter, an iterative process was employed in data analysis, involving real-time interaction with data, transcription of interviews, and coding using Atlas.ti.23 software, and thematic tabulation.

The study's findings reveal that South African consumers predominantly associate the term 'organic' with health, eco-friendliness, and ethical farming practices, although knowledge gaps were noted. Furthermore, trust in the labelling of organic food products varies, which highlights the importance of transparency in the organic food market. Diverse perspectives on health benefits and affordability concerns were also noted. Therefore, the purchase intent of organic food products is influenced by factors such as cost, label trust, accessibility, animal welfare, taste, and convenience. This highlights the necessity for organic food products to be affordable, accessible, and trusted in order to promote sustainable consumption. In addition, consumer participants exhibit diverse views on organic community gardens, expressing strong

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support for communal benefits, sustainability, and a preference for local entities over larger commercial networks. Consumers view community gardens as a means to address food scarcity, foster community engagement, and promote self-sufficiency and sustainability, highlighting potential positive impacts on social sustainability. In addition, consumer awareness of local organic community gardens varies, necessitating targeted education and promotion efforts to foster increased support for sustainable, locally driven food production. Thus, marketing opportunities for organic food products from organic community gardens can be optimised through a combination of local 'word-of-mouth' influence, strategic online presence on social media platforms such as Facebook and Instagram, leveraging the educational potential of community gardens, and ensuring convenient accessibility to meet diverse consumer needs.

From the cultivators' perspective, cultivators in organic community gardens stress the need for fresh produce and consider these gardens as a solution to provide access to nutritious food for local communities. Furthermore, they strongly believe in the benefits of organically grown food, which include improved taste, appearance and nutritional value. Moreover, these cultivators identify certain barriers to organic community garden cultivation, such as the high certification costs, theft, land availability constraints, and financial challenges. While acknowledging initial challenges, cultivators highlight the long-term benefits of organic gardening, including soil improvement and sustainable production. Cultivators propose educational programmes, youth engagement, and empowerment of marginalised individuals as opportunities. Cultivators' commitment to organic community garden initiatives extends beyond commercial interests, emphasising community support and local sustainability.

The recommendations drawn from the conclusive findings aim to strengthen organic community gardens' role contributing towards sustainability. Key recommendations include the necessity for comprehensive consumer education programmes, emphasising the distinctions between organic and non-organic foods, highlighting health benefits, environmental impact, and ethical farming practices. Educational institutions are urged to integrate organic agriculture and sustainability into curricula, while non-governmental organisations (NGOs) and community networks should

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conduct workshops and advocacy campaigns to bridge knowledge gaps. In addition, establishing transparent practices among organic community garden cultivators is essential for building and maintaining consumers' trust and addressing concerns about organic labels. Government support through policies, financial incentives, and educational initiatives is vital, with a focus on reducing certification costs for small-scale cultivators. Collaboration among stakeholders, including certification bodies, retailers, and marketers, is crucial for achieving these recommendations and fostering awareness and support for local organic community practices.

The study contributes significantly to the limited research on organic food products and organic community gardens' potential for sustainability within the South African context. Aligned with the three pillars of sustainability – environmental, social, and economic - and corresponding with the SDGs, the research enriches social sustainability theories by addressing issues such as food security, nutrition, and community well-being. Additionally, it proposes strategies to reduce certification costs for small-scale cultivators and expand the market for local, organic produce, aligning with economic sustainability goals. Moreover, the study provides practical insight into the significant role of organic community gardens in fostering environmental sustainability, contributing to multiple SDGs related to responsible consumption, climate change mitigation, and ecosystem conservation. The findings offer refinements to the Theory of Planned Behaviour (TPB), providing a nuanced understanding of consumer attitudes, decision-making processes, and the complexities of factors influencing purchase intent for organic food products. Furthermore, the study sheds light on barriers organic community garden cultivators face and identifies marketing opportunities, offering a comprehensive theoretical framework for policymakers and practitioners to promote sustainability and widespread acceptance of organic food products within the distinctive contours of the South African context.

Existing research on organic food products and their role in sustainability, particularly within South African organic community garden initiatives, is limited. However, future research in this domain could significantly contribute by conducting extensive data collection and robust statistical analysis to measure the tangible impact of organic community gardens on sustainability domains, strengthening their alignment with

SDGs. Additionally, research efforts should focus on improving consumer awareness of organic food products, addressing trust issues in organic labels, reducing certification costs for small-scale cultivators, and exploring cultural variations in organic food perceptions across diverse regions in South Africa. Moreover, investigating the economic aspects of organic community gardens, engaging youth in sustainable practices, assessing marketing strategies' effectiveness, understanding the diversity of community gardens, and conducting international comparative studies are recommended avenues to deepen our understanding of the long-term sustainability and global perspectives of South African organic community gardens.

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LIST OF ACRONYMS

ACB	Accredited Certifying Body
ADHD	Attention-Deficit/Hyperactivity Disorder
AI	Artificial Intelligence
BMI	Body Mass Index
CLA	Conjugated Linoleic Acid
DAFF	Department of Agriculture, Forestry and Fisheries
EPA	Environmental Protection Agency
ERC	Ethics Review Committee
FAO	Food and Agricultural Organisation
FiBL	Research Institute of Organic Agriculture (Forschungsinstitut für
	biologischen Landbau)
GMOs	Genetically Modified Organisms
ICA	Inductive Content Analysis
IFOAM	International Federation of Organic Agriculture Movement
LSM	Living Standard Measure
MDG	Millennium Development Goals
MSG	Monosodium Glutamate
NDP	National Development Plan 2030
NGO	Non-Governmental Organisation
OAPP	Organic Agricultural Production and Processing
OECD	Organisation for Economic Co-operation and Development
PGSs	Participatory Guarantee Systems
PGS-SA	Participatory Guarantee System – South Africa
SAARF	South African Audience Research Foundation
SABS	The South African Bureau of Standards
SANS	South African National Standards
SAOSO	South African Organic Sector Organisation
SDG	Sustainable Development Goals
SDG 2	end hunger, achieve food security, improve nutrition, and promote
	sustainable agriculture (ZERO HUNGER)

SDG 3	ensure healthy lives and promote well-being for all ages (GOOD HEALTH
	AND WELL-BEING)
SDG 8	promote sustained, inclusive, and sustainable economic growth, full and
	productive employment, and decent work for all (DECENT WORK AND
	ECONOMIC GROWTH)
SDG 9	build resilient infrastructure, promote inclusive and sustainable
	industrialisation and foster innovation (INDUSTRY, INNOVATION AND
	INFRASTRUCTURE)
SDG 12	ensure sustainable consumption and production patterns
	(RESPONSIBLE CONSUMPTION AND PRODUCTION)
SDG 13	take urgent action to combat climate change and its impacts (CLIMATE
	ACTION)
SDG 14	conserve and sustainably use the oceans, seas, and marine resources
	for sustainable development, protect, restore, and promote sustainable
	use of terrestrial ecosystems, sustainably manage forests, combat
	desertification, and halt and reverse land degradation and halt
	biodiversity loss (LIFE BELOW WATER)
SDG 15	promote peaceful and inclusive societies for sustainable development
	(LIFE ON LAND)
SFSCs	Short Food Supply Chains
ТРВ	Theory of Planned Behaviour
UNEP	United Nations Environment Programme
UNISA	University of South Africa
US	United States
US EPA	United States Environmental Protection Agency
USDA	United States Department of Agriculture
VNR	Voluntary National Review
WHO	World Health Organisation
WWF	Worldwide Fund for Nature

1.1 CONTEXT AND BACKGROUND

The organic versus non-organic food product debate has been of interest to many researchers. However, this debate is mostly unexplored within the South African context, especially the possible contribution that organic community gardens could make in reaching the Sustainable Development Goals (SDGs). In 2019, the Sustainable Development Summit was held in New York and adopted the political declaration titled, 'Gearing up for a decade of action and delivery for sustainable development' (Guterres 2019). Action in the current study involves taking a step closer to social (SDGs 2 – Zero hunger, 3 – Good health and well-being and 15 – Life on land), environmental (SDGs 2 – Zero hunger, 12 – Responsible consumption and production, 13 - Climate action and 14 - Life below Water), and economic sustainability (SDGs 8 – Decent work and economic growth and 9 – Industry, innovation and infrastructure) (UN 2015). The focus is on community garden cultivators and the cultivation of organic food products within the South African milieu. The discussion that follows provides a context for the current study. It examines organic community food gardens' potential contribution to promoting cultivators' sustainability in South Africa, and organic food products' possible benefits for South African consumers.

In the context of this study, a community garden is defined as land managed by a public or non-profit organisation or by a group of individuals, used to grow plants and harvest food or ornamental crops for donation or use by those cultivating the land and their households (Diaz et al. 2018), or sold to consumers outside the community. Modibedi et al. (2020) established that community gardens in Gauteng's urban areas play a critical role in improving food availability and thus positively influencing SDG 2 (UN 2015) and achieving zero hunger, which may lead to a food-secure community. Moreover, organic food product consumers' perspectives and knowledge have become an important link in the organic food market as a surge in this consumer group has been noticed in the United States (US) (Shahbandeh 2022) and South Africa (Steenkamp 2021). This surge has increased organic sales in the US to 56.4 billion

US dollars in 2021, from 14 billion US dollars in 2005 (Shahbandeh 2022). Likewise, this trend is evident in South Africa, with a growing organic market of products that are either home delivered, in specialised stores, supermarket chains, specialised restaurants, or special organic markets (Lim Tung 2016). In fact, according to the United States Department of Agriculture (USDA) (2019), there has been an increase from 35 (1999) to 250 (2018) organically certified farms in South Africa. By bridging the gap between organic food production and sustainable development, this study highlights the benefits and opportunities associated with organic community gardens in South Africa.

In support of the above-mentioned argument regarding the emerging organic food market, Curvelo et al. (2019) and Kazmi et al. (2021) suggest that the most important drivers for the organic food product surge are the fact that these products are perceived to be natural, have a higher nutritional value, and a positive impact on the environment. To clarify these perspectives regarding organic food products, Lim Tung (2016), Muller et al. (2017) and Stoma and Dudziak (2022) state that the aim of organic food production is the development of a sustainable agricultural system and a variety of high-quality products supportive of environmental and animal protection, thus giving credence to consumers' environmental concerns. Furthermore, organic food is grown sustainably as genetically modified organisms (GMOs), conventional pesticides, synthetic fertilisers, antibiotics, or other synthetic substances are prohibited in the production of organic food products (Bostan et al. 2019; Nguyen et al. 2020; Rana & Paul 2017). In light of this explanation, the possible role of organic food products and consumers' interest in sustainable development is worth further investigation.

Sustainable development has become a global priority, as it recognises that growth within human societies must meet their current needs without compromising future generations' ability to meet their needs, thus being inclusive and environmentally sound (Klarin 2018; Mensah 2019; Muralikrishna & Manickam 2017). Consequently, many countries, including South Africa, face challenges in meeting the SDGs set by the United Nations 2030 Agenda, including climate change, resource depletion, environmental degradation, economic crises, and quality of life considerations that impact human health (Al Shamsi et al. 2018; Monier-Dilhan & Bergés 2016). Further, SDGs are categorised into three pillars, namely economic, environmental, and social

sustainability (Gupta & Vegelin 2016; Purvis et al. 2019). These three pillars carry across all sustainable development sectors, including urbanisation, agriculture, infrastructure, energy development and use, water availability, and transportation (Muralikrishna & Manickam 2017). Given the global significance that is placed on sustainable development, it is imperative not to overlook the potential advantages of organic community gardens.



Figure 1.1: Worldwide sales of organic food from 1999 to 2021 (STATISTA 2023)

The growth in international organic food product trends despite the harsh economic climate, with sales increasing from 15.2 billion US dollars in 1999 to 132.74 billion US dollars in 2021 (see Figure 1.1) (STATISTA 2023), reflects that the link between the sustainable development pillars and organic food product cultivation and consumption is clear as both aim for economic, social, and environmental sustainability (Monier-Dilhan & Bergès 2016; Willer & Lernoud 2017). Furthermore, Willer et al. (2023) outlined that in the world of organic agriculture and emerging trends of 2023, South Africa has 97 359 hectares of organic-certified land, which shows a 125.5% growth over the past 10 years. Therefore, community gardens' potential contribution to

cultivating organic food products warrants further investigation. Chauke (2016) particularly emphasises the critical role that agriculture plays in improving livelihoods, reducing poverty, and increasing food security among rural small-scale farmers and community garden participants. Thus, within the context of the current research, a community garden is considered a shared, semi-public plot where people in the surrounding neighbourhood share the work, harvest and maintain a garden space where fruits, vegetables or flowers are grown, or livestock are found (Raneng et al. 2023). These community gardens contribute to food availability by providing fresh fruit and vegetables, rich in micronutrients, throughout the year (Modibedi et al. 2020).

To illustrate, the Somerset West Village community garden launched in 2015 with a group of local residents and vegetable enthusiasts aiming to aid the homeless population by creating a community vegetable garden in the underutilised Barlow Park, in Somerset West, Westen Cape. The project, supported by a Memorandum of Agreement with the City of Cape Town, sought to address challenges such as a lack of employment, food security, and sanitary facilities for the homeless. Despite water shortages and funding difficulties, the garden flourished into an urban oasis. Its vision involves restoring dignity to the homeless, improving community health, and reinvigorating the urban space. The objectives encompass providing employment and skills to people experiencing homelessness, alleviating hunger, and fostering self-sufficiency. The garden also aims to revitalise the neighbourhood, promote sustainable development, and build connections between various groups, emphasising the power of cooperation between the community and government (Somerset West Village Garden 2015).

Conversely, the Oude Molen Eco Village, near Pinelands in the Western Cape, focuses on uplifting the local community by providing plots for the community to start their own vegetable gardens. Furthermore, the village supports youth development within the vegetable gardening sector, thereby providing jobs, food security, and further youth development programmes in the region's local, neighbouring, and outlying communities. Another example is Aunty Naomi's vegetable garden in her local community of Jamestown in the Western Cape, which is a community garden that provides vegetables and herbs to Woolworths, employs local community members, and donates surplus vegetables to local soup kitchens. Finally, one of the participants

with a passion for the youth and engagement in the local school community established organic vegetable gardens as a local school project in Cape Town. He is also active in the zero-waste movement that offers communities an opportunity to take proactive measures towards sustainability, engaging residents in collective action and creating a healthier and more resilient environment for current and future generations.

However, according to Gunasekaran and Murugan (2020), there is a need to encourage cultivators of community food gardens to practise organic agricultural methods on a larger scale. These authors also emphasise the importance of the government's role in supporting the establishment of organic community food gardens. They claim that with low organic certification fees, cultivators will be able to sell their produce for a profit, increasing production and the availability of organic food products.

The discussion thus far indicates that community gardens already address social sustainable development by increasing food availability and security (Modibedi et al. 2020), contributing to the well-being of everyone in the community. Moreover, it may also contribute to economic and environmental community sustainability, which is achievable by potentially applying organic agricultural methods.

However, for organic food product cultivation to be a viable option within a community, it is necessary first to understand consumers' perspectives of organic food products. Importantly, sustainable development not only pertains to agriculture but becomes a consumer choice, as consumers play an important role in promoting sustainable food systems (Baudry et al. 2017). An opinion, for example, is a consumer's view, belief, or judgement of a specific topic, and it refers to what someone thinks about the topic (Phillips Davison 2017). Religion, culture, family background, and education are some of the influences that impact consumers' perspectives of sustainable healthy diets (Monterrosa et al. 2020). Perception, which is defined as how an individual makes sense of the world around them by selecting, organising, and interpreting different stimuli, further influences an opinion (Schiffman & Wisenblit 2019). Consumers' perspectives of organic foods are ultimately guided by a range of factors, including the taste, price, healthiness, ethical issues, availability, and even superficial aspects such as being a fashionable product (Kavaliauske & Ubartaite 2014; Petrescu & Petrescu 2015).

Hence, the perceived link between organic food and consumers' health-related quality of life has become unquestionable as consumers continue to associate organic food consumption with happiness and well-being that is linked to physical health, pleasure, and other emotional aspects (Apaolaza et al. 2018; Torres-Ruiz 2018). Health-related quality of life embodies the idea of a complete state of physical, social, and psychological functioning (Sosnowski et al. 2017). It is defined by multiple statistical parameters based on economic, health-related, and environmental conditions (Cesnales & Thyer 2014). Rana and Paul (2017) concurred, asserting that the shift towards organic food was driven by modern consumers' fulfilled expectations and the incorporation of practices like organic fertilisers, locally adapted seeds, and biological pest control in food production. Admittedly, consumers' perspectives may not always be true, but these perspectives often determine the failure or success of a product (Schiffman & Wisenblit 2019).

Subsequently, both cultivators' and consumer's perspectives of organic food products are essential in influencing the cultivation and purchase of these products. However, it may be difficult to cultivate or purchase organic food products within a community setting. Therefore, it might be necessary to identify the barriers preventing organic food products' cultivation and consumption. According to Kushwah et al. (2019), one barrier is consumers' resistance to the consumption or cultivation of organic food products, which can be classified as either a functional or a psychological barrier. A functional barrier refers to any practical or logistical obstacle that inhibits a consumer's willingness or ability to make a purchase. These barriers are typically related to tangible factors such as product features, pricing, availability, convenience, or accessibility. By comparison, psychological barriers focus on tradition and image (Joachim et al. 2018). Therefore, the functional and psychological barriers that impact consumers' resistance to perceiving organic food products as life-changing and conflicting with their current consumption patterns, as well as their focus on tradition and image, may negatively influence consumers' adoption of an organic community garden.

To conclude, the cultivation of organic food products in community gardens is influenced by the barriers consumers face in perceiving them as life-changing and conflicting with their current consumption patterns, but also by the fact that organic

food products are a niche market for many cultivators. To investigate marketing opportunities for organic food product cultivators, the exploration of three key facets is thus necessary: (1) the potential size of the market, (2) the degree of current consumer satisfaction, and (3) the marketing efforts of key competitors (Kuada 2016).

Even though the potential market size is an indication of income, it must be weighed against competition or potential competition as an effectively run market will offer no substantial opportunity for newcomers. Thus, gaining an understanding of consumers' and cultivators' perspectives on organic food products could provide critical information on future marketing opportunities in the organic food product market sector. For these reasons, the following problems relate to this study.

1.2 **PROBLEM STATEMENT**

1.2.1 Community gardens and the possible link to sustainable development

Numerous facets of the 2030 SDGs have been explored in existing literature (Balcerowicz-Szkutnik et al. 2020; Kang 2020; Moyer & Hedden 2020), as well as the three interrelated pillars (social, economic, and environmental) that make up these goals (Dalampira & Nastis 2020; Purvis et al. 2019). Additionally, studies have examined the significance of community gardens (Kordon et al. 2022; Lucke et al. 2019; Modibedi et al. 2020) and the broader context of organic food products (Kelly & Metelerkamp 2015; Mie et al. 2017; Lim Tung 2016). The most recent study by Modibedi et al. (2020), conducted in the Gauteng province of South Africa, analysed the extent to which urban community gardens contribute to food availability, emphasising their potential to enhance local food production, accessibility, and selfsufficiency for these communities. The findings highlighted urban community gardens' positive contribution to increasing the availability of fresh and nutritious foods within the municipality, thereby providing valuable insights into the importance of such initiatives for addressing food security challenges in urban areas. However, in South Africa, the link between organic community food gardens and their contribution to all three sustainable development sectors (social, economic, and environmental) remains unexplored. Moreover, while community food gardens do exist, it remains uncertain whether these gardens can be started or will be accepted within communities, and whether there will be sufficient uptake to address sustainable development within the South African context.

The current study explored organic community food gardens' potential contribution to sustainable development in South Africa. The focus is on social, economic, and environmental sectors, as there is uncertainty regarding organic community gardens' acceptance, feasibility, and contribution to addressing sustainable development challenges in the country.

1.2.2 Consumers' and cultivators' knowledge of organic food products

Another problem identified in studies relating to consumers' and cultivators' knowledge of organic food products is the lack of comprehensive and accurate information available to both groups. Consumers may have limited knowledge about the specific requirements and standards for organic certification, leading to confusion and misconceptions about organic products (Mughal et al. 2021; Lim Tung 2016). Similarly, cultivators may lack access to proper education and training on organic agricultural practices, which can hinder their ability to effectively produce organic foods while adhering to organic agricultural practices (Han & Grudens-Schuck 2022; Uhunamure et al. 2021). A study by Uhunamure et al. (2021) emphasised the potential benefits of organic agriculture for smallholder cultivators in the Limpopo province of South Africa, including food security, income generation, improved health, and environmental advantages. That research confirms that cultivators' willingness to engage in organic farming is influenced by their perspectives, socioeconomic factors, and institutional considerations. However, according to the authors, certain challenges must be addressed to foster a more successful organic sector. One noteworthy hindrance mentioned by the authors is the lack of information and knowledge about organic agricultural practices, which can be overcome through education and training initiatives. This knowledge gap can result in a misalignment between consumer expectations and the actual practices cultivators follow, leading to potential dissatisfaction and mistrust in the organic food sector.

This study aimed to examine the aforementioned issue within the context of South Africa, considering both consumers' and cultivators' perspectives and knowledge of

organic food products and the cultivation thereof. By gaining insight from both groups, a comprehensive analysis of the problem was conducted, allowing for a more holistic understanding of their knowledge regarding organic food products to emerge.

1.2.3 Consumers' and cultivators' perspectives regarding organic food products

Another problem identified is the subjectivity and variability of consumers' and cultivators' perspectives of organic products. Consumers and cultivators may have different understandings and beliefs about what constitutes 'organic' and the associated benefits and drawbacks (Gumber & Rana 2021). Perception studies often rely on self-reported data, which can be influenced by factors such as personal biases, cultural backgrounds, and individual experiences (Tempelaar et al. 2020). According to Gundala and Singh (2021), Mustafa et al. (2022) and Roh et al. (2022), the majority of studies on consumers' perspectives of organic products demonstrate a sincere and well-founded conceptual conviction that includes exogenous (environmental concerns, sustainability awareness, government policies, and cultural norms), product-related (perceived quality, health benefits, absence of synthetic chemicals, organic certification, taste, and freshness), social (the influence of social media, word-of-mouth recommendations, and social pressures to adopt environmentally friendly behaviours), and demographic (age, gender, income, education level, and lifestyle) factors that influence their willingness to pay for organic food products. The aforementioned elements will also affect consumers' attitudes and impressions of organic food products, ultimately resulting in them purchasing the products (Roh et al. 2022).

The varying perspectives documented in current literature present a notable challenge when attempting to establish definitive findings and develop strategies that address consumers' and cultivators' requirements and preferences in the organic food sector of South Africa. Therefore, by investigating South African consumers' and cultivators' perspectives towards organic food products, this study sought to assess organic community food gardens' potential contribution to the SDGs. Taking these perspectives into account will be beneficial in gaining insight into organic community food gardens' potential contribution to the achievement of sustainable development

objectives and formulating strategies to effectively harness their potential in advancing the SDGs.

1.2.4 Barriers associated with organic food product cultivation and purchase intent

In addition to the previously mentioned issues, a major challenge in the study of organic food products is identifying and understanding the barriers that impede the adoption and expansion of organic practices among consumers and cultivators. Barriers can include factors such as the high cost of organic production, limited availability and accessibility of organic products, lack of knowledge and awareness, scepticism about the benefits of organic foods, and challenges in complying with organic certification requirements (Carmona et al. 2020; Łuczka & Kalinowski 2020). Organic food cultivators ultimately face daily challenges. Because certification is governed by international standards, inspection and certification issues often prevent cultivators from implementing organic agriculture practices (Kelly & Metelerkamp 2015; Lim Tung 2016). To be clear, maintaining the integrity of an organic product requires frequent, unannounced audits that are costly and involve a lengthy paper trail (UNEP 2017). Local community gardens are thus less likely to access the organic food market due to financial and educational barriers (Diaz et al. 2018). In addition, Łuczka and Kalinowski (2020) concurred that economic factors are more important to organic cultivators than non-economic ones, such as low yields and production volumes. Moreover, many cultivators regard organic farming as risky due to low yields and production volumes (Röös et al. 2018).

These barriers can vary across different regions and socioeconomic groups, making it crucial to identify and address them to promote the wider acceptance and adoption of organic practices. Furthermore, addressing these barriers requires collaborative efforts from various stakeholders, including policymakers, industry players, and consumer education initiatives to create an enabling environment that supports organic food production and consumption. In the South African context, identifying and understanding barriers that hinder the adoption and growth of organic practices among consumers and cultivators will potentially promote these practices' wider acceptance and potential contribution to sustainable development in all three sectors (social,

economic, and environmental). Inadequate knowledge and diverse perspectives regarding organic food products ultimately impede the development and implementation of effective strategies to promote their acceptance and adoption.

1.3 RESEARCH JUSTIFICATION

The researcher aimed to explore organic community food gardens' potential contribution to advancing SDGs in South Africa. This research is justified for several reasons. First, as mentioned in sections 1.1 and 1.2, the organic versus non-organic food product debate has been of global interest to researchers, but its standing within a South African context is largely unexplored. Organic community gardens' potential contribution to reaching the SDGs in South Africa needs further investigation. As mentioned in the introduction, the Sustainable Development Summit held in New York in 2019 adopted a political declaration titled 'Gearing up for a decade of action and delivery for sustainable development' (Guterres 2019). The current study aligns with this declaration by focusing on social (SDGs 2, 3, and 15), environmental (SDGs 2, 12, 13, and 14), and economic sustainability (SDGs 8 and 9) in the context of community garden cultivators and the cultivation of organic food products in South Africa (UN 2015).

Previous studies have shown that community gardens in urban areas play a critical role in improving food availability and positively influencing SDG 2 (Modibedi et al. 2020). Moreover, Lucke et al. (2019) verified the presence of community food gardens in the Western Cape. However, it remains uncertain whether these gardens use conventional or organic agricultural methods. Additionally, the organic food market has been growing globally, including in South Africa, where the number of organically certified farms has increased significantly (Lim Tung 2016; USDA 2019). This trend emphasises the need to bridge the gap between organic food production and sustainable development. Moreover, sustainable development has become a worldwide priority, encompassing economic, environmental, and social sustainability (Bekele-Thomas et al. 2018; Purvis et al. 2019). Community gardens already address social sustainability by increasing food availability and security (Modibedi et al. 2020), but their potential advantages in achieving all three pillars of sustainable development need further investigation.

Second, consumers' perspectives and knowledge of organic food products are crucial in understanding the demand and potential market for organic community gardens. Consumers' perspectives include aspects such as taste, price, healthiness, ethical issues, and availability (Kavaliauske & Ubartaite 2014; Petrescu & Petrescu 2015). Moreover, this research also addressed the barriers to organic food product cultivation and consumption, including functional and psychological barriers consumers and cultivators face. An understanding of these barriers is essential for promoting organic community gardens and increasing organic food production. By exploring both cultivators' and consumers' perspectives, the research provides critical information for future marketing opportunities and addresses the potential advantages of organic community gardens.

This research is justified because it seeks to explore organic community food gardens' potential in several key areas: (i) meeting the SDGs, (ii) serving as a nutritious food source, (iii) examining the perspectives and barriers faced by cultivators and consumers, (iv) investigating organic community gardens as a viable option to provide affordable organic produce to communities, and (v) promoting sustainable and environmentally friendly agricultural practices. It fills a knowledge gap regarding organic community food gardens' contribution to sustainable development in South Africa, while addressing the lack of research on organic food products in this context. This study also aligns with global priorities on sustainable development and responds to increasing interest in the organic food market.

1.4 AIM AND OBJECTIVES

This study aimed to explore community food gardens' potential contribution to sustainability based on cultivators of such gardens and consumers' position on organic food products' consumption in general. To explore this aim, the following objectives were proposed:

- Objective 1: Explore consumers' perspectives on organic food products by:
 - 1.1 Determining consumers' knowledge and perspectives of organic food products.
 - 1.2 Determining consumers' willingness to purchase organic food products from a local organic community garden.

- Objective 2: Explore cultivators' perspectives on organic community gardens by:
 - 2.1 Determining cultivators' knowledge and perspectives of organic food products.
 - 2.2 Identifying the barriers to organic community garden cultivation in the local community.
 - 2.3 Exploring cultivators' willingness to sell produce at local organic markets.
- Objective 3: Identify the presence and cultivation of organic community gardens in the local area.
- Objective 4: Explore the local market opportunities for organic food products produced from organic community gardens.

1.5 CONCEPTUAL FRAMEWORK

This study was conceptualised based on the following conceptual framework. It was adapted from Yiridoe et al.'s (2005) original framework reflecting consumers' attitudes and purchase intentions toward organic foods.



Figure 1.2: Framework of factors affecting consumer attitudes and purchase decisions of organic foods (Yiridoe et al. 2005)

Figure 1.2 illustrates the relevance of Yiridoe et al.'s (2005) proposed framework, highlighting the interconnected influence of exogenous, product-related, social, and demographic factors on consumers' knowledge and, consequently, their organic food product purchase intent. This model suggests that these factors shape consumers' attitudes and perspectives, ultimately influencing their purchasing decisions. Notably, considerations such as health benefits, animal welfare, food safety, environmental impact, and manufacturing processes play a pivotal role in consumers' evaluation of organic food products. Furthermore, economic factors, including household income and product prices, also impact the decision-making processes.

Despite its inception in 2005, this framework remains pertinent in the current study, underscoring its sustained relevance as the identified factors continue to shape and influence consumers' understanding of organic food products. This framework was

thus used as a guide to formulate interview questions. Nevertheless, the framework was adjusted to incorporate both cultivators' and consumers' perspectives. The ultimate goal is to explore how these perspectives collectively influence organic food gardens' potential contributions to sustainability.

As per Figure 1.3, the study's conceptual framework was designed to explore both the demand side (consumers) and the supply side (cultivators) of organic food products within the context of community gardens. By examining knowledge, perspectives, and barriers related to organic food products, the study aimed to provide a comprehensive understanding of community food gardens' role in promoting sustainability and organic food consumption in the local community. Identifying community gardens' presence and market opportunities adds context and practical insight to the research.



Figure 1.3: Proposed schematic presentation of the conceptual framework
1.6 RESEARCH METHODOLOGY

To implement the objectives of the study, an interpretivist paradigm with a qualitative research methodology was applied. The reasoning behind this paradigm includes the fact that there is human (consumers and cultivators) interest in the study (Kumar 2019). Qualitative research is descriptive, exploratory, and contextual (Merriam & Tisdell 2016). As a result, it was deemed a suitable methodology to assist the researcher in gaining a thorough understanding of the perspectives, knowledge, and barriers to organic food product purchase and cultivation intentions.

Barrett and Twycross (2018) assert that rather than focusing only on statistics, qualitative researchers seek to comprehend participants' experiences, the ways in which they create their own worlds, and the significance that they attribute to their experiences. Furthermore, interpretive research makes the assumption that reality is shaped by society (Quinlan 2017). As a result, there are various interpretations of a single event rather than a singular, observable reality (Merriam & Tisdell 2016). This study included consumers and cultivators from various social constructs with various perspectives but shared meanings and perspectives regarding organic food products. This emphasises the importance of the qualitative research methodology and interpretive approach, which is concerned with understanding the processes in a social and cultural context influencing certain behavioural patterns, such as purchase intention.

The study used purposive sampling and accessed snowball sampling methods to select participants according to preselected criteria relevant to the research objectives. The study required a sample of community food garden projects in the Western Cape, South Africa, particularly in Somerset West, Stellenbosch, and Pinelands, which were managed by cultivators who could potentially participate in the study. Unfortunately, ethical clearance for this study was approved in 2020 at the peak of the COVID-19 pandemic, which influenced the identification of cultivators and their participation in the study because the Western Cape government was unable to sustain many community food garden projects at that time, reducing the availability of cultivators significantly. As a result, limited individuals with expert knowledge to suit the specific purpose of understanding organic food product cultivators' perspectives were

available. Hence, the study included four cultivators with diverse backgrounds in community food garden cultivation practices. Cultivators were identified through online searches for community gardens. Additionally, word-of-mouth and referrals were employed to connect with cultivators. The inclusion criteria for cultivators to participate in the study were:

- $\infty\,$ The participants had to be older than 18 years.
- Participants were required to be either currently involved in community garden projects or had experience in the cultivation of these community gardens in the Western Cape province of South Africa.

Following the recruitment of community garden cultivators, consumers were recruited through snowball sampling via Facebook (see Figure 1.4), connecting the researcher with participants with common interests and perspectives regarding organic food products. Inclusion criteria for consumers were:

- ∞ The participants had to be older than 18 years.
- ∞ The participants had to have an interest in organic food products.

Thus, participants were recruited through the social media platform, Facebook. Kosinski et al. (2015) state that Facebook offers large and diverse samples, and it is an inexpensive and efficient way to reach participants through friends to join a study. An additional Facebook profile (Luv.organic) and а separate email (luv.organic@outlook.com) account for the exclusive use of the current research project was created to recruit participants. As a result, the researcher's personal information was safeguarded. All current Facebook friends were asked to like and share the advertisement, as presented in Figure 1.4.



Figure 1.4: Advertisement used for Facebook consumer interviews

Furthermore, referrals from participants' peer networks were pursued to recruit participants with a common interest in organic food products. It was emphasised throughout the recruitment phase that no personal information would be used or disclosed during this study, thus adhering to the ethical requirements set out in the next section.

Semi-structured, self-administered interviews were used to gather responses from participants. Semi-structured interviews are commonly used during research projects to verify data from other sources (Maree 2019). These semi-structured interviews consist of predetermined questions but allow researchers to probe and clarify certain answers and concepts mentioned by the participants. All interviews were conducted through online platforms such as Microsoft Teams, Zoom and WhatsApp, as personal face-to-face interviews were not permitted during the study's launch as a result of the COVID-19 pandemic. Permission to record interviews was obtained from participants before the interviews commenced, and all participants signed the participant consent form after the researcher provided a brief introduction outlining the purpose of the study. Following the introduction, a preselected guide of questions was asked, probing when necessary. After launching a pilot interview, these questions were revisited to ensure the best possible outcome by adding additional probing questions. Twenty

consumer interviews were conducted, lasting approximately 15 minutes, and no personal information was collected during these interviews, ensuring anonymity throughout the investigation. The four cultivator interviews lasted between 20 and 40 minutes.

According to Saunders et al. (2017), data saturation reflects that sufficient data has been collected in a way that is coherent with the research question, theoretical position, and analytic framework. Furthermore, Fusch and Ness (2015) elaborate that the term "data saturation" is used in qualitative research to describe the point at which new participants do not offer new findings. When saturation is reached, enough information has been gathered to replicate the study, and no additional coding is required. Saturation also indicates the robustness of a study by demonstrating that the researcher has thoroughly investigated the phenomenon; in this case, organic food products, within the confines of the study. Failure to achieve saturation, as Fusch and Ness (2015) explained, can undermine content validity, making further data collection or analysis unwarranted. In this study, data saturation was attained.

Interview questions were structured so multiple participants could answer the same question. However, the data collection tool was continuously analysed and adapted based on the participants' responses using an iterative process to collect the most relevant data from participants in accordance with the research objectives. According to Srivastava and Hopwood (2009), iteration during qualitative data analysis should not be viewed as a repetitive mechanical task, but rather as a reflexive process that is essential for gaining insight and meaning about the research phenomenon at hand. Due to the unpredictable nature of research, the researcher followed an iterative process. According to Aspers and Corte (2019), gualitative research is an iterative process where the scientific community gains a better understanding of the phenomenon being studied by making new significant distinctions; in this case, specifically focusing on cultivators' and consumers' understanding regarding organic food products. Throughout the iterative process, the researcher interacted with the data in real-time, making sense of data, concepts, and evidence and how they relate to one another. The researcher switched back and forth between participant interviews, analysing data to generate new data that could change the current literature and, ultimately, the current study's findings.

After each interview, it was transcribed into a Microsoft Word document by a transcriber, ensuring an unbiased recording of all interviews. During the initial step in the analysis of the qualitative data, the researcher immersed herself in the data to familiarise herself with the presented data. All collected data, including field notes and transcribed interviews, were used to form a clearer understanding of the presented data. The data were then coded into themes using Atlas.ti.23, computer-assisted qualitative data analysis software, while keeping the research objectives in mind. These themes were tabulated, and inferences were made to address the research objectives.

To conclude, this study explored knowledge, perspectives and barriers towards organic food products' cultivation and purchase intent. The study was best served by using a qualitative research design that was based on an interpretive methodology because it gave the researcher the opportunity to explore organic food products from the perspectives of both cultivators and consumers.

1.7 ETHICS

The research complied with all ethical requirements determined by the University of South Africa (UNISA) in its Policy on Research Ethics. Ethical clearance was obtained from the Health Research Ethics Committee of the College of Agriculture and Environmental Science at UNISA before the study commenced (Reference number: 2020/CAES HREC/106; Appendix C). However, due to the COVID-19 lockdown and restrictions imposed during 2020-2021, data collection using face-to-face interviews had to be suspended immediately after ethical clearance was obtained, as per UNISA's press release on 9 April 2020. Guidelines and procedures were provided by UNISA for approved research, stating that any research involving face-to-face contact or settings where physical distancing is challenging must obtain formal approval from the relevant Ethics Review Committee (ERC). Researchers were encouraged to transition to remote data collection methods if it was feasible and were required to notify the ERC of any changes in their research proposal. Furthermore, the importance of informed consent and documentation, timely communication with participants about changes, and the prohibition of certain online tools due to privacy concerns were stressed. Additionally, the guidelines placed the responsibility on researchers to notify the ERC if research activities needed to be reduced, suspended, or postponed while also requiring frequent reporting to address potential COVID-19-related risks to ongoing studies. Finally, it reminded researchers to apply for an extension of their approval period if delays in data gathering occurred.

Therefore, consumer interviews were resumed through Facebook recruitment and online interviews. In addition, only one cultivator was interviewed in person from the Somerset Community garden, while the others participated online. Participants were informed of the purpose of the study, participation was voluntary, and participants were not coerced to participate in the study. Informed consent was obtained from all participants using the participant information sheet (Appendix D) that was signed by both the participant and the researcher. According to the information sheet, the study entailed individuals' participation in a semi-structured interview that was recorded for transcription and reference purposes only. These recordings were kept private, password-protected, and were only accessible to the researcher. The interview questions were topic-specific, and no personal or identifying information was collected, ensuring anonymity throughout the interview process.

Moreover, prior to the interviews' initiation, the importance of confidentiality was reiterated to participants. Utmost care was taken to handle all provided information in a manner that upheld the principles of confidentiality and respect. Data were collected honestly and ethically to ensure the integrity and validity of the research. Participants' rights were also duly acknowledged, and explicit permission was obtained for the researcher's use of gathered information. No names were recorded during the interview to safeguard participants' anonymity. Consent was also sought before recording interviews, and meticulous attention was paid to accurately interpreting participants' responses. The possibility of withdrawal at any stage was thoroughly discussed, and contingency plans were established to address any anticipated challenges.

1.8 ASSUMPTIONS, LIMITATIONS, AND DELIMITATIONS

During the online interview process, it was assumed that most people have access to an electronic device and sufficient knowledge of how to use it to conduct the interview. However, in the research field, this approach was found to be problematic and conducting interviews during times of load-shedding was often impossible, and different times had to be arranged. Furthermore, the use and understanding of technology had to be explained to various participants, which could have caused them some anxiety. It was also assumed that participants in this study would provide honest, ethical, morally sound, and reliable information. Moreover, it was assumed that participants fully understood the research questions.

In the Western Cape, some interviews had to be conducted in Afrikaans and translated into English. For Afrikaans-speaking participants, the consent forms and information letters were comprehensively explained verbally, as these documents were not translated into English. These participants were selected due to their interest in organic food products and a more sustainable world. The researcher assumed that vital information for the current study would be obtained to formulate strategies according to the research objective.

Limitations in the study included the COVID-19 pandemic, time constraints and access to participants. Additionally, a few responses to the Facebook advertisement mentioned a need for compensation if they took part in the study; this was not planned for in the budget. Furthermore, the unfortunate closure of several Western Cape community gardens was unforeseen and impacted the cultivator research group. The purposive sampling method using Facebook might also have excluded some participants who did not have access to social media.

The goal of this research was to understand community gardens' potential contribution to sustainable development by cultivating organic food products. Delimitations of the study include the focus area of these community gardens since different perspectives might exist in other provinces of South Africa.

1.9 DISSERTATION LAYOUT

This dissertation is presented over eight chapters and organised sequentially as designated below:

Chapter 1: Introduction

Chapter 1 provides a general overview of the study, including an introduction, justification and the aim and objectives of the study. This chapter also describes the conceptual framework, research design and framework, and ethical considerations.

Chapter 2: Literature review - Organic food products

Chapter 2 presents the reviewed literature, with an emphasis on sustainable development, organic food, community gardens and consumers' purchase intention.

<u>Chapter 3: Literature review – Organic community food gardens' contribution to</u> <u>sustainability</u>

The concept of sustainability is central to the study, and this chapter explores organic community gardens' potential contribution to the three pillars of sustainability, namely, economic, social and environmental sustainability.

<u>Chapter 4:</u> Literature review – Consumers' behaviour in the context of organic food product purchases

This chapter delves into the Theory of Planned Behaviour (TPB) (Ajzen 2019) and the consumer decision-making model (Schiffman & Wisenblit 2019). Furthermore, this chapter discusses consumers' perspectives, motivators, and barriers to purchasing organic food products.

Chapter 5: Research methodology

Chapter 5 describes the research methodology employed in this study. It includes a discussion on the research paradigm, research design, sampling strategy, inclusion criteria and ethics.

Chapter 6: Findings and discussion - Consumers' perspectives

This chapter presents the analysed data and discusses data from the literature reviewed from a consumer perspective.

Chapter 7: Findings and Discussion - Cultivators' perspectives

This chapter presents the analysed data and offers a discussion of data from the literature reviewed from a cultivator perspective.

Chapter 8: Conclusion

This chapter concludes the study by presenting conclusions about the findings. Each objective is discussed, and the limitations of the study, as well as suggestions for future studies, are addressed. Furthermore, recommendations and the study's contributions are reviewed.

1.10 ACADEMIC-RELATED INFORMATION

This dissertation makes use of the Harvard referencing style. The dissertation was submitted to Turnitin to determine its similarity index. The certificate of submission is included in Appendix E. One article on the study will be submitted to an accredited journal. The findings' dissemination at a local conference will also be considered.

1.11 SUMMARY

Organic food consumption is gaining momentum worldwide as consumers recognise that sustainable development should include social, economic, and environmental goals. Additionally, prior research has shown that organic food cultivation supports all three pillars of sustainable development. However, even though community gardens already contribute to the social SDG, these gardens' contribution towards economic and environmental sustainability (if they make use of organic agricultural methods) is not determined. These organic community gardens' possible sustainable contribution is also hindered by consumers' and cultivators' perspectives of and barriers toward the cultivation and purchase intention of organic food.

The presented chapter introduced the reader to the study's background, problem statement, justification, research aims and objectives, conceptual framework, research design and methodology. The study's ethical considerations, dissertation's layout and academic-related information for the research were also described. Literature concerning organic foods, consumer perspectives and purchase intention of organic food is reviewed in the following chapter. Furthermore, community gardens and their possible contribution to sustainable development are explored.

2.1 INTRODUCTION

In Chapter 1, evidence was presented indicating a global increase in the consumption of organic food products. According to Willer et al. (2023), the global organic farmland grew by 1.3 million hectares, marking a 1.7% increase. Multiple countries displayed significant expansions, with the largest being observed in China, France, and Spain. China's organic farmland grew by approximately 320 000 hectares (13.1%), France saw an increase of almost 228 000 hectares (8.9%), and Spain experienced a growth of nearly 198 000 hectares (8.1%). However, a few countries witnessed reductions in organic farmland, notably Argentina's decrease of almost 0.38 million hectares, primarily in grazing areas. The overall growth has led to the practice of organic agriculture spreading to an impressive 191 countries. As highlighted by the Research Institute of Organic Agriculture (Forschungsinstitut für biologischen Landbau (FiBL)) in 2022, approximately 3.4 million cultivators were proficiently managing nearly 75 million hectares of agricultural land using organic methods worldwide.

The surge in organic food production can be ascribed to the prevalence of lifestylerelated health conditions among modern consumers, such as heart disease and depression, which prompt them to opt for organic food products to enhance their overall well-being (Rana & Paul 2017; Nguyen et al. 2020). Furthermore, the Food and Agricultural Organisation (FAO) has emphasised the importance of sustainable diets in addressing various global challenges, including the pressures of increasing populations, rising food demand, environmental degradation, climate change, water scarcity, loss of biodiversity, and socioeconomic disparities (FAO 2019). Notably, consumers associate organic, natural, and plant-based foods with the notion of sustainable diets (Barone et al. 2019). Expanding on this foundation, the concept of organic community food gardens becomes increasingly pertinent.

Additionally, organic community food gardens are seen as a viable option to supplement sustainable diets through the inclusion of fresh fruits and vegetables (Modibedi et al. 2021) and improve household income and food security among

consumers (Elfrida et al. 2020) in deprived areas, such as the Western Cape in South Africa. According to Galal (2022), the South African population reached 60.6 million in 2022, with half the population living in three provinces, namely Gauteng (16.27 million), KwaZulu-Natal (11.82 million) and the Western Cape (7.23 million). Furthermore, 33.2% of the Western Cape's present population is classified as poor, according to the lower-bound poverty line, meaning they must choose between purchasing food and non-food items (STATSA 2019). Although the existence of community food gardens in the Western Cape has been confirmed (Lucke et al. 2019), it is currently unknown whether they employ conventional or organic agricultural practices and whether locals recognise such gardens' potential to address food security and aid in reducing poverty. In addition, Fynn-Green et al. (2019) point out that consumers of organic food products in South Africa's main obstacles towards purchase intent are accessibility and cost.

Based on multiple authors' recognition of the benefits of organic agricultural practices (Han et al. 2021; Thakur et al. 2022), this study extensively examined organic community gardens' potential contribution to social, economic, and environmental sustainability. This exploration shed light on cultivators' and consumers' perspectives in this context, offering insight into the broader implications of these practices. By exploring the perspectives of both cultivators and consumers within this context, the study offers a comprehensive understanding of the broader implications of these practices. This holistic approach not only validates claims about the benefits of organic agriculture but also empowers stakeholders with actionable insights for informed decision-making. Furthermore, the study's findings can foster collaboration among diverse stakeholders and bridge the gap between theoretical research and practical implementation, promoting sustainable agriculture in these communities.

Consequently, while this research focused on organic community food gardens' potential contribution to sustainability (from cultivators' and consumers' perspectives), studying organic food products provided a valuable context, enriched the research findings, and contributed to a well-rounded understanding of the complex dynamics within sustainable food systems. Thus, subsequent to this introduction, a comprehensive examination of organic food products is presented, followed by a discussion on community gardens within the context of the study.

2.2 ORGANIC FOOD PRODUCTS

2.2.1 Defining the term 'organic'

The Codex Alimentarius (as cited by DAFF 2010) defines 'organic' as a labelling term that denotes products that have been produced obeying organic production standards and have been certified by an aptly constituted certification body or authority. In addition, Bostan et al. (2019) explain that the term 'organic' refers to goods produced sustainably without using GMOs, artificial fertilisers, pesticides, antibiotics, or other materials prohibited by the certification authority. For this reason, consumers tend to believe that organic food products are superior to conventional food products in terms of their health, nutrition, and environmental impact (Singh & Verma 2017).

Similarly, organic agriculture is rooted in traditional agricultural methods that have evolved over the millennia, with best practices handed down for many generations (Ba et al. 2018). However, the modern face of organic agriculture stems from the late 1960s, when cultivators and consumers started recognising the volumes of chemicals used during production and the negative effect it has on the planet and its people (DAFF 2010; FAO 2019). Consequently, organic food products can be seen as a combination of tradition, innovation, and science to benefit the communal shared environment and promote reasonable relationships and a decent quality of life for all involved (Bostan et al. 2019; DAFF 2010; Gomiero 2018; Shafie & Rennie 2012).

At this point, it is crucial to acknowledge that organic agriculture operates in direct contraposition to conventional agricultural practices. In the continued examination of ongoing research, it becomes imperative to discriminate between these two divergent practices. The present research endeavour was oriented towards exploring the feasibility of effecting a transition from conventional to organic practices within community gardening contexts. This investigative pursuit was motivated by the overarching goal of engendering economic, environmental and social sustainability.

2.2.2 Organic vs conventional agricultural practices

Within the food production system, organic agricultural practices are seen as practices that rely on ecological processes that enhance agroecosystem health, including biodiversity, biological cycles, and soil biological activity (DAFF 2010; Chrzan & Ricotta 2019). Conversely, Shennan et al. (2017) note that conventional agricultural practices commonly employ artificial pesticides, herbicides, and fertilisers, and occasionally incorporate natural soil enhancements. In addition, fields are regularly planted with short rotations in between.

Smith et al. (2020), who conducted a meta-analysis covering 60 crop types across six continents, examined how landscape context impacts the biodiversity, yield, and profitability of organic versus conventional agricultural practices. Organic farms showed higher biodiversity (34%) and profits (50%) despite lower yields (18%). Conversely, as the field size grew, yield differences between organic and conventional agriculture increased, and the profitability advantages of organic agriculture decreased. Montgomery and Biklé (2021) added that prior research and meta-analyses revealed limited support for noteworthy variances in crop macronutrient levels between organic and conventional agricultural methods. However, considerable evidence highlights the impact of diverse cultivars and agricultural techniques on micronutrient concentrations. Furthermore, persistent disparities between organic and conventional varieties having elevated pesticide levels, while organically cultivated crops showcase elevated quantities of phytochemicals renowned for their health-promoting antioxidative and anti-inflammatory attributes.

In addition, Arunrat et al. (2022) studied the carbon, nitrogen and water footprints of organic versus conventionally produced rice. During their four-year investigation (from 2018 to 2021), the findings demonstrated that organic farming yielded lower net greenhouse gas emissions compared to conventional farming. This suggests that organic farming aids in mitigating greenhouse gas emissions through soil carbon sequestration. However, due to its lower yield, organic farming exhibited a higher carbon footprint intensity than conventional farming. Nitrogen footprint intensities for organic farming and conventional farming were 0.34 and 11.94 kg Neq kg-1 rice yield, respectively. Conventional farming had a greater total water footprint of 1470.1 m3

ton-1 compared to organic farming's 1216.3 m3 ton-1. The increased grey water in conventional farming stemmed from the use of chemical fertilisers, herbicides, and pesticides. Despite organic farming yielding nearly half the rice output of conventional farming, it exhibited a higher economic return due to reduced production costs and elevated rice prices. Thus, it needs to be recognised at this stage that the global food system significantly contributes to climate change; it is responsible for 23-42% of greenhouse gas emissions (Chiriacò et al. 2022). These authors emphasised that balancing the needs of a growing population while respecting sustainability boundaries requires a transition to sustainable food systems, and organic agriculture is proposed as a solution. However, its effectiveness in reducing climate impact compared to conventional agriculture is debatable. Clear indicators of climate and environmental sustainability are needed to enable an effective shift toward sustainable food production.

The aforementioned comparison of these two distinct food production systems underscores the significance of the present investigation within the context of the organic production paradigm. This study endeavoured to comprehensively address the complex principles involved in sustainability within the confines of a community garden setting. Ultimately, the significance of organic food products stems from the fact that such products are produced using natural agricultural practices, which have the advantage of supporting the global environmental sustainability initiative by preventing the use of synthetic materials like insecticides, herbicides, pesticides, growth hormones, GMOs, and routine antibiotics in the production of food products. Subsequently, for food products to be classified as organic, these foods must receive certification from a recognised certifying authority.

2.3 CERTIFICATION REQUIREMENTS FOR ORGANIC FOOD PRODUCTS

Certification is a crucial aspect of organic food products, as it ensures the integrity of the products in the marketplace as per the standards set by the International Federation of Organic Agriculture Movement (IFOAM) (Kelly & Metelerkamp 2015). The IFOAM from Germany, as well as the Research Institute of Organic Agriculture (FiBL) from Switzerland, have been providing data for over two decades concerning organic agriculture (Willer et al. 2023). The IFOAM was founded in 1972 and is a

membership-based organisation aiming to establish true sustainability across the globe (IFOAM 2021). The IFOAM has a vision that sustainable agriculture will be widely adopted and changes in consumption will align with organic agricultural principles worldwide. Additionally, the IFOAM's mission promotes the growth of organic agriculture, whether it is certified or uncertified, organic operations' advancement from good to best practices, and ultimately, the adoption of integral organic principles and practices among agricultural operations that are transitioning to sustainability (IFOAM 2021; Luttikholt 2007). The principles set out by the IFOAM include four areas, namely health, ecology, fairness, and care (IFOAM 2021; UNEP 2017).

According to the IFOAM, the health principle entails preserving and improving soil, plants, animals, people, and the environment. According to the WHO (2017), this principle emphasises that the health of an individual or a community cannot be separated from that of the ecosystem. Gamage et al. (2023) elaborate that within thriving ecosystems, the unique crop production environment is harnessed to attain nourishment and overall welfare. For instance, this is the living soil in the case of crops, the farm ecosystem in the case of animals, and the aquatic environment in the case of fish and other marine organisms. This shared world, which includes people and their relationships with other living things, is characterised by equity and respect, according to the third principle of fairness (Adamchak 2019). Last but not least, the principle of care relates to the requirement that organic agriculture exercises caution and management's accountability in safeguarding the health and welfare of both present and future generations (IFOAM 2021; Luttikholt 2007; Willer & Lernoud 2017).

Despite these certification criteria, it is crucial to remember that South Africa lacks laws defining organic agriculture (Uhunamure et al. 2021), and the first draft of organic product standards dates back more than 20 years (UNEP 2017; Willer et al. 2023). The increased demand for organic food products in South Africa is undeniable, according to Kisaka-Lwayo and Obi (2014) and Lim Tung (2016), but consumers need assurances of the organic origin of organic food products. However, since certification is governed by international standards, inspection and certification issues prevent many farmers from implementing organic agricultural practices (Kelly & Metelerkamp 2015; Lim Tung 2016). Furthermore, the South African consumer is constantly

exposed to false and misleading statements that they are unable to independently verify (Lim Tung 2016). According to UNEP (2017), regular surprise audits that are both expensive and require extensive documentation are required to preserve an organic product's integrity. Due to financial and potential educational barriers, local community gardens are therefore less likely to access the organic food product market (Diaz et al. 2018).

Currently, the South African Organic Sector Organisation (SAOSO), a non-profit organisation, is connecting farmers, producers, retailers, and consumers in the organic sector of South Africa (SAOSO 2022). SAOSO is affiliated with and has adopted the IFOAM standards for organic food products (IFOAM 2021). Further, SAOSO supports participatory guarantee systems (PGSs) to help producers become formally recognised as organic food producers. SAOSO identified three different processes by which trust in organic food products can be established between the cultivator and the consumer (see Figure 2.1).



Figure 2.1: The South African organic certification landscape (SOASO 2022)

In Figure 2.1, a first-party organic certification is a 'self-claim' that has not been independently verified. It involves the direct interaction between cultivators and consumers, where consumers have the opportunity to visit farms or engage in conversations with cultivators regarding their practices and claims. This direct engagement allows consumers to gather first-hand information about the cultivation methods employed and evaluate their satisfaction with the cultivators' assertions. The

second process is a PGS, which works with short supply chains and ensures secondparty organic certification in South Africa (see Figure 2.2).



Figure 2.2: Participatory Guarantee System (SAOSA 2022)

As per Figure 2.2, PGSs provide a method for localised quality control that certifies producers based on their active participation. In this endeavour, SAOSO partners with PGS-SA, recognised as a peer-review system by the IFOAM. This group of people consists of cultivators, consumers, and market operators and is often assisted by an organic expert who will support and annually assess a new cultivator. 'PGS-SA Endorsed' is used as a marketing tool to build consumer trust.

Finally, long supply chains and exports call for third-party organic certification. An accredited certifying body (ACB) certifies the procedures yearly following predetermined organic criteria (see Figure 2.3) (Purkis & Mentz-Langrage 2019; SAOSO 2022).



Figure 2.3: Third-party organic certification process (SAOSO 2022)

The process to be followed for PGS projects to receive approval for the use of the SAOSO organic PGS-endorsed logo is outlined in Figure 2.3. This process focuses on the processors of organic food products and whether ingredients are organically certified. Producers seeking certification should start by questioning whether they want to cultivate on virgin soil. This question will dictate the process to be followed before contacting SAOSO for third-party certification by a control union (SAOSA 2022).

The most recent study conducted in South Africa on farmers' perceptions of organic agriculture, by Uhunamure et al. (2021) in the Limpopo province, reiterates the aforementioned information and emphasises that an official certification system for organic agriculture is yet to be established in South Africa. Furthermore, the inspection and certification of organic farmers in the country are conducted by international and domestic certification bodies. Consequently, not all organic cultivators possess formal certification, despite numerous smallholder cultivators having adhered to organic agricultural principles, encompassing health, ecology, fairness, and care, for several years. The certification process often disregards the legitimacy of production systems employed by smallholder cultivators due to the challenges they encounter in

maintaining records that meet the standards required for confirmation of adherence to organic principles. This difficulty arises from the complexities smallholder cultivators face in upholding record-keeping practices that satisfy the criteria set by certification bodies. Thus, organic certification is required to increase consumers' trust in organic food products. However, the process of becoming certified as an organic food product cultivator in South Africa is time-consuming and costly, as membership and administration fees must be paid (Lim Tung 2016). The community garden cultivator may lack the financial resources or administrative skills to become certified to enter the organic food market and, as a result, will lack or be unable to build consumer trust in the food products they cultivate. Although the process of cultivating organic food products may not be a simple one, organic food products' impact on consumers' health remains the focus of many researchers and is discussed next.

2.4 IMPACT OF ORGANIC FOOD PRODUCTS ON HUMAN HEALTH

Whether organic food products have a clear impact on human health has been debated by numerous authors (Brantsæter et al. 2017; Hendriks et al. 2019; Mie et al. 2017; Vigar et al. 2019). However, findings from a systematic review by Vigar et al. (2019) and concurred by Glibowski (2020) indicate significant positive outcomes are linked to organic food products' consumption. These outcomes include the reduced occurrence of conditions like metabolic syndrome, a high Body Mass Index (BMI), non-Hodgkin lymphoma, infertility, congenital disabilities, allergic sensitisation, otitis media, and pre-eclampsia. Yet the existing body of evidence does not permit a conclusive assertion regarding the long-term health advantages of consuming an organic diet. Furthermore, the consumption of organic food products is frequently associated with overall healthier dietary patterns and a lower prevalence of overweight and obesity. In addition, research by del MarGómez-Ramos et al. (2020) suggests that organic foods tend to have fewer pesticide residues, as they are produced without synthetic pesticides and GMOs; pesticide residues are approximately five times lower in organic food products than in conventional ones.

Human health is an integral part of sustainability and is a crucial component of the current research. It not only reflects the social well-being of communities but also signifies the interdependence of human societies and their environment. Thus, the

effect of organic food products on human health is discussed in the following subsections.

2.4.1 Chemical exposure

As previously stated, organic food products have lower pesticide residue exposure than conventionally produced foods (Brantsæter et al. 2017; del MarGómez-Ramos et al. 2020). As a result, people with allergies to foods, chemicals, and preservatives often find that their symptoms lessen or even disappear when they eat organic food products (Leong et al. 2020; Mie et al. 2017; Payet et al. 2021). To be more specific, pesticide residue refers to pesticides that may remain on or in food after application (WHO 2018). The general public may be exposed to pesticide residues through the consumption of these foods and close contact with agricultural areas where these pesticides are used (Hendriks et al. 2019).

Pesticides are widely used in conventional agricultural production to prevent or control diseases, pests, weeds, and other plant pathogens, reduce yield losses, and maintain product quality (Damalas & Eleftherohorinos 2011). Nonetheless, Sarbawal et al. (2018) state that pesticide use is linked to the pathogenesis of Parkinson's and Alzheimer's diseases, as well as several respiratory and reproductive tract disorders, due to oxidative stress that causes DNA damage, which leads to cancer. Moreover, organic food products contain significantly lower levels of cadmium and nitrogen (Brantsæter et al. 2017; Leifert 2014). According to epidemiological studies, cadmium exposure is linked to a variety of cancers, including breast, lung, prostate, nasopharynx, pancreas, and kidney cancer (Genchi et al. 2020). Similarly, Marsala et al. (2021) added that high groundwater nitrogen due to the use of artificial fertilisers is linked to carcinogenic N-nitrosamines in adults and methemoglobinemia in infants. Mie et al. (2017) also highlight the risk of insecticide exposure at current levels and the negative effect it has on children's cognitive development. According to the United States Environmental Protection Agency (US EPA), these health risks result from occupational exposure and residues in food and drinking water (US EPA 2018). However, the impact of pesticides' use is difficult to assess based on the period and level of exposure, the type of pesticide, and the mixtures used in the field (US EPA 2018).

A study by Damalas and Eleftherohorinos (2011) determined that 32 out of 76 fungicides, 25 out of 87 herbicides, and 24 out of 66 insecticides were found in 276 legally marketed products in Europe and are related to at least one health effect, which include carcinogenic aspects, endocrine disruptors, reproductive and developmental toxicity, as well as acute toxicity. However, these authors emphasise that well-maintained and appropriate equipment to spray crops, along with all the other required precautions in all the stages of pesticide handling could reduce exposure to pesticide residue in food and drinking water. This approach could, in turn, aid in mitigating the detrimental impacts of pesticides on human health and the environment (Damalas & Eleftherohorinos 2011).

Likewise, organically raised animals are not given any routine disease-preventing antibiotics or growth hormones or are fed any animal by-products (Gopalakrishnan 2019). By feeding livestock animals by-products, there is an increased risk of mad cow disease (Center for Veterinary Medicine 2020), and the use of routine antibiotics can create antibiotic-resistant strains of bacteria (Gopalakirshnan 2019; Kim et al. 2018; Manyi-Loh et al. 2018; Mie et al. 2017). This implies that the biological entity ingesting these commodities may exhibit diminished susceptibility to antibiotic therapy in the event of illness caused by these bacterial strains (Mie et al. 2017; Tang et al. 2017).

Furthermore, conventional agricultural practices can expose cultivators to pesticides and other harmful chemicals, which can adversely affect their health. Several studies (Arcury et al. 2014; Damalas & Koutroubas 2016; Fuhrimann et al. 2019) have shown a clear association between occupational exposure to pesticides in conventional agriculture and various health risks among farm workers. Research conducted by Arcury et al. (2014) found that farm workers in conventional agricultural settings, such as those involved in pesticide application and crop harvesting, are at an elevated risk of acute and chronic health issues due to pesticide exposure. These health problems may include respiratory issues, skin disorders, neurological effects, and a heightened risk of certain cancers. Damalas and Koutroubas (2016) explain that these cultivators are predominantly exposed to pesticides during the formulation and application of pesticide sprays and when cleaning spraying equipment. The authors highlight that cultivators engaged in tasks involving the mixing, loading, and application of pesticides are also at risk of exposure due to spillage, inadvertent contact with sprayed solutions, potentially inadequate protective gear, and the occurrence of pesticide drift. In addition, the authors note that cultivators can encounter pesticide exposure even while conducting activities unrelated to direct pesticide application. Engaging in manual labour within pesticide-treated areas exposes cultivators to significant risks, including direct spray contact, drift from adjacent fields, or interactions with pesticide residues on crops or soil. This form of exposure, the authors argue, is frequently underestimated. According to Damalas and Koutroubas (2016), cultivators' pesticide exposure primarily occurs through the skin and inhalation, with dermal contact occurring on body regions not shielded by protective clothing, such as the face and hands.

It is possible to conclude that exposure to pesticides and antibiotics used in conventional agricultural methods – for the cultivator during production and the consumer during the consumption of these products – may result in chronic health risks. Thus, the connection between the potential health risks from exposure to pesticides and antibiotics in conventional agriculture practices and the exploration of organic community food gardens aligns with this investigation's aim to evaluate the viability of such gardens as a sustainable alternative, from both the perspectives of cultivators and consumers.

2.4.2 Food composition

The nutritional value of food represents the contents of food and the consequential effect on the body (Brantsæter et al. 2017). Unquestionably, higher nutritional values significantly impact consumers' behaviour toward organic food product purchase intentions (Bostan et al. 2016; Nguyen 2020; Vigar et al. 2019). Several studies by Brantsæter et al. (2017), Glibowski (2020) and Leifert (2014) claim that there are higher nutritional values and higher antioxidant levels in organically grown food products than in conventionally grown food products. According to Leifert (2014), organic food products have 60% more antioxidants than conventionally grown foods and have been linked to a lower risk of cardiovascular and neurodegenerative diseases, as well as certain cancers. Yet Barański et al. (2017) emphasised that there is almost no information available in published literature from extended observational

studies that concentrate on chronic ailments such as cardiovascular issues, diabetes, cancer, and neurodegenerative disorders that compare organic and conventional diets. Similarly, controlled experiments involving human dietary interventions to compare the impacts of organic and conventional diets are also lacking.

Benbrook et al. (2013) ultimately suggested that organic milk and dairy products may contain higher levels of omega-3 fatty acids, as well as slightly higher levels of iron, vitamin E, and some carotenoids. Carrington and Arnett (2018) and Kapoor et al. (2022) concurred and explained that during the natural ripening process of fruits and vegetables, nutrients such as vitamin C, carotenoids, flavonoids, antioxidants, natural sugars, and various phytochemicals can be synthesised or enhanced. Thus, the nutritional quality of the fruit is altered by adding chemicals causing crops to ripen more quickly (Hewajulige & Premaseela 2020). Robinson and Segal (2019) concluded that organic meat and milk tend to have up to 50% higher levels of beneficial nutrients such as omega-3 fatty acids, certain antioxidants, and conjugated linoleic acid (CLA) compared to their conventionally produced counterparts. In addition, Brantsæter et al. (2017) confirmed the compositional differences between organic food products versus conventionally grown products from numerous studies, as presented in Table 2.1. It is evident in this table that higher levels of vitamins, such as vitamin C, vitamin E and carotenoids, are present in organic food products than in conventionally grown food products. Similarly, minerals (calcium, potassium, phosphorus, magnesium, and iron), antioxidants, phenolic compounds and beneficial fatty acids are all present in higher quantities. Conversely, lower nitrate, protein, amino acid, nitrogen, iodine, selenium, cadmium, pesticide residues, and Fusarium toxins were present in organic food products compared to their conventional counterparts (see Table 2.1).

Table 2.1:Compositional differences between organically and conventionally
grown (Brantsæter et al. 2017)

		Organic versus
Parameters	Food produce	conventional
Vitamins: e.g., vitamin C, vitamin E, and carotenoids	Fruit, vegetables	Higher (most studies)
Minerals: calcium, potassium, phosphorous, magnesium, iron	Fruit, vegetables, cereals	Higher
Nitrate	Fruit, vegetables, cereals	Lower
Antioxidant activity	Fruit, vegetables, cereals	Higher
Phenolic compounds (total)	Fruit, vegetables, cereals	Higher
Protein, amino acids, nitrogen	Fruit, vegetables, cereals	Lower
Beneficial fatty acids, i.e., eicosapentaenoic acid, docosapentaenoic acid, docosahexaenoic acid, α-linolenic acid, and conjugated linoleic acid	Milk, meat	Higher
Iodine and selenium	Milk	Lower
Cadmium	Fruit, vegetables, cereals	Lower in cereals
Pesticide residues	Fruits, vegetables, and grains	Lower risk for contamination
Fusarium toxins	Cereals	Similar or lower in organic

Ultimately, opting for organic food products can augment the presence of antioxidants, advantageous fatty acids, and various indispensable vitamins and minerals in one's diet. Thus, the organic versus conventional food product debate demonstrates evidence of organic food products' likely higher nutritional value for certain nutrients. However, to facilitate the current research endeavour, a thorough examination of South Africans' perception and awareness regarding organic food products was imperative.

2.5 SOUTH AFRICAN CONSUMERS' VIEWS OF ORGANIC FOOD PRODUCTS

South Africa has a long history in the organic sector, as the country was one of the founding members of the IFOAM in 1972, according to the National Organic Production Policy (Draft 10) of 2010. Organic food products are in high demand in South Africa, and developing countries are frequently targeted for the promotion of organic agricultural methods due to the employment opportunities they provide (UNEP

2017; Meemken & Qaim 2018). De Bon et al. (2018) explain that these employment opportunities are created because organic agriculture is often considered more labourintensive than conventional agriculture due to practices such as manual weed control, reduced reliance on synthetic pesticides, and more diverse crop rotations. However, the level of labour intensity can vary based on factors like farm size, location, and specific practices being implemented.

As indicated, there has been an increase in the demand for organic food products in South Africa in recent years. According to a 2020 report by SAOSO (2022), the organic food industry in South Africa is growing at an average rate of 5-7% per year. The report notes that the demand for organic food products is driven by middle- and upperincome consumers willing to pay a premium for organic products (Auerbach 2020; SAOSA 2022). Hattingh and Ramlakan (2022) and Nielsen (2018) similarly concurred that two-thirds of South African consumers are willing to pay more for organic food products. This trend can be attributed to a variety of factors, including South Africans' concerns about food safety and health, environmental sustainability, and a desire to support local farmers (Kisaka-Lwayo & Obi 2016). Furthermore, a study conducted by Fynn-Green et al. (2019) observed that South African consumers perceive organic food products. The study also discovered that while consumers were willing to pay a premium for organic food products, their availability and affordability remained barriers to consumers' purchase intention (Fynn-Green et al. 2019).

In the framework of the current exploration, it was imperative to consider these favourable and unfavourable perspectives of organic food products in the South African context. Nonetheless, the potential to enhance the accessibility and affordability of organic food items for the South African consumer becomes a plausible avenue if orchestrated through efforts by community garden cultivators. This approach emerges as a viable prospect for upholding the enduring viability of said gardens. Consequently, it establishes a pertinent connection to the aim of the present research, which revolved around examining perceptions and hindrances associated with the procurement and cultivation of organic food products.

2.5.1 Production and export of organic food products

According to Willer et al. (2023), in the world of organic agriculture and emerging trends in 2023, South Africa has 97 359 hectares of organic-certified land, which shows a 125.5% growth in the past 10 years. Additionally, this land accounts for 0.01% of the organic share in the world, with 1 307 organic food producers, 213 processors, and 107 exporters in total. Moreover, Sikuka (2019) categorised the main organic food products produced in South Africa as vegetables, fruits, cereals, nuts, liquor, tea, herbs and spices, edible oils, and poultry. This finding was confirmed in 2023 by Willer et al. (2023), as summarised in Table 2.2. Conversely, most of these organic food products (approximately 28 450 tons) are exported to Europe, the US and Far East Asia (Willer et al. 2023). Exporting the majority of organic food products could potentially constrain the attainability and widespread access of such products within the ambit of South African consumers' demographics.

Category	Organic area [ha]	Organic share [%]	Area fully converted [ha]	Area under conversion [ha]
Cereals	1'868	0.05	1'862	6
Citrus fruit	695	0.71	617	78
Cocoa beans	174	0.25	174	
Temperate fruit	1'281	1.9	1'281	
Tropical and Subtropical fruit	1'551	3.98	1'549	2
Grapes	2'764	2.41	2'041	723
Oilseeds	3		3	
Olives	8		8	
Vegetables	744	0.75	666	78

 Table 2.2:
 Organic food products produced in South Africa (Willer et al. 2023)

As mentioned, Erasmus et al. (2020) affirm that despite the diverse array of organic food products being cultivated within South Africa's organic agricultural sector and the increasing consumer demand for such items, the challenge of ensuring accessibility to these products remains unresolved. The establishment and active support of organic community gardens thus emerge as a promising strategy that aligns with the need to enhance consumers' access while promoting sustainability and local engagement.

2.5.2 Organic food product retailers in South Africa

2.5.2.1 Commercial retailers

Woolworths and Pick 'n Pay, two prominent retailers in South Africa, are considered organic market leaders in South Africa, with a target market of middle to high-income consumers (Sikuka 2019). Thus, with 49.2% of the South African population living below the upper-bound poverty line (STATSA 2019), the accessibility of organic food products in South Africa remains questionable. Pick 'n Pay's private organic food product label brand is tightly regulated by food technologists during cultivation to ensure the integrity of its organic food products and offer its customers the best possible organic food products (SLR 2021). Additionally, according to Pick 'n Pay's sustainable living report (2021), their organic range is 100% independently certified organic and safe, ensuring that customers receive high-quality items cultivated in a naturally sustainable manner.

Conversely, according to its website, Woolworths launched its range of organic food products in 2008, ready to meet the growing consumer demand. According to the Good Business Journey Programme targets, 60% of products will have a sustainability attribute by 2015 and 100% by 2020 (Durham 2012). Their current website (<u>Organic Products | Woolworths.co.za</u>) states that Woolworths is pleased to provide the largest selection of organically certified items in South Africa. Furthermore, the company is committed to expanding its organic range so customers can live an organic lifestyle more easily. This includes jams, various pastas, peanut butter, sauces, coffees, oils, breakfast cereals, chocolates, condiments, and organic cotton basics in clothing and homeware. Their organic farmers adhere to the values of increasing soil fertility, reducing environmental harm, utilising natural systems rather than combating them, and preserving animal welfare (Woolworths 2023).

Another major retailer in South Africa, Shoprite Checkers, has a collective mission to bring products and services to market that delight in both quality and price. Jansen van Rensburg, a journalist for this retailer, states that Checkers is aware of the environmentally friendly movement and strives to keep its marketing strategies focused on green consumption (Engelbrecht et al. 2022). In addition, the chairperson of the social and ethics committee, Dr Anna Mokgokong, stated in the group's 2022 sustainability report that being a good corporate citizen requires the establishment of an ethical culture. This includes ensuring customers' and employees' health, safety, and welfare, as well as contributing to the development of the communities in which they operate and providing opportunities for shared socioeconomic value to all their stakeholders. The Group is dedicated to environmental protection, fulfilling its transformational mandate, and adhering to applicable legislation, regulations, and codes.

These commitments align with the SDGs, specifically SDG 2, which is to "End hunger, achieve food security and improved nutrition, and promote sustainable agriculture", SDG 8, which is to "Promote sustained, inclusive, and sustainable economic growth, full and productive employment, and decent work for all", and SDG 12, to "Ensure sustainable consumption and production patterns" (Mokgokong 2022). Furthermore, Checkers' 'Planet Bag', a 70-micron shopping bag made of 100% recycled and recyclable plastic, lasts for many shopping trips, lowering environmental impact by reducing landfill waste and offering customers 50 cents off their purchases when using these bags. In addition, the company's 'Simple Truth' range was launched, promising no artificial colours or flavours, no artificial sweeteners, and no added monosodium glutamate (MSG). This line is also organic and vegan friendly, in addition to being low in sugar and high in protein (Engelbrecht et al. 2022).

2.5.2.2 Farmers markets

The organic market in South Africa also includes farmer's markets such as the Oranjezicht City Farm Market, Oude Molen, Stellenbosch Slow Market, and The Urban Farmer, to name a few in the Western Cape area. These outlets offer organic fruits and vegetables, poultry and meat, raw and unpasteurised honey and yoghurt, pantry cupboard staples, as well as vitamins, beauty products, household detergents, pre-made meals, juices, and smoothies (Short et al. 2018). Within the context of the current research, these markets might present organic community food producers with an opportunity to sell their produce and ensure their economic sustainability.

South Africa has a thriving organic food product market, and organic agriculture may be able to alleviate some of the country's unemployment. However, this expanding

market faces significant economic challenges due to high certification, labour, and production costs. South African consumers are increasingly interested in organic food products. They are willing to pay a premium for these products, but their availability and affordability remain major challenges that must be addressed to further expand South Africa's organic food industry. The following section expands on this discussion by addressing the potential role of community gardens in achieving sustainability.

2.5.2.3 Others

Kroll (2016) examined the food market system, which includes poorer areas in South Africa, to determine where technology design should be directed and what type of enterprise could herald a systemic change in the food market. The food market in impoverished areas includes supermarkets and small-scale retailers, and these 'Spaza-shops' sell food to 70% of households in South Africa's poorer communities (Kroll 2016). A study by Willie (2024) explains that Spaza shops, colloquially known as 'tuck shops' or 'convenience stores', are locally owned establishments that serve as essential hubs for daily necessities, thereby fostering community interactions. These small-scale retailers have the potential to be a vital link in the development of the local food market system, but they face challenges in refrigeration, storage, and cost per volume. However, food markets, employment patterns, and the spatial configuration of the city all contribute to urban food security, necessitating the incorporation of the informal retail chain into the local food system (Battersby 2011).

iZindaba Zokudla is an isiZulu phrase that means "conversations about food". It is a research project that aims to create opportunities for urban agriculture in a sustainable food system (Malan 2015). Furthermore, universities, researchers, students, communities, entrepreneurs, and other stakeholders are working together to develop in-service learning and applied research projects that will contribute to social equity. iZindaba Zokudla has pioneered innovative agricultural development methods that have relevance for the development of new institutions, technology, markets, and sustainable agricultural produce distribution methods (Malan 2015). These markets could provide a strategy for communities to sell their products and earn an income.

Organic gardening, according to Small (2007), provides hope to urban communities. Abalimi Bezekhaya (Planters of the Home) is an urban agriculture organisation based on the Cape Flats near Cape Town, South Africa, in the socioeconomically disadvantaged townships of Khayelitsha, Nyanga, and surrounding areas (Small 2007). They help individuals, groups, and community-based organisations establish organic vegetable gardens to supplement their diet, improve household food and nutrition security, and generate long-term additional income. Further, Watermeyer (2018) reports that organic food gardens are sprouting up on sidewalks, waste spaces, and rooftops as farmers become involved in producing affordable organic produce motivated by food security and job creation. Johannesburg, in the Gauteng Province, is following suit with several gardening initiatives, such as Joubert Park's greenhouse project in Hillbrow. The greenhouse's organic vegetables are sold to hawkers and local restaurants. Only a few kilometres away, in Bertrams, is the Bambanani Food and Herb Cooperative, an award-winning organic farm. The project was created to provide more nutritious food to the community by selling produce to local supermarkets, restaurants, and hip inner-city markets. This cooperative is highly active in educating the community about organic agriculture techniques (Watermeyer 2018).

2.6 SUMMARY

The global expansion of organic agricultural land signifies the increasing recognition of organic agriculture's benefits in addressing health concerns and promoting sustainable diets, as highlighted by organisations like the FAO. Thus, the surge in organic food production and the rise of organic community food gardens offer the promise for improving food security and reducing poverty, especially in regions like the Western Cape of South Africa. While challenges persist, such as accessibility and cost, organic agricultural practices' potential contributions to social, economic, and environmental sustainability are gaining recognition among researchers and stakeholders. The subsequent chapter investigates organic community food gardens' contribution to sustainability, offering a deeper understanding of their impact on social, economic, and environmental dynamics within local communities and contributing to the broader discourse on sustainable food systems.

CHAPTER 3 – ORGANIC COMMUNITY FOOD GARDENS' CONTRIBUTION TO SUSTAINABILITY

3.1 INTRODUCTION

Chapter 2 extensively examined the complexities associated with organic food products, elaborating on their attributes, certification procedures, significance within consumers' dietary preferences, and South African consumers' views regarding organic food products. Nevertheless, it is imperative to acknowledge that notwithstanding their undeniable growth and prominence, the accessibility and affordability of organic food products pose substantive obstacles to adopting a lifestyle that embraces these products. The concept of sustainability is central to the current study as it aims to explore organic community food gardens' potential contribution to the three pillars of sustainability, namely economic, social and environmental (Sánchez-Bravo et al. 2021). This involves cultivating organic food products in a way that avoids the use of synthetic chemicals and preserves soil health, biodiversity, and water resources (Giampieri et al. 2022). Sustainability in this context means ensuring that these gardens can operate and provide nutritious food over the long term without depleting resources or harming the environment.

In addressing the three dimensions of sustainability, the undeniable connection to the SDGs becomes evident. As highlighted by Wong (2021), the SDGs encompass a set of 17 objectives along with 169 specific targets, all aimed at concurrently safeguarding human welfare, fostering economic advancement, and preserving environmental integrity. By exploring organic community food gardens' potential contribution, the study addressed environmental concerns along with social and economic dimensions.

The SDGs provide an established and universally recognised framework that facilitates a comprehensive analysis of these community gardens' possible contributions. By aligning with specific SDGs, the study ensured a holistic assessment across economic, social, and environmental dimensions. This framework not only enhances the credibility and relevance of the research but also situates the findings within the global dialogue on sustainable development. Furthermore, referencing the

SDGs' positions, the current study contributes to broader policy deliberations, advocacy endeavours, and initiatives aimed at realising these global objectives within the South African context. Sustainable development seeks to balance all these dimensions, and in this case, the focus is on how these gardens can positively contribute to the well-being of cultivators and consumers while preserving the environment. The forthcoming discussion explores sustainable development in conjunction with the 17 SDGs as they relate to sustainability.

3.2 SUSTAINABLE DEVELOPMENT

According to Zhang and Zhu (2020), sustainable development means achieving better and fairly shared well-being while remaining within the boundaries of the environment's capacity. This definition is deemed explicit and precise because it combines the ideas put forth by Aksoy and Bayram Arli (2019), which focus on "what makes something sustainable" by keeping the use of natural resources within specific limits and "what counts as development" by making sure well-being is improved and shared by all. Importantly, this new interpretation also fits with the main principles of the three pillars of the SDGs. It pushes for better and more fairly shared well-being in the economic and social arenas, and it also emphasises controlling the use of natural resources within the environment's limits.

Klarin (2018) further augments this conceptualisation of sustainable development by accentuating its multidimensional nature, encompassing socioeconomic advancement, the fulfilment of inherent needs, and the preservation of prospects for future generations. This comprehensive viewpoint aligns with the assertions of Gupta and Vegelin (2016), as well as Muralikrishna and Manickam (2017), who advocate for a holistic equilibrium among economic, social, and environmental progress as the only viable means to realise comprehensive sustainable development. Notably, Ruggerio (2021) substantiates this perspective and introduces Figure 3.1 as an illustrative representation of this complex interplay.



Figure 3.1: Multidimensional conceptualisation of sustainable development (Ruggerio 2021)

According to Figure 3.1, presented by Ruggerio (2021), sustainable development addresses the social, economic, and ecological dimensions as a whole, avoiding distributional perspectives and giving weight to one of these dimensions at the expense of others, thereby emphasising their interdependence. Thus, these pillars offer a foundation for holistic development and directly contribute to formulating and realising the 17 SDGs.

3.2.1 Sustainable Development Goals

The SDGs were adopted by United Nations member states on 25 September 2015 (UN 2015). These SDGs provide a framework for achieving a better, more sustainable future for the global population (UN 2019). It addresses global issues that affect everyone, such as poverty, inequality, climate change, environmental degradation, peace, and justice. Furthermore, the United Nations (2019) explains that the 17 goals are all interconnected, and societies must achieve these goals by 2030. According to

Bekele-Thomas (2018) and Moyer and Hedden (2020), the 2030 Agenda, characterised by its 17 SDGs, stands in marked contrast to its antecedent, the Millennium Development Goals (MDGs), which comprised only eight goals. While the MDGs were oriented towards addressing facets of poverty, health, education, gender equality, and environmental sustainability within a timeframe culminating in 2015, the SDGs represent a broader and more intricately woven framework designed to confront multifaceted global challenges. It was emphasised that no country is expected to adopt all of these indicators; rather, the goal was for these indicators to be highly advice-giving, all-encompassing, and applicable to all countries, focusing on people, prosperity, the environment, partnership, and peace (UN 2019).

Following the assertions made by the United Nations (2019), a reassessment of the methodologies employed in cultivating, distributing, and consuming food commodities is deemed imperative. An adept execution of this revaluation has the potential to engender a confluence wherein agriculture, forestry, and fisheries can effectively provide nourishing sustenance and an adequate income, thereby concurrently fostering rural advancement and safeguarding ecological integrity. However, Gupta and Vegelin (2016) believe that politics tend to favour the economy at the cost of the rest of social and environmental goals. In other words, political choices may prioritise economic development while potentially neglecting social welfare and environmental conservation objectives.

The United Nations (2019) unequivocally explained the current global state, where critical natural resources, namely soils, freshwater, oceans, forests, and biodiversity, are undergoing swift degradation, exacerbated by the additional strain of climate change. This confluence of factors places heightened pressure on the essential natural reservoirs upon which humanity relies. Consequently, a substantial number of rural households find themselves in a state of financial insufficiency, compelling them to relocate to urban areas in pursuit of alternative avenues for gainful employment (Adger et al. 2019; Mthiyane et al. 2022). To help alleviate these hunger threats, imperative changes such as agricultural investment, increased agricultural productivity, and sustainable food production systems are vital (UN 2019).

Osborn et al. (2015), as well as Silvestre and Ţîrcă (2019), believe that even though the SDGs are relevant and applicable in general to all countries, and specifically to developing countries, it is important to note that the nature and balance of these challenges will differ in different national contexts. These authors explain that the SDGs reflect the moral principle that no country or person should be left behind and that everyone and every country has a responsibility to play their part in the global vision, whether the country is developed or developing. South Africa's inaugural Voluntary National Review (VNR) (2019) underscores the country's dedication to Agenda 2030's complete implementation, involving multiple stakeholders to assess policy impacts on sustainable development and tackle persistent challenges. Furthermore, addressing shortcomings, particularly stakeholder engagements and reporting with developmental plans. Additionally, South Africa's National Development Plan 2030 (NDP) parallels Agenda 2030's objectives, emphasising poverty reduction, equality, and inclusive economic growth by 2030.

Progress in South Africa since 1994 includes improved living conditions, expanded education access, social protection growth, and gender equality. Moreover, challenges, according to the NDP 2030 report, include inequality, violence, discrimination, a low-carbon transition, and global support needs. Collaboration, data disaggregation, anti-corruption efforts, inclusive job creation, partnerships and gender parity are vital for achieving the SDGs. The current study's focus on organic community food gardens demonstrates a practical initiative that involves stakeholders at the community level contributing to sustainability. By engaging local communities in sustainable agricultural practices, the study resonates with South Africa's emphasis on stakeholder engagement as a priority.

The United Nations' 2030 Agenda for Sustainable Development includes the following seventeen goals to be achieved by 2030 (UN 2015):

- 1. end poverty in all forms everywhere,
- end hunger, achieve food security, improve nutrition, and promote sustainable agriculture,
- 3. ensure healthy lives and promote well-being for all ages,

- 4. ensure inclusive and equitable quality education and promote lifelong learning opportunities for all,
- 5. achieve gender equality and empower all women and girls,
- 6. ensure the availability and sustainable management of water and sanitation for all,
- 7. ensure access to affordable, dependable, sustainable, and modern energy for all,
- 8. promote sustained, inclusive, and sustainable economic growth, full and productive employment and decent work for all,
- 9. build resilient infrastructure, promote inclusive and sustainable industrialisation and foster innovation,
- 10. reduce inequality within and among countries,
- 11. make cities and human settlements inclusive, safe, resilient, and sustainable,
- 12. ensure sustainable consumption and production patterns,
- 13. take urgent action to combat climate change and its impacts,
- 14. conserve and sustainably use the oceans, seas, and marine resources for sustainable development, protect, restore, and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss,
- 15. promote peaceful and inclusive societies for sustainable development,
- 16. provide access to justice for all and build effective, accountable, and inclusive institutions at all levels, and
- 17. strengthen the implementation and revitalise the global partnership for sustainable development.

These goals collectively address a wide spectrum of global challenges to ensure a comprehensive and holistic approach to sustainable development. Furthermore, the SDGs provide a robust framework that validates the significance of exploring organic community food gardens' contribution to sustainability and offers a structured way to assess, interpret, and communicate their impact across economic, social, and environmental dimensions. Thus, it is proposed that for the current study, these 17 SDGs are categorised into the three sustainability pillars (see Table 3.1).
Economic Sustainability	Social Sustainability	Environmental Sustainability
POVERTY		2.
BECENT WORK AND ECONOMIC GROWTH	2.	6.
9.	and well-being 2.	T.
10.	3.	RESPONSIBLE CONSUMPTION AND PRODUCTION
SUSTAINABLE CITIES AND COMMUNITIES	4.	13.
RESPONSIBLE CONSUMPTION AND REDUCTION	10.	14.
	SUSTAINABLE CITIES AND COMMUNITIES	
	15.	
	16.	
	PARTNERSHIPS FOR THE GOALS	

 Table 3.1:
 Proposed Classification of Sustainable Development Goals (SDGs)

It is important to note that, in addition to the preceding discussion of organic food products and organic agricultural practices, the current study may be able to address categories in all three of the sustainable development pillars. To highlight the importance of the SDGs' three primary pillars – social, economic, and environmental – a further discussion is required and follows in the next section.

3.2.2 Social sustainability

The achievement of both environmental and economic sustainability goals is aided by social sustainability (Eisenmenger et al. 2020). Nonetheless, these authors agree that politics tends to favour the economy at the expense of social and environmental goals. As a result of increased awareness of environmental concerns and technological solutions in urban developments, as well as a lack of progress in addressing social issues in cities, such as inequality, displacement, liveability, and the increasing need for affordable housing, social sustainability emerged (Eisenmenger et al. 2020; Eizenberg & Jabareen 2017; Woodcraft 2015). Human rights, redistribution, rural development, entitlements, and perceptions of capability are all added to the list of social injustices by Gupta and Vegelin (2016).

Thus, social sustainability refers to a process of creating sustainable and successful spaces that will promote people's well-being by understanding their needs in the places where they live and work (Woodcraft 2015). According to Eizenberg and Jabareen (2017), the need for the social sustainability pillar was motivated by climate change, and its subsequent uncertainties pose serious risks to social, spatial, structural, and physical entities in contemporary human civilisations and their living spaces. Furthermore, these authors proposed a conceptual framework that focuses on the interrelationship of safety, urban forms, equity, and eco-prosumption to better understand social sustainability (See Figure 3.2).



Figure 3.2: Concepts of social sustainability (Eizenberg & Jabareen 2017)

In Figure 3.2, Eizenberg and Jabareen (2017) associate the concept of equity with the idea of preventing unequal policies and promoting fundamental public participation in the production of space. In contrast, safety refers to the right not only to be safe but to adopt all measures of alternation and security to prevent future casualties and bodily harm. The concept of eco-prosumption relates to consuming, producing and gaining value towards socially and environmentally responsible habits. Finally, sustainable urban forms are desired physical forms that promote a sense of community, safety, health, and place attachment, among other environmental objectives. These factors' importance to the current study is undeniable, as community food gardens already promote a sense of community. However, by incorporating organic agricultural practices, these gardens may also be able to address eco-prosumption and food safety in these communities.

Rivera et al. (2018) and Zmyślony et al. (2020) investigated the role of social capital in rural and agricultural development as a component of social sustainability. The social capital concept emphasises the role of relationships as the hidden resource in being successful in all areas of life, including work, family, and community. These authors explain that social capital can be seen as the opposite of individualism, where everybody succeeds or fails due to their actions and abilities. Bhandari and Yasunobu (2009) define 'social capital' as a communal resource consisting of common standards, principles, convictions, confidence, connections, interpersonal bonds, and establishments that enable collaboration and joint efforts for mutual advantage. Social capital is seen as a main analytical concept and policy tool for local development, where the focus is on people's capabilities to organise themselves and engage in development to reduce rural poverty and hunger (Nieman 2014; Rivera et al. 2018). The five areas of social capital explored by these authors were trust, cooperation, community, culture, and tradition, as these areas play a significant role in agricultural and rural development, and relate to how people interact, organise, and relate to each other to improve social development.

The study by Rivera et al. (2018) emphasised the importance of social capital, particularly trust and the quality of relationships. However, it was discovered that these relationships and a sense of community cannot just be achieved; definite actions must be taken to enhance trust-building and strengthen communities to facilitate social development (Rivera et al. 2018). This concept is relevant to the current study because it incorporates communities and the trusting relationships that must be established to facilitate the cultivation of organic community food gardens. It particularly relates to the TPB and consumer purchase decisions.

The aforementioned concepts reflect the need to address social responsibility within supply chain management. Jabbour et al. (2015) explain that supply chain management is about relationships, and the increased awareness of social sustainability means stakeholders in the supply chain now need to take responsibility and act against unsustainable practices and misconduct in their supply chain. Govindan et al. (2020) agree and state that these misconducts begin at the higher tier suppliers and their sub-suppliers. Thus, to ensure social sustainability in the supply chain, interventions have to start with the top-tier suppliers where violations of human rights, hazardous working conditions, lack of health and safety measures, low wages and excessive working hours, poor community engagement and lack of safety and privacy are often evident (Govindan et al. 2020; Köksal et al. 2017). In addition, Köksal

et al. (2017) identified internal and external barriers to the adoption of socially sustainable practices. These include consumer price demands and internal cost reduction. Because the organic food product market is currently dominated by commercial retailers (Section 2.2.4.2), the previously stated barriers are addressed in the current study. Thus, social sustainability for these communities can be addressed by increasing their involvement in community food gardens through education, emphasising the positive environmental and economic contribution of organic food gardens based on direct supply to the consumer.

As noted previously, social sustainability is emphasised in the study because community garden cultivators may face many of the aforementioned barriers, and social issues must be addressed before drivers toward the introduction of organic community gardens can be initiated.

3.2.3 Economic sustainability

Economic sustainability can refer to either the "continued success of an economy over time or, more recently, the way an economy operates sustainably, protecting social and environmental elements" (Ruggerio 2021). According to Quiroz-Niño and Murga-Menoyo (2017), current leading economic systems are destroying nature, leading to climate change, the exhaustion of resources, and various forms of social injustice. Typically, to achieve goal 1 (alleviate extreme poverty) of the SDGs, challenges are posed to global and national leaders as it is estimated that, globally, people are living on less than 1.90 US dollars per day (Balcerowicz-Szkutik et al. 2020). These challenges include but are not limited to rapid urbanisation and food security (Mthiyane et al. 2022).

Additionally, a paper by Kenny (2018) suggests that changes towards economic sustainability will be expensive and low- and middle-income countries might incur expenditures worth 11.5% of their gross domestic product at market exchange rates. Huang et al. (2016) agreed and identified the low-income consumer as a vulnerable part of society with daily challenges to meet household needs and consume a healthy diet. This is how the current study, with its emphasis on community gardens, relates to economic sustainability. When low-income consumers face financial difficulties, and

their intake of fruits and vegetables reduces due to the perceived inflated cost of these items, energy-dense foods become the food of choice (Huang et al. 2016).

To emphasise, Pechey and Monsivais (2016) investigated the cost of food as a contributor to socioeconomic inequality in terms of diet in the United Kingdom. The purchasing of fruits and vegetables and less healthy foods and beverages were used as indicators of the healthiness of choices. The choice of different supermarkets, whether it was high or low-price supermarkets, was reviewed. It was found that the higher occupational social class consumer could be identified by a higher food expenditure, which included healthier options. Furthermore, although the correlation between expenditure and the healthiness of selections was more prominent for fruits and vegetables in contrast to less healthy options, the degree to which expenditure served as a mediator for socioeconomic disparities was higher for less healthy foods and beverages (63%) compared to fruits and vegetables (35%). When the supermarket choice was controlled, these figures were significantly reduced to 53% and 31%, respectively. According to these authors, findings suggested that socioeconomic inequalities are a key contributor to less healthy food choices. It was concluded that cost significantly contributes to the socioeconomic inequality of healthy food choices and that the actual or perceived cost of healthy diets should be addressed to reduce socioeconomic disparities in food purchasing decisions.

A study by Labadarios et al. (2011) portrayed the situation in South Africa. Their study measured the dietary variety and, by association, food security of the South African population. According to these authors, dietary variety was exceptionally low in the low Living Standard Measure (LSM) group, and nearly 40% of South Africans consumed only one to three different food groups per day (Mchiza et al. 2015). The most neglected food group was vitamin A-rich fruit and vegetables, legumes and nuts. It should be noted that a varied diet is perceived to be more highly priced. Mchiza et al. (2015) confirmed these findings in a dietary survey review of the adult South African population from 2000 to 2015. Despite national food fortification, the consumption of many micronutrients, particularly calcium, folate, B vitamins, and vitamins C and D, remained low. Similarly, Vilar-Compte et al. (2021) expressed concern that living below the poverty line in African countries is endangering sustainable development and food security, leading to urban food riots and malnutrition.

In addition, Malak-Rawlikowska et al. (2019) also refer to traditional direct food delivery systems, which go directly from the supplier to the farmer's market, as short food supply chains (SFSCs), as opposed to more conventional (mass production) food systems. They highlight the economic advantages of SFSCs, which command higher price premiums. However, it was noted that after distribution costs were deducted in some chains, it was less attractive to some cultivators, which led to self-assessments and a review of the bargaining power of these cultivators. Moreover, from a broad sustainable development point of view, these SFSCs generate more employment opportunities and gender balance, which, in return, promote economic and social sustainability. As a result, it is relevant to the current study with its focus on sustainable development, which includes economic sustainability. However, it is important to note that economically sustainable practices should not come at the expense of the environment.

In the context of organic community food gardens, this discussion underscores the potential for such gardens to address economic sustainability challenges. By providing affordable access to fresh produce, community gardens could contribute to improved diets and better health outcomes for low-income individuals who are unable to afford organic food products from commercial stores. Additionally, the concept of SFSCs highlights the economic potential of local and sustainable food production systems, aligning with the broader economic and social sustainability goals. Nonetheless, balancing economic gains with environmental considerations remains essential to achieve holistic sustainability.

3.2.4 Environmental sustainability

Consumers around the world are becoming more aware of the negative impact of conventional agriculture. As a result, consumers are turning to alternative, organic food products (Fynn-Green et al. 2019; Mie et al. 2017; Muhammad et al. 2016) because organic agricultural methods reduce the social, environmental, and biological costs associated with conventional agricultural methods (Muhammad et al. 2016). Thus, organic agriculture promotes agroecosystem sustainability (Anbu 2020). Conversely, conventional agriculture may be considered a viable option for global food

security, but it comes at a cost to the environment and ecosystems (Muhammad et al. 2016). As a result, the establishment of organic community food gardens may encourage more sustainable agricultural systems.

Rana and Paul (2017) provide evidence to support the current environmental sustainability discourse by stating that the marketing of environmentally friendly products is growing as consumers become more conscious of the benefits to their health and the environment. According to Kardos et al. (2019), consumers are becoming more aware of concerns related to the environment, naturopathy, and the green world. Mustafa et al. (2021) state that critical environmental issues such as climate change have numerous implications for sustainable development and the future of different economies, health, and food systems. The regulation of greenhouse gases has implications for the well-being of an entire country, and reducing and sequestrating these emissions will have a significant impact on climate change (Niles 2008). Thus, organic agriculture, which explicitly prohibits the use of synthetic fertilisers and pesticides and instead relies on less intensive methods of fertilisation such as animal manure, cover crops, and integrated pest-management strategies, is one component that provides hope for future environmental sustainability and food production; it should be recognised for its environmental contribution (Niles 2008). Organic agriculture policy initiatives will ultimately protect the waterways while promoting biodiverse ecosystems. Thus, the future of the environment and the vitality of food systems in the shadow of climate change depend on organic food production systems and society's ability to move toward more sustainable agricultural policies (Muller et al. 2017; Niles 2008).

Ultimately, the discussion emphasises that organic agriculture holds promise for both the environment and food systems in the face of climate change. It is argued that moving towards sustainable agricultural policies, such as those advocated by organic agriculture initiatives, is essential to safeguard the environment and ensure the resilience of food production systems. In this context, the discussion on organic community food gardens aligns with these principles by promoting sustainable agricultural methods that prioritise environmental well-being and agroecosystem health.

3.3 THE CONTRIBUTION OF ORGANIC COMMUNITY FOOD GARDENS ON SUSTAINABILITY

Organic community food gardens are believed to make a substantial contribution to sustainability. The environmental benefits of organic community food gardens are well documented and include promoting organic agricultural practices, conserving biodiversity, and lowering carbon emissions. Furthermore, organic community food gardens can contribute to economic sustainability by providing direct supply to consumers, promoting local economic growth, and reducing reliance on long supply chains. Moreover, social sustainability aids in the achievement of environmental and economic sustainability goals. As a result, it is critical to address social responsibility within supply chain management and focus on relationships, trust-building, and community strengthening to facilitate social development in these rural communities. Organic communities' involvement through education and emphasising these gardens' positive contributions to the environment and the local economy. A deeper understanding of South Africans' perspectives on the SDGs was required to facilitate the current study.

3.3.1 Sustainable agriculture

Bhat et al. (2021) and Edwards (2020) define 'sustainable agriculture' as agriculture emphasising the cultivation of sustainable crops and livestock with minimal impact on the environment. According to these authors, sustainable agriculture aims to strike a balance between food production and environmental preservation. Furthermore, water conservation, reduced fertiliser and pesticide use, and crop biodiversity promotion are among the objectives (Edwards 2020; Bhat et al. 2021). In fact, Rege and Sones (2022) explain that agriculture can be seen as one of the leading economies of a nation and has a significant responsibility toward the overall socioeconomic fabric of a country. However, agriculture faces the challenge of feeding a growing population while simultaneously minimising its environmental impact (Brooks & Place 2019; Rege & Sones 2022). According to Brooks and Place (2019), as per the Organisation for Economic Co-operation and Development (OECD) website, this sector's most

significant challenges include feeding a growing population, providing a livelihood for farmers, and promoting environmental protection.

Średnicka-Tober et al. (2016) report that nearly 40% of the Earth's land is currently used for agriculture. To emphasise the significance of a sustainable agricultural system, Montgomery and Biklé (2021) explain that crops are classified as conventional if synthetic chemicals are used to preserve the plants. A significant amount of chemicals and energy are required to achieve the highest crop yield possible. Unfortunately, conventional agriculture has a high environmental cost because the goal is to maximise crops' potential yield (Montgomery & Biklé 2021). According to the authors, this is achieved by using synthetic chemicals, GMOs and a variety of other industrial products; thus, environmental health and biodiversity are not preserved. Most of these common intensive agricultural practices are extremely dependent on water, synthetic mineral fertilisers, chemical pesticides and increasingly also on the products of genetic engineering (Srivastav et al. 2023; Średnicka-Tober et al. 2016). Consequently, conventional agriculture, aimed at maximising yields while at the same time decreasing direct production costs, resulted in agriculture becoming one of the economic branches with the most negative environmental impact (Khapayi & Celliers 2016; Srednicka-Tober et al. 2016).

In response to growing environmental and social concerns, an alternative agriculture system, such as organic agriculture, is being promoted rather than conventional agriculture (Kanosvamhira 2023; Średnicka-Tober et al. 2016). GoMiero (2018) concurred and stated that the growth of the organic market has been appreciated by many consumers as a sustainable agricultural substitute, emphasising a reduction in the use of agrochemicals and the improvement of soil conservation, even though it is less productive and might lead to an increased food cost. As a result of their research to restructure citrus farms in Spain, from conventional to organic agriculture, Gamage et al. (2023) conclude that from an economically sustainable development standpoint, these farms' profitability increased due to the higher selling price of these organic food products. Furthermore, from a long-term social standpoint, the restructuring resulted in noteworthy progress in the district's employment indicators.

To illustrate, the Worldwide Fund for Nature (WWF) (2019) report estimates that South Africa will need to produce 50% more food by 2050 to feed a growing population, with an estimated 50% of the population living in urban areas (WWF 2019). The report identifies agriculture as an important driver for job creation and fundamental to addressing the environmental sustainability of both food production and the health consequences associated with low-quality diets. Clark (2016) explains that, while there is ongoing debate about the viability of organic agriculture, it extends beyond the need for adequate food supply, and organic agriculture must be recognised as a viable solution for consumers who are concerned about the environment and their health. Organic agriculture is one aspect that offers hope for future environmental sustainability and food production and should be recognised for its positive contribution to the environment (Musvoto et al. 2015). As a result, organic agriculture policy initiatives will ensure the protection of waterways and the promotion of biodiverse ecosystems (Clark 2016).

In the face of climate change, the future of the environment and the viability of food systems depend on organic food production systems and society's ability to shift towards more sustainable agricultural policies (Muller et al. 2017; Niles 2008). Organic agriculture may thus benefit not only small-scale farmers but also local and commercial farmers, as well as consumers (Jouzi et al. 2017). According to the 2015 publication from the South African Department of Agriculture (as cited by Carelson et al. 2021), small-scale farmers are described as individuals who engage in farming activities to produce products for personal consumption and to sell at markets. These farming endeavours generate continuous income for their families, essentially serving as a source of livelihood. Furthermore, Carelson et al. (2021) expressed that even though the South African government is dedicated to aiding the small-scale farming sector through various measures, including land redistribution and ensuring water availability, these smallholder farmers continue to be at risk, particularly during periods of drought. It is important to note that smallholder farmers are not a uniform group; they exhibit various differences, and their agricultural requirements vary based on their distinct livelihood needs. This relates to organic community food gardens, as these gardens embody many of the principles and concerns discussed. For instance, the emphasis on supporting various types of cultivators aligns with the inclusive nature of organic community food gardens, which often involve participation from small-scale,

local, and even commercial farmers, as well as community members. Furthermore, the notion of addressing vulnerabilities resonates strongly with the concept of organic community food gardens, as they can serve as adaptable and resilient systems during challenging periods such as droughts, contributing to food security at the local level. Moreover, just as smallholder farmers exhibit a range of differences and distinct livelihood needs, organic community gardens can be tailored to specific local environments, available resources, and community preferences.

The reviewed authors' consensus is that organic produce, grown without exposure synthetic materials such as insecticides, herbicides, pesticides, growth hormones, genetically engineered organisms, and antibiotics, provide a healthy product for the consumer and contributes to global environmental sustainability. Since the need for sustainable agricultural methods has been established, the role of community food gardens in this sector is noteworthy, and this study aimed to establish its role in all three dimensions of sustainability, namely economic, environmental and social.

3.3.2 Community gardens

The Ecolife Editorial Team (2023) defines a 'community garden' as a piece of land where residents of the surrounding neighbourhood share the work and harvest from a garden space maintained to grow fruits, vegetables, flowers, or even livestock. In addition, Jacob and Rocha (2021) explain that the term 'community' denotes a collective of people who collaborate to establish and upkeep a garden within an urban environment.

Doyle's (2022) findings indicated that learning about gardening and enhanced social interaction are the primary drivers for participating in community gardens. Additional motivations include making new friends and embracing ideological views. This research by Doyle (2022) highlights that ideological reasons often revolve around environmental and ecological concerns. In addition, Dolley and Howes (2019) identified three motivation categories, namely individual, community and gardening. Individual motivations encompass diverse factors like retirement activity, educating children about food, access to organic produce, and personal enjoyment. Community motivations involve civic engagement, meeting neighbours, charitable food growing,

and community-based social activities. Gardening motivations encompass outdoor enjoyment, an appreciation for nature, access to land, and food cultivation. Dolley and Howes (2019) also established that while environmental concerns only emerged occasionally in their study, sustainable practices like community composting and pesticide-free cultivation were evident across all sites.

The range of motivations underscores community gardens' contribution to urban life quality through enjoyable intergenerational social interactions, enhanced local social bonds, and unintended food security and sustainability benefits. Additionally, Diaz et al. (2018) concur that community gardens benefit both the community and the environment. These benefits include fostering a sense of community among neighbours and providing a healthy food option in areas facing frequent scarcity. Hume et al. (2022) agree, stating that community gardening is associated with increased fruit and vegetable consumption, as well as positive psychosocial and community outcomes. Additionally, the people who work in these gardens personally benefit from the exercise and sunshine, and gain therapeutic benefits from gardening. Creating a culture of self-sufficiency in low-income communities will result in these communities' independence (Giller et al. 2021). Pedro et al. (2020) added that community gardening benefits society in various ways, by improving communities, ensuring food security, improving health, providing recreational opportunities, and raising environmental awareness. However, even though gardening initiatives have spread, the challenge remains to include vulnerable communities in this endeavour, particularly in developing countries where infrastructure, environmental, and social pressures are prevalent (Pedro et al. 2020).

For this reason, it is important to note that Roberts and Shackleton (2018) reported a decline in community gardens in four medium-sized Eastern Cape towns, namely Fort Beaufort, King Williams Town, Butterworth and Mthatha. This decline contradicts the narrative of global urban agriculture and community gardening growth. According to this South African study, these community gardens face challenges such as theft of infrastructure, crime, and a lack of resources. These findings also contradict Nkosi et al.'s (2014) study in Hammanskraal, Pretoria, South Africa. That research emphasised that community food gardeners in Hammanskraal were experiencing significant advantages in terms of enhancing their food supply and earning income through the

sale of their crops. These researchers suggested that significant work is still required to aid and promote the expansion and sustainable management of these community food garden initiatives. Achieving long-term success requires a collaborative effort from key stakeholders, including both central and local government authorities, NGOs, local communities, and individuals, to actively support and foster organised urban farming.

Even though Nkosi et al.'s study was conducted in 2014, the findings remain pertinent to the current study as it is done within the South African context. In addition, Kanosvamhira et al. (2023) state that despite facing historical challenges, including the legacy of apartheid spatial planning, community gardens in Cape Town demonstrate shared responsibility, collective management, and empowerment, particularly of women, showcasing them as experimental urban commons within the neoliberal city. The potential for economic sustainability in organic community gardens is thus emphasised when they successfully market their produce to consumers, simultaneously bolstering their food security (social sustainability) and safeguarding the environment through the adoption of organic agricultural methods (environmental sustainability).

This illustrates the significance of the current investigation into the diverse advantages of organic community food gardens in promoting sustainability. The motivations that were examined, such as education, social interactions, and ideological alignment, are pertinent to the viewpoints of both garden cultivators and consumers engaged in these communal spaces. The study's focus on community gardens' potential influence on social ties, food security, and environmental awareness also corresponds with the broader recognition of how community gardens contribute to sustainability. Furthermore, the challenges spotlighted in this chapter, including theft and resource constraints, reflect the necessity for a holistic approach to bolster and maintain community food garden initiatives, which aligns with the study's analysis of factors impacting organic community food gardens' potential contribution to sustainability.

3.4 SUMMARY

The importance of organic food products lies in a commitment to sustainable production practices and avoiding synthetic materials that can harm the environment and human health. Moreover, sustainable production benefits the planet and promotes a global sense of environmental responsibility. However, certification is a pivotal aspect of organic food products, ensuring their credibility according to the standards set by the IFOAM. Thus, while demand for organic food products is on the rise in South Africa, it is noteworthy that the absence of local organic agriculture laws and challenges in certification hinder the adoption of organic agricultural practices. This poses a challenge for cultivators and consumers seeking genuine organic products. Community gardens, however, offer a promising solution to address sustainability goals, including ending hunger, ensuring food security, and promoting sustainable agriculture. These gardens provide access to fresh and healthy food, encourage local production, and foster community engagement. Additionally, they can contribute to the local economy and reduce environmental impact through organic farming practices. Integrating organic community gardens into sustainable development strategies holds immense potential for creating a more sustainable future.

The significance of organic agricultural methods, particularly in community food gardens, cannot be overlooked, and it is crucial to understand consumer behaviour concerning organic food product preferences for the continued success of these initiatives. The following chapter in the literature review examines consumers' behaviour towards organic food products, comprehensively analysing key factors influencing individuals' choices.

CHAPTER 4 – CONSUMERS' BEHAVIOUR IN THE CONTEXT OF ORGANIC FOOD PRODUCT PURCHASES

4.1 INTRODUCTION

Following the discussions on organic food products in Chapter 2 and sustainability in Chapter 3, the examination of consumers' behaviour towards organic food products assumes a crucial role in the current study. This step of including consumer behaviour is motivated by several significant factors. First, delving into consumer preferences and behaviours concerning organic food products provides invaluable insights into potential market demand, thereby ensuring the economic feasibility of produce cultivated within organic community gardens. Second, an assessment of consumers' inclinations towards or against organic food products offers a way to evaluate their endorsement of these gardens through their purchasing choices, thus contributing to their continuity and fostering sustainable goals encompassing food security and ecological conservation. Moreover, consumer preferences have considerable influence over the agricultural practices adopted within community gardens, potentially inspiring the adoption of sustainable agricultural methods. Positive experiences among consumers can also lead to greater community involvement and awareness, paving the way for the replication and expansion of successful models. Ultimately, understanding consumers' behaviour is a key factor in aligning community garden offerings with consumer preferences, thus enhancing the resilience and effectiveness of these initiatives within the broader context of sustainability in all three dimensions: social, economic and environmental.

Thus, this chapter offers valuable insight into the complex nature of consumers' decision-making by integrating Schiffman and Wisenblit's (2019) consumer decision-making model with Ajzen's TPB (2019) model. The theories presented in the chapter represent various perspectives on organic food purchasing, serving as distinct approaches to understanding the subject. It is important to note that these theories were not directly applied to analyse the data presented in Chapter 5. Instead, they function as theoretical frameworks for examining organic purchasing through decision-making and the TPB's perspectives. Ultimately, through this integrative approach, the

discussion sheds light on the intricate interplay between consumers' knowledge, perspectives, and barriers, and their behavioural intentions towards purchasing organic food products.

Based on an analysis of the currently available literature, a systematic framework is used to examine the key determinants of consumers' decision-making processes in the context of organic food product purchase intention. This examination contributes to the existing body of knowledge and offers practical implications for marketers and policymakers seeking to promote sustainable consumption practices within the organic community garden setting. Overall, the chapter sets out to illustrate the importance of the factors that influence consumer behaviour in the domain of sustainable consumption. By illuminating the various cognitive, affective, and social factors that shape consumers' decision-making processes, the chapter provides a robust foundation for further research in this crucial area.

The subsequent chapter's integration of consumer decision-making models sheds light on the complex interplay between knowledge, perceptions, barriers, and intentions regarding organic food purchases. This holistic approach contributes to knowledge and informs practical strategies for promoting sustainable consumption in the context of organic community gardens.

4.2 CONSUMER BEHAVIOUR

Schiffman and Kanuk (2014) describe consumer behaviour as a complex process involving numerous factors and influences. Furthermore, these authors explain that consumers have unique needs, wants, preferences, and experiences that influence their purchasing decisions. Kotler et al. (2023) concur and add that the factors Schiffman and Kanuk (2014) referred to can be both internal, such as personal characteristics and psychological factors, and external, such as social, cultural, and environmental influences. Furthermore, the complexity of consumer behaviour is exacerbated, according to Botha et al. (2019), by the fact that it is constantly evolving and changing. Thus, as society advances and new information becomes available, consumers' needs, preferences, and behaviours may shift accordingly.

Additionally, Wicaksana (2021) defines 'consumer behaviour' as a set of activities involving purchasing and using goods and services based on consumers' emotional and mental needs and behavioural responses. Consumer behaviour also refers to individuals' and households' actions and decisions when purchasing goods and services for their consumption, based on cultural, social, personal, and psychological influences (Solomon 2020). Additionally, Schiffman and Wisenblit (2019) identify four disciplines that influence consumer behaviour: psychology, sociology, anthropology, and communication, thus making consumer behaviour multidisciplinary. To emphasise, perception, self-concept, social and cultural backgrounds, age and stage in the family cycle, attitudes, beliefs, values, motivation, personality, social class, and a variety of other internal and external factors all influence what and how consumers buy, where and when they buy, and how much they buy (Schiffman & Wisenblit 2019; Wicaksana 2021).

Astute (2018), Botha et al. (2019), and Kotler et al. (2023) add that consumer decisionmaking is a five-stage process that comprises problem recognition, information search, alternative evaluation, purchase decision, and post-purchase evaluation. Kotler et al. (2023) explain this coherent sequence of stages, starting with problem recognition, where consumers identify unmet needs or desires. Subsequently, during the information search phase, they actively gather information about potential solutions. In the evaluation of alternatives stage, consumers assess and compare products or services based on attributes like quality and price. The purchase decision stage sees consumers making a choice aligned with their preferences. Finally, in the post-purchase evaluation stage, satisfaction with the chosen option is measured, often influencing subsequent decisions and word-of-mouth sharing. This process underscores the interconnected nature of these stages in shaping consumer choices.

The current study and the referenced literature collectively illustrate how organic community food gardens can be analysed through the lens of consumer behaviour theories, highlighting the interplay between sustainability, personal needs, and decision-making processes. The TPB (Ajzen 2011) provides a relevant framework to understand the interplay between sustainability, personal needs, and decision-making processes in the context of organic community food gardens. Thus, the next section describes the TPB, as it will clarify the motivations and decision-making processes

driving individuals to participate in sustainable community initiatives like organic community food gardens.

4.3 THEORY OF PLANNED BEHAVIOUR

The TPB, depicted in Figure 4.1, has been empirically assessed in several research papers (Sultan et al. 2020; Sun et al. 2022; Tan et al. 2022), making it one of the most commonly used theories in the social and behavioural sciences (Ajzen 2011; Bosnjak et al. 2020). The TPB is a social psychological theory that aims to explain and predict human behaviour. This theory posits that behavioural intentions are the primary determinants of behaviour, and intentions are influenced by three factors: attitudes towards the behaviour, subjective norms, and perceived behavioural control (Ajzen 2011).

In recent years, the TPB has become a popular framework for understanding and predicting consumer behaviour. Researchers like Nekmahmud et al. (2022) and Dangelico et al. (2021) have used the TPB to investigate 'green' purchases and sustainable consumption patterns in European countries. Similarly, Barone et al. (2019) also employed the TPB to explain consumers' intentions to reduce food waste. The TPB has also been used as a foundation for developing effective marketing strategies. For example, Riesgo et al. (2022) used the TPB to design a social media campaign to promote sustainable fashion consumption, while Qi and Ploeger (2021) developed an intervention using the TPB to increase consumers' intentions to purchase green products.

The TPB's versatility in predicting consumer behaviour and its ability to aid in developing effective marketing strategies make it a valuable tool for researchers and practitioners alike. In 2021, Dorce et al. employed the TPB to determine consumers' purchase behaviour towards organic vegetables in Brazil. However, at the time of this dissertation's publication, no previous studies were identified in the existing body of research that employed the TPB to investigate consumers' behaviour in purchasing organic food products sourced from organic community gardens.



Figure 4.1: Theory of Planned Behaviour (Ajzen 2019)

According to the TPB, human behaviour is guided by three considerations: behavioural, normative, and control beliefs (Bosnjak et al. 2020). Based on the diagram (Figure 4.1), behavioural beliefs produce a positive or negative attitude towards intended behaviour. In addition, normative beliefs produce perceived social pressure or subjective norms, and control beliefs produce perceived behavioural control or self-efficacy. A perception of behavioural control moderates the effects of attitude towards behaviour and subjective norms on intention. Generally, the stronger the intention to engage in the relevant behaviour, the better the attitude and subjective norm, and the greater the perceived behavioural control (Bosnjak et al. 2020). Finally, when individuals have a sufficient level of actual control over their behaviour, they are expected to carry out their intentions (Ajzen 2020). The immediate cause of the behaviour is assumed to be intention. Since perceived behavioural control is accurate, it can be used in place of actual control and can aid in the prediction of the behaviour under consideration (Bosnjak et al. 2020; Nimri et al. 2020; Scholtz & Mloza-Banda 2019). To clarify, Ajzen (1991, as cited by Le and Nguyen in 2022) explains that when attitude, subjective norms, and perceived behavioural control are all strong, intentions become more robust, leading to the desired behaviour.

According to Ajzen (2019), the theory can be expanded by incorporating additional determinants to increase the explanatory power of behaviour in various contexts, making it suitable for this study exploring organic community food gardens' potential

contribution to sustainability. In fact, behavioural, normative, and control beliefs are the motivators for purchasing products; thus, the TPB's importance in the current study is undeniable, as consumers' attitudes towards organic food products ultimately determine their intention to purchase them. While it is important to note that each consumer has a unique mindset and decision-making process, every consumer goes through similar stages of thinking as they make purchasing decisions (Reichstein & Brusch 2019; Lăzăroiu et al. 2020). Additionally, cultivators' and consumers' beliefs about organic community food gardens would impact their attitudes towards participating in or supporting these gardens. As normative beliefs in the TPB relate to perceptions of social pressure or subjective norms, the way in which cultivators and consumers perceive organic food products and community food gardens could influence their intention to employ organic agricultural practices and the purchase intent of these products. Thus, by exploring consumers' and cultivators' intentions and behaviour towards organic agriculture and organic food products, their motivations, goals and plans can be explored to determine potential participation and support for these gardens. Given the unique focus of the research, exploring how perceived behavioural control directly influences cultivators' and consumers' actual behaviour will determine whether they will support organic community food garden initiatives in practical ways. Therefore, determinants such as environmental consciousness, health benefits and community engagement can be included in the TPB as they might play a significant role in influencing behaviour in this research.

4.4 CONSUMER DECISION-MAKING PROCESS

The decision-making process is a crucial aspect of effective problem-solving, and it involves a series of steps that individuals must take to arrive at the best possible outcome (Sousa et al. 2019). Morelli et al. (2021) noted that decision-making models are a simplified representation of the consumer decision-making process, and real-world decisions can be much more complex and involve multiple stages and factors. Additionally, individual consumers' decision-making processes may vary based on their characteristics, experiences, and circumstances.

Many researchers and academics agree that the consumer decision-making theory involves several stages. Over the years, numerous researchers and academics thus

developed their theories and models in response to several factors and findings. Some of the most well-known consumer decision-making models were developed in the 1960s and 1970s when consumer behaviour theory research was limited, and theories from other disciplines were used (Buchanan & O'Connell 2014). Previously, marketers conducted research rather than academics, and it formed part of a growing consumer behaviour discipline (Chrysochou 2017). In 1963, Howard developed the first consumer decision-making model. Other models include the Nicosia (1966) and Howard-Sheth (1969) models, the Engel, Kollat and Blackwell (1968) model, the Andreason (1965) model, the Hansen (1972), and the Markin (1968/1974) models (Erasmus et al. 2010; Han 2021; Milner & Rosenstreich 2013).

The Five-Stage Model, first proposed by Cox et al. in 1983, is widely accepted as one of the most common models of the consumer decision-making process, with five distinct stages. These stages are as follows: recognition of a need or problem, information search, alternative comparison, purchase, and post-purchase evaluation (Dudovskiy 2013). This model is sequential and assumes that consumers go through a series of cognitive (thinking) and affective (feeling) steps, culminating in a behaviour, such as a purchase or trial. When consumers plan to purchase a specific product, many will generally (though not always in a linear fashion) follow the five-stage purchase decision-making process depicted in Figure 4.2 (Lappeman et al. 2021).



Figure 4.2: The five-stage purchase decision-making process (Lappeman et al. 2021)

According to Dudovkiy (2013) and Lappeman et al. (2021), the first stage is problem recognition, where the consumer identifies a need or problem that requires a solution. This could be triggered by internal or external stimuli. The second stage is information search, where the consumer starts to gather information about potential solutions from

various sources, such as personal experience, friends and family, advertisements, and online reviews. The third stage is the evaluation of alternatives, where the consumer compares and evaluates available options based on different criteria such as price, quality, and brand reputation. Once the evaluation is complete, the consumer makes the purchase decision. Finally, in the post-purchase evaluation stage the consumer assesses whether the product or service meets their expectations. If it did not, the consumer may engage in post-purchase behaviours such as returning the item or leaving negative reviews.

Furthermore, Schiffman and Wisenblit (2019) proposed an alternative simplified version of the consumer decision-making model (see Figure 4.3) that involves different stages. According to these authors, this model emphasises that consumer decision-making is a dynamic process that involves input, process, and output. It highlights the importance of understanding the factors influencing the consumer's decision-making process and the outcomes resulting from those decisions.

According to this model by Schiffman and Wisenblit (2019), the input stage involves external and internal stimuli triggering the consumer's decision-making process. Reichstein and Brusch (2019) and Stankevich (2017) state that external stimuli can include advertising, product packaging, and store displays, while internal stimuli can include hunger, thirst, or a desire for a specific product. These stimuli lead to problem recognition, where the consumer identifies a need or problem that requires a solution. The process stage involves the consumer's decision-making activities. Once the consumer recognises the problem, they start to gather information about potential solutions, evaluate available options, and make a purchase decision (Schiffman & Wisenblit 2019). Furthermore, the post-purchase evaluation stage is also part of the decision-making process, as the consumer assesses whether the product or service meets their expectations. Finally, the output stage involves the consumer's behaviour and outcomes resulting from the decision-making process. This includes the actual purchase behaviour, post-purchase evaluation and disposal behaviour, and the overall satisfaction or dissatisfaction with the decision that was made.



Figure 4.3: Consumer decision-making (Schiffman & Wisenblit 2019)

The ultimate goal of all these models is to enhance consumers' satisfaction with their purchases, thereby encouraging repeat purchases and fostering customer retention. Before making a good decision, consumers should therefore obtain all available, accurate and 'up-to-date' information about the product, as well as comprehend the fundamental significance of that data (Solomon 2020; Stankevich 2017).

This study investigated how consumers' perceptions influence their purchase intention of organic food products. As a result, an appropriate decision-making model was critical for the current study because the input and process stages influence whether consumers buy organic food from community gardens. Consumers' perceptions of organic food products are investigated further as part of the input stage.

4.5 CONSUMERS' PERCEPTIONS OF ORGANIC FOOD PRODUCTS

Section 2.2 of this dissertation highlights the extensive research that has been conducted on organic food products by numerous researchers. It is important to note that consumers may form an opinion or belief about a specific product based on their perception of that product, regardless of whether that perception is an accurate representation of the concept in question (Jensen et al. 2019). Thus, perceptions are not always true, but they play a significant role in marketing and frequently determine a product's market failure or success (Schiffman & Wisenblit 2019). Perceptions are formed by organising and paraphrasing physical sensations such as sight, sound, and smell into a meaningful whole (Berr 2023; Schiffman & Wisenblit 2019). Thus, consumers' perceptions of organic foods demonstrate a wide range of approaches, frequently focusing on different variables such as taste, price, healthiness, ethical issues, availability, and even superficial aspects such as fashionability (Van Bussel et al. 2022; Kavaliauske & Ubartaite 2014; Petrescu & Petrescu 2015).

To gain a clear understanding of consumers' perceptions of organic food products, the discussion is divided into motivators and barriers to purchasing organic food products.

4.5.1 Motivators driving organic food products demand

A thorough review of the literature reveals that people buy organic food primarily for two reasons: to promote their health and safety, and for the preservation of the environment (Eyinade et al. 2021; Kushwah et al. 2019). Thus, it is essential to keep in mind that consumers' perceptions of organic food can vary depending on a variety of factors, including their understanding of what 'organic' means, their beliefs about the health benefits of organic food, and their attitudes towards the environment and sustainability. Dorce et al. (2021) and Teixeira et al. (2021) state that some consumers may perceive organic food as healthier and safer than conventional food due to the absence of synthetic pesticides, fertilisers, and other chemicals. In addition, Bhat et al. (2021) explain that consumers may also regard organic agricultural practices as more environmentally friendly and sustainable, which can be an important consideration for those concerned about agriculture's environmental impact. Other consumers, however, may be sceptical of organic food's health benefits or may regard it as too expensive or inaccessible (Lamonaca et al. 2022). They may also be unaware of the distinctions between organic and conventional farming practices, as well as what 'organic' means in terms of food production (Kushwah et al. 2019).

Individual beliefs and attitudes, education and awareness about organic farming and food production, and broader social and cultural factors that influence how we think about food and health all influence consumers' perceptions of organic food (Eyinade et al. 2021). Understanding these perceptions is critical for policymakers and industry stakeholders who want to promote sustainable and healthy food choices. The discussion that follows investigates consumers' perceptions of organic food products based on the two most documented drivers, namely environmental concerns and health impact.

4.5.1.1 Environmental concerns

Environmental concerns have become a major driver of consumer interest in organic food products. According to Castellini et al. (2020), consumers who are aware of environmental issues are more likely to purchase organic products because they believe organic farming practices are more sustainable and environmentally friendly than conventional agriculture. Similarly, Schleiffer and Speiser (2022) discovered that consumers who are concerned about the negative environmental impact of pesticides and chemical fertilisers used in conventional farming practices are more likely to choose organic food products.

'Environmental concerns' are defined by Paul et al. (as cited by Cachero-Martinez 2020) as consumers' awareness of environmental problems and their willingness to contribute to their resolution. In addition, Lee et al. (2019) and Rizzo et al. (2020)

highlight a growing environmental consciousness among consumers, driven by their increased awareness of the harmful effects of chemical additives in food. This trend has led to the increased demand for organic food products, where environmental concerns have become one of the primary motivators for purchase (Basha et al. 2015; Tandon et al. 2020).

To illustrate, as consumers become progressively more conscious of the environment, they are becoming more willing to contribute to the protection thereof by buying organic food products (Barbu et al. 2022; Rana & Paul 2020). Lee et al. (2019), as well as Tandon et al. (2020), concurred and emphasised consumers' willingness to pay higher prices for organic food products that are produced in an environmentally conscious manner. Moreover, Stoma and Dudziak (2022) state that food without preservatives is becoming increasingly popular because toxic compounds found in certain food items harm consumers' health. As a result of increased awareness of environmental degradation, consumers' behaviour is shifting toward purchasing more environmentally friendly and organic food products (Barbu et al. 2022; Basha et al. 2015; Monier-Dilman & Bergès 2016). More frequently, ecologically conscious products are showing up in stationary and online retailers, and these products are also in designated areas. It should be mentioned that access to eco-friendly items is expanding yearly, increasing the likelihood that consumers will select the best products in terms of their environmental impact and health benefits.

Furthermore, the negative impact of conventional agricultural methods and their environmental cost are gaining traction worldwide (Muhammad et al. 2016). Climate change, associated with conventional agriculture, has numerous implications for sustainable development and the future of various economies, health, and food systems (Jolliet et al. 2018). Moreover, regulating greenhouse gas emissions during conventional agriculture has implications for an entire country's well-being, and reducing and sequestering these emissions will significantly impact climate change (Fawzy et al. 2020). It is also well-known that pesticides used in conventional agriculture not only kill pests but also mammals and birds (Montiel-León et al. 2019). These pesticides and synthetic fertilisers penetrate the soil, reaching underwater, which is the main source of drinking water all over the world, leading to further environmental deterioration and consequently motivating consumers to take part in

addressing these environmental concerns (Gopalakrishnan 2019; Montiel-León et al. 2019). Organic agriculture is one component that provides hope for future environmental sustainability and food production, and it should be recognised for its environmental contribution (Cachero-Martinez 2020).

Thus, growing consumer awareness and concerns about environmental issues have become significant drivers increasing consumers' interest in organic food products. Consumers who are aware of environmental issues and the negative impact of conventional farming practices on the environment are more likely to purchase organic food products, according to studies by Castellini et al. (2020) and Schleiffer and Speiser (2022). Lee et al. (2019) and Rizzo et al. (2020) concur that consumers' increasing environmental consciousness and desire to avoid harmful chemicals in food are significant determinants of their decision to purchase organic foods. Consumers are thus shifting towards more environmentally friendly and organic food products as they become more aware of the negative impact of conventional farming practices. As a step towards a more sustainable future, it is critical to support the growth of organic agriculture and make it more accessible to consumers.

It can be concluded that the preservation of the ecosystem through the avoidance of chemicals that are harmful to both animal and plant species, as well as the vitality of food systems in the face of climate change, rely on organic food production systems and our ability to shift toward more sustainable agricultural policies (Cachero-Martinez 2020; Fawzy et al. 2020).

4.5.1.2 Health and food safety – "If it is not safe, it is not food." (FAO 2019)

Rodríguez-Mañas et al. (2023) noted that the satisfaction of dietary needs is crucial in ensuring an active and healthy life. Over the years, there has been an increasing recognition of the link between food and health and how changes in dietary habits can positively impact populations' health (Forman & Silverstein 2012; Jürkenbeck & Spiller 2020). These authors highlight the well-established correlation between food and non-communicable diseases, with poor nutritional habits being a major risk factor for conditions such as obesity, cardiovascular disease, diabetes, and cancer. A multifaceted approach is required to combat this issue, involving policies to inform, educate,

and protect consumers in their food choices. By implementing such policies, individuals can be empowered to make informed choices and adopt healthier dietary habits, contributing to an overall improvement in population health. The promotion of healthier food options is ultimately essential in reducing the incidence of preventable health conditions.

Nielsen (2015) and Vigar et al. (2019) add that consumers globally aspire to better health and healthier eating habits, but are influenced by the health attributes in the food they consume. Consumers are returning to the basics regarding the foods they eat and rate attributes such as fresh, natural, and minimally processed as the most important when making purchasing decisions. In addition to these attributes, consumers seek functional foods that provide different health benefits, like promoting health or reducing the risk of nutrition-related diseases. The health attributes of food strongly influence consumers, but these attributes are not the same across the globe. Moreover, the question remains whether consumers are willing to pay for these attributes. In a survey by Nielsen (2015), 33% of respondents were willing to pay a premium for organic foods. According to the survey results, to encourage consumers to make healthier decisions, there should be more education about health and wellness claims and greater transparency about such claims to foster customer confidence. Nearly 80% of the respondents in the survey used "food as medicine" for health issues and medical conditions, such as obesity, diabetes, high cholesterol, and hypertension (Nielsen 2015).

Dangour et al. (2017) supported the findings of Nielsen's study from 2015, emphasising that nutrition has a significant impact on consumer health, and an improper diet with an inadequate nutrient intake might result in disease. However, convenience goods are overtaking the food industry's marketplaces, adding value while boosting sales. However, the high sugar, salt and fat content in these products, tailored to meet consumers' taste preferences, is contributing to the rise of metabolic illnesses and societal obesity. Food-related illnesses affect consumers around the world, yet a positive tendency in the food sector is to offer wholesome food to support and prevent disease (Ruthsatz & Candeias 2020).

Ruthsatz and Candeias (2020), as well as Dangour et al. (2017) and Rana and Paul (2020), concur that consumers should have the authority to actively manage their health, behaviour, and dietary choices. Changes in consumer attitudes will substantially impact the health status and behaviour of the general public, which will then affect the operations of organisations devoted to enhancing people's health and the food industry. Self-management and consumer empowerment have been demonstrated to have a positive effect on type 2 diabetes, which is treatable through diet. Consumers' choices thus foster innovation in illness prevention and health preservation. Ultimately, there is a need to change the habits and mentality surrounding food intake and physical activity. Consumers are exposed to an enormous amount of information through modern technology, and the sheer volume can leave consumers confused and overwhelmed. This may lead to a reluctance to make any decision regarding their health (Dangour et al. 2017; Ruthsatz & Candeias 2020; Rana & Paul 2020).

Furthermore, Petrescu and Petrescu's (2015) study stated that organic consumers were stereotyped as "stylish, trendy and fancy consumers", prompting a study on superficial perception versus actual perceptions of consumers. Even though organic food is fashionable, consumers mainly purchase it because of their perception of these foods being healthy and environmentally friendly. Their image of healthy, 'green' food was, therefore, the main factor in their decision to buy organic food (Bruschi et al. 2015; Seegebarth et al. 2016). Muhammad et al. (2016) concurred and elaborated that the consumption of organic foods is also influenced by more relevant factors such as gender, education, nationality, income, occupation, and age. Successful expansion of the awareness of organic foods should, therefore, consider different market segmentation and aim to understand the socioeconomic and demographic characteristics of these markets.

Health-conscious consumers believe that their health will improve by consuming organic foods, that such foods taste better, and that they participate in protecting the earth when buying green (Brantsæter et al. 2017; Fynn-Green et al. 2019). Furthermore, consumers may be willing to pay for the privilege of 'buying green'. Confidence in these foods and health consciousness thus emerged as consumers' main attraction towards purchasing and consuming organic foods. According to Rana

and Paul (2017), the decision to choose organic over inorganic food is influenced by one's perception of the health benefits of organic foods. Households that believe organic foods are healthier are thus more likely to purchase 'green' food at a premium (Rana & Paul 2017).

Similarly, Reid (2004) investigated South African consumers' perspectives on the relationship that exists between health and food. Food, according to the author, contains a variety of nutrients that are required for the body to function properly; these functions include growth and repair, heat and energy production, and disease protection. It is thus critical for the individual to consume a variety of foods to promote these bodily functions and protect the body from diet-related diseases (Reid 2004). Diet and disease are generally related to consumers' shifting needs and lifestyles (Vermeulen et al. 2020). Their interest in nutrition is thus sparked by dietary guidelines and media attention, and 'healthy living' is a term frequently used by consumers (Reid 2004).

The 'healthy living' term encompasses the advantages of exercise, a healthy diet, abstaining from alcohol, and stress management. Consumers want to live an active and healthy lifestyle for the rest of their lives as life expectancy rises. Yet chronic diseases are the leading cause of death in today's society, prompting an increase in nutrition research. This study by Reid (2004) sparked consumers' concerns, prompting them to become more aware of dietary needs and the diet-disease relationship. The gap between optimal and actual diet influenced certain consumers' perceptions of diet guality. However, despite their awareness of the link between diet and disease, many consumers have an incorrect perception of the nutritional adequacy of their diets and the types of food they consume (Ditlevsen et al. 2019). Consumer decisions are heavily influenced by information, and the internet and other information sources have the potential to educate more consumers about the relationship between diet and health, thereby reducing nutrition-related diseases (Miller & Cassady 2015). Vermeulen and Bienabe (2010) conducted a survey in Gauteng on South African consumers' purchase behaviour and quality perceptions regarding fresh produce. They determined vegetables are the most popular organic food type purchased by Gauteng consumers, followed by fruit, eggs, dairy, and meat. These customers were given a pre-tested list of potential reasons for purchasing organic food and asked to

select the most relevant option. Organic buyers were primarily motivated by health, nutrition, and superior product taste. However, sustainability dimensions such as environmental friendliness, production, and traceability also emerged as important motivators for eating organic food.

An understanding of food safety is equally crucial because organic food products are becoming increasingly popular with supermarkets worldwide because they can be guaranteed to be produced and processed without the use of synthetic fertilisers and chemicals (Kelly & Metelerkamp 2015). Food safety is the assurance that food, when cooked and consumed for its intended use, will not harm the consumer (Uçar et al. 2016). This is important because consumers are increasingly concerned about the health risks posed by microbial pathogens and potentially hazardous chemicals in food (Andersen et al. 2011; Tropea 2022).

Several researchers have noted the presence of pesticide residue and agrochemicals in food (Andersen et al. 2011; Carvalho 2017; Mie et al. 2017; Tropea 2022). In Figure 4.4, Montiel-León et al. (2019) confirm that multiple pesticide residues were detected in conventional food samples versus organically produced food samples. The authors (Montiel-León et al. 2019) compared conventionally produced fruits and vegetables to organically produced ones to detect pesticide residue quantities. The researchers analysed data from several studies that had measured pesticide residues in fruits and vegetables. They found that conventionally produced crops had a higher frequency and concentration of pesticide residues compared to organic ones. Furthermore, the study also found that the number of pesticide residues detected in both conventional and organic crops varied depending on the crop type and the region where it was grown. For instance, conventionally grown grapes had higher pesticide residues than organically grown grapes in Europe but not in North America. Overall, their study suggests that organic farming practices can reduce the presence of pesticide residues in fruits and vegetables compared to conventional farming methods.



Figure 4.4: Comparison between conventionally and organically produced fruit and vegetables with regards to the detected number of pesticide residues (Montiel-León et al. 2019)

Based on the discussion, there is a clear link between human health and food safety. Toxic chemicals used to prevent pests and diseases in conventional agricultural methods, such as organochlorines, organophosphorus, carbamate, phthalimide, and pyrethroid (Anaduaka et al. 2023), can cause acute and chronic health problems in humans, including immune suppression, hormonal disruptions, reproductive defects, and even cancer (Anaduaka et al. 2023; Rani et al. 2020). However, despite the literature's consensus that organically grown fruits and vegetables have lower levels of pesticide residue and nitrates, several factors will influence the quality and safety of fresh produce (Simonne et al. 2016). Environmental conditions, production practices, postharvest processing and handling, and bioavailability after consumption are some of these factors. Thus, for both methods, the compositional differences between organic and conventional produce depend on production practices and the surrounding environment (Clark 2016; Tavares et al. 2021). Postharvest processing, storage, handling, preparation, cooking, and processing before consumption also influence nutritional content, bioavailability, safety, and functionality (Simonne et al. 2016).

Nonetheless, Gupta (2017) supports the fact that organic agricultural methods improve food safety by using less nitrogen and avoiding pesticides, which results in virtually no pesticide residues, and not using chemical fertilisers, which results in low concentrations of chemical residue, potentially reducing the prevalence of cancer and the transfer of resistance genes from animal production systems to human pathogens. Food should ultimately provide nutrition free of disease-causing agents such as infectious microbes, toxic chemicals, and foreign bodies (Singh & Mondal 2019). Consumers are hesitant to purchase and consume food items that are unsafe or do not improve their health (Rodriguez et al. 2006; Bruschi et al. 2015).

To summarise, it is critical to meet all dietary requirements for an active and healthy lifestyle. Obesity, cardiovascular disease, diabetes, and cancer are all increased by poor eating habits. Consumers are becoming more aware of the diet-disease relationship, and their perception of diet quality is influenced by the gap between optimal and actual diets. Organic food buyers are motivated by health, nutrition, and superior product taste, whilst sustainability dimensions such as environmental friendliness, production, and traceability are also important motivators.

Consumers aspire to better health and healthier eating habits and are influenced by foods' health attributes. Consumers should therefore be empowered to manage their own health, behaviour, and dietary choices, and shifts in consumer attitudes will have a significant impact on public health and the food industry. Thus, more education and greater transparency about health and wellness claims in food are needed to foster consumers' confidence.

Conversely, as discussed in the following section, several barriers influence purchasing decisions and impede the organic food product market.

4.5.2 Barriers influencing purchase intentions of organic food products

Several barriers can influence organic food product purchase intentions. One significant barrier is price, as organic products are frequently more expensive than conventional products (Vermeulen & Bienabe 2010). Consumers may be sceptical about the actual benefits of organic food products, particularly if they are unaware of

the differences between organic and conventional farming practices (Vigar et al. 2019). Furthermore, consumers, particularly in rural areas, may be concerned about the availability and accessibility of organic products (Nielsen 2015). Finally, cultural and social factors such as tradition, peer influence, and personal values can influence organic food product purchase intentions (Ditlevsen et al. 2019). To overcome these barriers, a combination of education, marketing, and policy initiatives will be required to raise consumer awareness, reduce price disparities, and improve the availability and accessibility of organic products.

Torres-Ruiz et al. (2018) and Kushwah et al. (2019) explain that there has been significant growth in the purchasing of organic food in the last few decades. This growth is motivated by increased interest and investment among consumers, markets, and society in general, the promotion at a political level and the conviction among many farmers to give the market a competitive edge. However, certain factors prevent consumers from purchasing organic foods; at the top of the list is the high price differential between organic foods and their conventional counterparts.

4.5.2.1 Price

Studies in countries such as Germany, Greece, Romania, Croatia, Thailand, Canada, Brazil, Australia, Ireland, Sweden, Denmark, USA, Scotland, The Netherlands, Costa Rica, Turkey, and Poland all identified high pricing as the greatest barrier to purchasing organic food (Bryla 2016; Torres-Ruiz et al. 2018). Moreover, a lack of awareness contributed to the price differential as some consumers were unwilling to pay more as they did not observe any clear advantages in doing so (Joshi & Rahman 2015; Soroka et al. 2021).

Soroka et al. (2021) echoed Ham et al.'s (2016) view and explained that whenever individuals buy something, they have to deal with the price. This means that either prices need to be lowered or people should be targeted who are willing to pay those prices. Price cuts' impact on demand is deemed significant because the price elasticity of organic food is much higher than that of conventional food. Chandrashekar (2014) and Mbajiorgu and Odeku (2022) add that when it comes to food selection, many people with low incomes, such as unemployed or retired people, or those responsible

for household food shopping, consider price to be particularly important. Therefore, affluent households (LSM groups 8-10) are an extremely appealing target segment because they have more disposable income to spend on luxury items. Thus, LSM groups 8-10 are the consumers who can afford the higher prices (Schiffman et al. 2014) of organic food products. However, according to the South African Audience Research Foundation (SAARF) (2015), LSM 8-10 account for only 24.5% of the population, with LSM 1-4 accounting for another 22.3%, and LSM 5-7 accounting for 53.2%. This means that only about a quarter of South Africans are able to afford organic produce.

In contrast, research suggests that if certain conditions are met, consumers are willing to pay a premium for organic products. For instance, Chandrashekar (2014) found that consumers are willing to pay 5-50% more for organic products due to their perceived health benefits. Similarly, De Canio and Martinelli (2020) surveyed 438 Italian consumers and found that consumers' attitudes towards sustainability and trust in food labels were the most influential factors affecting their intentions to purchase organic food products. In addition, environmentally conscious consumers were more likely to pay a premium for organic foods, and this willingness to pay more was related to consumers' perceptions of organic foods' health and environmental benefits.

These findings were supported by Golijan and Dimitrijevi (2018), who found that a significant proportion of Serbian consumers were willing to pay more for organic products than for conventional ones. Similar findings have been discovered in other studies conducted by Melović et al. (2020) and Stampa et al. (2020); these studies also observed that consumers who care about the environment are more open to spending more on organic food items. Therefore, organic food businesses must target environmentally conscious consumers to develop sustainable marketing strategies. This can be achieved by highlighting their products' environmental, ethical, and health benefits. Furthermore, environmental sustainability labels have been found to positively impact consumers' willingness to pay a higher price for food products (Bastounis et al. 2021). These labels increase consumers' perception of the product's environmental benefits, and they are willing to pay more for products with these labels. Therefore, integrating sustainability labels in organic food products can attract environmentally conscious consumers and increase the products' perceived value.
Thus, even though the greatest barrier to purchasing organic food products has been identified as affordability in several countries (including Germany, Greece, Romania, Croatia, Thailand, Canada, Brazil, Australia, Ireland, Sweden, Denmark, USA, Scotland, The Netherlands, Costa Rica, Turkey, and Poland), a lack of awareness also contributes to the price disparity, as some consumers do not see any obvious benefits to paying more for organic food. Conversely, research suggests that if certain conditions are met, consumers are willing to pay a premium for organic products. Thus, environmentally conscious consumers are more inclined to purchase organic food products when they believe these items offer health benefits and trust the information provided on the food labels. As a result, to develop sustainable marketing strategies, organic food businesses, specifically organic community gardens, should target environmentally conscious consumers.

4.5.2.2 Consumer knowledge

Organic food products have become increasingly popular in recent years, but whether or not consumers choose to buy them can be influenced by several factors, including their educational level. Studies show that individuals with higher levels of education are more likely to purchase organic food products than those with lower levels of education. This phenomenon could be attributed to a variety of factors, such as greater awareness of health and environmental issues, greater exposure to information about organic farming practices, and a higher income level that allows for the purchase of more expensive organic products. Additionally, according to Asioli et al. (2017) and Saleki et al. (2019), higher education levels are often associated with higher incomes, which can make organic products more affordable. De Magistris and Gracia (2016) stated that educational levels could also shape consumers' values and beliefs, with individuals who prioritise environmental sustainability or animal welfare being more likely to choose organic products. Thus, access to information can also play a role, with consumers with higher levels of education having better access to information about organic products (Annunziata et al. 2019). Overall, educational level is just one factor that can influence a consumer's decision to buy organic food products, but it can play an important role in shaping their values, beliefs, and access to information.

According to Hunt (as cited by Yiridoe et al. 2005), most studies on consumers' knowledge about organic products reflect a true and justified conceptual belief. Yiridoe et al. (2005) proposed the framework presented in Figure 4.5 to explain the interaction of the varied factors that will influence consumers' decision to buy organic foods and products.



Figure 4.5: Framework of factors affecting consumer attitudes and purchase decisions of organic foods (Yiridoe et al. 2005)

According to Yiridoe et al. (2005), exogenous, product-related, social, and demographic factors influence consumers' knowledge and, as a result, their willingness to pay for organic foods or products. The aforementioned factors will then influence consumers' attitudes and perceptions of the products, ultimately leading to the product's purchase. Before purchasing organic food products, consumers will

consider product-related factors such as health benefits, animal welfare, food safety, environmental impact, and the manufacturing process. Economic factors such as household income, product price, and the price of other products all influence the purchase decision. Despite Yiridoe et al.'s framework being developed in 2005, its relevance persists in the present study, emphasising its enduring importance as the identified factors continue to impact consumer knowledge of organic food products.

Additionally, Fatha and Ayoubi (2021) distinguished between three types of knowledge: subjective knowledge, objective knowledge, and prior experience with the product. Subjective knowledge, also known as perceived knowledge, is what customers believe they know about a product. Objective knowledge, on the other hand, is what consumers know about a product. Raju et al. (2015) add that it is critical to assess both subjective and objective knowledge because they are crucial factors influencing consumers' willingness to accept new products, though their effects may differ. Aertsens et al. (2011), for example, state if the objective knowledge of organic vegetables is high, individuals tend to hold favourable attitudes toward consuming them. As a result, consumers are generally enthusiastic about eating organic vegetables because they are grown without synthetic pesticides, are healthier, of higher quality, and taste better. Unaffordable prices and a lack of availability are the most significant perceived barriers. The objective and subjective knowledge of organic food production thus have a positive correlation. A more positive attitude toward organic food, more experience with it, and more frequent use of information are associated with higher levels of objective and subjective knowledge about it.

Le-Anh and Nguyen-To (2020) state that although consumers are aware of organic food, their knowledge of it remains quite low, particularly among occasional consumers. As a result, consumers' lack of knowledge about organic agriculture and organic food is a significant barrier to organic food demand (Bruschi et al. 2015). In fact, consumers' purchasing behaviour is directly influenced by their level of knowledge (Le-Anh & Nguyen-To 2020). Cachero-Martinez (2020) imply in this context that the more consumers know about organic food, the more likely they are to buy or consume it. Similarly, Fatha and Ayoubi (2021) and Pieniak et al. (2010) report that the more informed consumers are about organic food, the more positive their attitudes are toward it.

Several studies have investigated the impact of information on consumer knowledge. According to Schiffman and Wisenblit (2019), knowledge assessments are based more on product-related experience memory in the form of information search, product usage, or ownership than on product-class information memory. A study by Činjarević et al. (2018) found that the effect of organic food information on consumers' subjective knowledge was also significant. Mercade Mele et al. (2019) emphasised that information obtained from the government, mass media, environmental organisations, and shopping websites influences consumers' knowledge. In support, Nedumaran and Manida (2019) indicate information sources such as e-marketing strategies could play an important role in promoting positive attitudes toward organic foods by meeting consumers' global needs for these products. Fatha and Ayoubi (2021) also refer to stored product information as a vital determinant of consumers' objective knowledge. However, research shows that consumers' decisions to buy organic foods tend to be very subjective (Shafie & Rennie 2012).

This understanding of consumers' decision to buy organic food will influence organic food policymakers to create legislation that enhances consumer trust in organic foods. It entails educating different market segments and increasing consumers' awareness of organic foods and their advantages in establishing a more sustainable society. The strong connection between education and organic products' benefits, including environmental and health benefits, is undeniable (Joshi & Rahman 2015; Muhammad et al. 2016; Bruschi et al. 2015).

4.5.2.1 Labelling and certification

Consumers' trust in organic certification and labelling worldwide is a complex issue that has been the subject of various studies. Research by Watanabe et al. (2021) suggests that consumers generally have a high level of trust in organic certification and labelling, particularly in countries where organic farming has a strong presence, such as in Europe.

According to research, consumers' trust in organic food certification and labelling influences their willingness to buy organic products. Consumers have faith in products

if they trust a particular product (Bruschi et al. 2015). In their research, Truoug et al. (2022) confirmed similar findings. They claim increasing consumer awareness of organic food certification and labelling, as well as increasing consumer trust, may be the most effective strategies for brands to gain market share. In addition, the findings of a study conducted in four European countries by Murphy et al. (2022), reflected that consumers have a higher level of trust in certified organic food chains and produce, as well as strong beliefs in the benefits of certification bodies. Watanabe et al. (2021) also assert that the certification label acts as a moderator, influencing both consumer trust and purchase intention. However, other studies have found that trust levels vary by country and demographic factors such as age, education level, and income (Carrier & Luetchford 2015; Lavuri et al. 2022). For example, a study conducted in China found that while consumers generally had positive attitudes towards organic products, trust in certification was relatively low due to concerns about counterfeit and mislabelled products (Chu 2018).

Furthermore, Lim Tung (2016) explains South Africa's organic sector pioneered private practices and systems in small informal groups to guide the public and private sectors in addressing environmental and sustainability issues. The country has a private certification system for organic products in place, which includes network certification and third-party certification through collaboration with foreign and domestic certification organisations. Local producers also use self-declaratory vendor claims linked to organic labels (Lim Tung 2016). Nonetheless, a state auditor mechanism applies to the use of the term 'free-range' on meat product labels. The South African Bureau of Standards (SABS) drafted the South African National Standards (SANS 1369) on Organic Agricultural Production and Processing (OAPP), but the definitive version has not yet been published. There is currently no specific legislation in the country governing organic products, and draft regulations governing the control and sale of organic products have yet to be promulgated. The aforementioned issues may be to blame for South African consumers' lack of trust in the organic label. However, little research has been conducted in this area in South Africa.

Overall, it can be said that while organic certification and labelling are generally viewed as important and trustworthy, there is still room for improvement in increasing consumer awareness and understanding of organic standards and certification processes, particularly in regions where organic farming is less prevalent.

4.6 SUMMARY

The exploration of consumer behaviour towards organic food products is a focal point in this study, driven by a complex rationale. By delving into consumer preferences and behaviours concerning organic food, the study gained insight that extends beyond market demand to underpin the economic viability of produce cultivated within organic community gardens. Moreover, the evaluation of consumers' inclinations towards organic food not only mirrors their endorsement of these gardens based on purchasing choices but also nurtures sustainable goals encompassing food security and ecological conservation. Furthermore, the influential role of consumer preferences extends to shaping agricultural practices within community gardens, potentially steering the adoption of sustainable farming methods. Positive consumer experiences within these gardens lead to increased community engagement and awareness, facilitating the replication and expansion of successful models. Ultimately, understanding consumer behaviour becomes instrumental in aligning community garden offerings with consumer preferences, thereby enhancing the resilience and effectiveness of these initiatives within the broader sustainability context.

Within this research context, consumer behaviour was an underlying variable that had to be investigated using the TPB in addition to the decision-making process. The research methodology is discussed in the next chapter, and the qualitative research design and the research process employed in conducting this study are presented.

5.1 INTRODUCTION

The previous chapters provided a review of the literature on organic food products, organic community gardens' potential contribution to sustainability, and consumer behaviour as it relates to organic food product purchases. This chapter concentrates on the methodology that was applied in this study. This includes a discussion on the research paradigm and design used to frame the study and address the research question, study location, sampling strategy, data collection methods and data analysis, and trustworthiness used to ensure the credibility of the findings. This study employed an interpretivist paradigm to better understand consumers' and cultivators' opinions on organic food products, community gardens and the role they play in sustainability, specifically in environmental, economic and social sustainability.

The research methodology employed one aim with sub-defined objectives to investigate perceptions, knowledge, and barriers related to organic food products' production and purchase intention among consumers and community food garden cultivators. This exploration was undertaken to understand organic community food gardens' potential contribution to sustainability.

5.2 QUALITATIVE RESEARCH METHODOLOGY

Qualitative research methods are required because people's subjective choices, attitudes, beliefs, and experiences are often not measurable in a statistical sense. "A methodology that seeks to understand human experiences through a qualitative stance and the use of qualitative procedures" is how Kostere and Kostere (2021) define qualitative research. Maree (2019) explains that qualitative research is concerned with understanding processes and the social and cultural contexts that underpin certain behavioural patterns and focuses primarily on researching 'why' questions. It is thus concerned with the meaning individuals assign to a specific phenomenon that emerges from an inductive approach to analysing the data (Creswell

2014). The meaning of the phenomenon represents the thoughts, attitudes, and behaviours of the individuals included in the research sample (Mohajan 2018).

Furthermore, the following traits are crucial to understanding the nature of qualitative research, according to Merriam and Tisdell (2016). The process of understanding and assigning meaning is the primary characteristic that sets this approach apart from others. Researchers specialising in qualitative inquiry seek to comprehend how individuals make sense of their experiences, interpret them, and create worlds around them (Feuerstein et al. 2018). The next feature is that the researcher serves as the main tool for gathering and analysing data. Third, the method is inductive; to support the process of creating concepts, theories, or hypotheses, researchers collect data. Fourth, the product uses both words and images to provide a descriptive analysis of the phenomenon being studied, making it extremely descriptive.

One benefit of qualitative research is that it allows the researcher to fully understand a phenomenon by thoroughly explaining participants' feelings, thoughts, and perceptions (Aspers & Corte 2019). Moreover, a qualitative research methodology aims to obtain a thorough comprehension of the human experience within a particular setting (Rahman 2016). According to Choy (2014), one of the main advantages of the qualitative approach to cultural assessments and experiences is its capacity to delve deeper into underlying values, beliefs, and presumptions. For instance, probing during focus groups and individual interviews gives researchers a thorough grasp of participants' lived experiences, reflecting what influences their perceptions (Choy 2014). Lastly, the researcher can communicate directly with the participants during the data collection process thanks to qualitative research data collection techniques (Shkedi 2019).

Conversely, qualitative research, like all research methods, has limitations. "Qualitative research is a long and difficult road, with elusive data on one side and stringent requirements on the other", writes Lune (cited in Rahman 2016). According to Silverman (Rahman 2016), contextual sensitivity is sometimes required because experiences and meaning are prioritised over other factors. Qualitative research typically also uses smaller sample sizes (Mocănaşu 2020), which could make it more

difficult to determine whether the study's conclusions apply to the study's overall population (Rahman 2016).

However, it was in the researcher's interest to investigate how people interpret their experiences and construct their worlds (Merriam & Tisdell 2016) regarding their knowledge, perceptions and barriers towards organic food products' cultivation and purchase intent. The objective of qualitative research is to achieve a thorough understanding of the environment in which participants exist (Hancock et al. 2009). Consequently, this study aimed to enhance the understanding of how consumers and cultivators of organic food products perceive these items. It sought to determine whether they are inclined to purchase such products from organic community food gardens, thereby contributing to the economic sustainability of these community initiatives while fostering environmental and social sustainability.

Therefore, a qualitative approach was best suited for this research. This method enabled the researcher to explore consumers and cultivators of organic food products' knowledge, perceptions, and barriers from their perspectives. Through the use of this methodology, the researcher was able to understand how community food gardens that produced organic food products were perceived by consumers and cultivators. The organic food products produced by community cultivators ensure the sustainability of those communities and contribute to sustainable development by addressing economic (SDGs 8 and 9), social (SDGs 2, 3, and 15), and environmental (SDGs 12, 13 & 14) sustainability. Furthermore, consumers of organic food products may also benefit from community organic food cultivation as these products may be more affordable and conveniently available. Authors such as Pechey and Monsivais (2016) identified cost as a barrier towards healthy eating habits and underscored that socioeconomic inequalities are a key contributor to less healthy food choices. Giller et al. (2021) also view community food gardens as a way to create a culture of selfsufficiency in low-income communities that will result in these communities' independence and improved access to healthier food options. The next section outlines the research paradigm employed as a guiding framework for this study.

5.3 RESEARCH PARADIGM

Kivunja and Kivunja (2017) state that the idea of a research paradigm is elusive to many researchers. The phrase 'paradigm' was first used in 1962 by American philosopher Thomas Kuhn to refer to 'a philosophical way of thinking'. In educational research, the term 'paradigm' is currently used to characterise the 'worldview' of the researcher (Kivunja & Kivunja 2017). The best way to conceptualise this worldview is as a collection of beliefs that guide the researcher's interpretation of the data or the participant's subjective perspective (Kivunja & Kivunja 2017). It is imperative for researchers to acknowledge that their approach to questioning and conducting research is shaped by the paradigm they follow (Davies & Fisher 2018).

In addition, a paradigm, according to Waters and Mehay (2010), is a collection of coherent ideas and concepts that provide scientific, philosophical, or theoretical frameworks. This means a completely new concept and framework emerge when the paradigm shifts. Moreover, Patel (2015) defines a 'paradigm' as "a set of common beliefs and agreements shared among scientists about how a problem should be understood and addressed". A paradigm is ultimately more than just a search for alternative methods of research; it also includes parallel developments within social science (Maree 2019). Consequently, research entails not only proving or disproving a theory but also developing or creating the theory itself.

An interpretivist paradigm was used in this study. Understanding participants' perspectives through their world is the fundamental tenet of interpretive research (Bhattacherjees 2012). Furthermore, Pope and Mais (2020) contend that with this approach, the researcher is able to understand participants' world views and the importance of the viewpoints of those who inhabit it. The purpose of this study was to gain insight into the knowledge, attitudes, and obstacles surrounding the production and intention to purchase organic food items. Understanding involved looking into how organic food products are experienced by both cultivators and consumers, as well as how these lived experiences shaped their knowledge, attitudes, and obstacles toward these products. The participants' experiences can be interpreted using an interpretivist approach by considering their perceptions and the social context in which they are embedded (Pope & Mais 2020).

Furthermore, Kumar (2019), as well as Kumatonga and Muzata (2021), state that an interpretivist approach is a method of conducting research that emphasises the researcher's subjective analysis, where the researcher shows empathy and understanding of the participant's points of view. Therefore, the goal of an interpretivist research approach is to gain an understanding of the participants and the research phenomenon (Kumar 2019). This approach differs from most other methods in that it shifts the emphasis away from the researcher making and proving predictions (Maree 2019). It filters all information gathered through the lens of social constructs, cultural norms, and relationships between subjects and researchers (Alharahsheh & Pius 2020).

The researcher's ability to examine and characterise things, people, or events in their social context is the primary benefit of the interpretivist paradigm. The researcher was able to explore and elicit concepts that cannot be observed, such as participants' thoughts, values, prejudices, perceptions, views, feelings, and perspectives by using individual interviews as a data-gathering method (Wellington & Szczerbinski 2007). This allowed the researcher to gain a deep and thorough understanding of the phenomenon under study. As a result, participants' perspectives were better understood, and the organic food product phenomenon was described (Kumatongo & Muzata 2021).

In the context of this study, the interpretivist paradigm has some drawbacks despite the aforementioned important advantages. Interpretivismsts' viewpoints, according to Goldkuhl (2012), can be overly subjective. In addition, Goldkuhl (2012) raises concerns about the ways in which the researcher's interpretation, personal beliefs, modes of thought, or cultural preferences influence the research findings and introduce an excessive amount of bias. Trustworthiness criteria were applied to mitigate the potential effects of the researcher's belief system, thinking style, interpretation, or cultural preference in this study.

The interpretive approach was therefore still best suited for this study as it allowed the researcher to understand the phenomenon through the lenses of both consumers and cultivators in an attempt to explore shared meanings and perceptions about organic

food products and their cultivation. The following section discusses the research design as it relates to the current study.

5.4 RESEARCH DESIGN

5.4.1 Phenomenology

According to Pathak (2017), a phenomenological research design is a study that attempts to comprehend people's perceptions and understanding of a specific phenomenon through their eyes. Delve and Limpaecher (2022) elaborate and explain that a phenomenological study's central research question focuses on a group's lived experiences of a specific phenomenon. Furthermore, it is used in most disciplines due to its philosophical and methodological strength (Pathak 2017). Thus, it emphasises the importance of personal perspective and interpretation as a method within the interpretive research paradigm. Umanailo (2019) agrees and defines 'phenomenology' as a tool for dissecting the human mind by observing and recognising individuals within the social context of their community.

The four main characteristics of phenomenological research designs are explained by Delve and Limpaecher (2022) as follows: First, a descriptive research design is used in phenomenological research. The researcher's goal is to describe the structure of a phenomenon as accurately as possible. Second, the goal of qualitative phenomenological research is to discover what a specific experience means to a group of people and how they experienced it. Third, this method requires researchers to set aside their prejudices and a priori assumptions and concentrate solely on the immediate experience. Finally, it necessitates that the researcher first objectively describes the lived experiences and then reflects on the description in light of existing theories about the phenomenon.

This study applied hermeneutic phenomenology because it is concerned with personal experiences and requires a description or interpretation of the meanings of phenomena encountered by participants in an investigation. Hermeneutic phenomenology is concerned with the life world or human experience as it is lived (Pathak 2017). Wilson and Hutchinson (as cited by Pathak 2017) state that in hermeneutic phenomenology, the emphasis is on illuminating details and seemingly

insignificant aspects of experiences that we may take for granted in our daily lives to create meaning and achieve a sense of understanding.

By applying the hermeneutic phenomenological design to this study, the researcher could investigate consumers' and community food garden cultivators' lived experiences of organic food products. The next section describes the background of the study's exploratory design.

5.4.2 Exploratory design

An exploratory design is used when there are few or no previous studies to reference or rely on to predict an outcome (George 2021). When research problems are in the early stages of the investigation, the emphasis is on gaining insight and familiarity for future investigations. According to Swaraj (2019), an exploratory study is required when a researcher needs to identify problems, more precisely define the problem, and identify any specific objectives or data requirements that must be addressed through additional research. Exploratory designs are frequently used to determine how to best proceed with a study or what methodology would most effectively gather information about an issue (Kumar 2019; Swaraj 2019). Furthermore, Swaraj (2019) explains that an exploratory study is highly adaptable, unstructured, and, in most cases, qualitative. Exploratory research is typically conducted with the goal of either exploring an area about which little is known or investigating the feasibility of conducting specific research.

Exploratory studies, like any other research design, have trade-offs, according to George (2021), in that they provide a unique set of benefits while also having drawbacks. Advantages include the ability to narrow down a difficult or nebulous problem that has not previously been studied, the ability to serve as a guide for future research, and the fact that it is flexible, cost-effective, and open-ended. However, disadvantages include the usual lack of conclusive results, results that can be biased or subjective due to a lack of pre-existing knowledge on your topic, and the fact that this type of research can be time-consuming (George 2021).

Using an exploratory research design allowed the researcher to gain a better understanding of cultivators' and consumers' knowledge, perceptions, and barriers to cultivation, as well as their purchase intent of organic food products, which had not been researched before. Further reasoning behind the chosen exploratory research design includes its potential to be more insightful than confirmatory research by employing dialectical thinking (Swaraj 2019), as exploratory research is considered more open-ended and flexible, allowing for a thorough exploration of the subject matter (Hassan 2022a). The subsequent section addresses the location where participants were recruited for the study.

5.5 STUDY LOCATION

The research was conducted in the Western Cape and Gauteng, South Africa. The choice of location for consumer interviews was not prioritised, reflecting a general interest in their knowledge and perceptions of organic food products and community food gardens. In contrast, cultivators were exclusively located in the Western Cape, particularly in Somerset West, Stellenbosch, and Pinelands. This location for cultivator interviews was chosen because, according to Stats SA (2021), 21% of the Western Cape's current population is classified as living under the lower-bound poverty line, which means they must choose between buying food and non-food items. Thus, community gardens can play a crucial role in alleviating this issue by providing local, affordable access to fresh produce, thereby reducing the financial burden on lowincome households and helping them better manage their limited resources. The researcher already had an interest in sustainable development based on her involvement in the Western Cape Sustainable Schools Project and organic food products. Thus, the researcher's interest in community food gardens was sparked by the establishment of an organic food garden at Somerset College and consumer interest in these organic food products.

Furthermore, the researcher visited the Somerset West Community Food Garden in person and conducted one cultivator interview onsite. All other interviews were conducted online due to the COVID-19 restrictions that were enforced in the early phases of the research and thereafter due to logistical issues since the researcher

moved to Gauteng. The following section provides a detailed discussion of the sampling strategy employed in the study.

5.6 SAMPLING STRATEGY

The term 'sampling' refers to strategies for selecting a subgroup from a larger group and then using this subgroup to draw assumptions about the larger group. The chosen sampling strategy must provide the researcher with the necessary confidence and power to allow appropriate and firm conclusions to be drawn (Potyrailo 2001). In addition, a study population is a specific group of people who share important characteristics of the study (Casteel & Bridier 2021). Thus, consumer participants were recruited through Facebook and were drawn from the Western Cape and Gauteng provinces in South Africa, representing a broad range of general consumers interested in organic food products. However, during the initial phase of the research, the researcher lived in the Western Cape, specifically in the Somerset West area, so all community food garden cultivators resided in the Western Cape, South Africa. Cultivators were identified via online searches for community gardens. Furthermore, word-of-mouth and referrals were used to establish connections with cultivators.

5.6.1 Non-probability sampling

Due to the nature of the study, non-probability sampling was used to recruit participants for the study. A non-probability sampling technique, according to Nikolopoulou (2022), is one in which the odds of any member being chosen for a specific sample cannot be calculated because selection is based on the researcher's subjective judgement. According to Battaglia et al. (2016), this type of sampling involves selecting a subset of the finite population. It attempts to draw a sample at random from the population of interest. To select a sample group, subjective methods are used.

Hassan (2022b) expands on this definition by stating that non-probability sampling is an appropriate method for researchers to assemble a sample group for studies that do not require population representation. Non-probability sampling, according to Hassan (2022b) and Wolf et al. (2016), is less complicated, less expensive, and can be done on the spur of the moment compared to probability sampling methods. According to Wolf et al. (2016), non-probability samples entail participants being chosen because they are easily accessible, or the researcher justifies their participation as a representation of the population being studied.

Since the study required cultivators of community gardens and consumers who frequent organic food markets, who are not easily identified, non-probability sampling enabled the researcher to find these less accessible participants (Bacher et al. 2019). As the study was exploratory, with an interest in the views of cultivators and consumers, non-probability sampling was justified as it allowed for the inclusion of participants who were best suited to address the purpose of the study (Casteel & Bridier 2021; Wolf et al. 2016). Thus, in keeping with non-probability sampling, the following three sampling techniques were used to recruit participants for the study: purposive sampling, convenience sampling, and snowball sampling.

5.6.2 Purposive sampling

Purposive sampling, also known as judgement sampling, is the deliberate selection of a participant based on the characteristics and qualities the individual possesses (Casteel & Bridier 2021; Etikan et al. 2016). Subsequently, participants are chosen based on predetermined norms relevant to the research question and the sample size is determined by the researcher's resources and time available, and it may or may not be determined beforehand (Maree 2019). According to Battaglia et al. (2016), the main goal is to create a sample group that can be considered representative of the population being studied, which can be accomplished by applying expert knowledge of the specific population and selecting the population in a non-random manner. Therefore, the process of locating and choosing individuals or groups of individuals who possess particular knowledge, expertise, and familiarity with a phenomenon of interest – in this case, organic food products and community food gardens – is known as purposeful sampling (Palinkas et al. 2015). This sampling technique is very effective when the researcher is interested in uncovering the meaning ascribed to a phenomenon as experienced through the eyes of the participants (cultivators and consumers) (Battaglia et al. 2016; Dudovskiy 2022) and was therefore beneficial to this study.

In the context of purposive sampling, participants (cultivators and consumers) who adhered to specific inclusion criteria were recruited for the study. Two sets of inclusion criteria were required, which were specific to cultivators and participants who were consumers of organic food products from organic markets. The inclusion criteria for consumer participants required participants to be over 18 years of age, and consumers had to demonstrate a keen interest in organic food products.

In addition, cultivator participants' inclusion criterion was community food garden cultivators in the Western Cape region. Upon contacting gardens following an online search, the designated contact person listed on the website, affiliated with the Western Cape government, responded: "As we discussed telephonically, I am no longer involved in the community gardens project and I'm not sure where there are community gardens currently operating in the City of Cape Town", and "Unfortunately, SD & ECD also no longer do any food gardens". As a result, only four community food garden cultivators were interviewed and discovered through word-of-mouth from the Somerset West Community Garden and consumer interviews.

5.6.3 Convenience sampling

Researchers use convenience sampling to obtain information for market research from a readily available pool of participants; it is seen as the most commonly used sampling technique because it is extremely quick, simple, and inexpensive (Simkus 2022). Kumar (2019) agrees and elaborates that convenience sampling is primarily guided by the researcher's convenience in terms of participants' accessibility, geographical proximity, known contacts, and ready approval for undertaking the study.

The current study's primary goal was to find consumers interested in organic food products. Participants were invited to take part in the research via various platforms.



Figure 5.1: Facebook convenience sampling process

First, a social media platform, Facebook, was used, and an advertisement was created to invite participants to take part in the study, and the researcher's friends and family members were asked to share the page (see Figure 5.1). Participants were contacted via the Facebook Messenger application and a newly created study email address. Despite positive feedback on the proposed research, fewer than expected consumers volunteered to participate. This could have been attributed to logistics, time constraints, and additional COVID-19 restrictions. Second, colleagues were asked to assist with the distribution of the research invitation. Finally, snowball sampling was used to recruit participants.

5.6.4 Snowball sampling

In addition to purposive and convenience sampling, snowball sampling was used to recruit organic food product consumers for this study. These participants also had to adhere to the inclusion criteria for the study. This kind of snowball sampling is often used to find "hidden populations"; thus, these groups of people are not accessible to researchers by other sampling strategies (Maree 2019; Sharma 2017). Also, in studies where participants are difficult to find, researchers use snowball sampling to seek possible participants or when the study sample is unusual or small (Sharma 2017), such as in the case of this study. One specific disadvantage of this sampling technique

is that sampling bias might occur, as subjects tend to nominate people they know well with the same characteristics and traits (Naderifar et al. 2017).

The researcher used exponential non-discriminative snowball sampling until an adequate number of participants were interviewed (see Figure 5.2).



Figure 5.2: Illustration of exponential non-discriminative snowball sampling (Dudovskiy 2022)

According to Dudovkiy (2022), in exponential non-discriminative snowball sampling, the first participant recruited for the sample group provides numerous referrals. Each new referral is investigated until primary data from a sufficient number of samples is collected. However, by using the snowball sampling technique, the sample of participants could be increased, thereby assisting the researcher in achieving data saturation.

5.6.5 Summary of sampling strategy

The researcher used her personal Facebook page, which was linked to a newly created profile specifically designed for recruiting participants. Consumer participants were thus recruited through this newly established Facebook page, created solely for the research study (see Figure 4.3). Kosinski et al. (2015) state that Facebook provides large and diverse samples, and is an inexpensive and efficient way to recruit participants through their friends to participate in a study. A Facebook page (Luv.organic) and a separate email account were created to recruit participants. Thereafter, referrals from participants' own personal networks were also pursued to recruit individuals who shared a common interest in organic food products. Throughout the recruitment process, it was stressed that no personal information would be used or distributed during this study, thus adhering to the ethical requirements. An effort

was made to interview participants of varying ages and from different ethnic groups to ensure representation of the diverse South African population.

Cultivator participants were recruited via online searches for community food gardens in the Western Cape; thereafter, word-of-mouth and referrals were used to connect with other community food garden cultivators. Following the sampling strategy, the data collection process is discussed.

5.7 DATA COLLECTION

Since the study was conducted during the COVID-19 pandemic (2020 to 2022), the data collection method had to be carefully considered. To avoid physical contact during the data collection phase, individual interviews were conducted using Google Meet, Microsoft Teams, WhatsApp calling, and Zoom, depending on which platform suited the participant best. According to Lobe et al. (2022), computer-mediated communication allows for greater flexibility in terms of data collection time and location. The individual interviews were also conducted primarily in English; one cultivator interview was conducted in Afrikaans and then translated into English.

5.7.1 Semi-structured interviews

Semi-structured interviews were conducted in this research study. The researcher had the flexibility to pose predetermined questions (that were relevant and important to the research question) while still collecting specific data from participants. To clarify, semistructured electronic interviews were mostly used to gather data from both cultivators and participants who were consumers of organic food products. The only face-to-face interview was conducted at Somerset West Community Garden after COVID restrictions were partially lifted, with strict adherence to all safety protocols. Interviews were used as a data collection method as it is commonly understood as a conversation through which everyday life experiences could be shared by the participant (Georgescu & Anastasiu 2022; Kumar 2019).

When conducting semi-structured interviews, it is also possible to probe for further clarification from the participant (Maree 2019), which results in the researcher's

improved understanding of the phenomenon. This study aimed to better understand the knowledge, perceptions, and barriers to organic food cultivation and purchase intent. An understanding of this knowledge, perceptions, and barriers required more than just observation; the researcher needed to explore participants' feelings, thoughts, and experiences.

According to Merriam and Tisdell (2016), in most forms of qualitative research, some, or even all, of the data are gathered through interviews. The concept of an interview, which entails asking research participants a series of questions, may appear simple. However, Pope and Mais (2020) argue that interviewing in qualitative research entails more than just asking questions; it is a type of social interaction in which "the interviewer must be able to listen to and encourage, the accounts of others so that they feel safe to tell their story or share their views". During the interview, the researcher and the participant have conversations about the research question. These interviews are typically conducted one-on-one, with discussions centred on the research study. As a result, these interviews can be thought of as purposeful conversations. The goal of these conversations in qualitative research is to understand the participants' thoughts and perspectives on a particular phenomenon.

During the interviews, the researcher was also able to gain an understanding of past events that influenced consumers' and cultivators' perceptions and knowledge of organic food products. The researcher was thus able to gain an in-depth understanding of the participants' perceptions of organic food products using interviews as a mode of data collection.

Two separate interview guides were compiled to execute the interviews, which can be found in Appendix A. The interview guides consisted of questions that were developed to address each of the objectives as indicated in the study's operationalisation in Chapter 1.

5.7.2 Piloting the interview guides

Before the study commenced, the interview guides were pilot tested with one consumer participant and one cultivator who were representative of the sample

population. The purpose of piloting the interview guides was to assess the appropriateness of the questions, determine if the questions were understood by the participants (cultivators and consumers who consumed organic food products), and if any questions needed to be omitted as they meant the same to the participants or questions that needed to be reworded for clarity. By piloting the interview guides, the researcher could establish if the research was viable based on early suggestions from responses to the questions (In 2017). Furthermore, by piloting the interview guides, the researcher gained experience conducting in-depth, semi-structured interviews and building rapport with the participants. Importantly, by piloting the interview guides, the researcher also gained confidence in interviewing participants and how best to keep the conversation flowing during the interview. According to Jacob and Furgerson (2012), establishing good rapport with the participants may facilitate more detailed responses.

After completing both piloting sessions for the interview guides, the interview guides were refined. Changes were made, including rewriting and rearranging some of the questions and adding topical probes to lead to more in-depth responses from participants. Following that, 24 possible open-ended questions were included in both interview guides to increase the utility of the interview questions in understanding the participants' lived experiences regarding the phenomenon.

5.7.3 Data collection process

The collection of data began in July 2021. The first cultivator interview was conducted at the Somerset West Community Garden in Somerset West. This was a face-to-face interview at the garden, whereas all other interviews were conducted online. The cultivator interview guide was used; however, it was quickly realised that there was a natural flow in the conversation because the cultivator had been involved with this garden since 2015, making them extremely passionate, knowledgeable, and interesting. This interview was recorded with the use of the researcher's cell phone.

It is important to note that all participants received an information sheet (Appendix D), with the ethical clearance number (2020/CAES_HREC/106/REC-170616-051) ahead of time and were asked to return the participant consent form before the interview

began. Furthermore, permission was obtained from participants before the interview was recorded. At the cultivator's request, one interview was conducted in Afrikaans; the rest were conducted in English.

Online consumer interviews commenced during the same period. Online platforms such as Google Meet, Microsoft Teams, WhatsApp calling, and Zoom were used as it was more convenient to schedule interviews with participants according to their available time. The duration of the interviews ranged from 13 to 41 minutes. To account for other commitments among participants, interviews should not last more than 90 minutes (Jacob & Furgerson 2012). It was observed that each session, including some initial social conversation, did not exceed the recommended time.

Although general issues were thoroughly discussed, the main goal was to foster positive relationships with the participants. All participants were allowed to freely discuss the questions that were posed, and the researcher used probing questions to elicit more in-depth information. The consumer interviews were conducted entirely in English. Moreover, the researcher did not ask the questions in an orderly fashion, but based on the flow of the discussion. Importantly, the pilot study taught the researcher that it was nearly impossible to predict how participants would respond to the questions. There were times when the answers were linked to subsequent questions or added to a point raised earlier in the previous discussion. Each interview therefore required unique probes, allowing the researcher to improve her interviewing skills and further probe in key areas.

5.7.4 Data saturation

Saturation is the point in data collection when no new or relevant information emerges (Given 2008). Moreover, Fusch and Ness (2015) and Patel (2015) agree that failure to reach data saturation has a negative effect on the validity of the research, but it also means that more research is needed.

Hennink et al. (as cited by Aldiabat & Le Navenec 2018) distinguished two types of data saturation: code saturation and meaning saturation. The authors proposed that code saturation could be reached after nine interviews when researchers believe they

had heard everything. Conversely, meaning saturation could be reached after 16-24 interviews, when researchers feel they comprehended all the collected information. In addition, Morse (2015) insists that qualitative researchers must achieve both types of saturation by using both subjective and objective data, which provides the best guarantee of rigour. Hennink et al. (2016) concluded that the following parameters may improve meaning saturation and, as a result, aid in the determination of an effective sample size: (a) the study's purpose, (b) the nature of the research population, (c) coding types and styles, and (d) the complexity and stability of the researcher's codebook. To achieve data saturation and rigour, Morse (2015) suggests that qualitative researchers use the following strategies: sustained attention, persistent observation, thick, rich description, inter-rater reliability, negative case analysis, peer review or debriefing, clarification of researcher bias, external audits, member verification, and triangulation.

In the current study, data saturation was observed when multiple participants repeated key concepts during consumer interviews, even when the researcher probed for greater detail. This became clear during consumer participant interview 18, and another two interviews were conducted before the data collection phase was terminated. Saturation was evident because the researcher transcribed the interviews externally before coding them with Atlas.ti.23. No new codes were observed, and there was obvious code repetition.

Unfortunately, due to the scarcity of operational community gardens in the Western Cape, the four cultivator interviews may not have yielded sufficient data. Even though various concepts were observed to be repeated, the researcher believes other community garden cultivators may have had different opinions. Furthermore, cultivator opinions might differ between provinces due to regional variations in climate, soil conditions, agricultural practices, and local challenges affecting community gardens. These factors can influence cultivators' experiences, preferences, and challenges, leading to diverse perspectives based on their specific provincial contexts. In contrast, consumer opinions may be more consistent across provinces because their experiences with organic food products are generally shaped by broader market trends, such as product availability and price, rather than regional agricultural practices. Consumers' preferences are often influenced by national trends and

marketing, which tend to be more uniform compared to the localised factors affecting cultivators. However, the data obtained were meaningful for the study because they related to its aim and objectives, and valuable conclusions could be drawn from these interviews.

5.8 DATA ANALYSIS

According to Merriam and Tisdell (2016), data analysis is the process of making sense of data. Consolidating, reducing, and interpreting what participants have said, as well as what the researcher has seen and read, is part of the analysis process. Consequently, significance was derived from participant interactions during the data collection stage. Since the researcher seeks answers to the posed research question during the data analysis phase, it is essential to the research process. Merriam and Tisdell (2016) concur the purpose of data analysis is to attain answers to research questions.

The following research objectives were addressed in this study:

- Objective 1: Explore consumers' perspectives on organic food products by:
 - 1.1 Determining consumers' knowledge and perspectives of organic food products.
 - 1.2 Determining consumers' willingness to purchase organic food products from a local organic community garden.
- Objective 2: Explore cultivators' perspectives on organic community gardens by:
 - 2.1 Determining cultivators' knowledge and perspectives of organic food products.
 - 2.2 Identifying the barriers to organic community garden cultivation in the local community.
 - 2.3 Exploring cultivators' willingness to sell produce at local organic markets.
- Objective 3: Identify the presence and cultivation of organic community gardens in the local area

• Objective 4: Explore the local market opportunities for organic food products produced from organic community gardens

The open-ended coding systems used in the inductive content analysis (ICA) of this study were the most appropriate for achieving the study's goals. Inductive content analysis describes methods where the researcher uses in-depth readings to extract concepts and themes from unprocessed data (Vears & Gillam 2022). Recurring, important, or dominating themes in the raw data surfaced during the ICA. Vears and Gillam (2022) state that the ICA approach is based on the following objectives: 1) developing a model or theory about the underlying structure of experiences that are apparent in the text data; 2) clearly defining the relationships between the research objectives and the summary findings derived from the raw data; and 3) condensing large amounts of raw text data into a summary format. Dudovskiy (2011) clarifies that ICA begins with observations, and theories are proposed at the end of the research process as a result of the observations.

The ICA coding process, as described by Creswell (as cited by Thomas 2006), is illustrated in Figure 5.3.

The Coding Process in Inductive Analysis				
Initial reading of text data	Identify specific text segments related to objectives	Label the segments of text to create categories	Reduce overlap and redundancy among the categories	Create a model incorporating most important categories
Many pages of text	Many segments of text	30 to 40 categories	15 to 20 categories	3 to 8 categories

Figure 5.3: The coding process in inductive analysis (Creswell 2002, cited by Thomas 2006)

Inductive analysis was performed during the data analysis phase for both cultivator and consumer interviews using the following steps:

Step 1: Data organisation and transcription

Putting the data in a format that can be used is the first step towards establishing meaningful answers to research questions (Castleberry & Nolan 2018). This was achieved through the transcription and organisation of data acquired from consumer and cultivator interviews. The researcher employed a qualified transcriber.

Step 2: Detailed reading of the text

To become familiar with the material and comprehend the themes and events covered in the text, the researcher read every transcription in detail during this step.

Step 3: Initial coding

The researcher familiarised herself with the data before disassembling it. This involved decomposing the data into meaningful groupings, which is often achieved through coding (Castleberry & Nolan 2018). The first round of coding involved merely reading the text and looking for themes while keeping the study's goals in mind (see Figure 5.4). This process involved going over the information to find important themes; this is commonly known as open-ended coding.



Figure 5.4: Coding example using Atlas.ti.23

Step 4: Coding with precision and identifying recurring themes

During this phase of the data analysis process, the researcher went through the initial coding completed in step 3 to find themes that emerged repeatedly (Elliott 2018).

Step 5: Focused categories

The codes identified in step 4 were reviewed during this stage. Inductive coding, according to Drew (2023), typically generates categories from real phrases or meanings in particular text segments. After that, the recurrent themes that showed up in the data were expanded into major categories.

<u>Step 6: Theme and sub-theme discussion, providing reference to pertinent literature</u> The research study's subsequent chapter goes into more detail about the themes and sub-themes that emerged from the data. Themes are also connected to pertinent literature.

To summarise, interviews were thoroughly scrutinised to identify core concepts and themes, then codes were assigned to these concepts and themes. Skjott et al. (2019) explain coding's fundamental purpose is for researchers to examine a coherent portion of their empirical material – a word, a paragraph, or a page – and label it with a word or short phrase that encapsulates its content. Coding, which is essential in qualitative analysis, reduces substantial volumes of empirical material and makes data easily accessible for analysis. After coding was completed, the researcher moved on to establish themes and categories by combining and organising related codes into categories and themes.

5.9 TRUSTWORTHINESS

According to Connelly (2016), trustworthiness in research is the level of researcher's assurance in their data, interpretation, and methodologies employed to uphold the quality of the study. Numerous researchers have embraced this standard for reliability in qualitative research, forming the basis for evaluating and discussing the study's trustworthiness. Maree (2019) states that the importance of trustworthiness in qualitative research is critical. The reliability of data analysis, findings, and conclusions should be evaluated. Processes to analyse data for trustworthiness should thus be kept in mind at all times. Assessment procedures also include checks for consistency as well as credibility or stakeholder checks.

Anney (2014) agrees with Gunawan (2015) that qualitative researchers use criteria such as dependability, credibility, transferability, and confirmability to ensure the trustworthiness and rigour of their research, but this author asserts that in qualitative research, the approaches to ensuring trustworthiness are diverse, encompassing numerous philosophical paradigms. This creates confusion about the diverse nature of qualitative research, which results in researchers employing quantitative research criteria to demonstrate trustworthiness.

The sections that follow discuss trustworthiness in qualitative research in terms of dependability, credibility, transferability, and confirmability. Furthermore, the discussion suggests appropriate strategies to ensure the study's trustworthiness.

5.9.1 Dependability

The term 'dependability' refers to the ability to measure or demonstrate the consistency and reliability of a study's findings. This begins by tracking the precise methods researchers use for data collection, analysis, and interpretation, as well as providing adequate contextual information about each aspect so that the study can theoretically be replicated by other researchers and produce consistent results (Kumar 2019). According to Forero et al. (2018), dependability is the process of ensuring that a study's conclusions can be repeated if the same inquiry is carried out with the same participants and in the same setting.

In this study, dependability was achieved by offering thorough explanations of the research techniques. Every phase and procedure of the study was meticulously documented and reported in order to attain dependability. The procedures for sampling, gathering data, and analysing it are all covered in detail in the study. Thus, the application of reflexivity promoted the reliability of the study and reduced bias by making the research process more transparent (Moon et al. 2016).

5.9.2 Credibility

Anney (2014) states that credibility relates to researchers' belief in the validity of their research findings. Long and varied field experience, time sampling, reflexivity,

triangulation, member checking, peer examination, interview technique, establishing the researcher's authority, and structural coherence should all be used as credibility strategies. Credibility, according to Merriam and Tisdell (2016), addresses the issue of how to find a match for reality. As a result, the researcher discovered a true reflection of the participants' perceptions during the data collection process. The authors also assert that no qualitative study can ever fully represent the participants' actuality or the objective truth. However, a few tactics can be used to improve a study's internal validity in order to combat this limitation.

The researcher established credibility by applying triangulation to data collection and analysis methods to determine if there were any discrepancies in the findings. To validate emerging findings, triangulation can take many different forms, according to Anney (2014). These forms include the use of multiple methods, multiple data sources, multiple investigators, or multiple theories. Triangulation helps the researcher reduce bias by allowing them to cross-check the consistency of participants' responses. In this study, the researcher employed triangulation by contrasting the results with recent, pertinent literature and theoretical frameworks.

5.9.3 Transferability

Transferability, as the name implies, assesses whether or not the study's findings are applicable in other contexts, circumstances, and settings. It can also be viewed in terms of generalisation. Researchers can offer detailed explanations to demonstrate transferability in qualitative research by providing adequate details of the research site, participants, and methods or procedures used to collect data during the study (Maree 2019). Furthermore, Cope (2014) defines 'transferability' as the ability to apply research findings to different settings or groups.

When conducting qualitative research, researchers must remind themselves why a small sample is selected – in this case, to understand participants' knowledge, perceptions and barriers toward the cultivation and purchase intent of organic food products. Thus, despite the small sample size, it is important to note that the sample must remain representative of the specific population, and data saturation must be reached to ensure comprehensive insights and meaningful conclusions. The study's

findings aimed not only to understand the knowledge, perceptions, and barriers to organic food products from both a cultivation and consumerist perspective, but also to empower current organic food product research in South Africa. It will inform future research and the ongoing development of sustainable development programmes. As a result, the researcher provided a large amount of clear and concise information about organic food product knowledge, perceptions, and barriers by presenting rich, detailed descriptions of the participants and their context.

5.9.4 Confirmability

Confirmability is linked to objectivity and is not dependent on human ability or perception. Steps must be taken to ensure that a study's findings reflect the informants' experiences rather than the researcher's (Shenton 2004). In terms of confirmability, the researcher must demonstrate that the qualitative research is unbiased and not influenced by the researcher's assumptions or biases. Rather, credible research should produce findings that objectively reflect information gathered from participants; in other words, the data should speak for itself.

Confirmability was demonstrated in this study by checking and rechecking the data throughout the data collection and analysis process. As a result, the researcher took extra precautions, such as maintaining detailed records and using the qualitative research computer program Atlas.ti.23 and its AI feature as a co-coder to analyse data without conscious or unconscious bias, while accurately portraying participants' responses.

5.9.5 Reflexivity of the researcher

Attia and Edge (2017) state that reflexivity entails an ongoing mutual shaping process between the researcher and the research. Therefore, development entails becoming more aware of interactive processes between organisms and context rather than viewing development as a welcome by-product of reflexive research. Researcher development is regarded as central, with reflexivity playing an instrumental role in this ongoing process (Attia & Edge 2017). Throughout the research process, the researcher needed to be mindful of the possibility of researcher bias because the research questions, design, and methods for gathering data could all be influenced by her experiences and values. Potential researcher bias was circumvented by the researcher participating in continuous reflection. Thinking back on one's research process is a key component of research reflexivity. Enhancing comprehension and thinking back on possible problems and experiences that might emerge during the research could expose possible biases and have an influence on the study's legitimacy. This is the aim of reflective practices (Adam 2013).

Throughout this study, the researcher became aware of her ongoing development as a whole person who conducts research, and the continuous enrichment from the research in her daily life as a Consumer Studies educator involved in sustainability school programmes. Throughout the process, special care was taken to avoid inherent biases toward organic food products due to the researcher's prior knowledge and perceptions. Rather than viewing influences such as gender, culture, and ethnicity as potential data contaminants to be avoided, the researcher had to trust methodological procedures, growing in her understanding of her knowledge, feelings, and the values that she brought into the field of research.

Furthermore, sharing one's ideas, viewpoints, and knowledge with people and oneself is another definition of 'thinking aloud'. During this process, time was spent visually diagramming ideas regarding opinions and feelings that were expressed during participant interactions. The researcher reflected on her understanding of both the participants and herself, acknowledging the importance of recognising that data gathering involved a collaborative effort between the researcher, her experiences, and the research supervisor. She worked hard to balance the value of her insider perspective with the necessity of maintaining objectivity and minimising personal biases in the research process (Adam 2013).

5.10 ETHICS

According to Bhandari (2021), ethical considerations in research are a set of principles that guide a study's research designs and practices. When gathering data from people, scientists and researchers must always follow a set of rules. Resnik (2020) agrees and states that there are several reasons why it is critical to follow ethical norms in

research. First, norms advance research goals such as knowledge, truth, and error avoidance. Second, because research frequently necessitates a great deal of collaboration and coordination among many different people from various disciplines and institutions, ethical standards promote collaborative work values such as trust, accountability, mutual respect, and fairness (Stuart 2020). Third, many ethical norms assist in holding researchers accountable to the public. Fourth, ethical norms in research contribute to public support for research. People are more likely to fund a research project if they have confidence in the research's quality and integrity (Resnik 2020). Finally, many research norms promote a wide range of important moral and social values, including social responsibility, human rights, animal welfare, legal compliance, and public health and safety. Ethical mistakes in research can have serious consequences for human and animal subjects, students, and the general public. In this study. The researcher adhered to the following ethical principles:

5.10.1 Privacy, confidentiality, and anonymity

Every effort was made throughout the research process to ensure participants' privacy, confidentiality, and anonymity. In addition, pseudonyms were used for all participants in data reporting, and all identifying names were removed from the interviews. Data were collected mostly via online interview platforms, and the data will remain anonymous because participants cannot be identified.

5.10.2 Informed consent

The participants all received an information sheet, and their participation was entirely voluntary. Thereafter, all participants signed a consent form that outlined the scope of the study. It was reiterated that the study is opinion-based, so no sensitive questions would be asked. Furthermore, issues of voluntary participation, anonymity, confidentiality and the freedom to leave at any time were reiterated throughout the interviews.

To be deemed 'informed', consent entails more than just signing a document; it also needs to cover the procedure of ensuring the participant is fully aware of the nature of the research and any possible risks. It is imperative that participants comprehend that they possess the liberty to revoke their consent to participate at any point. According to Hammersley and Traianou (2012), research must adhere to certain criteria and requirements for people's autonomy to be respected. It is not uncommon for qualitative researchers to be unable to control the course of data-gathering methods, like observation and interviews. Given the aforementioned considerations, it was decided that it was ethically appropriate to regard consent as an ongoing process as opposed to a one-time occurrence (Aspers & Corte 2019).

5.10.3 Potential risks to participants

The research questions were not controversial or unethical; rather, this was an exploratory study of consumers' and cultivators' knowledge, perceptions and barriers toward the cultivation and purchase intent of organic food products. As a result, there were no risks associated with participating in the research.

5.10.4 Data collection and plagiarism

Leading questions were avoided during the interview, and data analysis was not manipulated. All sources used in the literature were referenced and cross-referenced during data analysis to avoid plagiarism.

5.11 SUMMARY

This chapter discussed the research approach, design, paradigm, and technique. The methods employed for sampling, gathering data, and analysing qualitative data were explained. Furthermore, this chapter covered the ethical and reliability issues that impacted the study. Chapter 6 presents and discusses the consumer participants' data and emerging themes.

CHAPTER 6 - FINDINGS AND DISCUSSION – CONSUMERS' PERSPECTIVES

6.1 INTRODUCTION

Chapter 5 of this dissertation presented the research methodology adopted to achieve the study's objectives. A qualitative approach was deemed most appropriate based on the study's aim to explore organic community food gardens' potential contribution to sustainability from the perspectives of cultivators and consumers. This approach enabled an exploration of the individual experiences and perceptions of cultivators and consumers, influencing their understanding of organic food products.

Semi-structured interviews explored the knowledge, perceptions, and barriers associated with organic food products among cultivators and consumers. The findings of these interviews offer valuable insight into the factors that shape cultivators' and consumers' attitudes towards organic food products and whether organic community food gardens would be a viable option to contribute to some of the 2030 SDGs, specifically as it relates to the three pillars of sustainability: economic, environmental and social sustainability. This chapter presents the study's findings on each research objective specific to the consumer participants. The findings from the cultivator interview are presented in Chapter 7.

6.2 BRIEF DESCRIPTION OF THE CONSUMER PARTICIPANT STUDY SAMPLE

This research aimed to examine consumers' knowledge and perspectives of organic food products and identify barriers that hinder their purchase intent of organic products. The study aimed to examine whether the establishment of organic community food gardens could play a role in advancing South Africa's SDGs for 2030. Specifically, the research aimed to assess how these gardens could contribute to economic, environmental, and social sustainability within local communities. To achieve this objective, a purposive sampling strategy was employed to select 20 consumer participants who exhibited a keen interest in organic food products and were

considered likely to provide valuable insights. Convenience sampling techniques were initially employed (like the Facebook social media platform), and the researcher engaged with colleagues from a teaching context interested in organic food products. Subsequently, snowball sampling was further used, as participants referred similarly interested individuals. The inclusion criteria stipulated participants had to be over 18 years of age and have an opinion about organic food products. The researcher exercised personal judgement and employed purposeful sampling methods to ensure the inclusion of diverse perspectives and opinions to gather meaningful information for the study. The study therefore included a diverse range of consumers without any specific demographic limitations within the South African context, intending to examine general opinions. Therefore, the researcher did not prioritise the collection of personal information from the participants. In this study, consumer participants ranged in age from 25 to 60 years and were residents of urban areas in the Western Cape and Gauteng provinces of South Africa. The participants were predominantly educated adults with bachelor's degrees and were characterised by middle to higher income levels.

6.3 CODING OF DATA

During the study's inductive thematic data analysis phase, the researcher employed the services of a professional transcriber who transcribed both consumer and cultivator interviews. After the data had been compiled into a manageable format, the researcher thoroughly read the text to gain an understanding of the content. The initial coding was then performed using a qualitative content analysis technique. This involved breaking down the data into meaningful groups according to the objectives of the study and using the computer-assisted qualitative data coding analysis software, Atlas.ti.23, to assist with the process (see Figure 6.1).
Code Groups	Name	Grounded	Density	Groups	Created by	Modified by	Created	Modified
(5) 1a - Knowledge/Perceptions/Barriers) 🔹 🔷 1a1 Term 'organic'	229	1	[1a - Knowledge/Perceptions/Barriers]	Mariët Boshoff	Mariët Boshoff	2023/04/10 10:45	5 2023/04/20 10:17
Model 1b - Willingness to purchase organic produce from community garden (1)) • 🔷 1a2 Labelling/Packaging/Certification	135	1	[1a - Knowledge/Perceptions/Barriers]	Mariët Boshoff	Mariët Boshoff	2023/04/10 10:45	5 2023/04/20 10:18
$\langle\!\!\langle\rangle$ 3 - Presence and cultivation of community gardens in the local area \qquad (1) • 🔷 1a3 Associated processes	79	1	[1a - Knowledge/Perceptions/Barriers]	Mariët Boshoff	Mariët Boshoff	2023/04/10 10:45	5 2023/04/20 10:15
) 🔹 🔿 1a4 Health benefits	160	1	[1a - Knowledge/Perceptions/Barriers]	Mariët Boshoff	Mariët Boshoff	2023/04/10 10:45	5 2023/04/20 10:18
	• 💸 1a5 Environmental impact	37	0		Mariët Boshoff	Mariët Boshoff	2023/04/26 05:11	2023/04/26 05:21
	 ⁽¹⁾ ⁽¹⁾ ⁽¹⁾ ⁽¹⁾ ⁽¹⁾ ⁽¹⁾ 	215	2	[1a - Knowledge/Perceptions/Barriers]	Mariët Boshoff	Mariët Boshoff	2023/04/10 10:54	4 2023/04/20 10:19
	• 💸 1b- Consumers understanding of community gardens	34	0	[1b -Willingness to purchase organic produce from community garden]	Mariët Boshoff	Mariët Boshoff	2023/04/11 08:31	1 2023/04/14 10:15
	• 🔆 3 Local community gardens	38	0	[3 - Presence and cultivation of community gardens in the local area]	Mariët Boshoff	Mariët Boshoff	2023/04/11 08:38	3 2023/04/14 10:19
	• 💸 4-1 Marketing of community gardens	49	0	[4 - Local market opportunities for organic community gardens]	Mariët Boshoff	Mariët Boshoff	2023/04/11 08:39	9 2023/04/14 10:19



Figure 6.1: Atlas.ti.23 coding

As outlined in Figure 6.1, code groups were established that aligned with the study's objectives. The names assigned to these groups reflect the coding the researcher performed, capturing recurring themes identified throughout the qualitative data analysis. These recurrent themes were subsequently grounded, indicating their frequency in the analysed data. The density value associated with each theme signifies its relative significance or prevalence in the overall dataset. This approach offers another perspective beyond mere frequency counts, taking the proportion of coded content concerning the total qualitative data into consideration.

Following the initial coding process, the researcher used artificial intelligence (AI) coding to mitigate the potential for human error. To clarify, the AI coding process acted as a co-coder, assisting in generating efficient and minimally correlated code sets, as highlighted by Kadlimatti (2020). This resulted in codes that can be sent over the same frequency or channel, making the coding more effective while reducing cross-correlation (Kadlimatti 2020). Karp et al. (2019) emphasise that a co-coder adds reliability and security to the coding process. However, Zhang and Lin (2016) raised concerns about potential security and privacy issues, like the risk of pollution attacks; this means that a single problematic code could affect several good ones during the intermediate coding process. Despite these concerns, Zreik et al. (2022) discovered that collaborative coding has several benefits, fostering greater inclusivity and improving the overall analysis.

Al coding should not be solely relied upon, as the researcher realised that the Al coder is unable to differentiate between questions and responses. Therefore, the researcher removed codes related to research questions during the study to ensure code quality. Moreover, single themes and codes that did not relate to the research were either deleted or merged into similar themes. These themes were then categorised in the original code groups that were identified according to the research objectives.

6.4 OUTLINE OF THE STUDY OBJECTIVES

The study's objectives were established to help shape the questions posed during interviews with consumer participants. The aim was to encourage participants to provide information that would be pertinent to the study's objectives. These objectives

encompassed four key areas: (1) exploring consumers' perspectives of organic food, (2) exploring cultivators' perspectives on organic community gardens, (3) identifying the presence and cultivation of organic community food gardens in the local area, and (4) examining local market opportunities for organic food products derived from such gardens. Each objective was operationalised by designing questions that targeted the specific aspects related to that objective. Table 6.1 summarises the questions posed to the participants, along with their associated objectives and assigned codes, serving as points of reference.

Objective 1 - Explore consumers' perspectives on organic food	
products	
1.1 Determining consumers' knowledge and perspectives of orga	anic 1a
food products.	
1. When the word 'organic' is mentioned, what comes to mind? W	/hat do 1a1
you know about organic food?	
Possible prompts:	
Expensive – Do you know that for a fact, or is it just the perceptio	n?
Safe environment: Please elaborate on what you mean.	
Better for you: In terms of what specifically?	
'free-range' – what do you mean if you say free-range? Are free	e-range
and organic the same?	
'niche or fashionable'- is it something that will draw your attention	l?
2. So, when a product is labelled as organic, what do you expect from	om this 1a2
product?	
Are there things that are like 'red flags' when you immediately the	ink this
product is NOT organic?	
3. Do you associate organic food with certain processes? Things th	at they 1a3
definitely must or must NOT do for it to be organic?	
Possible prompts:	

Table 6.1: Operationalisation of the study's objectives

Is organic certification something that you consider when looking for organic products?	
Do you know whether we have a certification body for organic food in South Africa?	
If you say pesticide-free, what do you mean, and how does it differ from other farming methods?	
 In your opinion, are there any health benefits when eating organic foods? Please explain. Possible prompts: 	1a4
And what about nutritional value?	
So, you believe that it might be more nutritious in what way? So, will these health benefits persuade you to rather eat organically? If you are diagnosed with a food-related health disease, will eating organically be an option?	
5. What do you believe is the environmental impact (if any) of organic farming methods?	1a5
Do you know if this is any different from conventional farming methods?	
6. Purchase intent	1a6
Do you regularly buy any organic foods?	
No –	
Do you mind elaborating on the reasons why you are not interested in buying organic products?	
Possible prompts:	
If I understand correctly, the price/availability is something that hinders you from buying organic?	
Will you be willing to overlook this/these reason(s) to live healthier,	
support the local community garden or benefit the environment?	
Yes -	
Are there any products that you prefer buying only organic?	1a6a

Objective 2 - Explore cultivators' perspectives on organic community	
gardens (Discussed in Chapter 7)	
2.1 Determining cultivators' knowledge and perspectives of organic food	
products.	
2.2 Identifying the barriers to organic community garden cultivation in the local	
community.	
2.3 Exploring cultivators' willingness to sell produce at local organic markets.	

Objective 3 - Identify the presence and cultivation of organic community	
gardens in the local area.	
1. Are you aware of any community gardens in your area? (No - move to Q4)	3
Do you know whether they sell their produce to the local community or	
maybe at certain markets around Cape Town?	
2. Do you know whether the products they are selling/cultivating are organic?	

How are you, as the consumer, made aware of this? Does it make a difference whether you will support them or not?

Objective 4 - Explore the local market opportunities for organic food	Code
products produced from organic community gardens.	4

Next, a detailed discussion of the recurring themes and how they relate to the study's original objectives are presented.

6.5 QUALITATIVE FINDINGS

6.5.1 Objective 1: Explore consumers' perspectives on organic food products

1.1 Determining consumers' knowledge and perspectives of organic food products.

In recent years, researchers like Paul and Rana (2017) and Nguyen et al. (2020) have observed a growing trend in organic food product purchase intent. They noted that as lifestyle-related health issues have become more common, modern consumers have exhibited an increased interest in organic food products. To gain insight into consumer knowledge and perspectives regarding these products, it is important to consider that consumers often form subjective opinions or beliefs about a product based on their interpretation, regardless of its accuracy (Jensen et al. 2019). Knowledge was thus not explored in terms of right or wrong answers to a knowledge questionnaire, but the findings were based on opinions and what consumers understood about organic food products that may lead to their perceptions of these products. Schiffman and Wisenblit (2019) explain that perceptions have a significant role in marketing and can determine the success or failure of a product in the marketplace. These perceptions are developed by organising and summarising sensory input such as vision, sound, and odour into a coherent whole (Berr 2023; Schiffman & Wisenblit 2019). This information prompted the initial question directed at consumer participants.

1a1: When the word 'organic' is mentioned, what comes to mind? What do you know about organic food?

The consumer participants' responses that relate to this question are presented in Appendix B, Table 1, and are also incorporated into the discussions that follow.

This question assessed participants' perceptions and understanding of the term 'organic'. Different individuals may have varying interpretations of what 'organic' means, such as pesticide-free, natural, environmentally friendly, or healthy, to name a few concepts (Van Bussel et al. 2022; Kavaliauske & Ubartaite 2014; Petrescu & Petrescu 2015). Understanding these perspectives is crucial as it may influence consumers' engagement with organic community food gardens.

Figure 6.2 visually encapsulates the outcomes derived from participants concerning their knowledge and perceptions of the term 'organic'. These encompass discernments of health benefits, environmental concerns, seasonal availability, acknowledgements of the perceived high cost, and expressions of difficulty distinguishing between organic and non-organic food products by some participants.



Figure 6.2: Determining consumers' knowledge and perspectives of organic food products

According to the participants, organic food is associated with health benefits, environmental friendliness, ethical farming practices, and the absence of harmful chemicals, GMOs, and pesticides. However, some participants mentioned difficulty discerning between organic and non-organic food products, while others linked organic food with seasonal availability and high costs. The **health perception** is demonstrated in various quotations such as: "Okay a fresh, untainted, of the earth, natural, healthy, eco-friendly, tasty, non-modified, non-genetically modified" (P2/3), whereas P4 also "expect it to not damage my health", because "I mean the argument that eating something fresh out of the ground that is untreated is obviously healthier than eating something that is conditioned to grow in certain ways". In addition, P6 explained organic food in a simpler way just by saying that it is "Well healthier and expensive". P10 was also clear on organic food being "Healthy or like home grown food", to name a few examples.

This viewpoint of the consumer participants is consistent with the literature as Singh and Verma (2017) state consumers tend to consider organic food products superior to conventional products in terms of their health benefits, increased nutrition, and environmental impact. This belief arises because organic products are produced sustainably without using GMOs, artificial fertilisers, pesticides, routine antibiotics, or other materials prohibited by the certification body (Bostan et al. 2019). This seemed to be a consistent view among the South African consumer participants as they believed organic food products do not contain harmful chemicals or genetically engineered organisms.

Furthermore. consumer participants associated the word 'organic' with environmental concerns such as ethical farming practices and the absence of chemicals, GMOs and pesticides. P4 explained, "If I hear the word organic, I think of something that grows naturally or is naturally in its natural habitat and environment and not influenced by any human action". Participants P2/3 shared similar sentiments by emphasising the environmental context: "Okay a fresh, untainted, of the earth, natural, healthy, eco-friendly, tasty, non-modified, non-genetically modified". P1 concurred, stating, "I don't know how to put it, like a safe environment", while P11 articulated, "In my mind, organic means it's growing in soil that is clean, you know, as natural as possible in this world we live in, which is probably very, very challenging". Additionally, P10 asserted, "Well, no bad chemicals for the environment". These opinions are generally in line with current research on organic food products, as the Codex Alimentarius defines 'organic' as a label that refers to products that are

sustainably produced without the use of GMOs, artificial fertilisers, pesticides, antibiotics, or other materials prohibited by the certification authority (DAFF 2010). In addition, DAFF (2010) and the IFOAM (2017) state that organic food products rely on ecological processes that improve agroecosystem health, such as biodiversity, biological cycles, and soil biological activity. This lends credence to the notion that organic food products are free of synthetic materials.

Research has also suggested that organic products may have some health benefits, such as higher levels of antioxidants (Guéguen & Pascal 2023; Carrington & Arnett 2018; Leifert 2014), and lower levels of pesticide residue, although these differences may not always be significant (Brantsæter et al. 2017). Thus, participants' views regarding environmental sustainability, ethical farming practices, and the exclusion of harmful chemicals, GMOs, and pesticides align with the existing body of research on consumers' awareness and attitudes towards organic food products.

However, when consumers were asked about their perceptions of the term 'organic', an immediate association was also often made to the *high cost* associated with organic food products. This sentiment was expressed by P1, who remarked:

"So it was labelled as organic, and we didn't do this and we didn't do that, and we follow all these rules when, in reality, that wasn't actually the case. The price difference between some organic and non-organic items is quite high, so, therefore, being a student, I would go for whatever was cheapest".

Similarly, participant P4 emphasised:

"I think that's the biggest drive for me to buy something that is organic because it is more expensive usually, or it doesn't look so pretty, but one does feel more confident in the fact that you're not dealing with hidden substances or hidden things within that type of food".

P12 highlighted the cost factor and said, "You could just take the bigger lettuces and actually sell them, like when you buy the baby leaf lettuces from Woollies that cost an absolute fortune". This perspective aligns with findings in the literature, as

demonstrated by Kavaliauske and Ubartaite (2014) and Petrescu and Petrescu (2015), who highlighted that consumers perceive organic food products to be characterised by high prices. In addition, Köksal et al. (2017) identified the high cost of organic food products as a barrier to adopting sustainable practices. This economic consideration emerged as a significant factor influencing consumer choice, with affordability often taking precedence over other perceived benefits linked to organic food products.

Conversely, certain consumer participants exhibited a lack of differentiation between organic and non-organic foods. Specifically, P2/3 claimed, "I wouldn't know, if I saw two lettuces on the shelf and one was organic and the other one wasn't. I don't think I would be able to tell the difference between the two, if the one wasn't labelled". A subset of consumer participants also associated organic food products with seasonal availability as a means of identifying their organic status, as illustrated by statements such as "It follows the natural seasons and flow of harvesting, you give the ground time to rest and there's like..." (P4) and "So, I tend to go, you know, seasonal, local, best quality I can and then organic" (P5). The lack of consumer differentiation observed in the data between organic and non-organic food products has not been addressed in the existing literature, making it a topic of significant interest. However, non-differentiation may vary based on individual consumers; familiarity with the production and distribution of organic foods. Yiridoe et al. (2005) highlight the impact of various exogenous, product-related, social, and demographic factors on consumer knowledge and willingness to pay for organic products. Additionally, Fatha and Ayoubi (2021) identified subjective knowledge, objective knowledge, and prior experience with the product as key knowledge domains that shape consumers' behaviour. While subjective knowledge concerns consumers' perceived understanding of a product, objective knowledge pertains to their actual knowledge of it. According to Raju et al. (2015), it is crucial to assess both types of knowledge as they each have distinct effects on consumers' adoption of new products, albeit with varying impacts, such as in the case of organic foods. Aertsens et al. (2011) posit that high levels of objective knowledge regarding organic vegetables may affect consumer preferences and willingness to pay for such products. It is assumed that consumers' knowledge of organic foods may also increase their ability to differentiate between organic and nonorganic products.

Overall, consumers had a comprehensive perspective on agricultural methods, weighing the benefits and drawbacks of organic and conventional farming methods, and considering factors such as environmental impact and nutritional value where organic foods are concerned. They perceived organic food as being healthier, more environmentally friendly, and better for animal welfare than conventionally grown food. Furthermore, the participants associated organic food products with high costs and seasonal availability.

To gain a deeper understanding of the participants' perceptions and knowledge about organic food products, they were asked about the labelling used for these products.

1a2: When a product is labelled as organic, what do you expect from this product?

The quotations related to this question are displayed in Appendix B, Table 2, and are also incorporated into the discussions that follow.

Certification is a critical aspect of organic food products, as it ensures the integrity of the products in the marketplace according to the standards set by the IFOAM (Kelly & Metelerkamp 2015). Additionally, the IFOAM's mission promotes the growth of organic agriculture, whether it is certified or uncertified, the advancement of organic operations from good to best practice, and the ultimate adoption of integral organic principles and practices by agricultural operations that are transitioning to sustainability (IFOAM 2021; Luttikholt 2007). The principles set out by the IFOAM include four areas, namely health, ecology, fairness, and care (IFOAM 2021; UNEP 2017). Figure 6.3 illustrates the findings on participants' perspectives, highlighting either their trust in specific labelling practices or a noticeable scepticism regarding the labelling practices of organic food products in South Africa. Additionally, the figure reflects concerns related to certification costs.



Figure 6.3: Labelling of organic food products

It was evident during the interviews that consumer participants generally *trusted* the labelling of organic food products to a certain extent. P18 explained, "Woollies says it's organic I do trust because I know the systems are incredibly strict", and P2/3 elaborated, "we do trust a lot of what it says on the packaging, you know". P5 explained, "I've come to trust certain accreditation. So, certain companies and things. But I still think it's a, it's a scale rather than an absolute set of parameters, but I would trust it if I kind of recognised where it came from, I think". Yet, they also expressed scepticism and concerns about the authenticity of the label. P14 claimed "I do look to see where products have come from because I do think you know if you're running. Let's say for example on an organic mealie field but it's sitting right next to the Krugersdorp mine dumps that are full of acid mine water". P7 elaborated, "So I would definitely say in the situation it is becoming a trust issue", while P11 shared "I don't know what, what or who to trust nowadays". In support, P20 concurred "Trust is a real issue", and P18 was a "little bit sceptical in South Africa I guess also what to believe and how well it's controlled and how well the labelling laws is in South Africa then how enforced it is".

These perceptions are echoed in the literature as consumers' trust in organic food products is important for the success of the organic food industry. A study by Watanabe et al. (2021) found that consumers generally had a high level of trust in organic certification and labelling, particularly in countries where organic farming is well established, such as Europe. Yet studies by Carrier and Luetchford (2015) and Murphy et al. (2022) determined that levels of trust in certification and labelling vary based on the country and consumers' demographic factors such as age, education level, and income. While trust in certification and labelling is generally positive, concerns exist in some countries, such as China, where consumers have low trust due

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to counterfeit and mislabelled products (Chu 2018). In South Africa, according to Lim Tung (2016), a lack of specific legislation governing organic products and a lack of research in this area may be contributing to consumers' lack of trust in the organic label. Overall, increasing consumer awareness and understanding of organic certification processes and standards may be necessary to improve consumers' trust in organic food products.

Furthermore, the consumer participant data reflected that while they generally had a positive perception of organic food certification, as indicated in the quotes presented above, they were also aware of its limitations. These limitations included the high *cost of certification*, which may make it difficult for small-scale local farmers to afford organic certification of their products. P2/3 mentioned:

"what I'm thinking is, for goodness' sake why would it have to cost so much to be certified? Where is that money going? Who are these people who are deciding, okay, you know, because you've paid your money, now okay, you can be certified. No sorry you can't afford it. No, you're not certified".

Concerns about who decides who can be certified and why it costs so much were raised. Inspection and certification issues, which are governed by international standards, can also hinder small-scale farmers' implementation of organic agriculture practices (Kelly & Metelerkamp 2015; Lim Tung 2016). UNEP (2017) explained that ensuring the integrity of organic products requires frequent unannounced audits that can be costly and involve extensive documentation. Consequently, Diaz et al. (2018) observed that local community gardens may encounter financial and educational obstacles restricting their entry into the organic food market due to their inability to afford organic certification. Consumer trust in organic food certification is ultimately critical for the success of the organic food industry. Increasing consumer awareness and understanding of organic certification processes and standards can help improve consumers' trust in organic food products.

After gaining insight into participants' perspectives on the labelling of organic food products, the researcher delved into whether these consumers linked organic foods

with specific processes. This inquiry aimed to enhance the researcher's comprehension of the participants' grasp of organic agricultural methods.

1a3: Do you associate organic food products with certain processes?

The quotations related to this question are displayed in Appendix B, Table 3, and incorporated into the following discussions.

According to DAFF (2010) and IFOAM (2017), 'organic food products' are defined as foods that rely on ecological processes that enhance agroecosystem health, including biodiversity, biological cycles, and soil biological activity. It is worth noting that Nikol and Jansen (2021) stated organic agriculture stands in stark contrast to conventional agriculture. Shennan et al. (2017) explain that conventional agricultural practices often involve the use of artificial pesticides, herbicides, and fertilisers. Occasionally, natural soil enhancements are integrated into these practices. Furthermore, conventional fields typically undergo frequent planting with short rotations in between.

Figure 6.4 depicts the insights gathered from participants regarding the processes involved in organic food product production. These processes encompassed factors associated with the environment, such as air and water quality, and concerns about animal and worker welfare. Additionally, participants emphasised the significance of chemical usage and the adoption of natural pest prevention methods.



Figure 6.4: Processes associated with organic food production

The discussion on organic food production encompassed several elements and processes. First, participants stressed the importance of considering the *environment, quality of air and water, animal and worker welfare in the cultivation of organic crops*: P2/3 emphasised "*The quality of the air. The quality of the water around the place where it's growing*". P5 focused on "*the type of stuff that's put into the ground often affects the water source as well*". Moreover, P2/3 explained it is about "*The workers. Are they being looked after. Are they being sustained by the people who are employing them. So, it's, it's a whole chain of things. It's not just one thing*". P4 mentioned "*The effect on the environment*", while P12 reported:

"I actually expect from that product that it's grown in a really good natural environment that not excessive pesticides have been used to make it grow. So that it I really do believe that the pesticides do affect everything on the plants that it's in a natural environment with insects and everything else is around but that they looked after, and they've got good soil and good nutrition and not just chemically grown so that they sprout out very quickly".

According to P17, "problematic pesticides that are cheaper and can be used on mass and can affect the environment more end up in water systems and that sort of thing". More specifically, P4 said: "I think organic farming is much kinder to, kind of to the, to the ground a big or to the earth or the environment because it follows the natural processes. It follows the, the natural seasons and, through that flow of, harvesting you give the ground time to rest", highlighting the natural processes and seasons of organic farming, which avoids the use of chemicals, fertilisers, growth hormones, and genetic modification. According to Gamage et al. (2023), organic agricultural practices minimise water pollution, enhance soil quality, reduce workers' exposure to pesticides, and provide more employment opportunities, which is consistent with South Africans' views of the associated processes linked to organic food production.

Second, when questioned about the associated processes involved in organic agriculture, several participants mentioned chemical use, such as pesticides in organic food products. P1 mentioned, "*Like minimal use of pesticides*", P2/3 said, "*So, organic is for me, an indication of food that has not been contaminated with fertiliser and pesticides*", and P19 claimed, "*I think organic links to food that is not highly processed*

food that doesn't contain lots of different chemicals and pesticides". P17 focused on "farming methods that don't use pesticides", and "ethically farmed not using pesticides that will go into the water system". Brantsæter et al. (2017) and Hendriks et al. (2019) confirm this consumer perception by noting that pesticide residue exposure is lower in organic food products than in conventionally produced foods, which can reduce the risk of health problems related to pesticide exposure. In addition, organic food products also contain significantly lower levels of the cadmium and nitrogen found in pesticides, which have been linked to various cancers and methemoglobinemia (Brantsæter et al. 2017; Genchi et al. 2020; Pham et al. 2018).

Third, consumer participants emphasised *natural pest prevention methods*, avoiding pesticides that harm beneficial insects, and promoting the best and most natural quality of organic products as part of the process associated with organic foods. In this instance, P12 mentioned:

"I really do believe that the pesticides do affect everything on the plants that it's in a natural environment with insects and everything else is around but that they looked after and they've got good soil and good nutrition and not just chemically grown so that they sprout out very quickly".

P19 also reflected:

"like what they use around the garden so there's certain plants like marigolds or what like spring onions that are like pest sort of friendly if you want to call it that instead of using soaps and chemicals and to keep pests away".

Both participants expressed their belief that the organic food production process should prioritise the inputs used for soil and crop irrigation. This perspective aligns with the principles of sustainable agriculture as explained by Edwards (2020) and Bhat et al. (2021), of which organic food products are a part, where organic production aims to balance food production with environmental preservation. According to these authors, sustainable agriculture refers to agriculture that prioritises the cultivation of sustainable crops and livestock with minimal impact on the environment. The primary

objectives of sustainable agriculture are to conserve water, minimise the use of fertilisers and pesticides, and promote crop diversity.

Last, it is noteworthy that consumer participants believed organic food production processes entail *free-range farming practices* and organic meats and animal products that are free of antibiotics. P5 said, "*They're not using antibiotics*". Other participants agreed and said:

"And also for meats and stuff that's something that I might consider is whether they are given antibiotics. You know a lot of animals are given a lot of sort of antibiotics to make them and I would consider organics to have zero antibiotics in them". (P13)

"the chicken was running freely but maybe the food that the chicken was eating was genetically modified or the food that or the chicken was maybe still running happily but he got 13 antibiotics for example so there are I guess, it's not only the processes of actual the food that's being processed". (P18)

Researchers in this field concur with this view, as evidenced by the findings of Kim et al. (2019) and Gopalakirshnan (2019). They affirmed that organically raised animals are not given antibiotics or growth hormones, which reduces the risk of antibiotic-resistant strains of bacteria and diseases such as mad cow disease.

Evidently, the majority of participants believed organic food is generally sustainable, environmentally friendly, animal-friendly, and healthy. Several factors emerged as part of organic food production, including soil treatment, how fruits and vegetables are grown, packaged, and stored, and natural pest repellents. Consumer participants in this study perceived organic foods as being better for the health of both humans and animals. This perception naturally leads to the next question: What are consumer participants' perceptions and knowledge regarding the health aspects of organic food products?

1a4: In your opinion, are there any health benefits when eating organic foods?

The quotations related to this question are displayed in Appendix B, Table 4, and are also incorporated into the discussions that follow.

There is an ongoing debate about the health benefits of organic food products. While some studies suggest organic foods may contain higher levels of certain nutrients (Carrington & Arnett 2018; Brantsæter et al. 2017; Guéguen & Pascal 2023; Leifert 2014) and lower levels of pesticides (Damalas & Eleftherohorinos 2011; Pham et al. 2018), other studies have found little to no difference between organic and conventionally grown foods in terms of health benefits (Carrington & Arnett 2018). Figure 6.5 portrays the health benefits linked to the consumption of organic food products. It is evident that certain participants harboured scepticism regarding the health benefits of organic food products, while others correlated the absence of chemicals, impurities, pesticides, hormones, and antibiotics with improved health. Additionally, some viewed organic food products as being more nutritious.



Figure 6.5: Health benefits associated with organic food products

Two participants in the study (P13 and P16) expressed their *scepticism* about the health benefits of organic food products.

"No...I'm also sceptical whether it's organic or not because these days they say organic just because maybe they use less pesticides or less fertilisers or whatever, but I think in the long run they actually do". (P13) "No not really, I you know the thing is that it depends on really the type of foods that you do eat and how you eat and in what portions you eat and so it's not just you eat organic or not organic but the thing is I think that it's got to do more with how the food is treated and how much chemicals is added to the food and so I think that also plays a role in it as well. So, it's a point in every organic food and then they stop adding other chemicals to it or treating it in some way or other and they're not always honest". (P16)

These quotes indicate that neither participant believed organic food provides significant health benefits. Kotler et al. (2023) explain that these perspectives may have developed due to internal factors such as personal characteristics and psychological factors, as well as external factors such as social, cultural, and environmental influences.

The remaining consumer participants who were interviewed maintained the perspective that organic food products provide unequivocal health benefits. The participants' belief in the health benefits of organic food products was grounded in several factors. First, they argued that organic food is healthier because it lacks harmful *chemicals and impurities* commonly found in non-organic food. These notions were expressed by P2/3 saying:

"I think, just the knowledge, that you're eating something that is untainted by chemicals and that is being sustained in a, in a good way and I think that has an emotional impact and a physical impact on you". (P2/3)

"I think it's got to do with chemicals that can affect the end product. So, for me it's, whether it is something that happens right up at the beginning of the process or if it has any impact on the product". (P5)

"Organic. Healthy or like home-grown food. No chemicals" (P10)

"I think they do end up affecting the soils all these chemicals that you put in the crops to try and make them grow artificially". (P6)

Furthermore, the lack of harmful *pesticides* was mentioned:

"It doesn't use harmful pesticides" (P10)

"I think there is there could be negative to eating not treated foods or food that's been treated with pesticides I think the negatives of eating baby food that's treated with pesticides they say like that versus the upside of eating organic food is bigger". (P18)

"because of all the pesticides and long-term effects a lot of people are getting you know allergies". (P19)

No added *hormones* were emphasised:

"I think that there are so many extenuating circumstances that contribute to hormones and all that sort of stuff that's or eating clean so to speak in in an organic fashion is probably one of the better ways to help your health". (P15)

"I would change to organic mostly for the health benefits of it and not having those hormones and stuff injected into foods as I know that in the long term it can have quite bad effects". (P1)

The absence of **antibiotics** was important to P5: "*But I think it's a cumulative process. I think it's just something that you would, you will see over a period of time. I think the fact that we would be taking in less, you know, less hormones, antibiotics pesticides. You know, all those sorts of things*" used in conventional agriculture can negatively affect human health when consumed over time (Damalas & Eleftherohorinos 2011). Brantsæter et al. (2017) and Mie et al. (2017) affirm these perceptions and explain that organic food products are grown using more natural methods without the use of synthetic fertilisers or hormones, which makes them healthier.

In addition, the consumer participants suggested that organic food products are more *nutritious.* P2/3 explained, "*It provides our body with the nutrients that our body needs to sustain life and it provides it in the best form possible*". Others said:

"I also think there's more nutrients in vegetables and fruit and even, even meat products that aren't accelerated. That grow at their natural pace and that are picked at the right time. Or you know, chickens that aren't, you know, slaughtered early. You know things like that. So, I think that all contributes to, our nutritional value". (P5)

"I think organically produced food is more nutritious. Yes, I think all those nutrients have not been masked by whatever other candidates". (P6)

"The nutritional value, I personally think is a lot higher than what you probably get in a greenhouse or where else they are hiding or growing things that we are unaware of in the situation". (P7)

"I did a hundred per cent believe that there's health benefits in eating organic. I think first of all there will definitely be more nutritious the vegetables and the fruit 100% because they will just taste so much better, and something tastes good usually it has definitely got more of the vitamins than that". (P12)

These perceptions among consumer participants have been corroborated by numerous studies, including those by Brantsæter et al. (2017), Guéguen and Pascal 2023, Leifert (2014), Carrington and Arnett (2018), Nguyen (2020), Vigar et al. (2019), and Robinson and Segal (2019). These researchers indicate that organically grown food products contain higher levels of antioxidants, vitamins, minerals, and beneficial fatty acids than conventionally grown food products. Additionally, organic food products have lower levels of nitrates, proteins, amino acids, nitrogen, iodine, selenium, cadmium, pesticide residues, and Fusarium toxins than their conventional counterparts (Brantsæter et al. 2017).

The consumer participants also acknowledged that organic food can be **expensive** and not always affordable for everyone, which is unfortunate because they believed it is healthier. It is noteworthy that concerns regarding the high cost of organic food products have been mentioned in previous themes associated with Objective 1 as well:

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"So, but what has become normal is the genetically modified because that is the, what is an abundance and which is affordable to people because money is an issue." (P9)

"Well the end of the day is, you need to buy what you can afford." and "It's not always possible, you know especially financially a lot of people come and say well I want to be healthy, but I can't afford it and that's the sad part...I can't spend 100 rand on a snack for them each. It's just, it is pricey, but I think the more people that get into this industry and the better it will become easier and, yeah cheaper more affordable" (P11).

However, P5 suggested that applying the 80-20 rule to eating organic food can have health benefits: P5 shared, "*So, I think if you can apply the 80-20 rule of trying to do it best you can, it, there would be, there would be health benefits*". This means that consuming organic food products for 80% of one's diet and non-organic food products for 20% of one's diet can still yield positive health outcomes. However, there is no scientific evidence to support P5's viewpoint.

Finally, P19 noted that research has shown a correlation between the consumption of non-organic foods and *allergies* as well as diseases like *Alzheimer's, attention-deficit/hyperactivity disorder (ADHD)* and *cancer*:

"I have seen a lot of research recently and in the last couple of years noting how a lot of people who use organic foods and are eating organically generally have less allergies to foods things that are becoming more common like being allergic to gluten and wheat and those sorts of things because it's so processed and because of all the pesticides and long-term effects a lot of people are getting you know allergies to foods that previously weren't there before."

"I also know according to my studies in medicine and stuff, the things like Alzheimer's and cancer, there are a lot of studies that show that they're linked to certain processed meats that are being eaten. Processed foods kids that are you know ADHD and don't eat proper like healthy organic foods and are eating a lot of wheats and flowers and processed things that that are mass-produced and injected with like salts or waters or whatever to make them GMO's or like and grapes that everyone thinks tastes really lovely but actually are full of GMO's. I think like there's definitely research to show that in terms of healthy health-wise organic food is definitely the better way to go".

Therefore, P19 believed that consuming organic food products over non-organic foods can positively impact an individual's health and well-being. P6 and P15 agreed with the cancer opinion and explained: "*I think things like cancer and that definitely from a health perspective it does make me or more desire. It makes organic more desirable they're cleaner eating*", "Well we are looking at the prevalence of the cancers that *people get now and you know all sorts of disorders I think there's lots of health benefits of trying to stay as natural as possible, because I think these chemicals are yeah, not, great*". These concerns are echoed in the literature.

Mie et al. (2017) found that people with allergies often experience reduced symptoms or a complete cessation of symptoms when consuming organic food products. This is likely because pesticide residues, which refer to the pesticides that remain on or in food after application, are much lower in organic produce (Hendriks et al., 2019), reducing potential exposure to harmful chemicals. Moreover, conventional agricultural production practices frequently involve the use of pesticides to control diseases, pests, and weeds, which can lead to the contamination of food with pesticide residues. Damalas and Eleftherohorinos (2011) explain that pesticides are used to maintain product quality and prevent yield losses. Unfortunately, such pesticides' use has been linked to the development of several diseases, including Parkinson's and Alzheimer's diseases, respiratory and reproductive tract disorders, and cancer (Sarbawal et al. 2018). Pesticides can cause DNA damage through oxidative stress, which can lead to the development of cancer. Additionally, cadmium and nitrogen are common contaminants in non-organic food products (Brantsæter et al. 2017; Leifert 2014). Cadmium exposure has been linked to the development of several types of cancer, such as breast, lung, prostate, nasopharynx, pancreas, and kidney cancer (Genchi et al., 2020), while high levels of nitrogen from artificial fertilisers have been linked to carcinogenic N-nitrosamines in adults and methemoglobinemia in infants (Pham et al.,

2018). Furthermore, Mie et al. (2016) found that exposure to insecticides can negatively affect cognitive development in children.

The United States Environmental Protection Agency (EPA) highlights that these health risks are the result of occupational exposure and residues in food and drinking water, but that the impact of pesticide use is difficult to assess due to various factors such as the type of pesticide used and the period and level of exposure (EPA 2023). Thus, the consumer participants believed that consuming organic food products can have significant health benefits, such as reducing exposure to harmful chemicals and impurities, increasing nutrient intake, and reducing the risk of diseases caused by consuming non-organic foods.

As the researcher sought to connect organic community gardens to all three pillars of sustainability, it was crucial to inquire whether the participants believed organic food products offer any environmental benefits.

1a5: What do you believe is the environmental impact (if any) of organic agricultural methods?

The quotations related to this question are displayed in Appendix B, Table 5, and incorporated into the following discussions.

Chapter 2, sections 2.2.1 and 2.2.1.3 of the literature review, highlighted the direct contrast between organic and conventional agricultural practices, as indicated by Nikol and Jansen (2021). Conventional farming practices have notable adverse effects on the environment, such as soil degradation, water pollution, greenhouse gas emissions, and biodiversity loss, as documented by Gamage et al. (2023). Consequently, investigating consumers' knowledge and perceptions of organic food products requires a particular inquiry.

While analysing participants' interview data, it emerged that various aspects (see Figure 6.6) of the impact of organic agriculture were explored, such as the *quality of water*, the *sustainability of farming methods* and *seasonal fruit and vegetables*. Notably, it was observed that the consumers' responses regarding these issues referred to both the first question, which explored the meaning of the term 'organic',

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and the third question, which investigated the associated processes of organic farming.



Figure 6.6: Environmental impact of organic food products

Overall, participants recognised the benefits of organic agriculture, including its positive impact on the environment and the quality of the food produced. However, participants expressed some concerns about the challenges of organic agriculture, including the need for good water quality. P2/3 emphasised the importance of "Not contaminating the water with chemicals from whatever", and P5 explained, "I shudder to think what we have done to the water tables and to ground" and the ability to produce enough organic food to meet the demands of a growing population. P2/3 mentioned, "So will we be able to provide all the organic vegetables and meat and whatever, if we stick to this natural way". According to the United Nations (2019), our natural resources, including soils, freshwater, oceans, forests and biodiversity, are deteriorating at an alarming rate, exacerbated by the increasing pressure of climate change. As a result, humanity's dependence on these precious resources is at risk. In addition, Muhammad et al. (2016) explain that even though conventional agriculture may be a viable option for global food security, it also has a significant negative impact on the environment and ecosystems. Khapayi and Cellier (2016) and Srednicka-Tober et al. (2016) concurred that conventional agriculture, which prioritises yield maximisation and the reduction of production costs has a significant adverse environmental impact. Thus, the policy initiatives for organic agriculture will protect waterways while promoting biodiverse ecosystems. The future of the environment and the vitality of food systems in the shadow of climate change thus depend on organic

food production systems and our ability to pursue more sustainable agricultural policies (Muller et al. 2017; Niles 2008). Therefore, the interviewed consumers' concerns are legitimate and should be considered when organic agricultural methods are promoted.

In addition, participants also suggested that organic farming should go back to traditional and more *sustainable farming practices*, including the *use of natural manure*. P2/3 explained, "You, know, using natural manure and I think going back to the way things probably were in the past". More specifically, P4 discussed the impact of organic farming on the environment and emphasised it is much kinder to the earth, allowing it to follow natural processes, and giving the ground time to rest.

"I think organic farming is much kinder to the ground or to the earth or the environment because it follows the natural processes. It follows, the natural seasons and, through that the natural flow of, harvesting you give the ground time to rest". (P4)

P4 also noted the importance of understanding the purpose of growing or making food and the intentions behind it:

"a purpose that findings into something that sustains their living and it happens to be within growing food, food and selling that and then having multiple people having it as a multiple purpose effect on that specific community and I think it just comes down to your understanding of what exactly the, the purpose is of growing or making food and what your intention is with that".

According to Malan (2015) and Small (2007), community-based initiatives such as iZindaba Zokudla and Abalimi Bezekhaya have been established to promote sustainable food systems. The projects aim to support individuals, groups, and community-based organisations in creating sustainable vegetable gardens, enhancing dietary diversity, household food and nutritional security, and long-term income generation. This notion supports P4's opinion about the purpose of growing foods.

As a matter of fact, from the consumers' perspectives, organic agricultural methods have a positive impact on the environment. On the use of **pesticides**, P15 said, "*I* think that if we the less because when you think of pesticides you think of crop dusting you think of all that sort of stuff you think of the industry in terms of chemically made", P10 agreed "*It doesn't use harmful pesticides*", and P17 concurred "also in fact some problematic pesticides that are cheaper and can be used on mass and can affect the environment". According to P19:

"There's no GMOs it is sort of sustainable and something that you know is good for the environment", "I think organic being related to the environment would be naturally sort of produced. Not modified in any way not changed not mass produced and I also think it would be in terms of like large-scale farming more environmentally friendly in the sense that like things grow in the places where they need to grow".

P12 explained organic agricultural methods are "more natural and that hasn't got all these GMOs and all the different kinds of things" in conventional farming practices that are viewed as harmful to the environment and the ecosystem. Consumers believed that pesticides kill necessary bugs and there is always a **natural way to combat pests and crop diseases**, such as introducing ladybugs into fields or aphid-run crops.

P5 mentioned: "And then you know what, what are you then doing to kill the bugs. Are you using natural planting? So, like garlic or you know". P11 concurred, "Also if I see bugs and stuff in the garden then that is kind of a good sign because you do. I do feel like nature needs to kind of carry on", and P15 stated, "So I think that in that regard if I think about those pesticides and those the I think there's always a natural way in which to combat pests. So, you know I've seen some really cool things like rather introduce ladybugs into an aphid run crop and I think it's so smart" and disrupts the balance of the ecosystem.

In addition, the consumer participants also believed that organic farming practices give the **soil a resting period**: "Rather than trying to use chemicals to enhance the quality of the soil and using like the soil rotation, plant rotation in order to rehabilitate the soil is a better way" (P6), "I mean it's not my field of expert, but I can imagine that it's definitely that because if you just take preparation of soil. If there's. I know that some of, the fertilisers and stuff that they use can be retained in groundwater for years. So surely that must have an impact. So, if I treat my soil with only fresh manure or whatever you know. Yeah, I can imagine that I have less of an impact environment" (P9) and allow cultivators to concentrate on **seasonal fruit and vegetables**:

"Yes huge environmental because if you plant when you mean to plants fruits and vegetables, I think you give the other part of the soils a rest they don't need to be over fertilized it gives them a resting period. It also allows people just to do stuff that's in season which also sets a new mindset of buying what's in season and not looking for things other than that which gives farmers a break also in concentrating on one thing at the time and also, I think if people get used to eating organically more people will then be encouraged to grow the seasonal vegetables" (P12).

Moreover, participants suggested that organic meat from cattle farms that allows animals to roam freely on hillsides instead of feedlots has a different taste and is better for the environment, as it *reduces the use of chemicals and waste from cows*.

"So they claim it's organic meat because they're not feedlot they're not getting fed in those machines they're like roaming around on the hillside and it's interesting when you eat the meat the taste is very different. When you cook the meat, it cooks differently, and the land is better because that land isn't getting lots and lots of chemicals coming from the waste from the cows if I can put it that way". (P14)

These views are consistently held in the literature as organic agriculture is embedded in thriving ecosystems. To clarify, Edwards (2020) and Bhat et al. (2021) explain that organic agriculture explicitly prohibits the use of synthetic fertilisers and pesticides and instead relies on less intensive fertilisation methods such as animal manures, cover crops and integrated pest-management strategies. These components offer hope for future environmental sustainability and food production and should be recognised for their ecological contribution. In general, the consumers who participated in the interviews held the belief that organic farming practices, when implemented correctly, have a positive influence on the environment. However, despite their apparent positive perception of organic food products, it was crucial, in the present research context, to determine whether these consumers actually regularly purchased such organic food products and, if they did, where they typically sourced these products.

1a6: Do you regularly buy any organic foods? Purchase intent.

The quotations related to this question are displayed in Appendix B, Table 6, and are also incorporated into the discussions that follow.

The importance of understanding consumer behaviour and purchase intentions towards organic food products for the growth and development of the organic food industry is highlighted by Mtimet et al. (2020) and Singh and Verma (2017). Consumers' inclination to purchase organic food is influenced by several factors, including health concerns, environmental awareness, ethical and social responsibility, and perceived quality (Eyinade et al. 2021). Cubero Dudinskaya et al. (2021) agreed and explained that the purchase intention of organic food products is affected by the perceived quality of organic food products, such as their organic certification, lack of synthetic chemicals, and fresher and more natural taste. Purchase intent was an important factor for the researcher since purchase intent data can enrich the overall analysis of the potential contribution of organic community food gardens to advancing SDGs. It will help bridge the gap between theoretical benefits and practical impact by linking community initiatives with real-world consumer demand and preferences. As depicted in Figure 6.7, consumer participants' purchase intent towards organic food products was notably influenced by three key factors: the price difference, the perceived authenticity of the organic label, and the accessibility of these organic food products.



Figure 6.7: Challenges impacting purchase intent of organic food products

Based on the interviews, it was clear that some consumers regularly bought organic food products while others did not. Several consumers mentioned that they did not always buy organic due to the *price difference* compared to conventionally grown products: "the price difference often between some organic and something that isn't organic is guite high so therefore also being a student I would go for whatever was cheapest" (P1); "I look at the organic stuff sometimes, but it is more expensive" (P2/3); "genuine organic foods tend to be very expensive as compared to, you know fast processed foods" (P20); and "No, because it's very expensive" (P9). According to the literature, price is part of the alternative evaluation phase of the five-stage consumer decision-making process (Botha et al. 2019; Lappeman et al. 2021). Consumers may thus opt for non-organic options to save money or strike a balance between organic and non-organic purchases. Price has been identified as a barrier to the consumption of organic food products in several countries, such as Germany, Greece, Romania, Croatia, Thailand, Canada, Brazil, Australia, Ireland, Sweden, Denmark, USA and Scotland (Bryla 2016; Torres-Ruiz et al. 2018). In the context of the ongoing research, a similar pattern emerged in South Africa.

In addition, consumers expressed scepticism about the *authenticity of organic labels*, suspecting that some products labelled as organic may not follow organic procedures. P1's response was a quick and definite "*No*" as this participant works in the food industry, and there were trust issues, such as the addition of colourants "*Especially because I think being in the restaurant industry, we see how like we will dye your puree so that it looks*" and "*Like orange so that you think it was the most amazing pumpkin ever, but it just wasn't*" (P1). Others expressed scepticism about the reliability of organic certifications "*Not necessarily because I suppose you can get a*

certificate for anything and everything out there. So, you know the thing is it depends on how reliable the actual certification board is that's going to be doing it" (P1). Research indicates that consumers' trust in organic food certification and labelling plays a significant role in their willingness to purchase organic products. Studies by Lee et al. (2019) and Truong et al. (2022) highlight the importance of consumer trust in specific organic products. Increasing consumer awareness of organic food certification and labelling, as well as building trust, are crucial strategies for brands to gain market share. In addition, Watanabe et al. (2021) suggest that certification labels act as moderators, influencing both consumer trust and purchase intention.

Another important factor that seemed to be a barrier to organic food purchasing was *accessibility*: P18 explained, "*It has to be easily accessible*", and P19 stated, "*I think I try and avoid the other stuff as much as possible but yeah I think sometimes it's just not accessible*". According to P11, "*People don't know because it's not as accessible*". Lamonaca et al. (2022) identified the inaccessibility of organic food products as a barrier towards purchase intent. Furthermore, Gopalakrishnan (2019) and Montiel-León et al. (2019) emphasised the importance of expanding organic agriculture as a crucial step toward a more sustainable future. However, according to these authors, this will only be possible if organic food products are more accessible to consumers.

Thus, consumers' inclination to purchase organic food products is hindered by three main factors: price disparities, distrust regarding the authenticity of organic products, and limited accessibility to organic food products. Price disparities between organic and non-organic alternatives are a substantial obstacle to purchasing organic items, leading consumers to opt for cheaper non-organic options or seek a balance between organic and non-organic purchases. Furthermore, consumer distrust towards the authenticity of organic labels and certifications is an additional deterrent, undermining their willingness to buy organic products. Moreover, the restricted availability of organic food products in retail stores presents a significant challenge that requires attention and resolution.

Following the question regarding purchase intent, consumer participants who regularly bought organic food products were asked: "Are there any products that you prefer buying only organic?" (1a6a). This question aimed to identify specific organic

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preferences, understand consumers' priorities, explore consumers' knowledge and awareness, and identify market opportunities. This information helped the researcher gain insight into the specific food items or categories that were more likely to drive organic purchasing behaviour, understand the factors influencing consumers' decision-making process, gauge their level of knowledge and awareness about organic products, and identify potential market opportunities for organic food producers and retailers. Figure 6.8 highlights that consumer participants preferred purchasing organic meat, poultry, eggs, and fruits and vegetables. This inclination was rooted in their beliefs regarding the humane treatment of animals, contributions to environmental conservation, and the perceived superior taste associated with organic products.



Figure 6.8: Types and reasoning for purchasing specific organic food products

The participants' responses revealed a range of preferences and purchase intentions regarding organic food products. Some participants expressed a preference for specific organic products, such as **organic chickens** and **free-range eggs**: "organic chickens and free-range eggs" (P2/3), "have free roaming those sorts of things like eggs and chickens free-range eggs" (P19), and "I'm fussy about like the eggs and chickens" (P6). In addition, consumer participants mentioned meat, such as **red meat and pork**: "You know pigs for me, pork, is a massive, massive thing you know. So, I'm very, very cautious about that" (P5); "Pork and also fruits and vegetables" (P8) and "So like with meat I'm a lot more careful" (P18). However, most consumers mentioned a preference for organic **fruits and vegetables** such as lettuce, spinach, broccoli,

cauliflower, potatoes, butternut squash, tomatoes, peppers, and carrots. This aligns with the categorisation by Sikuka (2019) and Willer et al. (2023) of organic food products in South Africa, where vegetables and fruits are among the main organic food products produced in the country, but also include live poultry, meat and eggs.

To gain further insight into consumers' preferences for specific organic food products, the researcher inquired about the reasons behind their inclination to purchase these particular items exclusively as organic. By posing the question, **"Do you mind elaborating on the reasons why you would rather buy these mentioned products organic?" (1a6b)**, the researcher aimed to explore the underlying motivations driving consumers' preferences for organic options concerning the mentioned products.

Participants shared various reasons for choosing to buy certain products organically. One significant factor was the concern for the *humane treatment of animals*: "Well, in terms of chickens, we just feel that it's a humane." and "A humane way for them to grow up running around in the garden. Not stuck In a little hokkie. Like that with their beaks cut off and stuff" (P2/3); and "humane treatment of animals" (P5). The participants also emphasised the significant importance of the way animals are slaughtered: P4 shared: "I go to, and he's got farms that he supports. So all the meat comes through them slaughtered by him and that's how we get our meat hoping for a humane process". Furthermore, consumers expressed mistrust in purchasing meat from supermarket chains and instead opted for local butchers who source their meat from trusted farms. They believed that such meat, fruit and vegetables *taste* different: P18 reflected, "I do think the taste of organic food is better fruit, particularly where things that I do like to buy organic is meat." P12 also explained, "I like the fact that I put it in my basket and I take it home and I always find that their fruit and vegetable taste so much better" and "100 per cent and I must be honest I do think that usually they have a better smell they actually smell of fruit and they do taste of the fruit not just the water" and more authentic compared to mass-produced alternatives. This consumer's view aligns with research by Ufer and Ortega (2023), who suggest that individuals prioritising environmental sustainability or animal welfare are more inclined to choose organic products.

Furthermore, consistent views were shared by health-conscious consumers who believed consuming organic foods could lead to improvements in their health, as well as a better taste experience. They also perceived their choice to buy organic as a way to *contribute to environmental protection*. These assertions are supported by studies conducted by Brantsæter et al. (2017) and Fynn-Green et al. (2019). Moreover, the perceived quality of organic food products, including their organic certification, absence of synthetic chemicals, and the perception of a fresher and more natural taste, can influence consumers' purchase intentions, as emphasised by Cubero Dudinskaya et al. (2021). Additionally, Aertsens et al. (2011) indicate that consumers with a high level of objective knowledge about organic vegetables are more likely to exhibit enthusiasm in consuming them due to the perceived health benefits, higher quality, and enjoyable taste associated with organic cultivation practices.

After establishing why South African consumers buy certain food products organically, the researcher was interested in where South Africans buy their organic food products and posed the question: **"Where would you typically go for organic food products?" (1a6c)**. As per Figure 6.9, consumer participants commonly chose local farms, farmer's markets, and supermarkets for their organic food purchases. This preference was attributed to factors such as personal connection and enjoyable experiences, the availability of seasonal organic products, appealing appearance, lower costs compared to supermarkets, convenience, and considerations for sustainability and the environment.



Figure 6.9: Reasoning behind purchasing organic food products from specific South African retailers

Consumer participants had diverse options when it came to buying organic food products. Many chose to support local farmer's markets and gardens like "Nina Free Ranges" (P2/3), "Somerset Community Garden (Drama Street)", and "the veggie garden at Helderberg Village" (P2/3). They also relied on "local butchers" (P4), "the guy with his small truck filled with fruit and vegetables" (P4), and shops like "Faithful to Nature" (P5) and "Angus Macintosh" (P5). Farmers' markets, including "La Familiér" (P5), "Route 44 market" (P5 & P8), "Oranjezicht market" (P5 & P8), "Babylonstoren" (P11), "De Warenmarkt" (P7), "Old Biscuit Mill" (P7), "Boschendal" (P7), "Klein Joostenberg" (P7) and "Bryanston Organic Market" (P13), also attracted those seeking fresh organic produce. Supermarkets like "Woolworths" (P4, P6, P8, P11, P12, P13), "Checkers (with their Simple Truth brand)" (P13, P15) and occasionally "Pick and Pay" (P15, P19) and "Spar" (P2/3, P9, P16) were also convenient options. Other consumers had their own food gardens at home; "grow our own veggies" (P2/3), "We still do have our little vegetable garden that started up a hundred years ago and try and keep it going" (P19) and "I try to grow some at home" (P6). Thus, South African consumers displayed a varied range of preferences when it comes to purchasing organic food products, opting for local farms, gardens, butchers, specialised shops, farmer's markets, and even maintaining home vegetable gardens. This is consistent with the literature reviewed, as Sikuka (2019) mentioned Woolworths and Pick 'n Pay as leading retailers in South Africa's organic market, targeting middle to high-income consumers, and Shoprite Checkers (Engelbrecht et al. 2022), with initiatives like their environmentally friendly shopping bags and 'Simple Truth' range. Additionally, farmer's markets in South Africa, such as Oranjezicht City Farm Market and Stellenbosch Slow Market, offer organic produce and other products, providing opportunities for organic community food producers to sustain their businesses (Short et al. 2018). Nevertheless, the researcher was also interested in the underlying factors that drive consumers to choose these outlets when purchasing organic food products. Thus, the researcher asked: "Please elaborate on the reason for purchasing products there." (1a6d). Understanding why consumers select specific outlets for their organic food products was essential in researching the organic community food gardens' potential contribution to sustainability. This knowledge is required when tailoring community food garden supply to meet these preferences, thereby increasing the likelihood of consumer support.

Consumer participants' reasons for purchasing products from specific retailers can be categorised into several areas. First, many consumers valued the *personal connection* and *enjoyable experience* of shopping at local vendors, such as vegetable, meat, and bakery retailers, which they considered a nicer way of shopping. P4 said, *"for me that's a nicer way of shopping"*, and *"for me it's a treat to go to the vegetable guy to go to the meat guy and to get like a little box with stuff"*. Second, the *availability of organic and seasonal produce* was highly valued. P18 explained:

"like I know in Germany the market I used to know the farmer who did like you know him he can tell you already this is and then once it's out of season it's out of season it's just not available anymore then I bring my next crop", and "I do like the idea that we should be eating blueberries in blueberry season where the farmer is planting the blueberries in the right temperature and it's only on that type of year it's growing and then he uses that soil again for something else in another season".

P5 also shared: "The whatever seasonal. The whole lot. Even if I ignore everything else that happens at the Granger Bay Market, there's a lot of suppliers who all provide and that's what it's about". In addition, consumers expressed some comfort in purchasing organic items from these retailers even if they have a different **appearance**. P1 mentioned, "And it's more likely that when something doesn't look that great that it's. When the butternut isn't the most perfect shape. That's when you know it's probably the best one". P5 concurred: "They have a lot of organic products, and their vegetables are sometimes the funniest looking things you've ever seen in your life. I'm really quite comfortable with that, you know", and P18 mentioned, "they're not beautiful blueberries and us as consumers have been completely spoiled by perfect shape and form and colour fruit for example let's just talk about fruit".

Third, consumers expressed concerns about the *higher prices of organic products at supermarkets*. P11 said "*I can't spend 100 rand on a snack for them each. It's just, it is pricey, but I think the more people that get into this industry and the better it will become easier and, yeah cheaper more affordable*". P9 also mentioned, "*The price is just, yeah. I'm quite, but I try as much as possible to buy, buy raw, ja veggies and fruit I would buy. I mostly buy organic but when it comes to animal products and so on, I*
just find it's very expensive" and P8 emphasised, "*because of the price and because of it being quite, there's not a few there's not a lot of grocery stores that, you know the commercial ones*" compared to markets or smaller shops, and they are more likely to purchase organic items that are reasonably priced and fresh-looking. P13 mentioned: "*If I was at a market and I saw fruit and veggies there that said they were organic I would probably buy them if they look nice and fresh*".

In addition, *convenience* also played a significant role, as consumer participants preferred having all their needs met in one location rather than travelling between different places; "*Convenience is a big thing*. Yeah *if I can get it all at one stop, I'd be happy*" (P7); "*Because it's very inconvenient to just go to a certain market just to buy certain things*" (P20); and "*I think as a matter of convenience for a lot of us you know popping into Woollies or Pick and Pay or whatever is the only way you can get what you want*" (P19). Others specified trust and said, "*you can really trust what you grow in your own backyard*" (P20); "*Woollies says it's organic I do trust because I know the systems are incredibly strict*" (P18), "*because I trust those ladies from a fruit and vegetable point of view and they'll say to you, no, this stuff is organic or those, we're getting it from this producer and you know. So, reputation*" (P5). Trust and authenticity were thus important factors, with consumers showing a preference for sources they trust, such as greengrocers or local vendors, over supermarkets.

Moreover, sustainability and environmental considerations are gaining importance, "then the environmental impact of organic versus non-organic. See I'm not so sensitive to it personally let's say but I do like the idea that we should be eating blueberries in blueberry season where the farmer is planting the blueberries in the right temperature and it's only on that type of year it's growing and then he uses that soil again for something else in another season" with consumers advocating for reduced plastic waste "produce that is not in packaging and you know they all lose", "and then go to the small farmers who don't even have packaging and buy from there and support local" and supporting initiatives that offer biodegradable options "all the plastic bags that you buy for your fruit are all biodegradable" (P18). Overall, consumers' purchasing decisions were influenced by a combination of factors, including support for local businesses, the availability of organic and seasonal produce, pricing considerations, convenience, trust in retailers, and sustainability concerns.

Finally, when purchase intentions were discussed, the researcher was interested in determining "What would motivate you the most to change from conventional non-organic foods to organic foods?" (1a6e). This question was posed to the three consumer participants who said a clear "no" to whether they buy organic food products. The participants' motivation to change from conventional non-organic foods to organic foods primarily stemmed from the perceived health benefits and the desire to avoid hormones and additives commonly found in non-organic options. P1 shared: "I would change to organic mostly for the health benefits of it and not having those hormones and stuff injected into foods as I know that in the long term, it can have quite bad effects", and P15 agreed "a lot of the ailments that we've been struggling with I think things like cancer and that definitely from a health perspective it does make me or more desire", "from a health perspective it does make me or more desire. It makes organic more desirable they're cleaner eating". However, P5 expressed some difficulty in finding organic products: "The majority of my stuff isn't organic, because I battle to find it", indicating that convenience plays a significant role in their food choices. They believed that once organic becomes more accessible and normalised, "I think that the moment organic becomes the norm then the convenience will come with it as well because I think it's all about access" (P5), and convenience will follow suit. "The price difference often between some organic and something that isn't organic is quite high so therefore also being a student I would go for whatever was cheapest' (P1) was also mentioned as a consideration, acknowledging that organic options can be more expensive.

In the context of the current research, which explored the potential role of organic community gardens in promoting sustainability through organic food cultivation, there was a need to broaden the investigation to encompass consumer participants' sentiments and associations with community food gardens. This entailed determining whether consumers are inclined to engage with these gardens and, as a result, choose to purchase their organic food products from such sources. Consequently, the following objective of the study was oriented towards determining consumers' willingness to purchase organic food products from a local organic community garden.

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1.2 Determining consumers' willingness to purchase organic food products from a local organic community garden.

The quotations related to this question are displayed in Appendix B, Table 7, and are also incorporated into the discussions that follow.

After assessing participants' perceptions, knowledge, and purchase intent related to organic food products, the inquiry into **consumers' willingness to buy organic produce from a local organic community garden** was important as it served as a bridge between theoretical intent and practical action, embodying the transition from interest to tangible support. It added real-world application to the research, highlighting whether consumer intent materialises into concrete behaviour. This facet is crucial for the sustainability of community gardens, offering insight into potential market demand and the viability of these initiatives. Moreover, understanding consumers' willingness to purchase provides empirical validation to the research findings, strengthening its credibility and relevance.

The first question posed to consumers was, "So when I mention community gardens, what are you thinking of?" (1b1). This question was crucial to help clarify any misconceptions, align consumers' expectations of these community gardens and build trust in community garden products. Consumers' perceptions can influence their willingness to purchase organic food from community gardens. Furthermore, understanding any barriers or concerns consumers may have allows community gardens to address objections and tailor marketing messages effectively. Ultimately, this information aids community gardens in enhancing consumer education and ensuring that their offerings align with consumer expectations, thus influencing consumers' willingness to support these gardens.

Figure 6.10 elucidates that consumer participants linked community gardens with various factors, including conflicts arising during commercialisation, shared space, maintenance by community members, communal benefits, finding a balance between community support and economic viability, availability of local produce, sustainability, community support, addressing food scarcity, producing nutritious foods, acting as a

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means to generate income, fostering self-sufficiency, and individual and small-scale gardening.



Figure 6.10: Community gardens

Consumers' perspectives of community gardens varied. Some participants expressed strong support for these communal gardening initiatives, while others demonstrated a deeper understanding of their significance. Conversely, a portion of participants displayed limited knowledge of community gardens. P4 highlighted a critical aspect in defining a community garden and the potential *conflicts that can arise when commercial interests* are introduced. A community garden, according to P4, is *a space created and maintained by community members for various communal benefits*, including access to fresh produce, fostering a sense of community, and promoting sustainability. When profit-making becomes the primary goal, it can indeed change the nature of the community garden: "*The whole point of the community garden is for the community so the community knows the community garden is there*

because it's part of their sustainable space. And if you want to make money out of the community garden and but then I think you're changing the nature of what it was meant to be" (P4). However, this participant emphasised that there should be a balance between **community support** and **economic viability**, and this could vary depending on the specific goals and needs of the community involved:

"in order to support people you don't necessarily have to adopt all of these corporate approaches yeah like what, what is the benefits to more, if more people buy from the community gardeners or yeah buy produce from the community garden what, what is then the purpose actually. Was it to feed the people that live around it or was it to sell the stuff to get money to buy a TV with it." (P4).

Doyle (2022) and Dolley and Howes (2019) share a similar perspective on community gardens. They identified several reasons for the existence of community gardens, which include promoting social interactions among different generations, strengthening social connections within the local community, and unintentionally improving food security and sustainability. The presence of these various motivations highlights the positive influence that community gardens have on the quality of urban life and the overall well-being of both individuals and communities. Conversely, it is crucial to highlight the findings of Roberts and Shackleton (2018), who observed a decrease in the number of community gardens in four medium-sized towns in the Eastern Cape of South Africa: Fort Beaufort, King Williams Town, Butterworth, and Mthatha. This decline contradicts the global trend of urban agriculture and community gardening expansion. The study conducted in South Africa revealed that these community gardens encountered obstacles like theft of equipment, high crime rates, and resource scarcity.

Additionally, other consumer participants expressed various perspectives on community gardens, *emphasising support for local produce, sustainability,* and *community engagement*: *"I think I would, I, I believe in supporting one another"* (P6); *"In this current stage, yes, I think it's much easier to support a company who needs it the most than supporting a big branch network or a key network link where more salaries are being bumped into there, where your more commercial farmers are sitting*

with stock and nobody's buying from them and it goes to waste" (P7). This aligns with the literature, as Jacob and Rocha (2021) and the Ecolife Editorial Team (2023) define 'community gardens' as pieces of land where local residents cooperate to grow various plants and raise animals, highlighting the communal aspect of these spaces. Furthermore, the participants' views are consistent with the concept that 'community', according to Jacob and Rocha (2021), refers to a group of people collaborating to create and sustain these gardens in urban settings, stressing the teamwork involved. More specifically, P11 highlighted community gardens' potential to **combat food scarcity**, particularly in urban schools, and emphasised their role in fostering community engagement and cooperation, stating:

"And the reason that I would choose it is because I, I love the concept of community gardens. You know the money goes towards good projects sustaining the garden, also sustaining the local people who are impoverished and, and kind of feeding them. Giving them some work. That kind of, it's, yeah I'm talking about the one here in Somerset West. At least I know what they are up to. Yeah because I worked there for a day with them to see what it was all about and yeah I just really. I like the smaller community and, and it's it helps to grow more food and, and expand what they are doing. So, so to support them".

P12 added to this sentiment and discussed the practical aspects of community gardens, including their potential to provide *nutritious produce* and *generate income*:

"So schools could actually increase their funds that way could teach something at home. Especially even in urban schools not just in rural schools just in urban schools around our area there's so many children that go there that don't eat or don't have really enough to take home".

Moreover, P14 and P15 believed in the *self-sufficiency* and *sustainability* of community gardens, highlighting the intimate involvement of the community's responsible consumption and support for seasonal, self-sustaining produce and their potential for organic production: "*People working together to grow a garden and they*

benefit from that garden themselves" (P14) and "I think that if there are certain fruiting trees that are in public domain you should be able to take from that. You know I think that that's the idea of a community garden" (P15). These perspectives align with existing research; Doyle (2022) and Dolley and Howes (2019) highlighted that the motivations driving participation in community gardens encompass a wide spectrum. These motivations include personal enjoyment, social interaction, environmental concerns, civic engagement, and an appreciation for nature. Moreover, the studies conducted by Diaz et al. (2018), Hume et al. (2022), Giller et al. (2021), and Pedro et al. (2020) emphasised the broader societal and environmental advantages associated with community gardening. These benefits encompass creating a sense of community, ensuring a reliable source of healthy food, increasing the consumption of fruits and vegetables, promoting positive psychosocial and community outcomes, and offering personal advantages such as physical exercise and therapeutic benefits.

While P13 acknowledged the *individual and small-scale gardening* efforts involved in community gardens ("*I'm thinking about your little one making a vegetable garden. You know like a market gardener. Just your somebody with a small holding that grows a couple of lettuces and that's what I think yeah"*), this participant did not fully capture the essence of community gardening, which is characterised by communal participation, shared resources, and broader community engagement and goals (Ecolife Editorial Team 2023; Jacob & Rocha 2021).

To determine consumers' willingness to purchase organic food products from a local community garden, the question was posed: "If you had the choice, would you rather buy organic products from a commercial, well-known store or a community garden? Please tell me more for your reasoning behind this decision." (1b2). This inquiry served several vital purposes, such as increasing insight into consumer preferences, shedding light on whether convenience, trust, or community values drive their organic food choices. Second, it assessed the level of trust and perceived quality associated with products from community gardens compared to those from commercial outlets. Moreover, it delved into the extent of community engagement and support for local food systems. These insights offer practical market information for community gardens and commercial stores, informing marketing strategies, product offerings, and community outreach efforts. Additionally,

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local support for organic community gardens can align with the TPB as behaviour will be shaped by individuals' attitudes, subjective norms and perceived behaviour control (Ajzen 2019).

Figure 6.11 outlines the reasons participants offered for their preference in supporting community garden initiatives. These reasons encompassed supporting local and smaller-scale production, reducing their carbon footprint, fostering mutual support, emphasising community-centred initiatives, contributing to positive impacts on local communities, aiding the impoverished, facilitating community expansion, and promoting more natural and organic practices.



Figure 6.11: Community garden support

Without hesitation, all participants unequivocally expressed their intention to purchase organic food products exclusively from community gardens rather than commercial stores. P1 said, "*Out of just, I would prefer to support something more local*", P2 and P3 said: "*Community garden, I think. If it was, if it was open, you know regularly and it was easily accessible*", and P11 emphasised, "*Definitely a community garden absolutely*". As per the TPB (Ajzen, 2019), individuals' beliefs about a behaviour result in the development of either a favourable or unfavourable attitude towards that behaviour. In the context of the study, these positive attitudes among consumer participants signify their eagerness and inclination to participate in the behaviour of purchasing organic foods sourced from community gardens.

Consumers' motivations for buying organic foods from community gardens encompassed a variety of factors. Many participants expressed a strong preference for supporting local and smaller-scale production, as highlighted by P1: "Out of just, I would prefer to support something more local". This emphasis on the community aspect and the desire to reduce carbon footprints aligns with P6's view: "If I look at the carbon footprints, the things have been grown right here you know I and yeah, yeah, I think we all need to support each other whenever, whatever enterprise we're into. So I try to support local when I can". Furthermore, supporting one another and community-centred initiatives were values held by several participants, exemplified by P6 stating: "I believe in supporting one another". P7 added to this sentiment: "the community-centred people, all the people that actually run those gardens, they're probably the most friendliest people to actually have a conversation with". Moreover, the *positive impact on local communities*, including *support for the impoverished* and community expansion, was a driving force for some participants. P11, for example, supported community gardens because "the money goes towards good projects sustaining the garden, also sustaining the local people who are impoverished and kind of feeding them". Some participants found community gardens more natural and organic, appreciating their collaborative nature and environmental sustainability, as expressed by P18: "It definitely feels more natural and organic to me".

The positive attitude and purchase intention towards products from organic community gardens leads to the subjective norm of supporting one another and community initiatives. This aligns with TPB's concept of subjective norms, which involves considering the influence of others' opinions and behaviours on an individual's intentions (Bosnjak et al. 2020; Nimri et al. 2020; Scholtz & Mloza-Banda 2019). Additionally, **economic benefits**, such as contributing to the local economy, are considered a motivating factor for supporting community gardens, a sentiment shared by P20: "*if you are taking your time to kind of give a healthier option to the members of the community, it helps improve the economy of the country as well*". This notion corresponds with the literature and relates to perceived behavioural control. Bosnjak et al. (2020) explained that the stronger the intention to participate in a specified behaviour, the more favourable the attitude and subjective norm will be, and the higher the perceived behavioural control.

Conversely, when it comes to constraints that made it difficult for participants to support their local community gardens, some participants highlighted their preference for **convenience** and one-stop shopping at larger supermarkets, which limited their inclination to buy from community gardens. P3 explained, "Yes, but I have to be honest. I haven't bought a lot from them because I think I'm a little bit lazy. I'd rather just go to one place like Woolworths or Pick and Pay". In addition, accessibility and convenience played a crucial role for some, like P5, who said: "Now, if we could do that with a product or a range of products, where people felt like it was accessible for them to do their fruit and... I mean that's part of what the attraction for Oranjezicht is for me". **Accessibility** concerns were further emphasised by P19:

"generally I think people go to markets for more of like buying food and like having a good time rather than looking for a food sort of store to get their fresh fruits and vegetables".

Furthermore, **cost** concerns emerged as a notable constraint, with participant P14 expressing reservations about high prices potentially deterring them from making purchases: "Yes, *but again, it does depend on cost. So, if they're exorbitantly expensive, then I probably wouldn't*". Transparency and trust in locally sourced products were also important to others, such as P14: "*I know by the time they want to get certified and you know have, that's also added costs. So I'll try to and have to just be a matter of trust*". While the limitations associated with purchasing organic food products from community gardens were highlighted by participants, it is important to acknowledge that these constraints had already been addressed when the question "Do you regularly purchase any organic foods?" was posed. Participants specifically mentioned concerns related to the price disparity between organic and conventionally grown food products, the authenticity and trustworthiness of organic food product certifications, as well as the accessibility of these products. This suggests that these concerns were consistent and significant factors influencing their buying behaviour of organic food products.

To establish consumers' willingness to buy organic food products from community gardens, it was important to ascertain whether the participants had an awareness of the existence of community gardens in their local residential areas and whether these gardens sell organic food products. This question offered essential context for the research, enabling the researcher to assess the gardens' contribution to sustainability. It also facilitated data collection through engagement with cultivators and consumers, and allowed for comparative analysis among different gardens. Additionally, it encouraged community involvement and informed policy recommendations. Overall, identifying these gardens formed the foundation for a comprehensive understanding of the local food system and its role in advancing sustainability goals, therefore aligning with the study's third objective to identify the presence and cultivation of organic community gardens within the local area.

6.5.2 Objective 3: Identify the presence and cultivation of organic community gardens in the local area

The quotations related to this question are displayed in Appendix B, Table 8 and are also incorporated into the discussions that follow.

The consumer participants exhibited varying levels of awareness of community gardens in their local area. While some had limited knowledge of specific local initiatives or markets that may support community gardens, others expressed a complete lack of awareness. P1, P2, P3, P7, P8, and P10 exhibited limited or partial awareness of community gardens in their local area. They shared insights that reflected their varying degrees of familiarity with local food sources, but their knowledge remained somewhat superficial, often lacking in-depth details about community gardens. P1, for instance, mentioned places like Babylonstoren and Lanzerac Market as options for purchasing fresh produce but did not specifically reference community gardens. The participant stated, "I wouldn't say in my area but I know you can buy from places like Babylonstoren and, then the Lanzerac market has the local produce section in it where you can buy fruits, vegetables, all of that stuff". Similarly, P10 mentioned a nearby community that cultivates its own produce and sells it but did not delve into specifics, saying, "We've got this really cute little community next to us, and they like grow their own things and then they sell like...". P2/3 briefly mentioned specific locations like Helderberg and Somerset West, hinting at some awareness of local markets but not necessarily community garden initiatives. They said, "And Helderberg," "Helderberg. Yes", and discussed a market on the R44 without detailed information. On the other hand, while acknowledging produce gardens in their areas at Beyerskloof and Klein Joostenberg, P7 and P8 expressed uncertainty about the organic status of the vegetables they encountered at local markets. Additionally, P7 noted, "*In my area yes, but they only do Green Leaves from what I've known*", while P8 mentioned markets like Route 44 and Oranjezicht that have loosely displayed vegetables without confirming their organic nature.

A significant number of participants, including P5, P9, P12, P13, P16, P19, and P20, openly admitted to having limited awareness and knowledge concerning community gardens in their local areas. Their statements resoundingly conveyed their limited or complete absence of familiarity with these initiatives. P5 admitted, "*No, I don't know of any community gardens in my area*", while P9 similarly expressed a lack of awareness: "*Nee, no not at all. Are there?*". P20 went even further, emphasising their complete lack of knowledge by stating, "*Umm, no, not even a single one*". P12 openly admitted, "*Absolutely not one, not one*", further underscoring their lack of awareness regarding community gardens in their vicinity. P13 simply stated, "*No*", and P16 added to this theme by sombrely stating, "*Unfortunately not*"; P19 concurred with a straightforward, "*No*". This collective lack of awareness among these participants underscores the pressing need for greater education and promotion of community garden initiatives within their communities, highlighting the potential for increased engagement and participation in sustainable, local food production efforts through awareness-building activities.

During this discussion, a particular set of participants demonstrated their awareness of local initiatives related to community gardens and sustainable food sources. P4, for instance, demonstrated a clear grasp of the Stark Eyers community garden project and its advocacy for community-based agriculture:

"Yeah well not, not in my close, close area but I know, well the, they are on a Saturday at Stark Eyers which is also very close to my house. They support a community garden project where it's a bunch of farmers that they then collate and they sell their fruit and veg from there and you can also order a monthly box through that. I don't like that though because then I feel so bound to my box. I like to buy what I feel like eating and whatever looks nice and the whole process of yeah". (P4)

Similarly, P6 showed an awareness of local options for procuring fresh produce and raised valid concerns about the authenticity of organic certification and the significance of trust in these transactions. P6 strongly emphasised the importance of proximity when making choices related to food sources, highlighting the value of convenience:

"That's the other thing that many say they are, but how do we, how do we know. So, so it's, but I know by the time they want to get certified and you know have, that's also added costs. So I'll try to and have to just be a matter of trust ... Yeah, yes they like that one here because I, I live just about five, ten minutes away."

Furthermore, P11 contributed to the conversation by highlighting the presence of gardens at local wine farms and the endeavours of small shops to offer organic produce, even though these may not adhere to traditional community garden models:

"I don't know of any community gardens. I mean a lot of the wine, local little wine farms here have got their own gardens. Longridge. I've been there a few times, and she actually offers courses and teaches you how to grow organically and Friedenhoff which is also down the road and we buy some of their food every week. They've, yeah they also whatever they have available. La Familiér is another one. They also small, little health shop and she also tries to sell everything organic and they grow a lot of stuff there. So I mean, yeah they're not necessarily community gardens but..."

This discussion provided valuable insights into specific projects. It raised important questions about organic certification, trust, and the significance of proximity when making choices related to food sources, especially from organic community gardens. The findings collectively highlighted the diverse landscape of awareness among consumers, emphasising the potential for increased engagement and participation in sustainable, local food production efforts through targeted awareness-building activities. This led to Objective 4, to explore the local market opportunities for organic

food products produced from organic community gardens. By recognising the existing levels of awareness and addressing gaps through deliberate awareness-building initiatives, it is possible to foster greater engagement and support for sustainable and locally driven food production efforts, ultimately contributing to the study's overarching objectives.

6.5.3 Objective 4: Explore the local market opportunities for organic food products produced from organic community gardens

The quotations related to this question are displayed in Appendix B, Table 9, and are also incorporated into the discussions that follow.

The analysis of marketing opportunities for local community gardens revealed critical considerations. One central aspect was the influence of "word-of-mouth" within local communities as a marketing tool: "Word of mouth, yeah 100 per cent" (P1), "I think yeah, word of mouth, WhatsApp" (P6), and "Word of mouth yeah, I'd say word of mouth" (P11). However, it was emphasised that this approach should be complemented with other strategies, such as social media, "Facebook", "Instagram" and platforms such as "WhatsApp groups" to enhance reach and growth. This view is consistent with Nedumaran and Mnida's (2019) claim that e-marketing strategies could play an important role in developing positive attitudes toward organic food products. The significance of nutrient value in organic produce was acknowledged, prompting the suggestion that community gardens should focus on providing affordable, nutritious options for diverse socioeconomic groups. Furthermore, the need for increased research and education in farming practices was underlined, presenting an opportunity for community gardens to act as educational hubs, teaching people about sustainable and healthy farming practices.

An essential philosophical question emerged regarding the purpose of these gardens, whether they are primarily intended to feed the local community or generate income, which significantly influences mission alignment and marketing strategies. Moreover, the lack of marketing and communication efforts for community gardens in South Africa underscores the need for investments in creating a brand identity, social media presence, and other marketing materials to make their produce more appealing and

accessible. Convenience in accessing fresh produce was stressed, encouraging community gardens to provide various convenient access methods.

Lastly, the potential role of community gardens in educating the younger generation about the importance of fresh, locally grown produce was highlighted: P18 said, "Yeah I do think that education at the point of purchase is cool", P12 agreed that "community" gardens actually would work better organic because they're small sections and they're very easy to look after anybody can be taught to look after them", and P6 stated: "It's a lot of education as well being able to grow foods and as well". This aspect needs to be emphasised as organic food purchases are generally associated with higher education levels, according to Asioli et al. (2017), Demattè et al. (2019) and Saleki et al. (2019), which, in turn, is associated with higher income levels. Furthermore, according to de Magistris and Gracia's (2016) study, one's level of education can influence one's values and convictions, leading individuals who place importance on environmental sustainability or animal welfare to have a higher likelihood of selecting organic food products. Consequently, access to information may also be a factor, as individuals with higher educational attainment are typically more well-informed about organic products, as indicated by Hughner et al.'s (2007) research. Thus, introducing educational programmes at all education levels will change consumers' conceptual beliefs (Yiridoe et al. 2005) of organic food products and their subjective, objective and prior knowledge (Fatha & Ayoubi 2021) of organic food products.

Thus, community gardens hold substantial potential for local food sustainability and education. A recommendation is thus for a comprehensive marketing approach to be adopted, encompassing education, accessibility, affordability, and community engagement while aligning efforts with the garden's mission and purpose.

6.6 SUMMARY

In this chapter, the research findings were presented based on the primary objectives of the study, with a focus on consumers' perspective. The subsequent chapter delves into the findings from the cultivators' point of view.

7.1 INTRODUCTION

Chapter 6 discussed the findings of three of the four objectives of the current study. The chapter investigated consumers' knowledge and perceptions of organic food products (Objective 1), followed by a discussion of consumers' awareness and interest in community food gardens (Objective 3). This interest in community gardens is rooted in these gardens' capacity to cultivate organic food and provide it directly to consumers, thereby positively contributing to economic, social, and environmental sustainability, in alignment with the SDGs. The chapter also discussed market opportunities for organic food products grown in organic community gardens (Objective 4).

Subsequently, the research shifts its focus to community garden cultivators, recognising the importance of their perceptions in the context of organic community food gardens. Three key objectives guided this discussion. First, the researcher sought to ascertain the extent of cultivators' knowledge and perceptions regarding organic food products, as this understanding forms the foundation for their role in organic community gardening. Second, the researcher aimed to identify the specific barriers and challenges cultivators faced within the local community, shedding light on potential hindrances to the growth of organic community gardens. Finally, this chapter discusses the cultivators' willingness to participate in local organic markets, a factor influencing the accessibility and sustainability of organic food products in the local community.

Collectively, these discussions with consumers (see Chapter 6) and cultivators offer comprehensive insight into the holistic potential of organic community gardens, not only as a sustainable food source for their local community, but also as a possible source of income. The discussions also highlight the positive effect these organic agricultural practices will have on the environment.

The study's objectives were investigated using semi-structured interviews, and the study sample was chosen based on cultivator participants' interest in and current involvement in community gardening initiatives.

7.2 BRIEF DESCRIPTION OF THE CULTIVATOR PARTICIPANT STUDY SAMPLE

For Objective 2 of this research, organic community gardens were explored from the perspective of community garden cultivators. To fulfil this objective, a purposive sampling strategy was methodically employed to meticulously select four cultivators who possessed distinct areas of expertise, all situated within the purview of the present study. Following this, snowball sampling was implemented, with participants recommending additional individuals who shared similar interests and inclinations toward community food garden projects. The inclusion criteria mandated that these cultivators had to be at least 18 years old and involved in community food garden projects. The researcher exercised subjective discretion and applied purposeful sampling techniques with the explicit intent of including a wide spectrum of perspectives and acquiring substantial and relevant data for the research investigation.

As a result, the research encompassed four cultivators in the Western Cape, South Africa. Cultivators included in the study were based at the Somerset West Village Garden, Oude Molen Eco Village, Auntie Naomi's Farm in Jamestown, and a participant from a local school in Cape Town. The researcher did not collect any personal information not relevant to the study from any of the cultivators, but participants who engaged in these community garden initiatives were perceived to fall within the age range of 40 to 70 years and resided in urban areas in the Western Cape, South Africa. Furthermore, it should be emphasised that this study did not prioritise or explicitly address the educational and income levels of these participants as it was not the purpose of the study to differentiate between the community gardens based on such information. Consequently, the educational and income backgrounds of these cultivators remain unclear.

7.3 OUTLINE OF THE CULTIVATOR STUDY OBJECTIVES

The study's objectives were framed to guide the formulation of interview questions for cultivator participants. The goal was to prompt them to share information that aligns with the study's overarching objective of exploring organic community gardens' potential contribution to sustainability. Three key areas were emphasised: (1) exploring cultivators' knowledge and perspectives of organic food products; (2) identifying the barriers to organic community garden cultivation in the local community; and (3) exploring cultivators' willingness to sell produce at local organic markets. Each aim was operationalised by designing questions that targeted the specific aspects related to the objective. Table 7.1 summarises the questions posed to the cultivator participants (all responses in this chapter were provided by cultivator participants), along with their associated objectives and assigned codes, serving as points of reference.

Objective 2 - Explore cultivators' perspectives on organic community	Code
gardens	
(a) Determining cultivator's knowledge and perspectives of organic food	2a
products.	
(b) Identifying the barriers to organic community garden cultivation in the local	2b
community.	
(c) Exploring the willingness of cultivators to sell produce at local organic	2c
markets.	

 Table 7.1:
 Operationalisation of the cultivator study objectives

7.4 QUALITATIVE FINDINGS – CULTIVATOR PARTICIPANTS

7.4.1 Objective 2: Explore cultivators' perspectives on organic community gardens

The quotations related to this question are displayed in Appendix B, Table 10, and are also incorporated into the discussions that follow.

Even though the researcher envisioned these semi-structured interviews to follow the same kind of prompting as the consumer participant interviews, it became clear from the first interview that the cultivators shared a passion and enthusiasm for their community projects, and little prompting was necessary as the conversation had a natural flow towards the aims within Objective 2. The discussion included cultivators' knowledge and perspectives of organic food products, identifying barriers towards organic community garden initiatives, and marketing opportunities for these gardens.

Cultivator interviews started with the researcher's interest in the cultivators' involvement and interest in community gardening projects. Thus, the first question directed to cultivators was, **"Please give me some background regarding the garden and your involvement?"**. C1 from the Somerset West Village Garden was inspired by a BBC documentary on Cuba's survival during sanctions, and the garden project involved using open spaces for vegetable cultivation and engaging homeless individuals to grow and sell vegetables to earn money. Their journey started by transforming a neglected piece of land into a productive vegetable garden. The project faced initial hurdles but gained support from the City of Cape Town, which granted them permission to use the land. To formalise the initiative, they established a non-governmental organisation (NGO) and acquired funding for essential resources like seeds, tools, and fencing.

Additionally, they partnered with the Department of Agriculture and received support from ECHO in Erinvale for the property's fencing. The project's unique aspect was its collaboration with the Helderberg Street People Centre, later known as Thomas House of Hope. They ran harvest days on Tuesdays, selling produce to the public. Furthermore, they employed homeless individuals who earned tokens for their work in the garden, which could be exchanged for necessities like hot meals, showers, and even new crucial identification documents required when applying for employment or accessing healthcare. This approach aimed to empower people experiencing homelessness, allowing them to contribute and see the tangible benefits of their efforts.

As the project progressed, the team worked towards self-sufficiency and sustainability. They secured their water source through a borehole and used solar power for water pumping due to the lack of electricity in the area. The garden also employed a composting system to recycle waste effectively. Over time, they introduced a Bokashi (a composting method that employs microorganisms called 'Bokashi bran' to ferment organic food waste, producing a highly fertile compost that enhances soil quality (Edward 2024)) programme for kitchen waste, making it an integral part of their composting process. Throughout the conversation, C1 highlighted the learning curve they faced, recognising that certain approaches worked better than others and adjustments were required. Notably, their experience emphasised the importance of offering homeless individuals the opportunity to engage in meaningful work, fostering their willingness to participate, and ultimately aiding in their reintegration into society and the healing process. The project's growth towards sustainability and self-sufficiency showcased the dedication and adaptability of the community members involved.

C2 shared a fascinating journey that led her to become involved in the community garden at Oude Molen Eco Village, South Africa. C2 initially studied horticulture in the United Kingdom and moved to South Africa in 1991. She attempted to find horticultural work but ended up in the dental industry. In the late 1990s, C2 fell ill and started training as a Sangoma (*"Highly respected healer among the Zulu people of South Africa who diagnoses, prescribes, and often performs the rituals to heal a person physically, mentally, emotionally, or spiritually."* (Martin 2014)), which rekindled her connection to nature. This path eventually led her to Oude Molen Eco Village, where she discovered a community food garden in 1994.

C2's involvement in the garden began when she approached Jono Kennedy, who had just started the project. C2 offered to help, and their experience led to a plot rental system where she worked alongside Kennedy, focusing initially on a garden programme for teenagers, later expanding to involve younger children. Furthermore, C2 highlighted her commitment to organic and pesticide-free gardening, which has been a core principle of the vegetable gardens. Moreover, C2 explained that the garden is not limited to the local Oude Molen community; instead, it draws cultivators from various neighbourhoods around Cape Town, including Vredehoek, Observatory, Maitland Garden Village, and Pinelands. C2 also introduced an allotment system where cultivators maintain their plots and contribute financially to the garden. The

garden's spare funds are used to employ individuals from the local mental institution, Falconburg Hospital, to support their occupational therapy.

C3 was a cultivator from the Stellenbosch area, specifically Jamestown. She called herself a 'boervrou', which, directly translated, means a 'woman farmer'. She was an extremely passionate and proud farmer and cultivated coriander, Italian parsley, basil and wild rocket. Her farm was a 1.5-hectare piece of land within the Jamestown community next to the Berg River. She started her little farm because her children were very small, and the wine farm she worked for became commercialised. Her husband was a farmer, and her mentor also lost his job; thus, the farm was their only source of income. She emphasised that being a farmer is difficult as nature is unpredictable and harsh. She used local community members to help on her farm and mostly supplied Woolworths and their local soup kitchen. C3 was included in the study because she actively engages with her local community in Jamestown, Stellenbosch, by employing local residents. Furthermore, her supply to the local soup kitchen reflects her commitment to local food security and community support, which aligns with the principles of community gardening.

C4's involvement with community food gardens started during his time as a campus manager at a girls' high school in Cape Town. He started by looking at five focus areas for the school in general to enhance sustainability, which included energy, waste, water, procurement and the environment. He included environmental sustainability in the Life Orientation lessons for Grade 8 learners. These learners then all had to start and maintain organic food gardens within the school setting for the year. The produce was used on campus, and learners were allowed to take produce home to their communities. C4 noted this was an attempt to encourage learners to start food gardens at home and produce their own food. At the time of the interview, C4 was involved in implementing zero-waste systems across the country, such as schools and national parks.

Undeniably, the background of these cultivators links directly with literature and the nature of a community garden; Jacob and Rocha (2021) state the term 'community' refers to a group of people who collaborate to start and maintain a garden within the urban landscape. Additionally, Doyle (2022) emphasises that social interaction is often

one of the primary drivers for the establishment of community garden projects. Thus, these cultivator narratives provide real-world examples of the complex role community food gardens play in promoting sustainability, environmental responsibility, community empowerment, and the fostering of sustainable habits. Their experiences and backgrounds offer valuable context and depth to the study's exploration of community gardens' potential contributions to sustainability, demonstrating that these gardens have the potential to address various aspects of sustainability, including social, economic, and environmental facets.

The researcher was interested in these cultivator participants' **knowledge and perspectives of organic food products**. Figure 7.1 highlights that cultivators' knowledge and perspectives of organic food products included references to the nutritional value, health benefits, taste and appearance of these products.



Figure 7.1: Organic food products

The first question posed to these participants was, 'When the word 'organic' is mentioned, what comes to mind? What do you know about organic food?'. C1 believed organic foods have better nutritional value, with more nutrients than non-organic produce: "Much better. It's got all the nutrients that used to be in vegetables. I mean, these days, I think people take a lot of vitamins and supplements, because of the fruits and vegetables, have no longer got, got the nutritional things in, what they used to have" (C1). This perception aligns with some research findings indicating that organic produce may have higher nutrient content. Numerous investigations by Guéguen and Pascal (2023), Brantsæter et al. (2017), Leifert (2014), and De Oliveira et al. (2017) assert that organic food products contain higher levels of nutrients and antioxidants compared to conventionally grown food items. Leifert (2014) claims organic food items exhibit a 60% higher antioxidant content than their conventionally

grown counterparts, and this has been associated with reduced risks of cardiovascular ailments, neurodegenerative conditions, and specific types of cancer. Undoubtedly, an increased nutritional value significantly influences consumer attitudes and intentions to buy organic food products (Bostan et al. 2016; Nguyen 2020; Vigar et al. 2019).

In addition, C3 mentioned the *health benefits* of eating organically grown foods:

"Yes, I think there is because we now live in a world where people consume foods, add anything to your food, and you ingest it without knowing what you're eating. So, organics are the best option these days because all the young people today are very health-conscious. Many are now eating organically. They're looking for where they can get the best. So, I think organics are the best for our health and for living longer, as I always say. So, being healthconscious is the way our world is now, but it's also a costly process to live healthily. It's not for everyone. So, there are genuinely good things in organics that, as I can say, the health industry has."

The literature mentions health benefits as one of the primary motivators that drive organic food production (Eyinade et al. 2021). Dorce et al. (2021) and Teixeira et al. (2021) explain that the lack of synthetic pesticides, fertilisers, and other chemicals in organic food production may lead certain consumers to believe that organic food is a more wholesome and secure choice compared to conventional food. The insights from cultivator interviews reinforce the importance of organic community food gardens as a means to address food insecurity, enhance access to fresh and nutritious produce, and align with the growing trend of health-conscious consumer preferences. These findings closely relate to the research's focus on organic community food gardens' potential contributions toward sustainability, with cultivators playing a central role in driving these initiatives and consumers reaping the benefits of healthier and more sustainable food sources.

Another aspect that both C1 and C2 highlighted was that of *taste and appearance*:

"So, I think that you know carrot here, tastes like a carrot. If you have to buy carrots from Fruit and Veg it tastes like water. But it won't look like Pick and Pay's carrot, I promise you. Yes, and that's the other thing and there is a movement called the ugly, the ugly food movement. I don't know if you know about it. So, that's the other thing. Things that are being thrown away or shallots, carrots that are ugly or whatever. They're all being used. They should all be used to feed. So, or you know, it doesn't matter if the carrots got to or have split or something. If the tomato looks like that, it'll taste better than the other one let me tell you" (C1)

"Well it looks bigger and it tastes a thousand per cent better. Like if you eat growing lettuce in your garden and you buy a lettuce from Spar. I don't care how they package it. There is a huge difference. You can taste the difference. It's like you can taste the energy of the homegrown your in, in, in your garden versus something that's come from, from a supermarket and the avocados they just they look healthy, everything looks better, it tastes better you know". (C2)

The literature agrees with the perception that organic food products taste better. Kavaliauske and Ubartaite (2014) and Petrescu and Petrescu (2015) state that consumers' perception of organic food products encompasses various factors, spanning from taste, cost, nutritional value, ethical considerations, accessibility, to even superficial elements like the product's trendiness. In addition, Gundala and Singh (2021), Mustafa et al. (2022), and Roh et al. (2022) concur that product-related perceptions such as perceived quality, health benefits, the absence of synthetic chemicals, organic certification, taste, and freshness are drivers toward consumers' willingness to purchase organic food products. Research by Vermeulen and Bienabe (2010) also discovered that individuals who choose organic products are predominantly driven by concerns related to their health, nutrition, and the superior taste of such products. These findings are consistent with the observations made by Brantsæter et al. (2017) and Fynn-Green et al. (2019), all of whom noted that healthconscious consumers have a belief that their overall health can be enhanced through the consumption of organic foods. These observations reinforce the research's findings regarding consumer perceptions of organic food products and their motivations for choosing such products. The taste, quality, and health benefits

associated with organic produce are central factors influencing consumer preferences. Additionally, the joint recognition of the importance of reducing food waste emphasises the sustainability aspect of organic community food gardens, which can address consumer preferences while contributing to more efficient and responsible food production and consumption practices.

In sharp contrast to the other cultivators, C4 expressed his concern about the excessive emphasis on the term 'organic'. He suggested that many people talk about organic gardening, but few practice it: "I think there's too much emphasis on this organic thing that, you know, everyone's charting organic, organic, organic, we if you, if you have a close look at most gardens organic people, you know I think I think they fewer people using". Furthermore, C4 mentioned an increasing drive towards organic gardening and the "right way to do it". According to C4, there is a growing awareness of the adverse effects of harmful pesticides in conventional gardening ("And then more people that are now realising the effects of these horrible pesticides") and he mentioned the availability of eco-friendly pesticides like Ludwig's "Eco-friendly pesticides available, you know, Ludwig's", along with a variety of environmentally friendly alternatives.

Furthermore, it became evident during the discussions that cultivators all exhibited a well-founded understanding of **organic agricultural practices**, as depicted in Figure 7.2. These cultivators associated organic agricultural practices with lower yields and the avoidance of pesticides, synthetic fertilisers, herbicides and GMOs.



Figure 7.2: Organic agricultural practices

C1 acknowledged that the *yields* of organic gardens might not be as high as that of conventional agricultural methods:

"So, we use all of that. But the thing with organic garden and the perception is that the productivity isn't as high as something that is not organic. And you don't get the production of the, the bulk. The yield as you would but, but you know that might be with the first couple of years but as your plants and your soil are, it, is improved. And changed, the plants become very much more. They become stronger. More resistant, to diseases and, and the production is still good. Yeah."

This view is consistent with that of Smith et al. (2020), who reported higher biodiversity (34%) and profits (50%) despite lower yields (18%) when organic agricultural methods are employed. Furthermore, Shah and Wu (2019) clarified that to achieve maximum crop yields, a significant amount of chemicals and energy is needed.

In addition, it was clear from the conversations that cultivators *did not use pesticides and synthetic fertilisers* in their community garden initiatives. C1 explained: "*Well, it's all natural.* You don't use any pesticides. No pesticides. No, fertilisers that have been manufactured. Synthetic fertilisers, as you know but we do use things like chicken manure, iguana, horse manure, cow manure and kelp". C3 also mentioned, "Natural plants are those you need to put in the ground. This means that if you plant organically, you shouldn't put anything on that plant or any pesticide. You should also not have it. You must use organic products to get the nutrition of the plant, like us, who farm organically". C2 concurred and stressed the need to avoid **pesticides, herbicides and GMOs**:

"Are you gonna use pesticides aren't you gonna use pesticides and for me it was like a no-brainer. No pesticides okay, no chemicals and that's how we've always kept it that way and I've continued that way you know...I expect that it's been grown naturally. There is no pesticides there's been, yeah that's what I would expect if it said organic. That it's been grown as natural as possible. No GMOs with nothing like that (highlighting the importance of natural fertilisers and heirloom seeds) Yeah I'm so I'm a big advocate for heirloom and you know I'm just shocked at how many people don't know the difference between a GMO and GMO seed and an heirloom seed like I, I really try. Any adults that come around I educate them and they're like completely shocked you know".

In addition, C4 stated that the gardens he started were organic in the sense that they used natural pesticides: "In as much that we didn't use any, we used organic pesticides. We made our own compost as part of the as part of the waste program" and "And then your, as I say, we didn't use any, tried not to use any, you know, harmful pesticides and everything we tried to do". This viewpoint is consistent with that found in the literature. According to Bostan et al. (2019), Rana and Paul (2017) and Nguyen et al. (2020), organic food products are cultivated sustainably, with strict prohibitions on the use of GMOs, conventional pesticides, synthetic fertilisers, antibiotics, or any other artificial substances in the production of these organic food products.



Figure 7.3: Positive impact of organic food gardens

In addition, cultivator participants discussed the positive impact of these gardens and emphasised that organic gardens contribute positively to the environment by providing *green spaces, replenishing groundwater, and reducing carbon dioxide*.

"Well, it's a it creates a greener space where you might have a block of flats or concrete. It really helps with the water getting back into the, you know, into the under, the underground water replenishes. Because it's an open area. We've got lots of spekboom trees. which gives the, get rid of the carbon dioxide and it just creates a green space. And I think green spaces, we have to try and fight for and hang on to in our in our concrete jungles. Because people need to see green. They find green, green is very therapeutic. If you just look out onto green and, or go for a walk in the mountain or what, it's so therapeutic and you can't have con, a concrete jungle so. And, and the other thing is, that it's sustainable. You know, every, we don't have electricity here. We have our own water. We, we are a little, a little microcosm on its own. Little bubble that can survive on its own. The promotion of urban farming and community gardens is a step toward urban sustainability and healthier environments." (C1)

"It will be cleaner because there are so many things in the air that people are unaware of. But, as I say, if everyone can do it, then our lives will improve, but yes, it's not entirely in our hands." (C3)

Moreover, both C1 and C2 noted that over time, the **soil in an organic garden can** *improve*, making plants stronger and more resistant to diseases. C1 explained, "*They become stronger. More resistant to, to diseases and, and the production is still good*", and C2 concurred: "*My thing is at least we're keeping the soil, we're looking after our soil*". This highlights one of the advantages of organic agricultural practices mentioned by Gamage et al. (2023), which focuses on building healthy soil ecosystems that support plant growth naturally.

The conversations with the cultivators reinforced the core findings of the research by highlighting the cultivators' practical knowledge and experiences in organic gardening. Cultivators' insights demonstrate that organic community food gardens contribute positively to sustainability by providing fresh produce, promoting ecological practices, and enhancing environmental quality. An aspect of organic community gardens highlighted exclusively by C1 from the Somerset West Village Garden included the fundamental *need for fresh fruit and vegetables*:

"And they basically weren't able to get any fresh fruit and vegetables and so, they started growing vegetables on every open piece of land that, that was possible you know...Yeah. That's another factor and, and I think that, I think that if we can get people to grow their own fruit and vegetables in their own garden, there's more of a chance of people using organic than getting the greater community. I mean the great, the farming community".

The discussion naturally transitioned toward the **difficulties and obstacles** (Identifying the barriers to organic community garden cultivation in the local community. (2b)) that community gardens, like the Somerset West Village Garden, Aunty Naomi's Farm and Oude Molen Eco Village, encounter in their efforts to practice organic agriculture daily. According to Figure 7.4, cultivators face challenges such as expensive certification, theft, land availability and other financial constraints in their endeavours to establish community food gardens.



Figure 7.4: Barriers to organic community garden cultivation

C1 made it very clear from the start of the conversation that they are an organic garden, "*We are organic*"; however, they are not certified as 'organic' as acquiring **organic certification** can be expensive:

"Well, I think if you've got a, if you want to sell organic in say Pick and Pay, Woolies, in those places you, you've got to be certified organic and so they have to come and check your garden. But now to get an organic certification is a hundred thousand rand or something, which is just for us it's not viable...So, to have certified organic you have to get your, you've got to get your certification. But I mean we, we're not going to go that. We just know that our vegetables that we grow here, are organic and they're a lot more tasty".

Conversely, C2's response to certification was "*No, no I'm not on that level, not on that level*", and when prompted for a reason, this cultivator explained: "*I'm hopeless on paperwork … with the, with the, with a zoom and all that. I mean I'm not even. I mean yeah I'm not registered. No, I wouldn't even know how to go about that*". Cost and paperwork are both mentioned in the literature: Kelly and Metelerkamp (2015) and Lim Tung (2016) stated that certification in South Africa is currently governed by international standards adding to costs. Furthermore, UNEP (2017) explained that maintaining the integrity of organic food products requires frequent unannounced and expensive audits with lengthy paper trials. Therefore, this cost barrier can be a limiting

factor for small-scale cultivators or community garden cultivators who want to label their produce as organic.

Furthermore, C4 emphasised the complexity of obtaining organic certification "And how did these gardens get certification? I don't know. I believe it's not easy." and suggested that the emphasis should be on producing and providing healthy, pesticide-free food "Let's not get muddled up there. Let's not get muddled up with the with the legislation. Let's focus on producing the food", and "Using harmful pesticides then that's I think that's it that makes. And organic to me, that makes an organic garden. If you haven't used anything harmful on it, then it's organic". This perspective complements the broader research by highlighting the importance of striking a balance between promoting organic practices and ensuring that the primary mission of community gardens remains focused on delivering high-quality, sustainable food to communities.

C3 was organically certified, but she explained that it is not an easy process:

"Yes, the reason is that we have a certificate - they call it Global GAP. Global GAP is an international certificate that allows you to grow your products overseas because they are organic. I need to have the Global GAP certificate every year for my main market, which is the biggest market, Interfoods. Interfoods is a Woolworths market, and Woolworths only accepts organic products. That's why I farm organically. My other clients are also organic because they supply to places like hospitals. They provide it to people who might not go to the gym. They make natural products for people. So, it's essential for me to have that Global certificate every year because it's organic. If it's organic, I shouldn't have any problems with my products because they must be clean. They test them when I deliver. They look for any snails, insects on my plants, and any discoloration. It must be green, so it's a very thorough process I go through. The cost is R15,000 every year, and sometimes I don't have that money, so I have to come up with another plan, and I have to postpone it until the following year. And then the market, especially the big market I have, won't accept my products if I don't have that Global certificate because they export their products too. So, my main thing is that Global certificate I need every year...Yes, no, it will definitely show you. I've learned all my stuff. I can show you everything you want to know about organics. I have everything in my files. I file everything. The day it was sprayed, what the weather was like, what time I sprayed it, and all these things are associated with organics because that's what the records indicate when someone comes in. How do I know you're organic? Then I can take out my files and show them that this is what I use on my products. It's the name, it's this, it's that. So everything is shown in the records of my organic materials that I use for my plants."

These findings highlight the lengthy paper trail and costs involved in being certified as organic. It should also be noted that this cultivator (C3) referred to GlobalG.A.P certification, which is not an organic certification. GlobalG.A.P standards emphasise food safety, quality, and environmental sustainability. They aim to ensure that agricultural products are produced in a way that is safe for consumers, workers, and the environment (NSF 2024).

Another challenge regularly faced by both C1 and C2 was *theft*. C1 mentioned that theft can be a problem in community gardens:

"And the other thing I think is, that they have a big problem with theft, so if they're growing a vegetable garden people will come and steal their stuff, which hinders their sustainability...Yeah, but the system I think was quite, a complicated system. But you know people would start doing it and then the next thing they'd wake up the next morning, the whole thing would be stolen. So, I think there's a huge problem with theft in these communities".

C2 also explained: "I said there's a challenge, it's theft. That's probably the biggest thing you know. People you know they click they see the food that's grown and then they, they jump over the fence and they steal it". Roberts and Shackleton (2018) agree with this observation and recorded a decline in community gardens in the Eastern Cape due to theft, crime and a lack of resources.

Other challenges C3 faced included *land availability* and *financial constraints*. C3 mentioned her desire for more land to expand her farming activities and create employment opportunities:

"Yes, my challenges, oh dear. I would like to have more land for myself. The land is a bit too small. My challenge is to create more jobs for people. If I can get more land to farm, I only have 1.5 hectares of land, and it's just this small piece that I have, which is a bit limited. But yes, I've already applied for more land; it's a lengthy process. But my challenge is to have more land to create employment for people".

This highlights the challenge of land availability as a constraint to community gardening and organic agriculture. In addition, if C3 cannot afford to obtain organic certification, she will remain unable to supply produce to her main market:

"Indeed, there are, but I'm just not sure about all of them. The reason is that NSF, I know the company's name is NSF. They are located here at Techno Park. They are the ones who come to audit you for your global certificate. So, I just contact them, and they come out to me. They ask me how far I am and if I have done anything yet. Then I say, no, I'm not there yet. I'll keep you updated on finances, just give me some time. I just told my auditor yesterday. He asked me, Naomi, I see your audit expires on the 30th of August. I said yes, I've seen that, but due to financial constraints, I can't do it now. I may be able to do it early next year, possibly in March. So he needs to understand this little issue. I have to do it because if I don't have it, I won't be able to keep my market."

Moreover, she mentioned that the products used in organic agriculture have become very expensive (**financial constraints**):

"Yes, definitely, definitely, there will be many farmers because many people don't want to farm due to the goods that have become so expensive. Like us, who now buy our products. The prices have skyrocketed, Mariet, and we can't afford it anymore. That's why we're a bit down now because the products are too expensive, and there's no one to help us at the moment. So, we're just waiting for things to fall back into place, and if people can help us and say they'll come to your garden, I see where your need is. I see where your need is, and then I go for it." (C3)

C1 also mentioned the production cost of organic food products as it relates to larger agricultural land:

"Well, I think it is more expensive for a farmer if he goes on a broad scale, because I've got a brother-in-law who's a apple farmer and he says: 'Look, we don't use bad pesticides. We don't use bad things.' But he said: 'For us to go organic, we don't get the size. We don't get this. We don't get that and we are, we can't go organic. We won't get, you know'. (suggesting starting on a smaller scale) That's another factor and, and I think that, I think that if we can get people to grow their own fruit and vegetables in their own garden, there's more of a chance of people using organic than getting the greater community. I mean the great, the farming community".

C4 faced challenges like students' reluctance to engage in food gardening because it requires effort, such as preparing the garden beds, planting, watering, and maintenance:

"You know there is a bit of work to do, you know, you know, you've gotta you gotta create the bed. You've got to dig it over. You've gotta you've gotta go and purchase the seedlings. You're gonna plant them. And then regularly, you have to water them. And I think I think most people would just lazy and I try to".

In addition, C4 mentioned that school gardens face maintenance challenges during school holidays: "And then you also have and we had the same challenge addressed in bug come the holidays. Then girls go on holiday and there's no one to water".

The insights from cultivators offered practical insight into the barriers those involved in organic community garden cultivation faced. By addressing the described barriers, local communities can foster more sustainable organic community gardens. This, in turn, promotes healthier food production, strengthens local food systems, and enhances communities' overall resilience to challenges such as rising production costs and theft.

The challenges cultivators described, such as certification costs, theft, land availability, and financial constraints, resonate with the research findings. By addressing these barriers, local communities can work towards fostering more sustainable organic community gardens. Furthermore, the economic challenges identified in the conversations underscore the importance of economic sustainability in the context of organic community gardens. Managing costs, addressing barriers to certification, balancing production expenses, and ensuring efficient resource allocation are critical factors for the long-term economic sustainability of organic community gardens. By addressing these economic challenges, local communities can enhance the resilience and viability of their organic community gardening initiatives.

After the challenges surrounding organic community gardens were described in the interviews, the dialogue naturally transitioned to a discussion where all those involved in cultivation emphasised the importance of **educational programmes**, **empowerment**, and the **broader societal advantages** associated with community food gardens (Figure 7.5).



Figure 7.5: Community food gardens

The interview discussions suggested the need for *educational programmes* to teach people how to grow their own food, even in small spaces. C1 mentioned: "*if you can create food gardens throughout the communities then there will never be hunger. So, if everybody can grow some vegetables in their backyard or if they can have something similar to this". C2 concurred: "Any adults that come around I educate them and they're*

like completely shocked you know", and "You teach the kids at school, they'll educate the parents. The parents will then get educated and buy the right things for the home and so I think it starts in your own home with your kids through education". In addition, C4 advocated for the youth to be involved in sustainability initiatives from primary school as these youths are more receptive: "maybe even in primary school, maybe not in the senior phase. Maybe do it in the primary cause on the kids more receptive". However, C4 mentioned that even though engaging youth in sustainability initiatives is a commendable goal as it helps build a generation with a strong environmental consciousness, it is also important to acknowledge the challenges of maintaining this interest. "There was never any indication that it had succeeded and that the girls themselves had started their own food gardens.", "And I'll so I always felt that I'd kind of failed in that and, you know, and was looking at other ways of, you know, how do you encourage people to start their own food gardens?" as students progress to higher grades and face competing priorities. Furthermore, C4 suggested making sustainability part of the school curriculum in subjects such as Life Orientation and emphasise it throughout the year:

"So put it into the life orientation and, you know, develop a model A modules and teach the kids and teach them for a whole year about it. And just, you know, just keep knocking it on their head, knocking on head...But it but you know then add in the waste and the recycling and you know don't throw your packet on the ground. Introduce the making of eco-bricks and you can put that all into a lovely package and y'all to answer your question". (C4)

Sustainability education needs to evolve and remain engaging to sustain their interest, and the need for initiatives like free seeds and compost was mentioned: "*Free seed and maybe some compost. So if you literally got a sponsor somewhere and you handed out free seed and compost people would see that it's not such a you know it's not such a hassle it's easy to do your own.*" (C4).

This notion of education programmes forms part of the SDGs of inclusive and equitable education (UN 2015) and South Africa's NDP 2030, which emphasises expanded education access. This makes it a valuable contribution to the current study as community gardens coupled with educational initiatives have the potential to

enhance food security, empower communities, and promote self-sufficiency in food production. These are all key elements of sustainability, which the current research explored.

Another central aspect of C1's mission was to *empower* homeless individuals by providing them with work opportunities and a chance to earn tokens for their efforts:

"And so, we partnered with the Helderberg Street People Centre which is now Thomas House of Hope and that's how we managed to get the street people to come and work here and, so they earn a token for every hour that they work and then they can exchange that token for a hot plate of food, a shower. They can save between ten tokens for a new ID, because most of them have actually lost their IDs on the streets and without an ID they can't get a new, a new, a new job so."

Moreover, the **social advantages** for the local community were emphasised: "Well, the one benefit is obviously for the homeless people. The other benefit is that it is very central and there are quite a few old people that live around here so, they often they come here on a Tuesday to meet other people. To get maybe only smaller amounts of things" (P4). Somerset West Village Garden's reach extends beyond mere food production and serves as a means to achieve social and humanitarian goals, emphasising the value of offering work and a sense of accomplishment to vulnerable individuals as part of a sustainable approach. Conversely, Oude Molen Eco Village employs people from a local mental health institution: "I then employ people from Falconburg Hospital which is the local mental institution and so the money goes back into the occupational therapy for the patient. So it's a really nice it works so well" (P4) and get children from the local community involved in the garden:

"So I sort of look at my local community and for me we're in, we're in Pinelands and so I've got Maitland garden village which is a coloured community right next door and those kids come to my garden. So I can have up to 30 kids on a Wednesday afternoon but from there what I did, I just use Instagram, Facebook and just word of mouth hey. And I've got a board in the garden that says gardening classes from, gardening club from three till five every Wednesday,
age six to sixteen free of charge. And people who come to see it and they bring their kids and you know it's grown and grown and grown". (P4)

C3 employed individuals from her local community to work in her garden and supplied fresh vegetables as the need arose for her local soup kitchen:

"Yes, there are actually. We have people working for us. So, between 6 and 8 people work for us, and many people in our community also work with me. Then, outside the community, a few, as I mentioned, are black, but these are people who are committed and work every day. Yes. Yes, I play a significant role in my community by creating some jobs for people here. Yes. And in the community, I also play my role. If people maybe have a soup kitchen, then I provide them with vegetables. Or if people need something, and there are leftovers, I share those in my community. So, I also play a significant role in my community because we care for each other in this small town because it's a very small town."

Dolley and Howes (2019) highlighted the intergenerational socialisation of community gardens that strengthens local social connections. The interviews with cultivators thus underscore community food gardens' contribution towards social and environmental sustainability. These insights align with the research's focus on understanding organic community food gardens' potential contribution to sustainability. They highlight the importance of education, empowerment, and societal benefits as integral components of sustainable community gardening.

The third aim of the current objective was to **explore the cultivators' willingness to participate in local organic markets**. However, it became clear during the conversations that the interviewed cultivators were all involved in community projects, making their produce available to their local community first:

"We also do run a harvest day which is on a Tuesday. Every Tuesday and we sell vegetables, but we need to do that to be able to, continue and you know we do give the guys groceries on a Friday. They can buy groceries at Thomas House of Hope, with their tokens and then we actually pay for that." (C1) "So because we have an allotment system, people who grow their own product produce can take it home for themselves and then I've got about one two three, about six gardens which I grow to sell and then actually what we've got, we've got a, we've got a deli here in the village. You should actually get hold of Margot. Maybe she'll be open. She sells all organic produce. She sources organic meats, every type of and she buys from me. So she buys like my spinach from me, onions from me, chilli's, whatever's in season she'll buy. Like she bought a whole load of carrots last week or the week before, she bought carrots and so yeah so that's how it works but if somebody comes in and they'll say it. You know I run a market as well once a month. If somebody wants freshly picked spinach I say sure hold on a second and give them a big bunch and there we go you know." (C3)

"Yeah, I have local markets. I have local markets. They're not full of nonsense now. So they don't expect me to show a certificate because they say my products are already good. They have no problems. They sell it in the store. They do the packaging of it, so they have no problem. I've never heard of... saying, 'Naomi, but the problem is your product is not good.' I'd rather get a compliment saying your products are wonderful. So I look at my products, and I believe in providing quality to every person I can, to come back to me, Mariet. That's what I always say. Good quality for your customers". (C2)

C4, on the other hand, made produce available to the school hostel and student homes: "*The food we let the girls harvest it and take it home. It also went to it first went to the school hostel. There were 76 girls living on campus*". These findings indicate that the cultivators (C1, 2 and 4) were committed to community engagement, and their focus was on ensuring that their produce directly benefits their local communities. While they may participate in local organic markets, their primary goal was to support and provide for their local community. This reflects a strong sense of community responsibility and a commitment to sustainability at the local level.

7.5 SUMMARY

This chapter presented the findings and discussion on Objective 2, focusing on the cultivators' perspectives on organic community gardens. The next chapter provides the researcher's conclusions concerning the study's objectives, followed by an exploration of the study's contributions, suggestions for future research, and an examination of the study's limitations.

8.1 INTRODUCTION

Chapter 7 discussed the research findings related to organic community garden cultivators. These findings reflected these organic community gardens' potential contribution to sustainability. Valuable insight from these cultivators was gathered and presented.

Within the context of sustainability and the exploration of organic community food gardens, this chapter explores the significant findings and their implications for consumers and cultivators. The discussion is aligned with the predefined objectives of the study, and subsequent sections discuss recommendations derived from these findings, emphasising their practical significance within the wider community context. The chapter also highlights the distinctive contributions of the study, enriching the existing knowledge base. Within this chapter, attention is directed toward prospective research avenues emerging from these findings, underscoring the chapter's novelty and its enriching dimension to the field.

8.2 DISCUSSION OF THE FINDINGS

The study's primary aim was to explore community food gardens' potential contribution to sustainability based on cultivators of such gardens and consumers' position on organic food products' consumption in general. The establishment of organic community food gardens not only ensures the availability of nutritious food for these communities but also offers economic and environmental benefits. The introduction of these gardens enables consumers to directly purchase organic food products, thereby contributing to the economic sustainability of these community initiatives. Furthermore, adhering to organic agricultural practices in these community gardens can positively impact environmental sustainability. This examination entailed an exploration of garden cultivators' and consumers' viewpoints on the consumption of organic food products. To address the overarching research aim, several specific objectives were outlined. First, the study delved into consumers' attitudes regarding organic food, encompassing an exploration of their knowledge and perspectives of organic food products, as well as their willingness to purchase such items from local organic community gardens. Second, the research probed cultivators' perspectives on organic food products. The study also sought to identify barriers to practising organic agriculture within the local community and assess cultivators' readiness to sell their produce at nearby organic markets. Additionally, the study aimed to ascertain the prevalence of organic community gardens within the local area and evaluate the market opportunities for organic food products originating from these community gardens. Each objective of the study is systematically concluded in the discussion that follows.

8.2.1 Objective 1 - Explore consumers' perspectives on organic food products

8.2.1.1 Determining consumers' knowledge and perspectives of organic food products

During this study, South African consumer participants exhibited diverse perspectives and understanding of the concept of 'organic'. Consumer participants associated the term with health, environmental friendliness, ethical farming practices and the absence of harmful chemicals, GMOs and pesticides. However, it is important to note that some participants expressed a lack of understanding about the specific differences between organic and non-organic foods, and this gap in understanding could affect their ability to make informed choices when deciding whether to purchase organic or conventionally grown food products. Additionally, a subset of participants relied on seasonal availability as a means of identifying organic food products, a finding not extensively documented in existing literature. This suggests that efforts to educate consumers about the differences between organic and conventional foods may be essential in promoting the consumption of organic food products.

Moreover, consumers had diverse perspectives on organic food, considering factors such as health, environmental impact, and ethical farming practices when evaluating these products. Understanding these diverse consumer perspectives is critical in shaping the strategies and practices of organic community gardens to align with consumers' expectations and values. This knowledge informs how these gardens can effectively contribute to sustainability by addressing the specific concerns and priorities that consumers attach to organic food production.

Moreover, the consumer participant interviews provided insights into their views on organic food labelling. While consumers generally had a degree of trust in organic certification and labels, they also expressed reservations and doubts about the credibility of these labels. This division in consumer perceptions emphasises the importance of transparency and clear communication in organic food labelling. It underscores the need for continuous efforts to enhance consumer awareness and confidence in organic certification processes, as addressing these concerns is crucial for maintaining and strengthening consumers' trust in the organic food industry. These concerns stemmed from various factors, including doubts about the enforcement of labelling regulations, the proximity of organic production to potential sources of contamination, such as mines and contaminated rivers, and the absence of specific laws governing organic food products in South Africa. These factors highlight the need for robust regulatory frameworks and effective enforcement mechanisms in the organic food industry. Addressing these concerns is crucial for instilling confidence among consumers regarding the integrity of organic food products. The trust consumers place in organic food certification and labelling is of utmost importance for the organic food industry's success, as it will enhance consumers' confidence in organic food products.

Furthermore, consumer participants were aware of the limitations associated with organic certification, primarily the substantial costs involved in the certification process. These costs can present a significant barrier for small, local cultivators, limiting their ability to enter the organic market. This, in turn, can affect consumers, as the higher costs of certification often lead to increased prices for organic produce. This highlights the need for initiatives and support mechanisms to address these financial challenges, fostering inclusivity and enabling smaller cultivators to participate in the organic sector. Additionally, the requirement to meet international standards for inspection and certification can pose further challenges for small-scale cultivators, as

compliance may necessitate substantial financial investments, infrastructure upgrades, and procedural adjustments. These complexities can create additional barriers for local cultivators, potentially impacting their ability to compete effectively, thereby influencing the cost of organic produce for consumers.

When discussing consumer participants' comprehension and understanding of organic food production and its associated processes, their perceptions encompassed several key dimensions: First, consumer participants emphasised the importance of environmental considerations in organic food production, including air and water quality, worker welfare, and the broader impact on the ecosystem. They associated organic farming with natural processes, avoiding the use of chemicals, fertilisers, and GMOs. Thus, an essential consideration in prioritising sustainability within organic community food gardens lies in the necessity to align these initiatives with consumer expectations.

Second, consumers expressed concerns about chemical use in conventional agriculture, particularly pesticides and synthetic chemicals. Hence, consumers sought assurance that such practices are not employed in organic community garden initiatives. They viewed organic food products as a safer and healthier alternative to conventionally grown food products due to their avoidance of these chemicals. Third, consumer participants placed significance on natural pest prevention methods in organic farming. They preferred approaches that avoid harmful pesticides, promote beneficial insects, and maintain the natural quality of organic food products. This finding underscores the need for organic agricultural initiatives, including organic community gardens, to prioritise and implement natural pest prevention methods that align with consumers' expectations and promote the overall sustainability of organic agricultural systems.

Lastly, consumer participants expected organic food production to involve free-range farming practices and animal products free of routine antibiotics and growth hormones. This consumer expectation emphasises the importance of adhering to ethical and sustainable animal agriculture systems within organic food production systems. Overall, the majority of South African consumers who were interviewed viewed organic food as sustainable, environmentally friendly, animal-friendly, and healthy.

Understanding and meeting these specific consumer expectations are crucial for enhancing the sustainability and acceptance of organic community gardens. These consumer perceptions reflect a well-informed perspective on the benefits of organic agriculture.

Concluding the investigation into consumers' perceptions of the health benefits associated with organic food consumption, participants had diverse opinions. While some consumer participants expressed scepticism and doubted any significant health advantages linked to organic food products, most interviewed consumers held firm beliefs in the health benefits of organic food products. They argued that the organic label indicates a healthier option due to the absence of harmful chemicals and impurities commonly found in conventionally produced foods, emphasising the potential risks associated with pesticides, hormones, and antibiotics found in nonorganic food products. For the current study exploring organic community gardens' potential contribution to sustainability, it suggests that initiatives and communication strategies should consider these varying perspectives on health benefits. Addressing and clarifying concerns while highlighting the perceived advantages of organic labelling can contribute to building trust and enhancing the appeal of organic community garden products among consumers.

Consumer participants further argued that organic foods offer superior nutrition, with higher levels of essential nutrients, such as vitamins, minerals, and antioxidants, as well as better overall nutritional profiles. This perception was rooted in ongoing debates surrounding the nutritional value of organic food products. Acknowledging and understanding this awareness is crucial for effective advocacy promoting the consumption of organic food products sourced from organic community gardens. However, despite these convictions, participants acknowledged the financial challenges associated with organic food consumption, which can limit access to these perceived health benefits. Consequently, the imperative to address issues related to affordability is a prerequisite to promoting organic food products' consumption from organic community food gardens.

One consumer participant proposed the adoption of the 80-20 rule, advocating that incorporating 80% organic food products into one's diet could yield positive health

outcomes and alleviate affordability concerns. However, it is essential to note that this proposition lacks scientific evidence to substantiate its validity. Additionally, there was consensus among participants that consuming organic foods may reduce the risk of allergies, as well as certain chronic diseases, such as cancer and Alzheimer's. These assertions align with existing research on the topic, underlining the complex interplay between scientific findings and consumer beliefs regarding the health benefits of organic food products, stressing the need for ongoing dialogue and education to ensure that consumer perceptions align with evolving scientific research on the health benefits of organic food products.

Consumer participants in the study expressed a range of views regarding the environmental impact of organic food products. Many consumers recognised the benefits of organic agricultural practices, emphasising their positive effects on the environment and food quality. They appreciated the use of natural manure and traditional soil-healing practices in organic agriculture, considering it a kinder approach to the earth that embraces natural processes and gives the soil time to rest. This suggests that emphasising and incorporating such practices may enhance the appeal and support for these initiatives among consumers concerned about the environmental impact of food production systems. The consumer participants also expressed concerns about certain challenges, such as ensuring good water quality and meeting the demands of a growing population while adhering to organic agricultural principles. Thus, strategies and practices that align with organic agricultural principles while effectively managing water resources and accommodating the needs of a growing population are essential for the successful integration of organic practices into community garden initiatives. Moreover, consumer participants advocated for reducing harmful practices like pesticide use and GMOs found in conventional farming, as they believed these practices harmed the environment and the ecosystem. Consumer participants highlighted the importance of maintaining a balanced ecosystem, promoting natural pest control methods, and minimising the use of chemicals. This well-founded consumer perception suggests that consumers are aware of the environmental impact of conventional agricultural practices and initiatives embracing organic agricultural practices are likely to earn greater support and acceptance by the majority of consumers.

Furthermore, consumer participants noted that organic agricultural practices contribute to soil health and promote the cultivation of seasonal fruits and vegetables, encouraging a sustainable mindset. This indicates that consumer participants recognised and acknowledged the positive impact of organic agricultural practices on soil health and the cultivation of seasonal fruits and vegetables. Their observation implies an association between organic agricultural practices and sustainability, indicating that such practices foster a mindset that prioritises long-term ecological balance and the production of crops in harmony with seasonal cycles. They also found that organic meat from free-range cattle farms had a distinct taste and reduced the environmental impact by minimising chemical use and waste from feedlots. The observation implies that consumer participants were not only attuned to the sensory aspects of organic meat but also considered the broader ecological implications of organic production methods. Overall, consumer participants recognised the positive environmental aspects of organic agriculture while acknowledging areas that require improvement to make it even more sustainable.

An important question regarding consumers' knowledge and perceptions of organic food products is whether they purchase these products. Understanding their general preference for organic food purchases was essential to evaluate their willingness to purchase such products from local community gardens. Consumer participants indicated a variety of factors influenced their willingness to purchase organic food products. While some participants consistently chose organic food products, others refrained due to cost differences compared to conventionally grown options. This suggests that efforts to promote organic food product purchase intent should address the perceived benefits of these products and affordability considerations. In addition, doubts about the authenticity of organic labels also impact their decisions, as scepticism about certain products following organic standards prevails. This lack of trust may influence consumers' purchasing decisions and create a need for transparent and reliable labelling practices. Moreover, accessibility to organic items was a significant barrier, with many favouring specific items like free-range eggs, meat, and various fruits and vegetables. Therefore, strategies that enhance the availability and affordability of these preferred items may reduce barriers and encourage more consumers to choose organic food options, especially from organic community garden initiatives.

Furthermore, concerns about humane animal treatment and slaughter methods also influenced their choices. Consumers commonly purchased meat from local butchers known for sourcing from reputable farms. This underscores the crucial role of building trust in the meat-sourcing process. Local butchers with a proven track record of procuring from trustworthy farms resonated with consumer preferences, highlighting the importance of fostering relationships and credibility within the local supply chain. These considerations illustrate consumer participants' awareness of ethical agricultural practices. Thus, prioritising transparency in animal welfare practices and ensuring the humane treatment of animals may enhance consumers' acceptance and stimulate their intent to purchase organic food products.

Consumer participants also unequivocally recognised the superior taste of organic food over mass-produced items, and this acknowledgement plays an important role when contemplating the purchase of organic food products. The perceived superior taste not only serves as a decisive factor in their decision-making process but also presents an opportunity for businesses and marketers to leverage this preference. Moreover, consumer participants had diverse options when buying organic food, like supporting local farms, community gardens, butchers, specialised shops, and farmers' markets, with some even maintaining home vegetable gardens. In addition, supermarket chains such as Checkers, Pick 'n Pay, Spar, and Woolworths were popular choices among consumers despite frequent references to the high prices of organic food products. Consumers' choices were influenced by several factors, including a personal connection to local vendors, the availability of organic and seasonal produce, concerns about higher supermarket prices, convenience, trustworthiness, and sustainability and environmental considerations. Acknowledging these factors can potentially promote consumers' purchase intent of organic food products sourced from organic community garden initiatives.

For consumer participants who did not regularly buy organic food products, the primary motivation for making the switch was the perceived health benefits and their desire to avoid hormones and additives commonly found in non-organic options. This finding underscores the importance of health considerations as a potent incentive for encouraging the adoption of organic food products among some consumers. In

addition, convenience and cost remain significant considerations, along with accessibility. Thus, increasing the accessibility of organic food products to the general public and transitioning them from a niche to the norm could boost consumers' intention to purchase organic food products from organic community food gardens.

The study of consumers' willingness to purchase organic food products unveiled a diverse array of factors shaping their choices, including economic considerations, concerns about food authenticity, humane animal treatment, and environmental sustainability. As the global food market increasingly recognises the significance of organic food products, it is evident that consumer preferences and concerns must be addressed to promote the growth and success of the organic food industry. Efforts to enhance accessibility, affordability, and consumer trust in organic food products, while concurrently advocating for sustainable agricultural practices, are fundamental to fostering greater consumer participation in a sustainable and health-conscious food consumption paradigm. The findings align with the broader goal of normalising and expanding the availability of organic food products, contributing to a more sustainable and health-oriented food consumption setting. The following section focuses on consumers' willingness to purchase organic food products from a local community garden.

8.2.1.2 Determining consumers' willingness to purchase organic food products from a local organic community garden

Before determining consumer participants' willingness to purchase organic food products from a local organic community garden, the researcher was interested in the consumer participants' understanding of a 'community garden'. The findings revealed diverse views; some strongly supported these initiatives, while others displayed limited knowledge. Consumer participants defined 'community gardens' as spaces created and maintained by community members to provide communal benefits, including access to fresh produce, fostering a sense of community, and promoting sustainability. However, the introduction of profit-making objectives was recognised as potentially altering the nature of community gardens, highlighting the need to balance economic viability with community goals. This suggests that successful and sustainable organic community garden initiatives should carefully navigate and balance the integration of

economic considerations while preserving the fundamental community-oriented goals. Furthermore, consumer participants expressed a strong belief in supporting locally produced food products, placing a notable emphasis on sustainability and community engagement. Their belief lies in the perceived value of supporting smaller, local entities as opposed to larger commercial networks. This inclination toward favouring local entities over larger networks is indicative of a clear consumer preference. Thus, in exploring organic community gardens' potential contribution to sustainability, these consumer sentiments highlight the need to emphasise local and community-driven aspects of these initiatives.

Additionally, consumer participants saw community gardens as a means to combat food scarcity, particularly in local schools, by providing students with access to nutritious produce and engaging them in food production activities. This perspective suggests that community gardens have the potential to contribute to food security and foster community engagement and cooperation, particularly within educational settings. Moreover, this finding illustrates the benefits of such initiatives extending beyond providing fresh produce to actively involving community members, especially students, in sustainable and educational food practices, emphasising the positive effect these initiatives will have on social sustainability.

Some championed the idea of self-sufficiency and sustainability within community gardens, advocating for responsible consumption and seasonal, self-sustaining food options, including organic food production. This finding indicates that the idea of organic community gardens might resonate with consumers who prioritise self-sufficiency and sustainability. While acknowledging individual and small-scale gardening efforts, these perspectives collectively highlighted the complex nature of consumers' views about community gardens, ranging from local support to food security, sustainability, and community engagement. Overall, the findings indicated that consumers were enthusiastic about supporting organic community gardens. The following section concludes the second objective of the study.

8.2.2 Objective 2 - Explore cultivators' perspectives on organic community gardens

8.2.2.1 Determining cultivators' knowledge and perspectives of organic food products

The findings regarding cultivators' knowledge and perspectives of organic food products provided valuable insights. Cultivators involved in community gardens emphasised the fundamental need for fresh fruit and vegetables and considered organic community gardens as a solution to address this need. In addition, cultivator participants believed that growing their produce organically could improve access to fresh and nutritious food, especially for the local community. These cultivator participants also strongly believed in the nutritional benefits of organic foods, perceiving them as having better nutritional value than non-organic options. Furthermore, cultivator participants expressed the belief that organic foods, grown without synthetic pesticides or fertilisers, offer better taste and appearance. These findings collectively highlight the potential of organic community gardens not only as providers of fresh produce but also as contributors to nutritional well-being, health consciousness, and community sustainability. Moreover, these findings suggest that organic community food gardens can serve as holistic contributors to sustainable development by addressing economic needs, fostering social well-being, and promoting environmentally conscious practices.

Cultivator participants acknowledged that organic food gardening may have lower yields than conventional agricultural methods initially. However, over time, the soil in organic food gardens can improve, resulting in stronger and more disease-resistant plants, ultimately contributing to improved and more sustainable production outcomes. This acknowledgement contributes to the promotion of organic community food gardens as it highlights the need to consider and communicate the long-term benefits associated with organic agricultural practices, even if these gardens may not offer immediate maximum yields. Furthermore, the community garden cultivators explicitly stated that they avoid using synthetic pesticides and herbicides in their gardening practices. They relied on natural fertilisers, such as compost and animal manure, to maintain their gardens organically. This reflects their commitment to organic and chemical-free cultivation. In addition, the cultivator participants valued the use of heirloom seeds and emphasised the difference between heirloom and GMO seeds,

reflecting their commitment to preserving natural and non-genetically modified seed varieties and their understanding of organic agricultural practices.

Finally, the cultivator participants elaborated on the favourable environmental outcomes associated with organic community gardens. They emphasised that organic gardens positively contribute to the environment by establishing green spaces, replenishing groundwater, mitigating carbon dioxide levels, and supporting urban sustainability. This finding suggests that, beyond food production, these gardens play a vital role in enhancing ecosystem services and fostering sustainable urban living. As the study explored organic community gardens' potential contribution to sustainability, this environmental perspective underscores the broader positive impact these initiatives can have on urban ecosystems, reinforcing the importance of integrating environmental considerations into organic community gardening practices.

In summary, these findings suggest that cultivators involved in community gardens are deeply committed to organic agricultural practices and view it as a way to provide fresh, nutritious, and environmentally friendly produce to their communities. The following section concludes the barriers identified by the cultivators in cultivating organic community gardens.

8.2.2.2 Identifying the barriers to organic community garden cultivation in the local community

The cultivator participants in the current study revealed several barriers to organic community garden cultivation in their local community. One significant challenge is the cost associated with obtaining organic certification, making it financially unfeasible for smaller-scale community gardens to label their produce as organic, even if they adhere to organic practices. These costs may deter cultivators from pursuing organic certification. Additionally, some cultivators expressed difficulties related to paperwork and technical processes associated with certification. The complexity of paperwork and a lack of technical knowledge can thus pose obstacles to obtaining organic certification. Therefore, it is crucial to address financial barriers and streamline certification processes to improve the viability of organic agricultural practices within community gardens. This finding underscores the significance of making organic

certification more accessible and user-friendly, especially for smaller-scale initiatives, aiming to foster the widespread adoption of sustainable agricultural practices.

In addition, theft is another prevalent issue in community food gardens, which can disrupt the sustainability of these initiatives. The risk of theft, especially in open or accessible garden areas, poses a challenge to maintaining and sustaining the gardens. This finding emphasises the need to implement effective security measures and community engagement strategies to mitigate the impact of theft on community food gardens. It highlights the importance of considering not only environmental and financial factors but also social and security-related aspects to ensure the long-term viability of community-based food cultivation initiatives.

Moreover, land availability was another constraint some cultivators faced, limiting their ability to expand their gardening activities, create employment opportunities, and contribute more significantly to the community. This suggests that initiatives to support and expand organic community food gardens should consider strategies to overcome land constraints, facilitating the growth and positive impact of these endeavours within the community. Equally important are the financial constraints these cultivators face, especially the high costs of organic food products and certification, which can limit cultivators' ability to invest in organic agriculture, impacting their profitability and ability to maintain or expand their organic agricultural activities. In the context of school gardens, challenges include students' reluctance to engage in food gardening due to the effort required, as well as the issue of maintaining gardens during school holidays when students are unavailable to tend to the garden.

Surprisingly, the cultivator participants did not solely concentrate on the barriers organic community gardens faced; instead, the conversation organically shifted towards exploring potential opportunities. The cultivators emphasised the importance of educational programmes, empowerment, and the broader societal advantages associated with community food gardens. Cultivator participants recognised the need for educational initiatives aimed at teaching people how to grow food, even in limited spaces. This emphasis on education is considered a fundamental step in combating hunger and fostering self-sufficiency within communities. Furthermore, it was deemed crucial among cultivator participants to engage youth in sustainability initiatives, with

recommendations to integrate sustainability topics into the school curriculum, particularly within subjects like Life Orientation. In addition, cultivator participants emphasised that sustainability education goes beyond mere instruction; it entails maintaining interest and fostering active engagement.

The findings further highlighted the role of community gardens in empowering marginalised individuals. These gardens provide work opportunities for those facing homelessness, allowing them to earn tokens that can be exchanged for necessities. The gardens also offer a space for the local community to connect, particularly older residents who frequent the gardens for social interactions. Community gardens like Somerset West Village Garden thus extend their impact beyond food production, serving as vehicles for social and humanitarian goals. Similarly, Oude Molen Eco Village employs individuals from the local mental institution, channelling the money back into patients' occupational therapy. These initiatives also engage children from the local community, introducing them to gardening and sustainability from an early age.

The social sustainability implications of the findings become apparent through the positive contribution these community gardens could have on marginalised individuals, fostering a sense of community, providing economic support, and creating opportunities for personal development. Subsequent to the discussion on the barriers cultivators face in organic food cultivation, their willingness to market and sell their produce at local organic markets is considered in the section that follows.

8.2.2.3 Exploring cultivators' willingness to sell produce at local organic markets

The cultivators who participated in the interviews were already engaged in marketing their organic produce, either through their market events, local community markets, or by supplying retailers like Woolworths. Consequently, there is a need for deeper investigation, potentially from the vantage point of novice organic community garden cultivators, to gain a more comprehensive understanding of this aspect.

However, the conversations with the cultivators shed light on their strong commitment to community projects and unwavering dedication to making their produce accessible

to the local community first, with the exception of C3. While they engaged in local markets, their primary focus was to ensure that their fresh produce directly benefits their immediate communities. Their involvement extended beyond commercial interests, emphasising community support and sustainability on a local scale. These findings reveal a deep sense of community responsibility and a steadfast commitment to fostering sustainability within their immediate communities. The upcoming section concludes Objective 3, focusing on identifying the presence and cultivation of organic community gardens in the local area from a consumer perspective.

8.2.3 Objective 3 - Identify the presence and cultivation of organic community gardens in the local area

The findings regarding the presence and cultivation of organic community gardens in the local area revealed diverse levels of awareness among consumers. While some consumer participants demonstrated limited knowledge and partial awareness of specific local initiatives or markets supporting community gardens, others openly admitted to a complete lack of awareness in this regard. The consumer participants with limited awareness generally referenced local food sources without delving into the specifics of community gardens, reflecting a superficial understanding of the subject matter. Conversely, consumer participants who demonstrated awareness of community gardens exhibited a clear understanding of specific projects, often related to community-based agriculture or organic food sources. These participants also raised valid concerns about issues such as the authenticity of organic certification, the significance of trust in transactions, and the importance of proximity when choosing food sources.

These findings illustrate the pressing need for greater education and the promotion of organic community food garden initiatives within local communities, particularly among those consumers who displayed limited awareness. Addressing the existing gaps in consumer knowledge through deliberate awareness-building initiatives makes it possible to foster increased engagement and support for sustainable, locally driven food production efforts. The subsequent discussion focuses on the conclusion of Objective 4, delving into the exploration of local market opportunities for organic food products.

8.2.4 Objective 4 - Explore the local market opportunities for organic food products produced from organic community gardens

The findings on marketing opportunities for organic food products from community gardens highlight several critical considerations. A central theme was the influence of 'word-of-mouth' as a powerful marketing tool within local communities, as emphasised by several of the consumer participants. However, this approach should be complemented with a broader online presence, including the use of social media platforms like Facebook, Instagram, and WhatsApp groups to extend the reach and visibility of these organic community food gardens. Moreover, organic community gardens possess the capacity to function as educational centres, imparting knowledge to communities about sustainable and organic agricultural practices, thereby augmenting their attractiveness and significance within the community. Community gardens' potential role in educating the younger generation about the importance of fresh, locally grown produce is also underscored, with an emphasis on the educational value at the point of purchase and the ease with which individuals can be instructed to maintain small, organic sections, thus utilising it as a strategic marketing tool.

Furthermore, consumer participants also highlighted the importance of the accessibility of organic food products as a valuable marketing tool. The convenience of accessing fresh organic food products was mentioned, prompting organic community gardens to explore diverse and convenient access methods to meet consumers' varied needs. These findings collectively stress the marketing opportunities for organic community food gardens, emphasising the importance of a holistic approach that integrates both traditional and digital marketing strategies, educational initiatives, and enhanced accessibility to meet consumers' evolving preferences. Several key recommendations are provided in the sections that follow.

8.3 RECOMMENDATIONS

The current exploration delved into diverse facets of organic community food gardens and their potential contribution to sustainability, examining consumers' and cultivators' perspectives. The subsequent recommendations arose from the conclusive findings of the study's objectives.

- [∞] Comprehensive consumer education programmes are imperative to enhance organic community gardens' potential contribution to sustainability. These programmes should focus on clarifying the distinctions between organic and nonorganic foods, emphasising the associated health benefits, environmental impact, and ethical farming practices. Educational institutions can contribute by integrating organic agricultural and sustainability topics into the curriculum, fostering awareness and understanding among future consumers and cultivators. In addition, NGOs and community support networks can facilitate workshops, advocacy campaigns, and information dissemination to bridge the knowledge gap among consumers.
- ∞ Furthermore, transparent practices among organic community garden cultivators must be established to build and maintain consumer trust, addressing concerns about the credibility of organic labels through increased openness about organic agricultural methods and production processes.
- ∞ Government bodies play a crucial role by implementing policies that support organic agricultural practices, provide financial incentives for certification, and promote educational initiatives.
- Advocating for reduced certification costs, particularly for small-scale cultivators, is crucial, necessitating collaborative efforts to make certification more accessible. Thus, certification bodies should actively engage with small-scale cultivators, offering guidance on meeting standards and reducing certification costs.
- Additionally, targeted awareness campaigns by retailers and marketers and online platforms that disseminate information will contribute to building awareness and support for local organic community practices.

By collectively addressing these recommendations, stakeholders can enhance consumers' purchase intent of organic food products from local organic community gardens, contributing to these initiatives' overall success and sustainability. The next section delves into the study's contributions to the fields of knowledge, methodology, and theory.

8.4 CONTRIBUTIONS OF THE STUDY

8.4.1 Contributions to the body of knowledge

In the South African context, there have been limited studies on organic food products, with a notable absence of research exploring the potential of promoting organic community gardens for sustainability. This study holds substantial relevance to the three pillars of sustainability (environmental, social, and economic) and aligns with the SDGs within a South African context. The study contributes to social sustainability theories by directly addressing SDG 2 (Zero Hunger) through the promotion of sustainable agriculture in organic community food gardens, improving food security and nutrition in these communities. Furthermore, it corresponds with SDG 3 (Good Health and Well-being) by highlighting organic food production's favourable influence on the general well-being of these communities. The promotion of community participation in community gardens is thus emphasised for the greater good. Moreover, the study indirectly supports social sustainability theories related to SDG 15 (Promote Peaceful and Inclusive Societies for Sustainable Development) by recognising the role of community engagement in these gardens, fostering social cohesion, and contributing to the development of peaceful and inclusive societies. To clarify, the research provides practical insights into how sustainable agricultural practices can effectively advance the social sustainability goals outlined in the key SDGs. Furthermore, it addresses economic sustainability.

In the context of SDG 8 (Decent Work and Economic Growth), the study proposes strategies to reduce certification costs for small-scale cultivators and expand the market for local, organic food produce. These strategies include, but are not limited to, group certification, which allows small cultivators to share certification expenses through cooperatives, and seeking government subsidies and grants to provide financial support. Simplifying the certification process and negotiating reduced fees with certification bodies can further decrease costs. Additionally, providing technical assistance and training to community garden cultivators to enhance efficiency in meeting requirements, and implementing internal inspection and self-monitoring systems can help manage expenses. Developing cost-sharing programmes with local organisations can also make certification more affordable for these cultivators. Doing so directly supports sustained, inclusive, and sustainable economic growth, and

promotes full and productive employment within that community. Furthermore, the study aligns with SDG 9 (Industry, Innovation, and Infrastructure) by fostering innovation in agriculture through the promotion of sustainable and organic practices within community gardens. This aligns with the country's intention to build resilient infrastructure and promote inclusive and sustainable industrialisation. In essence, the research highlights the economic sustainability of organic community gardens by creating employment opportunities, fostering innovation, and contributing to overall economic resilience.

From an environmental perspective, the study underscores organic community gardens' significant contribution to environmental sustainability, aligning with multiple SDGs. Concerning SDG 2 (Zero Hunger), organic community gardens promote sustainable agriculture, addressing the goal of improving food security and nutrition through environmentally friendly practices. Furthermore, regarding SDG 12 (Responsible Consumption and Production), the study supports the adoption of sustainable consumption patterns by advocating for informed choices, responsible consumption, and sustainable food production practices within these community gardens. Additionally, in addressing urgent climate concerns outlined in SDG 13, the organic gardening practices advocated in the study contribute to mitigating climate change impacts by reducing harmful chemical use and supporting ecosystem conservation. Furthermore, the emphasis on sustainable ecosystems aligns with SDG 14, as organic community gardens promote conservation and the sustainable use of land resources, thereby halting biodiversity loss and ensuring the overall health of ecosystems. In essence, the research highlights the pivotal role of organic community gardens in fostering environmental sustainability across a spectrum of interconnected SDGs. Within the South African context, the research provides locally relevant insights to address specific challenges, such as theft and certification cost, while promoting sustainability in food production, economic growth, and community development. Therefore, this study can be a valuable resource for policymakers, researchers, and organisations aiming to advance sustainability goals in South Africa by harnessing organic community gardens' potential.

8.4.2 Contributions to methodology

The selected methodology for this study – which combined an interpretive paradigm, hermeneutic phenomenology, exploratory design, non-probability sampling through purposive and convenience snowball techniques, and semi-structured interviews – was appropriate in exploring organic community gardens' potential contribution to sustainability. This comprehensive approach was chosen to best align with the qualitative nature of the research, emphasising an understanding and interpretation of participants' experiences regarding organic community gardens.

Hermeneutic phenomenology enabled a deep exploration of the lived experiences and meanings associated with these gardens, while the exploratory design catered to the study's open-ended and explorative objectives. Furthermore, non-probability sampling, particularly purposive and convenience snowball sampling, allowed for the targeted selection of participants with relevant insight, ensuring diverse perspectives. In addition, the use of semi-structured interviews allowed for a balance between flexibility and structure, enabling participants to express their thoughts freely while ensuring a consistent exploration of key topics related to organic community gardens. This methodological combination aimed to gain insight from both cultivators and consumers, capturing a spectrum of perspectives to cultivate a comprehensive understanding of the factors contributing to organic community gardens' impact on sustainability. The objective was to illuminate their potential contributions to overarching concepts of environmental, social, and economic sustainability, as well as SDGs, a goal that was accomplished.

8.4.3 Contributions to theory

The study's findings significantly refine the initial conceptual framework presented in Figure 1.2. Consumer attitudes toward organic food products encompass a spectrum of perspectives, including health benefits, ethical farming practices, and avoidance of harmful substances. Challenges in distinguishing between organic and non-organic items, coupled with associations of organic food with seasonal availability and higher costs, revealed the complexity of consumers' perspectives. In the labelling context, positive attitudes toward and trust in organic labels contributed to consumers' intention

to choose organic food products. However, the study also highlighted consumers' scepticism regarding organic food labelling in South Africa. Concerns about certification costs and scepticism regarding health benefits and high prices influence purchase intent, demonstrating the intricate interplay of factors in the decision-making process.

Moreover, the decision-making process for organic food products is intricately linked to consumers' associations with factors such as price differences, doubts about authenticity, and accessibility. The perceived impact of price disparities emerged as a crucial determinant influencing consumers' decisions, where affordability prompts a thorough assessment of the perceived benefits of organic food products. Doubts concerning the authenticity of organic items introduce an additional layer to the decision-making process, emphasising the vital role of trust in the organic label. Additionally, the accessibility of organic options emerged as a key factor, with limited availability or variety posing challenges for consumers in incorporating them into their regular purchase decisions. The decision-making process is thus revealed as the interplay of considerations, including price, authenticity, and accessibility, collectively shaping consumers' final decisions regarding organic food products.

In addition, the study's findings aligned with the foundational principles of the TPB and clarified the complex decision-making processes surrounding organic food products. The study's findings regarding the diverse range of consumer perceptions of organic food products in the South African context, encompassing health, environmental impact, and ethical farming practices, substantively align with the TPB's foundational emphasis on attitudes as determinants of individual behaviour. Furthermore, the exploration of consumer trust and reservations regarding organic labelling, integrated with the TPB's construct of subjective norms, underscores the important role of transparent communication in shaping societal influences on consumer attitudes.

Moreover, the study's identification of financial barriers encountered by small-scale cultivators resonated deeply with the TPB's principle of perceived behavioural control, signifying that these hindrances served as influential barriers impacting cultivators' perceived control over their adoption of organic agricultural food practices. Furthermore, the study's insights into consumer expectations, health perceptions,

affordability considerations, recognition of environmental impacts, and factors influencing purchase intent intricately aligned with the TPB's framework of attitudes, subjective norms, and perceived behavioural control, providing a sophisticated understanding of the complex influences steering consumer behaviour within the organic food product domain. Ultimately, the study's emphasis on addressing economic considerations and sustainability concerns resonated profoundly with the TPB's imperative to shape attitudes, subjective norms, and perceived behavioural control, thereby facilitating the mainstream adoption of organic food products.

Therefore, this study offered a scholarly discussion that not only enriched the existing academic conversation but also provided a theoretical framework for policymakers and practitioners to formulate complex strategies fostering sustainability and widespread acceptance of organic food products within the distinctive contours of the South African context. While the primary objective of the present study was not to directly apply or collect detailed information on each component of the theory, noteworthy contributions that could enhance the theory exist. These potential contributions warrant further investigation to explore their specifics. Consequently, the researcher aimed to highlight the relevance of the findings by demonstrating their applicability to the components of the TPB, specifically in relation to consumers' intentions to purchase organic food products from organic cultivators.

The factors related to organic food retailers also contribute substantially to the theoretical framework surrounding consumers' purchase intent of organic food products. Consumers' preferences for various outlets, such as local farms, community gardens, butchers, and farmers' markets, go beyond considerations of availability and pricing. The study identified factors like personal connections, enjoyable shopping experiences, the availability of organic and seasonal produce, concerns about higher prices at supermarkets, and preferences for convenience as essential determinants in consumers' purchasing decisions. Trust in retailers, authenticity, and sustainability considerations also emerged as pivotal factors, enriching the theoretical framework with insights into the complexities of consumer choices.

Additionally, consumers' understanding of community gardens adds to the theoretical framework by unveiling a spectrum of perspectives, from strong support and deep

comprehension to limited awareness among participants. This information enriches existing literature on community gardens, emphasising their significance in fostering social interactions, supporting local communities, and unintentionally enhancing food security and sustainability. The study, aligned with the TPB, explored consumers' willingness to exclusively purchase organic food products from community gardens, shedding light on attitudes, subjective norms, and perceived behavioural control. Identified motivations, such as supporting local production and fostering community engagement contribute to the TPB by emphasising the role of subjective norms and attitudes in shaping consumers' intentions. Barriers, including convenience and cost concerns, reflect practical challenges that influence purchasing decisions, offering a comprehensive view of the factors impacting consumers' choices in purchasing organic food products from community gardens.

The barriers unveiled in conversations with organic community garden cultivators add to the existing theoretical framework, offering practical insights into the challenges these initiatives face. Economic hurdles, exemplified by the reluctance to obtain costly organic certification and the impact of theft on sustainability, underscore the financial and security aspects affecting organic gardening. The experiences shared regarding land availability, financial constraints, and students' reluctance provide perspectives emphasising the need for strategic planning, community engagement, and educational initiatives. These insights contribute to a comprehensive understanding of the economic, social, and practical dimensions shaping the sustainability and viability of organic community gardens, enriching the theoretical framework with real-world complexities and facilitating informed strategies for overcoming barriers.

The analysis of marketing opportunities for local community gardens also significantly contributes to the current theoretical framework by revealing crucial considerations. The emphasis on 'word-of-mouth' as a powerful marketing tool, coupled with endorsements on social media platforms, aligns with contemporary e-marketing strategies and reinforces the importance of positive attitudes toward organic food products. Recognising the significance of nutrient value prompts a recommendation for community gardens to focus on providing affordable, nutritious options for diverse socioeconomic groups. The proposal for community gardens to act as educational hubs for sustainable farming practices also introduces a novel dimension to their role.

The philosophical question regarding the primary purpose of these gardens underscores the need for mission alignment and tailored marketing strategies. The lack of marketing efforts for community gardens in South Africa ultimately reflects the potential for investments in brand identity and social media presence. Stressing convenience in accessing fresh produce encourages community gardens to adopt various access methods.

Finally, the highlighted role of community gardens in educating the younger generation aligns with existing literature linking education levels to organic food preferences, emphasising the need for comprehensive education programmes to reshape consumers' beliefs and knowledge of organic food products. Overall, these insights provide a holistic perspective on community gardens' potential to promote local food sustainability and education while emphasising the importance of tailored marketing strategies.

8.5 NEW CONCEPTUAL FRAMEWORK

The conceptual framework, as depicted in Figure 1.2, was designed to explore the demand and supply chains of organic food products from the viewpoints of both consumers and cultivators. Within the South African context, the newly developed theoretical framework serves to integrate and augment the existing model, concluding the exploration of purchase intent toward organic food products sourced from community food gardens. This integrated framework is expected to contribute to the advancement of environmental, social, and economic sustainability, as illustrated in Figure 8.1.







Figure 8.1: Amended conceptual framework

8.6 LIMITATIONS OF THE STUDY

The study had several notable limitations. The data collection method employed in this study relied on online platforms like Google Meet, Microsoft Teams, WhatsApp calling, and Zoom for interviews due to COVID-19 restrictions, and may have excluded individuals with limited access to the internet or digital devices, potentially leaving out less technologically proficient or marginalised populations. This might have resulted in a less inclusive study. Additionally, due to the study's reliance on self-reported data from interviews, response or recall bias might have emerged, impacting the accuracy of participants' accounts of their experiences and perspectives. In addition, the small number of cultivator interviews due to the scarcity of operational community gardens as a result of the pandemic and financial withdrawal from the government might limit the depth and breadth of insights obtained from the cultivator group. While the study

suggests that organic community gardens have the potential to contribute to sustainability, it does not provide a comprehensive assessment of the quantitative impact of these gardens on environmental, economic, and social sustainability indicators.

8.7 FUTURE RESEARCH

As mentioned, research regarding organic food products and their role in sustainability, especially concerning organic community garden initiatives, is currently limited in South Africa. Therefore, future research can focus on a variety of different fields. The field of organic community gardens and their contribution to sustainability could benefit from more extensive data collection and rigorous statistical analysis. This research would be valuable to determine organic community gardens' measurable contribution to sustainability domains, further strengthening their role in achieving SDGs in South Africa.

In addition, research is required to improve consumer awareness of organic food products and foster trust in organic labels. Research efforts should not only focus on developing strategies to reduce certification costs for small-scale cultivators but also address concerns about the credibility of these organic certifications. This undertaking can be decisive in promoting the widespread adoption of sustainable organic agricultural practices.

Furthermore, to gain a comprehensive understanding of organic food product perceptions, there is a need for comparative research across the diverse cultures and regions within the South African context. Such studies could show variations in consumer and cultivator perspectives and shed light on how cultural factors influence sustainability practices, especially as they relate to organic community gardening. Additionally, investigating the economic aspects of organic community gardens and, more specifically, the financial well-being of local cultivators will offer valuable insight. This will entail exploring possible financial support, creating employment opportunities, and devising strategies to increase economic sustainability within the context of organic community gardens. It is equally important to engage younger generations in sustainable and organic agricultural practices. Investigating the motivations,

preferences, and educational needs of youth in the context of locally grown produce and community garden projects is important for ensuring the long-term sustainability of these practices.

Yet another avenue of research could be comparative research aimed at assessing the effectiveness of various marketing strategies, such as 'word-of-mouth' and an online presence, in promoting organic, locally grown food products can also offer valuable insights. Such studies can help pinpoint the most impactful approaches for raising awareness and driving demand for organic food products from organic community food gardens. Furthermore, exploring the diversity of community gardens, including their sizes, structures, and operational methods, can provide valuable insights into how these variables influence their contributions to sustainability and their roles within local communities. Conducting cohort studies that track the development and contributions of organic community gardens over an extended period can offer a deeper understanding of their long-term sustainability and societal roles. Finally, comparative research involving other countries can provide a global perspective on South African organic community gardens' sustainability contributions. This international comparison can illustrate how these initiatives link with similar efforts worldwide.

8.8 NOVELTY OF THE RESEARCH

The novelty of this study exploring organic community gardens' potential contribution to sustainability in the South African context lies in its comprehensive examination of the perspectives of both cultivators and consumers. The study not only assessed consumer attitudes towards organic food products but also explored the viewpoints of cultivators, offering a holistic understanding of the dynamics within organic community food gardens. Furthermore, by exploring a variety of consumer perspectives from different provinces within South Africa, the study offered insights into the complex factors influencing purchasing decisions, such as health considerations, affordability concerns, and trust in labelling. Moreover, the research contributes to the literature by addressing the challenges small-scale cultivators face, particularly in South Africa, shedding light on financial barriers and especially the need for support mechanisms. The study's focus on aligning organic community gardening practices with consumer expectations, environmental considerations, and ethical agricultural practices adds an important layer to the broader discussion on sustainability. This dual perspective, encompassing both cultivators and consumers, provides valuable insight that can inform targeted strategies for developing and promoting sustainable organic practices in South Africa.

8.9 CONCLUSION

In this chapter, the study's objectives were addressed. Organic community gardens' potential to significantly contribute to sustainability was illustrated, with consumers and cultivators expressing a strong belief in the positive environmental impacts of organic food production. They associated organic agriculture with eco-friendly practices, avoiding harmful chemicals, and fostering natural processes, emphasising the environmental benefits such as groundwater replenishment and reduced carbon dioxide emissions. Additionally, both groups emphasised supporting local and smallerscale agricultural entities, reducing the carbon footprint from long-distance food transportation, and boosting local economies for enhanced environmental and social sustainability. Moreover, organic community gardens are recognised as educational centres capable of imparting sustainable agricultural practices, promoting long-term sustainability (environmentally and socially), fostering community involvement, and addressing cost-related barriers to economic sustainability. The study strongly suggests that organic community gardens hold the potential to contribute to sustainability through environmentally friendly agriculture, local support, and community engagement in sustainable organic food production.

Adam, A.S. (2013). Managing insider issues through reflexive techniques: an insiderresearcher's journey. [online] Available at: http://saruna.mnu.edu.mv/jspui/handle/123456789/2157 [Accessed 20 Jan. 2024].

Adamchak, R. (2019). Organic farming | Definition, History, Methods, & Benefits. In: *Encyclopædia Britannica*. [online] Available at: https://www.britannica.com/topic/organic-farming.

Adger, W.N., Boyd, E., Fábos, A., Fransen, S., Jolivet, D., Neville, G., Campos, R.S. de and Vijge, M.J. (2019). Migration transforms the conditions for the achievement of the Sustainable Development Goals. *The Lancet Planetary Health*, [online] 3(11), pp.e440–e442. doi:https://doi.org/10.1016/S2542-5196(19)30213-X.

Aertsens, J., Mondelaers, K., Verbeke, W., Buysse, J. and Van Huylenbroeck, G. (2011). The influence of subjective and objective knowledge on attitude, motivations and consumption of organic food. *British Food Journal*, 113(11), pp.1353–1378. doi:https://doi.org/10.1108/00070701111179988.

Ajzen, I. (2011). The Theory of Planned Behaviour: Reactions and Reflections. *Psychology & Health*, 26(9), pp.1113–1127. doi:https://doi.org/10.1080/08870446.2011.613995.

Ajzen, I. (2019). *Theory of Planned Behavior Diagram*. [online] people.umass.edu. Available at: https://people.umass.edu/aizen/tpb.diag.html.

Ajzen, I. (2020). The theory of planned behavior: Frequently asked questions. *Human Behavior and Emerging Technologies*, [online] 2(4), pp.314–324. doi:https://doi.org/10.1002/hbe2.195.

Aksoy, F. and Bayram Arlı, N. (2019). Evaluation of sustainable happiness with Sustainable Development Goals: Structural equation model approach. *Sustainable Development*, 28(1). doi:https://doi.org/10.1002/sd.1985.

Al Shamsi, K.B., Compagnoni, A., Timpanaro, G., Cosentino, S. and Guarnaccia, P.

(2018). A Sustainable Organic Production Model for 'Food Sovereignty' in the United Arab Emirates and Sicily-Italy. *Sustainability*, 10(3), p.620. doi:https://doi.org/10.3390/su10030620.

Aldiabat, K. and Le Navenec, C.-L. (2018). Data saturation: The mysterious step in grounded theory method. *The Qualitative Report*, 23(1). doi:https://doi.org/10.46743/2160-3715/2018.2994.

Alharahsheh, H. and Pius, A. (2020). A Review of Key paradigms: positivism VS interpretivism. *Global Academic Journal of Humanities and Social Sciences*, [online] 2(3), pp.39–43. doi:https://doi.org/10.36348/gajhss.2020.v02i03.001.

Anaduaka, E.G., Uchendu, N.O., Asomadu, R.O., Ezugwu, A., Okeke, E.S. and Ezeorba, T.P.C. (2023). Widespread use of toxic agrochemicals and pesticides for agricultural products storage in Africa and developing countries: Possible panacea for ecotoxicology and health implications. 9(4), pp.e15173–e15173. doi:https://doi.org/10.1016/j.heliyon.2023.e15173.

Anbu, S. (2020). *Environment and Rural Development*. [online] Chennai, India: Novel Corporation, pp.415–427. Available at:

https://www.researchgate.net/publication/340085155_Organic_Farming_and_Sustai nable_Agriculture/citations.

Andersen, J.K., Boldrin, A., Christensen, T.H. and Scheutz, C. (2011). Mass balances and life cycle inventory of home composting of organic waste. *Waste Management*, 31(9-10), pp.1934–1942. doi:https://doi.org/10.1016/j.wasman.2011.05.004.

Anney, V. (2014). Ensuring the quality of the findings of qualitative research: Looking at trustworthiness criteria. *Journal of Emerging Trends in Educational Research and Policy Studies*, 5(2), pp.272–281.

Annunziata, A., Agovino, M. and Mariani, A. (2019). Sustainability of Italian families' food practices: Mediterranean diet adherence combined with organic and local food consumption. *Journal of Cleaner Production*, [online] 206, pp.86–96. doi:https://doi.org/10.1016/j.jclepro.2018.09.155.

Apaolaza, V., Hartmann, P., D'Souza, C. and López, C.M. (2018). Eat organic – Feel good? The relationship between organic food consumption, health concern and subjective wellbeing. *Food Quality and Preference*, 63, pp.51–62. doi:https://doi.org/10.1016/j.foodqual.2017.07.011.

Arcury, T.A., Nguyen, H.T., Summers, P., Talton, J.W., Holbrook, L.C., Walker, F.O., Chen, H., Howard, T.D., Galván, L. and Quandt, S.A. (2014). Lifetime and current pesticide exposure among Latino farmworkers in comparison to other Latino immigrants. *American Journal of Industrial Medicine*, 57(7), pp.776–787. doi:https://doi.org/10.1002/ajim.22324.

Arunrat, N., Sereenonchai, S., Chaowiwat, W., Wang, C. and Hatano, R. (2022). Carbon, Nitrogen and Water Footprints of Organic Rice and Conventional Rice Production over 4 Years of Cultivation: A Case Study in the Lower North of Thailand. *Agronomy*, 12(2), p.380. doi:https://doi.org/10.3390/agronomy12020380.

Asioli, D., Aschemann-Witzel, J., Caputo, V., Vecchio, R., Annunziata, A., Næs, T. and Varela, P. (2017). Making sense of the 'clean label' trends: A review of consumer food choice behavior and discussion of industry implications. *Food Research International*, 99, pp.58–71. doi:https://doi.org/10.1016/j.foodres.2017.07.022.

Aspers, P. and Corte, U. (2019). What Is Qualitative in Qualitative Research. *Qualitative Sociology*, 42(2), pp.139–160. doi:https://doi.org/10.1007/s11133-019-9413-7.

Astute (2018). *Buyer Decision Process: What John Dewey Can Teach You About Marketing*. [online] astute. Available at: https://astute.co/buyer-decision-process/.

Attia, M. and Edge, J. (2017). Be(com)ing a reflexive researcher: a developmental approach to research methodology. *Open Review of Educational Research*, 4(1), pp.33–45. doi:https://doi.org/10.1080/23265507.2017.1300068.

Auerbach, R. (2020). Organic food systems: meeting the needs of Southern Africa. Wallingford, Oxfordshire Cabi.
Ba, Q.-X., Lu, D.-J., Kuo, W. and Lai, P.-H. (2018). Traditional Farming and Sustainable Development of an Indigenous Community in the Mountain Area—A Case Study of Wutai Village in Taiwan. *Sustainability*, 10(10), p.3370. doi:https://doi.org/10.3390/su10103370.

Bacher, J., Lemcke, J., Quatember, A. and Schmich, P. (2019). Probability and Nonprobability Sampling: Representative Surveys of hard-to-reach and hard-to-ask populations. Current surveys between the poles of theory and practice. *Survey Methods: Insights from the Field (SMIF)*. [online] doi:https://doi.org/10.13094/SMIF-2019-00018.

Balcerowicz-Szkutnik, M., Szkutnik, W. and Szkutnik, W. (2020). Sustainable development goals as a challenge for national and global development. *SHS Web of Conferences*, 74, p.05006. doi:https://doi.org/10.1051/shsconf/20207405006.

Barański, M., Rempelos, L., Iversen, P.O. and Leifert, C. (2017). Effects of organic food consumption on human health; the jury is still out! *Food & Nutrition Research*, [online] 61(1), p.1287333. doi:https://doi.org/10.1080/16546628.2017.1287333.

Barbu, A., Catană, Ş.-A., Deselnicu, D.C., Cioca, L.-I. and Ioanid, A. (2022). Factors Influencing Consumer Behavior toward Green Products: A Systematic Literature Review. *International Journal of Environmental Research and Public Health*, 19(24), p.16568. doi:https://doi.org/10.3390/ijerph192416568.

Barone, A.M., Grappi, S. and Romani, S. (2019). 'The road to food waste is paved with good intentions': When consumers' goals inhibit the minimization of household food waste. *Resources, Conservation and Recycling*, 149, pp.97–105. doi:https://doi.org/10.1016/j.resconrec.2019.05.037.

Barrett, D. and Twycross, A. (2018). Data collection in qualitative research. *Evidence Based Nursing*, [online] 21(3), pp.63–64. doi:https://doi.org/10.1136/eb-2018-102939.

Basha, M.B., Ghafar, A., Wahid, F., Alhafid, G., Al Shaer, E. and Shamsudin, M.F. (2021). Consumer Buying Behaviour towards Organic Food – A Case of UAE. *Transnational Marketing Journal*, 9(1). doi:https://doi.org/10.33182/tmj.v9i1.1028.

Basha, M.B., Mason, C., Shamsudin, M.F., Hussain, H.I. and Salem, M.A. (2015). Consumers Attitude Towards Organic Food. *Procedia Economics and Finance*, [online] 31, pp.444–452. doi:https://doi.org/10.1016/s2212-5671(15)01219-8.

Bastounis, A. 1, Buckell, J. 2, Hartmann-Boyce, J. 3, Cook, B. 3, King, S. 3, Potter, C. 3, Bianchi, F. 3, Rayner, M. 4, Jebb, S.A. 3 1 N.D. of P.C.H.S., protected] (A.B.), email, protected] (J.B.), email, protected] (J.H.-B.), email, protected] (S.K.), email, protected] (C.P.), email, protected] (F.B.), email, protected] (S.A.J.), email, Division of Epidemiology & Public Health, S. of M., protected] (A.B.), email, protected] (J.B.), email and protected] (J.H.-B.), email (2021). The Impact of Environmental Sustainability Labels on Willingness-to-Pay for Foods: A Systematic Review and Meta-Analysis of Discrete Choice Experiments. *ProQuest*, [online] p.2677. doi:https://doi.org/10.3390/nu13082677.

Battaglia, M.P., Dillman, D.A., Frankel, M.R., Harter, R., Buskirk, T.D., McPhee, C.B., DeMatteis, J.M. and Yancey, T. (2016). Sampling, Data Collection, and Weighting Procedures for Address-Based Sample Surveys. *Journal of Survey Statistics and Methodology*, 4(4), pp.476–500. doi:https://doi.org/10.1093/jssam/smw025.

Battersby, J. (2011). Urban food insecurity in Cape Town, South Africa: An alternative approach to food access. *Development Southern Africa*, 28(4), pp.545–561. doi:https://doi.org/10.1080/0376835x.2011.605572.

Baudry, J., Péneau, S., Allès, B., Touvier, M., Hercberg, S., Galan, P., Amiot, M.-J., Lairon, D., Méjean, C. and Kesse-Guyot, E. (2017). Food Choice Motives When Purchasing in Organic and Conventional Consumer Clusters: Focus on Sustainable Concerns (The NutriNet-Santé Cohort Study). *Nutrients*, [online] 9(2), p.88. doi:https://doi.org/10.3390/nu9020088.

Bekele-Thomas, N., Afonso-Gallegos, L., Harsha, D., Derick De Jongh, W., Fourie, N., Mkhize, J., Muller, A. and Schaefer (2018). *Implementing the Sustainable Development Goals in South Africa: Challenges & Opportunities*. [online] Available at: https://www.sun.ac.za/si/en-za/Documents/Trending/Implementing%20the%20SD Gs%20in%20SA_Digital.pdf.

Benbrook, C.M., Butler, G., Latif, M.A., Leifert, C. and Davis, D.R. (2013). Organic Production Enhances Milk Nutritional Quality by Shifting Fatty Acid Composition: A United States–Wide, 18-Month Study. *PLoS ONE*, 8(12), p.e82429. doi:https://doi.org/10.1371/journal.pone.0082429.

Bernard, H.R. (2013). Social Research Method: Qualitative and Quantitative Methods. Thousand Oaks, Calif.: Sage Publ.

Berr, K. (2023). Multisensuality Versus Visual Primacy of Landscape Perception. *RaumFragen: Stadt - Region - Landschaft*, pp.49–71. doi:https://doi.org/10.1007/978-3-658-40414-7_4.

Bhandari, H. and Yasunobu, K. (2009). What is Social Capital? A Comprehensive Review of the Concept. *Asian Journal of Social Science*, 37(3), pp.480–510. doi:https://doi.org/10.1163/156853109X436847.

Bhandari, P. (2021). *A Guide to Ethical Considerations in Research*. [online] Scribbr. Available at: https://www.scribbr.com/methodology/research-ethics/.

Bhat, S.J.A., Geelani, S.M., Dijoo, Z.K., Bhat, R.A. and Khanday, M. (2021). Sustainable Agricultural Practices. *Microbiota and Biofertilizers*, 2, pp.161–174. doi:https://doi.org/10.1007/978-3-030-61010-4_8.

Bhattacherjee, A. (2012). Social science research: principles, methods, and practices. 2nd ed. [online] Tampa, Florida: Anol Bhattacherjee. Available at: https://digitalcommons.usf.edu/cgi/viewcontent.cgi?article=1002&context=oa_textbo oks.

Bosnjak, M., Ajzen, I. and Schmidt, P. (2020). The theory of planned behavior: Selected recent advances and applications. *Europe's Journal of Psychology*, 16(3), pp.352–356. doi:https://doi.org/10.5964/ejop.v16i3.3107.

Bostan, I., Onofrei, M., Gavriluţă (Vatamanu), A.F., Toderaşcu, C. and Lazăr, C.M. (2019). An Integrated Approach to Current Trends in Organic Food in the EU. *Foods*, 8(5), p.144. doi:https://doi.org/10.3390/foods8050144.

Botha, E., Erasmus, A. and Mpinganjira, M. (2019). *Consumer behaviour: South African psychology and marketing applications*. Goodwood, Cape Town: Oxford University Press Southern Africa (Pty)Ltd.

Brantsæter, A.L., Ydersbond, T.A., Hoppin, J.A., Haugen, M. and Meltzer, H.M. (2017). Organic Food in the Diet: Exposure and Health Implications. *Annual Review of Public Health*, 38(1), pp.295–313. doi:https://doi.org/10.1146/annurev-publhealth-031816-044437.

Brooks, K. and Place, F. (2019). Global food systems: Can foresight learn from hindsight? *Global Food Security*, 20, pp.66–71. doi:https://doi.org/10.1016/j.gfs.2018.12.004.

Bruschi, V., Shershneva, K., Dolgopolova, I., Canavari, M. and Teuber, R. (2015). Consumer Perception of Organic Food in Emerging Markets: Evidence from Saint Petersburg, Russia. *Agribusiness*, 31(3), pp.414–432. doi:https://doi.org/10.1002/agr.21414.

Bryła, P. (2016). Organic food consumption in Poland: Motives and barriers. *Appetite*, 105, pp.737–746. doi:https://doi.org/10.1016/j.appet.2016.07.012.

Buchanan, L. and O'Connell, A. (2014). *A Brief History of Decision Making*. [online] Harvard Business Review. Available at: https://hbr.org/2006/01/a-brief-history-ofdecision-making.

Cachero-Martínez, S. (2020). Consumer Behaviour towards Organic Products: The Moderating Role of Environmental Concern. *Journal of Risk and Financial Management*, 13(12), p.330. doi:https://doi.org/10.3390/jrfm13120330.

Carelson, C.P.R., Ncube, B. and Fanadzo, M. (2021). Classification and characterisation of smallholder farmers in South Africa: a brief review. *South African Journal of Agricultural Extension (SAJAE)*, 49(2), pp.97–106. doi:https://doi.org/10.17159/2413-3221/2021/v49n2a12821.

Carmona, I., Griffith, D.M. and Aguirre, I. (2020). Understanding the factors limiting organic consumption: the effect of marketing channel on produce price, availability, and price fairness. *Organic Agriculture*. doi:https://doi.org/10.1007/s13165-020-

00331-1.

Carrier, J.G. and Luetchford, P. (2015). *Ethical Consumption: Social Value and Economic Practice*. New York: Berghahn Books.

Carrington, D. and Arnett, G. (2018). *Clear differences between organic and nonorganic food, study finds*. [online] the Guardian. Available at: https://www.theguardian.com/environment/2014/jul/11/organic-food-moreantioxidants-study.

Carvalho, F.P. (2017). Pesticides, environment, and food safety. *Food and Energy Security*, [online] 6(2), pp.48–60. doi:https://doi.org/10.1002/fes3.108.

Casteel, A. and Bridier, N. (2021). Describing populations and samples in doctoral student research. *International Journal of Doctoral Studies*, 16(1), pp.339–362. doi:https://doi.org/10.28945/4766.

Castellini, G., Savarese, M., Castiglioni, C. and Graffigna, G. (2020). Organic Food Consumption in Italy: The Role of Subjective Relevance of Food as Mediator between Organic Food Choice Motivation and Frequency of Organic Food Consumption. *Sustainability*, 12(13), p.5367. doi:https://doi.org/10.3390/su12135367.

Castleberry, A. and Nolen, A. (2018). Thematic analysis of qualitative research data: Is it as easy as it sounds? *Currents in Pharmacy Teaching and Learning*, [online] 10(6), pp.807–815. doi:https://doi.org/10.1016/j.cptl.2018.03.019.

Center for Veterinary Medicine (2020). *All About BSE (Mad Cow Disease)*. [online] U.S. Food and Drug Administration. Available at: https://www.fda.gov/animal-veterinary/animal-health-literacy/all-about-bse-mad-cow-disease.

Cesnales, N.I. and Thyer, B.A. (2014). Health-Related Quality of Life Measures. *Encyclopedia of Quality of Life and Well-Being Research*, pp.2809–2814. doi:https://doi.org/10.1007/978-94-007-0753-5_951.

Chandrashekar, H.M. (2014). Consumers Perception towards Organic Products - A Study in Mysore City. *International Journal of Research in Business Studies and Management*, 1(1), pp.52–67.

Chauke, T.M. (2016). *The contribution of community gardens to livelihood of participants: a case of Mudavula Village, Vhembe District, Limpopo Province*. [online] ulspace.ul.ac.za. Available at: http://hdl.handle.net/10386/1727 [Accessed 19 Nov. 2022].

Chiriacò, M.V., Castaldi, S. and Valentini, R. (2022). Determining organic versus conventional food emissions to foster the transition to sustainable food systems and diets: Insights from a systematic review. *Journal of Cleaner Production*, 380, p.134937. doi:https://doi.org/10.1016/j.jclepro.2022.134937.

Choy, L.T. (2014). The Strengths and Weaknesses of Research Methodology: Comparison and Complimentary between Qualitative and Quantitative Approaches. *IOSR Journal of Humanities and Social Science*, 19(4), pp.99–104.

Chrysochou, P. (2017). Consumer Behavior Research Methods. *Consumer Perception of Product Risks and Benefits*, [online] pp.409–428. doi:https://doi.org/10.1007/978-3-319-50530-5_22.

Chrzan, J. and Ricotta, J. (2019). *Organic food, farming and culture: an introduction*. London, UK: New York, Ny, Usa: Bloomsbury Academic, Bloomsbury Publishing Plc.

Chu, K. (2018). Mediating Influences of Attitude on Internal and External Factors Influencing Consumers' Intention to Purchase Organic Foods in China. *Sustainability*, 10(12), p.4690. doi:https://doi.org/10.3390/su10124690.

Činjarević, M., Agić, E. and Peštek, A. (2018). When Consumers are in Doubt, You Better Watch Out! The Moderating Role of Consumer Skepticism and Subjective Knowledge in the Context of Organic Food Consumption. *Zagreb International Review of Economics and Business*, 21(s1), pp.1–14. doi:https://doi.org/10.2478/zireb-2018-0020.

Clark, S. (2016). *Sustainable agriculture beyond organic farming*. [online] Basel, Switzerland: Mdpi Ag. Available at: https://doi.org/10.3390/books978-3-03842-305-8.

Connelly, L.M. (2016). Trustworthiness in Qualitative Research. *SAGE Publications, Inc. eBooks*, pp.117–128. doi:https://doi.org/10.4135/9781071909669.n18.

Cope, D.G. (2014). Methods and Meanings: Credibility and Trustworthiness of Qualitative Research. *Oncology Nursing Forum*, 41(1), pp.89–91.

Cresswell, J. (2014). Research design. 4th ed. Los Angeles: SAGE Publications.

Cubero Dudinskaya, E., Naspetti, S., Arsenos, G., Caramelle-Holtz, E., Latvala, T., Martin-Collado, D., Orsini, S., Ozturk, E. and Zanoli, R. (2021). European Consumers' Willingness to Pay for Red Meat Labelling Attributes. *Animals*, 11(2), p.556. doi:https://doi.org/10.3390/ani11020556.

Curvelo, I.C.G., Watanabe, E.A. de M. and Alfinito, S. (2019). Purchase intention of organic food under the influence of attributes, consumer trust and perceived value. *Revista de Gestão*, [online] 26(3), pp.198–211. doi:https://doi.org/10.1108/rege-01-2018-0010.

DAFF (2010). *National Policy on Organic Production*. [online] Available at: https://www.daff.gov.za/phocadownloadpap/Policies/National%20policy%20on%20or ganic%20production.pdf [Accessed 10 Jan. 2024].

Dalampira, E.S. and Nastis, S.A. (2020). Back to the future: simplifying Sustainable Development Goals based on three pillars of sustainability. *International Journal of Sustainable Agricultural Management and Informatics*, 6(3), p.226. doi:https://doi.org/10.1504/ijsami.2020.10034327.

Damalas, C. and Koutroubas, S. (2016). Farmers' Exposure to Pesticides: Toxicity Types and Ways of Prevention. *Toxics*, [online] 4(1), p.1. doi:https://doi.org/10.3390/toxics4010001.

Damalas, C.A. and Eleftherohorinos, I.G. (2011). Pesticide Exposure, Safety Issues, and Risk Assessment Indicators. *International Journal of Environmental Research and Public Health*, [online] 8(5), pp.1402–1419. doi:https://doi.org/10.3390/ijerph8051402.

Dangelico, R.M., Nonino, F. and Pompei, A. (2021). Which are the determinants of green purchase behaviour? A study of Italian consumers. *Business Strategy and the Environment*, 30(5). doi:https://doi.org/10.1002/bse.2766.

Dangour, A.D., Mace, G. and Shankar, B. (2017). Food systems, nutrition, health and the environment. *The Lancet Planetary Health*, 1(1), pp.e8–e9. doi:https://doi.org/10.1016/s2542-5196(17)30004-9.

Davies, C. and Fisher, M. (2018). *Understanding Research Paradigms*. [online] scirp.org. Available at: https://scirp.org/reference/referencespapers.aspx?referenceid=3082147.

De Bon, H., Temple, L., Malézieux, E., Bendjebbar, P., Fouilleux, E. and Silvie, P. (2018). Organic agriculture in Africa: A source of innovation for agricultural development. *Perspective*, (48), pp.1–4. doi:https://doi.org/10.19182/agritrop/00036.

De Canio, F. and Martinelli, E. (2020). EU quality label vs Organic food products: A multigroup structural equation modeling to assess consumers' intention to buy in light of sustainable motives. *Food Research International*, p.109846. doi:https://doi.org/10.1016/j.foodres.2020.109846.

de Oliveira, A.B., de Almeida Lopes, M.M., Moura, C.F.H., de Siqueira Oliveira, L., de Souza, K.O., Filho, E.G., Urban, L. and de Miranda, M.R.A. (2017). Effects of organic vs. conventional farming systems on quality and antioxidant metabolism of passion fruit during maturation. *Scientia Horticulturae*, [online] 222, pp.84–89. doi:https://doi.org/10.1016/j.scienta.2017.05.021.

de-Magistris, T. and Gracia, A. (2016). Consumers' willingness-to-pay for sustainable food products: the case of organically and locally grown almonds in Spain. *Journal of Cleaner Production*, 118, pp.97–104. doi:https://doi.org/10.1016/j.jclepro.2016.01.050.

del Mar Gómez-Ramos, M., Nannou, C., Jesús Martínez Bueno, M., Goday, A., Murcia-Morales, M., Ferrer, C. and Fernández-Alba, A.R. (2020). Pesticide residues evaluation of organic crops. A critical appraisal. *Food Chemistry: X*, [online] 5, p.100079. doi:https://doi.org/10.1016/j.fochx.2020.100079.

Delve, Ho, L. and Limpaecher, A. (2022). *What is Phenomenological Research Design?* [online] Delve. Available at: https://delvetool.com/blog/phenomenology.

Diaz, J.M., Webb, S.T., Warner, L.A. and Monaghan, P. (2018). Barriers to community garden success: Demonstrating framework for expert consensus to inform policy and practice. *Urban Forestry & Urban Greening*, [online] 31, pp.197–203. doi:https://doi.org/10.1016/j.ufug.2018.02.014.

Ditlevsen, K., Sandøe, P. and Lassen, J. (2019). Healthy food is nutritious, but organic food is healthy because it is pure: The negotiation of healthy food choices by Danish consumers of organic food. *Food Quality and Preference*, 71, pp.46–53. doi:https://doi.org/10.1016/j.foodqual.2018.06.001.

Dolley, J. and Howes, M.J. (2019). *A growing movement: Motivations for joining community gardens*. [online] Available at: https://www.researchgate.net/publication /332173030_A_GROWING_MOVEMENT_MOTIVATIONS_FOR_JOINING_COMMU NITY_GARDENS [Accessed 22 Aug. 2023].

Dorce, L.C., da Silva, M.C., Mauad, J.R.C., de Faria Domingues, C.H. and Borges, J.A.R. (2021). Extending the theory of planned behavior to understand consumer purchase behavior for organic vegetables in Brazil: The role of perceived health benefits, perceived sustainability benefits and perceived price. *Food Quality and Preference*, [online] 91, p.104191. doi:https://doi.org/10.1016/j.foodqual.2021. 104191.

Doyle, G. (2022). In the garden: capacities that contribute to community groups establishing community gardens. *International Journal of Urban Sustainable Development*, 14(1), pp.15–32. doi:https://doi.org/10.1080/19463138.2022.2045997.

Drew, C. (2023). *Inductive Coding: A Step-by-Step Guide for Researchers (2023)*. [online] helpfulprofessor.com. Available at: https://helpfulprofessor.com/inductive-coding/.

Dudovskiy, J. (2011). *Inductive Approach (Inductive Reasoning).* [online] Business Research Methodology. Available at: https://research-methodology.net/research-methodology/research-approach/inductive-approach-2/.

Dudovskiy, J. (2013). *Consumer Decision Making Process: a detailed analysis*. [online] Business Research Methodology. Available at: https://researchmethodology.net/consumer-decision-making-process-a-detailed-analysis/.

Dudovskiy, J. (2022). *Purposive sampling*. [online] Business Research Methodology. Available at: https://research-methodology.net/sampling-in-primary-datacollection/purposive-sampling/.

Durham, L. (2012). *Organics: Are you capitalising on this trend*. [online] Available at: https://www.supermarket.co.za/SR_Downloads/S&R%20Jan%202012%20Organic.p df [Accessed 10 Oct. 2018].

Ecolife Editorial Team (2023). *Community Garden: Definition, Examples* & *Objectives*. [online] Ecolife. Available at: https://ecolife.com/dictionary/community-garden/.

Edward, D. (2024). Bokashi Composting. Independently Published.

Edwards, C.A. (2020). Sustainable Agricultural Systems. CRC Press.

Eisenmenger, N., Pichler, M., Krenmayr, N., Noll, D., Plank, B., Schalmann, E., Wandl, M.-T. and Gingrich, S. (2020). The Sustainable Development Goals prioritize economic growth over sustainable resource use: a critical reflection on the SDGs from a socio-ecological perspective. *Sustainability Science*, [online] 15(4), pp.1101–1110. doi:https://doi.org/10.1007/s11625-020-00813-x.

Eizenberg, E. and Jabareen, Y. (2017). Social Sustainability: A New Conceptual Framework. *Sustainability*, [online] 9(1), p.68. doi:https://doi.org/10.3390/su9010068.

Elfrida, E., Mubarak, A. and Suwardi, A.B. (2020). Short Communication: The fruit plant species diversity in the home gardens and their contribution to the livelihood of communities in rural area. *Biodiversitas Journal of Biological Diversity*, 21(8). doi:https://doi.org/10.13057/biodiv/d210833.

Elliott, V. (2018). Thinking about the Coding Process in Qualitative Data Analysis. *The Qualitative Report*, 23(11). doi:https://doi.org/10.46743/2160-3715/2018.3560.

Engelbrecht, P., Mokgokong, A. and Raghubir, S. (2022). *Shoprite Holdings* | *Latest Integrated Report*. [online] www.shopriteholdings.co.za. Available at: https://www.shopriteholdings.co.za/sustainability/latest-sustainability-report.html.

EPA (2023). US EPA. [online] US EPA. Available at: https://www.epa.gov/.

Erasmus, A., Boshoff, E. and Rousseau, G. (2010). Consumer decision-making models within the discipline of consumer science: a critical approach. *Journal of Family Ecology and Consumer Sciences /Tydskrif vir Gesinsekologie en Verbruikerswetenskappe*, [online] 29(1). doi:https://doi.org/10.4314/jfecs.v2 9i1.52799.

Erasmus, N., Smit, Y., Nel, D. and Koen, N. (2020). Perceptions, Practices and the Barriers Relating to Organic Foods-Johannesburg, Gauteng Province, South Africa. *Journal of Consumer Sciences*, [online] 2020(5). Available at: https://hdl.handle.net/10520/ejc-famecs1-v2020-n5-a6.

Etikan, I., Musa, S.A. and Alkassim, R.S. (2016). Comparison of Convenience Sampling and Purposive Sampling. *American Journal of Theoretical and Applied Statistics*, 5(1), pp.1–4. doi:https://doi.org/10.11648/j.ajtas.20160501.11.

Eyinade, G.A., Mushunje, A. and Yusuf, S.F.G. (2021). The willingness to consume organic food: A review. *Food and Agricultural Immunology*, 32(1), pp.78–104. doi:https://doi.org/10.1080/09540105.2021.1874885.

FAO (2019). FAO - detail: There is no food security without food safety. [online] www.fao.org. Available at: https://www.fao.org/director-general/former-dg/da-silva/my-articles/detail/en/c/1185962/.

Fatha, L. and Ayoubi, R. (2021). A revisit to the role of gender, age, subjective and objective knowledge in consumers' attitudes towards organic food. *Journal of Strategic Marketing*, pp.1–17. doi:https://doi.org/10.1080/0965254x.2021.1939405.

Fawzy, S., Osman, A.I., Doran, J. and Rooney, D.W. (2020). Strategies for mitigation of climate change: a review. *Environmental Chemistry Letters*, [online] 18(18), pp.2069–2094. Available at: https://link.springer.com/article/10.1007/s10311-020-01059-w.

Feuerstein, J.L., Olswang, L.B., Greenslade, K.J., Dowden, P., Pinder, G.L. and Madden, J. (2018). Implementation Research: Embracing Practitioners' Views. *Journal of Speech, Language, and Hearing Research*, 61(3), pp.645–657.

doi:https://doi.org/10.1044/2017_jslhr-l-17-0154.

FiB, R.I. of O.A. (2022). *Global organic market: Unprecedented growth in 2020 – Organic retail sales grew by 14 billion euros and exceeded the 120-billion-euro mark*. [online] www.fibl.org. Available at: https://www.fibl.org/en/info-centre/news/global-organic-market-unprecedented-growth-in-2020#:~:text=Global%20organic%20mark et%3A%20Unprecedented%20growth%20in%202020%20%E2%80%93 [Accessed 17 Feb. 2023].

Forero, R., Nahidi, S., De Costa, J., Mohsin, M., Fitzgerald, G., Gibson, N., McCarthy, S. and Aboagye-Sarfo, P. (2018). Application of four-dimension criteria to assess rigour of qualitative research in emergency medicine. *BMC Health Services Research*, 18(1). doi:https://doi.org/10.1186/s12913-018-2915-2.

Forman, J. and Silverstein, J. (2012). Organic Foods: Health and Environmental Advantages and Disadvantages. *PEDIATRICS*, [online] 130(5), pp.e1406–e1415. doi:https://doi.org/10.1542/peds.2012-2579.

Fuhrimann, S., Winkler, M.S., Staudacher, P., Weiss, F.T., Stamm, C., Eggen, R.I.,
Lindh, C.H., Menezes-Filho, J.A., Baker, J.M., Ramírez-Muñoz, F., Gutiérrez-Vargas,
R. and Mora, A.M. (2019). Exposure to Pesticides and Health Effects on Farm
Owners and Workers from Conventional and Organic Agricultural Farms in Costa
Rica: Protocol for a Cross-Sectional Study. *JMIR Research Protocols*, [online] 8(1),
p.e10914. doi:https://doi.org/10.2196/10914.

Fusch, P. and Ness, L. (2015). Are We There Yet? Data Saturation in Qualitative Research. *The Qualitative Report*, 20(9). doi:https://doi.org/10.46743/2160-3715/2015.2281.

Fynn-Green, G., Mason, R.B. and Giampiccoli, A. (2019). Factors That Influence Perceptions and Purchasing of Organic Produce by South African Consumers. *International Journal of Customer Relationship Marketing and Management*, 10(2), pp.61–76. doi:https://doi.org/10.4018/ijcrmm.2019040104.

Galal, S. (2022). *South Africa: population by province*. [online] Statista. Available at: https://www.statista.com/statistics/1112169/total-population-of-south-africa-by-

province/.

Gamage, A., Gangahagedara, R., Gamage, J., Jayasinghe, N., Kodikara, N., Suraweera, P. and Merah, O. (2023). Role of organic farming for achieving sustainability in agriculture. *Farming System*, [online] 1(1), p.100005. doi:https://doi.org/10.1016/j.farsys.2023.100005.

Genchi, G., Sinicropi, M.S., Lauria, G., Carocci, A. and Catalano, A. (2020). The Effects of Cadmium Toxicity. *International Journal of Environmental Research and Public Health*, 17(11), p.3782. doi:https://doi.org/10.3390/ijerph17113782.

George, T. (2021). *A guide to exploratory research*. [online] Scribbr. Available at: https://www.scribbr.com/methodology/exploratory-research/.

Georgescu, S.-D. and Anastasiu, I.-E. (2022). The interview as a qualitative research instrument. [online] International Management Conference. Available at: http://conferinta.management.ase.ro/archives/2021/pdf%20IMC%202021/5%20PDF %20S5%20IMC%202021/5_14.pdf.

Giampieri, F., Mazzoni, L., Cianciosi, D., Alvarez-Suarez, J.M., Regolo, L., Sánchez-González, C., Capocasa, F., Xiao, J., Mezzetti, B. and Battino, M. (2022). Organic vs conventional plant-based foods: A review. *Food Chemistry*, [online] 383, p.132352. doi:https://doi.org/10.1016/j.foodchem.2022.132352.

Giller, K.E., Delaune, T., Silva, J.V., van Wijk, M., Hammond, J., Descheemaeker, K., van de Ven, G., Schut, A.G.T., Taulya, G., Chikowo, R. and Andersson, J.A. (2021). Small farms and development in sub-Saharan Africa: Farming for food, for income or for lack of better options? *Food Security*. doi:https://doi.org/10.1007/s12 571-021-01209-0.

Given, L.M. (2008). *The Sage Encyclopedia of Qualitative Research Methods*. Sage Publications.

Glibowski, P. (2020). Organic food and health. *Roczniki Państwowego Zakładu Higieny*, pp.131–136. doi:https://doi.org/10.32394/rpzh.2020.0110.

Goldkuhl, G. (2012). Pragmatism vs interpretivism in qualitative information systems research. *European Journal of Information Systems*, [online] 21(2), pp.135–146. Available at: http://liu.diva-portal.org/smash/get/diva2:515141/FULLTEXT01.

Golijan, J. and Dimitrijević, B. (2018). Global organic food market. *Acta agriculturae Serbica*, 23(46), pp.125–140. doi:https://doi.org/10.5937/aaser1846125g.

Gomiero, T. (2018). Food quality assessment in organic vs. conventional agricultural produce: Findings and issues. *Applied Soil Ecology*, 123, pp.714–728. doi:https://doi.org/10.1016/j.apsoil.2017.10.014.

Gopalakrishnan, Dr.R. (2019). Advantages and Nutritional Value of Organic Food on Human Health. *International Journal of Trend in Scientific Research and Development*, Volume-3(Issue-4), pp.242–245. doi:https://doi.org/10.31142/ijtsrd 23661.

Guéguen, L. and Pascal, G. (2023). Organic foods. *Elsevier eBooks*, pp.523–529. doi:https://doi.org/10.1016/b978-0-12-821848-8.00158-x.

Gumber, G. and Rana, J. (2021). Who buys organic food? Understanding different types of consumers. *Cogent Business & Management*, 8(1), p.1935084. doi:https://doi.org/10.1080/23311975.2021.1935084.

Gunasekaran, V. and Murugan, S. (2020). *Challenges and Opportunities of organic products market*. [online] Available at: https://www.semanticscholar.org/paper/ CHALLENGES-AND-OPPORTUNITIES-OF-ORGANIC-PRODUCTS-Gunasekaran-Murugan/7f944bb02b1ab1b9ae9b548a19f3c3b219d884e4 [Accessed 10 Jan. 2021].

Gunawan, J. (2015). Ensuring trustworthiness in qualitative research. *Belitung Nursing Journal*, 1(1), pp.10–11. doi:https://doi.org/10.33546/bnj.4.

Gundala, R.R. and Singh, A. (2021). What motivates consumers to buy organic foods? Results of an empirical study in the United States. *PLOS ONE*, 16(9), p.e0257288. doi:https://doi.org/10.1371/journal.pone.0257288.

Gupta, J. and Vegelin, C. (2016). Sustainable development goals and inclusive development. *International Environmental Agreements: Politics, Law and*

Economics, 16(3), pp.433-448. doi:https://doi.org/10.1007/s10784-016-9323-z.

Gupta, S. (2017). Food Safety and Organic Farming. *MOJ Food Processing & Technology*, 4(3). doi:https://doi.org/10.15406/mojfpt.2017.04.00092.

Guterres, A. (2019). *Home: SDG Summit 2019*. [online] Un.org. Available at: https://sustainabledevelopment.un.org/sdgsummit [Accessed 16 Feb. 2023].

Ham, M., Pap, A. and Bilandzic, K. (2016). Perceived barriers for buying organic food products. 18th International Scientific Conference on Economic and Social Development – 'Building Resilient Society'.

Hammersley, M. and Traianou, A. (2012). Ethics in Qualitative Research: Controversies and Contexts. doi:https://doi.org/10.4135/9781473957619.

Han, G., Arbuckle, J.G. and Grudens-Schuck, N. (2021). Motivations, goals, and benefits associated with organic grain farming by producers in Iowa, U.S. *Agricultural Systems*, 191, p.103175. doi:https://doi.org/10.1016/j.agsy.2021.103175.

Han, G. and Grudens-Schuck, N. (2022). Motivations and Challenges for Adoption of Organic Grain Production: A Qualitative Study of Iowa Organic Farmers. *Foods*, 11(21), p.3512. doi:https://doi.org/10.3390/foods11213512.

Han, H. (2021). Consumer behavior and environmental sustainability in tourism and hospitality: a review of theories, concepts, and latest research. *Journal of Sustainable Tourism*, [online] 29(7), pp.1–22. Available at: https://www.tandfonline.com/doi/full/10.1080/09669582.2021.1903019.

Hancock, B., Ockleford, E. and Windridge, K. (2009). *An Introduction to Qualitative Research the NIHR Research Design Service for Yorkshire & the Humber*. [online] Available at: https://www.rds-yh.nihr.ac.uk/wp-content/uploads/2013/05/5_ Introduction-to-qualitative-research-2009.pdf.

Hassan, M. (2022a). *Exploratory Research - Types and Methods*. [online] Research Method. Available at: https://researchmethod.net/exploratory-research/.

Hassan, M. (2022b). *Non-probability Sampling - Types, Examples*. [online] Research Method. Available at: https://researchmethod.net/non-probability-sampling/.

Hendriks, C., Gibson, H., Trett, A., Python, A., Weiss, D., Vrieling, A., Coleman, M., Gething, P., Hancock, P. and Moyes, C. (2019). Mapping Geospatial Processes Affecting the Environmental Fate of Agricultural Pesticides in Africa. *International Journal of Environmental Research and Public Health*, 16(19), p.3523. doi:https://doi.org/10.3390/ijerph16193523.

Hennink, M.M., Kaiser, B.N. and Marconi, V.C. (2016). Code Saturation Versus Meaning Saturation. *Qualitative Health Research*, 27(4), pp.591–608. doi:https://doi.org/10.1177/1049732316665344.

Hewajulige, I.G.N. and Premaseela, H.D.S.R. (2020). Fruit ripening: importance of artificial fruit ripening in commercial agriculture and safe use of the technology for consumer health. *Sri Lanka Journal of Food and Agriculture*, 6(1), p.57. doi:https://doi.org/10.4038/sljfa.v6i1.82.

Huang, Y., Edirisinghe, I. and Burton-Freeman, B.M. (2016). Low-Income Shoppers and Fruit and Vegetables. *Nutrition Today*, [online] 51(5), pp.242–250. doi:https://doi.org/10.1097/nt.00000000000176.

Hume, C., Grieger, J.A., Kalamkarian, A., D'Onise, K. and Smithers, L.G. (2022). Community gardens and their effects on diet, health, psychosocial and community outcomes: a systematic review. *BMC Public Health*, 22(1). doi:https://doi.org/10.1186/s12889-022-13591-1.

IFOAM (2021). *About Us* | *IFOAM*. [online] ifoam.bio. Available at: https://www.ifoam.bio/about-us.

In, J. (2017). Introduction of a Pilot Study. *Korean Journal of Anesthesiology*, [online] 70(6), pp.601–605. doi:https://doi.org/10.4097/kjae.2017.70.6.601.

Jabbour, A.B.L. de S., Frascareli, F.C. de O. and Jabbour, C.J.C. (2015). Green supply chain management and firms' performance: Understanding potential relationships and the role of green sourcing and some other green practices. *Resources, Conservation and Recycling*, 104, pp.366–374. doi:https://doi.org/10.1016/j.resconrec.2015.07.017. Jacob, M. and Rocha, C. (2021). Models of governance in community gardening: administrative support fosters project longevity. *Local Environment*, pp.1–18. doi:https://doi.org/10.1080/13549839.2021.1904855.

Jacob, S.A. and Furgerson, S.P. (2012). Writing Interview Protocols and Conducting Interviews: Tips for Students New to the Field of Qualitative Research. *Qualitative Report*, [online] 17. Available at: https://eric.ed.gov/?id=EJ990034.

Jensen, J.D., Christensen, T., Denver, S., Ditlevsen, K., Lassen, J. and Teuber, R. (2019). Heterogeneity in consumers' perceptions and demand for local (organic) food products. *Food Quality and Preference*, 73, pp.255–265. doi:https://doi.org/10.1016/j.foodqual.2018.11.002.

Joachim, V., Spieth, P. and Heidenreich, S. (2018). Active innovation resistance: An empirical study on functional and psychological barriers to innovation adoption in different contexts. *Industrial Marketing Management*, 71, pp.95–107. doi:https://doi.org/10.1016/j.indmarman.2017.12.011.

Jolliet, O., Antón, A., Boulay, A.-M., Cherubini, F., Fantke, P., Levasseur, A., McKone, T.E., Michelsen, O., Milà i Canals, L., Motoshita, M., Pfister, S., Verones, F., Vigon, B. and Frischknecht, R. (2018). Global guidance on environmental life cycle impact assessment indicators: impacts of climate change, fine particulate matter formation, water consumption and land use. *The International Journal of Life Cycle Assessment*, 23(11), pp.2189–2207. doi:https://doi.org/10.1007/s11367-018-1443-y.

Joshi, Y. and Rahman, Z. (2015). Factors Affecting Green Purchase Behaviour and Future Research Directions. *International Strategic Management Review*, [online] 3(1-2), pp.128–143. doi:https://doi.org/10.1016/j.ism.2015.04.001.

Jouzi, Z., Azadi, H., Taheri, F., Zarafshani, K., Gebrehiwot, K., Van Passel, S. and Lebailly, P. (2017). Organic Farming and Small-Scale Farmers: Main Opportunities and Challenges. *Ecological Economics*, 132, pp.144–154. doi:https://doi.org/10.1016/j.ecolecon.2016.10.016. Jürkenbeck, K. and Spiller, A. (2020). Consumers' Evaluation of Stockfree-Organic Agriculture—A Segmentation Approach. *Sustainability*, 12(10), p.4230. doi:https://doi.org/10.3390/su12104230.

Kang, M.S. (2020). Journal of crop improvement and the sustainable development goals. *Journal of Crop Improvement*, 34(5), pp.587–599. doi:https://doi.org/10.1080/15427528.2020.1764219.

Kanosvamhira, T.P. (2023). Urban Agriculture and the Sustainability Nexus in South Africa: Past, Current, and Future Trends. doi:https://doi.org/10.1007/s12132-023-09480-4.

Kanosvamhira, T.P., Follman, A. and Tevera, D. (2023). Experimental urban commons?: Re-examining urban community food gardens in Cape Town, South Africa. *The Geographical Journal*. doi:https://doi.org/10.1111/geoj.12553.

Kapoor, L., Simkin, A.J., George Priya Doss, C. and Siva, R. (2022). Fruit ripening: dynamics and integrated analysis of carotenoids and anthocyanins. *BMC Plant Biology*, [online] 22, p.27. doi:https://doi.org/10.1186/s12870-021-03411-w.

Kardos, M., Gabor, M.R. and Cristache, N. (2019). Green Marketing's Roles in Sustainability and Ecopreneurship. Case Study: Green Packaging's Impact on Romanian Young Consumers' Environmental Responsibility. *Sustainability*, 11(3), p.873. doi:https://doi.org/10.3390/su11030873.

Karp, B., Amrani, O. and Keren, O. (2019). Nonlinear Product Codes for Reliability and Security. doi:https://doi.org/10.1109/ivsw.2019.8854455.

Kavaliauskė, M. and Ubartaitė, S. (2014). Ethical Behaviour: Factors influencing intention to buy organic products in Lithuania. *Economics and Management*, 19(1). doi:https://doi.org/10.5755/j01.em.19.1.4991.

Kazmi, S.H.A., Shahbaz, M.S., Mubarik, M.S. and Ahmed, J. (2021). Switching behaviors toward green brands: evidence from emerging economy. *Environment, Development and Sustainability*. doi:https://doi.org/10.1007/s10668-020-01116-y.

Kelly, C. and Metelerkamp, L. (2015). Smallholder farmers and organic agriculture in South Africa. [online] doi:https://doi.org/10.13140/RG.2.2.27355.46888.

Kenny, C. (2018). Speeding Sustainable Development: Integrating Economic, Social, and Environmental Development. *SSRN Electronic Journal*. doi:https://doi.org/10.2139/ssrn.3208864.

Khapayi, M. and Celliers, P.R. (2016). Factors limiting and preventing emerging farmers to progress to commercial agricultural farming in the King William's Town area of the Eastern Cape Province, South Africa. *South African Journal of Agricultural Extension (SAJAE)*, [online] 44(1). doi:https://doi.org/10.17159/2413-3221/2016/v44n1a374.

Kim, Y-J., Park, J-H. and Seo, K-H. (2018). Comparison of the loads and antibioticresistance profiles of Enterococcus species from conventional and organic chicken carcasses in South Korea. *Poultry Science*, [online] 97(1), pp.271–278. doi:https://doi.org/10.3382/ps/pex275.

Kisaka-Lwayo, M. and Obi, A. (2016). Analysis of Production and Consumption of Organic Products in South Africa. *Sustainable Agriculture and Food Supply*, pp.51–79. doi:https://doi.org/10.1201/b19837-6.

Kivunja, C. and Kuyini, A.B. (2017). Understanding and Applying Research Paradigms in Educational Contexts. *International Journal of Higher Education*, [online] 6(5), pp.26–41. doi:https://doi.org/10.5430/ijhe.v6n5p26.

Klarin, T. (2018). The Concept of Sustainable Development: From its Beginning to the Contemporary Issues. *Zagreb International Review of Economics and Business*, [online] 21(1), pp.67–94. doi:https://doi.org/10.2478/zireb-2018-0005.

Köksal, D., Strähle, J., Müller, M. and Freise, M. (2017). Social Sustainable Supply Chain Management in the Textile and Apparel Industry—A Literature Review. *Sustainability*, 9(1), p.100. doi:https://doi.org/10.3390/su9010100.

Kordon, S., Miller, P.A. and Bohannon, C.L. (2022). Attitudes and Perceptions of Community Gardens: Making a Place for Them in Our Neighborhoods. *Land*, 11(10), p.1762. doi:https://doi.org/10.3390/land11101762.

Kosinski, M., Matz, S.C., Gosling, S.D., Popov, V. and Stillwell, D. (2015). Facebook as a research tool for the social sciences: Opportunities, challenges, ethical considerations, and practical guidelines. *American Psychologist*, [online] 70(6), pp.543–556. doi:https://doi.org/10.1037/a0039210.

Kostere, S. and Kostere, K. (2021). The Generic Qualitative Approach to a Dissertation in the Social Sciences. doi:https://doi.org/10.4324/9781003195689.

Kotler, P., Armstrong, G. and Balasubramanian, S. (2023). *Principles of Marketing*. 19th ed. Pearson.

Kroll, F. (2016). Foodways of the poor in South Africa: How value-chain consolidation, poverty & cultures of consumption feed each other. [online] Centre of Excellence. Available at: https://foodsecurity.ac.za/publications/foodways-of-thepoor-in-south-africa-how-value-chain-consolidation-poverty-cultures-of-consumptionfeed-each-other/ [Accessed 11 Jan. 2024].

Kuada, J. (2016). *Marketing Decisions and Strategies*. Adonis & Abbey Publishers Ltd.

Kumar, R. (2019). *Research Methodology: A Step-by-step Guide for Beginners*. 5th ed. London: Sage.

Kumatonga, B. and Muzata, K.K. (2021). Research paradigms and designs with their application in education. *Journal of Lexicography and Terminology*, 5(1), pp.16–32.

Kushwah, S., Dhir, A., Sagar, M. and Gupta, B. (2019). Determinants of organic food consumption. A systematic literature review on motives and barriers. *Appetite*, p.104402. doi:https://doi.org/10.1016/j.appet.2019.104402.

Labadarios, D., Mchiza, Z., Steyn, N.P., Gericke, G., Maunder, E., Davids, Y. and Parker, W. (2011). Food security in South Africa: a review of national surveys. *Bulletin of the World Health Organization*, [online] 89(12), pp.891–899. doi:https://doi.org/10.2471/blt.11.089243.

Lamonaca, E., Cafarelli, B., Calculli, C. and Tricase, C. (2022). Consumer perception of attributes of organic food in Italy: A CUB model study. *Heliyon*, 8(3), p.e09007.

doi:https://doi.org/10.1016/j.heliyon.2022.e09007.

Lappeman, J., Egan, P., Rightford, G. and Ramogase, T. (2021). *Marketing to South African Consumers*. [online] Cape Town: UCT Liberty Institute of Strategic Marketing & UCT Libraries. Available at: https://doi.org/10.15641/0-7992-2548-8.

Lavuri, R., Chiappetta Jabbour, C.J., Grebinevych, O. and Roubaud, D. (2022). Green factors stimulating the purchase intention of innovative luxury organic beauty products: Implications for sustainable development. *Journal of Environmental Management*, 301, p.113899. doi:https://doi.org/10.1016/j.jenvman.2021.113899.

Lăzăroiu, G., Neguriţă, O., Grecu, I., Grecu, G. and Mitran, P.C. (2020). Consumers' Decision-Making Process on Social Commerce Platforms: Online Trust, Perceived Risk, and Purchase Intentions. *Frontiers in Psychology*, [online] 11(1). doi:https://doi.org/10.3389/fpsyg.2020.00890.

Le, M.H. and Nguyen, P.M. (2022). Integrating the Theory of Planned Behavior and the Norm Activation Model to Investigate Organic Food Purchase Intention: Evidence from Vietnam. *Sustainability*, 14(2), p.816. doi:https://doi.org/10.3390/su14020816.

Le-Anh, T. and Nguyen-To, T. (2020). Consumer purchasing behaviour of organic food in an emerging market. *International Journal of Consumer Studies*, 44(6). doi:https://doi.org/10.1111/ijcs.12588.

Lee, T.H., Fu, C.-J. and Chen, Y.Y. (2019). Trust factors for organic foods: consumer buying behavior. *British Food Journal*, 122(2), pp.414–431. doi:https://doi.org/10.1108/bfj-03-2019-0195.

Leifert, C. (2014). *New study finds significant differences between organic and nonorganic food «Agriculture & Animal Science# «Cambridge Core Blog.* [online] www.cambridge.org. Available at: https://www.cambridge.org/core/blog/2014/07/13 /new-study-finds-significant-differences-between-organic-and-non-organic-food/.

Leong, W.-H., Teh, S.-Y., Hossain, M.M., Nadarajaw, T., Zabidi-Hussin, Z., Chin, S.-Y., Lai, K.-S. and Lim, S.-H.E. (2020). Application, monitoring and adverse effects in pesticide use: The importance of reinforcement of Good Agricultural Practices (GAPs). *Journal of Environmental Management*, 260, p.109987. doi:https://doi.org/

10.1016/j.jenvman.2019.109987.

Lim Tung, O.J. (2016). Organic Food Certification in South Africa: A Private Sector Mechanism in Need of State Regulation? *Potchefstroom Electronic Law Journal/Potchefstroomse Elektroniese Regsblad*, 19, p.1. doi:https://doi.org/10.17159/1727-3781/2016/v19i0a584.

Lim Tung, O.J. (2018). African Organic Product Standards for the African Continent? Prospects and Limitations. *Potchefstroom Electronic Law Journal*, 21, pp.1–38. doi:https://doi.org/10.17159/1727-3781/2018/v21i0a4308.

Lobe, B., Morgan, D.L. and Hoffman, K. (2022). A Systematic Comparison of In-Person and Video-Based Online Interviewing. *International Journal of Qualitative Methods*, 21, p.160940692211270. doi:https://doi.org/10.1177/16094069221127068.

Lucke, S., Mamo, E. and Koenigstorfer, J. (2019). Exploring the meaning of growing food in community gardens to South African township residents: A photovoice study. *Health & Place*, 55, pp.165–176. doi:https://doi.org/10.1016/j.healthplace. 2018.11.009.

Łuczka, W. and Kalinowski, S. (2020). Barriers to the Development of Organic Farming: A Polish Case Study. *Agriculture*, 10(11), p.536. doi:https://doi.org/10.3390/agriculture10110536.

Luttikholt, L.W.M. (2007). Principles of organic agriculture as formulated by the International Federation of Organic Agriculture Movements. *NJAS - Wageningen Journal of Life Sciences*, 54(4), pp.347–360. doi:https://doi.org/10.1016/s1573-5214(07)80008-x.

Malak-Rawlikowska, A., Majewski, E., Wąs, A., Borgen, S.O., Csillag, P., Donati, M., Freeman, R., Hoàng, V., Lecoeur, J.-L., Mancini, M.C., Nguyen, A., Saïdi, M., Tocco, B., Török, Á., Veneziani, M., Vittersø, G. and Wavresky, P. (2019). Measuring the Economic, Environmental, and Social Sustainability of Short Food Supply Chains. *Sustainability*, 11(15), p.4004. doi:https://doi.org/10.3390/su11154004.

Malan, N. (2015). Urban farmers and urban agriculture in Johannesburg: Responding to the food resilience strategy. *Agrekon*, 54(2), pp.51–75. doi:https://doi.org/10.1080/03031853.2015.1072997.

Manyi-Loh, C., Mamphweli, S., Meyer, E. and Okoh, A. (2018). Antibiotic Use in Agriculture and Its Consequential Resistance in Environmental Sources: Potential Public Health Implications. *Molecules*, [online] 23(4), p.795. doi:https://doi.org/10.3390/molecules23040795.

Maree, K. (2019). First steps in research. 3rd ed. Pretoria: Van Schaik.

Marsala, R.Z., Capri, E., Russo, E., Barazzoni, L., Peroncini, E., De Crema, M., Raúl Carrey Labarta, R.C., Frei, R., Colla, R., Calliera, M., Maria Chiara Fontanella and Suciu, N. (2021). Influence of nitrogen-based fertilization on nitrates occurrence in groundwater of hilly vineyards. *Science of the Total Environment*, 766, pp.144512–144512. doi:https://doi.org/10.1016/j.scitotenv.2020.144512.

Martin, D. (2014). *Sangoma* | *Zulu Healer*. [online] Encyclopedia Britannica. Available at: https://www.britannica.com/science/sangoma.

Mbajiorgu, D.G. and Odeku, K.O. (2022). Fighting food insecurity, hunger, and poverty: the content and context of the socio-economic right of access to sufficient food in South Africa. *Obiter*, [online] 43(3), pp.467–488. Available at: https://www.scielo.org.za/scielo.php?script=sci_arttext&pid=S1682-58532022000300003.

Mchiza, Z., Steyn, N., Hill, J., Kruger, A., Schönfeldt, H., Nel, J. and Wentzel-Viljoen, E. (2015). A Review of Dietary Surveys in the Adult South African Population from 2000 to 2015. *Nutrients*, 7(9), pp.8227–8250. doi:https://doi.org/10.3390/nu7095389.

Meemken, E.-M. and Qaim, M. (2018). Organic Agriculture, Food Security, and the Environment. *Annual Review of Resource Economics*, [online] 10(1), pp.39–63. doi:https://doi.org/10.1146/annurev-resource-100517-023252.

Melović, B., Cirović, D., Backovic-Vulić, T., Dudić, B. and Gubiniova, K. (2020). Attracting Green Consumers as a Basis for Creating Sustainable Marketing Strategy on the Organic Market—Relevance for Sustainable Agriculture Business Development. *Foods*, 9(11), p.1552. doi:https://doi.org/10.3390/foods9111552. Mensah, J. (2019). Sustainable development: Meaning, history, principles, pillars, and implications for human action: Literature review. *Cogent Social Sciences*, [online] 5(1), pp.1–21. doi:https://doi.org/10.1080/23311886.2019.1653531.

Mercade Mele, P., Molina Gomez, J. and Garay, L. (2019). To Green or Not to Green: The Influence of Green Marketing on Consumer Behaviour in the Hotel Industry. *Sustainability*, [online] 11(17), p.4623. doi:https://doi.org/10.3390/su11174623.

Merriam, S.B. and Tisdell, E.J. (2016). *Qualitative research: a guide to design and implementation*. San Francisco, CA: John Wiley & Sons.

Mie, A., Andersen, H.R., Gunnarsson, S., Kahl, J., Kesse-Guyot, E., Rembiałkowska, E., Quaglio, G. and Grandjean, P. (2017). Human health implications of organic food and organic agriculture: a comprehensive review. *Environmental Health*, [online] 16(1). doi:https://doi.org/10.1186/s12940-017-0315-4.

Miller, L.M.S. and Cassady, D.L. (2015). The effects of nutrition knowledge on food label use. A review of the literature. *Appetite*, [online] 92, pp.207–216. doi:https://doi.org/10.1016/j.appet.2015.05.029.

Milner, T. and Rosenstreich, D. (2013). A review of consumer decision-making models and development of a new model for financial services. *Journal of Financial Services Marketing*, [online] 18(2), pp.106–120. doi:https://doi.org/10.1057/fsm.2013.7.

Mocănașu, D.R. (2020). Determining the Sample Size in Qualitative Research. International Multidisciplinary Scientific Conference on the Dialogue between Sciences & Arts, Religion & Education, [online] 4(1), pp.181–187. Available at: https://www.ceeol.com/search/article-detail?id=936461.

Modibedi, T.P., Masekoameng, M.R. and Maake, M.M.S. (2020). The contribution of urban community gardens to food availability in Emfuleni Local Municipality, Gauteng Province. *Urban Ecosystems*, 24(2), pp.301–309. doi:https://doi.org/10.1007/s11252-020-01036-9.

Mohajan, H.K. (2018). Qualitative research methodology in social sciences and related subjects. *Journal of Economic Development, Environment and People*, 7(1), pp.23–48.

Mokgokong, A. (2022). *Social and ethics committee chariman's report*. [online] www.shopriteholdings.co.za. Available at: https://www.shopriteholdings.co.za /content/dam/shp/docs/shp-sr-2022.pdf.

Monier-Dilhan, S. and Bergès, F. (2016). Consumers' Motivations Driving Organic Demand: Between Self-interest and Sustainability. *Agricultural and Resource Economics Review*, 45(3), pp.522–538. doi:https://doi.org/10.1017/age.2016.6.

Monterrosa, E.C., Frongillo, E.A., Drewnowski, A., de Pee, S. and Vandevijvere, S. (2020). Sociocultural Influences on Food Choices and Implications for Sustainable Healthy Diets. *Food and Nutrition Bulletin*, 41(2), pp.59S73S. doi:https://doi.org/10.1177/0379572120975874.

Montgomery, D.R. and Biklé, A. (2021). Soil Health and Nutrient Density: Beyond Organic vs. Conventional Farming. *Frontiers in Sustainable Food Systems*, 5. doi:https://doi.org/10.3389/fsufs.2021.699147.

Montiel-León, J.M., Sung Vo Duy, Munoz, G., Verner, M.-A., Hendawi, M., Moya, H., Amyot, M. and Sébastien Sauvé (2019). Occurrence of pesticides in fruits and vegetables from organic and conventional agriculture by QuEChERS extraction liquid chromatography tandem mass spectrometry. *Food Control*, 104, pp.74–82. doi:https://doi.org/10.1016/j.foodcont.2019.04.027.

Moon, K., Brewer, T.D., Januchowski-Hartley, S.R., Adams, V.M. and Blackman, D.A. (2016). A guideline to improve qualitative social science publishing in ecology and conservation journals. *Ecology and Society*, [online] 21(3). doi:https://doi.org/10.5751/es-08663-210317.

Morelli, M., Casagrande, M. and Forte, G. (2021). Decision Making: A Theoretical Review. *Integrative Psychological and Behavioral Science*. doi:https://doi.org/10.1007/s12124-021-09669-x.

Morse, J.M. (2015). Critical Analysis of Strategies for Determining Rigor in Qualitative Inquiry. *Qualitative Health Research*, 25(9), pp.1212–1222. doi:https://doi.org/10.1177/1049732315588501.

Moyer, J.D. and Hedden, S. (2020). Are we on the right path to achieve the sustainable development goals? *World Development*, 127. doi:https://doi.org/10.1016/j.worlddev.2019.104749.

Mthiyane, D.B., Wissink, H. and Chiwawa, N. (2022). The impact of rural–urban migration in South Africa: A case of KwaDukuza municipality. *Journal of Local Government Research and Innovation*, 3. doi:https://doi.org/10.4102/jolgri.v3i0.56.

Mtimet, N., Souissi, A. and Mhamdi, N. (2020). Tunisian consumers perception and behavior towards organic food products. *New Medit*, 19(1), pp.3–18. doi:https://doi.org/10.30682/nm2001a.

Mughal, H.A., Faisal, F. and Khokhar, M.N. (2021). Exploring consumer's perception and preferences towards purchase of non-certified organic food: A qualitative perspective. *Cogent Business & Management*, 8(1). doi:https://doi.org/10.1080/23311975.2021.1984028.

Muhammad, S., Fathelrahman, E. and Tasbih Ullah, R. (2016). The Significance of Consumer's Awareness about Organic Food Products in the United Arab Emirates. *Sustainability*, 8(9), p.833. doi:https://doi.org/10.3390/su8090833.

Muller, A., Schader, C., El-Hage Scialabba, N., Brüggemann, J., Isensee, A., Erb, K.-H., Smith, P., Klocke, P., Leiber, F., Stolze, M. and Niggli, U. (2017). Strategies for feeding the world more sustainably with organic agriculture. *Nature Communications*, 8(1). doi:https://doi.org/10.1038/s41467-017-01410-w.

Muralikrishna, I.V. and Manickam, V. (2017). *Environmental management: science and engineering for industry*. Oxford Butterworth-Heinemann.

Murphy, B., Martini, M., Fedi, A., Loera, B.L., Elliott, C.T. and Dean, M. (2022). Consumer trust in organic food and organic certifications in four European countries. *Food Control*, 133, p.108484. doi:https://doi.org/10.1016/j.foodcont.2021.108484. Mustafa, Arslan, Y., Semih Okutan and Esra Dil (2022). An inquiry on organic food confusion in the consumer perception: a qualitative perspective. 125(4), pp.1420–1436. doi:https://doi.org/10.1108/bfj-03-2022-0226.

Mustafa, M.A., Mabhaudhi, T., Avvari, M.V. and Massawe, F. (2021). Transition toward sustainable food systems: a holistic pathway toward sustainable development. *Food Security and Nutrition*, pp.33–56. doi:https://doi.org/10.1016/b978-0-12-820521-1.00002-2.

Musvoto, C., Nortje, K., de Wet, B., Mahumani, B.K. and Nahman, A. (2015). Imperatives for an agricultural green economy in South Africa. *South African Journal of Science*, 111(1/2), pp.1–8. doi:https://doi.org/10.17159/sajs.2015/20140026.

Naderifar, M., Goli, H. and Ghaljaie, F. (2017). Snowball sampling: a Purposeful Method of Sampling in Qualitative Research. *Strides in Development of Medical Education*, [online] 14(3). doi:https://doi.org/10.5812/sdme.67670.

Nedumaran, G. and Manida, M. (2019). E-Marketing Strategies for Organic Food Products. *SSRN Electronic Journal*. doi:https://doi.org/10.2139/ssrn.3551995.

Nekmahmud, Md., Ramkissoon, H. and Fekete-Farkas, M. (2022). Green purchase and sustainable consumption: A comparative study between European and non-European tourists. *Tourism Management Perspectives*, 43, p.100980. doi:https://doi.org/10.1016/j.tmp.2022.100980.

Nguyen, C., Nguyen, Y. and Quy, T. (2020). (*PDF*) Organic Foods: What Are the Driving Factors of Purchase Intention? [online] ResearchGate. Available at: https://www.researchgate.net/publication/343584926_Organic_Foods_What_Are_th e_Driving_Factors_of_Purchase_Intention [Accessed 28 Mar. 2023].

Nielsen (2015). *Nielsen Global Sustainability Report Oct* 2015 | *PDF* | *Sustainability* | *Brand*. [online] Scribd. Available at: https://www.scribd.com/document/323678267/Nielsen-Global-Sustainability-Report-Oct-2015 [Accessed 12 Jan. 2024].

Nielsen (2018). *Unpacking the sustainability landscape*. [online] Nielsen. Available at: www.nielsen.com/us/en/insights/reports/2018/unpacking-the-sustainability-

landscape.print.html [Accessed 3 Mar. 2019].

Nieman, A. (2014). SOCIAL CAPITAL AND SOCIAL DEVELOPMENT. Social Work/Maatskaplike Werk, 42(2). doi:https://doi.org/10.15270/42-2-309.

Nikol, L.J. and Jansen, K. (2021). Rethinking conventionalisation: A view from organic agriculture in the Global South. *Journal of Rural Studies*, 86, pp.420–429. doi:https://doi.org/10.1016/j.jrurstud.2021.07.001.

Nikolopoulou, K. (2022). *What Is Non-Probability Sampling?* | *Types & Examples*. [online] Scribbr. Available at: https://www.scribbr.com/methodology/non-probability-sampling/.

Niles, M.T. (2008). Sustainable Soils: Reducing, Mitigating, and Adapting to Climate Change with Organic Agriculture. *Sustainable Development Law and Policy*, 9(1), p.8. doi:https://doi.org/10.6084/m9.figshare.1569552.v1.

Nimri, R., Patiar, A. and Jin, X. (2020). The determinants of consumers' intention of purchasing green hotel accommodation: Extending the theory of planned behaviour. *Journal of Hospitality and Tourism Management*, 45, pp.535–543. doi:https://doi.org/10.1016/j.jhtm.2020.10.013.

Nkosi, S., Gumbo, T., Kroll, F. and Rudolph, M. (2014). *Community Gardens as a Form of Urban Household Food and Income Supplements in African Cities: Experiences in Hammanskraal, Pretoria*. [online] Available at: https://www.research gate.net/publication/268685993_Community_Gardens_as_a_Form_of_Urban_Hous ehold_Food_and_Income_Supplements_in_African_Cities_Experiences_in_Hamma nskraal_Pretoria?channel=doi [Accessed 19 Sep. 2023].

NSF (2024). *GLOBALG.A.P. Certification*. [online] www.nsf.org. Available at: https://www.nsf.org/food-beverage/food-agriculture-aquaculture-fisheries/globalgap.

Osborn, D., Cutter, A. and Ullah, F. (2015). Understanding the Transformational Challenge for Developed Countries. *Economics, Environmental Science, Political Science*.

Palinkas, L.A., Horwitz, S.M., Green, C.A., Wisdom, J.P., Duan, N. and Hoagwood, K. (2015). Purposeful Sampling for Qualitative Data Collection and Analysis in Mixed Method Implementation Research. *Administration and Policy in Mental Health and Mental Health Services Research*, [online] 42(5), pp.533–544. doi:https://doi.org/10. 1007/s10488-013-0528-y.

Patel, S. (2015). The research paradigm-methodology, epistemology and ontology. [online] Available at: http://www.salmapatel.co.uk/academia/the-research-paradigmmethodology-epistemology-and-ontology-explained-in-simple-language.

Pathak, V. (2017). *Phenomenological Research: A Study of Lived Experiences*. [online] Available at: https://ijariie.com/AdminUploadPdf/Phenomenological_ Research__A_Study_of_Lived_Experiences_ijariie3960.pdf#:~:text=A%20phenome nological%20research%20design%20is%20a%20study%20that.

Payet, D., Adjibade, M., Baudry, J., Ghozal, M., Camier, A., Nicklaus, S., Adel-Patient, K., Divaret-Chauveau, A., Gauvreau-Béziat, J., Vin, K., Lioret, S., Charles, M.A., Kesse-Guyot, E. and de Lauzon-Guillain, B. (2021). Organic Food Consumption During the Complementary Feeding Period and Respiratory or Allergic Diseases Up to Age 5.5 Years in the ELFE Cohort. *Frontiers in Nutrition*, 8. doi:https://doi.org/10.3389/fnut.2021.791430.

Pechey, R. and Monsivais, P. (2016). Socioeconomic inequalities in the healthiness of food choices: Exploring the contributions of food expenditures. *Preventive Medicine*, [online] 88, pp.203–209. doi:https://doi.org/10.1016/j.ypmed.2016.04.012.

Pedro, A.A., Görner, A., Lindner, A. and Wende, W. (2020). 'More than fruits and vegetables': Community garden experiences from the Global North to foster green development of informal areas in Sao Paulo, Brazil. *Research in urbanism series*, 6, pp.219–242. doi:https://doi.org/10.7480/rius.6.101.

Petrescu, D. and Petrescu-Mag, R. (2015). Organic Food Perception: Fad, or Healthy and Environmentally Friendly? A Case on Romanian Consumers. *Sustainability*, 7(9), pp.12017–12031. doi:https://doi.org/10.3390/su70912017. Phillips Davison, W. (2017). Public opinion. In: *Encyclopædia Britannica*. [online] Available at: https://www.britannica.com/topic/public-opinion.

Pieniak, Z., Aertsens, J. and Verbeke, W. (2010). Subjective and objective knowledge as determinants of organic vegetables consumption. *Food Quality and Preference*, 21(6), pp.581–588. doi:https://doi.org/10.1016/j.foodqual.2010.03.004.

Pope, C. and Mays, N. (2020). *Qualitative Research in Health Care*. 4th ed. S.L.: Wiley-Blackwell.

Potyrailo, R.A. (2001). On-line Measurement. *Encyclopedia of Materials: Science and Technology*, pp.6401–6411. doi:https://doi.org/10.1016/b0-08-043152-6/01133-5.

Purkis, M. and Mentz-Lagrange, S. (2019). *Unlocking the Organic Sector in South Africa*. [online] Available at: https://agroecologyconference.bio-economy.org.za/wp-content/uploads/2019/02/Matthew-Purkis-and-Sasha-Mentz-Lagrange-Unlocking-the-organic-sector-in-South-Africa.pdf.

Purvis, B., Mao, Y. and Robinson, D. (2019). Three Pillars of sustainability: in Search of Conceptual Origins. *Sustainability Science*, [online] 14(3), pp.681–695. doi:https://doi.org/10.1007/s11625-018-0627-5.

Qi, X. and Ploeger, A. (2021). Explaining Chinese Consumers' Green Food Purchase Intentions during the COVID-19 Pandemic: An Extended Theory of Planned Behaviour. *Foods*, 10(6), p.1200. doi:https://doi.org/10.3390/foods1006 1200.

Quinlan, M.M. (2017). Interpretive Research. *The International Encyclopedia of Communication Research Methods*, pp.1–2. doi:https://doi.org/10.1002/97811 18901731.iecrm0122.

Quiroz-Niño, C. and Murga-Menoyo, M. (2017). Social and Solidarity Economy, Sustainable Development Goals, and Community Development: The Mission of Adult Education & Training. *Sustainability*, 9(12), p.2164. doi:https://doi.org/10.3390/ su9122164. Rahman, S. (2016). The advantages and disadvantages of using qualitative and quantitative approaches and methods in language 'Testing and Assessment' Research: A literature review. *Journal of Education and Learning*, 6(1), pp.102–112.

Raju, P.S., Lonial, S.C. and Mangold, W.G. (2014). Subjective, Objective, and Experience-Based Knowledge: A Comparison in the Decision-Making Context. *Developments in marketing science: proceedings of the Academy of Marketing Science*, pp.60–60. doi:https://doi.org/10.1007/978-3-319-13159-7_14.

Rana, J. and Paul, J. (2017). Consumer behavior and purchase intention for organic food: A review and research agenda. *Journal of Retailing and Consumer Services*, 38, pp.157–165. doi:https://doi.org/10.1016/j.jretconser.2017.06.004.

Rana, J. and Paul, J. (2020). Health motive and the purchase of organic food: A meta-analytic review. *International Journal of Consumer Studies*, 44(2), pp.162–171. doi:https://doi.org/10.1111/ijcs.12556.

Raneng, J., Howes, M. and Pickering, C.M. (2023). Current and future directions in research on community gardens. *Urban Forestry & Urban Greening*, 79, p.127814. doi:https://doi.org/10.1016/j.ufug.2022.127814.

Rani, L., Thapa, K., Kanojia, N., Sharma, N., Singh, S., Grewal, A.S., Srivastav, A.L. and Kaushal, J. (2020). An extensive review on the consequences of chemical pesticides on human health and environment. *Journal of Cleaner Production*, [online] 283, p.124657. doi:https://doi.org/10.1016/j.jclepro.2020.124657.

Ravi Kadlimatti (2020). Good Code Sets via Coprime Powers. doi:https://doi.org/10 .1109/radar42522.2020.9114667.

Rege, J. and Sones, K. (2022). *The Agriculture Sector in Sub-Saharan Africa and the Promise of Biotechnology*. SpringerNature, pp.1–10.

Reichstein, T. and Brusch, I. (2019). The decision-making process in viral marketing—A review and suggestions for further research. *Psychology & Marketing*, 36(11), pp.1062–1081. doi:https://doi.org/10.1002/mar.21256.

Reid, L. (2004). South African consumers' beliefs about the link between food and health. *North West University*.

Resnik, D. (2020). *What is ethics in research & why is it important?* [online] National Institute of Environmental Health Sciences. Available at: https://www.niehs.nih.gov/research/resources/bioethics/whatis/index.cfm.

Riesgo, S.B., Lavanga, M. and Codina, M. (2022). Drivers and barriers for sustainable fashion consumption in Spain: a comparison between sustainable and non-sustainable consumers. *International Journal of Fashion Design, Technology and Education*, [online] pp.1–13. doi:https://doi.org/10.1080/17543266.2022. 2089239.

Rivera, M., Knickel, K., María Díaz-Puente, J. and Afonso, A. (2018). The Role of Social Capital in Agricultural and Rural Development: Lessons Learnt from Case Studies in Seven Countries. *Sociologia Ruralis*, 59(1), pp.66–91. doi:https://doi.org/10.1111/soru.12218.

Rizzo, G., Borrello, M., Dara Guccione, G., Schifani, G. and Cembalo, L. (2020). Organic Food Consumption: The Relevance of the Health Attribute. *Sustainability*, 12(2), p.595. doi:https://doi.org/10.3390/su12020595.

Roberts, S. and Shackleton, C. (2018). Temporal Dynamics and Motivations for Urban Community Food Gardens in Medium-Sized Towns of the Eastern Cape, South Africa. *Land*, 7(4), p.146. doi:https://doi.org/10.3390/land7040146.

Robinson, L. and Segal, J. (2019). *Organic Foods: What You Need to Know*. [online] HelpGuide.org. Available at: https://www.helpguide.org/articles/healthy-eating/organic-foods.htm.

Rodríguez, E., Lupín, B. and Lacaze, M.V. (2006). Consumers' perceptions about food quality attributes and their incidence in Argentinean organic choices. *AgEcon Search*. [online] Available at: www.ageconsearch.umn.edu/bitstream/ 25791/1/pp062633.

Rodríguez-Mañas, L., Murray, R., Glencorse, C. and Sulo, S. (2023). Good nutrition across the lifespan is foundational for healthy aging and sustainable development. *Frontiers in Nutrition*, [online] 9. doi:https://doi.org/10.3389/fnut.2022.1113060.

Roh, T., Seok, J. and Kim, Y. (2022). Unveiling ways to reach organic purchase: Green perceived value, perceived knowledge, attitude, subjective norm, and trust. *Journal of Retailing and Consumer Services*, 67, p.102988. doi:https://doi.org/10.1016/j.jretconser.2022.102988.

Röös, E., Mie, A., Wivstad, M., Salomon, E., Johansson, B., Gunnarsson, S., Wallenbeck, A., Hoffmann, R., Nilsson, U., Sundberg, C. and Watson, C.A. (2018). Risks and opportunities of increasing yields in organic farming. A review. *Agronomy for Sustainable Development*, 38(2). doi:https://doi.org/10.1007/s13593-018-0489-3.

Ruggerio, C.A. (2021). Sustainability and Sustainable development: a Review of Principles and Definitions. *Science of The Total Environment*, [online] 786(1), p.147481. doi:https://doi.org/10.1016/j.scitotenv.2021.147481.

Rusu Mocănașu, D. (2020). Determining the Sample Size in Qualitative Research. International Multidisciplinary Scientific Conference on the Dialogue between Sciences & Arts, Religion & Education, 4(1), pp.181–187. doi:https://doi.org/ 10.26520/mcdsare.2020.4.181-187.

Ruthsatz, M. and Candeias, V. (2020). Non-communicable disease prevention, nutrition and aging. *Acta Bio Medica: Atenei Parmensis*, [online] 91(2), pp.379–388. doi:https://doi.org/10.23750/abm.v91i2.9721.

SAARF (2015). South Africa - All Media and Products Survey 2015. [online] Uct.ac.za. Available at: https://www.datafirsttest.uct.ac.za/dataportal /index.php/catalog/754/data-dictionary/F14?file_name=amps-2015-newspapermagazine-readership-v1.1 [Accessed 13 Jan. 2024].

Sabarwal, A., Kumar, K. and Singh, R.P. (2018). Hazardous effects of chemical pesticides on human health-Cancer and other associated disorders. *Environmental toxicology and pharmacology*, [online] 63, pp.103–114. doi:https://doi.org/10.1016/j.etap.2018.08.018.

Saleki, R., Quoquab, F. and Mohammad, J. (2019). What drives Malaysian consumers' organic food purchase intention? The role of moral norm, self-identity, environmental concern and price consciousness. *Journal of Agribusiness in Developing and Emerging Economies*, 9(5), pp.584–603. doi:https://doi.org/10.1108/jadee-02-2019-0018.

Sánchez-Bravo, P., Chambers V, E., Noguera-Artiaga, L., Sendra, E., Chambers IV, E. and Carbonell-Barrachina, Á.A. (2021). Consumer understanding of sustainability concept in agricultural products. *Food Quality and Preference*, 89, p.104136. doi:https://doi.org/10.1016/j.foodqual.2020.104136.

SAOSO (2022). South African Organic Sector Organisation | FOOD SOVEREIGN NATION. [online] saoso. Available at: https://www.saoso.org/.

Saunders, B., Sim, J., Kingstone, T., Baker, S., Waterfield, J., Bartlam, B., Burroughs, H. and Jinks, C. (2017). Saturation in qualitative research: exploring its conceptualization and operationalization. *Quality & Quantity*, [online] 52(4), pp.1893– 1907. doi:https://doi.org/10.1007/s11135-017-0574-8.

Schiffman, L. and Kanuk, L. (2014). *Consumer Behavior, Global Edition: Global Edition: Global Edition*. Harlow, United Kingdom: Pearson Education Limited.

Schiffman, L.G., Kanuk, L.L. and Brewer, S. (2014). *Consumer behaviour: global and Southern African perspectives*. Cape Town: Pearson.

Schiffman, L.G. and Wisenblit, J. (2019). *Consumer behavior*. 12th ed. Upper Saddle River, New Jersey Pearson Education.

Schleiffer, M. and Speiser, B. (2022). Presence of pesticides in the environment, transition into organic food, and implications for quality assurance along the European organic food chain – A review. *Environmental Pollution*, p.120116. doi:https://doi.org/10.1016/j.envpol.2022.120116.

Scholtz, B. and Mloza-Banda, C. (2019). Applying theories for using non-monetary incentives for citizens to participate in crowdsensing projects. *South African Computer Journal*, 31(2). doi:https://doi.org/10.18489/sacj.v31i2.787.

Shafie, F.A. and Rennie, D. (2012). Consumer Perceptions towards Organic Food. *Procedia-Social and Behavioral Sciences*, 49, pp.360–367.

Shah, F. and Wu, W. (2019). Soil and Crop Management Strategies to Ensure Higher Crop Productivity within Sustainable Environments. *Sustainability*, [online] 11(5), p.1485. doi:https://doi.org/10.3390/su11051485.

Shahbandeh, M. (2022). *Organic food sales in the U.S. from 2005-2021*. [online] Statista. Available at: https://www.statista.com/statistics/196952/organic-food-salesin-the-us-since-2000/.

Sharma, G. (2017). Pros and cons of different sampling techniques. *International Journal of Applied Research*, 3(7), pp.749–752.

Shekedi, A. (2019). Introduction to data analysis in qualitative research. *Practical and Theoretical Methodologies with Optional Use of Software Use*.

Shennan, C., Krupnik, T.J., Baird, G., Cohen, H., Forbush, K., Lovell, R.J. and Olimpi, E.M. (2017). Organic and Conventional Agriculture: A Useful Framing? *Annual Review of Environment and Resources*, 42(1), pp.317–346. doi:https://doi.org/10.1146/annurev-environ-110615-085750.

Shenton, A.K. (2004). Strategies for ensuring trustworthiness in qualitative research projects. *Education for Information*, 22(2), pp.63–75. doi:https://doi.org/10.3233/EFI-2004-22201.

Shkedi, A. (2019). Introduction to data analysis in qualitative research. *Practical and Theoretical Methodologies with Optional Use of a Software Use*. [online] Available at: https://scholar.google.com/scholar?hl=en&as_sdt=0%2C5&q=Shkedi++2019+-+Qualitative+research&oq=shkedi#d=gs_cit&t=1706645727723&u=%2Fscholar%3F q%3Dinfo%3Av-8m23PQ7BAJ%3Ascholar.google.com%2F%26output%3Dcite%2 6scirp%3D0%26hl%3Den.

Short, A., Flax, M., Chamaille, A. and Benatar, N. (2018). *The Best Organic Food Shops in Cape Town.* [online] Inside Guide. Available at: https://insideguide.co.za/cape-town/organic-food/ [Accessed 19 Sep. 2019]. Sikuka, W. (2019). South Africa: Growing Trade Opportunities for U.S. and South African Organic Food | USDA Foreign Agricultural Service. [online] fas.usda.gov. Available at: https://fas.usda.gov/data/south-africa-growing-trade-opportunities-us-and-south-african-organic-food.

Silvestre, B.S. and Ţîrcă, D.M. (2019). Innovations for sustainable development: Moving toward a sustainable future. *Journal of Cleaner Production*, 208(208), pp.325–332.

Simkus, J. (2022). *Convenience Sampling: Definition, Method and Examples -Simply Psychology*. [online] www.simplypsychology.org. Available at: https://www.simplypsychology.org/convenience-sampling.html.

Simonne, A., Ozores-Hampton, M., Treadwell, D. and House, L. (2016). Organic and Conventional Produce in the U.S.: Examining Safety and Quality, Economic Values, and Consumer Attitudes. *Horticulturae*, 2(2), p.5. doi:https://doi.org/10.3390/ horticulturae2020005.

Singh, A. and Verma, P. (2017). Factors influencing Indian consumers' actual buying behaviour towards organic food products. *Journal of Cleaner Production*, 167, pp.473–483. doi:https://doi.org/10.1016/j.jclepro.2017.08.106.

Singh, R.L. and Mondal, S. (2019). *Food safety and human health*. London, United Kingdom: Academic Press, An Imprint of Elsevier.

Skjott Linneberg, M. and Korsgaard, S. (2019). Coding qualitative data: a synthesis guiding the novice. *Qualitative Research Journal*, 19(3).

SLR (2021). *PICK N PAY SUSTAINABLE LIVING REPORT 2021*. [online] Available at: https://picknpayinvestor.co.za/downloads/doing-good/sustainable-living-report/2021/sustainable-living-report-2021.pdf [Accessed 16 Aug. 2023].

Small, R. (2007). Organic gardens bring hope to poor urban communities. *Appropriate Technology*, [online] 34(1), pp.18–24. Available at: https://www.farmgardentrust.org/resourcesdir/articles/OrganicGardensBringHopeApri I07.pdf.
Smith, O.M., Cohen, A.L., Reganold, J.P., Jones, M.S., Orpet, R.J., Taylor, J.M., Thurman, J.H., Cornell, K.A., Olsson, R.L., Ge, Y., Kennedy, C.M. and Crowder, D.W. (2020). Landscape context affects the sustainability of organic farming systems. *Proceedings of the National Academy of Sciences*, [online] 117(6), pp.2870–2878. doi:https://doi.org/10.1073/pnas.1906909117.

Solomon, M.R. (2020). *Consumer behavior: buying, having, and being*. 13th ed. Harlow (England), Etc.: Pearson.

Somerset West Village Garden (2015). *About Our Garden* | *Somerset West Village Garden*. [online] Available at: https://somersetwestvillagegarden.co.za/about-our-garden/ [Accessed 13 Oct. 2023].

Soroka, A., Mazurek-Kusiak, A.K. and Trafialek, J. (2021). Organic Food in the Diet of Residents of the Visegrad Group (V4) Countries—Reasons for and Barriers to Its Purchasing. *Nutrients*, 13(12), p.4351. doi:https://doi.org/10.3390/nu13124351.

Sosnowski, R., Kulpa, M., Ziętalewicz, U., Wolski, J.K., Nowakowski, R., Bakuła, R. and Demkow, T. (2017). Basic Issues Concerning Health-Related Quality of Life. *Central European Journal of Urology*, 70(2). doi:https://doi.org/10.5173/ceju.2017.923.

Sousa, M.J., Martins, J.M. and Sousa, M. (2019). Decision-Making Processes for Effective Problem Solving to Potentiate Organisations Sustainability. *European Journal of Workplace Innovation*, 5(1). doi:https://doi.org/10.46364/ejwi.v5i1.593.

Średnicka-Tober, D., Barański, M., Seal, C., Sanderson, R., Benbrook, C., Steinshamn, H., Gromadzka-Ostrowska, J., Rembiałkowska, E., Skwarło-Sońta, K., Eyre, M., Cozzi, G., Krogh Larsen, M., Jordon, T., Niggli, U., Sakowski, T., Calder, P.C., Burdge, G.C., Sotiraki, S., Stefanakis, A. and Yolcu, H. (2016). Composition differences between organic and conventional meat: a systematic literature review and meta-analysis. *British Journal of Nutrition*, 115(6), pp.994–1011. doi:https://doi.org/10.1017/s0007114515005073.

Srivastav, A.L., Patel, N., Rani, L., Kumar, P., Dutt, I., Maddodi, B.S. and Chaudhary, V.K. (2023). Sustainable options for fertilizer management in agriculture to prevent

water contamination: a review. *Environment, Development and Sustainability*. doi:https://doi.org/10.1007/s10668-023-03117-z.

Srivastava, P. and Hopwood, N. (2009). A Practical Iterative Framework for Qualitative Data Analysis. *International Journal of Qualitative Methods*, 8(1), pp.76– 84. doi:https://doi.org/10.1177/160940690900800107.

Stampa, E., Schipmann-Schwarze, C. and Hamm, U. (2020). Consumer perceptions, preferences, and behavior regarding pasture-raised livestock products: A review. *Food Quality and Preference*, p.103872. doi:https://doi.org/10.1016/j.foodqual. 2020.103872.

Stankevich, A. (2017). Explaining the Consumer Decision-Making Process: Critical Literature Review. *Journal of International Business Research and Marketing*, 2(6), pp.7–14. doi:https://doi.org/10.18775/jibrm.1849-8558.2015.26.3001.

STATISTA (2023). *Worldwide sales of organic foods, 2018*. [online] Statista. Available at: https://www.statista.com/statistics/273090/worldwide-sales-of-organic-foods-since-1999/.

Stats SA (2019). *Five facts about poverty in South Africa* | *Statistics South Africa*. [online] Stats SA. Available at: https://www.statssa.gov.za/?p=12075.

Stats SA (2021). 2021 | Statistics South Africa. [online] Statistics South Africa. Available at: https://www.statssa.gov.za/?m=2021.

Steenkamp, E.-M. (2021). *Market trends for organic food*. [online] Hortgro. Available at: https://www.hortgro.co.za/news/market-trends-for-organic-food/.

Stoma, M. and Dudziak, A. (2022). Analysis of Market Behaviour on the Organic Food Market in Terms of Environmental Protection and Consumer Environmentalism. *Lecture Notes in Civil Engineering*, pp.345–356. doi:https://doi.org/10.1007/978-3-031-13090-8_33.

Stuart, G. (2020). *Ethical norms for the writing of scientific articles*. [online] The Ethics of Writing. Available at: https://ethicsofwriting.com/2020/10/ethical-norms-writing-scientific-articles/ [Accessed 23 Nov. 2022].

Sultan, P., Tarafder, T., Pearson, D. and Henryks, J. (2020). Intention-behaviour gap and perceived behavioural control-behaviour gap in theory of planned behaviour: moderating roles of communication, satisfaction and trust in organic food consumption. *Food Quality and Preference*, 81, p.103838. doi:https://doi.org/10.1016/j.foodqual.2019.103838.

Sun, Y., Leng, K. and Xiong, H. (2022). Research on the influencing factors of consumers' green purchase behavior in the post-pandemic era. *Journal of Retailing and Consumer Services*, 69, p.103118. doi:https://doi.org/10.1016/j.jret conser.2022.103118.

Swaraj, A. (2019). *Exploratory Research: Purpose And Process*. [online] Available at: http://crm.skspvns.com/wp-content/uploads/2020/09/110-Ananya-Swaraj.pdf.

Tan, B.C., Pang, S.M. and Lau, T.C. (2022). Marketing Organic Food from Millennials' Perspective: A Multi-Theoretical Approach. *Foods*, 11(18), p.2721. doi:https://doi.org/10.3390/foods11182721.

Tandon, A., Dhir, A., Kaur, P., Kushwah, S. and Salo, J. (2020). Why do people buy organic food? The moderating role of environmental concerns and trust. *Journal of Retailing and Consumer Services*, [online] 57, p.102247. doi:https://doi.org/10.1016 /j.jretconser.2020.102247.

Tang, K.L., Caffrey, N.P., Nóbrega, D.B., Cork, S.C., Ronksley, P.E., Barkema, H.W., Polachek, A.J., Ganshorn, H., Sharma, N., Kellner, J.D. and Ghali, W.A. (2017). Restricting the use of antibiotics in food-producing animals and its associations with antibiotic resistance in food-producing animals and human beings: a systematic review and meta-analysis. *The Lancet Planetary Health*, [online] 1(8), pp.e316–e327. doi:https://doi.org/10.1016/s2542-5196(17)30141-9.

Tavares, V. de S., Stringheta, P.C., Perez, R., Braga, G.B., Mendonça, A.C. and Souza, E.C.G. de (2021). Composition differences between organic and conventional processed foods: a meta-analytical study. *Ciência Rural*, [online] 52. doi:https://doi.org/10.1590/0103-8478cr20210237. Teixeira, S.F., Barbosa, B., Cunha, H. and Oliveira, Z. (2021). Exploring the Antecedents of Organic Food Purchase Intention: An Extension of the Theory of Planned Behavior. *Sustainability*, 14(1), p.242. doi:https://doi.org/10.3 390/su14010242.

Tempelaar, D., Rienties, B. and Nguyen, Q. (2020). Subjective data, objective data and the role of bias in predictive modelling: Lessons from a dispositional learning analytics application. *PLOS ONE*, [online] 15(6), p.e0233977. doi:https://doi.org/10.1371/journal.pone.0233977.

Thakur, N., Nigam, M., Tewary, R., Rajvanshi, K., Kumar, M., Shukla, S.K., Mahmoud, G.A.-E. and Gupta, S. (2022). Drivers for the behavioural receptiveness and non-receptiveness of farmers towards organic cultivation system. *Journal of King Saud University - Science*, 34(5), p.102107. doi:https://doi.org/10.1016/ j.jksus.2022.102107.

Thomas, D.R. (2006). A General Inductive Approach for Analyzing Qualitative Evaluation Data. *American Journal of Evaluation*, 27(2), pp.237–246. doi:https://doi.org/10.1177/1098214005283748.

Torres-Ruiz, F., Vega-Zamora, M. and Parras-Rosa, M. (2018). False Barriers in the Purchase of Organic Foods. The Case of Extra Virgin Olive Oil in Spain. *Sustainability*, 10(2), p.461. doi:https://doi.org/10.3390/su10020461.

Tropea, A. (2022). Microbial Contamination and Public Health: An Overview. *International Journal of Environmental Research and Public Health*, [online] 19(12), p.7441. doi:https://doi.org/10.3390/ijerph19127441.

Truong, V.A., Lang, B. and Conroy, D.M. (2022). When food governance matters to consumer food choice: Consumer perception of and preference for food quality certifications. *Appetite*, 168, p.105688. doi:https://doi.org/10.1016/j.ap pet.2021.105688.

Uçar, A., Yilmaz, M.V. and Çakiroglu, F.P. (2016). Food Safety – Problems and Solutions. *Significance, Prevention and Control of Food Related Diseases*. [online] doi:https://doi.org/10.5772/63176.

Ufer, D.J. and Ortega, D.L. (2023). The Complexity of Food Purchase Motivations: Impacts of Key Priorities, Knowledge, and Information Sources on Active Purchase of Food Labels. 109, pp.104913–104913. doi:https://doi.org/10.1016/j.food qual.2023.104913.

Uhunamure, S.E., Kom, Z., Shale, K., Nethengwe, N.S. and Steyn, J. (2021). Perceptions of Smallholder Farmers towards Organic Farming in South Africa. *Agriculture*, 11(11), p.1157. doi:https://doi.org/10.3390/agriculture11111157.

Umanailo, M.C.B. (2019). *(PDF) Overview Phenomenological Research*. [online] ResearchGate. Available at: https://www.researchgate.net/publication/335230717 _Overview_Phenomenological_Research.

UN (2015). *The Sustainable Development Agenda*. [online] United Nations Sustainable Development. Available at: https://www.un.org/sustainabled evelopment/development-agenda/.

UN (2019). *Global Sustainable Development Report 2019*. [online] United Nations. Available at: https://www.un.org/en/desa/global-sustainable-development-report-2019.

UNEP (2017). UNEP report outlines vast opportunities for organic agriculture in South Africa. [online] UN Environment. Available at: https://www.unep.org/news-and-stories/news/unep-report-outlines-vast-opportunities-organic-agriculture-south-africa [Accessed 10 Jan. 2024].

US EPA (2018). *Human Health Risk Assessment* | *US EPA*. [online] US EPA. Available at: https://www.epa.gov/risk/human-health-risk-assessment.

USDA (2016). *Protecting Organic Integrity through Enforcement* | *USDA*. [online] www.usda.gov. Available at: https://www.usda.gov/media/blog/2016/04 /19/protecting-organic-integrity-through-enforcement [Accessed 10 Jan. 2024].

USDA (2019). South Africa: Growing Trade Opportunities for U.S. and South African Organic Food | USDA Foreign Agricultural Service. [online] fas.usda.gov. Available at: https://fas.usda.gov/data/south-africa-growing-trade-opportunities-us-and-southafrican-organic-food [Accessed 10 Jan. 2024]. van Bussel, L.M., Kuijsten, A., Mars, M. and van 't Veer, P. (2022). Consumers' perceptions on food-related sustainability: A systematic review. *Journal of Cleaner Production*, 341(130904), p.130904. doi:https://doi.org/10.1016/j.jclepro. 2022.130904.

Vears, D.F. and Gillam, L. (2022). Inductive content analysis: A guide for beginning qualitative researchers. *Focus on Health Professional Education: A Multi-Professional Journal*, 23(1), pp.111–127. doi:https://doi.org/10.11157/fohpe. v23i1.544.

Vermeulen, H. and Biénabe, E. (2010). The quality turn in South Africa: insights from a comprehensive investigation into the food quality behaviours, perceptions and knowledge of South African consumers with a focus on middle and upper socioeconomic groups. p.21. doi:https://doi.org/10.22004/ag.econ.96194.

Vermeulen, S.J., Park, T., Khoury, C.K. and Béné, C. (2020). Changing diets and the transformation of the global food system. *Annals of the New York Academy of Sciences*, 1478(1). doi:https://doi.org/10.1111/nyas.14446.

Vigar, V., Myers, S., Oliver, C., Arellano, J., Robinson, S. and Leifert, C. (2019). A Systematic Review of Organic Versus Conventional Food Consumption: Is There a Measurable Benefit on Human Health? *Nutrients*, [online] 12(1), p.7. doi:https://doi.org/10.3390/nu12010007.

Vilar-Compte, M., Burrola-Méndez, S., Lozano-Marrufo, A., Ferré-Eguiluz, I., Flores, D., Gaitán-Rossi, P., Teruel, G. and Pérez-Escamilla, R. (2021). Urban poverty and nutrition challenges associated with accessibility to a healthy diet: a global systematic literature review. *International Journal for Equity in Health*, 20(1). doi:https://doi.org/10.1186/s12939-020-01330-0.

VNR (2019). Voluntary National Review 2019, South Africa | High-Level Political Forum. [online] hlpf.un.org. Available at: https://hlpf.un.org/countries/south-africa/voluntary-national-review-2019.

Watanabe, E.A. de M., Alfinito, S. and Barbirato, L.L. (2021). Certification label and fresh organic produce category in an emerging country: an experimental study on

consumer trust and purchase intention. *British Food Journal*, ahead-of-print(ahead-of-print). doi:https://doi.org/10.1108/bfj-09-2020-0808.

Water, M. and Mehay, R. (2010). A deeper look at constructivism-ontology and epistemology. *A deeper look at constructivism-the essential handbook for GP*.

Watermeyer, N. (2018). *Joburg's mushrooming rooftop gardens*. [online] BusinessLIVE. Available at: http://www.businesslive.co.za/fm/life/2018-04-05joburgs-mushrooming-rooftop-gardens/ [Accessed 11 Jan. 2024].

Wellington, J. and Marcin Szczerbinski (2007). *Research Methods for the Social Sciences*. A&C Black.

WHO (2017). *Determinants of health*. [online] World Health Organisation. Available at: https://www.who.int/news-room/questions-and-answers/item/determinants-of-health.

WHO (2018). *Pesticide residues in food*. [online] Who.int. Available at: https://www.who.int/news-room/fact-sheets/detail/pesticide-residues-in-food.

Wicaksana, S. (2021). Consumer Behaviour. [online] pp.1–33. Available at: www.humanikaconsulting.com.

Willer, H. and Lernoud, J. (2017). *The World of Organic Agriculture - Statistics & Emerging Trends 2017*.

Willer, H., Schlatter, B. and Trávníček, J. (2023). The World of Organic Agriculture Statistics and Emerging Trends 2023 Edited by. [online] doi:https://doi.org/10.5281/zenodo.7572890.

Willie, M.M. (2024). *The Effect of Spaza Shops on Employment and Socioeconomic Dynamics in South Africa*. [online] Available at: https://www.researchgate. net/publication/378208491 [Accessed 24 Jul. 2024].

Wolf, C., Joye, D., Smith, T.W. and Fu, Y.-C. (2016). *Sage Handbook of Survey Methodology*. Los Angeles: Sage Publications.

Wong, A. (2021). *The Interconnectedness of Sustainable Development Goals: Boom or Gloom*. [online] Earth.org - Past | Present | Future. Available at: https://earth.org/the-interconnectedness-of-sustainable-development-goals/.

Woodcraft, S. (2015). Understanding and measuring social sustainability. *Journal of Urban Regeneration & Renewal*, [online] 8(2), pp.133–144. Available at: https://www.researchgate.net/publication/286595877.

Woolworths (2023). *Organic Products* | *Woolworths.co.za*. [online] www.woolworths.co.za. Available at: https://www.woolworths.co.za/content/ article/organic-products/_/A-cmp100419 [Accessed 26 Feb. 2023].

WWF (2019). *WWF statement on WEF's Global Risks Report 2019*. [online] wwf.panda.org. Available at: https://wwf.panda.org/wwf_news/?341471/WWF-statement-on-WEFs-Global-Risks-Report-2019 [Accessed 12 Jan. 2024].

Yiridoe, E.K., Bonti-Ankomah, S. and Martin, R.C. (2005). Comparison of consumer perceptions and preference toward organic versus conventionally produced foods: A review and update of the literature. *Renewable Agriculture and Food Systems*, [online] 20(04), pp.193–205. doi:https://doi.org/10.1079/raf2005113.

Zhang, P. and Lin, C. (2016). Security Threats in Network Coding. *Wireless networks*. doi:https://doi.org/10.1007/978-3-319-31083-1 2.

Zhang, S. and Zhu, D. (2020). Have countries moved towards sustainable development or not? Definition, criteria, indicators and empirical analysis. *Journal of Cleaner Production*, 267, p.121929. doi:https://doi.org/10.1016/j.jclepro.202 0.121929.

Zmyślony, P., Leszczyński, G., Waligóra, A. and Alejziak, W. (2020). The Sharing Economy and Sustainability of Urban Destinations in the (Over)tourism Context: The Social Capital Theory Perspective. *Sustainability*, 12(6), p.2310. doi:https://doi.org/10.3390/su12062310. Zreik, T., El Masri, R., Chaar, S., Ali, R., Meksassi, B., Elias, J. and Lokot, M. (2022). Collaborative Coding in Multi-National Teams: Benefits, Challenges and Experiences Promoting Equitable Research. *International Journal of Qualitative Methods*, 21, p.160940692211394. doi:https://doi.org/10.1177/16094069221139474. I would like to reiterate that this interview aims to obtain your view concerning organic food and the reasons you would buy these products. The information obtained will be used only for research purposes and no names of participants or any identifying data regarding yourself and your opinions will be made known in the report.

Do you have any questions before we start the interview?

May I audio-record the interview, as it would help me to listen to it again later and to make a transcript of the interview for data analysis purposes?

Exploring the potential contribution of organic community food gardens for sustainability: the perspective of cultivators and consumers.

Consumer Interviews

Objective 1 - Determine consumers' knowledge and perspectives of organic food. 1. When the word 'organic' is mentioned, what comes to mind? What do you know about organic food? **Possible prompts:** Expensive – Do you know that for a fact or is it just the perception? Safe environment: Please elaborate on what you mean. Better for you: In terms of what specifically 'free-range' – what do you mean if you say free-range? Are free-range and organic the same? 'niche or fashionable'- is it something that will draw your attention 2. So when a product is labelled as organic, what do you expect from this product? **Possible prompts:** Are there things that are like 'red flags', when you immediately think this product is NOT organic? 3. Do you associate organic food with certain processes? Things that they definitely must or must NOT do for it to be organic. **Possible prompts:**

Is organic certification something that you consider when looking for organic products? Do you know whether we have a certification body for organic food in South Africa? If you say pesticide-free, what do you mean and how does it differ from other farming methods?

4. In your opinion are there any health benefits when eating organic foods? Please explain.

Possible prompts:

And what about nutritional value? So you believe that it might be more nutritious in what way? So will these health benefits persuade you to rather eat organically? If you are diagnosed with a food-related health disease will eating organically be an option?

5. What do you believe is the environmental impact (if any) of organic farming methods?

Do you know if this is any different from conventional farming methods?

- Do you regularly buy any organic foods? (If the answer is No, continue to Q1.8)
 - a. Yes-
 - > Are there any products that you prefer buying only organic?
 - Do you mind elaborating on the reasons why you would rather buy these mentioned products organic?
 - When you are shopping for organic products, do you usually find what you are looking for?
 - > Does it fulfil your expectations of what the product should be like?
 - > Where would you typically go for organic products?
 - > Elaborate on the reason for purchasing products there.
 - b. No –

	Do you mind elaborating on the reasons why you are not interested
	in buying products?
	If I understand correctly, the price/availability/? is something that hinders you from
	buying organic
	Will you be willing to overlook this/these reason (s) to live healthier, support the
	local community garden or benefit the environment?
De	termining consumers' willingness to purchase organic food products from a local
or	ganic community garden.
	1. So when I mention community gardens, what are you thinking of?
	2. If you had the choice, would you rather buy organic products from a
	commercial, well-known store or a community garden? Please tell me more
	about your reasoning behind this decision.
Ot	piective 3 - Identify the presence and cultivation of community gardens in the
	local area.
1.	Are you aware of any community gardens in your area? (No - move to Q3.1.3)
	Do you know whether they sell their produce to the local community or maybe at certain
	markets around Cape Town?
2.	Yes - Do you know whether the products they are selling/cultivating is
	organic?
	How are you as the consumer made aware of this?
	Does it make a difference whether you will support them or not?
3.	No – Say, for instance, you have a community garden in your area and this
	community garden is selling fresh organic fruit and vegetables. Would you be
	interested to go and buy your organic fruit and vegetables from them?
	Please elaborate.
	If so, how often?
Ok	pjective 4 - Explore the local market opportunities for organic food products
pr	oduced from organic community gardens.
1.	What do you think these community gardens and the media can do better to persuade
	their community to rather buy from them?

2. In your opinion, what would the best way be to make you aware/advertise these community gardens?

Community Garden Cultivator Interviews

Ok	Objective 2 - Determine cultivators' perspectives on organic community			
	gardens.			
Ge	ener	al:		
1.	W	hy did you start this community garden? Background.		
2.	WI	nat do you believe should be the main objectives/aims of a community garden?		
3.	In	your opinion, how do you think your community benefit from your garden?		
4.	De	termine the cultivators' knowledge and perspectives of organic food.		
	a.	When the word 'organic' is mentioned, what are you thinking?		
		Expensive – Do you know that for a fact or is it just the perception?		
		Safe environment: Please elaborate on what you mean.		
		Better for you: In terms of what specifically		
		'free-range' – what do you mean if you say free-range? Are free-range and		
	organic the same?			
		'niche or fashionable'- is it something that will draw your attention		
	b.	So when a product is labelled as organic, what do you expect from this product?		
		Are there things that are like 'red flags', when you immediately think this product		
		is NOT organic?		
	C.	Do you associate organic food with certain processes? Things that they definitely		
		must or must NOT do for it to be organic.		
		Is organic certification something that you consider when looking for organic		
		products?		
		Do you know whether we have a certification body for organic food in South		
		Africa?		
		If you say pesticide-free, what do you mean and how does it differ from other		
		farming methods?		
	d.	In your opinion are there any health benefits when eating organic foods? Please		
		explain.		
		And what about nutritional value?		

So you believe that it might be more nutritious in what way? So will these health benefits persuade you to rather eat organically? If you are diagnosed with a food-related health disease will eating organically be an option?

e. What do you believe is the environmental impact (if any) of organic farming methods?

Do you know if this is any different from conventional farming methods?

- 5. Identifying the barriers to organic community garden cultivation in the local.
 - a. Is this an organic garden?
 - (i) Yes Please explain to me why this garden is organic.
 - Is it certified as organic? Or/and how does it work?
 - How is your garden different from any other conventional food garden?
 - (ii) No Please explain any challenges you may face.
 - b. According to you, What should an organic garden look like?When you mention ??? what do you mean
 - c. Is there a specific reason why you cannot have an organic garden?You talk about ??? (cost) and it is expensive, but what are the things that you believe are so expensive that you won't be able to afford it
 - d. In your opinion, what would motivate you the most to change from conventional non-organic foods to organic foods?

6. Exploring cultivators' willingness to sell produce at local organic markets.

- a. What do you do with all your products?
 Do you sell them? Local market?
 Give them away?
- b. (If it is an organic garden)If you had the opportunity to sell your products at a local organic market would you do that?
- c. What will be the determining factor for you to sell at local organic markets?
- d. (If it is not an organic garden)
 - If you get the opportunity to sell some of your products at a local organic market, will you change from conventional to organic farming methods?
- e. Do you know of any markets in your area where you would be able to sell your products?

f. How do you make people aware of the produce in your garden?If the garden is organic how do you make consumers aware of it?

TABLE 1

When the word 'organic' is mentioned, what comes to mind? What do you know about organic food?

ID	Document	Quotation Content	Codes
1:1	P1 Int	P1: Very much like farm-based products. Like minimal	1a1 Term 'organic'
		use of pesticides. Grown obviously. I don't know how to	
		put it in like a safe environment.	
1:2	P1 Int	P1: I would assume that it would be extremely natural. So	1a1 Term 'organic'
		there would be less hormones in the product. It would be	
		the most natural form of the product that you would get.	
1:27	P1 Int	P1: And I think also it's interesting because people would	1a1 Term 'organic'
		prefer to buy organic, yet it is that whole thing it's mostly	
		around like how do we know that this is actually organic.	· · · · · · · · · · · · · · · · · · ·
1:11	P1 Int	P1: I think possibly because of being in the food industry	1a1 Term 'organic'
		we've seen a lot where organic was more of a label than	
		the procedures actually having being followed. So it was	
		labelled as organic and we didn't do this and we didn't do	
		that wasp't actually the case and the price difference	
		often between some organic and something that isn't	
		organic is quite high so therefore also being a student l	
		would go for whatever was cheapest	
2.1	P2 & 3 Int	Okay a fresh untainted of the earth natural healthy	1a1 Term 'organic'
	1200	eco-friendly, tasty, non-modified, non-genetically	
		modified	
2:2	P2 & 3 Int	So, organic is for me, an indication of food that has not	1a1 Term 'organic'
		been contaminated with fertilizer and pesticides	0
2:4	P2 & 3 Int	And, also organic. It makes me think, although probably	1a1 Term 'organic'
		not directly, but free range. So, if they say organically fed.	
		Yeah. That starts going on to another whole thing.	
2:87	P2 & 3 Int	P2 & 3: Who go into the research and they'll make sure	1a1 Term 'organic'
		that they know that those chickens are not only let out	
		once a week and then they call them free-range. They go	
		to the farm and they go and see the chickens.	
2:66	P2 & 3 Int	P2 & 3: So, it's not just, you know stuffing your face with	1a1 Term 'organic'
		food because it's got all the nutrients and just knowing	1a4 Health benefits
		that you're supporting the people locally. You're eating	Health (2): Health concerns
		food that is supposedly free of, of harmful chemicals.	
0.60		Yean. Harmiul chemicals and things like that.	101 Torre lorgonial
2:03	P2 & 3 Int	P2 & 3: The workers. Are they being looked after. Are	Tal Term organic
		them So it's it's a whole chain of things. It's not just one	
		thing	
3.1	P4 Int	If I hear the word organic. I think of something that grows	1a1 Term 'organic'
0.1		naturally or is naturally in its natural habitat an	
		environment and not influenced by any human action. So	
		obviously now looking at organic plants and things and I	
		would assume that no substances were used to influence	
		the, the, the organism's growth and so forth and yeah I	
		know hormones and stuff was used. I think nowadavs	
		with the technology of I don't know GMO's and so forth	
		and it's actually quite scary that stuff gets so built and	
		engineered. So if I see something as organic I assume	

		that it is engineered fruit or vegetable. It is something that is naturally grown and gone through the natural motions	
3:51	P4 Int	P4: I expect it to not damage my health. I think that's the, the biggest drive for me to buy something that is organic because it is more expensive usually then or it doesn't it doesn't look so pretty, but one does feel more confident in the fact that you're not, there aren't hidden substances or hidden things within that type of food. So it just feels a little bit more natural so although it isn't as pretty or as, as nice and, and maybe doesn't have such a long shelf life, which already freaks me out. The other day I had a avocado and it just wouldn't go brown and I thought to myself like how is this avocado been engineered to not go brown after a full day and a half of being open. So that's quite scary so what I expect of my organic fruit is that unnatural stuff like that doesn't happen and I mean growing up on a plot and with my mother my mother who is very enthusiastic about our vegetable garden and a form of punishment was to go pick beans because it's a very labour-intensive job and you have a certain taste of. Like you actually know what certain vegetables and fruits are supposed to taste like and nowadays, it just feels like if you buy certain fruits and vegetables they just taste like nothing or they all taste the same and that's quite saddening. So when I buy something organic I expect to have that the taste that I tasted when I was younger growing up on the plot eating and harvesting our own fruits and vegetables so yeah	1a1 Term 'organic' 1a6 Purchase intent Health (2): Health concerns
3:60	P4 Int	P4: It's a fine line. I mean the argument that eating something fresh out of the ground that is untreated is obviously healthier than eating something that is conditioned to grow in certain ways.	1a1 Term 'organic'
3:92	P4 Int	P4: Just taste. Taste and yeah definitely just taste. Like I said I, I have a little bit of knowledge knowing what is in season because that's what it tastes nice. So yeah I would I would definitely go buy food if I knew. Like with the meat. I specifically don't buy meat in, in supermarket chains because my experience of the taste of the meat has just been so awful. So I will take the extra effort and I'll take the extra time and I go to the butcher and I go by the meat and meat's nice because you can freeze it and keep it for, for long. So it's not like you've got it constantly but with vegetables I will definitely do an effort if I know that I'm going to get something that is just really tasty and like just yeah it makes you happy to eat it	1a1 Term 'organic'

3:52	P4 Int	P4: Yeah so pretty as in, I mean we all like nice things that look nice. There is the, the idyllic strawberry that doesn't have like just is the perfect shape and the perfect plump redness and there's no parts of brown or white little ungrown part yet and we, the nice thing is and I'm going to revert back to my story from being younger. Like when you did find the perfect bean or the perfect potato it was like look how pretty this potato is because it was the exception, where nowadays it has changed like if it isn't the perfect round potato or the perfect strawberry or the, the perfect mandarin, then people are like it surely won't taste nice but the other day I went there's a local, a local vegetables and fruit from the road and it's so funny his narrative was. So he stood there and there he had naartjies but they looked terrific like they were still half green and like the skin was, they just didn't look nice and the first thing he said. He's like I know they don't look nice but they taste delicious and he opened one up and he, and he, and he knew that nowadays people are inclined not to buy fruit that doesn't look pretty. So he knew he had to open one up and share and be like taste this and, and it actually tasted like a proper nartjie. So I was like buying a whole box. So yeah I think it's and even that tradition, I remember back in the day like going to vegetable stores. You used to walk in and there was always this Portuguese guy. I know it's a stereotype but there was also always like this Portuguese guy and as you would walk through the story he would make you taste everything, be like this sin season taste this have one of these. Like it wasn't this perfectly packaged, wrapped in cellophane, looks beautiful and you get home and then you're very disappointed in what you, you	1a1 Term 'organic'
4:1	P5 Int	P5: For me it goes specifically to, to, to natural and, and no chemical intervention. So organic, for me, often meant that and, and then particularly of course to, to, to food. For me organic means food. I don't really think about it in other contexts, really. Cleaning materials. I've become quite specific about that as well. In terms of what it does. So organic cleaning materials around the house and then, and then what we, you know. Food stuffs.	1a1 Term 'organic'
4:53	P5 Int	P5: You know. The whole thing and you know, very often I like to get my vegetables with all their foliage on them so I can kind of see what is the growth like and, and all of that. And also, my carrots mustn't be this, you know, thing. Organic vegetables are smaller and they deformed and they. You know, they're not perfect. So, I tend to look at all those sorts of things which is why I really battle. I can buy, I can buy dry goods and stuff online. I can't buy fresh stuff online.	1a1 Term 'organic'
4:40	P5 Int	P5: So, so, for me it means it's the. It should be the best quality, most natural product I can get. If it's a local product in South Africa, because I know that our standards of being able to accredit organic farmers is not as good as it is in other parts of the world. So, for me it means that within South Africa, if I'm buying a local product, it is the most natural and un-interfered with form of that particular product that I can get. Often it also	1a1 Term 'organic'

		speaks to for me to the quality, particularly in terms of, of, of animals. The quality of life that that animal might have had. Which is, which is a massive driver for me in in terms of products. So, I kind of look at it as a standard. A quality standard, really.	
4:62	P5 Int	P5: Obviously there's a reason something's happened. No. I'm not doing that. But I find very often that my pool of what I can choose from, if I'm only choosing organic, is tiny at that particular, you know, point in time. So, I tend to go, you know, seasonal, local, best quality I can and then organic if I. I will choose it.	1a1 Term 'organic' 1a4 Health benefits
4:68	P5 Int	P5: But you know, one of the things that does worry me are, very often are my salad ingredients. Leafy ingredients and tomatoes. I once had a tomato many, many years ago that lived on my kitchen counter for about six weeks and didn't go off.	1a1 Term 'organic'
5:1	P6 Int	P6: Well healthier and expensive, but you know what we want to do that's what comes to mind	1a1 Term 'organic'
5:45	P6 Int	P6: Well we are looking at the prevalence of the cancers that people get now and you know all sorts of disorders I think there's lots of health benefits of trying to stay as natural as possible, because I think these chemicals are yeah, not, great	1a1 Term 'organic' 1a3 Associated processes Health (2): Health concerns
5:33	P6 Int	P6: To make sure the fruit gets to the shop with the same shape that it had and all of that which I don't think is necessarily good for our bodies. I think we sort of end up ingesting that sort of stuff. So I think organic food just, you know, just make good food but that's not got any residue of chemicals or fertilizers in it	1a1 Term 'organic' 1a4 Health benefits
5:32	P6 Int	P6: Well if I understand organic foods enough, it's foods that have been made with less harsh pesticides and fertilizers you know, I know farmers are all into having high yields and their crops and they use all sorts of stuff you know, preservatives	1a1 Term 'organic' 1a3 Associated processes
5:48	P6 Int	P6: Rather than trying to use chemicals to enhance the quality of the soil and using like the soil rotation, plant rotation in order to rehabilitate the soil is a better way of looking after the soil than	1a1 Term 'organic' 1a4 Health benefits
5:47	P6 Int	P6: Well I think I. I don't know much about a soil analysis and stuff but I think they do end up affecting the soils all these chemicals that you put in the crops to try and make them grow artificially. So I think for it's good for the environment if we not mess up the balance although	1a1 Term 'organic' 1a4 Health benefits
6:1	P7 Int	Nature's growth straight from the soil	1a1 Term 'organic'
6:2	P7 Int	And earthy	1a1 Term 'organic'
6:3	P7 Int	I nere is no adaptations made to it. There's no chemical imbalance being used through it. It is all just grown out of direct potting soil. No genetic influence	1a1 Term 'organic'
7:1	P8 Int	I'm thinking of produce that is grown without any pesticides, without any hormones. So as natural as possible	1a1 Term 'organic'
7:2	P8 Int	So natural, like going back to produce. If its, lets say it's a tomato, its grown to its ripeness. It's not picked before and you know left in somewhere to actually ripen	1a1 Term 'organic'
7:36	P8 Int	P8: I think in a situation like that, if it's you know loosely displayed I would say that the more. You know in in it's in a supermarket they always try and get the most perfect apples that are around and have the most perfect, you	1a1 Term 'organic'

		know shade of green or red and something's not perfect that's also an indication	
7:26	P8 Int	P8: The packaging seems to be a lot you know cleaner. There's more conscious thought going into the packaging then	1a1 Term 'organic'
7:20	P8 Int	P8: I'm thinking of produce that is grown without any pesticides, without any hormones. So as natural as possible	1a1 Term 'organic' Health (2): Health concerns
7:22	P8 Int	P8: So natural, like going back to produce. If its, lets say it's a tomato, its grown to its ripeness. It's not picked before and you know left in somewhere to actually ripen	1a1 Term 'organic'
7:30	P8 Int	P8: I think so. I think it reduces a lot of the, you know the added preservatives and the things that people are mostly worried about like MSG or the GMOs and that type of thing	1a1 Term 'organic' Health (2): Health concerns
7:28	P8 Int	P8: I think the more processed something looks, that's what I think this is definitely not an organic product	1a1 Term 'organic'
7:25	P8 Int	P8: The only thing that I can think of is Woolworths. They're organic section. So the way that they present the food is quite. You know minimalistic	1a1 Term 'organic' Retail
7:38	P8 Int	P8: There are quite a few. I don't know if they're organic but like those markets like Root44 market or the Oranjezicht market. They've got quite a few loosely displayed vegetables	1a1 Term 'organic' Shopping
8:1	P9 Int	Chemical-free	1a1 Term 'organic'
8:2	P9 Int	From preparing the soil for veggies or whatever needs to be grown or wheat. Preparing the soil with no, no chemicals involved to pest control. Is that the right word. Pest control and then also, ja the packaging or the ripening of fruit or whatever and the packaging I would say without chemicals	1a1 Term 'organic'
8:20	P9 Int	P9: Yeah or yes absolutely and they shouldn't be preservatives or anything, you know, like in, if juice for example is sold as organic I wouldn't want to see all the preservatives to actually lengthen the shelf life	1a1 Term 'organic'
8:15	P9 Int	P9: I think it shouldn't be ripened in a, in an artificial way. I, I don't think it should be processed in an artificial way and, you know. So like for example if they say fruit is organic, I wouldn't say, I wouldn't like it to be in refrigerators for like a month to ripen, yeah	1a1 Term 'organic'
8:14	P9 Int	P9: From preparing the soil for veggies or whatever needs to be grown or wheat. Preparing the soil with no, no chemicals involved to pest control. Is that the right word. Pest control and then also, ja the packaging or the ripening of fruit or whatever and the packaging I would say without chemicals	1a1 Term 'organic' 1a4 Health benefits
8:26	P9 Int	P9: Well the end of the day is, you need to buy what you can afford. So, money plays a role but I will then compromise. So in other words, I will then eat less grass-fed beef	1a1 Term 'organic' 1a6 Purchase intent
8:37	P9 Int	P9: And I really, really like the meat the beef and the mince and not the chicken because the quality to me is not the same	1a1 Term 'organic'
8:43	P9 Int	P9: And on the other hand I would assume and that could be wrong that they wouldn't be money for all the very expensive chemicals and that they would do it the organic way but I would then trust, yeah, because there are so many other good they're doing	1a1 Term 'organic' 1a4 Health benefits Assumption Trust

8:17	P9 Int	P9: Yeah. I, I am and they must not be artificial, like for example, I know with chickens they do a whole artificial day of light. So, so that they can produce more eggs. That kind of thing should not happen. So, they must run free for example when it comes to chickens and they must not force growth by adding hormones or you know to better the, you know	1a1 Term 'organic' 1a3 Associated processes
8:29	P9 Int	P9: Footprint. I'm, I'm, I'm off late and I think lockdown brought that on for me on many levels. Of late I think we need to live lighter so that we can sustain our planet and our, and it sounds such a cliché but it, but	1a1 Term 'organic' 1a4 Health benefits
9:1	P10 Int	Organic. Healthy or like home grown food. No chemicals. Well no bad chemicals for the environment	1a1 Term 'organic'
9:2	P10 Int	Like at home we grow all our like herbs and stuff like that. So it's me .it's like get some organic herbs	1a1 Term 'organic'
9:23	P10 Int	P10: I mean even just job creation or like smaller farmers who are like subsistence farming, but also selling whatever extra produce they have and we can support them	1a1 Term 'organic' 1a3 Associated processes
9:18	P10 Int	P10: The reputation I guess of a farmer's market is to be organic and it's the vendor's responsibility to be authentic	1a1 Term 'organic' Consumerism Trust
9:14	P10 Int	P10: Like at home we grow all our like herbs and stuff like that. So it's me .it's like get some organic herbs	1a1 Term 'organic'
9:13	P10 Int	P10: Organic. Healthy or like home grown food. No chemicals. Well no bad chemicals for the environment	1a1 Term 'organic' 1a4 Health benefits Health (2): Health concerns
9:15	P10 Int	P10: They have to tell you, don't they or when you buy them. I guess if you buy them Pick and Pay you don't have a guarantee that all of it's organic however if you go to like farmer's market then it's pretty much like you go there for the organic ones, organicness. That is the word	1a1 Term 'organic' 1a2 Labelling/Packaging/Certificati on
9:20	P10 Int	Organic, no that organic or sustainable farming. They like cycle the soil. So then the soil is better. They don't use harmful chemicals that go into water or into the soil or into the air. I'm not trying to put my consumer's knowledge on the exam	1a1 Term 'organic' 1a4 Health benefits
10:1	P11 Int	I think of natural food that hasn't been tampered with in any way you know with pesticides or genetically modified, yeah, in my mind organic means it's growing in soil that is clean you know as natural as possible in this world we live in which is probably very, very challenging. I know a lot of organic places still get you know residue from other farms and stuff like that	1a1 Term 'organic'
10:2	P11 Int	So, you know what is organic really in 2022. I think that's why we also a lot of people are resorting to trying to grow their own food at home but even then you know the water and the soil quality is not what we wish it would be but yeah, I think as natural as possible for me is organic	1a1 Term 'organic'
10:35	P11 Int	P11: Well I mean if I see containers that are plastic that concerns me, because we know plastic, you know leeches and. Obviously you can't see whether someone sprayed on it you know. Obviously if I see some a bag of some potion or poison you know there's certain ones that you kind of know in the industry are not great, then that is generally you know red flag. Yeah I think when I, when I see people's gardens that the vegetables are growing quite wild, it kind of makes me feel like that is natural. It's, it's not in those rows because and, and you can see	1a1 Term 'organic' 1a4 Health benefits 1a6 Purchase intent

		when it's companion planted quite well. Also if I see bugs and stuff in the garden then that is kind of a good sign because you do. I do feel like nature needs to kind of carry on	
10:31	P11 Int	P11: I expect it not to have any chemicals on it. I also expect the seeds not to be modified in any way to be you know heirloom seeds coming from generations of good quality plants that's what I hope because	1a1 Term 'organic'
11:1	P12 Int	When I think of organic I think that's something very natural that hasn't got lots of hormones. That's the first thing that comes to mind so if I think of organic meat organic food and vegetables I think of something that's more natural and that hasn't got all these GMOs and all the different kinds of things	1a1 Term 'organic'
11:24	P12 Int	P12: When I think of organic I think that's something very natural that hasn't got lots of hormones. That's the first thing that comes to mind so if I think of organic meat organic food and vegetables I think of something that's more natural and that hasn't got all these GMOs and all the different kinds of things	1a1 Term 'organic' 1a4 Health benefits
11:36	P12 Int	P12: So and then you know that this Farm is actually going to be growing that's kind of wine that doesn't use as much sulfur doesn't use as much theft because their growth they plant them in a specific way and that's been apparently done for hundreds and hundreds and hundreds of years. So I do think that if you had to walk into a farm you would be able to tell if it is an organic grown farm or not I must be very honest I haven't really been to very many farms to actually be able to say it was an organic farm but I do think that if somebody had to walk in they would be able to tell because it must be a certain way that you plant things. I don't know	1a1 Term 'organic' 1a2 Labelling/Packaging/Certificati on
11:33	P12 Int	P12: Okay to be very honest I've never really looked if there is a process which I just assume that there would be and I actually think it would be really really nice personally to say this is organically grown because we've used this kind of compost or it hasn't been grown like a million and just distributed this is the time of the year we grow with that's why you can only get it at this time and this is how we what pesticide we use less everything in more natural form and I think that really would be nice for us to know especially for me I am a little bit of a weirdo. So I know that any fruit that I buy because I don't know what pesticides they've used and I assume they've used pesticides I'll wash everything with dishwashing liquid first and then I've dried all up and then I put it in the fruit bowl yeah. S I think it would be nice personally to be able to quickly the same way as you read like what's in I don't know in a in a bought product that's got a square tin you know you say it's got sulfur it's got this and that. I think personally it would be quite nice to say this has been organically grown this is the area it was grown this is the kind of soil it was growing in I don't know if that's asking too much but maybe it really would help people that are a little bit paranoid about what they're eating just to help them along	1a1 Term 'organic' 1a2 Labelling/Packaging/Certificati on Health (2): Health concerns

11:35	P12 Int	P12: Okay I think I do think that but then I come from a different background a little bit because Angelica did try to do an organic garden and she used very specific plants in a very specific way of planting stuff to make vegetables grow. Having said that I've been to an organic wine farm overseas and what they plant next to all the vines difference different heights in different stages of the year are different rose bushes because they attract aphids and they attract some rose beetle kind of things that if they weren't there they would attack the grapes	1a1 Term 'organic' 1a3 Associated processes 1a4 Health benefits
11:42	P12 Int	P12: I I think I agree with you I think that you have to go hand in hand. I do think that more people would like to be organic because if you speak to people in general but it's just so hard to come by it is not promoted as well and I think maybe if it was more promoted and maybe not just hidden between the other fruit and vegetables. That these actually like a big display standards is this although organic vegetables are put there whether the carrots look funny not one little panic packet next to the non-ones that says organic. I think people would actually buy more organic food. It would just go off the shelves far more faster than having to actually sauces between the other fruits and vegetables I don't know that's just me	1a1 Term 'organic' Marketing
11:28	P12 Int	P12: So I think both although probably what you said before free range maybe free range is more for animal products and not so much for fruit and vegetables but I still think that they do that with vegetables nowadays because sometimes you get fruit at a taste of absolutely nothing. It's impossible it looks as if they've just been pumped up with who knows what to put them on the shelves and they've got absolutely no taste	1a1 Term 'organic' 1a3 Associated processes
11:37	P12 Int	P12: I did a hundred percent believe that there's health benefits in eating organic. I think first of all there will definitely be more nutritious the vegetables and the fruit 100 because they will just taste so much better and something tastes good usually it has definitely got more of the vitamins than that. I also do you think that so many people have noticed they open like a strawberry pack and they just eat them from the package without even washing them and if at least if it's organically grown you know that you're not going to be swallowing, I don't know half a can of Doom with it. So I do think that it is really beneficial health-wise because I do believe that you're taking a lot of impurities and toxins when you eat non- organic fruit and vegetables that's a personal point but that's just me	1a1 Term 'organic' 1a3 Associated processes 1a4 Health benefits Health (2): Health concerns
11:27	P12 Int	P12: I actually expect from that product that it's grown in a really good natural environment that not excessive pesticides have been used to make it grow. So that it I really do believe that the pesticides do affect everything on the plants that it's in a natural environment with insects and everything else is around but that they looked after and they've got good soil and good nutrition and not just chemically grown so that they sprout out very quickly. They've got a more natural cycle of growth if that makes any sense to you instead of just acting so that they grow quickly big so that they can just be distributed	1a1 Term 'organic' 1a4 Health benefits

11:39	P12 Int	P12: 100 I actually do think not only. Yes huge environmental because if you plant when you mean to plants fruits and vegetables I think you give the other part of the soils a rest they don't need to be over fertilized it gives them a resting period. It also allows people just to do stuff that's in season which also sets a new mindset of buying what's in season and not looking for things other than that which gives farmers a break also in concentrating on one thing at the time and and also I think if people get used to eating organically more people will then be encouraged to grow the seasonal vegetables at home in their own gardens because they're like they're not looking for something else. They say okay not spinach and cabbages and whatever but now because it's winter those grow well in winter look at this you know	1a1 Term 'organic' 1a4 Health benefits 1a6 Purchase intent Home gardening
11:47	P12 Int	P12: 100 I think those community gardens actually would work better organic because they're small sections and they're very easy to look after anybody can be taught to look after them so you don't need a a degree in agriculture to be able to look after a farm. It's very sustainable you can also grow vegetables that you know you will use all the time. You could also teach the people how to pick the vegetables from an organic garden because it's not a big farm so you don't have to uproot all the lettuce. You could just take the bigger lettuces and actually sell them like when you buy the baby leaf lettuces from Woollies that cost an absolute fortune. You could sell that kind of stuff and your plant would keep growing. So I think community gardens are actually the most amazing thing if everybody should have one and schools yeah those are really really good	1a1 Term 'organic' 1a3 Associated processes 1a4 Health benefits Community Education
12:1	P13 Int	More expensive	1a1 Term 'organic'
12:2	P13 Int	I'm also skeptical whether it's organic or not because these days they say organic just because maybe they use less pesticides or or less fertilizers or whatever but I think at the in the long run they actually do	1a1 Term 'organic'
12:24	P13 Int	P13: And also for meats and stuff that's something that I might consider is whether they are given antibiotics. You know a lot of animals are given a lot of sort of antibiotics to make them and I would consider organics to have zero antibiotics in them	1a1 Term 'organic'
12:23	P13 Int	P13: If I was at a market and I saw fruit and veggies there that said they were organic I would probably buy them if they look nice and fresh and whatever the case may be but it wouldn't change my skepticism because also I feel that they're quick to put the organic label on but they don't think of other things like carbon footprint to get it to be organic and all that sort of thing. So so I don't believe it's that much different to just normal non-organic food	1a1 Term 'organic' 1a6 Purchase intent
13:1	P14 Int	When I hear the word organic I think good old-fashioned farming	1a1 Term 'organic'
13:2	P14 Int	Yes very few chemicals planted in the ground. So not in fake compost or man-made artificial compost but planted in real soil with real nutrients. Exposed to the sun, not growing in a shed. So that's why I'm saying old-fashioned farming before we had all the modern additives	1a1 Term 'organic'
14:1	P15 Int	Generally I think no no pesticides	1a1 Term 'organic'

14:2	P15 Int	So if something is grown organic I think whole foods, I think yeah free range, no pesticides or yeah organically grown. I think it's clean that's my idea yeah	1a1 Term 'organic'
14:3	P15 Int	Free range would be in terms of like livestock and things like that and and poultry and chicken that they are not cubed up in cages that they you know necessarily are corralled at evenings and times and stuff like that but then they're in pins rather than necessarily cages and that and then in terms of like if we I mean we don't really look at we don't really look at produce in terms of free range but I think the idea of produce being that it's not it's it's hum it's farmed in a in a healthy fashion so it would be organic types of pesticides and things like that. So not really chemical pesticides and and that sort of stuff so yeah	1a1 Term 'organic'
14:31	P15 Int	P15: Yeah I would think that in terms of CO2 emissions and and that that all of that I think that there would be a massive knock-on in that. I think that if we the less because when you think of pesticides you think of crop dusting you think of all that sort of stuff you think of industry in terms of chemically made. I mean I know when I worked at a in my teen years I worked in a factory where they made those deo blocks and they made household cleaners and that and I know that my skin really really struggled. I had massive outbreaks because of the chemicals of the environment that I was in the whole time. So I think that in in that regard if I think about those those pesticides and those the I think there's always a a natural way in which to combat pests. So you know I've seen some really cool things like with the introducing ladybugs into an anfield or aphid run crop and I think it's so smart. I think that that kind of concept you know and obviously you need to look at this obviously risks of alien species and things like that but I think that there's always a natural way to to combat a a particular kind of ailment of the crop or something to that effect	1a1 Term 'organic' 1a4 Health benefits Health (2): Chemical exposure Healthy eating on a budget: Sustainable agriculture
15:1	P16 Int	Healthy	1a1 Term 'organic'
15:2	P16 Int	Generally when for me what it means is if you're using something organic that it is no preservatives no additives nothing like that yes and then the second word that comes to mind is expensive	1a1 Term 'organic'
15:28	P16 Int	P16: No not really I you know the thing is is that it depends on really the type of foods that you do eat and how you eat and in what portions you eat and so it's not just you eat organic or not organic but the thing is I I think that it's got to do more with how the the food is treated and how much chemicals is added to the food and so I'm so I think that also plays a role in it as well. So it's a point in every organic food and then they they stop adding other chemicals to it or treating it in some way or other and they're not always honest	1a1 Term 'organic' 1a3 Associated processes
15:21	P16 Int	P16: That first of all that it's hasn't gone through any sort of major treatments with insecticides pesticides and so on that just hopefully has got less poisons attached to it. That it's also a more pure substance in that the way that it has been treated. Pure meaning in the way it's been treated that it's been treated with no external or other objects other specimen species or anything like that. So no cross-contamination or anything like that	1a1 Term 'organic'

15:31	P16 Int	P16: I think so. Again I think it just depends on how it is done and because not all of it is done in the environment some of it's done in labs. So it really just depends but it definitely can have an impact on the environment and I think if it's both inorganic or organic foods and so on can be either safe or not safe. So I know this sounds like I'm sitting on the fence but the fact is is that if you're really going to do the organic foods in the proper way that you're supposed to do it and be above board it should be a healthier for the environment and if you package it properly and you you do it at the markets and all of that like it should be. It it would be more beneficial for the environment	1a1 Term 'organic' 1a4 Health benefits
15:24	P16 Int	P16: Incorrectly or correctly yes I do because if they if you have got anything that's been genetically modified or anything like that then I start thinking twice about how genuine the actual article is at the end and from from me from a perspective is organic should be kept as natural as possible	1a1 Term 'organic' 1a4 Health benefits Health (2): Health concerns
15:20	P16 Int	P16: Generally when for me what it means is if you're using something organic that it is no preservatives no additives nothing like that yes and then the second word that comes to mind is expensive	1a1 Term 'organic'
15:38	P16 Int	P16: To me that would be that it involves the the people in the area with getting going with doing the the growing of produce and it might not just be vegetables I assume. It could also be livestock as well just depends on the area that you're in where they themselves will be producing the the product whatever it might be collectively and then be selling that for a profit for the and then hopefully using their profit to to sustain the community that they're living in but I can imagine that must also be guite difficult	1a1 Term 'organic' Community
16:1	P17 Int	So a few things. I think when I think of organic you think of like fresh produce mostly and I think there's like some positive things like I know it has like connotations of being like healthier and stuff although I know but that's not actually true and then also expensive	1a1 Term 'organic'
16:2	P17 Int	So like GMOs are not in themselves problematic but I think when people say organic they're thinking of like farming methods that don't use pesticides and all those things but they also wanted to be like heirloom seeds and not at all genetically modified and like my belief is a lot of the genetic modification we've done is really positive otherwise we wouldn't have enough food and we wouldn't have nutritious enough food and also it's not like we're not turning things into like glow-in-the-dark fish or anything. Like we're just making it draft resistant crops crops or more nutritious wheat	1a1 Term 'organic'
16:3	P17 Int	ethically farmed for a few in in a few ways of meaning that's why I think. I don't know I expected not to have like terrible pesticides. I expected not to. Yeah I think that's basically and also I think some of the time I think maybe if it's organic we're not like expecting a certain shape and a certain size and that sort of thing. So maybe there's less wastage but I'm not actually always sure	1a1 Term 'organic'
16:4	P17 Int	So I do think what we end up seeing in the shops can be quite different because I know we have like huge food wastage from just throwing away fruit and vegetables that don't like fit a mold in like industrially you produced farming and I do think because organic farming is often	1a1 Term 'organic'

		like smaller scale that kind of thing doesn't happen. So like the size is also black sizes might be less modified I guess	
16:22	P17 Int	P17: So I do think what we end up seeing in the shops can be quite different because I know we have like huge food wastage from just throwing away fruit and vegetables that don't like fit a mold in like industrially you produced farming and I do think because organic farming is often like smaller scale that kind of thing doesn't happen. So like the size is also black sizes might be less modified I guess yeah	1a1 Term 'organic' 1a4 Health benefits
16:26	P17 Int	P17: We think of unless I said the chemicals being used to have problematic maybe that can be damaging and like mass produced food. Maybe one of the other things is. Can you leave the fruit and veg to like ripen more fully in organic farming maybe because people don't expect it to look as like perfect when it gets to the shop. So then maybe there's some nutritional value in that. I don't know tomatoes are nicer if they are properly ripe on the bush before you thin into the shops but I don't think there's like a huge difference in terms of nutrition actually	1a1 Term 'organic' 1a4 Health benefits
16:19	P17 Int	P17: Okay so my belief is I think some of it's come from the fact that we do use some. Like because we've had to mass-produce food like to do that we have done things like is quite problematic pesticides and stuff at times. So that can be a problem I think sometimes people also like plump that in though as genetically modified food and we've genetically modified foods that we can produce enough food for the world. So like GMOs are not in themselves problematic but I think when people say organic they're thinking of like farming methods that don't use pesticides and all those things but they also wanted to be like heirloom seeds and not at all genetically modified and like my belief is a lot of the genetic modification we've done is really positive otherwise we wouldn't have enough food and we wouldn't have nutritious enough food and also it's not like we're not turning things into like glow-in-the-dark fish or anything. Like we're just making it draft resistant crops crops or more nutritious wheat or yeah yeah	1a1 Term 'organic' 1a3 Associated processes
16:18	P17 Int	P17: So a few things. I think when I think of organic you think of like fresh produce mostly and I think there's like some positive things like I know it has like connotations of being like healthier and stuff although I know but that's not actually true and then also expensive	1a1 Term 'organic' Health (2): Health concerns
16:24	P17 Int	P17: Yeah so it's difficult for me for me with like fruits and vegetables I have a lot more opinions about okay thank you for meat but I guess like ethically farmed not using pesticides that will go into the water system and affect like other communities right. So things where it you can't be having like a massive negative impact that stretches beyond like the industry. So I think like if you're using pesticides that are dangerous if they go into the water system and that that is affecting communities we have to use that water then that's problematic. I think also and that's not to do with organic but I think also ethical farming practices involve like treating workers correctly and paying people properly and maybe that does sometimes go with organic farming because it's on a	1a1 Term 'organic' 1a2 Labelling/Packaging/Certificati on 1a4 Health benefits

		smaller scale and it's driven by like mass production. So you can and and you can charge higher prices so maybe you can treat people better. Treat the land better. Actually rotate your crops and do that sort of thing rather than just trying to produce as much as possible in whatever way as possible but I mean that's also complicated though because we simply cannot produce enough food for the world if we organically farm everything that we cannot. We just can't. Yeah	
16.27	P17 Int	P17. Yeah so they can and do you think that they can be	1a1 Term 'organic'
		a difference in the environmental impact. Like I was	1a2
		saying if you're mass producing and that's driven by lack	Labelling/Packaging/Certificati
		profit and the demand it's not always possible to do	On 1a2 Associated processos
		environment. So like when we are mass pro math. When	1a4 Health benefits
		we're farming for that kind of production like sometimes	
		land gets overfarmed with a single crop and then you end	
		up not having any value in the soil anymore and also in	
		fact some problematic pesticides that are cheaper and	
		can be used on mass and can affect the environment	
16:33	P17 Int	P17: So the Pretoria vards they've converted old	1a1 Term 'organic'
10.00		warehouses and into an area where people can. There	Community
		are like offices and stuff there but also there's a	Sharing
		community clinic and all of the spare land they've planted	
		with edible like fruits and vegetables and herbs and	
		and also they sell yeagie boxes and and they've planted	
		outside on the road and it's like an industrial area and not	
		a wealthy area. They've planted boxes of spinach and	
		mealies and that sort of thing and it's available for for	
		people to take. So it's like take what you need and what's	
		really interesting is people have done that in Newtown as	
		street and you might think that because there's only	
		desperate people that it's just all be taken in one go but	
		it's not. Like people are really good at taking what they	
		need and leaving and sharing. So I think that's a really	
40.00	D (7) (cool thing also yeah	
16:28	P17 Int	P17: Sometimes I do and I try and buy like local if	1a1 Term 'organic'
		like local businesses and like a few of the ones around	Support
		me have organic stuff. I mean with meat I didn't need to	Capport
		try and find like free range and that sort of thing because	
		the environmental impact of 5 meters should be terrible	
474	D10 Lui	and	
17:1	P18 Int	A little as possible interference by burgers	1a1 Term 'organic'
17.2	F 10 IIIL D18 Int	As mue as possible interference by numaris	
17.3	P18 Int	The way something was intended to be ECood and the	1a1 Term 'organic'
		limited processes	
17:5	P18 Int	Limited chemical processes I would say. So say for	1a1 Term 'organic'
		example processing in terms of refining something, I	5
		would still say that's natural but something where you are	
		a adding or chemically changing something I wouldn't	
		see mat as natural process as I would say. So it's limited	

		something where you are involving chemical, a medical type of substances	
18:1	P19 Int	So for me, I think organic links to food that is not highly processed food that doesn't contain lots of different chemicals and pesticides. There's no GMOs it is sort of sustainable and something that you know is good for the environment it's not taking up space. It's animal friendly it's environmentally friendly and it's healthy for you that's what I think of	1a1 Term 'organic'
18:29	P19 Int	P19: I think in terms of meat I would prefer that the meat is you know like fed with natural stuff that they have free roaming those sorts of things like eggs and chickens definitely and in terms of fruits and vegetables I would much prefer much much much prefer that it's organic yeah. I think I try and avoid the the other stuff as much as possible but yeah I think sometimes it's just not accessible	1a1 Term 'organic'
19:1	P20 Int	I'm thinking naturally grown. Umm. I'm thinking authentic.	1a1 Term 'organic'
19:2	P20 Int	High quality	1a1 Term 'organic'
19:3	P20 Int	Umm, what I know of my knowledge when it comes to naturally or organic foods rather and even with certain animals, I know they can be also organically grown. I by naturally by naturally grown. I mean they are kept in very natural standards that do not have very toxic fertilizers that are not manipulated. I Umm. Especially with animals they not injected with any substances to manipulate their growth or they muscle improvement or how much they can reproduce.	1a1 Term 'organic'
19:35	P20 Int	I'm by naturally by naturally grown. I mean they are kept in very natural standards that do not have very toxic fertilizers that are not manipulated.	1a1 Term 'organic'

TABLE 2

When a product is labelled organic, what do you expect from this product?

ID	Document	Quotation Content	Codes
1:3	P1 Int	I think possibly because of being in the food industry we've seen a lot where organic was more of a label than the procedures actually having being followed. So it was labelled as organic and we didn't do this and we didn't do this and we follow all these rules when in the reality of it that wasn't actually the case and the price difference often between some organic and something that isn't organic is quite high so therefore also being a student I would go for whatever was cheapest.	1a2 Labelling/Certification 1a6 Purchase intent
1:17	P1 Int	P1: No. They're advertised as organic yet, knowing whether or not they really are, is another story.	1a2 Labelling/Certification 1a6 Purchase intent
1:28	P1 Int	P1: We've, you know like just because it's grown at a local farm doesn't mean it's organic and we've seen in so many cases, more I'd say in terms of like meat and that sort of stuff that it's free range, all of this stuff but there's so many loopholes. So you can get around that so easily.	1a2 Labelling/Certification 1a6 Purchase intent
2:8	P2 & 3 Int	When there are. If it's packaged. In other words. First of all, if it's packaged and it's in a box.	1a2 Labelling/Certification
2:9	P2 & 3 Int	I wouldn't know, if I saw two lettuces on the shelf and one was organic and the other one wasn't. I don't think I would be able to tell the difference between the two, if the one wasn't labelled.	1a2 Labelling/Certification
2:21	P2 & 3 Int	And what I'm thinking is, for goodness' sake why would it have to cost so much to be certified. Where is that money going. Who are these people who are deciding, okay, you know, because you've paid your money, now okay, you can be certified. No sorry you can't afford it. No, you're not certified.	1a2 Labelling/Certification
2:40	P2 & 3 Int	we do trust a lot of what it says on the packaging, you know.	1a2 Labelling/Certification
3:9	P4 Int	but having something organic in a plastic bag doesn't fit well. I mean the, the two concepts don't, don't marry and I know that shops are making an attempt to, to have less plastic and they have alternative packaging I saw always the other day I put the tomatoes in now carton boxes instead of the plastic containers	1a2 Labelling/Certification
3:10	P4 Int	like a net whatever. That packaging was fantastic because that was reused.	1a2 Labelling/Certification
3:11	P4 Int	We always did but nowadays with a, with a styrofoam pallet	1a2 Labelling/Certification
3:12	P4 Int	And then plastic over. There is nothing really you can do with it unless give it to the art department to use as painting trays but that's about that	1a2 Labelling/Certification
4:7	P5 Int	Yeah. If it. You know, as I said in South Africa, it would be very nice to have a standard. I know that the years we spent in Europe, there was a lot more of an organic standard around that and, but yeah. I mean. I've come to trust certain accreditation. So, certain companies and things. But I still think it's a, it's a scale rather than an absolute set of parameters, but I would trust it if I kind of recognized where it came from, I think.	1a2 Labelling/Certification

5:59	P6 Int	P6: That's the other thing that many say they are, but how do we, how do we know. So, so it's, but I know by the time they want to get certified and you know have, that's also added costs. So I'll try to and have to just be a matter of trust	1a2 Labelling/Certification Trust
6:8	P7 Int	Personally in South Africa I feel that it's more of a trust thing, considering the climatic impact we've had over the last 10 years has really made a dampen on our producers lately. So I would definitely say in the situation it is becoming a trust issue	1a2 Labelling/Certification
7:6	P8 Int	The only thing that I can think of is Woolworths. They're organic section. So the way that they present the food is quite. You know minimalistic	1a2 Labelling/Certification
7:40	P8 Int	P8: think the way it's displayed. If it's if it is loose then maybe make it so that it doesn't look like this. You know sometimes if you walk into a place that has loose vegetables. You know there's always flies around it and it just doesn't. I think people like the fact that produce is protected by packaging	1a2 Labelling/Certification
9:15	P10 Int	P10: They have to tell you, don't they or when you buy them. I guess if you buy them Pick and Pay you don't have a guarantee that all of it's organic however if you go to like farmer's market then it's pretty much like you go there for the organic ones, organicness. That is the word	1a1 Term 'organic' 1a2 Labelling/Certification
10:34	P11 Int	P11: Where are you sourcing your other things from to grow those foods, like you said the water and all that	1a2 Labelling/Certification
10:37	P11 Int	P11: I can't remember the name. I've got a few of them now that I've planted. You know as I learn, I, I try things and I see what works and certain things work so I'll carry on doing that but then sometimes next season it doesn't work so I don't know but	1a2 Labelling/Certification Gardening Trial and error
10:42	P11 Int	P11: Labelling/Certifications so we've started to try and support more small local businesses and you know when talking to people and going to see the, you know how they're growing the food and that's also gives me a little bit more comfort in, in knowing that it's possibly even more organic maybe than the labels, because I don't know what, what or who to trust nowadays. When there's money behind it you just you it makes you question things, because like you said you know this person can't get a certification and they're probably growing some incredible food and it's, it's same with the honey industry. I've seen a lot of a lot of local honey guys they said it's just so expensive to get it certified that it's not worth. They, they're too small to, to spend that kind of money	1a2 Labelling/Certification 1a6 Purchase intent
10:44	P11 Int	P11: So the answer really is like a two. For me it's, it's a yes and a no. Like when I go shopping, yes I will go for the ones that say says organic in the shops, but I will generally choose to not shop in supermarkets if possible and then go to the small farmers who don't even have packaging and buy from there and support local. So it's a yes and a no	1a1 Term 'organic' 1a2 Labelling/Certification Local markets
11:14	P12 Int	It does. I really really do think it does. I suppose plastic does keep it fresher longer because it keeps the moisture in and having said that I do think if it's organic we should track you to the more natural stuff all around you know	1a2 Labelling/Certification

11:3	0 P12 Int	P12: Okay so that is a little bit of a problem because for me sometimes the organic fruit and vegetables I must say don't look as appealing and as I don't know conform to sizes and look and a little bit spastic looking if that's the right way to say I mean that's such a bad word to use but they don't look as pretty as the ones that are all exactly the same size exactly packaged the same and they're not always as appealing as I sometimes do expect them to look a little bit wonky	1a2 Labelling/Certification 1a6 Purchase intent
11:3	3 P12 Int	P12: Okay to be very honest I've never really looked if there is a process which I just assume that there would be and I actually think it would be really really nice personally to say this is organically grown because we've used this kind of compost or it hasn't been grown like a million and just distributed this is the time of the year we grow with that's why you can only get it at this time and this is how we what pesticide we use less everything in more natural form and I think that really would be nice for us to know especially for me I am a little bit of a weirdo. So I know that any fruit that I buy because I don't know what pesticides they've used and I assume they've used pesticides I'll wash everything with dishwashing liquid first and then I've dried all up and then I put it in the fruit bowl yeah. S I think it would be nice personally to be able to quickly the same way as you read like what's in I don't know in a in a bought product that's got a square tin you know you say it's got sulfur it's got this and that. I think personally it would be quite nice to say this has been organically grown this is the area it was grown this is the kind of soil it was growing in I don't know if that's asking too much but maybe it really would help people that are a little bit paranoid about what they're eating just to help them along	1a1 Term 'organic' 1a2 Labelling/Certification Health (2): Health concerns
11:3	6 P12 Int	P12: So and then you know that this Farm is actually going to be growing that's kind of wine that doesn't use as much sulfur doesn't use as much theft because their growth they plant them in a specific way and that's been apparently done for hundreds and hundreds and hundreds of years. So I do think that if you had to walk into a farm you would be able to tell if it is an organic grown farm or not I must be very honest I haven't really been to very many farms to actually be able to say it was an organic farm but I do think that if somebody had to walk in they would be able to tell because it must be a certain way that you plant things. I don't know	1a1 Term 'organic' 1a2 Labelling/Certification
12	3 P13 Int	if it's organic I think I would expect it well firstly to be more expensive but maybe to last longer or maybe not last as long or be fresher you know	1a2 Labelling/Certification
12	9 P13 Int	The biggest visual change could be the packaging but what's inside looks the same	1a2 Labelling/Certification

13:3	P14 Int	I expect it to be as natural as possible to the original old product so for example if I'm buying a packet of of organic tomatoes. I expect none of them to look the same. I expect them to all look like they grow outside in the sun. So some will be big some might have spots you know and so when I see something that says organic and actually it looks like they've all been cloned then I'm not I'm not happy. If it's an organic chicken I would expect it not to have three liters of water that's come pouring out of it when you start cooking it or bacon you know that's obviously had something added to it. It is no longer organic so yeah it mustn't look pretty if it's organic	1a2 Labelling/Certification
13:5	P14 Int	So it depends what it is some stuff I think you can tell by sight that it's organic or not. Especially like vegetables you know when you go and buy a bunch of carrots that they all look like as I say it looks like they were made with a cookie cutter actually that's not organic. Generally though if I want something organic I don't buy it at the shops with labeled names if I can put it that way. So I would rather then go to something like the Bryanston market and buy it from the farmer who happens to have a stall there because he's more likely to be selling organic than the stuff that's coming from the supermarkets or from the chain the chain. So generally I'm quite skeptical when people say they're selling organic. I don't think they're very many people left who are because it doesn't it's not competitive. You know it's very expensive to be raising stuff that's organic. So yeah I'm quite skeptical on it. I do look to see where products have come from because I do think you know if you're running. Let's say for example on an organic mealie filled but it's sitting right next to the Krugersdorp mine dumps that are full of acid mine water. Well I definitely don't want those organic vegetables	1a2 Labelling/Certification
13:6	P14 Int	I'm not too sure because to be honest I think in our country we've got so many Labelling/Certifications about everything but nobody actually ever monitors if it's real or not. So I don't think it would mean anything to be honest	1a2 Labelling/Certification
13:23	P14 Int	P16: That's a good question. Mariet I'm not too sure because to be honest I think in our country we've got so many Labelling/Certifications about everything but nobody actually ever monitors if it's real or not. So I don't think it would mean anything to be honest	1a2 Labelling/Certification 1a6 Purchase intent
14:7	P15 Int	Yes so if it's packaged sustainably friendly I will immediately go for it. So I hate plastic so anything that's in plastic like well Woollies is worst. All of their all of their produce is in this plastic and most of the plastic can't be recycled. So I definitely love something that's done with cardboard boxes. You know if it's got the plastic foam over it I understand it's about perishables and things like that but I always try and go for loose. I never go I never get the plastic bags. So if it looks good if it looks sustainable if it looks yeah green then then I'm happy. So anything in cardboard anything done in with bamboo all of that sort of stuff	1a2 Labelling/Certification

15:3	P16 Int	That first of all that it's hasn't gone through any sort of major treatments with insecticides pesticides and so on that just hopefully has got less poisons attached to it. That it's also a more pure substance in that the way that it has been treated. Pure meaning in the way it's been treated that it's been treated with no external or other objects other specimen species or anything like that. So no cross-contamination or anything like that	1a2 Labelling/Certification
15:6	P16 Int	Not necessarily because I suppose you can get a certificate for anything and everything out there. So you know the thing is it depends on how reliable the actual Labelling/Certification board is that's going to be doing it	1a2 Labelling/Certification
15:8	P16 Int	Yeah I think because generally people who are looking at organic food serious organic foods out your serious eco people and health fanatics and all of that and then they do care about the world and the popular pollution and all of that so I think yes it does make a huge difference in what you are actually packaging it in as well. Absolutely	1a2 Labelling/Certification
17:6	P18 Int	If I look at the label and I can't don't know half, half the ingredients that's in there so most of the ingredients are from a chemical nature, of a chemical nature. For me it would be if you turn it around and it's literally salt pepper and kind of natural additives not chemical additives and so red flags for me would be the more processed the more red flags the more things edit the more red flags the longer something can stay fresh without shooting it naturally stay that fresh that's all red flags	1a2 Labelling/Certification
17:15	P18 Int	I'm a little bit skeptical how well it's monitored in our	1a2 Labelling/Certification
17:16	P18 Int	little bit skeptical in South Africa I guess also what to believe and how well it's controlled and how well the labeling laws is in South Africa then how enforced it is	1a2 Labelling/Certification
17:17	P18 Int	yes I in fact so don't trusted through that or that will get you know whether it's really truly truly organic not even in my garden I can grow truly organic because I don't know this car provide that wants to eat it	1a2 Labelling/Certification
17:33	P18 Int	You know this is how we do it. I do think so because at least it just adds a little bit of credibility that	1a2 Labelling/Certification 3 Local community gardens
17:72	P18 Int	So I wonder how many processes are really in place I do believe a little bit when something and Woollies says it's organic I do trust because I know the systems are incredibly strict but if I just walk on a market and somebody say it's organic not so sure if I can trust that and then pay so much more money and then you are still getting in the pesticides form your neighbour spraying and he's playing his spraying on your crop to you know but just do you know what I'm trying to say so I'm a little bit sceptical in South Africa I guess also what to believe and how well it's controlled and how well the labelling laws is in South Africa then how enforced it is	1a2 Labelling/Certification
17:60	P18 Int	P18: You know this is what we are trying to do and you know we might not be 100 organic but we try our very best to bring it to you as organic as possible. Do you know I mean I think just transparency is good	1a1 Term 'organic' 1a2 Labelling/Certification

18:4	P19 Int	Yeah Labelling/Certification. I'm not necessarily sure the degree of what would classify something as organic or not organic but I think across the world there should be some kind of Labelling/Certification of a standard I think in some countries it is more you know acceptable to do certain things and use certain products on farming and on animals and on organic organic in brackets food but in other countries certain use of pesticides and things are not and I don't think there's necessarily a standard across the globe	1a2 Labelling/Certification
18:5	P19 Int	I know that there were sort of bulls and policies that we're trying to be put in place in terms of getting the use of like DDT's and those sort of things to not be used in South Africa I'm not entirely sure if they have been passed but I don't think in there yeah I don't think in the in the standard globally we are where we should be for the health of our country yeah	1a2 Labelling/Certification
19:4	P20 Int	In terms of making it taste and look the way it does, I can imagine the amount of chemicals that that type of food would have. So things like fast foods and processed meats. I can't trust those to be organic. But then when you find things like bacon, then there isn't much that can be done to bacon to not make it organic. I mean, yes, there are those that Durp orcessed but those organic ones which we just slicing through the meat from it from directly from the pay gap.	1a2 Labelling/Certification
19:6	P20 Int	I'm sure at this point, honestly, you can really trust what you grow in your own backyard, because when it comes to Labelling/Certifications and we know about corruption and all that, that's happening outside here. I mean, if people are able to buy certain, you know creditation, I mean accreditations, then I guess they can make their foods certified organic even without going through all the proper procedures.	1a2 Labelling/Certification
19:7	P20 Int	Yeah, trust. Trust is a real issue because yeah, a lot of people have been due to thinking that. I know that there was a friend of mine who is very unnatural to almost everything, and she went to this restaurant where they stayed to serve organic foods and content free and all that. And she ordered this meal. But she ended up still having the allergic reaction, only to show that there was something in the food that was not authentic as they had saved.	1a2 Labelling/Certification

TABLE 3

Do you associate organic food with certain processes?

ID	Document	Quotation Content	Codes
1:1	P1 Int	P1: Very much like farm-based products. Like minimal use of pesticides. Grown obviously. I don't know how to put it in like a safe environment.	1a3 Associated processes
2:2	P2 & 3 Int	So, organic is for me, an indication of food that has not been contaminated with fertilizer and pesticides	1a3 Associated processes
2:13	P2 & 3 Int	Because they could be organically fed, but they could still be in chicken coops and things. I'm talking about chickens and things now. You know.	1a3 Associated processes
2:22	P2 & 3 Int	They definitely must be grown and cultivated in a way that is natural and for earth.	1a3 Associated processes
2:23	P2 & 3 Int	That's the thing. How do you know that rivers running past there aren't full of pesticides.	1a3 Associated processes
2:24	P2 & 3 Int	You see now one starts thinking about the quality of the air.	1a3 Associated processes
2:25	P2 & 3 Int	The quality of the air. The quality of the water around the place where it's growing	1a3 Associated processes
2:26	P2 & 3 Int	The workers. Are they being looked after. Are they being sustained by the people who are employing them. So, it's, it's a whole chain of things. It's not just one thing.	1a3 Associated processes
2:68	P2 & 3 Int	P2 & 3: Well, that would mean that the people in the area of your farm would need to step up their game in terms of the water. The quality of the water. Not contaminating the water with chemicals from whatever and using the soil. Perhaps having cattle as well to help with the manure. So, using natural manure. I don't know. I don't know about farming.	1a3 Associated processes 1a4 Health benefits
3:13	P4 Int	The funny, that's the funny thing like, I think the contradiction because organic means just, well like the untouched the, in my definition it's, it's literally putting the seed in the ground and letting it grow and knowing when to plant at the right time that nature can follow its own course but living in the society that we're living today everything gets protocoled everything gets written up in some form of I don't know legislative law and I think that's what also happened to that word like nothing can be anything without defining it with five million conditions almost	1a3 Associated processes
3:67	P4 Int	P4: The effect on the environment. Yeah so and that's the thing so because the economy drives these, let's expand, let's expand get more out of our crops and you start just taking the environment for granted because that's not important. What is important is how much money I can make out of this season or this crop or this land space and whatever damage is left by it I mean that's problem or and I think organic farming is much kinder to, kind of to the, to the ground a big or to the earth or the environment because it follows the natural processes. It follows the, the natural seasons and, and through that that ebb and flow of, of harvesting you give the ground time to rest and there's like. There's traditional ways of how you heal your ground before you plant again and stuff like that. I don't know if organic farming applies all of that but I know people that locally farm without making, trying to make money out of that.	1a1 Term 'organic' 1a3 Associated processes 1a4 Health benefits
		that's the process that I followed. It was interesting to see we watched a series. I don't know if you know Jeremy Clarkson, the guy from Top Gear	
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4:2	P5 Int	Okay. I think it's; I think it's got to do with chemicals that can affect the end product. So, for me it's, whether it is something that happens right up at the beginning of the process or if it has any impact on the product. So, things like fertilizers, genetic modification. You're interfering with, with growth and, and hormones in animals and those sorts of things for me. I can't, I can't really comment on whether I, I would use the word synthetic, because I actually don't know. I mean, I think there's a lot of like hormone stuff is often not synthetic hormones. They're often using natural hormones.	1a3 Associated processes
4:3	P5 Int	I'd say things that were actually not meant to be there that affect the product throughout the, the process. Right through to the end.	1a3 Associated processes
4:5	P5 Int	Yes. Because I think there are. I think free range doesn't mean that there isn't the routine use of antibiotics or, or drugs. It just means that they basically can wander around a little more space. And I think a lot of people open that up to abuse. So, for me, they're very different concepts.	1a3 Associated processes
4:6	P5 Int	Okay. So, I think it starts with, with, with particularly implanting and in, in feed, feedings of animals and plantings of crops. It's got to do with what is put into the soil or what is put into whatever they are consuming, number one. I mean soil preparation is massive. I also think it depends for me around growing things. It's got to do with, I quite like the concept of rotation so that there isn't, so the thing you know land is not over farmed or, or overused. I know that I, I've visited quite a few places in the world where, where they're starting to have problems with, with earth. You know with, with subsidence and things like that because of over farming and the chemicals and stuff they've put. And then directly the, the, the type of stuff that's put into the ground often affects the water source as well. So, for me that's a, that's another critical element. And then you know what, what are you then doing to kill the bugs. Are you using natural planting. So, like garlic or you know. Like yesterday, I was like a person spraying my lemon tree because I've got some strange things happening with it. With lemon juice and garlic and bicarbonate on strange things. So, but just so that you know it wasn't, I wasn't having to put pesticides on there. Because, I also think then the treatment of those crops, then it kills things like ladybirds and bees and you know spraying of crops and, and I'm not even speaking about the problems that happened in in the 70s and 60s you know with, with crop spraying and fruit spraying and stuff that made people sick apparently. I mean that was, you know. I was only just born. So, it's everything for me, that, but it starts with what's in the soil and, and what are you watering with and what are you doing to, to prevent pests and, and fungus and things.	1a3 Associated processes

4:40	P5 Int	P5: So, so, for me it means it's the. It should be the best quality, most natural product I can get. If it's a local product in South Africa, because I know that our standards of being able to accredit organic farmers is not as good as it is in other parts of the world. So, for me it means that within South Africa, if I'm buying a local product, it is the most natural and un-interfered with form of that particular product that I can get. Often it also speaks to for me to the quality, particularly in terms of, of, of animals. The quality of life that that animal might have had. Which is, which is a massive driver for me in in terms of products. So, I kind of look at it as a standard. A quality standard, really.	1a1 Term 'organic' 1a3 Associated processes Local markets
4:48	P5 Int	P5: But, but yeah. I, I, there aren't a huge amount of	1a1 Term 'organic'
		are talking about humane treatment of animals and you	1a2 Labelling/Packaging/Certificati
		know and, and things like that often. So, the free range,	on
		the free reign, free range chicken for me, is my lowest form of what I will go to when I buy chicken as an	1a3 Associated processes
		example. But I'd much rather be buying chicken that	
		was, where I know what the chicken, what their lives are	
		actually like. But, I, we don't have much. We're not	
		pork, is a massive, massive thing you know. So, I'm	
		very, very cautious about that. But I must be honest with	
		you, I'm buying a lot of this type of stuff from people who	
		not using antibiotics and stuff and these are small	
		suppliers without particular brands or you know. I do a	
5.2	D6 Int	lot of farm hopping.	1a2 Appariated processos
5.5			
5.11	P6 Int	I think using fertilizers. I think the chemicals that they	1a3 Associated processes
5:11	P6 Int	I think using fertilizers, I think the chemicals that they use and as I said I know it's done a lot in Europe. I don't	1a3 Associated processes
5:11	P6 Int	I think using fertilizers, I think the chemicals that they use and as I said I know it's done a lot in Europe. I don't know about here but where they want the banana to look	1a3 Associated processes
5:11	P6 Int	I think using fertilizers, I think the chemicals that they use and as I said I know it's done a lot in Europe. I don't know about here but where they want the banana to look artificially yellow for weeks, you know, for me then it's just like no I'd rather buy it	1a3 Associated processes
5:11	P6 Int P6 Int	I think using fertilizers, I think the chemicals that they use and as I said I know it's done a lot in Europe. I don't know about here but where they want the banana to look artificially yellow for weeks, you know, for me then it's just like no I'd rather buy it P6: Well if I understand organic foods enough, it's foods	1a3 Associated processes
5:11	P6 Int P6 Int	I think using fertilizers, I think the chemicals that they use and as I said I know it's done a lot in Europe. I don't know about here but where they want the banana to look artificially yellow for weeks, you know, for me then it's just like no I'd rather buy it P6: Well if I understand organic foods enough, it's foods that have been made with less harsh pesticides and	1a3 Associated processes 1a1 Term 'organic' 1a3 Associated processes
5:11	P6 Int P6 Int	I think using fertilizers, I think the chemicals that they use and as I said I know it's done a lot in Europe. I don't know about here but where they want the banana to look artificially yellow for weeks, you know, for me then it's just like no I'd rather buy it P6: Well if I understand organic foods enough, it's foods that have been made with less harsh pesticides and fertilizers you know, I know farmers are all into having high yields and their crops and they use all sorts of stuff	1a3 Associated processes 1a1 Term 'organic' 1a3 Associated processes
5:11	P6 Int P6 Int	I think using fertilizers, I think the chemicals that they use and as I said I know it's done a lot in Europe. I don't know about here but where they want the banana to look artificially yellow for weeks, you know, for me then it's just like no I'd rather buy it P6: Well if I understand organic foods enough, it's foods that have been made with less harsh pesticides and fertilizers you know, I know farmers are all into having high yields and their crops and they use all sorts of stuff you know, preservatives	1a3 Associated processes 1a1 Term 'organic' 1a3 Associated processes
5:11 5:32 5:45	P6 Int P6 Int P6 Int	I think using fertilizers, I think the chemicals that they use and as I said I know it's done a lot in Europe. I don't know about here but where they want the banana to look artificially yellow for weeks, you know, for me then it's just like no I'd rather buy it P6: Well if I understand organic foods enough, it's foods that have been made with less harsh pesticides and fertilizers you know, I know farmers are all into having high yields and their crops and they use all sorts of stuff you know, preservatives P6: Well we are looking at the prevalence of the cancers	1a3 Associated processes 1a1 Term 'organic' 1a3 Associated processes 1a1 Term 'organic'
5:11	P6 Int P6 Int P6 Int	I think using fertilizers, I think the chemicals that they use and as I said I know it's done a lot in Europe. I don't know about here but where they want the banana to look artificially yellow for weeks, you know, for me then it's just like no I'd rather buy it P6: Well if I understand organic foods enough, it's foods that have been made with less harsh pesticides and fertilizers you know, I know farmers are all into having high yields and their crops and they use all sorts of stuff you know, preservatives P6: Well we are looking at the prevalence of the cancers that people get now and you know all sorts of disorders I think there's lots of health benefits of trying to stay as	1a3 Associated processes 1a1 Term 'organic' 1a3 Associated processes 1a1 Term 'organic' 1a3 Associated processes Health (2): Health concerns
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8:5	P9 Int	I would want them to run free like, yeah	1a3 Associated processes
8:6	P9 Int	Okay, so I suppose it doesn't qualify if I say it must not have growth hormones in it	1a3 Associated processes
8:7	P9 Int	Yeah. I, I am and they must not be artificial, like for example, I know with chickens they do a whole artificial day of light. So, so that they can produce more eggs. That kind of thing should not happen. So, they must run free for example when it comes to chickens and they must not force growth by adding hormones or you know to better the, you know	1a3 Associated processes
8:17	P9 Int	P9: Yeah. I, I am and they must not be artificial, like for example, I know with chickens they do a whole artificial day of light. So, so that they can produce more eggs. That kind of thing should not happen. So, they must run free for example when it comes to chickens and they must not force growth by adding hormones or you know to better the, you know	1a1 Term 'organic' 1a3 Associated processes
8:23	P9 Int	P9: I can imagine that. I mean it's not my field of expert but I can imagine that it's definitely that because if you just take preparation of soil. If there's. I know that some of the, the fertilizers and stuff that they use can be retained in groundwater for years. So surely that must have an impact. So, if I treat my soil with only fresh manure or whatever you know	1a3 Associated processes 1a4 Health benefits
9:8	P10 Int	So then the soil is better. They don't use harmful chemicals that go into water or into the soil or into the air.	1a3 Associated processes
9:23	P10 Int	P10: I mean even just job creation or like smaller farmers who are like subsistence farming, but also selling whatever extra produce they have and we can support them	1a1 Term 'organic' 1a3 Associated processes
10:5	P11 Int	Well I don't know a lot about planting. I go to little garden classes and I try to learn. There is so much to learn so it's trial and error really. When I, even when I come home with what I've learned. I try it and we've got terrible soil here. It's very sandy by the beach and very windy, so to find the right location is tricky, but I've got yeah, I've put down lists. I find that there's certain plants that work well together. I know the, some that, that's put back in the soil what the other one needs so that's a good companion, but then other ones that will attract certain bugs away from the plant	1a3 Associated processes 1a4 Health benefits Gardening Trial and error
10:6	P11 Int	Season, things change. So yeah I'd like to do more intense permaculture classes and like really learn how to properly sustain us as a family because we eat so much vegetables we could really benefit not only financially but nutritionally you know knowing that, that's good quality food that's not packaged in plastic and sitting on the rack for how long. Sometimes I can smell sprays on things like, you know the herbs you know herbs when you pick it, it wilts quickly like rocket but then the stuff in the shop doesn't and sometimes I open the rocket or the broccoli and I smell this chemical. It's something they're putting on to like keep it fresh, because it, no it doesn't usually stay fresh	1a3 Associated processes

11:2	P12 Int	I think they're the same things yeah I personally think but I don't know much about it so I just almost think. I think you know maybe some there probably is a little bit of a difference. I think hormones maybe is more into like meat products and GMOs or just maybe seeds that are specifically cultured so that they don't get diseases or grow better probably that way	1a3 Associated processes
11:3	P12 Int	I actually expect from that product that it's grown in a really good natural environment that not excessive pesticides have been used to make it grow. So that it I really do believe that the pesticides do affect everything on the plants that it's in a natural environment with insects and everything else is around but that they looked after and they've got good soil and good nutrition and not just chemically grown so that they sprout out very quickly. They've got a more natural cycle of growth if that makes any sense to you instead of just acting so that they grow quickly big so that they can just be distributed	1a3 Associated processes
11:9	P12 Int	So and then you know that this Farm is actually going to be growing that's kind of wine that doesn't use as much sulfur doesn't use as much theft because their growth they plant them in a specific way and that's been apparently done for hundreds and hundreds and hundreds of years. So I do think that if you had to walk into a farm you would be able to tell if it is an organic grown farm or not I must be very honest I haven't really been to very many farms to actually be able to say it was an organic farm but I do think that if somebody had to walk in they would be able to tell because it must be a certain way that you plant things.	1a3 Associated processes
11:45	P12 Int	P12: Okay so I do know a little bit about community gardens because when I first started at Bressiah we did set up a few community gardens on some of our outreach programs when we used to go out with our grade 11s and when we used to take the girls to do community service projects out of nursery schools a little bit far out. So I do know a little bit about them not great but I do know that how we planted them how to make them water wise so then we did some in tires and we did some lap as big as a door so we did do a few of those I don't know if that's answering the right question or not	1a3 Associated processes Gardening
12:4	P13 Int	I associate organic with where they use natural things like not any artificial pesticides and not any artificial fertilizers to do a natural process.	1a3 Associated processes
12:7	P13 Int	And also for meats and stuff that's something that I might consider is whether they are given antibiotics. You know a lot of animals are given a lot of sort of antibiotics to make them and I would consider organics to have zero antibiotics in them	1a3 Associated processes
13:4	P14 Int	Yes and no. I think that there are still some processes that have to happen regardless of how a product is grown. You know it's got to get collected it's got to get sorted so there's going to be some kind of mechanized process somewhere. You know organic chickens have to be plucked. I I'd only imagine that they're sitting plaquing them and chopping off their heads like they're used to years ago. So I think there is mechanization. There is going to be marketing that sort of thing but if I'm	1a3 Associated processes

		buying an organic chicken I don't expect it to have come from one of those big product production line feedlots	
14:21	P15 Int	P15: Free range would be in terms of like livestock and things like that and and poultry and chicken that they are not cubed up in cages that they you know necessarily are corralled at evenings and times and stuff like that but then they're in pins rather than necessarily cages and that and then in terms of like if we I mean we don't really look at we don't really look at produce in terms of free range but I think the idea of produce being that it's not it's it's hum it's farmed in a in a healthy fashion so it would be organic types of pesticides and things like that. So not really chemical pesticides and and that sort of stuff so yeah	1a1 Term 'organic' 1a3 Associated processes
14:26	P15 Int	P15: Yeah obviously genetic you know GMS so and and that's and that sort of stuff I think artificial colorants and flavorants is is somewhat of a problem I see we we we're getting more and more e ingredients in in our in our foods these days. I generally try and go for. Look I don't think meat is as big a problem in our country as it is in let's say like America or the UK and that I think our practices are pretty good but I I think that when it comes to like corn and maize and all of that that's all genetic. All of it's genetically modified it's all hybrid food so I also am conscious of things like seedless grapes and that sort of stuff because that all it also it's hybridized it's genetically modified but it's very rare that our fruits these days isn't. So I think we've got to understand that as much as we want things that are organic and that the moment we take a specific kind of apple we need to realize that it's hybridized we need to realize that it's it's been made and therefore genetically modified in so many ways as well	1a1 Term 'organic' 1a3 Associated processes
15:35	P16 Int	P16: I must be honest no I don't I'm not and don't go out of my way to go and see if it's organic or not organic I must be honest	1a3 Associated processes

16:5	P17 Int	Yeah so it's difficult for me for me with like fruits and vegetables I have a lot more opinions about okay thank you for meat but I guess like ethically farmed not using pesticides that will go into the water system and affect like other communities right. So things where it you can't be having like a massive negative impact that stretches beyond like the industry. So I think like if you're using pesticides that are dangerous if they go into the water system and that that is affecting communities we have to use that water then that's problematic. I think also and that's not to do with organic but I think also ethical farming practices involve like treating workers correctly and paying people properly and maybe that does sometimes go with organic farming because it's on a smaller scale and it's driven by like mass production. So you can and and you can charge higher prices so maybe you can treat people better. Treat the land better. Actually rotate your crops and do that sort of thing rather than just trying to produce as much as possible in whatever way as possible but I mean that's also complicated though because we simply cannot produce enough food for the world if we organically farm everything that we cannot.	1a3 Associated processes
16:19	P17 Int	P17: Okay so my belief is I think some of it's come from the fact that we do use some. Like because we've had to	1a1 Term 'organic' 1a3 Associated processes
17:10	P18 Int	mass-produce food like to do that we have done things like is quite problematic pesticides and stuff at times. So that can be a problem I think sometimes people also like plump that in though as genetically modified food and we've genetically modified foods that we can produce enough food for the world. So like GMOs are not in themselves problematic but I think when people say organic they're thinking of like farming methods that don't use pesticides and all those things but they also wanted to be like heirloom seeds and not at all genetically modified and like my belief is a lot of the genetic modification we've done is really positive otherwise we wouldn't have enough food and we wouldn't have nutritious enough food and also it's not like we're not turning things into like glow-in-the-dark fish or anything. Like we're just making it draft resistant crops crops or more nutritious wheat or yeah yeah	1a3 Associated processes
17:10	P18 Int	No well also the way it's been grown and the way something has come yeah onto the shelf. So firstly I think from the type of soil where some veggies for example grown in whether that soil has been treated with chemicals or pesticides or then also whether the fruit on the trees has even been sprayed with chemicals or pesticides then whether maybe in the packaging whether it's been treated with sulfur dioxide to keep it fresh. So I would say from the point where it's grown to the way it's been storage and to the point where it's actually getting to you on the shelf can also be not so organic	1a3 Associated processes
17:11	P18 Int	Yes and I guess it's also that thing where you think okay I found the chicken was running freely but maybe the food that the chicken was eating was genetically modified or the food that or the chicken was maybe still running happily but he got 13 antibiotics for example so	1a3 Associated processes

		there are I guess, it's not only the processes of actual the food that's being processed	
18:18	P19 Int	Yeah for sure I think the one of the main things that I know that I did it with ours is like like what they use around the garden so there's certain plants like marigolds or what like spring onions that are like pest sort of friendly if you want to call it that instead of using soaps and chemicals and to keep pests away. That's definitely one of them I think also the way that they've planted like the fruits and vegetables. There's certain things that grow really well together and others that don't grow well together the type of soil that they use if you can see it's been like turned over or if it's very rocky and they're putting carrots in rocky soil and you know that those carrots are not going to be long and if they're showing you that they're really long like something else is going on there. So I think you know that but I also think for the general public who maybe don't have as much knowledge they won't really know those things	1a3 Associated processes
18:20	P19 Int	P19: So for me, I think organic links to food that is not highly processed food that doesn't contain lots of different chemicals and pesticides. There's no GMOs it is sort of sustainable and something that you know is good for the environment it's not taking up space. It's animal friendly it's environmentally friendly and it's healthy for you that's what I think of	1a1 Term 'organic' 1a3 Associated processes 1a4 Health benefits Health (2): Health concerns
19:5	P20 Int	Umm yeah, definitely. Like the steroids that obviously my knowledge base when it comes to the biotechnological part of it is not very broad, but I'd like to think that when it comes to foods that are injected with steroids, then it becomes a problem when it comes to foods that are grown from seeds that are manipulated.Umm and buy manipulated obviously. I mean, you know, injected with steroids kept in the labs to make sure that they actually grow even outside their regarded temp environments.	1a3 Associated processes
19:34	P20 Int	Umm, what I know of my knowledge when it comes to naturally or organic foods rather and even with certain animals, I know they can be also organically grown.	1a1 Term 'organic' 1a3 Associated processes
19:36	P20 Int	Umm. Especially with animals they not injected with any substances to manipulate their growth or they muscle improvement or how much they can reproduce.	1a3 Associated processes 1a4 Health benefits

TABLE 4

In your opinion are there any health benefits when eating organic foods? Please explain.

ID	Document	Quotation Content	Codes
1:12	P1 Int	I would change to organic mostly for the health benefits of it and not having those hormones and stuff injected into foods as I know that in the long term it can have quite bad effects.	1a4 Health benefits Health (2): Health concerns
2:14	P2 & 3 Int	It provides our body with the nutrients that our body needs to sustain life and it provides it in the best form possible.	1a4 Health benefits
2:15	P2 & 3 Int	Without compromising other things in our body by using poisons or things like that.	1a4 Health benefits
2:16	P2 & 3 Int	So, it's a healthy delivery of nutrients.	1a4 Health benefits
2:27	P2 & 3 Int	I think, just the knowledge, that you're eating something that is untainted by chemicals and that is being sustained in a, in a good way and I think that has an emotional impact and a physical impact on you.	1a4 Health benefits
2:28	P2 & 3 Int	So, it's not just, you know stuffing your face with food because it's got all the nutrients and just knowing that you're supporting the people locally. You're eating food that is supposedly free of, of harmful chemicals. Yeah. Harmful chemicals and things like that.	1a4 Health benefits
3:15	P4 Int	P 4: It's a fine line. I mean the argument that eating something fresh out of the ground that is untreated is obviously healthier than eating something that is conditioned to grow in certain ways. I read the other day that some of the vegetables and fruit always grows, never actually even grows in the ground. They grow it above the ground in like modified I don't know how to, how to. I don't have the right terminology, but one of my brother's friends he, he grows red and yellow and green peppers for Woolworths and he says they just don't go in the ground. They grow above the ground. That cannot be normal. So what are you, what are you. So obviously that you're altering, you're altering, you're altering the natural process with obviously certain substances or conditions that aren't natural and that must, even if we don't know it yet, must have some effect on your, on your being. I mean we get our nutrients from our food and my father-in-law is a doctor and he said well you, you have to drink a multivitamin because our food just doesn't have all the nutrients your body needs. So you need to get it somewhere. So I don't know if when I'm eating my broccoli if I'm actually getting in the iron that I need to get in by eating that because I don't know how it was modified in order to be this beautiful little bushy green tree that nowadays doesn't go off. I mean I remember our broccoli when again talking about my past but it had a life span like when you from, from cutting it to eating it. You couldn't leave it in the fridge for a week and nowadays the, I think these the food just stands. Interesting I had a conversation with my husband yesterday and with the current social climate and everybody's panicked by, panic buying for foods and my mom and them have a shop and she's like, it's ridiculous. Like there's just no food and Gauteng in their shop because everybody just bought everything. They	1a4 Health benefits

		only have cleaning materials and, and toiletries. She had a giggle but I stood there in the shops and I was like well everybody's panic buying maybe I should just buy a little bit extra in case shops shut down and whatever. So I stood there and I started looking at like the expiry dates on the packages and I was like you actually physically can't find more food than for three days from now because all of the stuff is technically has like a four day shelf life. So if you want to buy vegetables for the week they're all going to be off at the same time because I think these companies live on this high rotation of. I think it's very from, from, from cutting the vegetables to preparing everything by the time it gets to the shelf where the customer actually buys it. It's been so long out of the ground or out of its natural state that for you to buy it and eat it you have a very small, small window before it goes off. So part of the, the changing everything is like extending that shelf life, extending that life it has outside of the ground or whatever I'm saying but yeah I don't know if our, if our, our habits in buying and eating and how we run our lives can adapt to not, to be more planned with nothing's and to have a. I don't know, I don't know how if I'm expressing myself well but yeah. The end of the story was I couldn't I couldn't panic buy because what's the point that would go off in my fridge	
4:15	P5 Int	I do. But I think it's a cumulative process. I think it's just something that you would, you will see over a period of time. I think the fact that we would be taking in less, you know, less hormones, antibiotics pesticides. You know, all those sorts of things. There's things that they, whatever they put on apples to make them shine, and you know such. that sort of. I think that must have a cumulative effect on your body over a period of your lifetime. So, I think if you can apply the 80 20 rule of trying to do it best you can, it, there would be, there would be health benefits. I also think there's more nutrients in vegetables and fruit and even, even meat products that aren't accelerated. That grow at their natural pace and that are picked at the right time. Or you know, chickens that aren't, you know, slaughtered early. You know things like that. So, I think that all contributes to, to our nutritional value.	1a4 Health benefits
5:13	P6 Int	Well we are looking at the prevalence of the cancers that people get now and you know all sorts of disorders I think there's lots of health benefits of trying to stay as natural as possible, because I think these chemicals are yeah, not, great	1a4 Health benefits
5:14	P6 Int	I think organically produced food is more nutritious. Yes I think all those nutrients have not been masked by whatever other candidates	1a4 Health benefits
5:15	P6 Int	Well I think I. I don't know much about a soil analysis and stuff but I think they do end up affecting the soils all these chemicals that you put in the crops to try and make them grow artificially. So I think for it's good for the environment if we not mess up the balance although	1a4 Health benefits
5:18	P6 Int	Ladening it with chemicals	1a4 Health benefits
6:10	P7 Int	Then it's just it's much easier because you don't have to worry about any artificial colouring, whether or not you're	1a4 Health benefits

		going to be allergic in a sense of pesticides on, unless your body really rejects certain acidity, but	
6:39	P7 Int	The nutritional value, I personally think is a lot higher than what you probably get in a greenhouse or where else they are hiding or growing things that we are unaware of in the situation	1a4 Health benefits
7:8	P8 Int	I think so. I think it reduces a lot of the, you know the added preservatives and the things that people are mostly worried about like MSG or the GMOs and that type of thing	1a4 Health benefits
8:10	P9 Int	Definitely and I'm not an expert on that okay but I wouldn't, I wouldn't want. I think long-term I don't know if there's enough evidence that genetically modified food is good for us. So, if I had a choice, I wouldn't feed. If I had babies again, I wouldn't feed them stuff that's not, that's laden with preservatives and with other things. So, I do think there's health benefit for them	1a4 Health benefits
8:26	P9 Int	P9: Well the end of the day is, you need to buy what you can afford. So, money plays a role but I will then compromise. So in other words, I will then eat less grass-fed beef	1a1 Term 'organic' 1a4 Health benefits 1a6 Purchase intent
8:30	P9 Int	That would be my, my of just being healthier on all levels. Not only my body but also the earth's body kind of thing	1a4 Health benefits Health (2): Health concerns
9:5	P10 Int	It doesn't use harmful pesticides	1a4 Health benefits
9:7	P10 Int	Well organic foods don't, they aren't like necessarily packed with preservatives and things and they could, they go off quickly because they don't have the preservatives and those preservatives can be bad for you	1a4 Health benefits
9:13	P10 Int	Organic. Healthy or like home grown food. No chemicals. Well no bad chemicals for the environment	1a1 Term 'organic' 1a4 Health benefits Health (2): Health concerns
10:9	P11 Int	Absolutely, I definitely, definitely do. I think because of the industry that I'm in and I deal with a lot of people with a lot of health issues and as soon as we clean up their diet and look I think it's, it's not only one thing that you do to get healthy. I think it's a combination of you know taking away all the, the chemicals in your, not only your food but your skin care products and, and just living well and being outside and take you know, consuming the right combination of healthy foods, but I definitely think that it does make a difference I mean I've seen people literally do a 360 with their health and it was a combination of things but one of the things that they do is, no synthetic foods, no I mean even the spices you know go non-irradiated spices make everything from scratch no packaged stuff nothing. So I think it makes a heck of a difference. I've seen people go from super sick to super healthy and just improve and it's, yeah for me it's a no-brainer. It's not always possible, you know especially financially a lot of people come and say well I want to be healthy, but I can't afford it and that's the sad part. It's you know it's a bit of a catch-22, because we even can't. We catch ourselves as well. We were at Babylonstoren yesterday and the freaking food there was so beautiful, but I went into the little shop and I was	1a4 Health benefits

		like, wow, you know we my husband hasn't worked for 11 months, I kind of, I can't really justify buying this food. My kids eat punnets of, you know they eat like a whole head of broccoli each. They'll eat a whole punnet of tomatoes each and I'm like, I can't spend 100 rand on a snack for them each. It's just, it is pricey, but I think the more people that get into this industry and the better it will it will become easier and, yeah cheaper more affordable.	
10:39	P11 Int	Season, things change. So yeah I'd like to do more intense permaculture classes and like really learn how to properly sustain us as a family because we eat so much vegetables we could really benefit not only financially but nutritionally you know knowing that, that's good quality food that's not packaged in plastic and sitting on the rack for how long. Sometimes I can smell sprays on things like, you know the herbs you know herbs when you pick it, it wilts quickly like rocket but then the stuff in the shop doesn't and sometimes I open the rocket or the broccoli and I smell this chemical. It's something they're putting on to like keep it fresh, because it, no it doesn't usually stay fresh	1a1 Term 'organic' 1a4 Health benefits Consumerism
11:10	P12 Int	I did a hundred percent believe that there's health benefits in eating organic. I think first of all there will definitely be more nutritious the vegetables and the fruit 100 because they will just taste so much better and something tastes good usually it has definitely got more of the vitamins than that. I also do you think that so many people have noticed they open like a strawberry pack and they just eat them from the package without even washing them and if at least if it's organically grown you know that you're not going to be swallowing, I don't know half a can of Doom with it. So I do think that it is really beneficial health-wise because I do believe that you're taking a lot of impurities and toxins when you eat non-organic fruit and vegetables that's a personal point but that's just me	1a4 Health benefits
12:5	P13 Int	No	1a4 Health benefits
12:17	P13 Int	I'm also skeptical whether it's organic or not because these days they say organic just because maybe they use less pesticides or or less fertilizers or whatever but I think at the in the long run they actually do	1a4 Health benefits 1a6 Purchase intent

14:8	P15 Int	So I think that there should be I don't entirely know if it is in in that regard. I think that's I think that there are so many extenuating circumstances that contribute to hormones and all that sort of stuff that's or eating clean so to speak in in an organic fashion is probably one of the better ways to to help your health but I think when we talk about like fruits and veg and hybridized things like that we know that they're not they're as organic as they can be I don't know that I mean you know if we're looking at organic practices and there for something to be truly organic then I do think that it needs to have followed a particular protocol. So like are the soils you know how do you rehabilitate the soil. What is what's happening are you what are you putting into that soil in terms of the rehabilitation. So I think in many instances part of my understanding of something about organic and sustainability would be like partner feeding so are you growing your beans with certain types so they're growing up the stalks and as a result are we looking at like bamboo how bamboo actually replenishes soils. So in terms of the carbon dioxide that's going through. So those sorts of things I think I think often we think organic is better but I actually think sustainability is probably probably better. So you know we can't if if we're producing you know eggs. If they're not sustainably produced then are we factory farming do you know what I mean that kind of idea so yeah.	1a4 Health benefits
15:7	P16 Int	No not really I you know the thing is that it depends on really the type of foods that you do eat and how you eat and in what portions you eat and so it's not just you eat organic or not organic but the thing is I I think that it's got to do more with how the food is treated and how much chemicals is added to the food and so I'm so I think that also plays a role in it as well. So it's a point in every organic food and then they stop adding other chemicals to it or treating it in some way or other and they're not always honest	1a4 Health benefits
15:24	P16 Int	Yes I do because if they if you have got anything that's been genetically modified or anything like that then I start thinking twice about how genuine the actual article is at the end and from me from a perspective is organic should be kept as natural as possible	1a1 Term 'organic' 1a4 Health benefits Health (2): Health concerns
15:30	P16 Int	Yeah I think because generally people who are looking at organic food serious organic foods out your serious eco people and health fanatics and all of that and then they do care about the world and the popular pollution and all of that so I think yes it does make a huge difference in what you are actually packaging it in as well. Absolutely	1a4 Health benefits Health (2): Health concerns
16:6	P17 Int	We think of unless I said the chemicals being used to have problematic maybe that can be damaging and like mass produced food. Maybe one of the other things is. Can you leave the fruit and veg to like ripen more fully in organic farming maybe because people don't expect it to look as like perfect when it gets to the shop. So then maybe there's some nutritional value in that. I don't know tomatoes are nicer if they are properly ripe on the bush before you thin into the shops but I don't think there's like a huge difference in terms of nutrition actually	1a4 Health benefits

17:12	P18 Int	To be honest with you I battle to think that there is so what I do think is I think there is there could be negative to eating not treated foods or food that's been treated with pesticides I think the negatives of eating baby food that's treated with pesticides they say like that versus the upside of eating organic food is bigger. So I can't so whether I think organic apple is healthier than a non- organic apple they say I can't imagine that the it's that much more healthy. I can't imagine that there's now so much more vitamin C in the organic apple than in the not organic. I can't imagine it but I do think that eating an apple as pesticides on is potentially more harmful for me than the benefits are organic. Does that make sense	1a4 Health benefits
18:6	P19 Int	So, I well sort of. I think according to research. I've I have seen a lot of research recently and in the last couple of years noting how a lot of people who use organic foods and are eating organically generally have less allergies to foods things that are becoming more common like being allergic to gluten and wheat and those sorts of things because it's so processed and because of all the pesticides and long-term effects a lot of people are getting you know allergies to foods that previously weren't there before. I also know according to my studies in in medicine and stuff, the things like Alzheimer's and cancer, there are a lot of studies that show that they're linked to certain processed meats that are being eaten. Processed foods kids that are you know ADHD and don't eat proper like healthy organic foods and are eating a lot of wheats and flowers and processed things that that are mass-produced and injected with like salts or waters or whatever to make them GMO's or like and grapes that everyone thinks tastes really lovely but actually are full of GMO's. I think like there's definitely research to show that in terms of healthy health-wise organic food is definitely the better way to go. Whether it's accessible or not is a different story but yeah	1a4 Health benefits
19:8	P20 Int	I guess if you look at the our older generations of people that are still existing and still alive, the they they food or their diet is very, very clean.Umm, I know of uh village, old men and women, they still keep to the same diet that they used to. They don't eat processed foods, they cook their meat in a certain way. They don't use things like microwaves and all that to try and avoid the toxins that come with eating just any random thing. So there's definitely benefits to eating healthy and organic foods.	1a4 Health benefits
19:36	P20 Int	Umm. Especially with animals they not injected with any substances to manipulate their growth or they muscle improvement or how much they can reproduce.	1a3 Associated processes 1a4 Health benefits

Table 5

What do you believe is the environmental impact (if any) of organic farming methods?

ID	Document	Quotation Content	Codes
2:68	P2 & 3 Int P2 & 3 Int	P2 & 3: Well, that would mean that the people in the area of your farm would need to step up their game in terms of the water. The quality of the water. Not contaminating the water with chemicals from whatever and using the soil. Perhaps having cattle as well to help with the manure. So, using natural manure. I don't know. I don't know about farming. P2 & 3: You, know, using natural manure and I think	1a3 Associated processes 1a4 Health benefits 1a5 Environmental impact 1a4 Health benefits
		going back to the way things probably were in the past But, then you start looking at. But you know the way things are being processed and handed out now, is to keep up with the number of people in the world. So will we be able to provide all the organic vegetables and meat and whatever, if we stick to this natural way.	1a5 Environmental impact 1a6 Purchase intent
3:67	P4 Int	P4: The effect on the environment. Yeah so and that's the thing so because the economy drives these, let's expand, let's expand get more out of our crops and you start just taking the environment for granted because that's not important. What is important is how much money I can make out of this season or this crop or this land space and whatever damage is left by it I mean that's problem or and I think organic farming is much kinder to, kind of to the, to the ground a big or to the earth or the environment because it follows the natural processes. It follows the, the natural seasons and, and through that the natural flow of, of harvesting you give the ground time to rest and there's like. There's traditional ways of how you heal your ground before you plant again and stuff like that. I don't know if organic farming applies all of that but I know people that locally farm without making, trying to make money out of that, that's the process that I followed. It was interesting to see we watched a series. I don't know if you know Jeremy Clarkson, the guy from Top Gear	1a1 Term 'organic' 1a3 Associated processes 1a4 Health benefits 1a5 Environmental impact Organic agriculture: Organic farming Organic agriculture: Traditional farming practices Social and Environmental Responsibility: Environmental impact
3:98	P4 Int	P4: Yeah but I think that's something that's, that's a, that's something completely different in my mind because that's yeah are you using the terminology of community garden and so forth but basically that is a idea for a non- profit organisation in order to give people that have no purpose a purpose and a purpose that results into something that sustains their living and it happens to be within growing food, food and selling that and then having multiple people having it as a multiple purpose effect on that specific community and I think it just comes down to your understanding of what exactly the, the purpose is of growing or making food and what your intention is with that. If that makes sense so if the intention is like you just explained that example that's great	1a1 Term 'organic' 1a5 Environmental impact Community Social and Environmental Social and Environmental Responsibility: Sustainability

3:136	P4 Int	P4: Yes so he, you must watch it. It's a series that he made just before lockdown. Clarkson's farm. So he went to go farm and it is so brilliant to give people insight into what that life looks like. So it's a 360 days of farming that he filmed and like just shows like the hard work and the hours. Like 24 7 like up till like up at dawn and then until midnight you like in certain seasons when it's harvesting or whatever and after the whole year like so his annual. He sits down with his farm manager and they go through the finances and he had only made 140 pounds. 140 pounds of a year's worth of work. Like how do you sustain. How do you sustain yourself on that. It's impossible. So he even says it finishes off the season goes like respect to farmers like how do you, how do you even choose this. If, if, if this was my real life and I wasn't making a show for amazon and he says it. Then I would sell my farm in a heartbeat and just go do something else and he's, he said he would make more money off the, the dividends of the money you would get for the farm than actually farming it year by year that's how scary it is. So I think people underestimate the hard work that food production entails and especially in South Africa because, I'm sorry South Africans still make use of the marginalized people and we have a large source of cheap labor and for example even in that show, Jeremy Clarkson and one guy did all the work. On the South African farm there's 10 farm workers, 20 farm workers, there's a million farm workers because it's very cheap labor and that we have in South Africa which is I don't know how I feel about that in in any case either.	1a5 Environmental impact
4:58	P5 Int	P5: Absolutely. Absolutely. I shudder to think what we have done to the water tables and to, to, to, to ground and to. I mean, you know, feed lots. I mean and whatever. You know. If you're putting the sort of stuff into, into animals and they're defecating and this is going back into the soil. It. Yeah. That must be, that must be horrific. So, once again, it's that whole life cycle process of what is your soil and your ground and your, your food source you know looking like and, and I do I think it must be a huge problem. And then our oceans, you know. A lot of the effluent water that comes off a lot of these, of these things gets pumped into the oceans. And, and what is it doing to the fish. and you know, that we are then consuming at a later stage and the chemicals from factories from processing of food. Yeah. Plenty. Definitely.	1a1 Term 'organic' 1a2 Labelling/Packaging/Certification 1a4 Health benefits 1a5 Environmental impact Social and Environmental Responsibility: Environmental concerns Social and Environmental Responsibility: Pollution
4:43	P5 Int	P5: Okay. So, I think it starts with, with, with particularly implanting and in, in feed, feedings of animals and plantings of crops. It's got to do with what is put into the soil or what is put into whatever they are consuming, number one. I mean soil preparation is massive. I also think it depends for me around growing things. It's got to do with, I quite like the concept of rotation so that there isn't, so the thing you know land is not over farmed or, or overused. I know that I, I've visited quite a few places in the world where, where they're starting to have problems with, with earth. You know with, with subsidence and things like that because of over farming and the chemicals and stuff they've put. And then directly the, the, the type of stuff that's put into the ground often	1a5 Environmental impact Natural pesticides/herbicides Sustainable agriculture Regulation: Crop rotation

		affects the water source as well. So, for me that's a, that's another critical element. And then you know what, what are you then doing to kill the bugs. Are you using natural planting. So, like garlic or you know. Like yesterday, I was like a person spraying my lemon tree because I've got some strange things happening with it. With lemon juice and garlic and bicarbonate on strange things. So, but just so that you know it wasn't, I wasn't having to put pesticides on there. Because, I also think then the treatment of those crops, then it kills things like ladybirds and bees and you know spraying of crops and, and I'm not even speaking about the problems that happened in in the 70s and 60s you know with, with crop spraying and fruit spraying and stuff that made people sick apparently. I mean that was, you know. I was only just born. So, it's everything for me, that, but it starts with what's in the soil and, and what are you watering with and what are you doing to, to prevent pests and, and fungus and things.	
5:48	P6 Int	P6: Rather than trying to use chemicals to enhance the quality of the soil and using like the soil rotation, plant rotation in order to rehabilitate the soil is a better way of looking after the soil than	1a1 Term 'organic' 1a4 Health benefits 1a5 Environmental impact
8:59	P9 Int	P9: I can imagine that. I mean it's not my field of expert but I can imagine that it's definitely that because if you just take preparation of soil. If there's. I know that some of the, the fertilizers and stuff that they use can be retained in groundwater for years. So surely that must have an impact. So, if I treat my soil with only fresh manure or whatever you know. Yeah I can imagine that I have less, less of an impact environment	1a5 Environmental impact
9:29	P10 Int	P10: It doesn't use harmful pesticides	1a5 Environmental impact
10:54	P11 Int	P11: I, I definitely do and I'm we're moving more towards, you know supporting the environment. I think everything works together you know as we as we spray our foods and genetically modify things we obviously kill off a lot of necessary bugs and, and things in nature that, that work together in the ecosystem and that's why they're such an imbalance you. Like they always say kill the bees and we will die you know we kind of need our pollinators. It's the same with the ocean. The ocean we're getting very involved with the children with the cleaning of the beaches and stuff and, and I've been going to, to listen to what they've got to say and it's just scary. Our ocean is being stripped and it's all money	1a2 Labelling/Packaging/Certification 1a4 Health benefits 1a5 Environmental impact Social and Environmental Responsibility: Environmental awareness
10:4	P11 Int	Veil I mean if I see containers that are plastic that concerns me, because we know plastic, you know leeches and. Obviously you can't see whether someone sprayed on it you know. Obviously if I see some a bag of some potion or poison you know there's certain ones that you kind of know in the industry are not great, then that is generally you know red flag. Yeah I think when I, when I see people's gardens that the vegetables are growing quite wild, it kind of makes me feel like that is natural. It's, it's not in those rows because and, and you can see when it's companion planted quite well. Also if I see bugs and stuff in the garden then that is kind of a good sign because you do. I do feel like nature needs to kind of carry on	1a5 Environmental impact

10:55	P11 Int	P11: And at the end of the day these people aren't going to have a fish to eat and if we don't have an ocean we're not going to have a land but we you know so there's an infinite impact. Everything in my opinion has a knock-on effect. So we need to protect our forests, our oceans, our soil. Yeah and hopefully more people can see that instead of having these, you know immediate gratification. Ag its lekker now, but never mind in 10 years, but we've seen the impact that it's had in the last 20 years alone. I mean give another 20 years. I don't know where we're gonna be. Like my mom says. She can't wait for the day when there's just a tablet that you take and that's your food	1a1 Term 'organic' 1a4 Health benefits 1a5 Environmental impact Social and Environmental Responsibility: Environmentalism Social and Environmental Responsibility: Sustainability
11:39	P12 Int	P12: 100 I actually do think not only. Yes huge environmental because if you plant when you mean to plants fruits and vegetables I think you give the other part of the soils a rest they don't need to be over fertilized it gives them a resting period. It also allows people just to do stuff that's in season which also sets a new mindset of buying what's in season and not looking for things other than that which gives farmers a break also in concentrating on one thing at the time and and also I think if people get used to eating organically more people will then be encouraged to grow the seasonal vegetables at home in their own gardens because they're like they're not looking for something else. They say okay not spinach and cabbages and whatever but now because it's winter those grow well in winter look at this you know	1a1 Term 'organic' 1a4 Health benefits 1a5 Environmental impact 1a6 Purchase intent Organic agriculture: Organic farming Social and Environmental Responsibility: Environmental awareness
11:24	P12 Int	P12: When I think of organic I think that's something very natural that hasn't got lots of hormones. That's the first thing that comes to mind so if I think of organic meat organic food and vegetables I think of something that's more natural and that hasn't got all these GMOs and all the different kinds of things	1a1 Term 'organic' 1a4 Health benefits 1a5 Environmental impact
12:46	P13 Int	P13: I suppose there's a maybe a better environmental impact if they're doing it correctly	1a5 Environmental impact
13:27	P14 Int	P16: I think that again is a yes and a no depending what it is and where it is that it's happening. I know for example in the Kwazulu Midlands there are a lot of dairy farmers and cattle farmers there that have gone organic and instead of feedlot animals. So they claim it's organic meat because they're not feedlot they're not getting fed in those machines they're like roaming around on the hillside and it's interesting when you eat the meat the taste is very different. When you cook the meat it cooks differently and the land is better because that land isn't getting lots and lots of chemicals coming from the waste from the cows if I can put it that way. So the whole I think it is better but when you speak to those farmers they do say that it takes quite a time. It is costly in the beginning for them to set up those organic farms because they've got to feed the cattle better. They've got to have you know the land management has to be different. So I think that's partly why it becomes more expensive but I would imagine if more and more people were doing it it would be better for the environment and it would become cheaper	1a1 Term 'organic' 1a4 Health benefits 1a5 Environmental impact 1a6 Purchase intent Organic agriculture: Organic farming Social and Environmental Responsibility: Environmental sustainability

14:54	P15 Int	P15: Yeah I would think that in terms of CO2 emissions and and that that all of that I think that there would be a massive knock-on in that. I think that if we the less because when you think of pesticides you think of crop dusting you think of all that sort of stuff you think of industry in terms of chemically made. I mean I know when I worked at a in my teen years I worked in a factory where they made those deo blocks and they made household cleaners and that and I know that my skin really really struggled. I had massive outbreaks because of the chemicals of the environment that I was in the whole time. So I think that in in that regard if I think about those those pesticides and those the I think there's always a a natural way in which to combat pests. So you know I've seen some really cool things like rather introduce ladybugs into an aphid run crop and I think it's so smart. I think that that kind of concept you know and obviously you need to look at this obviously risks of alien species and things like that but I think that there's always a natural way to to combat a a particular kind of ailment of the crop or something to that effect	1a5 Environmental impact
15:31	P16 Int	P16: I think so. Again I think it just depends on how it is done and because not all of it is done in the environment some of it's done in labs. So it really just depends but it definitely can have an impact on the environment and I think if it's both inorganic or organic foods and so on can be either safe or not safe. So I know this sounds like I'm sitting on the fence but the fact is is that if you're really going to do the organic foods in the proper way that you're supposed to do it and be above board it should be a healthier for the environment and if you package it properly and you you do it at the markets and all of that like it should be. It it would be more beneficial for the environment	1a1 Term 'organic' 1a4 Health benefits 1a5 Environmental impact Organic agriculture: Organic farming Social and Environmental Responsibility: Environmental impact Social and Environmental Responsibility: Sustainability
16:27	P17 Int	P17: Yeah so they can and do you think that they can be a difference in the environmental impact. Like I was saying if you're mass producing and that's driven by lack profit and the demand it's not always possible to do things in a way that's not going to negative the impact the environment. When we're farming for that kind of production like sometimes land gets over farmed with a single crop and then you end up not having any value in the soil anymore and also in fact some problematic pesticides that are cheaper and can be used on mass and can affect the environment more end up in water systems and that sort of thing	1a1 Term 'organic'1a2Labelling/Packaging/Certification1a3 Associated processes1a4 Health benefits1a5 Environmental impactOrganic agriculture: AgricultureOrganic agriculture: PesticidesSocial and EnvironmentalmpactSocial and EnvironmentalimpactSocial and EnvironmentalResponsibility: EnvironmentalResponsibility: Sustainability

17:72	P18 Int	See I'm I'm not so sensitive to it personally lets say but I do like the idea that we should be eating blueberries in blueberry season where the farmer is planting the blueberries in the right temperature and it's only on that type of year it's growing and then he uses that soil again for something else in another season. So I like that from a sustainability point of view however I also know from a commercial point of view it's doesn't make so much sense and how much of your crop are you throwing away because they're not beautiful blueberries and us as consumers have been completely spoiled by perfect shape and form and color fruit for example let's just talk about fruit. So with I am now going to make a choice just based on the sustainability I'm not so sure you know it all comes down finally to what you pay for for it and it's hard to justify a buy organic fruit for example that is maybe going of much quicker or they don't look so nice and my kids don't want to eat them so you've spent more money to get organic food and then no one wants to eat it because. I do think it tastes better I do think the taste of organic food is better fruit particularly where things that I do like to buy organic is meat. So meat organic meat. Somehow I can with the fruit I feel I can wash it off or I can clean it with a piece of meat I feel it's like the hormones go into the piece of chicken that I'm eating and I'm really getting that too so I kind of feel like chicken is probably the one thing that I definitely choose organic. Am I so worried about all the other things and worled in our country. So I wonder how many processes are really in place I do believe a little bit when something and Woollies says it's organic not so sure if I can trust that and then pay so much more money and then you are still getting in the pesticides form your neighbour spraying and he's playing his spraying on your crop to you know but just do you know what I'm trying to say so I'm a little bit sceptical in South Africa I guess also what to believe and	1a5 Environmental impact
18:1	P19 Int	So for me, I think organic links to food that is not highly processed food that doesn't contain lots of different chemicals and pesticides. There's no GMOs it is sort of sustainable and something that you know is good for the environment it's not taking up space. It's animal friendly it's environmentally friendly and it's healthy for you that's what I think of	1a1 Term 'organic' 1a5 Environmental impact
18:21	P19 Int	P19: So I think organic being related to the environment would be naturally sort of produced. Not modified in any way not changed not mass produced and I also think it would be in terms of like large-scale farming more environmentally friendly in the sense that like things grow in the places where they need to grow. Trees are not cut down in order to mass produce food. You know animals habitats are not taken away because of the impact that mass farming has to do or conventional farming takes on and yeah	1a1 Term 'organic' 1a4 Health benefits 1a5 Environmental impact Organic agriculture: Organic farming Social and Environmental Responsibility: Sustainability

19:47	P20 Int	P20 Not. Not as much as there is when we try and manipulate things. Obviously, the environmental problem within be that humans will get the bulk of things and then other wild animals or livestock wouldn't get as much food as they are currently gating with all the processed stuff that we eating.	1a2 Labelling/Packaging/Certification 1a5 Environmental impact
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TABLE 6

Purchase intent: Do you regularly buy organic food products?

ID	Document	Quotation Content	Codes
1:4	P1 Int	No	1a6 Purchase intent
1:3	P1 Int	I think possibly because of being in the food industry we've seen a lot where organic was more of a label than the procedures actually having been followed. So it was labelled as organic, and we didn't do this, and we didn't do this and we follow all these rules when in the reality of it that wasn't actually the case and the price difference often between some organic and something that isn't organic is quite high so therefore also being a student I would go for whatever was cheapest.	1a6 Purchase intent
1:5	P1 Int	P1: When the butternut isn't the most perfect shape.	1a6 Purchase intent
1:6	P1 Int	I would change to organic mostly for the health benefits of it and not having those hormones and stuff injected into foods as I know that in the long term it can have quite bad effects.	1a6 Purchase intent
2:31	P2 & 3 Int	Yeah. We 99.999 percent of times, if, I mean probably 100 percent.	1a6 Purchase intent
2:32	P2 & 3 Int	organic chickens and free-range eggs.	1a6 Purchase intent
2:33	P2 & 3 Int	Nina Free Ranges	1a6 Purchase intent
2:34	P2 & 3 Int	grow our own veggies in a little. We've just got a little. What's a three by two and a half or what.	1a6 Purchase intent
2:35	P2 & 3 Int	provides sufficient lettuce, spinach like you cannot believe. Broccoli, cauliflower.	1a6 Purchase intent
2:36	P2 & 3 Int	If I shop at Woolies, say for instance or at the Spar. I don't always go for organic because, I mean, I just go, okay, that's a nice bunch of celery and it's not organically grown. I look at the organic stuff sometimes, but it is more expensive.	1a6 Purchase intent
2:37	P2 & 3 Int	Well, in terms of chickens, we just feel that it's a humane.	1a6 Purchase intent
2:38	P2 & 3 Int	A humane way for them to grow up running around in the garden. Not stuck In a little hokkie. Like that with their beaks cut off and stuff.	1a6 Purchase intent
2:39	P2 & 3 Int	And for the animals as well, and hopefully the way they slaughter them is also humane.	1a6 Purchase intent
2:93	P2 & 3 Int	I think we've bought from. I think Atties bought, when my husband, was still in love, I think he bought from that garden there in Drama Street(Somerset Community Garden) and we have bought from the veggie garden here Helderberg Village. Hey.	1a6 Purchase intent

3:21	P4 Int	I don't know. I, I think because I don't know. So we regularly buy from our, the street vendor, the guy with his little trokkie and nothing is. It's just out of his truck. It's just a bunch of vegetables and food out of his	1a6 Purchase intent
3:23	P4 Int	I don't know where his stuff come from comes from because it's not packaged. It's literally just in big boxes and I don't know. So my parents have a shop and I used to also go to the markets to go buy fruit and vegetables and there we definitely didn't look at anything organic. We just look at price you're like give me the best price for the best. You look there you at least get to test your, your knowledge on what is good food and what is bad food and you like. I want a good price for the nice fruit that you see and vegetables. Yeah, so I, I think we buy a lot of it but not consciously, if that makes sense	1a6 Purchase intent
3:24	P4 Int	Yeah so obviously your, your milk any for me it's anything coming off a farm	1a6 Purchase intent
3:25	P4 Int	I mean the meat situation is, is, is just a big story. I refuse to buy meat from a, a supermarket chain. So I have a local butcher that I go to, and he's got farms that he supports. So all the meat comes through them slaughtered by him and that's how we get our meat hoping for a humane process. If you eat a lamb chop from always it just doesn't taste like lamb. I don't know why it's like if it's psychological or whatever, but it just doesn't and, and it's funny because people have gotten used to the tastelessness. So that when they eat vegetables and fruit and meat and like the, the real healthy stuff, they're actually freaked out by the taste like. I know so many young people that don't eat lamb like real land because actually they're not used to the taste of, of, of the meat	1a6 Purchase intent
3:27	P4 Int	for me that's a nicer way of shopping. So even if it isn't organic or whatever the, the, the interaction of knowing who you're supporting and that plays a role. Like in my consumer world	1a6 Purchase intent
3:28	P4 Int	Something I don't buy at supermarkets but for me it's a treat to go to the vegetable guy to go to the meat guy and to get like a little box with stuff in and also have a baker and to get your loaf of bread once a week. We don't eat a lot of bread but it's like first like a treat but yeah	1a6 Purchase intent
4:1	P5 Int	P5: For me it goes specifically to, to, to natural and, and no chemical intervention. So organic, for me, often meant that and, and then particularly of course to, to, to food. For me organic means food. I don't really think about it in other contexts, really. Cleaning materials. I've become quite specific about that as well. In terms of what it does. So organic cleaning materials around the house and then, and then what we, you know. Food stuffs.	1a6 Purchase intent

4:8	P5 Int	Okay. So, there's, so there are some. I mean there are certain farmers who you know like small people, I mean. But, so like. So, one of the companies I buy from online quite regularly is like Faithful to Nature. I buy from them. I'm very keen on, I'm very keen on people like from a farming point of view like, like Angus Macintosh. Like farmer Angus. He does a tremendous amount of really interesting stuff. But once again his accreditation standards with these animals in comparison to somebody like. I'm trying to think who else I, I'm quite keen on. There's a guy in the Midlands. Natal Midlands. I've just gone blank on his name, but it is. I, I don't buy. Now I say this right now. I don't buy. The majority of my stuff isn't organic, because I battle to find it.	1a6 Purchase intent
4:9	P5 Int	So, that's you know. So, if somebody says to me this is an organic product. If it's at a small market somewhere and it's like a little farmer, I'd probably just question - So what are your standards. What are you doing, you know. I can't. It's not a seamless process from beginning to end for me	1a6 Purchase intent
4:10	P5 Int	But, but yeah. I, I, there aren't a huge amount of very recognised. I know that there's a lot of people who are talking about humane treatment of animals and you know and, and things like that often. So, the free range, the free reign, free range chicken for me, is my lowest form of what I will go to when I buy chicken, as an example. But I'd much rather be buying chicken that was, where I know what the chicken, what their lives are actually like. But, I, we don't have much. We're not organic. We don't have organic. You know pigs for me, pork, is a massive, massive thing you know. So, I'm very, very cautious about that. But I must be honest with you, I'm buying a lot of this type of stuff from people who are telling me that it is a humane environment. They're not using antibiotics and stuff and these are small suppliers without particular brands or you know. I do a lot of farm hopping.	1a6 Purchase intent
4:11	P5 Int	One is reputation. Because I'm relatively new to the area. So, if there's a lot of, sort of like-minded people I know, who are keen on the sort of stuff. I get like that. So, for instance I will. You know in Joburg we used to have a thing called the, the Bryanston Organic Market.	1a6 Purchase intent
4:12	P5 Int	Yeah. And they used to do a lot of. So, they used to say, well this is either, you know, just natural or it is organic or not and that used to be great. So, it's reputation. Experience. Very often, you know, I will, I will look at a product. Like I go to the Oranjezicht Market in Cape Town quite a lot, because I trust those ladies from a fruit and vegetable point of view and they'll say to you, no, this stuff is organic or those, we're getting it from this producer and you know. So, reputation. Word of mouth. I follow a tremendous amount of food groups and things like that, where people talk about particular suppliers. But really when I'm looking.	1a6 Purchase intent

4:14	P5 Int	So, like. La Familiér. Do you go down to them. Down at. I mean like, yeah, behind route 40 of the old, route 44 there. There's some I mean. She's she is a. They talk about being. They have a lot of organic products and their vegetables are sometimes the funniest looking things you've ever seen in your life. I'm really quite comfortable with that, you know. And, and I, I also re. I, I've got two massive Bokashi Bins in my garden. So, I re, you know. If I don't, if I don't. This one doesn't look nice so, it's a bit funny and you know, I stick it into the Bokashi.	1a6 Purchase intent
4:20	P5 Int	So, for me that's a big thing. And then I try and make sure that my next parameter is, that I'm eating the best quality of that product that I can. You know. I mean. I, I'm like everybody else. I do shop at Woolies, you know, quite often. I won't. The other day I was looking for beans. And I won't buy beans from Kenya. Why am I buying beans from Kenya, in Cape Town, you know.	1a6 Purchase intent
4:21	P5 Int	Obviously there's a reason something's happened. No. I'm not doing that. But I find very often that my pool of what I can choose from, if I'm only choosing organic, is tiny at that particular, you know, point in time. So, I tend to go, you know, seasonal, local, best quality I can and then organic if I. I will choose it.	1a6 Purchase intent
4:23	P5 Int	very often are my salad ingredients. Leafy ingredients and tomatoes. I once had a tomato many, many years ago that lived on my kitchen counter for about six weeks and didn't go off.	1a6 Purchase intent
4:60	P5 Int	No. Not really. So, I try. The one parameter I do try and stick to is, that I'm eating seasonally.	1a6 Purchase intent
4:82	P5 Int	And also remember it's about convenience. So, you know big, big supermarkets. I mean Fruit and Veg City make me sick. You know. They just, they just capitalize on these massive, massive, you know, crates of vegetables that sometimes are very poor quality. You know they've got these stores that just stock everything. So, people go in there and they stop. You know. It's a one-stop shop for them. It's like going to a supermarket.	1a6 Purchase intent
4:84	P5 Int	You know. I can do it all there. Everything. Herbs. You know. The whatever seasonal. The whole lot. Even if I ignore everything else that happens at the Granger Bay Market, there's a lot of suppliers who all provide and that's what it's about. So, it's accessibility. I used to have a box concept in Somerset West, from Terra Madre, that they used to up in Elgin. They used to have vegetable boxes delivered to one of the health shops in Somerset West, but this is a good four or five years ago. I used to love that because I was getting. I, I, I love to cook. So, that's what my life's about. I didn't care if they gave me strange things, I didn't know what to do with. I'd find a way to cook with them. But I really liked the convenience of paying online and then all I had to do was fetch my box	1a6 Purchase intent
5:4	P6 Int	But it comes at a price which is understandable	1a6 Purchase intent
5:6	P6 Int	It's at least more affordable but I think if you go to the big shops, once they put organic then you know there's going to be a price to pay for that	1a6 Purchase intent

5:8	P6 Int	Buy eggs anymore but I would go and buy or I don't know, I don't want to mix up the two but I'd make sure they're either free range or organic because I, I don't like opening an egg and then the yolk and the egg look exactly, you know you can't tell the difference I like that yellow, you know, that shows that the chicken was healthy and happy that's what to me matters. So my eggs and with my fruit and chicken not very particular but everything else I suppose you can't run away from, you can't just stick to organic and nothing else another exclusively	1a6 Purchase intent
5:9	P6 Int	some vegetables and fruits	1a6 Purchase intent
5:19	P6 Int	I try to grow some at home. I'm not very green fingered so and yeah it's all very seasonal as well because during winter it basically can grow not much and I don't really give it as much time as I should and as I said there's some things I'm fussy about like the eggs and chickens. I want to buy a chicken that starts off eating them and by the time 	1a6 Purchase intent
5:20	P6 Int	So yeah, those I tend to look at the labels, but other things I, I, that I can't grow at home then what can I do, just end up buying what the pocket will allow	1a6 Purchase intent
5:22	P6 Int	They don't open over the weekend. So it's like, okay, I'll go during the holidays and stuff like that and then the markets are only at certain times so as I said	1a6 Purchase intent
5:36	P6 Int	Well I suppose if you walk in Woolworths and something is branded organic it's going to have a certain premium to it whether it's actually worth that cost or is it just because it's trying to market it to a certain kind of person. I don't know yeah but yeah that's what you tend to find that there'll be an extra premium, whereas if you go to a market maybe or to the little shop here the prices are not that high	1a6 Purchase intent
6:13	P7 Int	Yes I do	1a6 Purchase intent
6:15	P7 Int	Potatoes, butternut squash, my tomatoes and my peppers, especially my carrots as well	1a6 Purchase intent
6:16	P7 Int	Just tastes a lot better if it's fresh out of the soil	1a6 Purchase intent
6:17	P7 Int	Taste and texture is a very big thing	1a6 Purchase intent
6:19	P7 Int	De Warenmarkt	1a6 Purchase intent
6:20	P7 Int	Old Biscuit mill because they've got quite a big organic garden	1a6 Purchase intent
6:21	P7 Int	used to buy our veggies from Boschendal as well but they've been struggling at the moment	1a6 Purchase intent
6:22	P7 Int	I think that would have to be if there's a variety at one place instead of me having to travel back and forth between different places to buy a fresh chicken or to get a fresh	1a6 Purchase intent
6:23	P7 Int	Convenience is a big thing	1a6 Purchase intent
6:24	P7 Int	Yeah if I can get it all at one stop, I'd be happy	1a6 Purchase intent
6:59	P7 Int	Well it's easy to put it on a board and sell off for marketing purposes but I would like to know how much truth is in that	1a6 Purchase intent
6:65	P7 Int	So in the recent I obviously went to Klein Joostenberg just for quick lunch and what I've noticed is the lettuce come straight out of their garden but you can see that it's not obviously washed off properly and obviously certain bugs are traded or pesticides are traded on those leaves. So it would be something that they need to watch out for	1a6 Purchase intent

6:69	P7 Int	If it's worth the size then yes, but I'm not going to pay they'd say 20 rand for a squash that's the size of my hand if, I'm looking for a nice decent size green butternut squash	1a6 Purchase intent
6:71	P7 Int	The nutritional value, I personally think is a lot higher than what you probably get in a greenhouse or where else they are hiding or growing things that we are unaware of in the situation	1a6 Purchase intent
7:11	P8 Int	Not really okay just because of the price and because of it being quite, there's not a few there's not a lot of grocery stores that, you know the commercial ones the ones that are big you can actually buy them from	1a6 Purchase intent
7:12	P8 Int	I would say a farmer's market that's you know, that has those produce that is not in packaging and you know they all lose. That type of stuff	1a6 Purchase intent
7:14	P8 Int	There are quite a few. I don't know if they're organic but like those markets like Route 44 market or the Oranjezicht market. They've got quite a few loosely displayed vegetables	1a6 Purchase intent
7:15	P8 Int	Pink meat and also fruits and vegetables	1a6 Purchase intent
8:13	P9 Int	No, because it's very expensive	1a6 Purchase intent
8:24	P9 Int	Yeah all these blocks of grass-fed beef and grass-fed butter. The price is just, yeah. I'm quite, but I try as much as possible to buy, buy raw, ja veggies and fruit I would buy. I mostly buy organic but when it comes to animal products and so on, I just find it's very expensive	1a6 Purchase intent
8:38	P9 Int	Definitely and that is one of the pitfalls because, because it's convenient to buy at the Spar or at Woollies and that sell packages chopped already for you	1a6 Purchase intent
10:8	P11 Int	For me it's, it's a yes and a no. Like when I go shopping, yes I will go for the ones that say says organic in the shops, but I will generally choose to not shop in supermarkets if possible and then go to the small farmers who don't even have packaging and buy from there and support local. So it's a yes and a no	1a6 Purchase intent
10:15	P11 Int	We buy as much organic as we possibly can yes. At this, the children go to a school where they've now started a garden again. During Covid they weren't allowed to grow vegetables and let the kids eat. Crazy but now they've started that again and they sell some veggies there. So we support the school through buying some of the stuff there and we get to pull it out and the kids can pick. So we're very blessed in that regard it makes it easier but yeah I definitely don't buy 100 percent organic as best I can. We've got two little places close to the school that I can stop. I get my spices and some of my grains that are you know organic but yeah not everything. We do sometimes go to the shop and just buy what we can yeah	1a6 Purchase intent
10:19	P11 Int	For me, I think because of the location where we live in, I have access now but. I feel like I personally know of a few places but also it's because of the industry that I'm in and the location that I live in that I do know a few places in the area where I can get organic but if I have to compare them to all the shops that we have here, I don't feel like we have enough organic at all and you know a lot of people will say where do you get your food and I'm like what do you mean. You live in the same area as me. How do you not know	1a6 Purchase intent

10:27 P11 Int Convenient absolutely so we need to find a way to make it more convenient and more practical. I started doing organic veg boxes but then the lady who I was working with, she was a bit inconsistent, but I've got some friends at the school now who are going to start it and I'm going to start supplying with healthy treats and snacks and then the idea is that yeah, on a weekly especially for the moms at school, we can start small and then expand out. Come and get your, your veggie box. Make it easy. You can get all your other products. That your skincare. It's all natural. So they've got a little a little deli type shop that they've taken over. Two of my friends at the school and to also to support local and to make it easier for us to all get the healthy foods that we want to get. So yeah, I think if more people start doing that and expanding it I said maybe 1a6 Purchase intent 10:45 P11 Int Absolutely, I definitely, definitely do. I think because of the industry that I'm in and I deal with a lot of people with a lot of health issues and as soon as we clean up their diet and look I think it's, it's not only one thing that you do to get 1a6 Purchase intent	. It's kind 1a6 Purchase inte ou don't and I actually . They, /ou know ow not to	People don't know because it's not as accessible. It's kind of like those hidden little gems you know and if you don't know about them you don't, you don't get access and I mean Woolworths. They're organic produce has actually decreased over the years which I'm, I'm shocked. They, they used to have a bigger variety but then also you know some of this stuff is packaged so I prefer you know not to then buy that. I'd like to just get my lettuce head	10:20 P11 Int
10:45P11 IntAbsolutely, I definitely, definitely do. I think because of the industry that I'm in and I deal with a lot of people with a lot of health issues and as soon as we clean up their diet and look I think it's, it's not only one thing that you do to get1a6 Purchase intent	to make it ng orking ∋ friends n going to d then he moms it. Come i can get l natural. ey've o also to et the k if more aybe	Convenient absolutely so we need to find a way to make it more convenient and more practical. I started doing organic veg boxes but then the lady who I was working with, she was a bit inconsistent, but I've got some friends at the school now who are going to start it and I'm going to start supplying with healthy treats and snacks and then the idea is that yeah, on a weekly especially for the moms at school, we can start small and then expand out. Come and get your, your veggie box. Make it easy. You can get all your other products. That your skincare. It's all natural. So they've got a little a little deli type shop that they've taken over. Two of my friends at the school and to also to support local and to make it easier for us to all get the healthy foods that we want to get. So yeah, I think if more people start doing that and expanding it I said maybe	10:27 P11 Int
healthy. I think it's a combination of you know taking away all the, the chemicals in your, not only your food but your skin care products and, and just living well and being outside and take you know, consuming the right combination of healthy foods, but I definitely think that it does make a difference I mean I've seen people literally do a 360 with their health and it was a combination of things but one of the things that they do is, no synthetic foods, no I mean even the spices you know go non- irradiated spices make everything from scratch no packaged stuff nothing. So I think it makes a heck of a difference. I've seen people go from super sick to super healthy and just improve and it's, yeah for me it's a no- brainer. It's not always possible, you know especially financially a lot of people come and say well I want to be healthy, but I can't afford it and that's the sad part. It's you know it's a bit of a catch-22, because we even can't. We catch ourselves as well. We were at Babylonstoren yesterday and the freaking food there was so beautiful, but I went into the little shop and I was like, wow, you know we my husband hasn't worked for 11 months, I kind of, I can't really justify buying this food. My kids eat punnets of, you know they eat like a whole head of broccoli each. They'll eat a whole punnet of tomatoes each and I'm like, I can't spend 100 rand on a snack for them each. It's just, it is pricey, but I think the more people that get into this industry and the better it will become easier and,yeah cheaper more affordable.	ise of the 1a6 Purchase inte with a lot r diet and r diet and to get ing away out your eing ano- o k of a o super a no- ially nt to be t. It's you in't. We en autiful, you ns, I kind at of toes ack for re people ome	Absolutely, I definitely, definitely do. I think because of the industry that I'm in and I deal with a lot of people with a lot of health issues and as soon as we clean up their diet and look I think it's, it's not only one thing that you do to get healthy. I think it's a combination of you know taking away all the, the chemicals in your, not only your food but your skin care products and, and just living well and being outside and take you know, consuming the right combination of healthy foods, but I definitely think that it does make a difference I mean I've seen people literally do a 360 with their health and it was a combination of things but one of the things that they do is, no synthetic foods, no I mean even the spices you know go non- irradiated spices make everything from scratch no packaged stuff nothing. So I think it makes a heck of a difference. I've seen people go from super sick to super healthy and just improve and it's, yeah for me it's a no- brainer. It's not always possible, you know especially financially a lot of people come and say well I want to be healthy, but I can't afford it and that's the sad part. It's you know it's a bit of a catch-22, because we even can't. We catch ourselves as well. We were at Babylonstoren yesterday and the freaking food there was so beautiful, but I went into the little shop and I was like, wow, you know we my husband hasn't worked for 11 months, I kind of, I can't really justify buying this food. My kids eat punnets of, you know they eat like a whole head of broccoli each. They'll eat a whole punnet of tomatoes each and I'm like, I can't spend 100 rand on a snack for them each. It's just, it is pricey, but I think the more people that get into this industry and the better it will become easier and, yeah cheaper more affordable.	10:45 P11 Int
11:5P12 Int100 percent and I must be honest I do think that usually they have a better smell they actually smell of fruit and they do taste of the fruit not just the water1a6 Purchase intent	usually 1a6 Purchase inte it and	100 percent and I must be honest I do think that usually they have a better smell they actually smell of fruit and they do taste of the fruit not just the water	11:5 P12 Int

11:12	P12 Int	I must be very unless I'm I try I really do try but even if I go to the shops and I am a Woollies shopper so I'm have to admit that I do buy I do try and look for the organically grown stuff.	1a6 Purchase intent
11:13	P12 Int	I love to go to markets because then I know that I've just bought it then it's very different I like the fact that I put it in my basket and I take it home and I always find that their fruit and vegetable taste so much better. Having said that I do think the shops are convenient. Like the supermarket shops are convenient the only downfall that I have found if you buy the shop not if you go to a market on a Saturday or a Sunday morning is that it's so much more expensive than stuff that's not organically grown which I think that's a little bit unfair. That it isn't but I understand why I probably cost them so much more in the commercial farmers do that. The only one thing that I think is wrong with organically grown stuff that it says shipped to like Woolworths is that they still package it in so much polystyrene and plastic which I think shouldn't. I really do think it should be maybe in paper. I don't know that's just me. I don't know there must be a reason	1a6 Purchase intent
12:14	P13 Int	You know like if you go it would be put into the markets and markets that are easily you easy to get to like your Bryanston Organic Market here. I would buy things there but they're not many of them so if there were more of them that that were easy to get to I would support them.	1a6 Purchase intent
12:17	P13 Int	I'm also sceptical whether it's organic or not because these days they say organic just because maybe they use less pesticides or less fertilizers or whatever, but I think at the in the long run they actually do	1a6 Purchase intent
12:23	P13 Int	If I was at a market and I saw fruit and veggies there that said they were organic I would probably buy them if they looked nice and fresh and whatever the case may be but it wouldn't change my scepticism because also I feel that they're quick to put the organic label on but they don't think of other things like carbon footprint to get it to be organic and all that sort of thing. So I don't believe it's that much different to just normal non-organic food	1a6 Purchase intent
12:35	P13 Int	Yeah I would support and maybe it's another thing is that when you when you when you talk about organic. You're going to Checkers or you're going to Woolworths and you've got an organic label okay and that's what I'm not interested in buying but if somebody has got as you say a little market garden in the church and you go past and you see tomatoes and you see lettuce and various things. I would buy it from there and so I go to a greengrocer rather than buy my veggies in a store	1a6 Purchase intent

13:9	P14 Int	Yes and no. So certain vegetables are will only buy organic and because I'm a bit worried about whether they are grown you know because as I say some stuff could very easily be bought be getting grown on land where maybe the land itself is not so good. So yes, people can say it's organic but maybe that area shouldn't be growing anything in the soil you know wherever. The mine dumps that that land is poisoned land. So it depends where it comes from. So I look on where was it grow. So if I can see it was grown in the Midlands or you know then that's a different thing but if it says it was you know somewhere between here and Witbank where all the mind dumps are well you, you're not so sure about that. So yeah, then I'd rather go with mass-produced stuff where I know it was grown	1a6 Purchase intent
13:10	P14 Int	So I'm we lucky there's the Bryanston Organic Market. So they sell organic vegetables and those farmers are coming out from more. I'm trying to think ton of luck Honeydew back end of Lanseria, Kyalami way and you can actually go and see the farms. So if you're driving out you can see where the farms are that they're coming from and then meat. We've got a family friend who happens to run a beef farm in the KwaZulu Midlands. So we just order once every four months in bulk from them because you can actually go and pick the cow if you want	1a6 Purchase intent
13:12	P14 Int	Clooney Farm near Stein City.	1a6 Purchase intent
14:10	P15 Int	Checkers have created their sustainable friendly Simple Truth brand. Woollies are doing the same thing I don't know I don't very often shop at Pick and Pay	1a6 Purchase intent
14:12	P15 Int	So I think that there is a market I don't know that we're fully there in terms of access but I definitely feel that we are moving in that direction and consumers need to take most more acknowledgment of that like I don't think that there should be plastic bags or when I was in Europe all the plastic bags that you buy for your fruit are all biodegradable	1a6 Purchase intent
14:14	P15 Int	affordability plays a big role	1a6 Purchase intent
14:15	P15 Int	Yeah so I think things like cholesterol I think the notions of you know like gluten all that kind of stuff a lot of the ailments that we've been struggling with I think things like cancer and that definitely from a health perspective it does make me or more desire. It makes organic more desirable they're cleaner eating so I definitely seek that concept within our household within our products but I also know that convenience is key and if organic is inconvenience then you're less likely to go straight for it. So that's kind of my my whole idea. I think that the moment organic becomes the norm then the convenience will come with it as well because I think it's all about access. The more access we have to Greener sustainable free range organic supplies the the better it will be. I mean you've got Jackson's Food you've got those kinds of options but they do come at a bit of a price concept I also think something that we need to think about in terms of organic farming is local farming as well. So if I I really will buy my I try and not buy goods that come from overseas I try and make sure that I I when I when I stuck fruit I'm stuck in our seasonal fruit. So I won't be buying the grapes that are in	1a6 Purchase intent

		the shops at the moment they are all from Spain and they they cost a lot more so yeah	
15:10	P16 Int	I must be honest no I don't I'm not and don't go out of my way to go and see if it's organic or not organic I must be honest	1a6 Purchase intent
15:11	P16 Int	For me it is just get in get what I need and get out	1a6 Purchase intent
15:12	P16 Int	That's also that's why I say you know I've for me there's a spot up the road from my house. I always go to Spar. Whatever Spar has is what I buy	1a6 Purchase intent
15:6	P16 Int	Not necessarily because I suppose you can get a certificate for anything and everything out there. So you know the thing is it depends on how reliable the actual Labelling/Certification board is that's going to be doing it	1a6 Purchase intent
15:22	P16 Int	When you really when you start looking at the cross-breed species that you have where you've got like sort of different fruits that have been fiddled with and so on then I'm sort of hesitant to see not that it's not necessarily organic but it just means that it's they they've been doing fiddling with nature and not that not that it might not be organic but it just means that it's not what it's meant to be	1a6 Purchase intent
16:8	P17 Int	Sometimes I do and I try and buy like local if possible because I can't afford too and I try to support like local businesses and like a few of the ones around me have organic stuff. I mean with meat I didn't need to try and find like free range and that sort of thing	1a6 Purchase intent
16:10	P17 Int	yeah with fruits and veg I'm not as strict about like buying a specific things. I'll buy from I like buying from a local shop and then what they have I'll generally try and buy	1a6 Purchase intent
16:29	P17 Int	So like with meat I'm a lot more careful. I was like I must be vegetarian for a while just not with Covid because it's just too many things to worry about but yeah with fruits and veg I'm not as strict about like buying a specific things. I'll buy from I like buying from a local shop and then what they have I'll generally try and buy	1a6 Purchase intent
17:14	P18 Int	Woollies says it's organic I do trust because I know the systems are incredibly strict	1a6 Purchase intent

17:46	P18 Int	Perfect thanks perfectly sense and then the environmental impact of organic versus non-organic. See I'm I'm not so sensitive to it personally let's say but I do like the idea that we should be eating blueberries in blueberry season where the farmer is planting the blueberries in the right temperature and it's only on that type of year it's growing and then he uses that soil again for something else in another season. So I like that from a sustainability point of view however I also know from a commercial point of view it's doesn't make so much sense and how much of your crop are you throwing away because they're not beautiful blueberries and us as consumers have been completely spoiled by perfect shape and form and colour fruit for example let's just talk about fruit. So with I am now going to make a choice just based on the sustainability I'm not so sure you know it all comes down finally to what you pay for for it and it's hard to justify a buy organic fruit for example that is maybe going of much quicker or they don't look so nice and my kids don't want to eat them so you've spent more money to get organic food and then no one wants to eat it because. I do think it tastes better I do think the taste of organic food is better fruit particularly where things that I do like to buy organic is meat. So meat organic meat. Somehow I can with the piece of chicken that I'm eating and I'm really getting that too so I kind of feel like chicken is probably the one thing that I definitely choose organic. Am I so worried about all the other things to be truly honest with you no and probably because I am a little bit I'm a little bit sceptical how well it's monitored in our country.	1a6 Purchase intent
17:55	P18 Int	It has to be easily accessible. It can't be like a random place which is hard and then you have to park and then you know I mean like it's got to be really easily accessible and then it almost has to stay just with fruit and veggies. There don't mean like it can't then become all other gedoente market and they need next thing the jams and breadstick. I don't read like that but then you know that you know those farms and you get to know the farmers also that comes like I know in Germany my market I used to know the farmer who did like you know him he can tell you already this is and then once it's out of season it's out of season it's just not available anymore then I bring my next crop.	1a6 Purchase intent
18:7	P19 Int	We try to definitely on our side I think. We still do have our little vegetable garden that started up a hundred years ago and try and keep it going and definitely like buying at farmers markets and things like that we try. Sometimes it's not always possible and I think that that is something that probably could be better at but I think as a matter of convenience for a lot of us you know popping into Woollies or Pick and Pay or whatever is the only way you can get what you want and I suppose a quality that will last in the fridge longer than maybe what the others would because they have all the special chemicals on them	1a6 Purchase intent

18:8	P19 Int	I think in terms of meat I would prefer that the meat is you know like fed with natural stuff that they have free roaming those sorts of things like eggs and chickens definitely and in terms of fruits and vegetables I would much prefer much prefer that it's organic yeah. I think I try and avoid the other stuff as much as possible but yeah I think sometimes it's just not accessible	1a6 Purchase intent
19:14	P20 Int	However, the accessibility to that also is a problem.UM, accessibility is a problem, and considering how much we are used to processed foods and there are certain people that when they start eating clean then they fall sick, you know, because the system is not used to not fighting so much.	1a6 Purchase intent
19:18	P20 Int	another thing is the expenses. Umm it will genuine organic foods tend to be very expensive as compared to, you know fast processed foods.	1a6 Purchase intent
19:6	P20 Int	I'm sure at this point, honestly, you can really trust what you grow in your own backyard, because when it comes to Labelling/Certifications and we know about corruption and all that, that's happening outside here. I mean, if people are able to buy certain, you know creditation, I mean accreditations, then I guess they can make their foods certified organic even without going through all the proper procedures.	1a6 Purchase intent
19:19	P20 Int	Convenience does play a role. It really does play a role.	1a6 Purchase intent
19:20	P20 Int	Because it's very inconvenient to just go to a certain market just to buy certain things.	1a6 Purchase intent
19:50	P20 Int	And also if if you really think about it, people that are able to truly, really eat organic foods, people that have farms and they can grow all these things for themselves, they can grow their animals themselves the way they want them to be. But for a person who is like for us, we teachers, we working, you have families that you have to take care of, running errands and all that. And then you have to now also.	1a6 Purchase intent

TABLE 7

So when I mention community gardens, what are you thinking of?

ID	Document	Quotation Content	Codes
1:51	P1 Int	P1: I would say from an organic market	1b2 - Commercial or Community/Organic market?
1:14	P1 Int	P1: Out of just, I would prefer to support something more local. So, in most organic markets the produce would have been farmed locally and then you would be supporting something like a local distributor as opposed to something like Woolworths where the stuff is also mass produced, as opposed to probably grown in smaller segments, so it won't just be about supporting a local market over a huge producer.	1a4 Health benefits 1a6 Purchase intent 1b3 - Reasoning
2:90	P2 & 3 Int	P2 & 3: Community garden, I think. If it was, if it was open, you know regularly and it was easily accessible, yes. I think. My sister not so much, she'd rather go to Woolies.	1a6 Purchase intent 1b2 - Commercial or Community/Organic market?
3:141	P4 Int	So a community garden is supposed to feed the community but if you start making money out of a community garden then just to buy food somewhere else I don't understand like	1b- Consumers understanding of community gardens
3:142	P4 Int	I don't believe community gardens should be marketed and I'm sorry but I'm going to burst your bubble here. The whole point of the community garden is for the community so the community knows the community garden is there because it's part of their sustainable space	1b1 - Community garden?
3:143	P4 Int	P4: And if you want to make money out of the community garden and but then I think you're changing the nature of what it was meant to be. Then you're moving away from, then it's not, it's then, it's a, then it's a business. So I, yeah I'm a. I think I'm a socialist in that sense where, in order to support people you don't necessarily have to adopt all of these corporate approaches yeah like what, what is the benefits to more, if more people buy from the community gardeners or yeah buy produce from the community garden what, what is then the purpose actually. Was it to feed the people that live around it or was it to sell the stuff to get money to buy a tv with it	1b1 - Community garden?

4:25	P5 Int	o, for me the, the, the biggest example of what started out as a community garden was the Oranjezicht Garden up, which I think was started on Helen Ziller's property up in Cape Town. I went to, there, many years ago when they started out and that was interesting because there were a lot of people who were giving of their time to that garden, but they weren't earning a living off it. They were then obviously getting some crops out. Even poor people could have access to those vegetables. Much like they're doing now. And then they would sell the remainder at the market. And for me it just. It's effectively that. Everybody brings something to the party. People would benefit from it. The poorest of the poor who would give up their time, often, you know, would be okay in terms of getting fruit and vegetables. And then, and then they would make money to cover costs afterwards. And, and that works. That works quite nicely. I mean, it's a much bigger thing. I mean there's all those little, what are they called, in, in the UK. Those little garden patches that people have. You know which ones I'm talking about.	1b- Consumers understanding of community gardens
4:26	P5 Int	And very often, even though they're all sitting on their own little pieces of land, all those farmers or those little gardeners, they all share their products amongst one another in a very communal space. And, and so, it's very much a community gardening concept. I'd love to see much more of it, hey. Particularly because, why not.	1b- Consumers understanding of community gardens
4:27	P5 Int	Yes of course. Absolutely. I'm embarrassed to say that I haven't been to the one in Somerset West for a little while. But a lot hasn't happened during Covid, you know. But absolutely. I. If, if that was something that was on my doorstep and I had an element of, of, of choice. Absolutely. I'm also one of those people who is very, very comfortable with paying a premium for this type of product. Maybe I'm just. I'm fortunate because I can. But, but it's important because it's so much bigger than just what you are. So, yes. I would. I would support it and I would share it and I'd verbalize it and I would tell people about it. Because this stuff's important.	1b- Consumers understanding of community gardens3 Local community gardens
5:24	P6 Int	I think I would, I, I believe in supporting one another. I mean if I look at the carbon footprints, the things have been grown right here you know I and yeah, yeah, I think we all need to support each other whenever, whatever enterprise we're into. So I try to support local when I can.	1b- Consumers understanding of community gardens3 Local community gardens
6:32	P7 Int	In this current stage, yes I think it's much easier to support a company who needs it the most than supporting a big branch network or a key network link where more salaries are being bumped into their, where your more commercial farmers are sitting with stock and nobody's buying from them and it goes to waste	1b- Consumers understanding of community gardens3 Local community gardens
6:31	P7 Int	From a community garden. Support the locals	1b- Consumers understanding of community gardens 3 Local community gardens
9:10	P10 Int	Well probably more beneficial for your community	1b- Consumers understanding of community gardens

9:11	P10 Int	I mean even just job creation or like smaller farmers who are like subsistence farming, but also selling whatever extra produce they have and we can support them	1b- Consumers understanding of community gardens
10:22	P11 Int	And the reason that I would choose it is because I, I love the concept of community gardens. You know the money goes towards good projects sustaining the garden, also sustaining the local people who are impoverished and, and kind of feeding them. Giving them some work. That kind of, it's, yeah I'm talking about the one here in Somerset West. At least I know what they are up to. Yeah because I worked there for a day with them to see what it was all about and yeah I just really. I like the smaller community and, and it's it helps to grow more food and, and expand what they are doing. So, so to support them. I mean these big companies they are loaded man	1b- Consumers understanding of community gardens
10:21	P11 Int	Definitely a community garden absolutely	1b- Consumers understanding of community gardens
11:18	P12 Int	Okay so I do know a little bit about community gardens because when I first started at Brescia we did set up a few community gardens on some of our outreach programs when we used to go out with our grade 11s and when we used to take the girls to do community service projects out of nursery schools a little bit far out. So I do know a little bit about them not great but I do know that how we planted them how to make them water wise so then we did some in tires and we did some lap as big as a door so we did do a few of those I don't know if that's answering the right question or not	1b- Consumers understanding of community gardens
11:19	P12 Int	100 I think those community gardens actually would work better organic because they're small sections and they're very easy to look after anybody can be taught to look after them so you don't need a a degree in agriculture to be able to look after a farm. It's very sustainable you can also grow vegetables that you know you will use all the time. You could also teach the people how to pick the vegetables from an organic garden because it's not a big farm so you don't have to uproot all the lettuce. You could just take the bigger lettuces and actually sell them like when you buy the baby leaf lettuces from Woollies that cost an absolute fortune. You could sell that kind of stuff and your plant would keep growing. So I think community gardens are actually the most amazing thing if everybody should have one and schools yeah those are really really good	1b- Consumers understanding of community gardens
12:8	P13 Int	Yeah I think so because if it's a community garden and it's a small garden I think they would be doing it more naturally. You know they might be using a little bit of fertilizer and a little bit but it's on a small it's on a smaller scale then this the mass sort of spraying and the mass fertilizers and things	1b- Consumers understanding of community gardens
12:10	P13 Int	I'm thinking about your your little oke making a vegetable garden. You you know like a market gardener. Just your your somebody with a small holding that grows a couple of lettuces and that's what I think yeah	1b- Consumers understanding of community gardens

12:11	P13 Int	Yeah I get them from a from a commercial store but the one I actually go to doesn't package it. It's all you you pick and you and you put they put in a box	1b- Consumers understanding of community gardens
13:11	P14 Int	People working together to grow a garden and they benefit from that garden themselves. So it's not just to sell but it's for them to live off and feed from and I would imagine that it would be more organic than a bigger sort of feedlot garden type place because they're small. They tend to be smaller	1b- Consumers understanding of community gardens
13:13	P14 Int	Yes but again it does depend on cost. So if they're exorbitantly expensive then I probably wouldn't but I'll give you an example of a place that just popped into my head that before Covid they were selling organic vegetables and it's Clooney Farm near Stein City. It's a place for mentally disabled adults and they've put up a community garden, little domes and they grow herbs and I think at one stage it was strawberries and tomatoes and things like that and then they would sell them to raise money. So yes those kind of little community gardens that are trying to earn money to keep themselves going and selling some of their products I definitely would support	1b- Consumers understanding of community gardens
14:16	P15 Int	So in terms of community gardens I do think that's I think it's a really good idea. I think that it's I love the concept of community gardens from what I understand about it is I I think there should be an establishment or other community garden but I like the sidewalk community guidance as well I know that a lot of urban areas are practicing that concept. It did take off a bit in Johannesburg but I don't know in terms of the sustainability I think the idea of a community garden should be that you only take what you need. You don't you don't take for greed purposes as well. I think that if there are certain fruiting trees that are in public domain you should be able to take from that. You know I think that that's the idea of a community garden but I also think that the idea of a community garden means that you have to attend it as a community garden then you need to give back to it in what in in some way shape or form. What that measurable is I'm not too sure but you know I do like the idea of a community garden and I also like the idea of it being something that is seasonal. So you grow something that you can grow either evergreen or like spinach and things like that that you're taking out is self- seeded and grows back that kind of concept	1b- Consumers understanding of community gardens

14:18	P15 Int	Yes in that regard I would be and I suppose that's part of that artisanal Garden concept and stuff like that that I quite like and also like going to Jasmyns and going to you know I mean. They're just far so convenience is key so like I just popped up I've got a box of fruit and veg sure I just popped up to the fruit and veg I needed I needed tomatoes but I didn't feel like having to stop at Checkers on the way home so I thought okay I want a coffee let me quickly walk to the fruit and veg place yeah and I grabbed a grabbed grabbed some stuff here's a little bit more expensive than what I would be willing to spend at times but you know convenience is key in that regard so if there was. I I know that Paul Matthews is part of a community a veg garden process and they get a box of communal veg delivered each week and that or every two weeks it was something I thought was really cool. I I wish that there were more neighborhoods that were doing that kind of thing. I loved I mean when I was growing up my grandmother used to have the fruit and veg truck used to come past and park out and then she would go with her bags and collect her stuff and and she would pay the man cash and you know it was always readily ready and accessible. I wish that we had more stuff like Europe where we walked straight down to the local markets and we go the food markets and we pick up our stuff and we go home. So we're only buying as we need. That for me is is the true idealist	1b- Consumers understanding of community gardens
15:13	P16 Int	To me that would be that it involves the the people in the area with getting going with doing the the growing of produce and it might not just be vegetables I assume. It could also be livestock as well just depends on the area that you're in where they themselves will be producing the the product whatever it might be collectively and then be selling that for a profit for the and then hopefully using their profit to to sustain the community that they're living in but I can imagine that must also be quite difficult	1b- Consumers understanding of community gardens
15:15	P16 Int	Because if one because particularly if the community garden is doing it for themself and doing it naturally and healthily and without person it for me that would be the better option	1b- Consumers understanding of community gardens
16:12	P17 Int	A couple of things. I think like on the one hand I think have like organized versions of that like allotments in the UK where people can and the community can. As individuals you can pay to have a piece of land that you can like grow fruit and veg on and. It will be like not in the city and so there's that kind but then I think there's also like community gardens where there are empty spaces where communities come together and and grow food and I know that happens like a lot in Zimbabwe and it happens. Sometimes I mean as I live on the Delta and at one section a community of people started growing like mealies and that sort of thing and I think that's it would be amazing if there was like land that was available for that sort of thing because also there's really interesting things happening. I don't know you know about Pretoria yards	1b- Consumers understanding of community gardens
16:11	P17 Int	Okay so I buy from like the local fruit and veg shops around me. I'm in Craigsville Park so we've got like quite a few like Portuguese and Greek shops but I've also been meaning to but I haven't done it yet but down the road from us at the Colorful Splendor that's kind of a nursery. The nursery down the road from as they sell veggie boxes from urban farms in Joburg which I think could be a really cool thing to do I just haven't got there	1b- Consumers understanding of community gardens
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17:20	P18 Int	Yeah community garden I kind of feel like everyone in the community is coming together and those people have time and energy plants something and everyone benefits from it and yes you kind of use use it if you've contributed but I don't necessarily. It definitely feels more natural and organic to me but then also then people will quickly learn if you don't do it then you're planting so much and only half of the crop is good so that you're wasting energy and water and he's like if I put this in all of a sudden my crop looks so much better	1b- Consumers understanding of community gardens
17:21	P18 Int	I think when the fruits in. I'll happily some things I'll happily buy from a community garden how if I still then I must know that I'm going to use it within the next day or two	1b- Consumers understanding of community gardens
17:22	P18 Int	I do feel that there's a very short shelf life and that is really how it is I mean naturally it is like that but yeah	1b- Consumers understanding of community gardens
17:23	P18 Int	Yeah because even I was in Germany now and the fresh fruits the fresh fruit food markets are really on a Tuesday Friday in your area where you live so you really go from the train through the market. So there I would definitely be buying more from the farmers and I know really it is the farmers that come in and it's most probably more organic and less processed. In South Africa it's just the way you get it during. So yes inconvenience do play a role and I do go to the free I do go to Impala Center which is in Northgate, Northcliff to the fresh food market there but I still think they're treated this stuff right yeah I don't think it's I don't really go to organic but I go there for fresh fruit over maybe by from Woollies but if it was more in your if you know that every week the same farmer will be there and you would can buy the produce on your way somewhere, yes I would support it but it's not really that convenient and it's not here	1b- Consumers understanding of community gardens
17:26	P18 Int	And then you do you think those commercial type of places there's an expense to it	1b- Consumers understanding of community gardens
18:13	P19 Int	I believe a community garden should be in a space or an area that's accessible to a wider range of people. That it is maintained and looked after a wide range of people and not just one person within the community and I think it should have various types of fruits and vegetables that are going to be able to grow with. Enough to sustain a few people and a few families but also be able to you know meet the needs of their sort of income. Their ability to water it yeah	1b- Consumers understanding of community gardens
18:14	P19 Int	I definitely think I would prefer to buy from a community garden.	1b- Consumers understanding of community gardens

19:22	P20 Int	Ohh could freeze to have one at school, so that is a a garden. Obviously that members of the Community, while they would pick a certain area in the Community that is accessible to well most members and that particular garden is then ran and in charge well the people in the community are in charge of it. They responsible for watering it and tending to the garden and then whatever foods that are grown in that garden.	1b- Consumers understanding of community gardens
19:23	P20 Int	Definitely from them.	1b- Consumers understanding of community gardens
19:24	P20 Int	One, because I mean, if you are taking your time to kind of give a healthier option to the members of Community, if we think about it one it means that you probably not employed if you are able to sit and tend to the garden every single day. So that gives back not only to just the person but also it helps improve the the economy of the country as well. Dumm. And then just yeah, just to help out and give back to your own community instead of growing these already huge food chain markets, yeah.	1b- Consumers understanding of community gardens

TABLE 8

So when I mention community gardens, what are you thinking of?

ID	Document	Quotation Content	Codes
1:55	P1 Int	P1: I wouldn't say in my area but I know you can buy from places like Babylonstoren and, and then the Lanzerac market has the local produce section in it where you can buy fruits, vegetables, all of that stuff. So, that would probably be the closest range to me.	3 Local community gardens CG in area
2:150	P2 & 3 Int	Well, the one in Somerset West there in Drama Street. We know of that one.	3 Local community gardens
2:152	P2 & 3 Int	I know there's a market place called La Familiér or something on the R44. My daughter goes there. La Familiér.	3 Local community gardens
3:31	P4 Int	Yeah well not, not in my close, close area	3 Local community gardens
3:32	P4 Int	Well the, they are on a Saturday at Stark Eyers which is also very close to my house. They, they support a community garden project where it's a bunch of farmers that they then collate and they sell their fruit and veg from there and you can also order a monthly box through that. I don't like that though because then I feel so bound to my box. I like to buy what I feel like eating and whatever looks nice and the whole process of yeah. So if we add Stark Eyers then we will always support and buy something that is on the table but and then there's like I said Constantia side where it's the definitely. I'm not always convinced people eat the stuff though like I think it's, it's like it's like a fashion. Like let me go get my organic carrots and then put it in my hessian bag and then walk around with my hessian bag full of carrots while I have my latte and then. I don't know yeah, I don't know like it always feels to me so	3 Local community gardens

3:33	P4 Int	It's just the image of the little beautiful little stall and the whatever but there's quite a few there and then there's a community garden that I saw and I was actually quite interested about but which was in Woodstock. We were actually looking at moving, when we moved in March we were looking at all different areas and we drove past this community garden that, it was fenced. So they, it's protected whatever and then there was a little sign that said this is where the homeless people. They feed all the homeless people from the garden. I was like, that's quite cool but there wasn't for sale. So you could volunteer or you could donate but the garden sustained a large community of homeless people in the area because I mean Woodstock has a lot of homeless people	3 Local community gardens
3:34	P4 Int	Well the, the fancy Constantia people they put up signs. Big signs. Organic. I don't know if it really is organic with their little crate. They write it and then, no the other, Woodstock was just a community garden and like the Stark Eyers. They don't say organic at all. They just said it was a, a, a project to help local like community farmers to make more money from their crops which I also don't understand because 99 persent of the time those communities grow the gardens to feed the community like but now you go in there and are you marketizing the like does their crop yield enough food to feed the people that are living around that space and to be selling it to make an income. Yeah it's like a, it's like a catch 22 for me. So a community garden is supposed to feed the community but if you start making money out of a community garden then just to buy food somewhere else I don't understand like	3 Local community gardens
4:27	P5 Int	Yes of course. Absolutely. I'm embarrassed to say that I haven't been to the one in Somerset West for a little while. But a lot hasn't happened during Covid, you know. But absolutely. I. If, if that was something that was on my doorstep and I had an element of, of, of choice. Absolutely. I'm also one of those people who is very, very comfortable with paying a premium for this type of product. Maybe I'm just. I'm fortunate because I can. But, but it's important because it's so much bigger than just what you are. So, yes. I would. I would support it and I would share it and I'd verbalize it and I would tell people about it. Because this stuff's important.	1b- Consumers understanding of community gardens3 Local community gardens
4:29	P5 Int	And also remember it's about convenience. So, you know big, big supermarkets. I mean Fruit and Veg City make me sick. You know. They just, they just capitalize on these massive, massive, you know, crates of vegetables that sometimes are very poor quality. You know they've got these stores that just stock everything. So, people go in there and they stop. You know. It's a one-stop shop for them. It's like going to a supermarket.	3 Local community gardens 4-1 Marketing of community gardens
4:30	P5 Int	Now, if we could do that with a product or a range of products, where people felt like it was accessible for them to do their fruit and. I mean that's part of what the attraction for Oranjezicht is for me. I can go to Oranjezicht on a Saturday morning, to the market at Granger Bay. Not. And I can get all my fruit and vegetables that I need for that week.	3 Local community gardens 4-1 Marketing of community gardens

4:31	P5 Int	You know. I can do it all there. Everything. Herbs. You know. The whatever seasonal. The whole lot. Even if I ignore everything else that happens at the Granger Bay Market, there's a lot of suppliers who all provide and that's what it's about. So, it's accessibility. I used to have a box concept in Somerset West, from Terra Madre, that they used to up in Elgin. They used to have vegetable boxes delivered to one of the health shops in Somerset West, but this is a good four or five years ago. I used to love that because I was getting. I, I, I love to cook. So, that's what my life's about. I didn't care if they gave me strange things, I didn't know what to do with. I'd find a way to cook with them. But I really liked the convenience of paying online and then all I had to do was fetch my box	3 Local community gardens 4-1 Marketing of community gardens
4:148	P5 Int	No. I don't.	3 Local community gardens
5:29	P6 Int	In our communities, like what I was saying what I heard from that guy I was saying was on radio. He was actually talking about the young man men in the Cape Flats now employed, making their own money because they're trying to grow foods that they can sell. Of course without, they have the premiums that are commercial shops	3 Local community gardens
5:82	P6 Int	Yeah, yes they like that one here, because I, I live just about five, ten minutes away	3 Local community gardens
6:25	P7 Int	In my area yes, but they only do green leaves from what I've known	3 Local community gardens
6:26	P7 Int	And that is at Beyers kloof	3 Local community gardens
6:27	P7 Int	Klein Joostenberg. They also have a produce garden	3 Local community gardens
6:32	P7 Int	In this current stage, yes I think it's much easier to support a company who needs it the most than supporting a big branch network or a key network link where more salaries are being bumped into their, where your more commercial farmers are sitting with stock and nobody's buying from them and it goes to waste	1b- Consumers understanding of community gardens3 Local community gardens
6:33	P7 Int	I must, say the community centered people, all the people that actually run those gardens, they're probably, the most friendliest people to actually have a conversation	3 Local community gardens
07:14	P8 Int	There are quite a few. I don't know if they're organic but like those markets like Route 44 market or the Oranjezicht market. They've got quite a few loosely displayed vegetables	3 Local community gardens
09:10	P9 Int	P9: Nee, no not at all. Are there	
09:04	P10 Int	P10: We've got this really cute little community next to us and they like grow their own things and then they sell like	3 Local community gardens
10:23	P11 Int	I don't know of any community gardens. I mean a lot of the wine, local little wine farms here have got their own gardens. Longridge. I've been there a few times and, and she actually offers courses and teaches you how to grow organically and Friedenhoff which is also down the road and we buy some of their food every week. They've, yeah	3 Local community gardens

11:21	P12 Int	100 percent I would definitely do that. I would definitely do that I don't know if anybody asked because that is actually one of the main things when I even go to like farmers markets or that I don't buy very many handmade things because I'm not really into that kind of stuff. I'd rather try to do it by myself but I always always managed to find bunches of spinach that look so delicious or fruit or something like that. So definitely definitely that's yeah I would definitely do that	3 Local community gardens
11:23	P12 Int	P12: Absolutely not one not one. Which is bad but anyway not on	3 Local community gardens
12:12	P13 Int	No	3 Local community gardens
13:14	P14 Int	I don't think so at all. I think you know if I think about my job with the social work going into the community and you see how many people are trying to make a living off these little gardens. There are churches that have gardens, there's schools that have got gardens, the old age homes with gardens but nobody knows they're trying to sell stuff there. So yeah I think if they were marketed differently. You know overseas if I think about the UK they have those markets where you can go and you can pick from so-and- so's farm. You know they've got all the different farmers selling their tomatoes next to one another	3 Local community gardens
15:16	P16 Int	Unfortunately not	3 Local community gardens
16:13	P17 Int	So the Pretoria yards they've converted old warehouses and into an area where people can. There are like offices and stuff there but also there's a community clinic and all of the spare land they've planted with edible like fruits and vegetables and herbs and things. And that food goes to the community to the clinic and also they sell veggie boxes and and they've planted outside on the road and it's like an industrial area and not a wealthy area. They've planted boxes of spinach and mealies and that sort of thing and it's available for for people to take. So it's like take what you need and what's really interesting is people have done that in Newtown as well and I take what you need boxes all the way down a street and you might think that because there's only desperate people that it's just all be taken in one go but it's not. Like people are really good at taking what they need and leaving and sharing. So I think that's a really cool thing	3 Local community gardens
16:14	P17 Int	No no I think I just assumed because they were like a small scale urban farms that they would be but I guess that's not necessarily true	3 Local community gardens
18:16	P19 Int	No	3 Local community gardens
19:29	P20 Int	Umm, no, not even a single one	3 Local community gardens
19:30	P20 Int	Yes, definitely. I know back when I was living in Pretoria, still they used to be a couple of guys that owned a farm and they would style meat from their farm and I religiously bought meat from them and they used to be this other girl that used to grow her fruits and vegetables and sell them. I bought religiously from them. So I'm definitely one to PAnd to to to buy from these local and law. Yeah, local businessmen and women PUmm, but then again, another problem with such comes in at when they don't keep the consistency, then you are forced to now go to, you know to to the mall and just buy food from the.	3 Local community gardens

TABLE 9

What do you think these community gardens and the media can do better in order to persuade their community to rather buy from them.

In your opinion, what would the best way be to make you aware/advertise these community gardens?

ID	Document	Quotation Content	Codes
3:29	P4 Int	Word of mouth, yeah 100 persent. I mean that is exactly it	4-1 Marketing of community
			gardens
3:40	P4 Int	So, but what has become normal is the genetically	4-1 Marketing of community
		modified because that is the, what is an abundance and	gardens
		which is affordable to people because money is an issue.	
		So I think making research and making knowledge more	
		accessible to what those. I mean I think if people find out	
		that a lot of the vegetables don't even grow in the ground	
		and they grow them in the air and people don't know this	
1.28	D5 Int	So this is where my marketing hat comes on because one	1-1 Marketing of community
4.20	FJIIL	of the things we in South Africa do so badly is we make	aardens
		these types of things the best kent secret ever. So, you	gardens
		have your doers. You have your experts. You have the	
		people who, who work the soil and work the land and do all	
		the work and then you tell nobody about it and then you	
		wonder why everybody goes, really. I don't know about	
		that. So, that's the one thing, is you need to have a person	
		who will give of their time or people who will give off their	
		time to create, like we do in any business, a brand. And	
		people do this on a donation basis. It doesn't have to be	
		something that can cost money. Create a brand. Create a,	
		you know, a Facebook page or an Instagram page or a	
		something, and then you make it attractive. So, you not	
		only, are educating, but you're selling. Because it needs to	
		be desirable so, people would much rather, you know, be	
		eating a fruit of a vegetable of something like that, that is	
		types of environments are non existent. I mean that's why	
		spend so much time trolling all these different sites and	
		stuff is to try and you know to try and find people who've	
		nosted something here or posted something there or said	
		something It's all about communication and and then I	
		think you know. Yes, it is expensive but you just need to	
		get to the market that, that can pay for it and understand	
		the value.	
4:29	P5 Int	And also remember it's about convenience. So, you know	3 Local community gardens
		big, big supermarkets. I mean Fruit and Veg City make me	4-1 Marketing of community
		sick. You know. They just, they just capitalize on these	gardens
		massive, massive, you know, crates of vegetables that	
		sometimes are very poor quality. You know they've got	
		these stores that just stock everything. So, people go in	
		there and they stop. You know. It's a one-stop shop for	
4.00	D5 lat	them. It's like going to a supermarket.	
4:32	P5 Int	Of vegetables and fruit for that week. It's that. It's	3 Local community gardens
		conveniences in this day and age and, and that's what	4-1 Warketing of community
1	1		yaruens

4:35	P5 Int	we have to start teaching our children to eat properly.	4-1 Marketing of community gardens
4:36	P5 Int	But I do think communication and marketing is a massive factor when you set up the sort of environment with these community gardens.Yeah. Yeah. It's also an interesting thing, because I mean, I teach this all. I teach organic. I teach GMO's. I teach all these things in. But then you get. So, this generation actually needs to take it forward because even though their parents are still packing their lunches. So, they are sort of and I said to them the other day you are the generation that needs to make a stand and make these changes.	4-1 Marketing of community gardens
5:23	P6 Int	They're on the WhatsApp group so they'll say, okay on Thursday we have this and this and this and then the they have but then you have to be able to go there to the market	4-1 Marketing of community gardens
5:27	P6 Int	Just at word of mouth as well	4-1 Marketing of community gardens
5:28	P6 Int	I think yeah, word of mouth, WhatsApp. Actually funny enough I heard someone else advertising on radio when they were talking about how they, yeah. So just putting it out there, right your local radio in that Bolanders as well	4-1 Marketing of community gardens
6:29	P7 Int	I mean it's all basically, all about the marketing of	4-1 Marketing of community gardens
6:37	P7 Int	I think that obviously would have to start on a social platform of word of mouth, get a big group, I mean on Facebook we have the services of having these community groups. An icon where you can actually just start a page and say. These are local community service gardens. Come and support within your area. Send out locations for them to be at. So the good use of social media platforms. having somebody's number one speed dial just in case somebody needs something and that would be a good start and then making use of our local newspapers as well	4-1 Marketing of community gardens
7:18	P8 Int	I think if, if you know these big commercial grocery stores that they can you know help initiate that and maybe saying like getting some of their products in or even advertising their stuff. I think that would be quite beneficial	4-1 Marketing of community gardens
9:6	P10 Int	The reputation I guess of a farmer's market is to be organic and it's the vendor's responsibility to be authentic	4-1 Marketing of community gardens
9:12	P10 Int	Yes definitely because lots of people want to support like them on social media because it's also kind of an ego boost to some people but like posting on their stories, like go in this baby garden. They'll go to this community and buy their fruits and stuff like that	4-1 Marketing of community gardens
10:10	P11 Int	Yeah no absolutely. No we have to support and as a community and I, I think what you're doing is awesome. This is definitely the way forward. Like you look at people's gardens. We've got too many lawns you know. Look at the streets. Why don't we just plant some veggie, like some fruit trees along. You know people when, when we were in Europe it was just incredible. There's naartjie trees. I would go outside and just on the streets pick my rosemary like you know and there's enough to go around. Yeah it seems so simple to me and you and	4-1 Marketing of community gardens

10:25	P11 Int	Word of mouth yeah, I'd say word of mouth. Yeah when I. Hold on. Climb over me. When I worked there just for the day. Climb over. I didn't see any of the processes you know, I didn't see how what they were up to with regards to putting anything into the soil anything. It was only one day. We were just picking to sell to the community but obviously you know you look for, for food that isn't, not perfect, you know because then it feels more organic. So like you pointed out. The colors are different. It's not like the Woolworths perfect carrots. They kind of all look really authentic and nutritious. So yeah. Just a feeling that you get when you, when you buy something	4-1 Marketing of community gardens
10:26	P11 Int	I think through so, well social media is a good platform. I always. The way that I've managed to get people to know about these places is you know we'll post a photo of me shopping there and or preparing a meal and then I, I tag the community garden page. That kind of thing and share	4-1 Marketing of community gardens
11:20	P12 Int	I think that would be an amazing idea and I think I think it really would work. I think it's a kind of thing that you could do at schools. So schools could actually increase their funds that way could teach something at home. Especially even in urban schools not just in rural schools just in urban schools around our area there's so many children that go there that don't eat or don't have really enough to take home. So maybe something is that if they work a patch of an of their little community garden they can take stuff home or share with their friends. I think also help families not only	4-1 Marketing of community gardens
		just with income but it would really make it sustainable as in like a food source you know it's amazing how much one little plants of potatoes can actually produce	
11:22	P12 Int	That's quite a difficult thing. I do think that maybe a I think through schools they could like we could announce it weekly this week we've not the same way as we announced the sports the cultural and stuff like that I think it would be really really nice to announce that. Another nice thing would be actually also to announce is like on newsletters at the schools to send it up this week our special is on carrots and this and this and that and it can be picked up on Friday afternoon at reception and we used to have Toscana Farms that used to do that. They used to run but since the children had left that school have never come back. Another nice way maybe would be is that they set up stalls outside churches. Churches are always looking for people to do something and there are so every denomination doesn't matter what you are is always trying to help the community. So that's actually a really nice place even to put it in their newsletters and I don't I don't know if shopping centers would allow people to put up like a little store because they always have to pay but schools and churches are very easy places to advertise and if you think about it that's where the whole population is. People either drop their children off at school and if you don't have children you're old and you're going to church because you're counting your last days. So it is quite a good way to actually advertise. I don't know any other way I don't think pamphlets and standing at street corners works but I do think newsletters does work	4-1 Marketing of community gardens

12:16	P13 Int	I think the easiest way for them might be to get onto the area WhatsApp Pages or Facebook pages to say because you know in our area quite a few people who are cooking from home. They're making little pies or they're making this technique get onto the Facebook page of the area and say we are doing this and this is where we are and I've supported quite a few of them you know for for you know homemade pies and that sort of thing	4-1 Marketing of community gardens
14:19	P15 Int	Yeah look I think marketing is a huge thing so I think like making sure that you're part of the correct you know we say Facebook groups and things like that but you know I I mean if there was a really good I mean you get the Bryanston organic markets and stuff like that I mean I've been there once or twice but I I don't I don't frequent it but I mean if you're on the four-ways Facebook group and somebody's saying that they get their veg from a really good market and they do a central point every certain you know I mean I don't drive all the way to Carreras but I do most certainly have gone to Food Lovers and I have gone to the the Chinese markets and that. So I think again it would be marketing that's what I would I would imagine you know in strong word of mouth and perhaps some sort of. I think it needs to be a little bit in-house but you know what I mean that it's like if if we at Bressah knew of a place and we could then get it for certain amounts and they came here and we could choose our stuff I think that that would be great because I think that that's the way you can look at quality control and and establishing a community and then you know if I'm buying a box and I know my mom needs a box although my parents don't live in Joburg but the reality would be that I would then buy my parents a box as well you know that sort of thing. So yeah I think that that's often the idea. So perhaps marketing perhaps word of mouth maybe it's something like that	4-1 Marketing of community gardens
15:17	P16 Int	You know it's difficult because I know that social media is not necessarily the the bee end of everything but most of us are somehow either have the availability to social media. Whether it is a radio station whether it's a TV ad whether it is Facebook whether it's I don't know WhatsApp group whatever. You know a lot of a lot of the the sort of this neighborhoods have a neighborhood group and so on and maybe they should all just if they're part of a neighborhood group advertise on there you know. Like for example have the sunflower neighborhood watch group and on their advertise that they have a a community got a garden that's starting up or a market or whatever because I think that they would really benefit from actually doing it. But like I said not everybody necessarily has got a social media but most people have cell phones and because of that it would be a very good thing to use that as a platform to start on. I suppose you could say advertise it at your local shopping center but I'm not so sure that people will be very happy with that but also the the local newspapers. you know Sandton Chronicles, Roodepoort Rekord. Whatever advertising there because those are the communities and newspapers and you know sometimes you can find people who will sponsor to actually do the ad for them and get it out that way. So that it's like what the	4-1 Marketing of community gardens

		old flea market used to be advertised like a flea market thing and get people to come to them	
15:18	P16 Int	Absolutely I also know that for example Paul here at school he loves to shop. So what he used to also do is he used to do shopping for everybody. He used to go to the marketplace wherever their big marketplace was and he would go and buy x amount of vegetables whatever and then five families would divide it amongst them. So and that is also a plan for like these little markets it. Gets somebody to say okay well I'll go do all the shopping for you everybody you give me 250 rand and I'll soft	4-1 Marketing of community gardens
15:19	P16 Int	Yeah I'll shop for everybody and every Friday you get your box with whatever is available at at that market. So it is like come what what comes is what's there at the market	4-1 Marketing of community gardens
16:16	P17 Int	The question I think look social media is obviously a way to do like very widespread advertising that can hit many markets but I do also think something you were just talking about really struck me. Like using already existing community kind of centers and that sort of thing might be very helpful if you're trying to expand the people who would be using these products because I don't know when I did like legal activism we would use churches because they're already super organized. They've already got like a community they've already got a network. The ladies are organizing churches organized really well and so it was a really good way to do even like a like a secular thing it was a really good way to get into those communities and to spread the word about stuff. So so a really existing networks might be very helpful so yeah using churches using community centers even using schools. Targeting kids as always quite effective	4-1 Marketing of community gardens
17:25	P18 Int	for example I know these people have tried some of these stories they're still down the road Joe Jackson's Jackson's and they very much, all this stuff is organic and they really source perfectly and whatever and then through them you can do boxes and they'll deliver. So there are I think places to try to bring it to your, you know closer more convenient but it's definitely we are far from	4-1 Marketing of community gardens

17:27	P18 Int	So if we would bring farmers do a parking lot or to a church or to somewhere where you can go on a weekly	4-1 Marketing of community gardens
17:28	P18 Int	It has to be easy accessible. It can't be like a random place which is hard and then you have to park and then you know I mean like it's got to be really easy accessible and then it almost has to stay just with fruit and veggies. There don't mean like it can't then become all other gedoente market and they need next thing the jams and breadstick. I don't read like that but then you you know that you know those farms and you get to know the farmers also that comes like I know in Germany my market I used to know the farmer who did like you know him he can tell you already this is and then once it's out of season it's out of season it's just not available anymore then I bring my next crop	4-1 Marketing of community gardens
17:30	P18 Int	The thing is you probably only start within a community in a community right and I think word of mouth.	4-1 Marketing of community gardens
17:31	P18 Int	I think if you can establish something like that well in like say for example a Lonehill community or something you know where people are a pro for you know prone to support something like that because the the problem is is whether is it going to be more expensive or less expensive. So will it also attract the person who's walking on their way home from after work to the taxi. Would they be shopping there or would it be too expensive for them but it would be focusing on the people live in the area say for example but I think like if you can grow something like that and it's successful in one area. By word of mouth I think you know social media campaigns obviously work well and yeah you know you get a few instagramers involved you know I mean like those type of things really is by word of mouth. I think you know then you get some radio station on it you know what I mean like where they dropping because I think you know three decisions like 702 or whatever it really is community focus and you know a lot of us hear about it and want to support and yeah that's it I would imagine	4-1 Marketing of community gardens
17:32	P18 Int	Yeah I do think that education at the point of purchase is cool. You know where you say like we do not use XYZ on our farm. Like this is what we do this is our ethos this is our	4-1 Marketing of community gardens
18:17	P19 Int	So I think in terms of like markets and things I know that there are a few consumers that do. I mean a few of the sort of farmers who come to the local markets that are around here but generally I think people go to markets for more of like buying food and like having a good time rather than looking for a food sort of store to get their fresh fruits and and vegetables but I think if they were to. I don't know maybe get sections in the morning at Woollies or something like that or even just go when they are at the market say like we have this and this and this available on these days please come to us because I've never actually had anyone come up to me or even if I've walked past their store be like we are an organic farm or we have a local garden it's just more like do you want this no okay yes and then	4-1 Marketing of community gardens
19:26	P20 Int	is word of mouth.	4-1 Marketing of community gardens
19:27	P20 Int	And I think what I also hear what you're saying is education is sort of key because the these people come to	4-1 Marketing of community gardens

		the garden and they go out and they go tell other people again.	
19:28	P20 Int	Yeah, but what I'm saying is I think you also talk a lot about education that we need to educate people in. This is a more natural and authentic way. Like you were saying to do stuff.	4-1 Marketing of community gardens
19:33	P20 Int	Umm, the one thing, obviously it's accessibility. If we aren't able to reach out to them and then obviously we won't know about them. So the best way is to use what we have. We have a lot of social media right now and they aren't any advertising costs on certain platforms. So advertising through those platforms, making sure that schools, churches, community halls.Such places know about them, and also I know that there are some stores or some shopping centers that are allow for stalls to be put up to sell whatever it is that you selling and then pay smaller rent as compared to the actual stores. So using all those things that are available to kind of advertise and then growing like a fan base of sorts, once you've grown a fan base and people know about you.Then it makes it easier for people to access you.	4-1 Marketing of community gardens

TABLE 9

Objective 2 - To explore the cultivator's perspective on organic community

gardens

ID	Document	Quotation Content	Codes
1:1	Cul 1	P1: Yeah. So, I mean many years ago, I listened to a, I got a, a documentary to watch. A BBC documentary about how Cuba managed to survive the sanctions that America had against them.	Background
1:2	Cul 1	P1: And they basically weren't able to get any fresh fruit and vegetables and so, they started growing vegetables on every open piece of land that, that was possible you know. Anything.	Background Knowledge and perceptions
1:3	Cul 1	P1: And one of the programs was, where the homeless people were to grew vegetables and then on Friday they would sell their vegetables, to actually make some money and then Jenny and I were in the neighbourhood watch together or we still, I'm still in the neighbourhood watch and we.	Background
1:4	Cul 1	P1: And we, we used to drive past this this piece of land which was absolutely dreadful. You know the, the homeless people would be sleeping here, defecating, making a complete mess and, and, and then we decided to start a vegetable garden and Jen approached Stuart Pringle and he pointed us in the direction of, of Mr. John Jarvis who was the head of the of parks and gardens at the time. And they then gave us permission to start a vegetable garden. We went out to, to Oranjezight City Farm, where they have, you know where that is.	Background

1:5	Cul 1	P1: That's where they've also started a vegetable garden on, on municipal land and then, and then they gave us the blueprint as to how they approached the municipality or the City of Cape Town to use that land. So, then we went into, we signed a Memorandum of Agreement with the City of Cape Town.	Background
1:6	Cul 1	P1: And they said yes that's absolutely fine but we said we wanted the, the land for free and the water for free, because we didn't have any money. And then the first thing was to start an NGO. Before we could get any funding from anywhere, we had to start an NGO and that was quite an operation.	Background
1:7	Cul 1	P1: But we managed to get it up and going and then we got some funding. I think Jen from, from, we got from a Social Development.	Background
1:8	Cul 1	P1: We got some sort of seeds and, and material so, I think wheelbarrow and some spades and some forks and we then approached the Department of Agriculture and to ask them for some funding and fortunately ECHO from Erinvale, at the time, they're no longer around, but they paid for these fencing of this property which was wonderful. You know without the fencing; I think we wouldn't have been able to start. We then got put in touch with Andy Lauten from, he was then Helderberg Street People Centre and we had a chat to him and I'd always heard that you can actually do a bartering system with the, with the street people. I think there, at the time, there was a, there was a, there was something running in Curitiba in Brazil, where street people could, could pick up rubbish and for every bag of rubbish they could then get a bag of, of groceries. And we chatted to Andy and he said: "You know actually I'm on exactly the same page as you guys "	Background
1:9	Cul 1	P1: It's got all the nutrients that used to be in vegetables.	Knowledge and perceptions
1:10	Cul 1	P1: I mean, these days, I think people take a lot of vitamins and supplements, because of the fruits and vegetables, have no longer got, got the nutritional things in, what they used to have.	Knowledge and perceptions
1:11	Cul 1	P1: So, so I think that, that you know carrot here, tastes like a carrot. If you have to buy carrot from Fruit and Veg it tastes like water.	Knowledge and perceptions
1:12	Cul 1	P2: But it won't look like Pick and Pay's carrot, I promise you. P1: Yes, and that's the other thing and there is a movement called the ugly, the ugly food movement.	Knowledge and perceptions
1:13	Cul 1	P1: So, that's the other thing. Things that are being thrown away or callots, carrots that are ugly or whatever. They're all being used. They should all be used	Knowledge and perceptions
1:14	Cul 1	P1: To feed. So, or you know, it doesn't matter if the carrots got to, or have split or something.	Knowledge and perceptions
1:15	Cul 1	Actually, realize that if a tomato is just skew or not the right rate, it gets thrown away.	Knowledge and perceptions

1:16	Cul 1	P1: So, we use all of that. But the thing with organic garden and the perception is that the productivity isn't as high as something that is not organic.	Knowledge and perceptions
1:17	Cul 1	P1: The yield as you would but, but you know that might be with the first couple of years but as your plants and your soil is, is, is improved.	Knowledge and perceptions
1:18	Cul 1	P1: And changed, the plants become very much more. They become stronger. More resistant to, to diseases and, and the production is still good. Yeah	Knowledge and perceptions
1:19	Cul 1	P1: Well, it's all natural. You don't use any pesticides. No pesticides. No, no fertilizers that have been manufactured. Synthetic fertilizers, like you know but we do use things like chicken manure, iguana, horse manure, cow manure and.	Knowledge and perceptions
1:20	Cul 1	P1: Well, it's a it creates a greener space where you might have a block of flats or concrete. It really helps with the water getting back into the, you know, into the under, the underground water replenishes. Because it's an open area. We've got lots of spekboom trees. which give the, get rid of the carbon dioxide and it just creates a green space. And I think green spaces, we have to try and fight for and hang on to in our in our concrete jungles. Because people need to see green. They find green, green is very therapeutic. If you just look out onto green and, or go for a walk in the mountain or what, it's so therapeutic and you can't have con, a concrete jungle so.	Knowledge and perceptions
1:21	Cul 1	P1: Yeah. That's another factor and, and I think that, I think that if we can get people to grow their own fruit and vegetables in their own garden, there's more of a chance of people using organic than getting the greater community. I mean the great, the farming community. I know where we get some of our stuff from, in Elgin. They, they are rolling out all things like, what do they call it. It's bio, bio, bio P2: Bio sprays. P1: Bio sprays and things so, so it's organisms and insects.	Knowledge and perceptions
1:22	Cul 1	P1: Certified, but it's not been certified organically. We are organic.	Barriers
1:23	Cul 1	P1: Well, I think if you've got a, if you want to sell organic in say Pick and Pay, Woolies, in those places you, you've got to be certified organic and so they have to come and check your garden. But now to get an organic certification is a hundred thousand rand or something, which is just for us it's not viable.	Barriers
1:24	Cul 1	P1: Yeah. So, to have certified organic you have to get your, you've got to get your certification. But I mean we, we're not going to go that. We just know that our vegetables that we grow here, are organic and they're a lot more tasty.	Barriers
1:25	Cul 1	P1: And the other thing I think is, that they have a big problem with theft, so if they're growing a vegetable garden people will come and steal their stuff	Barriers

1:26	Cul 1	P2: That's the other thing. They are setting up chicken coops for all the people. It teaches you how to P1: Well, well maybe here, they might steal the chickens to eat.	Barriers
1:27	Cul 1	P1: Yeah, but the system I think was quite a, a complicated system. But you know people would start doing it and then the next thing they'd wake up the next morning, the whole thing would be stolen. So, so I think there's a huge problem with theft in, in, in, in these communities.	Barriers
1:28	Cul 1	P1: Well, I think it is more expensive for a farmer if he goes on a broad scale, because I've got a brother-in-law who's a apple farmer and he says: "Look, we don't use bad pesticides. We don't use bad things." But he said: "For us to go organic, we don't get the size. We don't get this. We don't get that and we are, we can't go organic. We won't get, you know."	Barriers
1:29	Cul 1	P1: Yeah. That's another factor and, and I think that, I think that if we can get people to grow their own fruit and vegetables in their own garden, there's more of a chance of people using organic than getting the greater community. I mean the great, the farming community.	Barriers
1:30	Cul 1	P1: Look at the district mail this week. Last week's district mail. They are starting to roll out and then there's funding available to do that because they believe that, and we also believe that, if you can create food gardens throughout the communities then there will never be hunger. So, if everybody can grow some vegetables in their backyard or if they can have something similar to this.	Background Community food garden
1:31	Cul 1	Because, because I do not agree with the street people just being handed out food. They then don't learn to, to, to get to the next step and the next level. It's much better for them to do work and to see that they're doing something and then that will help with their healing process." And so, we partnered with the Helderberg Street People Centre which is now Thomas House of Hope and that's how we managed to get the street people to come and work here and, so they earn a token for every hour that they work	Community food garden
1:32	Cul 1	P1: Well, the one benefit is obviously for the homeless people. The other benefit is that it is very central and there are quite a few old people that live around here so, they often they come here on a Tuesday to meet other people. To get maybe only smaller amounts of things.	Community food garden
1:33	Cul 1	P1: We also do run a harvest day which is on a Tuesday. Every Tuesday and we sell vegetables, but we need to do that to be able to, to continue and you know we do give the guys groceries on a Friday. They can buy groceries at Thomas House of Hope, with they're tokens and then we actually pay for that.	Local organic markets

1:34	Cul 1	P1: And then they can exchange that token for a hot plate of food, a shower. They can save between ten tokens for a new ID, because most of them have actually lost their IDs on the streets and without an ID they can't get a new, a new, a new job so.	Community food garden
1:35	Cul 1	P1: Yeah, so, really that that is how we started and, and, and we always said that within three years we want to be sustainable. We want to be self-sufficient. We want to be able to not have to buy compost and so we've created a little sustainable urban garden here, where we have our own water. We've got a borehole. We've got solar power that, that powers that borehole because there's no electricity here and everything that comes out of the garden goes into our compost. We've also started a Bokashi Program here which is run by Natasha De Wet and people can come and buy a Bokashi Bin and then they can put the kitchen waste in that and then it goes into our compost eventually.	Background
1:36	Cul 1	P1: I think to start off with was to get the street people onto the same page hey, because we only had one or two, Jen.	Community food garden
1:37	Cul 1	P1: Grants from them. We got Echo from Erinvale. Fantastic. So, you've got to put it out there and there are, there are people that, or organizations that will fund things like that. Woolworths, Checkers.	Background
1:38	Cul 1	P1: But the other thing is to get somebody to run that garden. You have to have a champion to run it. P2: You have to have somebody with a vision. P1: But, but the thing is, people are all very, you know we've seen it at Christmas and Park, where they started a vegetable garden and they were also funded by ECHO from Erinvale and they were all very keen but, but then within the community they started just, what are we getting for this. Why aren't we getting paid. You know.	Community food garden
1:39	Cul 1	P1: So, one of our things is. So, what our biggest thing is, to start this, to uplift the people that are living on the streets. To give them a hand up, not a hand out. To be able to then provide the other NGO's that are feeding people living on the streets with fresh fruit vegetables.	Community food garden
1:40	Cul 1	P1: Yes, but I think within three years we will be, we were able to become economically a stand- alone.	Knowledge and perceptions
1:41	Cul 1	P1: So, so that's the other thing is that it is a community. It's creating a community within, within the area.	Community food garden
1:42	Cul 1	P1: Yes, and people specifically shop here for organic, but you would find probably that those are people that are vegans.	Knowledge and perceptions
1:43	Cul 1	P1: That are very, you know they, they're into another way of life. We do get quite a lot of Zimbabwean shopping here because we, we grow kale and they love kale, but the general public, like the people who are living on the breadline, they couldn't care.	Knowledge and perceptions

1:44	Cul 1	P1: That will attack other insects to actually help but that's all very expensive. So, they're trying to roll it out in in the apple farms in the, at the moment and.	Knowledge and perceptions
1:45	Cul 1	P2: If the tomato looks like that, it'll taste better than the other one let me tell you.	Knowledge and perceptions
2:1	Cul 2	P1: So basically I'm from the UK and I studied horticulture in the UK and I came out to South Africa in 1991 and I had a sitting guilds in, in horticulture so I thought it's going to be easy to get a job in South Africa but obviously it wasn't. Nelson Mandela just been released and obviously very different. So I didn't go into it entirely immediately which was quite interesting for me and I ended up in the dental industry which was bizarre as it was but and it was what it what it what is what it is and so I sort of worked my way up through that and then many, many years ago two tried about 2000 just before 2000 actually. I started getting sick and I ended up as a training as a sangoma. I ended up doing that path and of course it led me back into the cycle of nature and I lived in the Transkei with the people working with the food and stuff and so I ended up here in Oude Molen. So I came back into Oude Molen in 1994 after I just graduated as sangoma and there was a there was an food garden here. So I thought you know I'm going to join the food garden and so I approached this man called Jono Kennedy. He was he just started the project then and I said you know can I kind of help and can I rent a plot and he said yes you can rent a plot I said well I've got you know experience blah blah blah and so that's how I got involved in the food garden in the village. So basically I worked with him. First of all with the kids we used to run a garden program on, on a Wednesday. I still run it actually with kids from local neighborhoods from Maitland garden village and Athlone Kensington. Kids come from there and so yeah I started working with. First of all with the teenagers and then eventually moving on to the little kids. So that was my sort of entrance into the food garden with Jono and you know I really respected him and we, we worked nicely together even though you know I still just, I still work in the morning in the dental industry which is quite interesting	Background
2:2	Cul 2	P1: Well it looks bigger and it tastes a thousand percent better. Like if you eat growing lettuce in	Knowledge and perceptions
		your garden and you buy a lettuce from Spar. I don't care how they package it. There is a huge difference. You can taste the difference. It's like you can taste the energy of the homegrown your in, in, in your garden versus something that's come from, from a supermarket and the avocados they just they look healthy, everything looks better, it tastes better you know. It's they're vital, it's like the fruit is still got, is still vital	

2:3	Cul 2	P1: Yeah I think maybe I mean the thing is I think what puts people off organic food is the price	Barriers
2:4	Cul 2	P1: I mean it's just a price change really. If you made it the same price as your regular veg then maybe people would be more open to it. I think price point is a huge thing but obviously maybe markets. I mean marketing and gosh I don't know how you create more awareness	Barriers
2:5	Cul 2	P1: I think what I see a lot of especially during Covid, I saw a lot of the can. you know can, the community action network people coming together. It's really important you get everybody on the same page and from the beginning. Like if you want to start a community garden you've got to decide on what how you're going to do this and who's going to actually, who's gonna run it because at the end of the day you can all work in one space but you have to have sort of ground rules. Are you gonna use pesticides aren't you gonna use pesticides and for me it was like a no- brainer. No pesticides okay, no chemicals and that's how we've always kept it that way and I've continued that way you know	Knowledge and perceptions
2:6	Cul 2	P1: No GMOs with nothing like that, yeah	Knowledge and perceptions
2:7	Cul 2	P1: My thing is at least we're keeping the soil, we're looking after our soil	Knowledge and perceptions
2:8	Cul 2	P1: I'm hopeless on paperwork with the, with the, with a zoom and all that. I mean I'm not even. I mean yeah I'm not registered. No I wouldn't even know how to go about that	Barriers
2:9	Cul 2	P1: I said there's a challenge, it's theft. That's probably the biggest thing you know. People you know they click they see the food that's grown and then they, they jump over the fence and they steal it	Barriers
2:10	Cul 2	P1: Really it's for me that's, yeah but I was, you know and this food is taken for you know, for drugs or whatever, there's also stuff. So we have spates of theft in that garden. It's quite, quite the norm you know	Barriers
2:11	Cul 2	Any adults that come around I educate them and they're like completely shocked you know	Community food garden
2:12	Cul 2	P1: You teach the kids at school, they'll educate the parents. The parents will then get educated and buy the right things for the home and so I think it starts in your own home with your kids through education	Community food garden

2:13	Cul 2	P1: Yeah it's, it's very an interesting setup where I've got an allotment system where we have people who have an allotment within the got, within the garden and we all pay. I also pay as well even though I volunteer most of my time there and we all pay anything from 50 rand up to 150 rand per plot and you, you are, you maintain the plot yourself. Obviously and we you know there's conversations if you've got any, we never get really get pests or anything or any diseases. It's rare, rarely do we get that and then with the money that goes into the garden I then employ people from Falconburg hospital which is the local mental institution and so the money goes back into the occupational therapy for the patient. So it's a really nice it works so well yeah	Community food garden
2:14	Cul 2	P1: So I sort of look at my local community and for me we're in, we're in Pinelands and so I've got Maitland garden village which is a colored community right next door and those kids come to my garden. So I can have up to 30 kids on a Wednesday afternoon but from there what I did, I just use Instagram, Facebook and just word of mouth hey	Community food garden
2:15	Cul 2	P1: And I've got a board in the garden that says gardening classes from, gardening club from three till five every Wednesday, age six to sixteen free of charge. And people who come to see it and they bring their kids and you know it's grown and grown and grown	Community food garden
2:16	Cul 2	P1: Well you see the community garden that I'm part of I think we've only got one or two people from our actual village who are part of that garden and I have people from other communities that come and work in the garden. So people come from Fredehoek, from Observatory, Maitland garden village, Pinelands. So I've got a sort of it's quite an interesting setup. Have you been to our garden before	Community food garden
2:17	Cul 2	P1: Organic for me is no pesticides, no fake, I don't know what a word is it fake is that not the word. No added chemicals fertilizers. We're gonna do fertilizer keep it natural like we just use bird poop. We use horse manure, goat manure yeah and that's it we don't use any fertilizers. If we want to do a fertilizer we'll use comfrey. We'll make a comfrey tea and put that into the in the garden. So for me organic is no pesticides, nothing, no chemical	Knowledge and perceptions
2:18	Cul 2	P1: Keep it natural yeah	Knowledge and perceptions
2:19	Cul 2	P1: I expect that it's been grown naturally. There is no pesticides there's been, yeah that's what I would expect if it said organic. That it's been grown as natural as possible	Knowledge and perceptions

2:20	Cul 2	P1: Yeah I'm very passionate about that you see because for me I collect heirloom seeds. I've been collecting for years and years and years and. So we've started, not myself but we've got a food growers initiative and a seed bank in the Western Cape now. So we have these seed swaps which is great, great you know and they're all heirloom seeds. So I share my seed with another person who's maybe down maybe 30 or 40 k's away and so we're spreading the heirloom seed. We're trying to get back to that natural seed again you know get rid of the GMO	Knowledge and perceptions
2:21	Cul 2	P1: No it's not, it's about what seed are you using, what stuff. I mean this can be you can be growing it yourself but it's still got GMO. I mean it's still actually not the original seed and I must say everything in our garden from the time I've sort of I took the reigns of the gardener about four years ago on when Oupa Jono passed away eventually and so he always use that we've always used the same seed. Everything that's coming out we keep part of it. Look I, I don't even eat my food most of it because I collect the seed. I'm going to seem crazy you know	Knowledge and perceptions
2:22	Cul 2	P1: Well that's what, exactly I once found some guys actually in the garden one evening I went in and I saw these guys at the bottom of the garden. I thought hey who these guys here because we've got like a lock which has got a combination lock so our gardeners could come in and out whenever and they want to come and do and work on the garden. We've got sort of rules keep yourself locked in when you're in the garden and keep the don't tell the code to anybody and one day I found these guys that had a bag and I said to them. Hey guys what are you doing here no, no we're just speaking vegetables. I said well I can see that. This is, you're not gardeners here. They're like no. I said well you know what instead of stealing the vegetables, I said, because I know that's what you do and I said I'll give you a plot here. I'd like to give you a plot of land here and you, and I'll give you the seeds as well and I'll let you come and grow the, the vegetables yourself and then you'll see how it feels. I didn't hear from them again	Barriers
2:23	Cul 2	P1: I would think gosh come here see, like I, I think like looking at the permaculture principles you know how, how is everything looking as a whole, not just individual plants. Is everything working with each other what are they using as pest control. I'd be looking is there marigolds around, is there nasturtiums around	Knowledge and perceptions
2:24	Cul 2	P1: For me that's important you know. How are they treating the disease, as it is in shade. Are they yeah, soil what's going on yeah how are they planting you know. Companion planting is a big thing for me	Knowledge and perceptions

2:25	Cul 2	P1: So because we have an allotment system, people who grow their own product produce can take it home for themselves and then I've got about one two three, about six gardens which I grow to sell and then actually what we've got, we've got a, we've got a deli here in the village. You should actually get hold of Margot. Maybe she'll be open. She sells all organic produce. She sources organic meats, every type of and she buys from me. So she buys like my spinach from me, onions from me, chili's, whatever's in season she'll buy	Community food garden Local organic markets
2:26	Cul 2	P1: Like she bought a whole load of carrots last week or the week before, she bought carrots and so yeah so that's how it works but if somebody comes in and they'll say if. You know I run a market as well once a month. If somebody wants freshly picked spinach I say sure hold on a second and give them a big bunch and there we go you know.	Local organic markets
2:27	Cul 2	P1: Yeah definitely with the cycles. Definitely I mean I know how the garden works with the flowers. Like we go from the cosmos know into aloes, now it's poppies and the fruits the same you know. We we've must follow the seasons follow the natural rhythms of life	Knowledge and perceptions
2:28	Cul 2	P1: It starts with those kids at home. I think more schools. I think it should be part of the curriculum. I'm really like an advocate for that	Community food garden
2:29	Cul 2	P1: I became a teacher by default	Community food garden
2:30	Cul 2	P1: Absolutely I mean if you're talking about growing your own then definitely convenience. I mean not many people want to grow their own food it takes forever	Community food garden
2:31	Cul 2	P1: No then they'd respect it a little bit more	Community food garden
3:1	Cul 3	Dis 'n plesier om met jou te praat oor die plaas. Ek is Naomi Herbst. Ek is 'n boervrou van Stellenbosch en my boerdery het begin in 2019 het ek my geregistreer as 'n boervrou. Ek boer met coriander, met Italian parsley, met basil, wild rocket. Dan het ek sekere gewasse produkte soos green beans het ek wat nou in die somer geplant word en dan het ek winter het ek gehad nou selery en raap. Turnups is mos nou die engelse word	Background
3:2	Cul 3	En dan het ek leeks gehad. Dis 'n ui. En my boerdery was 'n baie suksesvolle boerdery wat ek het op die oomblik. Ek het op die plaas van ons is een en half hektaar grond wat ons het en dan het ons op die grond het ons 2 net huise en een klein tonnel wat ons ook die goedjies daaronder in plant	Background

3:3	Cul 3	En dan het ons ook 'n dam wat daar is wat ons besproeing doen uit die dam uit. Ons kry eintlik water uit die Berg uit en dit is water in die wat afkom van die werk af in 'n sloot dan gaan hy in die water in. Dit is besproeing wat ons doen en die boerdery het begin. Dat ek se dit was nie 'n maklike iets om te begin te nie maar ek het net gevoel as ek as vrou wil ek dit doen omdat ek lief is daarvoor. En dit het begin en ek is nou nog daar in en soos ek se boerdery is nie vir sussies nie. Dit is 'n groot risiko. As die oes nie die dag nie reg is nie dan is dit is heeltemal, heeltemal klaar vir die hele maand. So oes as jy iets in die grond in sit byvoorbeeld coriander dan is dit iets wat 3 maande moet jy wag voordat dit reg is om te oes. So ja om elke 3 maande te wag. Al my herbs is so. Jy moet elke 3 maande te wag om 'n oes te kry en dit is nie altyd maklik nie soos ek se en dan die weer speel ook 'n baie groot rol. Winter is die groei proses 'n bietjie vinniger as in somer is. Somer kry ons weer baie son. Dis hoekom ons die nethuise het om dit in die winter om in die winter daarin te plant want as ons dit buitekant plant en die son kry vir hom, kry hy outomaties geel. En dan is daar ook sekere insekte wat hom ook byt wat nou ook effek het op die, op die plante. So ja dis nou hoe my boerdery begint het en ek geniet dit en ek is lief daarvoor en ek sal nie ophou nie. Dis wat ek omdat ek my boerdery maar het.	Background
3:4	Cul 3	Is natuurlike plant wat jy in die grond moet sit. Dit bedoel as jy organies plant dan moet jy nie enigeiets op daardie plant gooi nie of 'n bespuitmiddel dit moet ook nie he nie. Jy moet organiese produkte gebruik om om om om die voeding van die plant te kan kry. Soos ons wat organies boer	Knowledge and perceptions
3:5	Cul 3	Gebruik veel as moontlik baie min produkte want baie mense is gesondheidsbewus deesdae en bulle wil gesonde kosse eet	Knowledge and perceptions
3:6	Cul 3	Ja ek dink daar is want ons lewe nou in kosse wat mense eet, enige iets op jou kosse gooi en jy kry dit in en jy weet nie meer wat jy eet nie, so organies is maar die beste opsie deesdae want almal die jong mense van vandag is baie bewus van hulle gesondheid. Baie gaan mos nou eet organies. Hulle soek eintlik waar hulle die beste kan kry. So ek dink organies is maar die beste in ons land vir ons gesondheid om langer te lewe soos ek altyd se. So dit is maar soos ek se gesondheid bewus is nou ons wereld maar dit is ook 'n baie duur proses om gesond te lewe. Dit is nie vir almal nie. So daar is eintlik goeie goeie dinge in die organies in wat ek nou kan se wat gesondheidsbedryf het	Knowledge and perceptions
5.7		ons meer gesond ook lewe en meer kla oor ons siektes wat ons het en die omgewing gaan ook meer skoner ook wees	

3:8	Cul 3	Gaan meer skoner ook wees want daar is so baie dinge in die lug in wat mens self nie van weet nie, maar soos ek se as almal dit kan doen dan sal ons lewe ver vorentoe gaan, maar ja dit is mos nou nie ons in ons hande nie	Knowledge and perceptions
3:9	Cul 3	Ja, die rede hoekom is, is ons het 'n sertifikaat - hulle noem dit global gap. Global gap is 'n sertifikaat wat internasionaal wat jy ook oor die water jou produkte kan groei omdat organies is. Ek moet elke jaar die global sertifikaat het vir my mark, die grootste mark is into foods. Into foods is 'n Woolworths mark en Woolworths vat nie enige produkte nie want dit moet organies wees en dis hoekom ek organies boer. My ander kliente is ook organies want hulle gee byvoorbeeld hospitale. Hulle gee dit miskien uit vir mense wat in die gym nie gym nie in wat noem mens nou die natuurlike produkte wat hulle nou maak vir die mense. So ja dit is baie belangrik dat ek daai global sertifikaat elke jaar moet het omdat dit organies is en as dit organies is dan moet ek nie hulle nie probleme kry met my produkte nie want my produkte is clean. Hy moet skoon wees want hulle toets hom as ek daar kom. Kyk vir enige slakke, kyk vir enige insekte op my plant. Kyk vir enige kleur van my plant. Dit moet groen, groen wees so dis 'n baie baie proses wat ek deurmaak met betaling wat vir my elke jaar R15000 kos en somtyds het ek nie daardie geld nie dan moet ek 'n ander plan maak dan moet ek dit weer uitstel tot volgende jaar en dan vat die mark nie die groot mark wat ek nou het vat nie as gevolg van. Ek moet daai global sertifikaat, want hulle voer mos uit hulle produkte ook verstaan Mariet. So dit is nou eintlik my main, my global sertifikaat wat ek elke jaar moet he	Barriers
3:10	Cul 3	Ja, my challenges ag hene. Ek wil graag nog	Barriers
		grond vir myself he. Die grond is 'n bietjie te min.	
		My challenge is om meer mense werk te skep. As	
		doen Mariet, want op die oomblik sit ek maar met	
		1,5 hektaar grond en dis maar nou die stukkie wat	
		ek hier het wat 'n bietjie min is maar ja ek het	
		alreeds aansoek gedoen vir grond, dit vat 'n lank	
		proses, maar my challenge is om meer grond het	
		om vir mense werk te skep	

3:11	Cul 3	Daar is, daar is maar ek weet net nie waar oral nie van die, die rede waar die NSF ek weet die company se naam is NSF. Hulle sit hier by Tegnopark. Hulle is die mense wat jou kom oudit vir jou global sertifikaat. So ek kontak net vir hulle en hulle kom uit na my toe en hulle vra vir my hoe ver is jy en het jy al iets gedoen al dan se ek nee ek is nog nie daar nie ek sal vir julle op hoogte hou met finansies gee my net tyd en ek het nou nou gister net gese vir my oudit. Hyt my gevra Naomi. Ek sien jou oudit verval in die 30ste Augustus. Toe se ek ja ek het gesien maar as gevolg van finansies kan ek dit nie nou doen nie. Ek sal volgende jaar vroeg by Maart moontlik sal ek dit kan doen so hy moet verstaan toe die probleempie toe. So dit moet ek doen want as ek nie dit gaan het nie gaan ek nie my mark kan hou nie	Barriers
3:12	Cul 3	Ja defnitief, defnitief, daar gaan baie boere wees want baie mense wil nie boer as gevolg van die goedere wat nou so baie duur geraak het nie. Soos ons wat nou ons produkte koop. Die goed het verskriklik op gegaan Mariet en ons kan dit nie meer bekostig nie. Dis hoekom ons bietjie down is now as gevolg van produkte wat te veel geld is en daar is niemand wat ons kan help nie op die oomblik nie so nou wag ons maar tot dinge maar nou weer in plek van as mense vir ons kan help en vir ons kan se ons kom na jou tuin toe. Ek sien waar jou behoefte is. Ek sien waar jou nood is dan dan I go for it	Barriers
3:13	Cul 3	Ja daar is eintlik ons het mense vir ons werk daar. So tussen 6 en 8 mense wat vir ons werk en baie mense in ons gemeenskap is ook by my en dant ek buite die gemeenskap ook n paar soos mos nou se swart maar dit is mos nou mense wat commiment is wat elke dag in hulle werk is.	Community food garden
3:14	Cul 3	Ja ek speel 'n baie groot rol in my community van darem bietjie werk geskep vir mense hierso	Community food garden
3:15	Cul 3	En in die community speel ek ook my rol as mense miskien met 'n sop kombuis het dan gee ek groente vir hulle of as mense nou miskien iets nodig het en daar bly left overs oor dan deel ek nou omtrent uit in my community so ek speel ook 'n baie groot rol in my community as gevolg van ons gee om vir mekaar in hierdie dorpie want dis 'n baie klein dorpie	Community food garden
3:16	Cul 3	Yes, defnitief en die wat die waardering is groot en ons het omstandighede ook in ons dorpie. Baie mense het nie en daar is baie wat ons kan vir hulle gee as ons ook het	Community food garden

3:17	Cul 3	Ja dit daar was 'n spesifieke rede. My man was in die boerdery in gewees en ek het 23 jaar gewerk in 'n wyn fabriek. Ou farmer's winery. Dit het oorgegaan na Distell toe en as gevolg van ek moet. My kinders was klein. Ek kon nie skofte gewerk het nie toe het ek bedank en toe kom ek huis toe en ek se vir my man. Ons moet nou iets uitwerk. Wat gaan ons nou doen en hy se al wat ek vir jou het is om die boerdery in te gaan. So daar het dit begin waar hy vir my self geleer het hoe om te werk met die goed en wat om te maak en. Hys eintlik my mentor. Hy het eintlik die wysheid vir my gegee van boerdery en hy het vir my geleer baie dinge en vir my gewys want hy het ook 'n werk gehad daai tyd. Hy was 'n trok driver gewees en hy het op die oomblik het hy ook sy werk verloor en dit het so gekom dat ons twee saam nou in die besigheid is. So hy is die mentor. Hy is die een wat die oes doen en ek is die een wat die deliverings doen en die admin doen. So daar het dit begin dat ek moet toe iets gedoen het om toe nie by die huis te kon sit nie om liewerster iets te doen het ek besluit ek wil 'n boervrou word	Background
3:18	Cul 3	Eers moet hulle jou vra. Is jou plant organies dan se ek ja want ek gebruik organiese produkte. Ek gebruik nie enige produk op my plant nie want want dan gaan dit nie deur na my mark toe nie, want my mark soek ook organies want dis wat hulle hier wil he want die mense moet gesond bly	Knowledge and perceptions
3:19	Cul 3	Man dis 'n baie goeie ding. Ek dink dis 'n baie goeid ding. Ek is nou al my 3de jaar wat ek nou hier deurgaan en die ding van die is dit is niks om dit deur te laat gaan nie maar as finans druk dit somtyds vir my dan kan ek dit nie bekostig nie en dit is my grootste probleem wat ek het op die oomblik so ek moet nou my global sertifikaat verval nou op 30 Augustus nou die maand en ek het nie finansies nie nou moet ek wag vir volgende jaar so veel as moontlik moet ek nou weer insit om iets te doen wat ek moet doen om geld bymekaar te kry om dit te betaal want dit is 'n jaar se se se se sertifkaat wat jy het. Jy moet elke jaar vervang en R15 000 is baie geld om net papier in die hande te kry maar dis nie net om papier in die hande te kry nie. Dit is jy moet jou water laat toets. Jy moet jou plante laat toets. Jy moet jou grond laat toets. Jy moet jou spuitman wat jou spuitmiddel doen laat toets. Jy moet sertifikaat het vir jou spuitman en jy moet die	Barriers
3:20	Cul 3	Om dit deur te laat gaan om vir jou om om om te survive. Om global sertifikaat te het Mariet	Barriers
3:21	Cul 3	Die is in die rondte, nie eintlik baie wat ek van weet nie maar as gevolg van die global sertifikaat wil mense nie eintlik dit doen nie want hulle se dis te veel geld	Barriers
3:22	Cul 3	En dit is nou eintlik die grootste probleem wat ons het maar daar kan baie ingaan in die organiese mark net as gevolg van 'n sertifikaat wat gaan vir hulle baie geld kos	Barriers

3:23	Cul 3	En soos ek se dit is nie maklik om ek het net daai een mark wat my druk op 'n global sertifikaat omdat dit hulle meer geld ook vir jou aanbied as gevolg van die organiese produkte wat nie probleme het nie wat als skoon is soos ek se en dit is eintlik dit wat ek nou kan se dit is hoe ons nou te werke gaan met ons sertifikaat mos nou	Barriers
3:24	Cul 3	Ja nee dit sal defnitief vir jou wys daar. Ek het al my goed op leer. Ek kan vir jou wys alles wat julle wil weet van organies. Ek het alles in my files. Ek file elke ding. Die dag wanneer dit gespuit word. Hoe was die weer gewees. Hoe laat het ek daai gespuit en al die goed gaan gepaard met organies want dit is wat die rekords mos aanwys as iemand inkom. Hoe weet ek jy is organies. Dan kan ek my files uithaal en vir hulle wys dit is wat ek op my produkte spuit. Dis die naam, dit is dit, dit is daai. So alles wys op die leers aan van mu organiese middels wat ek gee vir my plante	Barriers Community food garden Knowledge and perceptions
3:25	Cul 3	Ons het plastiek bottels. Die 2 liter plastiek bottels. Ons spuit hom geel, spray hom geel en dan smeer ons 'n bietjie vis olie aan en dan sit ons dit in die tuin in. Daar is omtrent meer as 18 20 30 bottels om net te keer vir die insekte en jy sal verbaas wees hoeveel insekte, hoeveel verskillende insekte sit op daai bottel en dan kom hy nie op die plant nie	Knowledge and perceptions
3:26	Cul 3	Janee ek het local markets. Ek het 'n local markets. Hulle is nou nie vol nonsens nie. So hulle verwag nie van my sertifikaat om te wys so nie want hulle se my produkte is reeds mooi. Hulle het nie probleme nie. Hulle verkoop dit in die winkel. Hulle doen verpakking daarvan, so hulle het geen probleem nie. Ek het nog nooit van gekry nie om te se Naomi maar dit is die probleem jou produk is nie mooi nie. Ek kry eerder 'n kompliment om te se jou produkte is wonderful. So ek kyk na my produkte en ek glo om kwaliteit vir elke mens te gee wat ek kan gee om weer terug na my toe te kom Mariet. Dis wat ek altyd se. Goeie kwaliteit vir jou customers	Local organic markets
3:27	Cul 3	Dis 'n swaar storie maar dit hang van die is 'n mens sal dink aan die persoon wat jy die middleman noem. So ek sal. Ek is die enigste een wat in die tuin is met my werkmense en dan het ek die middelman ek weet nie Mariet dit is swaar storie wat ek se dis nie vir enige een om nou so aan te dink aan daai middelman nie, maar as ek so kon en jy kom in my tuin in dan dan sal ek vir jou die bordjies sal daar alles wees. Jy kan lees wat daar staan. Jy kan vir my vrae vra. Jy, soos ek se jy kan enige iets vir my vra. Jy kan proe van my produkte. Jy kan in my leers gaan. Jy kan navorsing doen omtrent my so. Dis nou hoe ons ons goed moet agtermekaar het. As enige een vir ons vra is julle regtig organies om gesondheid van vir hulle	Local organic markets

3:28	Cul 3	Ja jy weet om vir mense bewus te maak van jou organiese produk is eerstens. Hulle wil, hulle kom na jou toe, wat produseer jy, wat doen jy. Nou se ek vir hulle wat ek doen. Vra hulle organies, ja dis organies. Kan ek dit proe. Ja ek sal dit vir jou laat proe. Jy kan dit geniet en dan sal hulle terugkom na my toe en vir my se wow dit is nou die goed wat ek hulle lankal soek en dit is wat hulle wil he van. Hulle, hulle wil eintlik miskien hulle eie markte ook opsit dan kan ek miskien vir hulle voorsien maar die feit is dat dit omdat die grond te klein is kan ek nie te veel markte op my het nie verstaan Mariet	Local organic markets
3:29	Cul 3	Ek het min markte. Ek het, ek het markte maar nie baie nie. As ek nog kan kry kry ek meer grond of ek het miskien meer ander idees, dan kan ek dit go. My 2de idee wat ek ook het. My beplanning, my plan B soos ons se is verpakking, maar ek het nie fasiliteite daarvoor nie. Ek het nie geld om gebou op te sit en die goed moet in 'n verpakking of in 'n koelkamer of iets kom nie	Local organic markets
4:1	Cul 4	I think it started when I was addressed Rustenburg Girls high school. That was the campus manager there for.	Background
4:2	Cul 4	Who was seven years and in my second year there I launched a sustainability initiative, got the school onto an environmentally sustainable program.	Background
4:3	Cul 4	Where where we looked at 5 focus areas.	Background
4:4	Cul 4	Procurement and the environment and and we and we set-up a programs for holes getting water from the ground pasilla boulder solar panels for energy and then we introduced in our in our waste focus area we we introduced a whole lot of recycling.	Background
4:5	Cul 4	We became zero waste to landfill, so we even we we treated our food waste, you know with the Bokashi the Bokashi method Bokashi parted and we and we also introduced food gardening.	Background
4:6	Cul 4	To the girls and it's part of their grade eight life orientation syllabus. I managed to get it. I managed to get this environmental sustainability thing popped into the syllabus.	Background
4:7	Cul 4	And the Grade 8 did it, and they had about they had about 20 lessons in the year.	Background
4:8	Cul 4	And it was basically tours around the campus showing them all the initiatives, all these five focus areas and one of them was establishing their own food garden and then maintaining the food garden throughout their grade, ATR.	Background
4:9	Cul 4	I think there's too much emphasis on this organic thing that, you know, everyone's charting organic, organic, organic, we if you, if you have a close look at most gardens organic people, you know I think I think they fewer people using.	Knowledge and perceptions
4:10	Cul 4	And then more people that are now realizing the effects of these horrible pesticides.	Knowledge and perceptions
4:11	Cul 4	Eco friendly pesticides available, you know, Ludwig's	Knowledge and perceptions

4:12	Cul 4	In a smuch that we didn't use any, we used organic pesticides. We we made our own compost as part of the as part of the waste program.	Knowledge and perceptions
4:13	Cul 4	And then your, as I say, we didn't use any, tried not to use any, you know, harmful pesticides and everything we tried to do.	Knowledge and perceptions
4:14	Cul 4	Using harmful pesticides then that's I think that's it that makes.	Knowledge and perceptions
4:15	Cul 4	And how did these gardens get certification? I don't know. I I believe it's not easy.	Barriers
4:16	Cul 4	And and that there's there's a challenge is to is to is to is to ease off ease off from the legislation.	Barriers
4:17	Cul 4	Let's not get muddled up there. Let's not get muddled up with the with the legislation. Let's focus on producing the food.	Barriers
4:18	Cul 4	Using harmful pesticides then that's I think that's it that makes	Barriers
4:19	Cul 4	And organic to me, that makes an organic garden. If if you haven't used anything harmful on it, then it's organic.	Barriers
4:20	Cul 4	You know there is a bit of work to do, you know, you know, you've gotta you gotta create the bed. You've gotta dig it over. You've gotta you've gotta go and purchase the seedlings. You're gonna plant them. And then regularly, you have to water them. And I think I think most people would just lazy and I try to. I try to also launch this zero waste to landfill at a number of schools in the Western Cape.	Barriers
4:21	Cul 4	And then you also have and we we had the same challenge addressed in bug come the holidays.	Barriers
4:22	Cul 4	Then all the girls go on holiday and there's no one to water.	Barriers
4:23	Cul 4	maybe even in primary school, maybe not in the senior phase. Maybe do it in the primary cause on the kids more receptive.	Community food garden
4:24	Cul 4	Not even pre primary school and everything. It's very nice if there's somebody digging the holes and somebody bringing the tires and everything. But when we went back after a year's time, the harvested everything and we actually got pictures of how nice it grew and everything. And then there was nothing.	Community food garden
4:25	Cul 4	There was there was. There was never any indication that it had succeeded and that the girls themselves had started their own food gardens.	Community food garden
4:26	Cul 4	And I'll so I always felt that I'd kind of failed in that and, you know, and was looking at other ways of, you know, how do you encourage people to start their own food guns?	Community food garden
4:27	Cul 4	But I I think it should be put in as a curriculum item. It should be put in. I don't know. Life orientation seems a subject that everybody does.	Community food garden

4:28	Cul 4	So put it into the life orientation and, you know, develop a model A modules and and teach the kids and teach them for a whole year about it. And just, you know, just keep knocking it on their head, knocking on head.	Community food garden
4:29	Cul 4	But it but you know then add in the waste and and the recycling and you know don't throw your packet on the ground. Introduce the making of eco bricks and you can put that all into a lovely package and y'all to answer your question. There's no doubt that every single kid.	Community food garden
4:30	Cul 4	Free seed and maybe some compost. So if you if you if you literally got a sponsor somewhere and you handed out free seed and compost people would would see that it's not such a you know it's not such a hassle it's it's easy to do your own.	Community food garden
4:31	Cul 4	The food we we let the girls harvest it and and take it home. It also went to it first went to the school hostel. There were 76 girls living on campus.	Local organic markets
4:32	Cul 4	But yes, they will or ganic	Knowledge and perceptions
4:33	Cul 4	We we made organic compost on campus from all the leaves and branches and twigs and all that sort of thing. And then we made compost from food waste. But because in it leaning it, Nicole and then after three weeks, you know the process, we then transferred it over to the compost windrows and we added it into that. And so the compost was used as the feed on the food gardens.	Knowledge and perceptions
4:34	Cul 4	Yeah, the environmental thing.	Knowledge and perceptions
4:35	Cul 4	Like the fruit fly the fruit fly, there isn't really any inorganic chemical or I mean organic chemical at the moment.	Knowledge and perceptions
4:36	Cul 4	And that that has been found to treat that so then we'd have to go just just if we, you know, if we discovered the fruit fly we, we'd have to just go in and use, you know, harmful pesticide. But that was that was very that was right in the minority.	Knowledge and perceptions
4:37	Cul 4	Majority of it was all organic stuff.	Knowledge and perceptions
4:38	Cul 4	In an attempt to encourage them to all start their own food gardens at home, that was, that was the main sort of. That was the carrot on the stick sort of thing. You know, you got you girls can produce the food, you can do all the work. You can do what you want. You can compost it, feed it and all that, and then you can take from the harvest when available.	Community food garden
4:39	Cul 4	And hopefully taking that back, you know, showing the parents and the parents going, wow, you know, well done. You know, why don't you grow own food at home? So that was that was the sort of idea behind them taking the, you know, taking the food home.	Community food garden
4:40	Cul 4	Is 1 idea just make it so expensive that it's unaffordable and you force the people to grow themselves.	Barriers

4:41	Cul 4	And I gave over the years, I must have given two talks at different meetings, trying to encourage them to do it and and not one since civilians did. And that was when I went and I consulted up to Isaac's head heads conference in the sentence convention centre and I.	Barriers
4:42	Cul 4	Promote this environmental sustainability and I've got some Stithians to buy into it and started a whole program and then michalos and I don't know if I don't know if maybe those schools are affluent schools and that's why they're brought into it. And the kids thought of doing it, but I never got, you know, that far down, surveying it and working out the reasons.	Community food garden

APPENDIX C: ETHICAL CLEARANCE



UNISA-CAES HEALTH RESEARCH ETHICS COMMITTEE

Date: 09/06/2020

Dear Ms Boshoff

NHREC Registration # : REC-170616-051 REC Reference # : 2020/CAES_HREC/106 Name : Ms HM Boshoff

Student #: 46738517

Decision: Ethics Approval from 04/06/2020 to 31/05/2023

Researcher(s): Ms HM Boshoff <u>m.boshoff@somcol.co.za</u>

Supervisor (s): Prof EL Kempen <u>kempeel@unisa.ac.za</u>; 011-471-2241

> Dr L Christie <u>chrisl@unisa.ac.za</u>; 011-471-2811

Working title of research:

Exploring the potential contribution of organic community food gardens for sustainability: the perspective of cultivators and consumers

Qualification: M Consumer Science

Thank you for the application for research ethics clearance by the Unisa-CAES Health Research Ethics Committee for the above mentioned research. Ethics approval is granted for three years, **subject to submission of the relevant permission letters and yearly progress reports.** Failure to submit the progress report will lead to withdrawal of the ethics clearance until the report has been submitted.

The researcher is cautioned that fieldwork may not commence until such time as the COVID-19 lockdown has been lifted.

Due date for progress report: 31 May 2021

Please note the points below for further action:



 The committee notes the researcher's undertaking to obtain the relevant permission letters. The researcher is cautioned that the letters must be submitted to the committee once obtained, and that data collection may not commence until this has been done.

The **medium risk application** was **reviewed** by the UNISA-CAES Health Research Ethics Committee on 04 June 2020 in compliance with the Unisa Policy on Research Ethics and the Standard Operating Procedure on Research Ethics Risk Assessment.

The proposed research may now commence with the provisions that:

- 1. The researcher will ensure that the research project adheres to the relevant guidelines set out in the Unisa Covid-19 position statement on research ethics attached.
- The researcher(s) will ensure that the research project adheres to the values and principles expressed in the UNISA Policy on Research Ethics.
- Any adverse circumstance arising in the undertaking of the research project that is relevant to the ethicality of the study should be communicated in writing to the Committee.
- The researcher(s) will conduct the study according to the methods and procedures set out in the approved application.
- 5. Any changes that can affect the study-related risks for the research participants, particularly in terms of assurances made with regards to the protection of participants' privacy and the confidentiality of the data, should be reported to the Committee in writing, accompanied by a progress report.
- 6. The researcher will ensure that the research project adheres to any applicable national legislation, professional codes of conduct, institutional guidelines and scientific standards relevant to the specific field of study. Adherence to the following South African legislation is important, if applicable: Protection of Personal Information Act, no 4 of 2013; Children's act no 38 of 2005 and the National Health Act, no 61 of 2003.
- Only de-identified research data may be used for secondary research purposes in future on condition that the research objectives are similar to those of the original research. Secondary use of identifiable human research data require additional ethics clearance.
- No field work activities may continue after the expiry date. Submission of a completed research ethics progress report will constitute an application for renewal of Ethics Research Committee approval.

URERC 25.04.17 - Decision template (V2) - Approve

Note:

The reference number **2020/CAES_HREC/106** should be clearly indicated on all forms of communication with the intended research participants, as well as with the Committee.

Yours sincerely,

WAR

Angaina >

Prof MA Antwi Chair of UNISA-CAES Health REC E-mail: antwima@unisa.ac.za Tel: (011) 670-9391 Prof SR Magano Acting Executive Dean : CAES E-mail: magansr@unisa.ac.za Tel: (011) 471-3649



APPENDIX D: PARTICIPANT INFORMATION SHEET



PARTICIPANT INFORMATION SHEET

Ethics clearance reference number: REC-170616-051 Research permission reference number: 2020/CAES_HREC/106

17 June 2022

Title:

Determining the opinions of consumers and communities regarding the production and purchase intention of organic products.

Dear Prospective Participant

My name is Mariët Boshoff and I am a student at the University of South Africa in the process of completing a Masters dissertation, under the supervision of Professor E. Kempen in the Department of Life and Consumer Science.

WHAT IS THE PURPOSE OF THE STUDY?

I am conducting this research to:

- 1. determine consumer's knowledge and perception of organic food.
- determine consumers' willingness to purchase organic produce from a local organic community garden.
- 3. identify the presence and cultivation of organic community gardens in the local area.
- 4. determine cultivator's knowledge and perception of organic food.
- 5. identify the barriers of organic community garden cultivation in the local community.
- 6. explore the willingness of cultivators to sell produce at local organic markets.
- explore the local market opportunities for organic food produced from organic community gardens.

WHY ARE YOU BEING INVITED TO PARTICIPATE?

As a researcher, I am interested in the perceptions of people with regards to organic foods. You have been randomly selected to participate in this research due to your interest in organic foods.



WHAT IS THE NATURE OF YOUR PARTICIPATION IN THIS STUDY?

The study involves participating in a structured interview that will be recorded for transcription and reference purposes only. These recordings will be kept confidential, password protected and only accessible by myself and my supervisor. in. The interview questions that will be asked, will be topic related and no personal information nor identifying information will be collected. The interview will take about 20 to 25 minutes to complete.

CAN YOU WITHDRAW FROM THIS STUDY EVEN AFTER HAVING AGREED TO PARTICIPATE?

Participating in this study is voluntary and you are under no obligation to consent to participation. If you do decide to take part, you will be given this information sheet to keep and be asked to sign a written consent form. You are free to withdraw at any time and without giving a reason.

WHAT ARE THE POTENTIAL BENEFITS OF TAKING PART IN THIS STUDY?

Your interview data will provide insights into how organic community gardens can contribute to reaching sustainable development goals in the Western Cape, South Africa. From this study, professionals in various sectors, such as the private, government, marketing, agricultural, and nutritional sectors, will be able to consider implementing more appropriate strategies to promote and establish organic community gardens.

ARE THERE ANY NEGATIVE CONSEQUENCES FOR YOU, IF YOU PARTICIPATE IN THE RESEARCH PROJECT?

There are no foreseeable risks anticipated with this study. I am only interested in your opinion, and therefore there are no right or wrong answers to the questions. I just ask that you answer truthfully. Furthermore, the information will be kept anonymous.

WILL THE INFORMATION THAT YOU CONVEY TO THE RESEARCHER AND YOUR IDENTITY BE KEPT CONFIDENTIAL?

The information collected will not be traced back to you, as your participation will remain anonymous and the information collected confidential. To ensure your anonymity and confidentiality, a number will be assigned to you and used to refer to your interview and data. Only I, the researcher and my supervisor will have access to the data for analyses.



HOW WILL THE RESEARCHER PROTECT THE SECURITY OF DATA?

Hard copies of your answers will be stored by the researcher for a period of five years in a locked cupboard/filing cabinet for future research or academic purposes. An electronic copy will be stored on a password protected computer. Future use of the stored data will be subject to further Research Ethics Review and approval if applicable.

WILL YOU RECEIVE PAYMENT OR ANY INCENTIVES FOR PARTICIPATING IN THIS STUDY?

There is no payment or reward offered for participating in the study. Participation is completely voluntary.

HAS THE STUDY RECEIVED ETHICS APPROVAL?

This study has received written approval from the Health Research Ethics Committee of the College of Agriculture and Environmental Sciences, Unisa. A copy of the approval letter can be obtained from the researcher if requested.

HOW WILL YOU BE INFORMED OF THE FINDINGS/RESULTS OF THE RESEARCH?

If you would like to be informed of the final research findings or require any further information, please contact Ms Mariët Boshoff at luv.organic@outlook.com.

Should you have concerns about the way in which the research has been conducted, you may contact Prof Kempen (<u>kempeel@unisa.ac.za</u>) or the research ethics chairperson of the CAES Health Research Ethics Committee, Prof MA Antwi on 011-670-9391 or <u>antwima@unisa.ac.za</u> with any ethical concerns.

Thank you for taking the time to read this information sheet and for your willingness to participate in this study.

Thank you.



Ms Mariët Boshoff


CONSENT TO PARTICIPATE IN THIS STUDY

I, _____ (participant name), confirm that the person asking my consent to take part in this research has told me about the nature, procedure, potential benefits and anticipated inconvenience of participation.

I have read (or had explained to me) and understood the study as explained in the information sheet.

I have had sufficient opportunity to ask questions and am prepared to participate in the study.

I understand that my participation is voluntary and that I am free to withdraw at any time without penalty.

I am aware that the findings of this study will be processed into a research report, journal publications and/or conference proceedings, but that my participation will be kept confidential unless otherwise specified.

I agree to the recording of the interview.

I have received a signed copy of the informed consent agreement.

Participant Signature...... Date......

Researcher's Name & Sumame: Mariët Boshoff

Researcher's signature:

Date.....



University of South Africa Preller Street, Muckleneuk Ridge, City of Tshwane PO Box 392 UNISA 0003 South Africa Telephone: +27 12 429 3111 Facsimile: +27 12 429 4150 www.unisa.ac.za

APPENDIX E: TURNITIN RECEIPT



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EXPLORING THE POTENTIAL CONTRIBUTION OF ORGANIC COMMUNITY FOOD GARDENS FOR SUSTAINABILITY: THE PERSPECTIVE OF CULTIVATORS AND CONSUMERS
by
Harriët Maria Boshoff
submitted in accordance with the requirements for the degree of
MASTERS OF CONSUMER SCIENCE
in the
College of Agriculture and Environmental Sciences Department of Life and Consumer Science
at the
UNIVERSITY OF SOUTH AFRICA

Supervisor: Prof. E. Kempen Co Supervisor: Dr L. Truter

February 2024

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APPENDIX F: LANGUAGE EDITING CERTIFICATE



Leatitia Romero Professional Copy Editor and Proofreader (BA HONS)

> Cell: 083 236 4536 leatitiaromero@gmail.com www.betweenthelinesediting.co.za

23 February 2024

To whom it may concern:

I hereby confirm that I edited the dissertation titled: "EXPLORING THE POTENTIAL CONTRIBUTION OF ORGANIC COMMUNITY FOOD GARDENS FOR SUSTAINABILITY: THE PERSPECTIVE OF CULTIVATORS AND CONSUMERS". Any amendments introduced by the author hereafter are not covered by this confirmation. Participants' verbatim quotes were not edited. The author ultimately decided whether to accept or decline any recommendations I made, and it remains the author's responsibility at all times to confirm the accuracy and originality of the completed work. The author is responsible for ensuring the accuracy of the references and its consistency based on the department's style guidelines.

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