

**INCLUSION OF LOCAL COMMUNITY FARMERS IN THE LAST-MILE
SUPPLY CHAIN PROCESSES OF LUXURY WILDLIFE TOURISM
DESTINATIONS**

by

**HUGO VAN DEN BERG
(57297940)**

submitted in accordance with the requirements
for the degree of

DOCTOR OF PHILOSOPHY

in

ENVIRONMENTAL MANAGEMENT

at the

UNIVERSITY OF SOUTH AFRICA

SUPERVISOR: PROF K MEARNES

December 2022

Declaration

I, Hugo van den Berg, hereby declare that the thesis Title: INCLUSION OF LOCAL COMMUNITY FARMERS IN THE LAST-MILE SUPPLY CHAIN PROCESSES OF LUXURY WILDLIFE TOURISM DESTINATIONS, which I hereby submit for the degree of Doctor of Philosophy in Environmental Management at the University of South Africa, is my own work and has not previously been submitted by me for a degree at this or any other institution.

I declare that the thesis does not contain any written work presented by other persons whether written, pictures, graphs or data or any other information without acknowledging the source.

I declare that where words from a written source have been used the words have been paraphrased and referenced. Where exact words from a source have been used the words have been placed within quotation marks and referenced.

I declare that I have not copied and pasted any information from the Internet, without specifically acknowledging the source and have inserted appropriate references to these sources in the reference section of the thesis.

I declare that during my study I adhered to the Research Ethics Policy of the University of South Africa, received ethics approval for the duration of my study prior to the commencement of data gathering, and have not acted outside the approval conditions. I declare that the content of my thesis has been submitted through an electronic plagiarism detection programme before the final submission for examination.



Student signature:

Date: 1 December 2022

Abstract

The fresh produce supply chains' content, nature, and characteristics for luxury tourism wildlife destinations in South Africa and sub-Saharan Africa are unknown. There is no synthesised document that compares the current body of knowledge in the form of subject literature, primary and secondary data that has investigated and explored the concept and objectives of including fresh produce from local community farmers in the supply chain (SC) processes of luxury wildlife tourism destinations, which in turn may guide future research needs and identify niche research areas. This study aimed to establish the probability of including fresh produce from community farmers in luxury wildlife tourism destinations' last-mile SC processes. The study's methodology used available literature, including relevant theoretical and applied research findings. The philosophy that underpinned this research was interpretivism, which involves a researcher interpreting elements of a study and focusing on their meaning, which typically materialises at the end of the study. The method used for this study was a literature review and content analysis. Three different types of interviews were used, The focus was supported with research, particularly concerning the discipline of supply chains (SCs), food SCs, sustainable SCs, tourism SCs, hospitality industry, replenishment strategies, local communities, tourism business management, food from cradle to plate and community sustainability.

Primary and secondary data were used to develop a community farmer inclusion coefficient (*Cfic*), which organisations can use to determine the probability of including fresh produce from community farmers in their last-mile SC processes. Other areas of SC research were identified; green SCs, SC integrations, globalisation and SC challenges, transparency in the SC, and robotic automation of the SCs. This study identified research gaps in community farmers' fresh produce SCs and the fresh produce SCs of luxury wildlife tourism destinations. It is recommended that researchers consider investigating other business-to-business (B2B) processes that can exist between a local community and a luxury wildlife tourism destination. This will ensure greater alignment between

researchers and the collaboration processes between community farmers and luxury wildlife tourism destinations.

Acknowledgements

I want to thank GOD for giving me the strength and persistence for completing this research.

I would like to express my gratitude to the following people, without whom this research would not have been possible:

- Prof K Mearns: my supervisor
- Dr Unine van den Berg: my wife
- Mr J Braack: Group Sustainability Manager and Ocean's Without Borders Project at &Beyond
- Mrs R Beumer: &Beyond, Lodge Support & Service Director, Johannesburg
- Mrs B Brenner: &Beyond, Logistics Manager, Johannesburg
- Miss N Davids: &Beyond, Office Manager, Zanzibar
- Mrs Y De Villiers: &Beyond, Lodge Manager, Mnemba Island, Zanzibar, Tanzania
- Mrs S de Vos: &Beyond, Operational Manager, Tanzania, Kenia & Zanzibar
- Mr C Jardine: &Beyond, General Manager, Phinda Forest, Vlei and Homestead Lodges
- Mr K Malcommes: &Beyond, Lodge Manager, Tanzania
- Mrs K Pretorius: &Beyond, Procurement Manager, Johannesburg
- Mr K Strautmann: &Beyond, Lodge Manager, Tanzania
- Miss T Mdluli: &Beyond, Phinda Private Game Reserve – KwaZulu-Natal
- Mr K Haji: &Beyond, Mnemba Island, Zanzibar, Tanzania

Definitions of Abbreviations

Abbreviations	Meaning
BI	Behavioural Intention
B2B	Business-to-Business
CKD	Chronic Kidney Disease
CBNRM	Community-Based Natural Resource Management
CBT	Community-Based Tourism
<i>Cfic</i>	Community farmer inclusion coefficient
COVID-19	Coronavirus Disease
DCV	Development and Constructed Validation
DE	Distribution Expectancy
DSI	Dialysis Symptom Index
ECT	Expectation Confirmation Theory
EDI	Electronic Data Interchange
EE	Effort Expectancy
EF	Executive Functioning
EU	European Union
FMCG	Fast Moving Consumer Goods
GDP	Gross Domestic Product
HRQOL	Health-Related Quality of Life
ISCP	Innovative Supply Chain Practices
LPE	Load Planning Expectancy
LR	Loading Requirements
NTSS	National Tourism Sector Strategy
PE	Performance Expectancy
POD	Proof of Delivery
PROs	Patient-Reported Outcomes
PROMs	Patient-Reported Outcomes Measures
PPT	Pro-Poor Tourism
QE	Quality Expectancy
RT	Retail Trustworthiness
SC	Supply Chain
SCE	Supply Chain Environment
SCM	Supply Chain Management
SCs	Supply Chains
SSCM	Sustainable Supply Chain Management
SSCMT	Sustainable Supply Chain Management Theory
TEQ	Transformative Experience Questionnaire
WHO	World Health Organisation
WTTC	World Travel & Tourism Council

Table of Contents

	<u>Page</u>
Declaration	ii
Abstract	iii
Acknowledgements	v
Definitions of Abbreviations	vi
Table of Contents	vii
List of Tables	xii
List of Figures	xiii
Chapter 1 Introduction	1
1.1 Introduction.....	2
1.2 Tourism supply chains.....	9
1.3 Rational and motivation of the study.....	11
1.4 Research problem, research question and research aims and objectives.....	15
1.4.1 Research problem	15
1.4.2 Research questions	17
1.4.3 Research aims and objectives	17
1.5 Significance of the research	19
1.6 Chapter breakdown	20
1.7 Ethics.....	23
1.8 Conclusion.....	23
Chapter 2 Literature review	24
2.1 Introduction.....	25
2.2 Conceptualising the framework of including fresh produce from local communities in the last-mile supply chain processes of luxury wildlife tourism destinations	27
2.3 Relevant and appropriate literature on similar studies and methods	29

2.4	Concepts fundamental to the study	32
2.4.1	Luxury wildlife destinations	32
2.4.2	Local community	32
2.4.2.1	Link between local communities and luxury wildlife tourism destinations	34
2.4.2.2	Problems associated with service delivery within local communities	37
2.4.2.3	The link between the local communities, luxury wildlife tourism destinations and the environment.....	40
2.4.2.4	Key concepts emanating from the literature review on establishing a link between the luxury wildlife tourism destinations and the local community.....	41
2.4.3	Last-mile logistics	43
2.4.3.1	The last-mile supply chain processes of a luxury wildlife tourism destination	45
2.4.3.2	Fresh produce supply systems of a luxury wildlife tourism destination	47
2.4.4	Green supply chain.....	49
2.4.5	Purchasing functions.....	51
2.4.5.1	Purchasing functions of a luxury wildlife tourism destination.....	51
2.4.5.2	Purchasing pathway system of a luxury wildlife tourism destination	53
2.5	Theoretical framework.....	56
2.6	Sustainable supply chain management theory	56
2.7	Expectation confirmation theory	59
2.8	Encapsulating the theories	61
2.9	Conclusion.....	63
Chapter 3	Research design and research methodology	66
3.1	Introduction.....	67
3.2	Research design and philosophy	67

3.3	Case study research design	68
3.3.1	Case study research with specific research design elements.....	71
3.3.2	Case record and verification	72
3.4	Research methods	73
3.4.1	Mixed method.....	74
3.4.2	Delphi technique and adapted Delphi technique	75
3.4.3	Strengths and limitations of the adapted Delphi technique	77
3.4.4	Expert panel selection.....	78
3.4.5	Steps of the research	82
3.5	Data collection methods for the case study selection	84
3.5.1	Phase 1: Understanding the supply chains of &Beyond.....	84
3.5.2	Phase 2: Research using observation and interviews.....	85
3.5.3	Phase 3: Research using questionnaires	85
3.5.3.1	Questionnaire design.....	85
3.5.3.2	First interviews	88
3.5.3.3	Second interviews	90
3.5.3.4	Third interviews	90
3.5.4	Phase 4: Understanding the latent, new and current possibilities of including a local community in the supply chain.....	92
3.5.5	Phase 5: Data analysis, development of the framework, testing of the framework and conclusion.....	92
3.6	Ethical research design considerations	93
3.7	Conclusion.....	94
Chapter 4	Supply chains of luxury wildlife tourism destinations	96
4.1	Introduction.....	97
4.2	History and lodges of &Beyond	97
4.2.1	Klein's Camp – Serengeti	99
4.2.2	Mnemba Island – Zanzibar	100
4.2.3	Phinda Private Game Reserve – KwaZulu-Natal	103
4.3	Procurement and supply pathway of products to the &Beyond lodges	105

4.3.1	Procurement and supply pathway for Klein’s Camp – Serengeti	107
4.3.2	Procurement and supply pathway for Mnemba Island – Zanzibar ..	111
4.3.3	Procurement and supply pathway for Phinda Private Game Reserve – KwaZulu-Natal	115
4.4	Fresh produce requirements for Klein’s Camp, Mnemba Island and Phinda Forest Lodge	118
4.5	Fresh produce supply capabilities of local communities around Klein’s Camp, Mnemba Island and Phinda Forest Lodge	121
4.6	Conclusion.....	124
Chapter 5 Research through the use of an adapted Delphi technique.....		126
5.1	Introduction.....	127
5.2	Delphi questionnaire results	127
5.2.1	Response of luxury wildlife tourism destinations	128
5.2.2	Response of transport/logistics companies	140
5.2.3	Results and analysis	147
5.3	Framework for the inclusion of local community farmers in the last-mile supply chain processes of luxury wildlife tourism destinations	149
5.3.1	Framework criteria for luxury wildlife tourism destinations.....	150
5.3.2	Framework criteria for transport companies.....	152
5.4	Community farmer inclusion criteria checklist.....	155
5.5	Development of a possibility instrument for the inclusion of community farmers in the supply chain of luxury wildlife tourism destinations	159
5.5.1	Related statistical indicators	159
5.6	Conclusion.....	161
Chapter 6 Summary, recommendations and conclusions		163
6.1	Introduction.....	164
6.2	Synthesis.....	164
6.3	Relevance of this study	175

6.4	Placement of results back into the literature.....	176
6.5	Contribution to the body of knowledge	178
6.5.1	Supply and demand requirements for fresh produce	178
6.5.2	Theories linked to the research.....	180
6.5.2.1	Expectation confirmation theory.....	180
6.5.2.2	Sustainable supply chain management theory	180
6.5.3	Adapted Delphi technique.....	181
6.5.4	Statistical indicator.....	182
6.5.5	Theoretical framework	183
6.6	Limitations of the study.....	183
6.7	Recommendations.....	183
6.8	Conclusion.....	186
References	187

List of Tables

Table 1.1 United Nations sustainable development goals.....	8
Table 3.1 Different forms of Delphi.....	75
Table 4.1 Fresh produce demand of Klein's Camp, Mnemba Island and Phinda Forest Lodge.....	120
Table 4.2 Fresh produce produced by local farmers.....	123
Table 5.1 Expert coefficient of questionnaires.....	127
Table 5.2a Questionnaire results of Round 1.....	129
Table 5.2b Questionnaire results of Round 1.....	131
Table 5.3a Questionnaire results of Round 2.....	134
Table 5.3b Questionnaire results of Round 2.....	135
Table 5.3c Questionnaire results of Round 2.....	136
Table 5.3d Questionnaire results of Round 2.....	137
Table 5.3e Questionnaire results of Round 2.....	138
Table 5.4 Questionnaire results of Round 1.....	141
Table 5.5a Questionnaire results of Round 2.....	144
Table 5.5b Questionnaire results of Round 2.....	145
Table 5.6 Results of data collection from luxury wildlife tourism destinations.....	150
Table 5.7 Criteria checklist for luxury wildlife tourism destinations.....	152
Table 5.8 Results of data collection from transportation companies.....	153
Table 5.9 Criteria checklist for transport companies.....	154
Table 5.10 Community farmer inclusion checklist.....	157

List of Figures

Figure 2.1 Conceptual framework of the literature review	28
Figure 2.2 Sustainable supply chain management theory	59
Figure 2.3 Expectation confirmation theory	60
Figure 2.4 ECT and SSCMT for the tourism industry	63
Figure 3.1 Data collection process	80
Figure 3.2 Steps of the research process.....	83
Figure 4.1 &Beyond lodges of the study.....	99
Figure 4.2 &Beyond Klein’s Camp	100
Figure 4.3 &Beyond Mnemba Island	101
Figure 4.4 Aerial photo of &Beyond Mnemba Island	102
Figure 4.5 Departing to Mnemba Island	103
Figure 4.6 &Beyond Phinda Private Game Reserve, Forest Lodge	104
Figure 4.7 Phinda Private Game Reserve, Rock Lodge.....	104
Figure 4.8 Distance by road between &Beyond Arusha and Serengeti lodges	108
Figure 4.9 Distance between Arusha airport and Lobo airstrip.....	109
Figure 4.10 Distance between Lobo airstrip and Klein’s Camp	110
Figure 4.11 Flow diagram of fresh produce for Klein’s Camp.....	111
Figure 4.12 Distance between Zanzibar office and Mnemba Island	113
Figure 4.13 Distance between &Beyond Arusha office and Mnemba Island	113
Figure 4.14 Flow diagram of fresh produce for Mnemba Island.....	115
Figure 4.15 Distance between Johannesburg office and Phinda Private Game Reserve	116
Figure 4.16 Flow diagram of fresh produce for Phinda Forest Lodge.....	118
Figure 4.17 Shamba near &Beyond Klein’s Camp	122
Figure 5.1 Expert coefficient of questionnaires	129
Figure 5.2 Expert coefficient of questionnaires	132
Figure 5.3 Expert coefficient of questionnaires	142
Figure 5.4 Data analysis of questionnaires	148
Figure 5.5 Data analysis of questionnaires	149

Figure 5.6 Conceptualising of the framework	155
Figure 5.7 Community farmer probability calculation	160
Figure 6.1 Conceptualising of the theoretical framework.....	165

Appendices

Appendix A UNISA ethics clearance	225
Appendix B Round 1 Questionnaire for a luxury wildlife tourism destination.....	227
Appendix C Round 1 Questionnaire for the transportation company	231
Appendix D Round 2 Questionnaire for a luxury wildlife tourism destination.....	234
Appendix E Round 2 Questionnaire for the transportation company	236
Appendix F Round 3 Opinion of the luxury wildlife tourism destination	238
Appendix G Round 3 Opinion of the transportation company	239
Appendix H Example of a &Beyond menu for lodges.....	240
Appendix I &Beyond product order – Klein’s Camp	243
Appendix J &Beyond product order – Mnemba island	245
Appendix K Zanzibar tide table April 2020	248
Appendix L Company product order – Phinda Forest Lodge.....	249
Appendix M Example of a Non-consumable order – Klein’s Camp	250
Appendix N Zanzibar researcher’s contract form	251
Appendix O Community farmer information Form 3 – KwaZulu-Natal	252
Appendix P Language editing certificate	253
Appendix Q Turnitin plagiarism report	254

Chapter 1: Introduction

1.1 Introduction

If one had to rank all seven continents of the world from amazing to extraordinarily to astonishingly, Africa would be number one because Africa is truly astonishingly incomparable to any other country in the world (India Today, 2022). Only in Africa would one find the hottest place in the world, Ethiopia. The world's largest and tallest animals both originate from Africa, the African elephant and the giraffe. The largest desert and longest river, the Sahara and the river Nile, are both located in Africa (India Today, 2022). Africa offers tourists an unbelievable travelling experience that is why it is rated as one of the most sought-after tourist destinations in the world (Lewis, 2022).

As tourists visit African destinations, local handicrafts, fresh produce and firewood are always in demand by those visiting lodges close to local communities. The fundamental question is – *How to bridge the gap between luxury wildlife tourism destination demand of and the supply of fresh produce produced by local communities?* In the long run, the economic and social benefits to the community are worth it, assuming that the community can understand and be allowed to tap into the potential wealth hidden in the supply chain (SC) (Rylance & Spenceley, 2013). Supply organisations do not regard community involvement in logistics and supply chain-related processes of luxury tourism destinations as very important. However, it is estimated that 75% of a company's carbon footprint is produced by its supply chain (Van den Berg, Labuschagne & Van den Berg, 2013). According to Lukhele and Mearns (2013), change in the tourism industry is unavoidable because luxury tourism destinations are a vigorous and thought-provoking environment that is ever-changing. The concept of supply chain management (SCM) and SC operations have been researched substantially, and many similar problems and difficulties have been identified. However, the development of tourism SCs is a relatively new concept. Consequently, the ever-rising customer expectations to operate and maximise entire SCs is creating noticeable planning problems in the SCs (Barbosa-Póvoa, Da Silva & Carvalho, 2018). Problems, such as the impact of globalisation and altering purchasing behaviours (Oláh, Zéman, Balogh & Popp, 2018), are the concerning challenges facing tourism SCs (Fayet & Vermeulen, 2014; Michailidou, Vlachokostas, Achillas, Maleka, Moussiopoulos & Feleki, 2016). In a SC milieu, there is no standard

model that will work for similar types of companies, even if operating in the same business-surroundings (Melnyk, Narasimhan & De Campos, 2012; Aubry & Kebir, 2013; Zhang, Song & Huang, 2014).

A lot of research surrounding SCM has been done in recent years. However, no research pertaining to the inclusion of local communities in the last-mile SC processes has been done. According to Shahbaz, Rasi, Ahmad and Sohu (2018), organisations are working more closely with each other to incorporate the upstream and downstream SC partners. Innovation in SCs is sometimes difficult for organisations to explore and implement for the following two reasons; first, internal organisational structures, systems and commitment are barriers that need to be addressed or overcome; second, external factors, such as knowledge sharing, lack of resources, financial difficulties, unstable demand, and commitment are some hindrances affecting SC innovation. From the research, it appears that the concept of SC innovation is one area in the SCM process that has not received a great deal of attention by SC managers, as well as researchers (Lavastre, Ageron, Chaze-Magnan & Spalanzani, 2014; Yagc & Akdag, 2014; Solaimani & van der Veen, 2022). The effectiveness and efficiency of an organisational SC depends on the ability to identify, measure, manage and correct any obstacles that can influence the SC (Van den Berg & Mearns, 2021). It became evident from the research that the primary objective in a SC is the reduction of lead times and costs (Rusko, Kylänen & Saari; Bąkowska-Morawska, 2014). Top management should realise the benefits of supply chain management, hence, the reason why an appropriate tourism supply chain must be developed to meet a complex set of requirements (Melnyk *et al.*, 2012; Tippayawong, Ramingwong, Kamkorkaeo & Jangkrajarn, 2015).

Supply chain management in organisations are searching for innovation(s) to bring to their SC to satisfy their customers' needs or achieve a competitive advantage. Such an competitive which will be long lasting and problematic or difficult to duplicate by other SCM organisations. The concept of innovative supply chain practices (ISCP) is to discover and implement an idea, notion or system between SC partners and/or organisations that were of a problematic nature or did not transpire before (Font, Tapper, Schwartz & Kornilaki, 2013). A SC innovation intends to address these

problem areas in a SC, which influences customer service, quality, deliveries and cost or profit of the company (Lavastre *et al.*, 2014). The question then arises as to the difference between an invention and an innovation? According to the Swiss Federal Institute of Intellectual Property (2021: 1): “An invention is defined and uses technology to solve a specific problem. The technical features of an invention have a function through which the problem – the purpose of the invention – is solved.” While, Baregheh, Rowley and Sambrook (2009: 1325) define innovation as “An idea which the company uses further to satisfy the needs and expectations of the customers.” Regarding the reduction of SC lead-time, the question whether the inclusion of local suppliers in the SC will shorten the SC lead-time is questionable. In recent years, regional and international organisations across all SC domains have started to involve local communities in some of their SC operations to determine whether cost savings or product substitution is possible (Pellegrin-Romeggio & Leszczyńska, 2014; Skippari, Laukkanen & Salo, 2017). Other proficiencies, such as product quality, different types of food, and conservation efforts, are not major deciding factors why people would return to the same tourist destination. According to Pillai, Talari and Elluri (2014), the costs (technical and financial support) involved by including the local communities in SCs must be investigated to determine if it is possible to obtain cost savings.

Supply chains are part of the global environment, therefore, the result of globalisation over the last three decades has changed SCs in becoming more difficult and complex (Abbasi, 2017; Bi, Davison & Smyrniotis, 2017). “According to Your Matter (2022: 1) globalisation is defined as “the speedup of movements and exchanges (of human beings, goods, and services, capital, technologies, or cultural practices) all over the planet. One of the effects of globalisation is that it promotes and increases interactions between different regions and populations around the globe.” Organisational supply chains now expand in many different geographical areas bringing about new challenges, opportunities and problems, which were previously not part of organisational supply chains (Sigala, Parsa, Segarra-Oña, Jang, Chen & Singh, 2012; Ren & Bai, 2014; Zailani, Iranmanesh, Yusof & Ansari, 2014). Organisations across the globe have to deal with SC changes and uncertainties, such as technological developments, new suppliers, different or complex products, market changes, longer

cycle or delivery times, increased stock levels, and the possibility of outsourced manufacturing (Minculete & Olar, 2014). All of these challenges have been imposed due to globalisation. Since 2019, COVID-19 is a new threat in the SC environment (Gereffi, 2020). Studies have shown that organisations in the globalisation arena are experiencing an average increase of 35% in distribution costs, resulting in a 40% increase of the total cost to the organisation (Minculete & Olar, 2014; Tippayawong, Ramingwong, Kamkorkaeo & Jangkrajarn, 2015). Since 2019, organisations in the globalisation arena are now experiencing an average decrease of 78% in distribution costs, resulting in an 82% decrease of the total cost to the organisation (Gereffi, 2020; Hayakawa & Mukunoki, 2021). Since the outbreak of COVID-19, global SCs were disrupted, which created various problems and difficulties across the globe (Van den Berg & Mearns, 2021). Countless organisations worldwide were forced to shut down because of COVID-19, and these closures escalated into unanticipated trade disruptions in most industry sectors. Organisations that remained active were confronted with various challenges of SC disruptions, such as the decline in consumer demand, marketing problems, cash flow inconsistencies, and health and safety issues (Guan, Wang, Hallegatte, Davis, Huo, Li, Bai, Lei, Xue, Coffman & Cheng, 2020).

Therefore, SCM divisions in organisations are searching for innovation(s) to bring in their supply chain to satisfy their customers' needs or to achieve a competitive advantage which will be long-lasting and problematic to duplicate (Skippari *et al.*, 2017; Thomas-Francois, Von Massow & Joppe, 2017; Zheng, Leromonachou, Fan & Zhou, 2017). The concept of innovative supply chain practices (ISCP) is to discover and implement an idea, concept or system between supply chain partners and/or organisations that were of a problematic nature or had not transpired. The intention of ISCP is to address these problem areas in a supply chain, which influences customer service, quality, deliveries and the cost or profit to the company (Lavastre *et al.*, 2014; Raj, Biswas & Srivastava, 2018). According to Morali and Searcy (2013), to acquire the necessary resources, organisations rely on one another, which is necessary for survival and growth. Therefore, this dependency must be administered on an ongoing basis. Logistics has changed from a science to a higher-level discipline in recent decades. It is becoming evident that the focus of logistics is shifting to a more social environment rather than a technologically focused environment (Bhatt, Buckley,

McEntire, Lothian, Sterling & Hickey, 2013; Reddy, 2014). According to Shinohara (2010), this social environmental area of logistics and supply chain management is yet to be thoroughly researched. Del Borghi, Gallo, Strazza and Del Borghi (2014) and Raj *et al.* (2018), also add that if an organisation wants to develop a sustainable food supply chain it is important to have methods and tools that enables it to assess the environmental sustainability performance of their products. Allen, Walker and Brady (2012) suggest that companies should represent their SC goals through their operations and practices. Initiatives include efforts to track and/or reduce greenhouse gas emissions, develop sustainable products or avoid waste. Initiatives like this are becoming more and more important as many companies either perceive themselves to be environmentally friendly or are trying to become so. Nonetheless, if these initiatives are not achieved, they can affect an organisation's value chain, ("According to Kaplinsky and Marris (2000: 1), a value chain describes the full range of activities which are required to bring a product or service from conception, through the different phases of production (involving a combination of physical transformation and the input of various producer services), delivery to final consumers, and final disposal after use.") as well as its supply chain ("According to Luther (2020), a SC is a coordinated network that includes all the companies, facilities and business activities involved in sourcing, developing, manufacturing and delivering products. Each business relies on its SC to be able to build products and bring them to market; a business may itself be a crucial link in other companies' SCs."), (Chen, Daugherty & Landry, 2009; Costa & Carvalho, 2014; Alexandru, 2014; Bodosca & Streimikiene, 2015).

The core business functions of SCM are procurement, packaging, logistics, transport, warehousing, waste and knowledge management. All these factors lead to the important interdisciplinary field of sustainable supply chain management (SSCM) (Noyan & Kahvecioğlu, 2018). However, SSCM theory and practice are evolving rapidly, and many organisations are looking for the best ways to integrate and implement sustainability principles in their supply chains (Bowersox, Closs & Cooper, 2009; Morali & Searcy, 2012). According to Bell, Bradley, Fugate and Hazen (2014), the increasing focus on SSCM has led to a wide-scale adaptation of SSCM practises. In summary, luxury wildlife destinations need to meet the growing demands of stakeholders for environmental sustainability. For this reason, it is imperative for a

luxury wildlife tourism destination to work with suppliers and customers throughout the organisation's supply chain (Lekhaya, Olajumoke & Nirmala, 2017; Maršanić, 2014). (In the study reference will be made to lodges/luxury wildlife tourism destinations/luxury lodges/camps and these terms will be used interchangeably. All will be referring to luxury wildlife tourism destinations which is the object under investigation in this study). This promotes partnerships and joint initiatives with supply chain partners to develop strategies to improve overall efficiency along the whole supply chain while meeting the organisational, as well as the environmental sustainability objectives (Kovačić, Topolšek & Dragan, 2013; Biao, Liang & Liang, 2014). For the SC transformation process of a luxury wildlife tourism destination to be successful, systems and procedures need to be in place. Therefore, a luxury wildlife tourism destination should search for measures to make their SCs environmentally friendly and more sustainable. This is because the customers of luxury wildlife tourism destinations are more inclined to a destination that is focused on having environmentally friendly SCs. It can also help a luxury wildlife tourism destination attract customers to the organisation (Junayduloevich, Mukhammedrizaevna & Bakhritdinovna, 2020). Thus, the inclusion of local communities and farmers in the supply chain of an organisation can have constructive results, such as the reduction of product prices, development of skills in a local community and growth in revenue for small farmers (Fu, Chakpitak & Goldsmith, 2012; Buyukkeklik, Ozoglu & Kemer, 2014).

Earth has a constrained ecological system, therefore, the objective of sustainability is to establish a balance between socio-economic interests and the ecological system (Boluk, Cavaliere & Higgins-Desbiolles, 2019). For sustainable development, environmental objectives are necessary to create global stability for the three dimensions of sustainable development, namely economic, social and environmental factors (Omisore, 2018). Allen, Metternicht and Wiedmann (2018) are of the opinion that instruments are needed to determine connections between economic, social and environmental factors. However, due to the absence of methodologies supporting sustainable development, environmental developmental issues have been neglected for a long time. Methodologies do not exist that support sustainable development, therefore, in September 2015, the United Nations (UN) implemented a framework of

17 sustainable development goals (SDGs), which included 169 targets and 232 indicators (Table 1.1).

Table 1.1 United Nations sustainable development goals

UN SDGs	Definition	Description
UN SDG1	No poverty	End poverty in all its forms everywhere.
UN SDG2	Zero hunger	End hunger, achieve food security, and improved nutrition and promote sustainable agriculture.
UN SDG3	Good health and well-being	Ensure healthy lives and promote well-being for all at all ages.
UN SDG4	Quality education	Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all.
UN SDG5	Gender equality	Achieve gender equality and empower all women and girls.
UN SDG6	Clean water and sanitation	Ensure availability and sustainable management of water and sanitation for all.
UN SDG7	Affordable and clean energy	Ensure access to affordable, reliable, sustainable and modern energy for all.
UN SDG8	Decent work and economic growth	Promote sustained, inclusive and sustainable economic growth, full and productive employment, and decent work for all.
UN SDG9	Industry, innovation, and infrastructure	Build resilient infrastructure, promote inclusive, and sustainable industrialisation and foster innovation.
UN SDG10	Reduced inequalities	Reduce inequality within and among countries.
UN SDG11	Sustainable cities and communities	Make cities and human settlements inclusive, safe, resilient, and sustainable.
UN SDG12	Responsible consumption and production	Ensure sustainable consumption and production patterns.
UN SDG13	Climate action	Take urgent action to combat climate change and its impact.
UN SDG14	Life below water	Conserve and sustainably use the oceans, seas, and marine resources for sustainable development.
UN SDG15	Life on land	Protect, restore, and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss.
UN SDG16	Peace, justice, and strong institutions	Promote peaceful and inclusive societies for sustainable development; provide access to justice for all and build effective, accountable, and inclusive institutions at all levels.
UN SDG17	Partnership for the goals	Strengthen the means of implementation and revitalise the global Partnership for Sustainable Development

Source: Adapted from Tsalis, Malamateniou, Koulouriotis and Nikolaou, 2020

According to Boluk *et al.* (2019), these SDGs linked up with the success of other target and indicator-based frameworks, such as the Millennium Development Goals (MDGs). The inclusion of local communities in the SCs of wildlife tourism establishments, supports the sustainable development goals (SDG11, SDG12, SDG13 and SDG17) of the United Nations (UN) 2030 agenda for sustainable development (Bali Swain &

Yang-Wallentin, 2020). When wildlife tourism establishments support SDGs, it is progress towards the main objective of sustainable development, which is a higher quality of life for all people. Omisore (2018) is of the opinion that when it comes to sustainable development factors, the environmental matters in sub-Saharan Africa have not received much attention, even though the natural environment is the main focus in socioeconomic development. Therefore, governments and international organisations must understand the positive impact that the natural environment of sub-Saharan Africa has on economic and social changes and therefore, much more attention should be given to SDGs. With sustainability in mind, it is critical that sustainable tourism acquires a meaningful understanding of the environmental challenges in sub-Saharan Africa (Omisore, 2018).

1.2 Tourism supply chains

Supply chain management in the tourism environment is a challenging matter, not only does it directly impact the competitiveness of traditional performance measures, such as cost and quality, but also the range of stakeholders extends well outside traditional suppliers and customers (Anderson, Mossberg & Therkelsen, 2017). According to Van der Vost, Tromp and Van der Zee (2009), the concept of a last-mile SC processes is a contested idea. The concept of the last-mile process as a contested idea refers to the challenges and complexities involved in delivering goods and services to their final destination, often the end user or actions of the user. Especially with the rise of e-commerce and the demand for faster and more efficient delivery, it has become an increasingly important issue in logistics and SCM (Juhász & Bányai, 2018). The last-mile is considered one of the most critical and expensive parts of the SC. This is the transportation of products from a distribution centre or fulfilment centre to the customer's doorstep. Last-mile challenges vary by location, infrastructure, urbanisation and consumer preferences (Buldeo Rai, Verlinde & Macharis, 2019). SC sustainability is a term that combines several vague and uncertain concepts (Cleophas & Ehmke, 2014; Mitchell's NY, 2018; Perboli, Rosano, Saint-Guillain & Rizzo, 2018). The concept of supply chain sustainability has been extensively studied in relation to supply chain concerns such as product pricing, ordering processes, the profit of the SC members, and the performance of the SC (Martins & Pato, 2019; Gupta, Kusi-

Sarpong & Rezaei, 2020). However, community engagement is a recent offshoot and becoming increasingly widespread (Lim, Srai & Jin, 2017; Mazza, 2014). This concept has become more specific in that it considers the practices and actions required at the micro-level that contribute to or hinder the sustainability of the last-mile SC processes going beyond the purely economic aspects of development. It is more comprehensive in that it includes social and cultural aspects of how communities can benefit from the sustainability of last-mile SC processes (Mandal & Saravanan, 2019).

In last-mile SC processes the success of an organisation's SC depends on the availability of critical resources to other stakeholders. Organisations, therefore, need to continuously manage this dependency that is critical to their survival and growth (Morali & Searcy, 2013; Gandhi, Shaikh & Sheorey, 2017; Shahbaz *et al.*, 2018). According to Shinohara (2010), this social-environmental area of logistics and SCM is yet to be thoroughly researched. Various studies have been conducted to understand what a value chain is and how the related processes operate. The different interactions between the role players within a value chain are necessary to create value for all involved (Fung & Fung, 2014; Ruiz-Torres, Mahmoodi & Ayala-Cruz, 2012). According to Rylance, Snyman and Spenceley (2017), 'leakages' are frequent within a value chain. A leakage is seen as money spent on a SC but does not add direct value to the value chain. For example, many products are being bought from international suppliers and imported into the country. These products and/or services are being used in the tourism SC to satisfy the needs of the tourists visiting tourism destinations and local communities in a country. Why then do local, as well as international organisations, maintain their support of local communities? Rylance and Spenceley (2013) argue that the reason why some tourism organisations involve the local community in their SC was motivated by their business ethic and feel that it is the 'right thing to do' rather than a desire to see a return on investment (Liu, 2013; Minculete & Olar, 2014; Suh & Lee, 2018). Supply chain development in an organisation focuses on the ability or the competencies to deliver the desired SC outcomes. The management in the tourism SC operators should try to source as many local suppliers as possible (Krishnapillai, Hamid & Rashid, 2011; Corominas, 2013; Eksoz, Mansouri & Bourlakis, 2014). When local suppliers cater for the needs of the tourists, the money spent locally will not 'leak out' of the value chain. Therefore, it will remain within the tourism SC, which will

increase the tourism value (A tourism value chain is defined as a system that describes how private companies, working with governments and civil society, acquire or access resources as inputs, add value through various processes (planning, development, financing, marketing, distribution, pricing, positioning, etc.), and sell the resulting products to visitors. A value chain describes any activity required to meet the requirements of a tourist stay or visit to a tourist destination (Gutierrez, (2018)) chain, and ultimately help to stimulate the country's economy (Singh & Acharya, 2014; Abbasi, 2017; Bowersox *et al.*, 2017). Over the past 30 years, the world's SC has been affected by large-scale catastrophic events, such as; (i) September 11 terrorist attacks in 2001, (ii) severe respiratory syndrome (SARS) in 2003, (iii) the global financial crisis in 2008 and 2009, (iv) COVID-19 in 2019 (Nsanzya, 2021) and (v) Russia-Ukraine war (Aljazeera News, 2022). Catastrophic events can influence SCs globally, including tourism SCs. Therefore, this study investigated the probability of including fresh produce from community farmers in the last-mile distribution activities of luxury wildlife tourism destinations. The reason was to determine the probability of creating a possible sustainable SC even though unforeseen SC disruptions may occur. A luxury wildlife tourism company, namely &Beyond, was the primary focus of the research. The reason for selecting &Beyond was that the company has 29 camps and lodges that are in spectacular locations in sub-Saharan Africa. The environment of the 29 camps and lodges is totally different from each other. Three &Beyond lodges were selected; (i) Klein's Camp in the Serengeti, (ii) Mnemba Island in Zanzibar and (iii) Forest Lodge in Phinda Private Game Reserve in South Africa. The reason for selecting only these three, was that each of these are located in a unique and different environment, which meant the local communities would also be unique and different. Not only are the communities different, the types of fresh produce these communities are able to produce, are also different. Thus, supporting the objective of the research.

1.3 Rationale and motivation of the study

“Tourists pay considerable amounts to be surrounded by 'wilderness' resulting in lodges that are predominantly positioned within protected areas, neighbouring rural environments with low-density populations and few private businesses” (Rylance *et al.*, 2017: 141). According to Statistics South Africa (2020), there were 3 260 195

international leisure tourists arriving in South Africa in 2018 and in 2019 there were 3 179 862. This is a good indication that there were many reasons why international leisure tourists visited South Africa between 2018 and 2019 (Statistics South Africa (2021)). As a result of COVID-19, by the end of December 2020, international leisure tourists to South Africa had declined to a very low number of 601 506, which indicated an alarming decrease of 81.08% between 2019 and 2020. According to the latest information of Statistics South Africa (2021), the number of international leisure tourists arriving in South Africa until the end of June 2020 was 425 379, a decline of 17.95% compared to 2018. Even though the numbers do not show a positive increase of leisure tourists arriving in South Africa, according to the World Travel & Tourism Council's (WTTC, 2020) economic report of 2021, the tourism sector contributed 6.9% (R363.2 billion) to the Gross Domestic Product (GDP) in 2019, and 3.7% (R182.5 billion) in 2020. In Tanzania, where &Beyond contributes to the GDP, in 2019 the Tanzanian tourism sector contributed 10.3% (\$8.7 billion) to the GDP, and in 2020, 5.3% (3.5 billion) (World Data Atlas, 2022). It is evident from the above information that both the South African and the Tanzanian tourism industry are under pressure to continue enhancing the experiences of tourists at every tourism establishment, and simultaneously, contributing to addressing South Africa's and Tanzania's triple challenge of poverty, inequality and unemployment. Luxury tourism destination companies, such as &Beyond, are under significant pressure because the clients visiting luxury tourism destinations in sub-Saharan Africa expect world-class accommodation and service.

The SCs of luxury wildlife tourism destinations, such as &Beyond, have unique and complicated SCs, as seen from the previous information. This research aimed to develop a possible inclusion instrument, which would enable &Beyond to determine the probability of including fresh produce from local community farmers in the last-mile SC processes. The purpose of assessing the possibility of including fresh produce from local farmers is to contribute to community development and the possible creation of a sustainable fresh produce SC. &Beyond can play an essential role in developing and assembling knowledge regarding a sustainable fresh produce supply to the company to achieve a competitive advantage in their fresh produce SC (Sigala *et al.*, 2012; Biao *et al.*, 2014; Zailani *et al.*, 2014). The SC of fresh produce, for the &Beyond

lodges is complex. Also, the tourism environment's inherent uncertainty will contribute to the complexity of restructuring the fresh produce SC (Abbasi, 2017; Van der Vorst *et al.*, 2009).

The concerns of SC sustainability has been extensively researched; however, community engagement is a more recent derivation which is broad (Koberg & Longoni, 2019). However, the concept of SC sustainability is more focused. It looks at the practices and actions needed at the micro-level that contribute to or hinder the sustainability of last-mile SC processes (Zheng & Fang, 2014; Zhang, *et al.*, 2014). The focus has moved beyond the economic dimensions of development to encompass the social and cultural aspects of how communities can benefit from the sustainability of a last-mile SC processes. The objective of the research aimed to first, establish the current SC distribution methods of the three above-mentioned &Beyond lodges. Second, to determine the current procurement pathways and decision-making practices in the strategically selected fresh produce SCs. Lastly, to assess latent, new, and present possibilities of the inclusion of local community farmers in the last-mile SC processes of selected &Beyond lodges.

&Beyond is dependent upon other companies and suppliers to harness critical resources; constantly managing this dependency is crucial for their survival and growth. This is the reason why upstream and downstream collaboration in a SC and the relationships amongst SC partners is an essential strategic mechanism for sustainable supply chain management (SSCM). This is to reduce the external uncertainty of companies and increase the bottom-line results (Ren & Bia, 2014; Koberg & Longoni, 2019). It is imperative &Beyond understands that a change to the SC must be accepted and incorporated in the organisation's processes and procedures. After completion of these, the change to the SC can be seen as an innovation in the last-mile SC processes of luxury wildlife tourism destinations. Today, many organisations form collaborations to establish innovation processes in the supply chain environment (SCE) (Raj *et al.*, 2018). The collaboration aims to add value for the organisation's customers, and internally increase the profit in the shortest possible period. Collaboration partners traditionally have a long-term relationship with one

another, which are first and foremost built on trust (Schermer, 2015; Da Silva, Brandão & Sousa, 2019).

The research aimed to design and develop a framework to maximise local community contributions in the last-mile SC processes of luxury wildlife tourism destinations. It would be more constructive knowledge when shared in cross-functional teams driven to successfully develop a last-mile fresh produce SC processes for wildlife tourism destinations. Suppose the innovation vision and process are mapped out, which will in that case establish a sense of innovative accomplishments. This process can contribute to the success of restructuring the last-mile fresh produce SC processes for wildlife tourism destinations (Mani & Gunasekaran, 2018). When &Beyond's internal departments share and communicate information, it can positively impact the design and development process, which must include the people who participated in the operational process. The reason being, when changes are necessary, the people involved in the development process will have adequate knowledge on how to implement changes so that the outcome will be successful (Wowak, Craighead, Ketchen & Hult, 2013; Raj *et al.*, 2018). Various business opportunities exist within the local community, and if &Beyond focused on these, it could become financially feasible for the local community and for &Beyond. Unfortunately, there seemed to be a misconception and a complete misunderstanding of the business operations of the local community by some tourism organisations. However, some local entrepreneurs do understand what business is. They cannot fully comply with some of the business requirements, for example, not producing a VAT registration or tax number, certificates for health and safety, and insurance and/or electrical purposes. According to Raj *et al.* (2018), local farmers face challenges and find it difficult to become active product suppliers to a luxury wildlife tourism destination SC. Another reason why the tourism organisations cannot purchase products from the local community, is the inability of the local suppliers to produce an invoice, or do not have a bank account, making payment difficult for the tourism organisations because electronic payments are handled by the finance department, which is sometimes situated elsewhere (Rylance *et al.*, 2017). These are issues that will need to be overcome when luxury wildlife tourism destinations consider including local community farmers in their last-mile SC processes.

1.4 Research problem, research question and research aims and objectives

1.4.1 Research problem

Luxury wildlife tourism destinations have not been a sector traditionally associated with SC sustainability in the same way as the transport sector, energy sector and the manufacturing industries (Bodosca & Streimikiene, 2015; Mani & Gunasekaran, 2018). Integrating the concept of SC transformation with the core business functions of luxury wildlife tourism destinations will be a complex process. Management of luxury wildlife tourism destinations must understand the current SC processes before emerging areas of sustainability can be addressed. These sustainable initiatives can establish new market links and expand the SCs' productivity while supporting the local community and creating job opportunities (Jing, Chakpitak, Goldsmith, Sureephong & Kunarucks, 2013; Raj *et al.*, 2018).

Supply chain management practices in many pioneering logistics companies are concerned with the shortening of supply lead times, reducing inventory levels, creating value, reducing transport costs and increasing profitability. Hence, many organisations in the SCE are reviewing their SCM policies, procedures, and systems to address problem areas previously mentioned (Biao *et al.*, 2014; Arampantzi & Minis, 2017). Just-in-time deliveries and the shortening of delivery times are many areas of a companies' SC. A competitive advantage can be obtained by adequately re-examining companies' SCM practices (Gyula, 2013; Mani & Gunasekaran, 2018).

To overcome these SCM problems, the management of luxury wildlife tourism destinations must work closely with the manufacturers, suppliers and distributors. The entire SC of a luxury wildlife tourism destination must be analysed to determine where changes are possible. Alternatively, outsourcing some products to the local community would be a more feasible option (Varzandeh, Farahbod & Zhu, 2014; Cheraghalipour, Paydar & Hajiaghahi-Keshteli, 2019). The focal principle for re-examining and redesigning the SCM objectives of luxury wildlife tourism destinations is to maximise the SC efficiency, consolidating deliveries to enhance the efficiency of the supply of products, and increase profit for the organisation (Biao *et al.*, 2014). Regarding reducing the SC lead-time, the question of whether the inclusion of the local

communities in the SC of luxury wildlife tourism destinations will shorten the SC lead-time is questionable.

Therefore, to make full use of the efficiency of the SC within the tourism environment, will be a complex undertaking, seeing that the well-being of the tourists and the environment is the primary objective of the luxury wildlife tourism industry. For the tourists, the efficiency of the supply chain would relate to the availability of specific products when and where needed, without compromising quality (Car, Pilepic & Simunic, 2014). To satisfy the needs of the tourists creates a tug-of-war scenario within the tourism organisations. On one side the tourism organisations strive to maximise profit and on the other hand, the well-being of the client is considered the ultimate objective. This cost efficiency versus customer satisfaction creates a challenge in tourism organisations (Rusko *et al.*, 2013; Cheraghalipour *et al.*, 2019).

The SCE for organisations is very competitive and complex. Environmental friendliness and awareness are becoming a critical and competitive factor for many organisations' SCs today. Therefore, the aim of the innovation process for an organisation must bring about positive outcomes in an unstable SCE (Rusko *et al.*, 2013). The concept of 'supply and demand' is one of the fundamental areas in the SC processes that the local community does not understand and where the luxury wildlife tourism destinations are experiencing many problems. In addition, the luxury wildlife tourism organisations sometimes do not understand the shortcomings and difficulties the local communities are experiencing (Gandhi *et al.*, 2017; Font *et al.*, 2013). The main problem is the inconsistency the luxury wildlife tourism destinations experience with the local community in terms of product deliveries. These problems, in general, are the inability of the local suppliers to deliver because of issues in the following areas: inconsistent quality products, unreliable deliveries, not being able to supply the required demand, absence of communication, lack of infrastructure, financial constraints to produce products, lack of skills to create products and unsuitable agriculture land available to produce products (Rylance *et al.*, 2017). These are some of the problems identified as to why the involvement of a local community in the SCs of fresh produce for the luxury wildlife tourism destinations has not been successful (Rylance *et al.*, 2017).

The re-examining and re-designing process for a company's SCM objectives can be a daunting task. The reason is, the SCE is ever-changing because there are many uncontrollable elements, such as political, economic, and environmental factors that can directly influence SCs and SC processes (Corominas, 2013; Elgazzar, Tipi & Jones, 2019). Therefore, when a luxury wildlife tourism destination re-examines and re-designs its SC and SC processes, the organisation should disentangle the entire SC to gain an understanding of all the procedures and responsibilities of all the parties, internal, as well as external, within the SC (Lavastre *et al.*, 2014; Varzandeh *et al.*, 2014). It is essential that the unravelling and re-designing processes do not consume a lot of time. As previously mentioned, a considerable number of factors can change, which can influence the success of the re-examining and re-designing of SC processes (Hoberg & Thonemann, 2014; Elgazzar *et al.*, 2019).

This research aimed to develop a framework, which would enable luxury wildlife tourism destinations to adapt or change their current fresh produce SC. Specific attention was given to the last mile logistics distribution processes of three different &Beyond lodges. The reason being, as mentioned in Section 1.2, when a possibility arises that could disrupt the SC of fresh produce for some &Beyond lodges, the probability may exist to make use of a sustainable fresh produce SC.

1.4.2 Research question

What is the probability of developing a possibility instrument that can be used to determine the usage probability of local community fresh produce and to include the fresh produce in the last-mile SC processes for luxury wildlife tourism destinations?

1.4.3 Research aims and objectives

The research aimed to develop a framework to maximise the contribution of fresh produce from the local community in the last-mile SC processes of luxury wildlife tourism destinations. To obtain this, the following objectives were identified:

1. To investigate the end-to-end fresh produce SC for selected &Beyond lodges
2. To determine current procurement pathways and associated decision-making practices in the strategically selected fresh produce SCs
3. To assess latent, new and current possibilities in the potential contribution of neighbouring communities to &Beyond lodges in fresh produce SC needs
4. To obtain expert opinions of the complexities and challenges of including fresh produce from local communities in last-mile SC processes of luxury wildlife tourism destinations
5. To develop a framework for the possibility of including fresh produce from local communities in the SC processes of luxury wildlife tourism destinations

The objectives mentioned above led to the following research question. What possibility instrument can be developed to incorporate neighbouring communities of the selected &Beyond lodges, to maximise their contribution of fresh produce in the last-mile SC processes of luxury wildlife tourism destinations?

1. What is the nature of the SC of fresh produce in the selected &Beyond lodges?
2. What are the current procurement pathways of the fresh produce SC to the selected lodges?
3. What are the current decision-making practices performed by the key decision-makers?
4. What are the latent, new and current possibilities for neighbouring communities to contribute fresh produce in the last-mile SC processes of luxury wildlife tourism destinations?
5. How can the identified challenges and opportunities of the neighbouring communities be overcome to facilitate the contribution of fresh produce in the last-mile SC processes of luxury wildlife tourism destinations?
6. What design elements are required to develop a framework for maximising the community contribution to the last-mile SC processes of luxury wildlife tourism destinations?

This study researched the possibilities of including fresh produce from local community farmers in the last-mile SC process activities of three selected &Beyond lodges, one in South Africa, as well as two in Tanzania.

1.5 Significance of the research

In South Africa, the Department of Tourism introduced the National Tourism Sector Strategy (NTSS) in 2011. The NTSS was revised in 2017 and five essential pillars were identified; (i) effective marketing, (ii) facilitating ease of access, (iii) the visitor experience, (iv) destination management, and (v) broad-based benefits. These pillars would provide a framework for the actions of the NTSS and support its vision (South African Government, 2017). According to Yanes, Zielinski, Diaz Cano and Kim (2019), in Colombia, tourism policies were written to outline the processes needed for the development of a socially inclusive and ecologically sound tourism environment. However, the application processes neglected community-based tourism. In 1995, the European Union (EU) legitimised and normalised their intervention in tourism. This process assisted the different member states to systematise tourism in nearby European organisations. This was necessary to institutionalise the tourism policy. The EU further refined the tourism policy by acknowledging the rights, freedom, and principles of the different member states through the Lisbon Treaty (Estol, Camilleri & Font, 2018). This treaty was signed at the European Council of Lisbon on 13 December 2007 (Pavy, 2021). The purpose of governmental guidelines is to establish connections in the local communities so that they can participate in the financial benefits of the tourism environment. This will provide local communities with the opportunity of becoming directly or indirectly part of the organisations' product SC if the supplier possesses or has access to a vehicle to supply the lodge directly (Mathew & Sreejesh, 2017). Indirectly, if the supplier does not own or have access to a vehicle for deliveries; it is then the responsibility of the lodge to collect or make alternative arrangements for the collection of the products from the suppliers (Rylance *et al.*, 2017).

Note that the research focus area is to identify the potential of including a local community in the last-mile SC processes of luxury wildlife tourism establishments. No framework has been found to maximise the opportunities of incorporating fresh

produce from local community farmers in the last-mile SC processes and activities of luxury wildlife tourism destinations. This, in turn, will allow for a greater likelihood of success in achieving the NTSS strategies of the South African Department of Tourism. The goal is to achieve sustainability through cooperative partnerships, growth and development, job creation, more efficient operations, improved communication and dissemination of information. In short, the study advances the realisation of the Ministry of Tourism's vision (South Africa) and the Tanzanian tourism industry by 2026.

1.6 Chapter breakdown

Chapter 1 – Introduction

This chapter discussed the importance of SCM, and the innovation(s) companies bring to their SCs to satisfy their customers. The research idea was introduced, and the motivation for the study was formulated and explained. It is essential to understand that an interruption in supply resulting from something, such as COVID-19, can have a devastating effect on the business functions of a luxury wildlife destination. The SC outcomes of luxury wildlife destinations are dependent on other parties to harness critical resources. Therefore, the luxury wildlife destination must continuously manage this dependency, which is essential for survival and growth.

Chapter 2 – Literature review

This chapter focused on the probability of including fresh produce from community farmers directly in the last-mile SC processes of luxury wildlife tourism destinations. The literature review provides an overview of existing studies in this field of research internationally, in Africa as well as regionally. These studies allow the current research to be embedded in existing themes, theories and debates in the field of research. From the research, it became evident that a local community could be motivated to supply locally produced fresh produce to a luxury wildlife tourism destination. Likewise, the objectives for providing and receiving locally grown fresh produce from both the local community and the luxury wildlife tourism destination must be focused on ensuring customer satisfaction and creating a successful partnership. To correctly manage an uninterrupted flow of fresh produce can be a complicated and laborious operation. Key aspects and concepts regarding the inclusion of fresh produce from local community

farmers in the last-mile SC process activities of luxury wildlife tourism destinations are deliberated. Lastly, a theoretical framework was used to gain a theoretical perspective on which the research was based.

Chapter 3 – Research design and research methodology

In Chapter 3, multiple exploratory and descriptive case studies were used to determine the methods of data analysis based on a research philosophy. The research method was the procedure the author followed to collect and analyse data. A qualitative strategy was used to identify how people perceive and interpret their experiences in their natural settings and provided answers to the research questions. During the research process, the combination of a qualitative and a quantitative research approach was viewed as equal, although separate, because different questions were answered to similar and related topics. Therefore, a mixed method research approach was used in this study. Different research questions were used for the luxury tourism destinations and the transport companies because they enabled a diverse collection range. The research aimed to determine whether a luxury wildlife tourism destination could include fresh produce from a local community farmer in their last-mile SC processes. By using primary and secondary data, the possibilities could be determined based on the sources of information in the community.

Chapter 4 – Supply chains of luxury wildlife tourism destinations

The aim of Chapter 4 was to determine the nature of the present SCs of fresh produce to the selected &Beyond lodges. Second, the current procurement pathways for various products, including fresh produce, had to be determined for the selected &Beyond lodges. Third, to determine whether local community farmers were producing fresh produce in their communities adjacent to the selected &Beyond lodges. Last, to identify the types of fresh produce these local community farmers were growing within the local communities. Before the analysis could be done, the points mentioned earlier (Sections 1.4.1 and 1.4.3) had to be determined. Once the context was known, a holistic view of the supply and demand characteristics of the fresh produce from the local community farmers and the selected &Beyond lodges could be established.

Chapter 5 – Research through the use of an adapted Delphi technique

In this chapter, an adapted Delphi technique was used to obtain information from experts within the hospitality and transport industries. This information was used to construct context-specific questionnaires for two different groups; (i) Group 1 experts from 21 luxury wildlife tourism destinations, and (ii) Group 2 experts from 30 transportation organisations. In Group 1, using three rounds of questionnaires, information from the experts of luxury wildlife tourism destinations was obtained with regards to; (i) the important characteristics luxury wildlife tourism destinations require when procuring fresh produce from retail companies or green grocers, (ii) the characteristics of luxury wildlife tourism destinations would require when procuring fresh produce from community farmers, and (iii) the opinions of luxury wildlife tourism destinations with regards to the inclusion of fresh produce from local communities for guests and employee meals. In Group 2, using three rounds of questionnaires, information from a panel of experts from transport organisations was obtained with regards to; (i) the important factors transport organisations deemed necessary when collecting products at a company, (ii) the important factors transport organisations deemed necessary when collecting products from a community farmer, and (iii) the opinions of transport organisations with regards to the inclusion of fresh produce from local communities with existing loads for luxury wildlife tourism destinations. Once the information was analysed, a framework was constructed. The framework consisted of statistical indicators which generated a probability coefficient used to determine if it would be possible for a community farmer to supply fresh produce to a luxury wildlife tourism destination. The information collected from the luxury tourism destinations during the three rounds of questionnaires was used in the development of the possibility instrument to complete the research.

Chapter 6 – Synthesis, recommendations and conclusions

In the final chapter, the results of the analyses in Chapters 4 and 5 are synthesised in Chapter 6. The results are related to the fundamental theories, research method and literature review. This concluding chapter ensures that the research aim, and objectives have been reached and acknowledged, and the research questions answered. The significance and importance of the study are highlighted. Recommendations are made in this final chapter for future research and the possible identification of research areas in environmental management.

1.7 Ethics

To proceed with this research, the CAES ethics process, as prescribed by UNISA (Ref #: 2017/CAES/057) was followed regarding the protection of information and the engagement of human resources (Appendix A).

1.8 Conclusion

In conclusion, inter-organisational collaboration of the inclusion of fresh produce from local community farmers in the last-mile SC processes and activities of luxury wildlife tourism destinations should assist the author with opportunities to extract internal knowledge. The boundaries of luxury wildlife tourism destinations must be exceeded to include external resources (Mani & Gunasekaran, 2018; Tham, Ogulin, Selen & Sharma, 2015). The last mile logistic distribution system of fresh produce for luxury wildlife tourism destinations must be transparent. Luxury wildlife tourism destinations must understand the importance of sharing expertise and experience. Still, some partner organisations choose to be secretive about their strengths and weaknesses, resulting in unforeseen challenges in the last-mile SC processes of consumer goods for luxury wildlife tourism destinations process (Skippari *et al.*, 2017; Schermer, 2015).

The author inevitably faced ethnic and topographical differences, such as the physical location of the &Beyond lodges. Therefore, the success of the last-mile SC processes for fresh produce from local farmers to luxury wildlife tourism destinations depends on the exchange and communication of critical and relevant information during the design phase of the process for the last-mile SC processes. The author needed to make critical decisions in a timely manner and had to work logically and collaboratively without unnecessary interruptions.

Chapter 2: Literature review

2.1 Introduction

The purpose of this chapter is to provide a distinct context of last-mile SC processes, local communities, and the procurement function of luxury wildlife tourism destinations. The purpose is to create an understanding of the possible role local community farmers can play in the procurement function of luxury wildlife tourism destinations.

As mentioned in Chapter 1 (Section 1.4), fast-moving consumer goods' (FMCG) SCs of luxury wildlife tourism destinations consist of a variety of products. Therefore, the main aim for this research was to determine whether a SC factor, such as *the inclusion of a local community in the last mile logistics distribution systems of luxury wildlife tourism destinations*, will be able to influence the outcome of the current SC factor. In many countries in the world, a primary benefactor to the economic growth is the tourism industry (Boesen, Sundbo & Sundbo, 2017; Sanches-Pereira, Onguglo, Pacini, Gómez, Coelho & Muwang, 2017). In 2020, due to the impact of the COVID-19 pandemic, the travel and tourism industry's contribution to the gross domestic product (GDP) dropped to 3.7% (R11,7 billion). Despite the severe economic recession in 2020, and the effects of the COVID-19 pandemic, South Africa's and the global economy are slowly recovering (Department of Tourism, 2020; Statistics South Africa, 2021). To determine whether a working relationship between local communities supplying fresh produce to a luxury wildlife tourism destination, is difficult, as there is not much information available to support such a collaboration. However, Dodds, Ali and Galaski (2016) state that there is sufficient research focused on local communities and their needs, and how tourism is valued as a tool for community conservation and development. Tourism facilities can also be an additional source of income in areas where tourism development impact daily lives. According to Dodds *et al.* (2016), when local communities engage in tourism, the effort is known as community-based tourism (CBT) (Ndivo & Cantoni, 2015; Bányai, 2018). Tourism, as noted above, can disturb the livelihood of a local community. Community-based tourism is, therefore, a technique that can help local communities develop opportunities to improve living conditions over the long term. The goal of CBT is sustainable community development. In that sense, it can be considered an alternative form of tourism.

From the tourism research, an assumption was made that the mind-set of a local community must be positive towards supplying locally produced fresh produce to a luxury wildlife tourism destination. Likewise, the objectives for providing and receiving locally produced fresh produce from both the local community and the luxury wildlife tourism destination must focus on ensuring customer satisfaction and creating a successful partnership (Boesen *et al.*, 2017). Collaboration can sometimes be problematic because the viewpoints, interests, and goals of the local community and the luxury wildlife tourism destination are different (McCamley & Gilmore, 2017).

Both a luxury tourism destination and a local community can benefit by the latter providing fresh produce and their members being employed at the luxury tourism lodge destination. Tourists will be able to taste and consume locally fresh produce at mealtimes. They have the opportunity to visit the local community farmers to experience the environment where these community farmers function (King & Dinkoksung, 2014). The taste-experience will relate personal, social, and the cultural background of the tourists visiting a luxury tourism destination (Anderson *et al.*, 2017). Anderson *et al.* (2017) state that food production and hospitality have been researched thoroughly by numerous scholars. However, only recently has 'food tourism', the study of tourism and food production, gained prominence. Through tourism, food tourism must be careful not to see local communities as *tourism for the poor*, but humanitarian initiatives focused on the local communities, make tourists aware of their obligations to support the local communities.

The purpose of this chapter is to provide a comprehensive overview of the complexities and challenges a luxury tourism destination will have to address when it considers the inclusion of a local community in its last-mile SC processes of fresh produce. The information in the chapter will be presented on a characteristic-by-characteristic basis. The characteristics described in this chapter were selected according to the current and future functionality of the last-mile SC processes of fresh produce for luxury wildlife tourism destinations.

2.2 Conceptualising the framework of including fresh produce from local communities in the last-mile supply chain processes of luxury wildlife tourism destinations

This research addressed the possibility of integrating fresh produce from local community farmers in the last-mile SC processes of luxury wildlife tourism destinations. According to Dodds *et al.* (2016), local community engagement is referred to as community-based tourism (CBT) (Ndivo & Cantoni, 2015; Bányai, 2018). Tourism can disrupt community life. CBT is, therefore, a technique that helps local communities develop opportunities to improve their living conditions in the long term. The goal of CBT is sustainable community development. In that sense, it can be said to be an alternative form of tourism. For this reason, the research focus transpired into the following focus areas (Figure 2.1). The first focus area is the investigation of local communities and their link with luxury wildlife tourism. This will determine whether possibilities do exist for local communities to form a working relationship with a luxury wildlife tourism destination. Such a relationship can be beneficial for the local community in terms of job creation, financially contributing to the local economy, and a possible decrease in communal poverty. The second focus area investigates the SC of fresh produce for luxury wildlife tourism destinations, with specific attention given to the last-mile SC activities. According to Ranieri, Digiesi, Silvestri and Roccotelli (2018), last-mile SC processes is the least efficient stage of the SC but comprises up to 28% of the total delivery cost. Morali and Searcy (2013) argued that luxury wildlife tourism destinations are dependent on other parties to harness critical resources. The third area was to investigate the SC of fresh produce of luxury wildlife tourism destinations, giving attention to green SCs of fresh produce. These three focus areas led to the sustainable supply chain management (SSCMT) theory. Through SSCM initiatives, the possibilities were investigated to determine whether a local community can benefit from SSCM initiatives of luxury wildlife tourism destinations. The last focus area is the purchasing function which led to the expectation confirmation theory (ECT) of investigating a possible working relationship between local community farmers and luxury wildlife tourism destinations adjacent to the local communities.

The conceptual framework (Figure 2.1) was created to provide the structure of correlation in the literature review. The focus areas mentioned above, which provide the foundation for the research on the inclusion of fresh produce from local community farmers in the last-mile SC processes of luxury wildlife tourism destinations, will be methodically discussed in the paragraphs below.

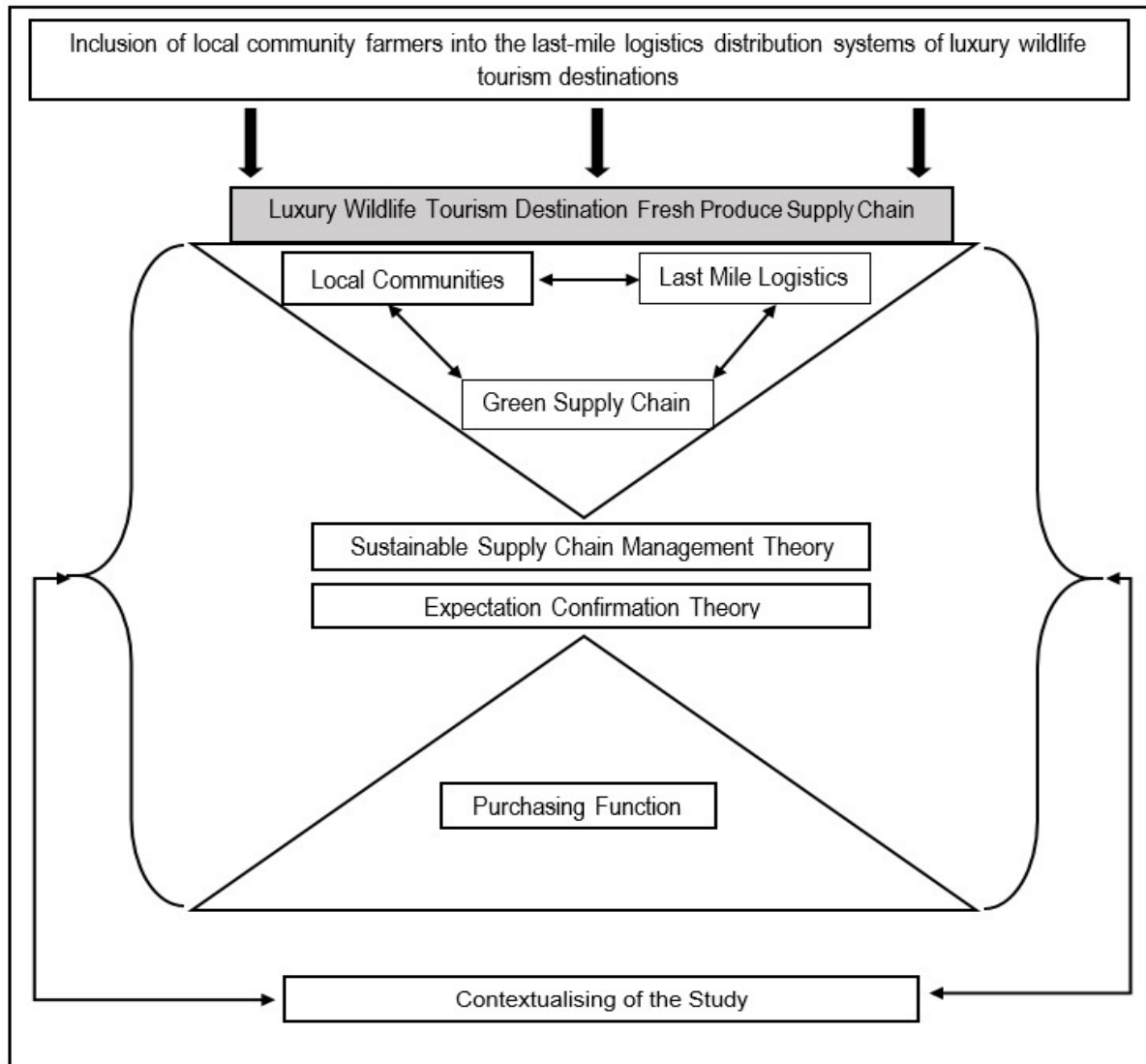


Figure 2.1 Conceptual framework of the literature review

Source: Developed by the author, 2021

A formal working relationship between the local community to supply locally grown fresh produce and a luxury tourism destination will benefit both parties (Thomas, 2014; Sanches-Pereira *et al.*, 2017). However, commitment from the national government and the local government departments, is sometimes the most critical reason for failure. According to Gordon and Harris (2015), when the national government

promotes the inclusion of local fresh produce in the day-to-day operations of luxury tourism destinations, this initiative can then be viewed as a significant contributor to enhancing tourism linkages.

The tourism linkages in a country's tourism sector have a comparative advantage over other economic sectors of the country. The benefit relates to the spending effect tourists have across the local economy. When tourists visit a luxury tourism destination, there is an increase in the demand for transport, accommodation, telecommunications, and consumables. Therefore, the sourcing of locally produced fresh produce can be viewed as a critical economic contributor to the micro-economic environment (Rylance & Spenceley, 2017; Sanches-Pereira *et al.*, 2017). Głabiński and Duda (2017) noted that the development of tourism linkages can have a positive impact on aspects, such as; (i) economic – improving the communities' quality of life; (ii) socio-cultural – associated with establishing a working relationship between a luxury tourism destination and a local community, and (iii) infrastructure-service – improving infrastructure and quality of services offered to a local community. It was established from the research that generally, local communities are in favour of tourism development. Although, there were factors of particular community members that contradicted the public perception of a local community (Thomas, 2014; Othman, Latip & Ariffin, 2019). These factors that related to the individual community members were; (i) how long they had been living in the community and their place of birth, (ii) their sense of belonging in the local community, (iii) their strength of commitment to the local community, and (iv) their attitude to the type of commitment the luxury tourism destination wanted to establish, either agricultural or socio-cultural (locally manufactured gifts or craft). Głabiński *et al.* (2017) also stated that tourism usually evolves in touristically desirable areas. The focus is then primarily on the development of tourism and the needs of local communities adjacent to a luxury tourism destination.

2.3 Relevant and appropriate literature on similar studies and methods

Similar research, and research that made use of the same methods as in this study will now be discussed. According to Koskey, Sondergeld, Stewartnd Pugh (2018), Sam Houston State University researchers proposed the instrument development and

constructed validation (IDCV) process as a mixed-methods framework. The IDCV process is intended to develop validating measures for a transformative experience questionnaire (TEQ). TEQ was used to determine student engagement with the content they were learning. Ten phases concerning the qualitative and quantitative methods in instrument construction validation were formulated. Data were collected on what it means to engage in transformative experiences using interviews, observations, work samples, and context-specific assessment tools. IDCV employs mixed method data integration techniques, such as data transformation, integration, correlation, integration display and flattening. By applying the Rasch model, which was used from 1960 to 1980, and incorporating the IDCV process into the model, through a cognitive aspect of survey methodology, the strategy sought to determine whether learners chose to or spontaneously learned, even when not required.

In 2021, research focusing on executive functioning (EF) skills was conducted on 106 primary school teachers in Ireland. According to Keenan, O'Sullivan and Downes (2021), EF skills are essential for learners as they help them meet their academic and social needs. EF skill development is very important in the early stages of a child's development. Because skills related to goal-directed global competence begin in early childhood and develop into adulthood, EF skills include inhibitory regulators (the ability to suppress impulsive reactions), and working and cognitive flexibility (the ability to adapt thoughts and actions to changing circumstances). These are the three important factors. A combination of qualitative and quantitative mixed methods was used to assess the teachers' comprehension of understanding EF domains and the ability to identify EF difficulties in learners. A survey found that 65% of teachers were familiar with the EF components of cognitive flexibility and inhibitory control. Quantitative and qualitative results identified the primary school teachers' perception of their EF competencies. According to Keenan *et al.* (2021), it will be important to examine this in more detail in future studies.

Over the past decade, the Dutch focus has shifted to a more patient-centric and value-based healthcare industry. According to Van der Willik, Meuleman, Prantl, Van Rijn, Bos, Van Ittersum, Bart, Hemmelde and Dekker (2019), patient-reported outcomes (PROs) are becoming increasingly important in healthcare due to change. PRO

measurements (PROMs) can quantify a variety of patient-related health concepts, such as B. Quality of life, functional status, and symptom burden. Willick *et al.* (2019), found that a poor health-related quality of life (HRQOL) contributed to increased physical and emotional disease-related symptoms in patients with advanced chronic kidney disease (CKD). His four-step mixed method research approach, used qualitative and quantitative research methods. The survey consisted of; (i) a systematic literature review, (ii) a questionnaire, (iii) interviews with CKD patients, and (iv) an online feedback panel from CKD patients. The aim of this study was to determine a valid CKD-specific symptom questionnaire that could be developed for the routine assessment of patients with advanced CKD. The score indicated how high a patient's dialysis symptom index (DSI) was. According to Willick *et al.* (2019), the validity of the symptom questionnaire content was sufficient, and the DSI results were highly reliable in developmental studies.

According to Firth, O'brien, Guo, Seymour, Richardson, Bridges, Hocaoglu, Grande, Dzingina, Higginson and Murtagh (2019), if the mortality rate in England and Wales continues, by 2040, an additional 160,000 people will require palliative care. Because of the aging population and restricted resources, specialist palliative care is facing severe challenges. Specialist palliative care services are required in private homes, hospitals, hospice inpatient establishments, outpatient, and day services. Several processes, interventions, and compositions of staff are required to determine how specialist palliative care should be delivered. The Department of Health and Social Care in the United Kingdom acknowledges that no formal models and methods exist to describe and separate the various models and processes required for specialist palliative care. A mixed method study comprising of; (i) semi-structured interviews, (ii) a two-round Delphi study, and (iii) structured interviews were used to identify the core components that characterise and differentiate the required models needed to provide specialist palliative care. The strengths of the research were the information and opinions provided by active professionals. The data were used to identify the critical criteria needed to characterise and differentiate these highly varied models of specialist palliative care. From the research, 20 measures have been identified to describe and separate the models of specialist palliative care, according to the

authors, which is a significant step towards accurate reporting and comparison in practice and research.

The above literature reviewed studies in which a mixed method approach was used. It also provides guidance on how to conduct research of this nature and the value that such research has for the respective disciplines. The first part of the literature review is completed by discussing studies that looked at research topics, designs, data collection, abstracts, and analysis techniques that conceptualised the study. The expectation confirmation theory (ECT) and the sustainable supply chain management theory (SSCMT) are both relevant in the research areas of SCs. The ECT has two focus areas; the first is the expectations a buyer has of the taste, usage, quality, and performance of a product, before it is bought. The second is the perceived performance the buyer experienced during and after the product was bought (Shiau, Huang & Shih, 2011). The SSCMT is focused on the distribution of products, transport costs, environment, optimal vehicle usage and safety. If these factors are not managed effectively, they can directly influence the business operations, profit margins and SC effectiveness (Al-Odeh & Smallwood, 2012).

2.4 Concepts fundamental to this study

The following aspects of last-mile SC processes, local community, and purchasing that are foundational to the research will now be elaborated:

2.4.1 Luxury wildlife destinations

Luxury wildlife destinations can be defined as natural destinations that feature luxury goods and services and are often exclusive, different, authentic and unique. Luxury wildlife destinations offer complete satisfaction and comfort to their guests through the highest quality and, in most cases, are able to meet their needs at high prices (Carrasco-Santos, Peña-Romero & Guerrero-Navarro, 2023).

2.4.2 Local community

According to the South African Department of Tourism, the definition for the local community is "[a] social group of any size whose members reside in a specific locality, share government and may have a common cultural and historic heritage/s" (Department of Tourism, 2018: 15). It can also refer to a group of individuals who interact within their immediate surroundings. A typical local community consists of business operators, public agency staff and residents, and their interactions. It can include sharing resources, information and support, as well as establishing commercial relationships between local businesses and consumers. (Department of Tourism, 2020). In Tanzania, IGI Global defines a local community as people from a similar culture and traditions, who inherited the land from their forefathers. These people stay together in Kebeles or villages, and they work the land and raise their cattle according to the methods and traditions as did their ancestors (IGI Global, 2022). In a local community, certain potentialities exist that can contribute to the social and economic well-being of members of the local community (Van der Schoor & Scholtens, 2015; Sgroi, Di Trapani, Testa & Tudisca, 2017). Success in CBT should be built upon a strong foundation of basic essential business principles, such as business skills, communication, and finance, which are vitally important considerations.

In the local community, there are dedicated community members who have committed to their growth and social upliftment. These community members, with the assistance of the luxury wildlife tourism destination, must educate and train fellow members in the local community (Dodds *et al.*, 2016). According to Rakoma and Schulze (2015); (i) situational factors (lack of money); (ii) institutional factors (location of the classes and content of the programmes); (iii) dispositional factors (internal beliefs and attitudes about the learners), and (iv) informational factors (poor access to information and guidance) were the problems preventing participation in the adult basic education and training (ABET) programmes. Therefore, without people to educate and train in a local community, the very aim of CBT for local community development will not be successful (Dodds *et al.*, 2016). People living in local communities are satisfying their needs for fruit, corn and vegetables by converting the natural landscapes into self-made orchards, cornfields, and vegetable gardens. By cultivating agricultural products, some community members are able to generate an income and create employment using their agricultural activities (Afrane & Adjei-Poku, 2016; Sgroi *et al.*,

2014). According to Zheng *et al.* (2017), within a local community, there are fresh produce suppliers who produce on a small scale, which are essential incubators of entrepreneurship in the FMCG, SCE. The reasons why a luxury wildlife tourism destination would buy from local suppliers are profit maximisation, job creation, and community improvements (Angilella & Mazzu, 2015). Lekhaya *et al.* (2017) agree that local fresh produce suppliers face various challenges to become part of a luxury wildlife tourism destination SC. These challenges are; (i) limited resources; (ii) poor quality control; (iii) lack of access to a marketing platform; (iv) limited credit access; (v) limited access to equipment; and (vi) farming materials. According to Farrington (2018), fresh produce suppliers across the globe have a slow growth rate in the agriculture sector because of the challenges mentioned above. Touboulic, Chicksand and Walker (2014) also stated that fresh produce suppliers in a local community find it difficult to meet the requirements of luxury wildlife tourism destinations. For this reason, luxury wildlife tourism destinations find it challenging to incorporate fresh produce suppliers in their SCs. According to Pooe and Mahlangu (2017), a working relationship between fresh produce suppliers and luxury wildlife tourism destinations can enhance the performance of the luxury wildlife tourism destinations' SC operations. When there is a working relationship with fresh produce suppliers, these people can gain industry experience. In contrast, the luxury wildlife tourism destinations can use the products or services provided by the fresh produce suppliers within a local community (Afrane & Adjei-Poku, 2016; Lekhaya *et al.*, 2017).

2.4.2.1 Link between local communities and luxury wildlife tourism destinations

Guests who visit luxury wildlife tourism destinations spend their money on a variety of crafts, including food and drink, transport, accommodation, and excursions, sometimes directly linked to a local community. This spend by tourists can be viewed as an additional source of income. This can be achieved if a local community is able to produce products and services, which tourists view as a unique culture, tradition and food ingredients (Rylance & Spenceley, 2017). When these factors are incorporated in the tourism environment, it has the ability to; (i) create an exceptional tourist experience for local and international visitors; (ii) assist with sustainable

development in the local community; (iii) contribute to agricultural diversification within the country; and (iv) facilitate in maintaining regional identities (Rylance *et al.*, 2017; Sanches-Pereira *et al.*, 2017). Long-term development can enhance the sustainable development of the local community. The reason is that food-demands in luxury wildlife tourism destinations accounts for approximately 30% of their expenditure (Saarinen & Rogerson, 2015). Given that there is always a high demand for fresh produce in luxury wildlife tourism destinations, fresh produce suppliers within a local community can meet a small fraction of the demand for fresh produce (Saarinen & Rogerson, 2015). This alliance between the local community and the luxury wildlife tourism destinations can become a critical link, where both parties can benefit economically (Thomas-Francois *et al.*, 2017). According to Thomas-Francois *et al.* (2017), agro-trade is a connection between a tourism destination and a local community that can facilitate the supply of local products to the tourism destination. The luxury tourism destinations will also be able to provide job opportunities for people living in the local community. This connection creates a forward and backward linkage.

A forward connection is local community-based, where the local community will be supplying the tourism destination with products that create job opportunities and alleviate economic pressure within the community. A backward connection is tourism destination-based, where the tourism destination benefits from products produced or manufactured in the local community (Robert, Frash, DiPietro & Smith, 2015). This connection can assist the tourism destination with savings on procurement costs and contribute to community development in the local community. Researchers have established that a link between the agricultural/rural environment and tourism has the ability to generate economic activities within the local community (Spenceley, Snyman & Rylance, 2019; Thomas-Francois *et al.*, 2017).

Research shows that food sources produced in local communities and available to tourists visiting a destination, are considered factors of tourism attraction (Boesen *et al.*, 2017). The intended purpose of including local providers in the SC of luxury tourism destinations is to create value for the guests. Fresh produce from the local community should not be seen as another product for the luxury tourism destination. It should be a formal service delivery process that must be managed from a management

perspective to create value and not just a normal functionalistic process (Thomas-Francois *et al.*, 2017; Spenceley *et al.*, 2019). The relationship between the local community and the luxury tourism destination, necessitates the establishment of a formal partnership, and an entrepreneurial network, which includes a commitment from both the local community, as well as the management of a luxury wildlife tourism destination. The success of collaboration or entrepreneurial networks must be reliant on passion, trust, and loyalty. If these factors are the focus areas, the partnership can become an economical and viable entrepreneurial network (Boesen *et al.*, 2017).

According to Gordon and Harris (2015), with a partnership, the tourism industry contributes directly and indirectly to the micro- and macro-economic environment of a country. Presently, the only contribution to the micro-economic environment is the costs associated with the reservation and payment for the accommodation and transport costs to the luxury wildlife tourism destination. The indirect contribution relates to the support services concerning the tourism destinations, such as locally manufactured crafts and indigenous foods, bought and consumed by the tourists (Gordon *et al.*, 2015; Mathew & Sreejesh, 2017). Not only can tourism contribute to economic growth, but it can also influence the social environment of residents in a particular area. The residents adjacent to a luxury wildlife tourism destination in some geographic regions, can benefit financially, by being employed and selling of locally manufactured crafts and indigenous foods, more than other residents not living near the luxury tourism destination (McCamley & Gilmore, 2017; Su, Wall, Wang & Jin, 2019).

When there is a demand for indigenous foods and other types of fresh produce by a luxury wildlife tourism destination, it is primarily satisfied by commercial producers. If local fresh produce farmers in the local community are able to supply the luxury wildlife tourism destination with some of the indigenous foods and various types of fresh produce they require, then the guests will have indigenous fresh produce and not commercially produced goods (Robert *et al.*, 2014; Su *et al.*, 2019). In addition, the tourism industry is indirectly responsible for stimulating the demand for agricultural products. Thus, by sourcing locally produced commodities, tourism will positively impact the micro- as well as the macro-business environment of the country where the

luxury wildlife tourism destination is situated (Sanches-Pereira *et al.*, 2017). According to Boesen *et al.* (2017), local food products that are planted and harvested in a specific environment, adjacent to a luxury tourism destination, will have a particular taste and texture. The tourists' perception when visiting luxury wildlife tourism destinations, is that local food is sometimes more nutritious, better tasting and naturally produced. The reason is those producers of fresh produce within the local community do not use pesticides or additives in their farming techniques. Therefore, the belief is that the fresh produce from the local community is environmentally friendly, as less energy is used in their farming methods (Thomas-Francois *et al.*, 2017; Su *et al.*, 2019).

2.4.2.2 Problems associated with service delivery within local communities

Small-scale farmers are primarily responsible for producing horticultural products in local communities. From the research, the only information available regarding the average size of the workable land for small-scale farmers in sub-Saharan countries is as follows; (i) Ethiopia, 0,78 hectares in 2012; (ii) Ghana, 1.57 hectares in 2013; (iii) Kenya, 0,53 hectares in 2005; (iv) Malawi, 0,47 hectares in 2011; (v) Niger, 2,91 hectares in 2011; (vi) Nigeria, 0,53 hectares in 2013; (vii) South Africa, 0,50 hectares in 2019, (viii) United Republic of Tanzania, 2,5 hectares in 2017; and (ix) Uganda, 0,97 hectares in 2012 (Food and Agriculture Organization of the United Nations, 2021). All the community farmers' families mainly consume the fresh produce, and the surplus is sometimes sold at regional markets (Sanches-Pereira *et al.*, 2017). In South Africa, according to Pienaar and Traub (2015), the workable land for small-scale farmers is 0,86 hectares. Sanches-Pereira *et al.* (2017) believe that small-scale farmers are disorganised, and their bargaining power is limited. Hence, fresh produce merchants buy all the fresh produce of the farmer for a low price. The fresh produce is sold later at regional markets for a much higher price, putting the small-scale farmers at a disadvantage (Dodds *et al.*, 2016).

The producers of fresh produce in local communities are also faced with environmental, as well as organisational problems. The environmental factors may vary, depending on where the fresh produce is grown. The local fresh produce suppliers have to overcome environmental factors, such as pests, extreme weather

conditions, e.g., droughts or excessive rains, and not enough suitable land for growing fresh products. According to Dodds *et al.* (2016), for a local community to participate actively with CBT projects and processes can be a daunting exercise. Quite a few times, a local community has had difficulties matching the theories and principles of the CBT projects with practice. Problems, such as; (i) lack of sufficient finances or a lack of funding; (ii) no direct connection with a luxury tourism destination, and (iii) a lack of knowledge and skills to continuously produce fresh produce, are some of the barriers a local community farmer has to overcome. The organisational factors the fresh produce suppliers have problems with, relate to poor planning and communication. Rylance *et al.* (2017) studied the constraints of fresh produce supplied by the small scale-farmers; according to the authors, the small-scale farmers could not supply fresh produce to 61% of the safari lodges in the Sabi Sands Game Reserve in South Africa (Rylance *et al.*, 2017). The high demand for fresh products from luxury wildlife tourism destinations makes it difficult for local fresh produce suppliers to satisfy that demand. The contributing organisational factors relating to the supply and demand of the constraints that producers of fresh produce may have, are the inability to market, store and distribute their products (Thomas-Francois *et al.*, 2017; Su *et al.*, 2019).

Fresh produce producers within a local community are essential participants in the agricultural environment. Nevertheless, these local producers are often confronted with financial constraints, high costs and insufficient production techniques, and low or non-existent power to negotiate when supplying their fresh produce (Dodds *et al.*, 2016; Budhiasa & Riana, 2019). Not only are the challenges, as mentioned earlier, problematic for the producers of fresh produce, but they also have difficulties when it comes to satisfying the demands required by the luxury wildlife tourism destinations (Thomas-Francois *et al.*, 2017). Big food corporations can deliver the demands required by the luxury wildlife tourism destinations, making it difficult for the small fresh produce producers in a local community to compete successfully in FMCG, SCs of luxury wildlife tourism destinations (Thomas-Francois *et al.*, 2017; Budhiasa & Riana, 2019). According to Boesen *et al.* (2017), the orders of the worth framework have been used by various researchers to analyse the collaboration practices between fresh produce suppliers and organisations in SCs. By analysing the SC networks and

applying the orders of the worth framework, researchers identified particular problem areas within the fresh produce supply networks. King and Dinkoksung (2014), state that when a working relationship exists between a luxury wildlife tourism destination and a local community, moral difficulties can come into view concerning the distribution of benefits within a local community – who acts, who gains, and who loses? According to King and Dinkoksung (2014); Budhiasa and Riana (2019), limited studies exist that focus on the equal distribution of wealth within local communities. These problem areas could assist in explaining why some SC collaborations are successful and others are failures.

According to Sanches-Pereira *et al.* (2017), a problem for a local community is the growing number of tourists visiting the luxury wildlife tourism destinations, which increases the demand for many different products, including fresh produce. When fresh produce farmers from a local community cannot satisfy the need for luxury wildlife tourism, they have no other option than to source from alternative suppliers. These alternative suppliers may even be international suppliers (Głabiński *et al.*, 2017). By importing, not only are the luxury wildlife tourism destinations diminishing the sustainability of the farmers within a local community, but they are also exhausting foreign exchange earnings. An increase in international tourists visiting luxury wildlife tourism destinations has increased the pressure on these establishments to satisfy the expectations of international tourists (Głabiński & Duba, 2017). The luxury wildlife tourism destinations are benchmarking their standards against those internationally. Quality, stability, reliability, delivery, and price are the critical business factors in the business environment. If a business is experiencing problems in any of these, the results can be disastrous. (Sanches-Pereira *et al.*, 2017; Sariskumar & Bhavan, 2018). The demand for quality fresh produce by luxury tourism destinations is ongoing, and no quality requirements are specified for the fresh produce that local producers have to meet. Therefore, luxury wildlife tourism destinations are sceptical about the quality of the fresh produce available from the local community. In a local community, 'large' fresh produce suppliers are scarce; most of the fresh produce is planted by small-scale farmers, primarily for personal use (Sanches-Pereira *et al.*, 2017).

If small-scale farmers are able to produce fresh produce for a luxury wildlife tourism destination on a type of 'large' scale, the small-scale farmers depend on one critical component, rain. Unfortunately, the luxury wildlife tourism destination cannot rely on a continuous supply of fresh produce from the small-scale farmers because most of it is seasonal (Sanches-Pereira *et al.*, 2017). According to Gordon and Harris (2015), economic leakage occurs when a luxury tourism destination has to import various food products because the demand cannot be satisfied locally. When a local community is able to supply fresh produce to a luxury tourism destination over twelve months, this small contribution can correlate to the average per capita income of the local community. Gordon *et al.* (2015) state that from research, it was established that the fresh food preferences of international visitors are different from what a local community is able to produce. Therefore, the need arises for the luxury wildlife tourism destination to import other fresh food to satisfy the requirements of the international guests. Košić, Demirović and Dragin (2017) agree with Gordon *et al.* (2015) but highlight that fresh produce from local community farmers could be used for staff meals. Not only will it contribute to financial savings of the procurement costs of FMCGs for the luxury wildlife tourism destination, but it also contributes to community development.

2.4.2.3 The link between the local communities, luxury wildlife tourism destinations and the environment

According to Thomas-Francois *et al.* (2017), very few formal business relationships exist globally between local communities and established tourist destinations. Spenceley *et al.* (2019) acknowledge that in South Africa, relationships do exist between a tourism destination and a local community but in a limited capacity. One of the intentions of CBT is to encompass environmental conservation and community development. When a local community is concerned about the environment, it will support commitments of sustainability. The United Nations World Tourism Organisation (UNWTO) has compiled good practices for community-based ecotourism. The critical areas of community-based ecotourism projects are economic, social, and environmental contributions. Environmental efforts of the projects incorporate issues, such as; (i) waste management; (ii) energy and water

conservation; (iii) organic farming and gardening; (iv) reforestation; using traditional and sustainable natural products; and (v) recycling (Dodds *et al.*, 2016). However, the problem with this study areas, are situated in rural South Africa and Tanzania and there is no evidence of a formal business relationship between the relevant departments of Agriculture and Rural Development and Economic Development, Tourism, and Environmental Affairs. In business, according to Thomas-Francois *et al.* (2017), when a relationship does exist between parties, but there are no appropriate changes taking place, then that relationship is frail. Therefore, it will have no impact on economic development. Hence, the question arises, how can luxury wildlife tourism destinations, the local communities, and the Department of Economic Development, Tourism, and Environmental Affairs establish appropriate connections to uplift the community, as well as increase economic development (Rylance *et al.*, 2017)?

When a luxury wildlife tourism destination considers the inclusion of a local community in its last-mile SC processes, it can be seen as a marketing, as well as an environmental attraction. According to Boesen *et al.* (2017), the luxury wildlife tourism destination can inform their guests, for example, by indicating on the menu, that the ingredients used in the preparation of specific dishes are sourced from the local community (Frash, DiPietro & Smith, 2014; Košić *et al.*, 2017). The luxury wildlife tourism destination can inform their guests of the benefits of sourcing local food; first, by contributing to minimising poverty within the local community. Second, luxury wildlife tourism contributes to economic development in the local community (Rylance *et al.*, 2017). However, to achieve a successful working relationship, the local community and the luxury wildlife tourism destination must find a common objective or goal that is beneficial to both. If there is no common objective or purpose, the working relationship may not be successful (Boesen *et al.*, 2017).

2.4.2.4 Key concepts emanating from the literature review on establishing a link between the luxury wildlife tourism destination and the local community

When a formal business-to-business (B2B) process exists between the local community and the luxury wildlife tourism destination, it can benefit both parties. The local community can benefit economically from this relationship, and guests from the

luxury wildlife tourism destination will be able to enjoy nutritious, better-tasting, and naturally produced products from the local community (King & Dinkoksung 2014; Budhiasa & Riana 2019). Another benefit for the luxury wildlife tourism destination is the creation of a *Guest-to-Farmer* relationship, where some of the guests might be interested in visiting the small-scale farmers in the local community, to see and experience the environment of those who are supplying the fresh produce to the luxury wildlife tourism destination (Thomas-Francois *et al.*, 2017; Sariskumar & Bhavan, 2018).

When a luxury wildlife tourism destination plans to establish a relationship with a local community, it will be based on a consumer-centric SC process. This involves members within a SC searching for and identifying opportunities that can create value for the end consumers, who are the guests of the luxury wildlife tourism destinations (Cooney, Roe, Dublin Phelps, Wilkie, Kaene, Travers, Skinner, Challender, Alan & Biggs, 2016; Košić *et al.*, 2017). The process is customer-oriented, focus-driven, encouraging the local community and the luxury wildlife tourism destinations to establish more formal working relationships. In addition, to create a strong and valued business relationship, the luxury wildlife tourism destinations should inform the local fresh produce producers in the community of the critical role they fulfil. Small-scale farmers producing fresh produce in a local community must understand that they do not only produce fresh produce, but they also have the ability to create value for the end consumers, the guests of the luxury wildlife tourism destinations (Cooney *et al.*, 2016; Sariskumar & Bhavan, 2018). Luxury wildlife tourism destinations apply the industrial logic principle, where fresh produce is ordered and delivered through a centralised framework. In establishing collaboration processes between a local community and the luxury wildlife tourism destinations, it is advisable to coordinate with a single supplier rather than multiple suppliers. For example, deliveries of fresh produce will take place on a predetermined day and time. Alternatively, the collection of fresh produce will take place at a particular location on a predetermined day and time (Boesen *et al.*, 2017).

In conclusion, an increase in the demand for fresh produce from a luxury wildlife tourism destination can increase the supply of fresh produce from the local community. An increase in demand in the agricultural environment can decrease poverty more

than growth in other singular sectors of the economy. The reason for this is, as stated in Section 2.3.2, the link between local communities and luxury wildlife tourism destinations is that the tourism industry contributes directly to economic development within a local community. Because of demand, direct linkages exist between two economic sectors, the Department of Tourism and the Department of Agriculture. In Zanzibar a linkage exist between the Tanzania Agricultural Development Bank and the Ministry of Natural Resources and Tourism. Hence, one department can influence the other. Therefore, it is essential to establish good working relationships at a higher level of governmental management procedures that will benefit the two economic sectors of micro- and macro-environments (Sanches-Pereira *et al.*, 2017).

2.4.3 Last-mile logistics

According to Ranieri *et al.* (2018: p 784):

Last mile logistics is the least efficient stage of the SC and comprises up to 28% of the total delivery cost. Therefore, the improvement of last-mile logistics and a significant externalities reduction are substantial challenges for researchers. New technologies and transport means, innovative techniques, and organisational strategies allow handling the last-mile delivery in urban areas in a more effective way.

Morali and Searcy (2013) argued that luxury wildlife tourism destinations are dependent upon other parties to harness critical resources. Therefore, the SC members must continuously manage this dependency, which is essential for a luxury wildlife tourism destination's survival and growth. Logistics have changed from a science to a higher-level discipline in recent decades. It is becoming evident that the focus of logistics is shifting towards a more social environment rather than a focused technological environment (Bhatt *et al.*, 2013). The social-environmental area of including local suppliers from communities in the last-mile SCs of luxury wildlife tourism destinations is yet to be thoroughly researched (Olsson, Hellström & Pålsson, 2019). Del Borghi *et al.* (2014) also state that if a luxury wildlife tourism destination wants to develop a sustainable food SC, it is important to have methods and tools that enable an organisation to assess the environmental sustainability performance of their products. Luxury wildlife tourism destinations should represent their last-mile SC goals through operations and practices (Allen *et al.*, 2012; Wang, Wong, Teo, Yuen & Li,

2019). Initiatives may include trying to track and/or reduce greenhouse gas emissions, develop sustainable products or avoid waste. All of these factors can impact the SC and value chain of luxury wildlife destinations. Initiatives like this are becoming more and more important as many companies either perceive themselves to be environmentally friendly or are trying to become so (Alexandru, 2014; Bodosca & Streimikiene, 2015; Lim, *et al.*, 2017).

To deliver environmentally friendly products efficiently and economically to the end customer of the last-mile SC processes, the final step in the business-to-customer SC must be working without any obstacles or problems (Aized & Srari, 2014). One of the essential areas of distribution is the last-mile delivery. For the end customers, it is the area in the SCE that is important because it offers customers convenience and flexibility (Lim *et al.*, 2017). Outbound logistics is the process of storing and moving final products and all the relevant information from one location to the end customer. Last-mile SC processes is the last link in this process, as products are collected in one area and distributed to a final destination (Chen *et al.*, 2009). For many transport organisations, last-mile delivery is often the least efficient link of the SC, contributing to as much as 28% of the total cost of transport (Kilcarr, 2015). Transport companies must become more proficient at managing their outbound SCs in an ever-changing SCE. A critical factor in staying competitive and profitable relates to the ability of an organisation to efficiently manage the last-mile SC processes (Wang, Zhang, Liu, Shen & Lee, 2016).

The core business functions of logistical processes are procurement, packaging, logistics, transportation, warehousing, waste, and knowledge management. These factors have led to a critical and interdisciplinary field – SSCM. Although the theory and practice of SSCM have been evolving fast, luxury wildlife tourism destinations are still searching for the best methods to incorporate and implement sustainability principles in their SCs (Morali & Searcy, 2013). According to Bell *et al.* (2014), the increasing focus on SSCM has led to a wide-scale adoption of SSCM practices. The need for luxury wildlife tourism destinations is to tackle the rising environmental sustainability requirements by stakeholders. Hence, the reason why luxury wildlife tourism destinations must collaborate with their suppliers, as well as their customers

throughout the organisation's entire SC (Bányai 2018; Maršanić, 2014). This promotes partnerships and joint initiatives with SC partners to develop strategies to improve overall efficiency along with the whole SC, as well as examining the inclusion of local fresh produce suppliers from local communities, while meeting the organisational, as well as the environmental sustainability objectives (Lim *et al.*, 2017; Kovačić *et al.*, 2013). For the SC transformation process of a luxury wildlife tourism destination to be successful, systems and procedures need to be in place. The inclusion of local fresh produce suppliers from local communities in the SC of luxury wildlife tourism destinations can have constructive results, such as the reduction in product prices, development of skills within a local community, and a growth in revenue for small farmers (Bányai 2018; Buyukkekklik *et al.*, 2014; Fu *et al.*, 2012).

2.4.3.1 The last-mile supply chain processes of a luxury wildlife tourism destination

As the importance of the processes of last-mile SC processes increases, obtaining real-time information about the distribution of the products also increases. By connecting to a specific network of trading partners, companies will be able to lay the foundation to gather the many different pieces of actionable business information required to obtain visibility in actual last-mile product movements. When a manual dispatch process is automated, the transport company is able to exchange electronically critical last-mile SC processes information, such as; (i) orders received; (ii) loading or pick-up times, and (iii) delivery times efficiently (Mazza, 2014). According to Nazri, Misiran and Abdullah (2015), all the activities of SCM, such as; (i) sourcing and procurement; (ii) conversion; (iii) distribution, and (iv) coordination and collaboration with channel partners, such as (a) suppliers; (b) intermediaries (c) third party service providers, and (d) customers; (v) creating and fulfilling demands for goods, have one objective in mind – the satisfaction of the customers at the end of the last-mile SC processes. According to Frehe, Mehmman and Teuteberg (2017), finally, customers' satisfaction is still the priority for a business. However, critical factors of organisations and transport companies have to be adapted to e-commerce. Furthermore, Frehe *et al.* (2017) also state that e-commerce has grown worldwide by 50%, and by 2025, the increase in e-commerce will have increased threefold. With this

increase in e-commerce, the demand for reliable transport service providers has also increased. Efficient distribution planning is essential for e-commerce because customers' expectations are high, concerning the reliability of the deliveries and the quality of the service (Cleophas & Ehmke, 2014; Melkonyan, Gruchmann, Lohmar, Kamath & Spinler, 2020). While the profit margins of e-commerce for businesses are not profitable because of the high demand for higher-level delivery services, organisations and distribution companies are working more closely together (Allen *et al.*, 2012; Melkonyan *et al.*, 2020). An increase in information technology used by organisations and distribution companies has become more ingrained with one another. The distribution of products is expensive (Kilcarr, 2015), and last-mile delivery is the most cost-demanding part of the SC (Cleophas & Ehmke, 2014; Lim *et al.*, 2020).

In the SCE, transport/distribution is considered a critical factor that directly relates to the successful delivery of the products in the SC. In a transport company, staff expenses represent the most significant percentage of the overhead cost factors, while the fleet of vehicles would be the second most crucial portion of the overhead costs (Allen *et al.*, 2012; Mangiaracina, Perego, Seghezzi & Tumino, 2019). The transport business can increase its profitability in two different ways; first, by efficient vehicle routing and scheduling with optimum usage of the vehicle fleet; second, ensure that the delivery charges are not excessively high (Cleophas *et al.*, 2014). When distribution activities take place efficiently and cost-effectively, transport is not only contributing to cost savings but it contributes to creating customer satisfaction as well. Indirectly, transport enhances the operational efficiency of the organisation (Batini, Peretti, Persona & Sgarbossa, 2014; Mangiaracina *et al.*, 2019). According to Fayezi, *et al.* (2018), through last-mile SC activities, a corporate organisation is able to assist emerging economies to grow and prosper with; (i) the development of community-driven last-mile distribution options for small-scale fresh produce producers; and (ii) incorporating the small-scale fresh produce producers in the last-mile SC processes of the corporate organisation. Fayezi *et al.* (2018) state that the channels of distribution are the blood vessels of industry; Noyan and Kahvecioğlu (2018) concur, but state that the challenges of last-mile SC processes will be affected by the uncertainty in demand for last-mile transport.

2.4.3.2 Fresh produce supply chain system of a luxury wildlife tourism destination

The SC includes the processes and activities undertaken by a luxury wildlife tourism destination to add value to the products in the FMCG SC (Singh & Acharya, 2014). As mentioned in Section 2.1, the FMCG SCs of luxury wildlife tourism destinations consist of a variety of products; the focus will only be on the fresh produce SC for luxury wildlife tourism destinations. In the fresh produce SC for luxury wildlife tourism destinations, flexibility is essential to be able to respond quickly to an ever-changing FMCG, SCE (Mangiaracina *et al.*, 2019; Singh & Acharya 2014). In the FMCG environment, many different products are time sensitive. Therefore, a luxury wildlife tourism destination must be able to use technological systems, such as just-in-time strategies to improve their fresh produce SC operations (Soto-Acosta, Colombo-Palacios & Popa, 2014). Furthermore, an information system, for example, systems applications products (SAP), which is used for data processing, will enable a luxury wildlife tourism destination to efficiently distribute FMCG products to the various lodges (Bi *et al.*, 2017; Manning & Monaghan, 2019). A SAP system can reduce order lead times and improve inventory management, ensuring fewer stock shortages by using automatic order replenishment. Rao (2017) states that with an information system that includes electronic data interchange (EDI), when an actual product is used, it triggers the programme and then the inventory levels are known for the placement of future orders. Bi *et al.* (2017) maintain that the fresh produce SC of a luxury wildlife tourism destination is complex and requires a rapid, responsive system. It must be used by all the major role players in a luxury wildlife tourism destination fresh produce SC, for efficient customer response. This outlines the importance of procuring quality fresh produce products, one of many critical aspects of a luxury wildlife tourism destination's FMCG, SC.

There are many critical aspects within a luxury wildlife tourism destination's fresh produce SC. These key aspects are part of a network of organisations that incorporate different processes and activities in such a FMCG, SC (Singh & Acharya 2014; Manning & Monaghan, 2019). The poor performance of a single organisation can negatively affect some critical aspects in a luxury wildlife tourism destination's fresh

produce SC. Furthermore, FMCG, SC of different organisations must work together to achieve the objectives of the fresh produce SC of a luxury wildlife tourism destination (Yakovleva, Sarkis & Sloan, 2012; Bi *et al.*, 2015). Manning and Monaghan (2013) suggest that luxury wildlife tourism destinations must respond to any fresh produce SC disruptions, as these can negatively influence SC operations, which can result in not meeting the expectations of their customers (MacKenzie & Apte, 2017). For example, an e-supply chain has electronic capabilities that interact quickly with SC partners to mitigate any disruption within the chain (Bi *et al.*, 2015). According to Piera, Roberto, Giuseppe and Teresa (2014), in an e-supply chain, an organisation will share information with all the role players using technological activities, which are aimed at the accomplishment of particular objectives. Furthermore, an e-supply chain can be suitable for luxury wildlife tourism destinations with complex FMCG, SCs (Bala & Kumar, 2011). An e-supply chain is a flexible method of integrating small FMCG suppliers in the SCs of luxury wildlife tourism destinations (Kellner, Otto & Busch, 2012; Piera *et al.*, 2014). For example, in Australia, small enterprises share product information, thus assisting the corporate organisations with purchasing decisions in their SC processes. (Nguyen & Waring, 2013).

In luxury wildlife tourism destinations, the SC processes and procedures can negatively influence the profit margins of both the investors and the organisation if not managed efficiently. The ability of SC managers to identify, address and overcome problems in the luxury wildlife tourism destination's SC plays a critical role in the type of relationships the organisation will have with their suppliers and customers (Minculete & Olar, 2014; Zheng *et al.*, 2017). Unproductive SC processes and procedures between suppliers and customers can have detrimental effects on the SC visibility performance and expose the weaknesses in the luxury wildlife tourism destination's SC. These weaknesses will highlight the incompetence of the SC to match the organisation's strategic objectives, resulting in not meeting the needs of the strategically important customers of the luxury wildlife tourism destination (Melnik *et al.*, 2012; Zheng *et al.*, 2017). Therefore, maximising the efficiency of the SC is fundamental. Efficiency in a SC will be different because the 'links' in a SC are different. For example, buying fresh produce from local community suppliers may inevitably force a luxury wildlife tourism destination to source additional fresh produce

from elsewhere because the local community supplier is unable to satisfy their demand.

In conclusion, the following areas of logistics and SCM, which a luxury wildlife tourism destination can focus on when re-examining and re-designing processes and objectives, are arranged in no particular order of importance; (i) minimising stock; (ii) shortening and/or reducing delivery/lead times; (iii) introducing logistics service providers in the operational issues of organisations in areas, such as packing and labelling; (iv) SC integration (the inclusion of local fresh produce suppliers from a local community, the areas of concern surrounding integration include who will benefit the most in the integration process); (v) introducing information and communication technology (ITC) to optimise SCs, and (vi) outsourcing (Shinohara, 2010; MacKenzie, & Apte, 2017). During the SC development process, luxury wildlife tourism destination must investigate and recognise any potential changes that can influence the process (Nijaki & Worrel, 2012; Zheng *et al.*, 2017).

2.4.4 Green supply chain

During the past two decades, extensive research has been conducted in green supply chain management (GSCM). From the literature, it was found that the management of organisations gave a lot of attention to ensure sustainability in three echelons; environmental, financial and social (Coute, Tiago, Gil, Tigo & Faria, 2016; Jaggernath & Khan, 2015; Tumpa, Ali, Rahman, Paul, Chowdhury & Khan, 2019). However, GSCM practices can influence corporate performance, according to Younis, Sundarakani and Vel (2016), it has an additional echelon: i.e., operational. Younis *et al.* (2016: p. 217) define GSCM as “[t]he integration of environmental thinking in SCM, including product design, supplier selection and material sourcing, manufacturing processes, product packaging, delivery of the product to the consumers, and end-of-life management of the product after use.” Younis *et al.* (2016) are of the opinion that when businesses understand the benefits that GSCM can have, such as business operations, increasing efficiency and innovation leadership (Laari, Töyli & Ojala, 2017), economics, as well as the social and environmental reflexion of the organisation, businesses will be motivated to implement GSCM practices. Another reason why organisations might be motivated to implement GSCM practices is climate

change. Globally fresh produce SCs are influenced by environmental changes; when an organisation understands how to create a link between sustainability and the environment it can contribute to reducing environmental risks on a small scale (Zhao, Liu, Zhang & Huang, 2017).

An organisation implements GSCM practises to assist with detrimental environmental issues, such as air pollution (carbon dioxide (CO₂) emissions), depletion of natural resources and waste. These environmental issues can influence the operational performance of an organisation (Fahimnia, Sarkis & Davarzani, 2015; Famiyeh, Kwarteng, Asante-Darko & Dadzie, 2018). When an organisation is able to live up to the expectations of their customers in terms of flexibility in a cost-effective manner, on-time deliveries and the quality of products, the operational performance of the organisation is effective; this operational effectiveness contributes to the ability of the organisation to compete in the business environment. According to Famiyeh *et al.* (2016), research has been conducted on the connotation between environmental management applications and the operational performance of an organisation. The studies have provided evidence that a positive corroboration exists when environmental management procedures are implemented in the operational performance measures of an organisation.

A link between organisational performance measures and GSCM audits can be possible, if GSCM practises are categorised and there is an understanding of how each GSCM application connects to the strategic framework (Laari, Töyli & Ojala, 2017). In contrast to those organisations motivated to introduce GSCM connections to the strategic framework, Tseng, Islam, Karia, Fauzi and Afrin (2019) identified internal obstacles (lack of environmental knowledge, lack of top management support, financial constraints, fear of failure and others) and external obstacles (lack of government support, lack of proper training, lack of awareness among SC partners, as well as poor commitment from partners and others) that could be barriers for organisations implementing GSCM initiatives. Although GSCM has only been researched for the past two decades (Jaggernath & Khan, 2015; Couto *et al.*, 2016; Tumpa *et al.*, 2019), according to Tseng *et al.* (2019), there are already new challenges, for example, eco-technology. Be that as it may, GSCM is an area that has

been researched to some extent and may be to a greater extent in the future (Tseng *et al.*, 2019).

2.4.5 Purchasing functions

2.4.5.1 Purchasing function of a luxury wildlife tourism destination

Since the early 1900s, purchasing activities in many organisations were a single-function process, primarily centred on material management systems. During the period 1960 to the late 1970s, when globalisation started to evolve, a few organisations began to outsource some minor activities (Bienhaus & Haddud, 2018). Gangurde and Chavan (2016) agree with Bienhaus and Haddad (2018) that SCM became more critical during these periods. Also, organisations continuously searched for methods to increase and strengthen their competitive advantage in the SCM environment. If an organisation is able to align its business strategies with purchasing in the SCM domain, the alignment is advocated as a 'desired state' (Mikalef, Patel, Batenburg & Van de Wetering, 2013). Miklef *et al.* (2015) also argue that organisation's management teams must prioritise purchasing and business alignment strategies so that when attained, an organisation will escalate its financial and operational performances. The purchasing function fulfils an essential part of a company's business operations and assists in multiplying its value (Lorentz, Laari, Engblom & Tanskanen, 2019). Hesping and Schiele (2015) refine the understanding of business operations further, and accentuate that when an organisation wants to achieve purchasing competence, strategy development must be performed by management (at middle and senior management level) and have functional (purchasing, manufacturing, marketing, and others) levels. Hesping and Schiele (2015) propose that the purchasing department should decide how the purchasing activities will be accomplished. Successful execution of the purchasing functions depends on how well the purchasing practices correspond with the functional purchasing strategies. It is clear that purchasing has progressed, and 21st century purchasing is no longer a single activity; instead, it is now a cross-functional business process (Grzybowska & Gajdzik, 2014; Mogre, Lindgreen & Hingley, 2017).

Bienhaus and Haddud (2018) are of the opinion that uncertainty has always been a critical attribute of purchasing regarding 'deliveries of suppliers'. The authors have categorised three different aspects of uncertainty; (i) about available supply alternatives, (ii) regarding the consequences of these alternatives, and (iii) related to the way other companies would react. Because uncertainty is part of purchasing, Gangurde *et al.* (2016) stated that during the last two decades, researchers suggested various purchasing mechanisms to assist organisations in evaluating their supply functions and developing purchasing strategies that can support the supply base structure. SCs are different, even in the same organisation; therefore, different purchasing approaches must be implemented for buyer-supplier relationships for other products in the SC (Gangurde & Chavan, 2016; Lorentz *et al.* 2019). Therefore, despite the uncertainty associated with purchasing, it fulfils an essential function in the strategic planning processes for a luxury wildlife tourism destination. When the purchasing operations of a luxury wildlife tourism destination are well managed, it can have a positive effect on the overall business functions (Rodriguez-Escobar & González-Benito, 2017).

Business functions in a luxury wildlife tourism destination, such as operations, marketing and sales, distribution, and purchasing, cannot function in individual silos. Business functions must be well incorporated and efficient cooperation must exist between all the departments of luxury wildlife tourism destinations to maximise future company success (De Hemmer Gudme, 2017). According to Mogre *et al.* (2017), the progression of purchasing, as discussed in the previous section, can contribute to the profit margin of a luxury wildlife tourism destination when a working relationship exists between it and the suppliers. Mogre *et al.* (2017) emphasise that risk management and a maintainable product supply are the two main components needed to achieve purchasing excellence. When purchasing fulfils a strategic role in mitigating the adverse effects of disruptions of a luxury wildlife tourism destination's SC and risk management, SC disruptions can be minimised by mutual risk mitigation processes with suppliers (Mogre *et al.*, 2017; Lorentz *et al.*, 2019;). According to Hesping and Schiele (2015), to support minimising supply disruptions, a luxury wildlife tourism destination should consider formulating more than one purchasing strategy, as a specific, purposeful tactic for more than one product, as well as for more than one

supplier. To institute such a diverse series of purchasing methodologies would be challenging. Upon completion of a purchasing framework for a specific product, the framework can be used as a blueprint for devising purchasing frameworks for other products and suppliers (Hespring & Schiele, 2015).

When a luxury wildlife tourism destination wants to develop a framework that could assist in minimising SC disruptions, the focus must be on establishing long-term strategic alliances between a luxury wildlife tourism destination and its suppliers. By gathering information and sharing strategic knowledge, long-term partnerships have the ability to develop into a communally beneficial relationship (Yang, Lin, Krumwiede, Stickel & Sheu, 2013; Legeza, Brunner, Kerimova, Kulish & Konovalenko, 2019).

2.4.5.2 Purchasing pathway system of a luxury wildlife tourism destination

Purchasing pathways need to include consideration of purchasing policies. One such policy is the Preferential Procurement Policy Framework Act, 2000, which is used by the World Bank. This policy states that importance must be given to small and medium enterprises (The World Bank, 2019). In a luxury wildlife tourism destination, a substantial amount of the expenses are related to purchasing FMCG products. Therefore, luxury wildlife tourism destinations can lessen their purchasing costs of FMCG products. These cost savings can release money for other resources, which can improve the quality of service provided to the customers, visiting the luxury wildlife destination (Nijaki & Worrel, 2012). According to Drake, Lee and Hussain (2013), products bought can be grouped into two different groups; functional and innovative. The characteristics of active products are: small product assortment, long product life cycles, small profit margins, and stable demand. The features of functional products, include greater excellent product assortment, shorter product life cycles, higher profit margins, and unpredictable demand (Nijaki & Worrel, 2012), for example, on Mnemba Island, the male staff, predominantly Muslim, consumed much more chicken and dates during the month of Ramadan. According to Dabhilkar, Bengtsson and Lakemond (2016), when a luxury wildlife tourism destination is searching for opportunities to reduce purchasing costs in a particular environment, SC operating priorities must be established to meet the demand of the specific environment. According to Dabhilkar *et al.* (2016); (i) cost, (ii) quality, (iii) delivery, and (iv) flexibility are the four-supply

chain operating priorities that can influence a luxury wildlife tourism destination's competitive priority the most. The importance of an operation priority must be determined before the impact of change on it can be identified and measured (Drake *et al.*, 2013; Legeza *et al.*, 2019). For example, suppose it is critical for a luxury wildlife tourism destination to receive quality FMCG products, and quality is essential, in that case, the impact on the operating priority will be imperative. On the other hand, if it is critical for a luxury wildlife tourism destination to be flexible, then the impact on quality FMCG products will be less significant.

To further elaborate on the operational flexibilities (Dabhilkar *et al.*, 2016), Rodriguez-Escobar and González-Benito (2017) have identified five additional hindrances a luxury wildlife tourism destination may encounter when deciding to source FMCG products from local communities. According to Rodriguez-Escobar and González-Benito (2017), the inconvenience of sourcing products from local communities is; (i) the high prices the locals are asking for their produce, (ii) the availability of undesired products, (iii) unfamiliar with the type of products produced by the local community, (iv) long waiting time for products to be available, and (v) insufficient knowledge on how to prepare the local produce. Because purchasing fulfills a vital function in luxury tourism destinations, unsustainable purchasing difficulties will prevent them from buying fresh produce from local communities (Gangurde & Chavan 2016; Gurbuz & Macabangin, 2019).

Buying fresh produce from local communities should be recognised as a crucial process for a luxury wildlife tourism destination because it will fulfill an essential function (Musau, 2015; Gurbuz & Macabangin, 2019). When a luxury wildlife tourism destination purchases fresh produce from a local community farmer, there is a positive impact on the micro-economic environment of the region. Also, guests visiting a luxury wildlife tourism destination contribute to an increase in greenhouse gasses, by using different modes of transport to reach the luxury wildlife tourism destination. Tourists visiting a luxury wildlife tourism destination will be given fresh produce, purchased from the commercial fresh suppliers, and then the fresh produce must be transported to the luxury wildlife tourism destination. It is predicted that food SCs contribute 75% of CO₂ emissions to the atmosphere (Van den Berg & Mearns, 2021). Therefore, when a

working agreement is developed between a luxury wildlife tourism destination and a community, and it is done efficiently and effectively, an SSC could develop in the long term. Thus, procurement is a process of purchasing goods and services based on the objectives of the luxury wildlife tourism destination to meet the requirements of their customers (Mgidlana, 2013; Darshan & Teja, 2019). Dahwa, Al-Hakim and Ng (2013) explain the FMCG procurement process as the acquisition of fast-moving products at the right price, right time, right quality, and the correct quantity from the right supplier. According to Musau (2015), there are challenges associated with the procurement of locally produced fresh products from local community suppliers, such as; (i) poor utilisation of resources, (ii) lack of experienced employees, and (iii) poor adaptation to technological change. In addition to the challenges, Mgidlana (2013) suggests that luxury wildlife tourism destinations should adopt e-procurement as a technological advancement to automate their buying cycles. With e-procurement, buying processes would improve, potentially strengthening collaboration amongst the role players in the SCs of luxury wildlife tourism destinations. Local suppliers are unable to collaborate with corporate organisations because they lack the required technology to integrate them in their SC (Darshan & Teja, 2019; Mgidlana, 2013).

According to Nijaki *et al.* (2012), besides the technological challenges, environmental preferable purchasing (EPP) is another problem for local community fresh produce suppliers. EPP is something luxury wildlife tourism destinations aimed to incorporate in their procurement goals. EPP is achievable when fresh produce is sourced from local fresh produce suppliers. Because the products are locally produced, their impact on the environment and human health is less significant than similar products, which organisations mass-produce. When a luxury wildlife tourism destination incorporates EPP in its procurement policies, such processes can also assist in the achievement of environmental, equity, and economic goals of luxury wildlife tourism destinations (Darshan & Teja, 2019; Nijaki & Worrel, 2012).

Besides procuring environmentally sustainable fresh produce, according to Fayezi *et al.* (2018), the climate is changing globally. These changes are of great concern to environmental protection agencies and governments. The result of climate change has forced governments to alter their carbon emission regulatory policies for those

contributing to climate change. Various organisations and luxury wildlife tourism destinations contribute to global warming by carbon emissions emanating from the distribution of FMCG products to the final destinations (Fayezi *et al.*, 2018; Jeżewska-Zychowicz, Plichta & Królak, 2020).

2.5 Theoretical framework

The theoretical framework enables the research to be grounded in a selected theoretical perspective on which it is based (Fouché, Strydom & Roestenburg, 2021). A theoretical framework is a set of related concepts from similar studies and methods from relevant and appropriate literature of the study discipline (Saunders, Lewis & Thornhill, 2019).

To theorise is to generate a body of knowledge and rise above direct concerns to what is more enduring (Saunders *et al.*, 2019). The theory is the step towards broad assumptions and detailed methods that guide initiatives of finding knowledge and facts rather than reaching goals (Creswell, 2014). Theories enable participants in a specific field to use the same common terminology and explain or predict the relationship among variables in the study (Creswell, 2014). The theory is built on reliable knowledge or facts to describe a process or phenomena (Fouché *et al.*, 2019). It is a summary and combination of what knowledge is available and known in a specific field.

Several theories were considered to offer a theoretical base for this research, including expectation confirmation theory, knowledge-based theory of the firm, stakeholder theory, and sustainable supply chain management (SSCM) theory. After scrutinising and comparing theories, some theories were found not be relevant, as a result of this only two theories were chosen. The two selected to form the framework were the expectation confirmation theory (ECT) and the sustainable supply chain management (SSCM) theory.

2.6 Sustainable supply chain management theory

Throughout history, SCs have been developed to meet human societies' diverse needs, enable humans to engage profitably in commerce and trade and to exhaust natural resources. The extensive literature on SCs addresses their practices, performance strategies and dynamics over time (Shan & Wang, 2018). According to Liu *et al.* (2017), sustainable supply chain management (SSCM) has not been scientifically researched to the extent of that of supply chains and sustainability.

According to Touboulic and Walker (2015), the theory of SSCM originated from identifying the strategic importance of purchasing and supplying activities to achieve a firm's long-term performance, and to address sustainability issues in business capabilities. The SSCMT considers sustainability as one of the strategically essential functions of the company. Because sustainable SCs are difficult to imitate, a firm's heterogeneous knowledge base and capabilities are the major determinants of a sustained competitive advantage and superior corporate performance (Dubey, Gunasekaran, Papadopoulos, Childe, Shibin & Wamba, 2017).

According to Dubey *et al.* (2017), to successfully implement the SSCMT in a competitive and changing environment, organisations must change their goals and actions to achieve the goals of the SSCMT. For change to occur, the company must make a conscious decision to adjust actions in response to changes in the SCE and must consciously link activity to outcome (Dubey *et al.*, 2017). The critical point is that a company must change in response to environmental changes, as each action-outcome link must be specified in terms of applicable conditions. The main idea is that this is a process of continual adaptation in SC conditions (internal, external, competitors, suppliers, and others) and will be affected to a large extent by the complexity and determination of the organisation (Shan & Wang, 2018).

According to Kolenke (2021), SCM is the practice of incorporating a company's social, environmental, and economic goals in the coordination of inter-business processes to improve the long-term financial performance of the company. In an SSCMT model (Figure 2.2) according to Liu *et al.* (2017), the constructs of importance are; (i) barriers and supporting factors, (ii) suppliers' evaluation, (iii) risk avoidance, and (iv) performance of the chain. SSCM barriers, according to Sajjad, Eweje and Tappin

(2015), are obstacles or obstructions associated with successful supply chain integration initiatives. SSCM barriers can be internal (financial constraints, insufficient SC knowledge, minimal support from senior management) and external (political constraints, not enough suppliers, high demand for environmentally friendly products, SC lead times, amongst others). Supplier evaluation and selection is an important process to achieve a resourceful SC. Factors, such as delivery, quality, quantity, and price are usually considered in an evaluation to determine the continuation of a long-term relationship with suppliers (Winter and Lasch, 2016; Keshavarz Ghorabae, Amiri, Zavadskas & Antucheviciene, 2017). In a SC, the market demand for products with a short life cycle is affected by the freshness of the product (Feng, Hu & He, 2021). Risk avoidance characteristics are related to controllable and uncontrollable SC influences. The quantity of products ordered is a controllable risk avoidance characteristic. Whereas traffic congestion is an uncontrollable risk avoidance characteristic (Liu, Li & Qi, 2019). The risk avoidance decisions that management makes can influence the design and the operating effectiveness of the organisation's SC (Cannella, Di Mauro, Dominguez, Ancarani & Schupp, 2019). Vahidi, Torabi and Ramezankhani (2018) are of the opinion that SC performance is a critical factor that companies must implement to achieve and maintain competitiveness within a SC. Acquaye, Ibn-Mohammed, Genovese, Afrifa, Yamoah & Oppon (2018) agree with Cannella *et al.* (2018), and highlight the fact that there are inconsistencies between the objectives of performance measures and actual SC operations. Maestrini, Luzzini, Maccarrone and Caniato (2017) are confident that despite inconsistencies, when an organisation applies its measurements of importance, it will be able to manage the SC performance through certain procedures. With the effective use of resources and by creating linkages between internal and external SC partners, a seamlessly coordinated SC will be able to improve performance (Carter & Rogers, 2008).

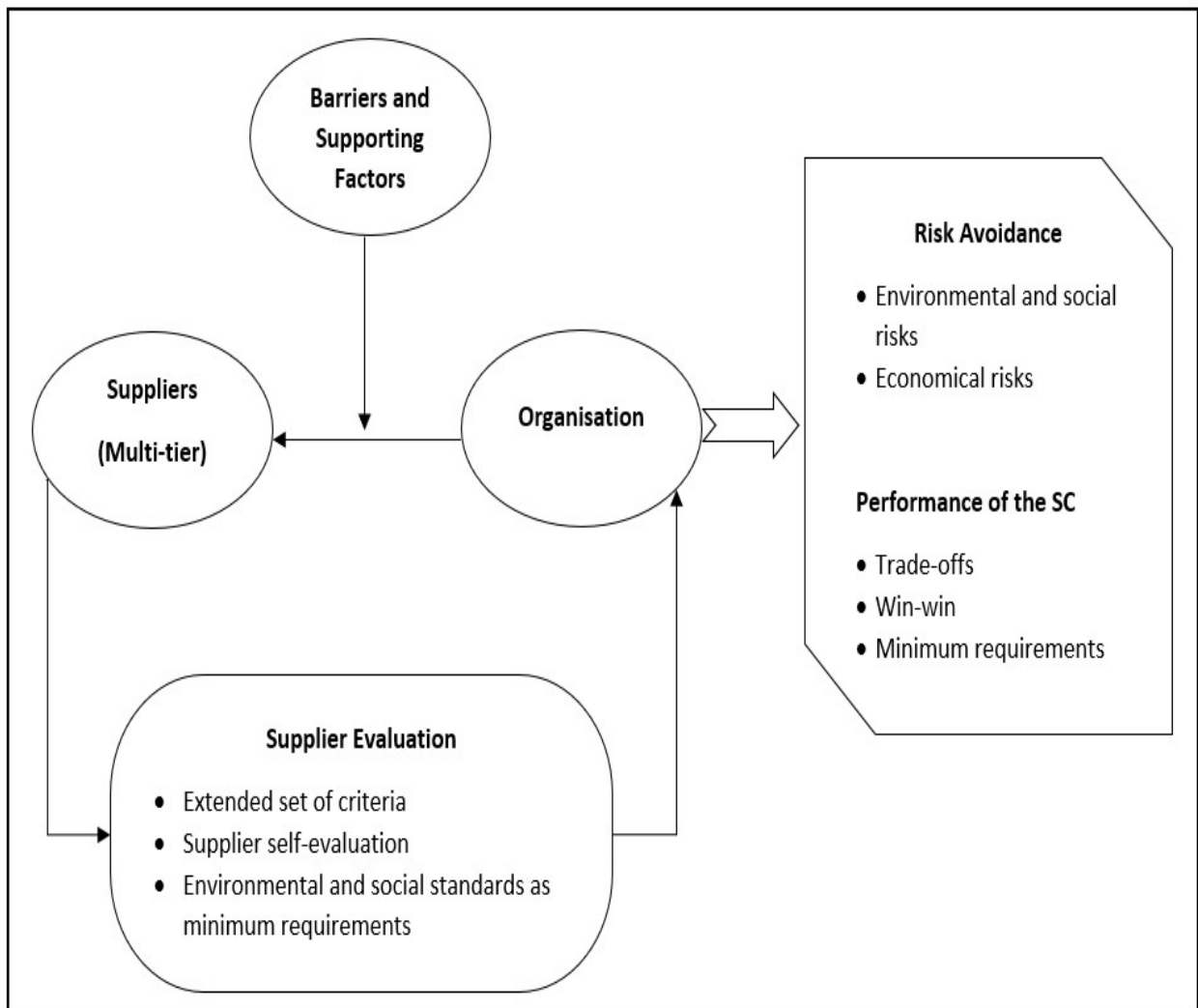


Figure 2.2 Sustainable supply chain management theory
 Source: Adapted from Liu, Bai, Liu and Wei (2017)

2.7 Expectation confirmation theory

The origin of the expectation confirmation theory (ECT) dates back many decades. Military experts have long believed that the fulfilment of expectations leads to positive changes in morale. Richard L. Oliver developed the format of the theory in two different papers, in 1977 and 1980 (Dwivedi, Lal, Williams, Schneberger & Wade, 2009). According to Wang (2012), ECT has been used extensively to study customer satisfaction, post-purchase behaviour, and service marketing. The four primary constructs in the ECT model (Figure 2.3) are (1) expectations, (2) performance, (3)

disconfirmation, and (4) satisfaction. Expectations reflect expected behaviour and are predicted by indicating expected product attributes in the future.

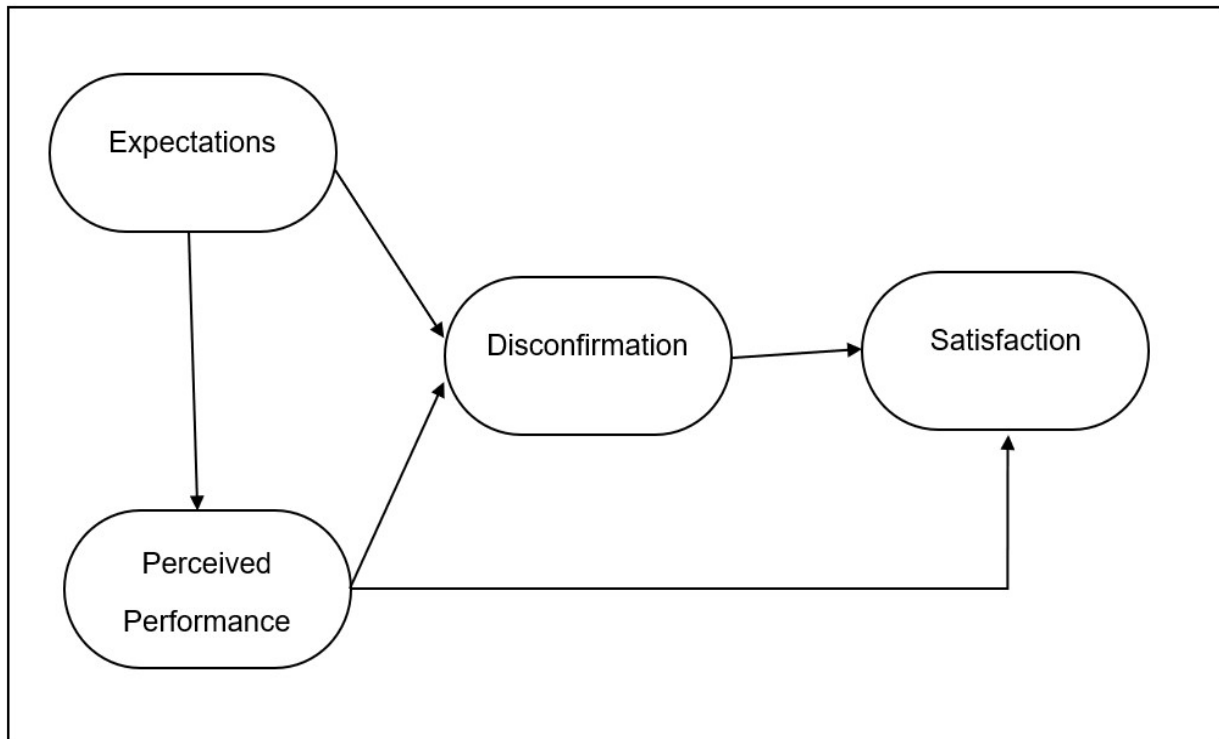


Figure 2.3 Expectation confirmation theory
Source: Adapted from Dorit (2015)

Expectations serve as the comparison standard in ECT – what consumers use to evaluate performance and form a disconfirmation judgment. Expectations reflect anticipation over product characteristics in the future (Wang, 2012). Performance relates to the quality of the service or the product. The customer will assess if the service or the product has met or outperformed their expectations (confirmation). If the customer is content, post-purchase satisfaction will be the result. When the service or the product does not meet the expectations (disconfirmation) of the consumer, post-purchase dissatisfaction will be the result (Lee & Kim, 2020.) Disconfirmation is hypothesised to affect satisfaction, with positive disconfirmation leading to satisfaction, and negative disconfirmation leading to dissatisfaction. A significant debate in the marketing literature concerns the nature of the effect of disconfirmation on satisfaction (Wang & Wang, 2019). The root of the problem lies in the definition of predictive expectations as the comparison standard for perceived performance. In such a case, the confirmation of negative expectations is not likely to lead to satisfaction.

Researchers have proposed other comparison standards, such as desires, ideals, equity, or past product and brand experience (Atapattu, Sedera, Ravichandran & Grover, 2016).

Dwivedi *et al.* (2009) are of the opinion that ECT expectations, working in conjunction with perceived performance, will steer toward post-purchase satisfaction. The outcome is intervened during positive or negative disconfirmation between expectations and performance. Consumers are prone to be dissatisfied when a product falls short of expectations (negative disconfirmation). When a product outperforms expectations (positive disconfirmation), the result will be post-purchase satisfaction (Atapattu *et al.*, 2016).

2.8 Encapsulating the theories

ECT and the SSCMT are both relevant in the research areas of SCs. However, in the existing literature, both ECT and SSCMT have not received much attention in the tourism industry (Mandal & Saravanan, 2019). Therefore, an outcome or shape of the ECT in tourism and SSCMT in the tourism sector could not be determined. Figure 2.4 was created to graphically depict the concept based on the above discussions for the ECT, as well as the SSCMT.

When a luxury tourism destination considers including a local community in their last-mile SC processes, the luxury tourism destination will be involved in community-based natural resource management (CBNRM) programme (Cooney *et al.*, 2016). These authors have noted that if the benefits are unsatisfactory for the local community, the CBNRM proposals will not be successful. The success of CBNRM initiatives is determined by the local community's willingness to participate in the CBNRM programmes. To increase the willingness to participate, the luxury tourism destinations must; (i) establish better and more specific benefits with fresh produce deliveries; (ii) ensure that the majority of the benefits are directed at the individual/s responsible for fresh produce deliveries; and (iii) communicate the success of the working relationship to the whole community. If a luxury wildlife tourism destination can create a sense of belonging or ownership through fresh produce deliveries by the local community to the

luxury wildlife tourism destination – then the fresh produce would be an essential component in the preparation of meals served.

According to Thomas-Francois *et al.* (2017), luxury wildlife tourism destinations can create possibilities for local communities to increase their micro-economic environment, relieve unemployment, and lighten the burden of poverty. Sanches-Pereira *et al.* (2017) agree with Thomas-Francoise *et al.* (2017) and state that to alleviate poverty, one must connect a local community with tourism, an approach known as pro-poor tourism (PPT). The intention of PPT is to establish a partnership between a local community and a luxury wildlife tourism destination (Ndivo *et al.*, 2015a; Zou, Huang & Ding, 2014). Such a connection can result in a working relationship between a local community by supplying fresh produce to a luxury wildlife tourism destination. From the research, it has been established that tourists prefer locally produced food above imported food. According to the tourists, the local food is fresher, more authentic, better tasting, and of a better quality than similar imported foods (Thomas-Francois *et al.*, 2017). For tourists, locally produced food characterises the origin and culture of the local people, their stories, and the taste experience of the local food. Luxury wildlife tourism destinations can use locally produced food from a local community to attract tourists to the establishment (Thomas-Francois *et al.*, 2017). Furthermore, luxury wildlife tourism destinations can create a unique experience for their guests by creating innovative, genuinely unique, and original dishes from locally produced ingredients. Not only can this assist in the development of a sustainable fresh produce supply with vegetable farmers in a local community, but it can also attract more guests to the luxury wildlife tourism destinations (Boesen *et al.*, 2017). As mentioned by Sgroi *et al.* (2017), there are people in the local community who can produce specific products using traditional farming methods. By applying their knowledge and experience, these farmers can plant and harvest good quality fresh produce on a small scale without the help of dangerous chemicals and pesticides (Sanches-Pereira *et al.*, 2017; O'brien *et al.*, 2019).

However, in the existing literature, ECT in tourism and SSCMT in the tourism industry have not received much attention (Mandal & Saravanan, 2019). Therefore, an outcome or shape of the ECT in the tourism and SSCMT in the tourism industry could not be determined. For this reason, Figure 2.4 was created to graphically depict the concept based on the discussions concerning the ECT, as well as the SSCMT.

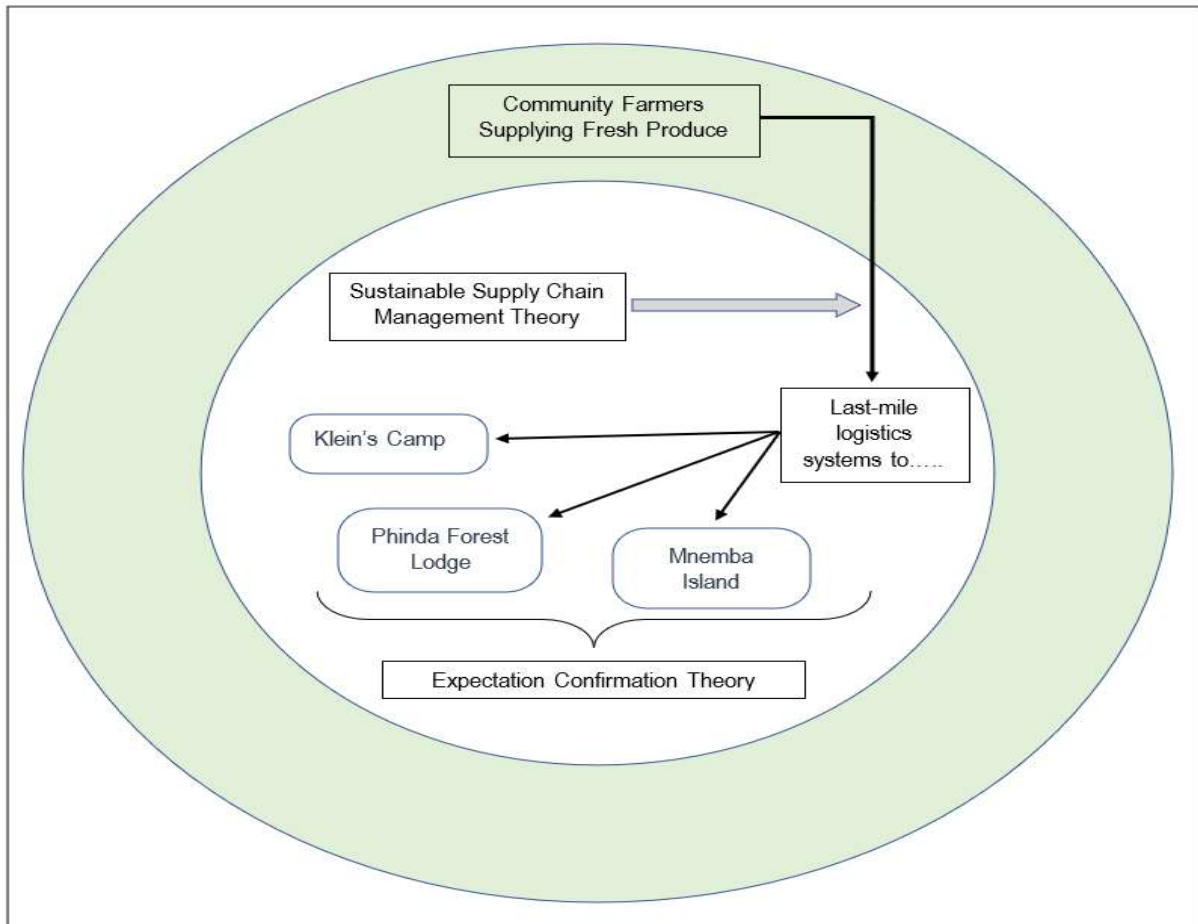


Figure 2.4 ECT and SSCMT for the tourism industry

Source: Developed by the author, 2021

2.9 Conclusion

This chapter provided context and an understanding of last-mile SC processes, local communities, and the procurement function of luxury wildlife tourism destinations. When potential local community suppliers are identified that could be included in the last-mile SC processes of fresh produce for luxury wildlife tourism destinations, external factors, such as current suppliers, customers, and other rival organisations

can have even more pressure on luxury wildlife tourism destinations to develop innovative ideas or processes in their SCs. Luxury wildlife tourism destinations are sometimes unenthusiastic to pursue ideas of a last-mile SC processes because it requires an organisational workforce and monetary commitments (Biao *et al.*, 2014; Jeżewska-Zychowicz *et al.*, 2020). The ability of luxury wildlife tourism destinations to ascertain whether local community suppliers will be profitable is problematic, as this is still an idea. Therefore, the return on investment cannot be quantified. In addition, to evaluate whether the inclusion of local community suppliers in the last-mile SC processes of luxury wildlife tourism destinations will be achievable, using only economic elements, will not be realistic.

Other elements, such as brand loyalty, quality, customer satisfaction, and market position must be included in the last-mile SC processes of the fresh produce supply evaluation process (Costa & Carvalho, 2014; Othman *et al.*, 2019). Suppose a luxury wildlife tourism destination includes fresh produce in their supply processes of the last-mile SC processes, it will be difficult to determine the contribution percentage of the inclusion over a short period. Therefore, the last-mile SC processes of fresh produce supply processes cannot individually be singled out. Factors, such as the reputation, as well as the experiences of the guests will also contribute to the return on investment regarding the inclusion of the local community in the last mile logistic distribution system of the fresh produce supply processes (Lavastre *et al.*, 2014; Othman *et al.*, 2019).

In closing, the tourism environment, especially that of the luxury wildlife tourism destination, continues to be a challenging SCM issue. It directly influences competitiveness through traditional performance measures, such as cost and quality, but the range of stakeholders extends well beyond traditional suppliers and customers (Paesbrugge, Sharma, Rangarajan & Syam, 2018). According to Melkonyan *et al.* (2020), the concept of a last-mile SC processes for a luxury wildlife tourism destination is a contested idea. Supply chain sustainability is a term that compounds several vague and ambiguous concepts.

The next chapter (Chapter 3) will provide an overview of the research methods, followed by a step-by-step discussion on how the data were collected, which will be used to determine the possibilities for the inclusion of fresh produce from local community farmers in the last-mile SC processes of a luxury wildlife tourism destination. In Chapter 3, the focus will be on the research philosophy that forms part of the research design.

Chapter 3: Research design and research methodology

3.1 Introduction

In the previous chapter (Chapter 2) an idea was suggested that demonstrates the viewpoint where the study idea originated, and discussions of previous studies provided an enhanced motivation for this study. The theoretical framework on which the research was based, contributed to the explanation of the process and phenomena. The purpose of this chapter is to provide the context of data collection methods, and types of data analysis methods, which were based on a research philosophy that forms part of the discussion of the research design.

Research methodology refers to the choices the author makes and the methods used for data collection, data analysis and completing the objectives of the research study (Layder, 2018). Cohen, Manion and Morrison (2018) agree with Layder (2018) that through the research methodology, knowledge is acquired, examined and evaluated using certain research methods to determine the legitimacy of the information. Adams and Lawrence (2018) refer to research methodology as a philosophical framework of assumptions and characteristics from a human scientific perspective; the focus is on the view of knowledge and the scene of what the research represents or implied through certain research methods. Research methods and techniques are used in the research design and research plan to address the research goals and research objectives (Yin, 2014).

3.2 Research design and philosophy

Maxwell (2017) is optimistic about research design as a plan or structured framework of how a researcher intends to conduct a research process. Research is based on solving a research problem or suggesting recommendations pertaining to the problem. A research process is undertaken to gain knowledge and an understanding of the problem. Kushner (2017) theorises that research design is the project, which describes the procedures for collecting and analysing data. Through a clear and well-thought-out research design, the reader will be able to construct an understanding of the methods used, as the author progresses through the research project (Mouton 2008).

In addition, Yin (2014) emphasises that a research design is the logical sequence that connects the empirical data to the study's initial research questions and ultimately to its conclusions. The main function of research design is to enable the author to anticipate what the appropriate decisions should be to maximise the validity of the eventual results (Creswell, 2014). The research design should be constructed on four very significant questions (Leedy & Ormond, 2015);

- i. What data must be acquired?
- ii. Where is this data positioned?
- iii. How will the data be secured?
- iv. How will the data be interpreted?

These four questions must assist in finding appropriate, current and relevant data that will support and assist in finding answers and possible solutions for the research questions as stated in Chapter 1 (Section 1.4.3). A mixed method case studies will be the primary research design of this study. According to Yin (2014: p 15) "the essence of case study, the central tendency among all types of case study, is that it tries to illuminate a decision or set of decisions: why they were taken, how they were implemented, and with what result." The research questions led to multiple exploratory and descriptive case studies. The philosophy that underpinned this research was interpretivism, which involves a researcher interpreting elements of a study and focusing on their meaning.

3.3 Case study research design

According to Creswell (2014), using case studies, the researcher is developing an understanding of processes, events or programmes of situations and activities in various environments. In mixed method research, three different designs can be used; (i) convergent parallel mixed methods, (ii) explanatory sequential mixed methods, and (iii) exploratory sequential mixed methods.

- In a convergent parallel mixed method, qualitative and quantitative data are collected and analysed separately. The data are then combined and compared

to determine if a correlation exists or not between the qualitative and quantitative data relating to the purpose of the study.

- In an explanatory sequential mixed method two phases of data collection are used. In the first phase, quantitative data are collected and the results analysed. These results are then used to construct a second data collection phase for gathering additional quantitative information on a specific area that was identified during the first phase. The data and findings from the second phase contributed to the study's purpose.
- In an exploratory sequential mixed method three phases of data collection are used. In the first phase qualitative data are collected and the results analysed. The results from the qualitative phase are used to design a mechanism for the second quantitative data collection phase. After the quantitative data are collected and analysed, the results are used to design a measurement for a specific population which will explore a prodigy that was established in the first phase. The findings and data from the third phase contribute to the study's purpose (Fouché *et al.*, 2021).

These case studies can assist the researcher to collect information by using different collection procedures, to develop an outcome for a research objective. Case studies in research are used for exploring something new or to investigate a particular scenario, rather than a hypothesis being examined (Mligo, 2016). In this study, case study research and a convergent parallel mixed method was used as the primary research strategy.

Patten and Newhart (2018) point out that case studies are demarcated in different ways. The focus of case study research can be on a single case or multiple similar variable cases. In case study research, the researcher attempts to investigate and explain single or multiple occurrences comprehensively, taking in as many considerations as possible (Tan, 2017). Yin (2014) elaborates that case study research focuses on 'how' and 'why' questions. Patten *et.al.* (2018) state that the researcher is able to determine the 'how' and 'why' by making use of case studies that cover or are similar to the outcomes of the research study. In this study, exploratory

and descriptive case studies were investigated methodically based on the criteria below:

- Determine how capable a local community is in supplying a luxury wildlife tourism destination with fresh produce
- Understanding that the researcher has little control over the willingness of a local community to produce fresh produce, the weather or the environment, as well as the willingness of the local community to support
- A point of view that the research can contribute to the body of knowledge when all the information is used to determine the possibilities of local communities becoming part of the last mile logistics distribution systems of FMCG for luxury wildlife tourism destinations

To gain an understanding of individual, group or business prodigies, case study research is considered very effective. By using case studies, researchers are able to gain an understanding of a certain phenomenon, which can be viewed as a real-world perception (Yin, 2014). According to Coghlan and Brannick (2014), different genres of knowing are achievable through case studies research:

- Experiential knowing – gaining knowledge about &Beyond's SC and the local communities adjacent to the lodges mentioned in Section 3.3.1 above
- Presentational knowing – the knowledge articulated in composing configuration to the experiential knowing through applications, methods and observations
- Propositional knowing – the knowledge categorising our experiential and presentational knowing into opinions, explanations and suggestions
- Practical knowing – the knowledge which combines the first three classes of knowing to complete functioning by completing relevant functions competently skilfully and accurately

During this study, primary data were collected from the selected industry experts from luxury wildlife tourism destinations and SC companies through interviews, questionnaires and physically observing participants. Secondary data were obtained through the data documents of similar organisations within the luxury wildlife tourism environment.

The aim of the research was to determine whether a local community has the potential to be included in the last-mile SC processes of luxury wildlife tourism destinations. The following steps provide a basic framework for the process; (i) a luxury wildlife tourism destination must identify potential local community fresh produce farmers bordering them, (ii) when a potential fresh produce community farmer has been identified, the luxury wildlife tourism destination must determine whether there is a demand for the type of fresh produce produced by the community farmer, (iii) once the demand for a certain type of fresh produce has been decided, the luxury wildlife tourism destination must start the process of establishing a working relationship between the community farmer and itself. A lot of work would happen in the final step; the criteria for working specifications for the contractual agreement between a luxury wildlife tourism destination and a fresh produce community farmer would be tailor-made, bearing in mind each location and the type of fresh produce. By making use of primary and secondary data, the possibilities could be determined based on the sources of information within the community.

3.3.1 Case study research with specific research design elements

Multiple exploratory and descriptive case studies were appropriate analytical methods in this study. Case studies were the primary research design of this study. This case study research question led to several exploratory and descriptive case studies. Mouton (2008) argues that case studies are more appropriate when the research is exploratory and descriptive in nature rather than explanatory and evaluative. In case study research, five important components of research design have to be addressed, according to Yin (2014), they are:

1. A case study question
2. It's propositions if any
3. It's unit(s) of analysis
4. The logic linking the data to the proposition
5. The criteria for interpreting the findings

Each of the above is explained in detail below:

- ❖ **Case study question:** The vital question asked in the study was: How can a local community be included in the last mile logistics distribution systems of luxury a wildlife tourism destination?
- ❖ **Proposition:** To determine the possibility of including a local community in the last-mile SC processes of a luxury wildlife tourism destination, information pertaining to the study area had to be obtained. However, as mentioned in Chapter 1, limited cases are available. Therefore, a list of luxury wildlife tourism destinations had to be compiled to establish the comprehension, which luxury wildlife tourism destinations have regarding the possibility of; (i) working with, and (ii) including a local community in their last-mile SC processes. Secondary sources of data obtained, which indirectly related to luxury wildlife tourism destinations, and were that of SC organisations. Fast moving consumer goods for wildlife tourism destinations are usually delivered by third-party SC organisations. Data were obtained regarding the organisational perception of the last-mile SC processes in terms of (1) the possibility (yes or no) of including a local community in the last mile distribution, and (2) factors to consider when including a local community, in the last mile such as; (i) cost, (ii) type of product, (iii) packaging, (iv) loading, (v) loading time, (vi) location, and (vii) road. The data collected using data collection instruments are discussed in Chapter 5.
- ❖ **Unit of analysis:** The specific unit of analysis that was investigated in the study was the three selected &Beyond lodges in Southern and eastern Africa. An investigation was done to determine at which &Beyond lodge(s) it would be possible to include a local community in the last-mile SC processes.
- ❖ **Logic linking the data to the propositions:** The logical linking of the data collected helped first, to select the case studies investigated, and second, to judge sustainability in terms of the evaluation frameworks built.

3.3.2 Case record and verification

According to William (2018), numerous case studies can be used to obtain a more cohesive understanding of a research problem. Using case study research, a cross-case analysis platform is constructed, which can be used to compile a verification

report (Yin, 2014). The data obtained in the research were verified, arranged and stored.

3.4 Research methods

In this study, several exploratory and illustrative case studies form the analytical weight. Therefore, the research method in this study was primarily exploratory and descriptive by nature. The aim of the research was established in Chapter 1 – *The inclusion of local communities in the last mile logistics distribution systems of luxury wildlife tourism destinations*. According to William (2018), once the research objective is established, the next step is to consider what type of research method would be appropriate for the research design. For this research study, the author combined various types of research methods. First, to study (through observation, questionnaires and interviews) a few communities close to the selected luxury wildlife tourism destinations, and to determine if local produce is grown in the community. Second, interviews with key informants were held to determine the procurement pathway of products, including fresh produce, for three selected &Beyond lodges. Third, to determine through multi-methods qualitative techniques (face-to-face interviews and telephonic interviews) the purchasing characteristics of fresh produce according to the selected luxury wildlife tourism destinations. Last, also through a multi-methods qualitative technique (face-to-face interviews and telephonic interviews), to determine the distribution requirements, when loading fresh produce at a local community farmer, according to the transport companies. The different types of research methods were developed specifically to answer the research objectives.

The research aim was achieved by adopting both inductive and deductive reasoning. The research method is the procedure the author follows to collect and analyse data (William, 2018). According to Patten and Newhart (2018), research methods can be sufficiently flexible to emerge naturally from the research question, and in turn, form the nature of the social setting in which the research will be carried out. A qualitative strategy is best to identify how people perceive and interpret their experiences in their natural setting and provide answers to the research questions (Mouton, 2008).

The qualitative strategy best lends itself to express variance as a real positive number (O'Dwyer & Bernauer, 2014). A quantitative study research design measures the relationship between numerical variables, followed by statistical data analysis. Quantitative data collection methods allow for the collection of quantitative data which can be statistically analysed. A structured data collection strategy provides more control over the research process (Saunders *et al.*, 2019). This study supported a qualitative research strategy.

According to Mouton (2008), in the content analysis sources of information, such as letters, word documents, speeches, pictures, symbols, interviews and themes are used to review the research information. The content analysis is a review technique of cataloguing different information to support qualitative analysis (Saunders *et al.*, 2019).

3.4.1 Mixed method

According to Deshpande, Narayan and Londhe (2017), qualitative and quantitative methods are often used in a combination of functional research. Creswell (2014) supports these authors' statements but elaborates further by stating that when collecting a diverse range of data, a more complete understanding of the research problem will be achievable through a mixed method, than either a qualitative or a quantitative approach. During the research process, the combination of a qualitative and a quantitative research approach, which is referred to as convergent parallel design (gathers both quantitative and qualitative data, analyses both datasets separately, compares the results from the analysis of both datasets, and makes interpretation as to whether the results support or contradict each other (Asenahabi, 2019)) was viewed as equal, although separate, because different questions were answered on similar and related topics (Deshpande *et al.*, 2017). According to Yin (2014), when the same research questions are used in different environments, a mixed method is appropriate. This study investigated three selected &Beyond lodges by using a mixed methods approach, as it enabled the collection of a diverse range of data, within a single-case study (Johnson & Christensen, 2012). Data can be statistically analysed with statistical analysis software packages, such as IBM SPSS

Statistics 26.0™. Unfortunately, the amount of quantitative data collected during the study was not enough to conduct a statistical analysis because there were a range of questionnaires of which the number of responses were insufficient. However, the qualitative and quantitative data gathered were analysed by the author using an Excel calculation, of which the results were used to calculate the inclusion coefficient (*Cfic*), as discussed in Chapter 5. The next section discussed the Delphi and adapted Delphi used for the empirical data collection section which is fundamental for the answering of the research objectives as stated in section 1.4.1

3.4.2 Delphi technique and adapted Delphi technique

The Delphi technique gathers data using non-physical interactions with members who have been selected to form part of a panel. Various methods of the Delphi technique exist (Fisher, Erasmus & Viljoen, 2020), and in each of the methods, a specific technique is used for data-gathering that is fundamental to the particular Delphi (Table 3.1). Concerning other data gathering and analysis techniques, the Delphi technique is designed to apply multiple interactions with panel members who will express their opinions and supply knowledge concerning a specific topic or problem (Limon, 2021). The Delphi technique is a group process used by researchers to anonymously assess, survey and collect the opinions of a group of experts in a particular environment, or who are experts in a particular field (Barrett, Feng & Wang, 2020; Holt, Hutcheson Crowe & Lynagh, 2021). The participants are facilitated using an interactive process with a set of structured questionnaires or rounds of collecting their opinion and feedback (Hirschhorn, 2019; Rajhans, Rege, Memon & Shinde, 2020).

Table 3.1 Different forms of Delphi

Form of Delphi	Description
Exploratory-/ Conventional-/ Classical Delphi	A panel of experts is recruited to obtain reliable information about future trends concerning a specific issue or topic.
Modified Delphi	The conventional Delphi technique is modified, e.g., by allowing in-person discussion among some of the experts, even at the end of the process, noting the value of face-to-face meetings to exchange views, clarify reasons for disagreements, and resolve uncertainties.

Spatial Delphi	This applies when consultations and related decisions concern matters of spatial location. Experts' contributions are geographically mapped, and convergence of their opinions is indicated utilising simple geometric shapes (circles or rectangles). During subsequent iterations, the shapes become progressively smaller to circumscribe a very small portion of territory that represents the final solution to the research problem.
Policy-/ Focus-/ Decision Delphi	Used to explore different policy options with the most important pros and cons for each policy resolution based on experts' judgments, opinions, and experiences.
Real-time-/ Consensus Conference-/ Normative Delphi	This refers to an online computer-mediated asynchronous conference system where anonymity is guaranteed.
E-Delphi (eDelphi), Technological-/ Online-/ Argument Delphi	A modified Delphi survey conducted online.
Disaggregating Policy Delphi	This format is based on the assumption that consensus is not possible through expert communication but will evoke various schools of thought because experts aggregate around the alternative arguments that gain support.
Problem Solving Delphi	Used for collaborative judgment by collecting participants' rankings or paired comparisons.
The Fuzzy Delphi Method (FDM)	Information obtained is expressed as fuzzy numbers, instead of a single value in traditional deterministic methods.

Source: Adapted from Fisher, Erasmus and Viljoen, 2020.

However, in this research an adapted and modified Delphi approach was used to systematically obtain expert opinions, as well as relevant information that was used to construct the questionnaires. The method used coincided with the description of the modified Delphi and e-Delphi techniques in Table 5.1. According to Ogden, Culp Jr, Villamaria and Ball (2016), when researchers make use of an adapted and modified Delphi technique, experts are able to remotely submit their questionnaires from various locations in a non-confrontational and anonymous manner. The Delphi technique enables researchers to collect data without the need to physically meet the panel members face-to-face. The adapted and modified Delphi method also included telephonic, Microsoft Teams, emails and WhatsApp communication. However, in an adapted and modified Delphi technique there were face-to-face sessions with experts in the hospitality and transport industries whereas in a normal Delphi technique, members would remotely submit their answers to the questionnaires. The information obtained via the adapted and modified Delphi method can be used after the completed sessions (Kraines, Uebelacker, Gaudiano, Jones, Beard, Loucks & Brewer, 2020).

The results and comments, which the group members submitted to the author, were captured in a secured controlled environment (Drumm, Bradley & Moriarty, 2022).

3.4.3 Strengths and limitations of the adapted Delphi technique

The *strength* in using the adapted Delphi technique is the ability to gather data from expert respondents in an unsophisticated manner because non-progressive mathematical skills are needed for the design, implementation and analysis of an adapted Delphi project (Ogden *et al.*, 2016). Weerawardhana, Meegoda and Goonewardena (2022) agree with the authors and stated that an adapted Delphi technique makes it possible for expert respondents to express their opinions incognito without the pressure of manipulation from overbearing group members to confront or adapt to a certain viewpoint. Huong, Huong and Thuc (2016) argue that the Delphi technique is appropriate to use when the judgement and opinions of experts are needed, but due to time constraints, distance and cost factors, sometimes make it difficult for the experts to work together in one location. Therefore, according to Roller-Wirnsberger, Masud, Vassallo, Zöbl, Reiter, Van den Noortgate, Petermans, Petrov, Topinkova, Andersen-Ranberg and Saks (2019), an adapted Delphi technique is a suitable and satisfactory research procedure to determine a specific set of indicators.

It must be noted that an adapted Delphi technique is not without limitations. When researchers use the Delphi techniques for the first time, they may be of the opinion that the process is straightforward without numerous complications (Badghan, Namdar & Valizadeh, 2020). Karabasevic, Stanujkic, Urosevic, Popovic and Maksimovic (2017) agree that the sample size of the experts may not reflect the overall view of many others in a similar environment, who were not part of the original research process. Drumm *et al.* (2021: 2) agree with Karabasevic *et al.* (2017) by expressing that the intention of the Delphi 'might be more of an art than a science' because the Delphi technique lacks rudimentary guidelines for scientific research. The Delphi technique involves rounds of data collection, and according to Karabasevic *et al.* (2017), the drawback is that the experts' opinions are expected to change between rounds. This makes the analysis difficult, based on the alteration of opinions, because

additional rounds to gather data would be needed to fully respond to the panel of experts.

To summarise, the adapted Delphi technique as a research approach, has positive and negative criteria according to numerous studies (Song, Chen, Zhang, Wang, Li, Li, Yuan & Zhang, 2020). Rajhans *et al.* (2020), state that using the Delphi technique is particularly useful to obtain ideas from an isolated panel of experts to reach consensus on a specific topic and establish agreement. The application of the adapted Delphi technique can be adapted because it follows some central features, such as the researcher having the ability to tailor the process to the particular distinctiveness of the research problem (Hirschhorn, 2019). Therefore, it can be concluded that an adapted Delphi technique was an appropriate and acceptable method for this study.

3.4.4 Expert panel selection

When making use of the adapted Delphi technique, the quality of information acquired is dependent on the selection of the panel of experts. It is essential that these experts must have extensive knowledge of a particular environment (Hirschhorn, 2019). According to Drumm *et al.* (2021), there is no rule concerning the optimal size of the panel of experts, which could fluctuate from five to one thousand. Zhang and Xi (2021) believe that the study design will determine the lowest appropriate number of experts needed to substantiate a comprehensive outcome. Habibi, Sarafrazi and Izadyar (2014) argued that an ideal number for a panel of experts in the adapted Delphi technique can oscillate between five to ten or six to twelve panel members who have specialised areas of knowledge. According to Barrett *et al.* (2020), a panel of experts is defined as individuals who have experience or expertise, who have worked in the study area for more than ten years or who have the necessary academic qualifications.

Drumm *et al.* (2021) agree with Barrett *et al.* (2020) that experts must possess a certain range of knowledge to be appropriate candidates for the research study and that the anonymity of the experts will not influence the outcome of the results. The panel of experts who participated in this adapted Delphi research technique were thoroughly evaluated and selected by the author. After the experts were chosen, they

were personally contacted using one of the following methods, such as emails, telephone calls or virtual face-to-face Microsoft Teams meetings. The author explained to all the experts what the adapted Delphi technique is; they then agreed to participate in the research process (Bieijlevens, Wagner, Capezuti, Hamers & International Physical Restraint Workgroup, 2016). The following analyses were used in the adapted Delphi research process; (i) Why was the researcher interested in the availability of fresh produce from local communities around luxury wildlife tourism destinations? (ii) If the fresh produce from local communities could be included in the SC processes of luxury wildlife tourism destinations? and (iii) Can the results from the adapted Delphi technique be used to decide the possibility of including fresh produce from local communities that are close to luxury wildlife tourism destinations in the last-mile SC processes of luxury wildlife tourism destinations?

The choice of the panel members is an important step because it relates directly to the quality of the information to be gathered. Information that is required on a specific issue, is gathered from rounds of questioning of a panel of experts over a period of time (Schmalz, Spinler and Ringbeck, 2021). According to Drumm *et al.* (2021), there is no set number of Delphi technique rounds. However, the authors discovered from their research that the most appropriate number of rounds to gather data appears to be two or three rounds using the adapted Delphi. For that reason, three-rounds of gathering data were used during this study (Figure 3.1).

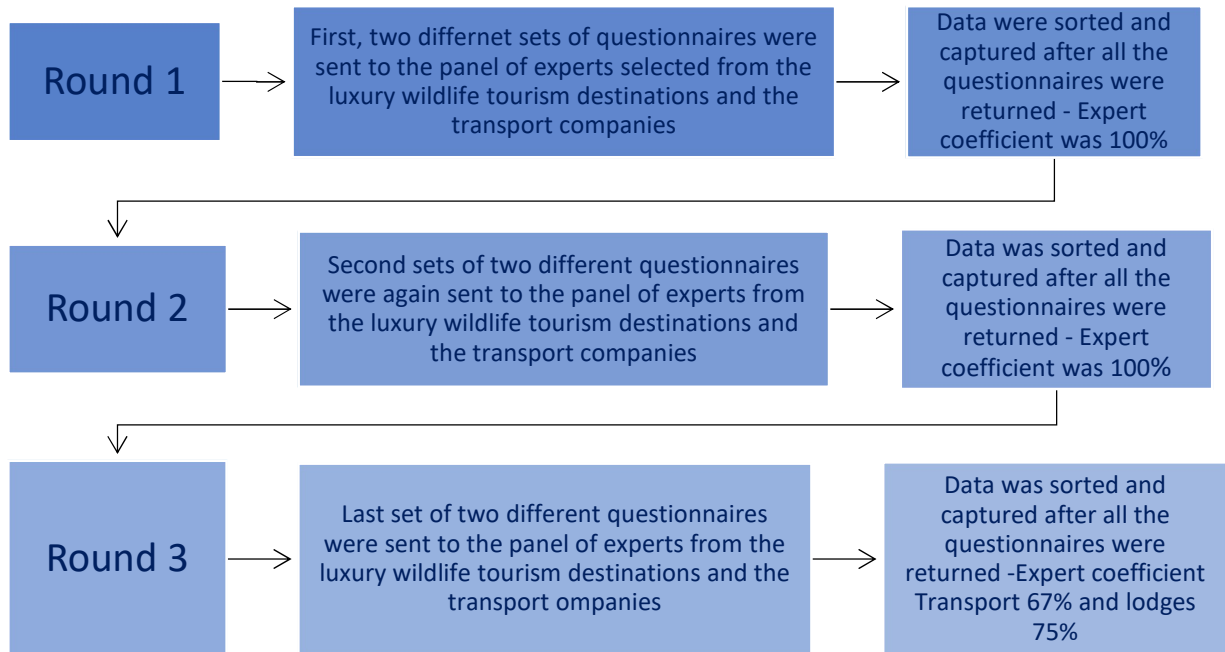


Figure 3.1 Data collection process
Source: Developed by the author, 2022

❖ Round 1

In the first round, questionnaires were sent to persons at the luxury wildlife tourism destinations and transport/logistics companies. The questionnaires of the luxury wildlife tourism destinations related to the acquisition process and the characteristics of fresh produce. The questionnaires related to the load requirements of the transport/logistics companies when loading for the first time at a new company.

It must be noted that the questionnaires were not sent to luxury wildlife tourism destinations in Tanzania and Zanzibar but only to those in South Africa for the following reasons; (1) as mentioned in Section 4.2.1, Klein's Camp is located on the north-eastern border of the Serengeti National Park, it is very remote, and products are sent from the Arusha office. There are no luxury wildlife tourism destinations surrounding Arusha, (2) in Zanzibar there are small companies and one-man businesses scattered across the country, which sell different kinds of products, including fresh produce to organisations and private individuals (N. Davids, 2020, October 16), (3) in Zanzibar there is a huge central marketplace where various merchants sell

a variety of products to organisations and private individuals, (4) as mentioned in Section 3.4, COVID-19 travel restrictions made it difficult for the author to visit Mnemba Island to investigate the various fresh produce suppliers operating in Zanzibar.

The questionnaires were emailed to the panel of experts, and the time of questionnaire recovery was established. When all the questionnaires were returned, the data were sorted and captured. Feedback was provided (information only related to the transport/logistics companies in Table 5.1) were emailed to the panel of experts regarding the percentage response rate and data captured.

❖ **Round 2**

In the second round, the questionnaires were sent to persons at the luxury wildlife tourism destinations to complete. These questionnaires related to the possibility of including fresh produce from local community farmers in their SC.

The second round of questionnaires were sent to persons at the transport/logistics companies. These questionnaires related to the possibility of collecting fresh produce from local community farmers and including these on the existing load for the luxury wildlife tourism destination.

In the second round, two different questionnaires were emailed, once again to the panel of experts; the time of questionnaire recovery was established. When all the questionnaires were returned, the data were sorted and captured. Feedback was given (information only related to transport/logistics companies in Table 5.1) by email to the panel of experts regarding the percentage response rate and data captured. The panel of experts were informed about the final questionnaire.

❖ **Round 3**

In the final round, the personal opinions of the panel of experts relating to the acquisition and the distribution of fresh produce from local communities to luxury wildlife tourism destinations areas. When all the responses of the panel of experts were returned, the information was sorted and captured. Feedback was only given to the panel of experts who returned their questionnaires. After collecting the data from the three rounds, all the panel of experts were thanked for their willingness to assist in the data collected from the questionnaires.

3.4.5 Steps of the research

In the study, a research process of four steps was followed (Figure 3.2). In the first step, the review process started with the implementation of the research question (Section 1.4.2). In step 2 a comprehensive literature search was conducted (Chapter 2, Literature Review). During step 3, data were collected to address the aims and objectives of the study (Section 1.4.3). In the final step, the data collected were interpreted and discussed. The findings and results were included in the synthesis (Section 6.2).

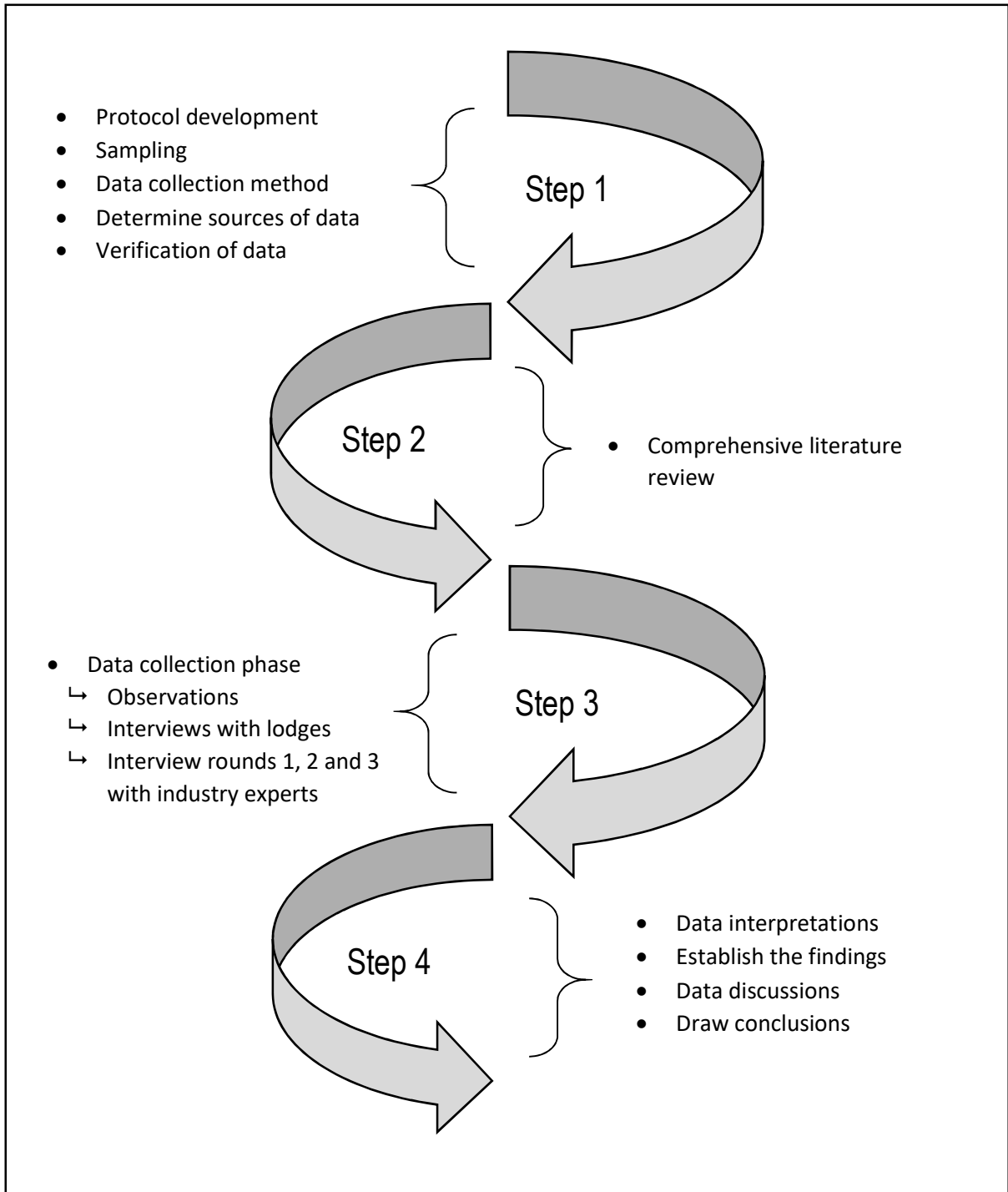


Figure 3.2 Steps of the research process
Source: Developed by the author, 2022

The four key elements that were investigated are; (i) the current suppliers to the &Beyond lodges, (ii) the location of the &Beyond lodges, (iii) all the parties involved in the supply of fresh produce to the &Beyond lodges, and (iv) the local communities located near the &Beyond lodges. The primary aim of the research was to determine

if local communities can be included in the last-mile SC processes of the FMCG for luxury wildlife tourism destinations.

In summary, the research phases included:

- ☞ An interview with community farmers located around the selected &Beyond lodges:
 - ◇ Sixty-one community farmers: 30 in Zanzibar, 30 in KwaZulu-Natal and one close to Klein's Camp were visited to determine what types of fresh produce these community farmers are producing
 - ◇ The community farmers were interviewed, which did not take longer than 30 minutes (Appendix O)

- ☞ Industry experts:
 - ◇ Fifty-one industry experts: 21 from luxury wildlife tourism destinations, and 30 from SC organisations were interviewed, which were no longer than 30 minutes
 - ◇ &Beyond decision-makers and staff were also interviewed.

3.5 Data collection methods for the case study selection

The primary research design for this study was case studies. Multiple exploratory and descriptive case studies were used to formulate the research questions. In a study which is more exploratory and has a descriptive nature rather than explanatory and evaluative, according to Mouton (2008), a case study research method would be more appropriate.

3.5.1 Phase 1: Understanding the supply chains of &Beyond

This research phase tested the tourism industry's vision of SCs for FMCG for luxury wildlife destinations and a last-mile SC processes for FMCG. This was accomplished by conducting and documenting selected luxury wildlife tourism destinations in a series of structured interviews with this group of SCM experts. Luxury wildlife tourism destinations do not have relevant sectors for SC issues, such as transport, energy and manufacturing. According to Morali and Searcy (2013), organisations depend on other

parties for critical resources, such that there is a need to continuously manage this dependency, which is essential for the survival and growth of the organisation.

The luxury wildlife tourism industry and SCM experts are defined as individuals representing luxury wildlife tourism destinations, SC organisations, consulting companies, academia, government agencies, and non-government organisations. These experts are concerned with one or more aspects of SCs of FMCG for luxury wildlife tourism destinations and the last-mile SC processes for FMCG. Two groups of industry experts with varying degrees of exposure to SCs of FMCG for luxury wildlife tourism destinations and the last-mile SC processes for FMCG were identified and formally engaged after telephone calls and follow-up e-mails. If the experts were based beyond a radius of 250km from Johannesburg, interviews were conducted via telephone, Skype or video calls.

3.5.2 Phase 2: Research using observation and interviews

An observation research technique was used to determine what fresh produce community farmers near two of the three selected &Beyond lodges were producing. &Beyond employees visited community farmers and documented their types of fresh produce. Informal interviews were conducted regarding the challenges and difficulties community farmers had cultivating the fresh produce. This information was crucial to establish the possibility of including the fresh produce from community farmer/s in the last-mile SC processes of luxury wildlife tourism destinations.

3.5.3 Phase 3: Research using questionnaires

3.5.3.1 Questionnaire design

The author approached industry experts to obtain information regarding the characteristics and requirements when; (i) purchasing fresh produce, and (ii) collecting and distributing/delivering fresh produce. The information was gathered with the use of emails and telephonic interviews. The objective was to use the information obtained from the industry experts to design two different sets of questionnaires. These questionnaires would then be sent to two different panels

of experts. The first group of 30 experts were distribution managers from various SC organisations. The second group of 21 experts were from various luxury wildlife tourism destinations.

According to Maxwell (2017), for questionnaires to be constructive, a sequence of questionnaires must be distributed through a succession of data-gathering rounds to a panel of experts. Hirschhorn (2019) is of the opinion that there is no constructive research literature that recommends a set number of questions in a questionnaire. In this study, the process of collecting the data was obtained using a series of questionnaires. A 5-point Likert scale was used as a tool to measure data in three interviews. The sequence of the interviews were as follows:

❖ **First interviews with experts from luxury wildlife tourism destinations**

In Round 1, the panel of experts from luxury wildlife tourism destinations had to select answers on a scale ranging from 1 = extremely important to 5 = unimportant (Appendix B).

❖ **First interviews with experts from supply chain organisations**

During the first interviews, the panel of experts from SC organisations had to select answers on a scale ranging from 1 = extremely important to 5 = unimportant (Appendix C).

❖ **Second interviews with experts from luxury wildlife tourism destinations**

During the second interviews, the panel of experts from luxury wildlife tourism destinations had to select answers on a scale ranging from 1 = strongly agree to 5 = strongly disagree (Appendix D).

❖ **Second interviews with experts from supply chain organisations**

During the second interviews, the panel of experts from SC organisations had to select answers on a scale ranging from 1 = extremely important to 5 = unimportant (Appendix E).

❖ **Third interviews with experts from luxury wildlife tourism destinations**

During the last interviews, the panel of experts from luxury wildlife tourism destinations had to provide their opinions based on the results of Round 1, and Round 2 (Appendix F).

❖ **Third interviews with experts from supply chain organisations**

During the last interviews, the panel of experts from SC organisations had to provide their opinions based on the results of Round 1, and Round 2 (Appendix G).

The questionnaires for the Interviews 1, 2 and 3 were emailed to the panel of experts from the luxury wildlife tourism destinations and those from SC organisations. After the first interview the panel member returned the questionnaire. Once received and the data captured, the questionnaire for the second interview was emailed to the panel member. The data was captured on receiving the questionnaire from the second interview and then the questionnaire for the last interview was emailed to the panel member. None of the expert panel members from the luxury wildlife tourism destinations and from the SC organisations had any knowledge of the other panel members.

For the purpose of this research, from the interviews, a register of experts was compiled. Three interviews and interactions with the selected panel members were used to collect data; the interaction was virtual. Concerning other data gathering and analysis techniques, interviews are designed to apply multiple interactions with panel members who express opinions and supply knowledge concerning a specific topic or problem (Boparai, Singh & Kathuria, 2018). Interviews were used to collect responses from industry professionals working at luxury wildlife destinations and from SC organisations. The questions focused on identifying opportunities and challenges to involve local communities in FMCG's last-mile SC processes. Respondents were

contacted after each round of questioning until common trends were identified and consensus or disagreement was reached.

3.5.3.2 First interviews

The author conducted telephonic interviews with some experts from both luxury wildlife tourism destinations (Appendix B), as well as SC organisations (Appendix C), to complete some questionnaires. Other questionnaires were sent to experts from both luxury wildlife tourism destinations and SC organisations. The information gathered from the luxury wildlife tourism destinations was concerning the characteristics that fresh produce must have when purchasing the items. Information was gathered from the SC experts from organisations concerning the important characteristics when SC organisations are loading products at a company. After the questionnaires were returned the responses from the panel of experts were captured.

The luxury wildlife tourism destinations in this research were located through an internet search. The top luxury wildlife tourism destinations were approached to participate but due to COVID-19 restrictions, distance, locations, and company rules and regulations, the experts from the below-mentioned luxury wildlife tourism destinations agreed to participate:

1. &Beyond Phinda Forest, Vlei and Homestead Lodge
2. &Beyond Phinda Mountain, Rock and Zuka Lodge
3. Dulini Private Reserve (previously Exeter River Lodge)
4. Gorah Lodge
5. Jamala Madikwe
6. Kapama Game Reserve – Kruger National Park
7. Kwandwe Private Game Reserve
8. Lion Sands Tinga Lodge
9. Londolozi
10. Makakatana
11. Mala Game Reserve
12. Morukuru Lodge
13. Mount Camdeboo

14. Rhino Sands
15. Royal Malewane
16. Sabi Sands Game Reserve
17. Singita Sweni and Lebombo Lodge
18. Thorny Bush Lodge
19. Tree Top Lodge
20. Tswalu Kalahari Reserve
21. Ulusaba private game reserve

According to KR. Bell (2021, 14 October), there are approximately 300 SC operators scattered across South Africa. Many of these are small to medium size organisations and find it difficult to compete in the very competitive SCE of South Africa. The SC organisations in this research were located through an internet search. Many SC organisations were approached to participate but due to COVID-19 restrictions, distance, locations, and company rules and regulations, the only experts from the below-mentioned SC companies agreed to participate:

1. Barloworld Logistics
2. Comserve (Pty) Ltd
3. Consolidated Cargo Carriers
4. Crossroads Distribution (Pty) Ltd
5. D & H Logistics
6. Dezzo Trading (Pty) Ltd
7. FMC Logistics cc
8. Heneways Freight Services
9. Invusa Transport
10. Interlogix
11. JHM Logistics
12. Jonen Freight (Pty) Ltd
13. Kargo Logistics (Pty) Ltd
14. Kargo Long Distance (Pty) Ltd
15. Letaba Logistics
16. Logwin

17. Lucerne
18. Managed Freight
19. Musubo Freight and Logistics (Pty) Ltd
20. Nace Logistics
21. Nyati South Africa (Pty) Ltd
22. Onelogix Group Limited
23. Procet Freight
24. Reliable Resources & Logistics (Pty) Ltd
25. Shogan Transport
26. SMC Freight Logistics
27. Tiexma Transport cc
28. Trans Logistics Services
29. Valley Transport
30. Vanito (Pty) Ltd

3.5.3.3 Second interviews

During the second round the author again conducted telephonic interviews with some experts from both luxury wildlife tourism destinations (Appendix D), as well as SC organisations (Appendix E), to complete some questionnaires. Other questionnaires were sent to experts from both luxury wildlife tourism destinations and SC organisations. Information from luxury wildlife tourism destinations was gathered concerning; (i) the possibility of including fresh produce from local community farmers in the SC of luxury wildlife tourism destinations, and information from SC organisations was gathered concerning (ii) the possibility of collecting and including fresh produce from local community farmers in the existing load for a luxury wildlife tourism destination. The information was captured after the return of the questionnaires.

3.5.3.4 Third interviews

For the final interviews (Appendices F and G) the personal opinions were asked of the panel of experts from the luxury wildlife tourism destinations, and the SC organisations relating to the acquisition and distribution of fresh produce from the local

communities to luxury wildlife tourism destinations areas. The information (Table 5.1, 15 questionnaires from luxury wildlife tourism destinations which was a 75% expert coefficient, and 20 questionnaires from SC organisations which was a 66.67% expert coefficient) was captured for the final time and conclusions were formulated.

According to Lottering (2021), there are numerous luxury wildlife tourism destinations in South Africa. Due to distance, location and COVID-19 difficulties, only South African-based luxury wildlife tourism destinations were contacted to participate in the research. The author searched the internet with key words, such as '*best luxury safari lodges in South Africa, 5 star wildlife destinations in South Africa, and top 10 game reserves in South Africa*' to acquire the names of the most luxurious wildlife destinations in the country. All the luxury wildlife tourism destinations, listed in Section 3.5.3.2, are dependent on efficient SC processes. This is achievable when the suppliers of raw materials, manufacturers and the SC operators are able to deliver the right product to the right customer and within the required time with minimum disruptions and as cost-effectively as possible (Paulraj & Schuetz, 2013).

Supply chain management as a notion is a very complex activity because of all the links, especially for luxury wildlife tourism destinations. The final step in a SC is ensuring customer satisfaction, but before this can be achieved various upstream activities within the SC, such as the acquiring of raw materials, manufacturing, packaging, information sharing, orders received, currency transferring, and distribution must have been completed. Therefore, to manage a SC effectively requires tremendous organising, planning and control (Spasić, 2013).

Using the results of a literature survey and interviews with SC industry experts, two rounds of questionnaires were developed. Two separate rounds were sent to pre-selected luxury wildlife destinations, as well as SC organisations. The questionnaires, which included qualitative and quantitative questions, were used to collect qualitative data using multiple methods. It included objective, as well as subjective perspectives from the market on 1) an understanding of &Beyond's SCs, 2) the extent to which the community can be involved in the last-mile SC processes for FMCG, and 3) the barriers preventing the implementation of including local communities in the last-mile

SC processes for FMCG. Multi-method collection of qualitative data was aimed at understanding the SCs of &Beyond and the degree to which the current SCs could be linked to including the local communities in the last-mile SC processes for FMCG. Qualitative and subjective data were aimed at understanding the context of &Beyond's SC for FMCG. Awareness and buy-in to completing the survey were obtained by distributing e-mails and newsletters to the target population.

3.5.4 Phase 4: Understanding the latent, new and current possibilities of including a local community in the supply chain

The findings were from the literature review, and the interviews with industry experts from the luxury wildlife tourism destinations and SC organisations. The author had informal telephonic discussions with various industry experts from wildlife tourism destinations, luxury wildlife tourism destinations and SC organisations before the questionnaires were developed. These were translated and used to compile a mixed method questionnaire, which contained both qualitative and quantitative questions. The questionnaires were completed by experts from previously selected luxury wildlife tourism destinations and SC organisations. These were written in appropriate business language while not losing perspective of the rigour required to support this academic research. The objective of the research was to provide guidance for luxury wildlife tourism destinations with the possibilities on how to include local communities in the SCs of FMCG and the last-mile SC processes for FMCG. The information gathered during the second interviews gave an indication of the different types of fresh produce the farmers in the local communities were currently producing. By establishing an overall view of the different types of fresh produce available from community farmers, a luxury wildlife tourism destination would have an indication whether it would be worthwhile to continue exploring the possibilities of including fresh produce from a local community farmer in their last-mile SC processes.

3.5.5 Phase 5: Data Analysis, development of the framework, testing of the framework and conclusions

The findings from the four interventions mentioned above were analysed and conclusions drawn about the obstacles contributing to the last-mile SC processes of the FMCG for &Beyond. This was followed by the development of an appropriate contribution to the body of knowledge, consisting of; (i) a set of executable steps, (ii) a list of stakeholders required to participate in each step, their roles and responsibilities, and (iii) the platforms and forums to be used for future restructuring of SCs. Appropriate case study literature was studied; the information in the case studies that could contribute to the purpose study was selected. A case study was undertaken at each of the three selected &Beyond luxury destinations to develop a strategic framework to determine if an opportunity existed to procure fresh produce from local community farmers. The framework for the possible inclusion of fresh produce from local community farmers would assist a luxury wildlife tourism destination to decide the feasibility of including fresh produce from local community farmer/s in their last-mile SC processes. On completion, conclusions were drawn, recommendations made, and the framework finalised. Three anonymous luxury wildlife tourism destinations were selected and the framework and the associated community farmer inclusive coefficient (*Cfic*) was tested.

3.6 Ethical research considerations

According to Patten and Newhart (2018), researchers seek answers or solutions for a problem or scenario in an ethical manner. William (2018) agrees with the authors, stating that no matter how trivial a study is, if it is done honestly, it matters. The author obtained ethical clearance (Appendix A) and in this study the author used the following ethical considerations, which is proposed by Warr, Cox, Guillemin and Waycott (2016) and Cresswell (2014) as explained below:

- ❖ **Respect the local community and disturb them as little as possible:**
Although COVID-19 travel restrictions made it difficult for the author to visit (1) Forest Lodge in Phinda Private Game Reserve, (2) Klein's Camp in the Serengeti, and (3) Mnemba Island in Zanzibar. The author did employ &Beyond personnel to visit community farmers and to conduct research on his behalf (Appendix N). The author used WhatsApp Wi-Fi calls to explain to the &Beyond

employees how to use the questionnaires, and informed the researchers to treat the community members with the utmost respect. The environmental observation was conducted, and no physical environmental changes took place.

- ❖ **Informed consent and voluntary participation:** According to Warr *et al.* (2016), when research participants are treated respectfully, it will allow them to make knowledgeable decisions whether they want to participate in the research or not. Participants voluntarily gave their consent based on their access to sufficient information that clearly described the purpose and aims of the research, their needs, and any risks to which they may be exposed (Appendix N). After giving consent, the participants were informed they can refuse to answer specific questions, or if they felt uncomfortable during the process, they could withdraw at any time. The participants had the right to the contact details of the researcher if there were any queries or problems after the research was conducted.

Confidentiality and anonymity: The privacy and confidentiality of all the participants must be respected and protected by the researcher, even though the participants are unknown to the researcher (Warr *et al.*, 2016). Patten *et al.* (2018) argue that a researcher has the obligation to maintain the anonymity and confidentiality of the participants even when the information was freely and knowingly provided by the participants. Storey and Hesbol (2016) are of the opinion that researchers must protect participants from not only physical harm but also discomfort, such as distress, embarrassment, shame, or regret. The names of the participants were not acquired and the information for the research was presented in such a manner that the participant information could not be recognised, thereby assuring anonymity.

3.7 Conclusion

This chapter provided a detailed overview of the research design and philosophy and the research methods (including the adapted Delphi technique). The need to have a demanding case study research process, a point reinforced by Yin (2014), was

important because it would provide an overall view of the prospects of the inclusion of local communities in the last-mile SC processes of luxury wildlife tourism destinations and suggest ways to manage a local community efficiently. In the luxury wildlife tourism environment, FMCG supply disruptions occur sometimes, which can have a far-reaching avalanche effect because the guests visiting these facilities expect excellent customer service.

The next chapter (Chapter 4) will provide an overview of the FMCG SC functions for the three selected &Beyond lodges; (i) Forest Lodge in Phinda Private Game Reserve, (ii) Klein's Camp in the Serengeti, and (iii) Mnemba Island in Zanzibar. The relevance and importance of the different SCs will be identified and formalised.

Chapter 4: Supply chains of luxury tourism destinations

4.1 Introduction

In the previous chapter (chapter 3), the focus was on data collection and analysis methods based on the research philosophy and the research design. In this chapter, the context of the procurement and supply pathways of the three selected &Beyond lodges will be discussed in terms of relevance to luxury wildlife tourism destinations.

In the tourism industry, luxury wildlife tourism destinations, such as &Beyond, have different SCs that supply a diverse range of products to various camps and lodges; within these, other SCs are, in retrospect, the lifelines of the different &Beyond camps and lodges business processes. According to Gattorna (2015), a business should search for new and alternative methods/products that will assist the organisation to get closer to their customers so that the change can bring about a new growth path for their companies. What does this mean for a luxury wildlife tourism company, such as &Beyond? Gattorna suggests (2015) that companies must align their SC strategies to focus on customers' needs. It means that &Beyond should attempt to inform the customers visiting their camps and lodges about the origin of the fresh produce SC from a local community, as described in Chapter 2 (Section 2.3.2). For example, the inclusion can be achieved by providing the customers with information about the name/s and the different types of fresh produce these community farmers are providing for their enjoyment. In this chapter, the researcher will be establishing the supply operations of fresh produce for Klein's Camp in the Serengeti, Mnemba Island in Zanzibar, and Forest Lodge in Phinda Private Game Reserve.

4.2 History and lodges of &Beyond

&Beyond operates 29 camps and lodges in spectacular locations, from the Serengeti and Okavango Delta to the islands of the Indian Ocean. The dream began over 30 years ago at Londolozi Private Game Reserve in South Africa. Yet it was not until the early 1990s, when those at Phinda, the Zulu word for "return", sparked the idea of creating sustainable conservation combined with responsible tourism. Community responsibility was embraced and expanded the ethics professed by &Beyond: "Respect the land, respect the wildlife, respect the people" (Andbeyond, 2019a).

&Beyond also strongly believes in giving back to the community by providing employment, land ownership opportunities, and building local schools and clinics. Numerous international hospitality and conservation awards recognise this philanthropic spirit. The prestigious Conde Nast Traveller's World Savers Award for Wildlife Conservation, was awarded to the flagship Phinda Private Game Reserve in 2008 (Go2Africa, 2019).

Although &Beyond has 29 camps and lodges, including them in the research process would have been a considerable undertaking. Therefore, as mentioned in Chapter 3 (Section 3.3.3), during the research process, only three &Beyond lodges; (i) Klein's Camp in the Serengeti, (ii) Mnemba Island in Zanzibar and (iii) Forest Lodge in Phinda Private Game Reserve, were used during the research (Figure 4.1). These three &Beyond lodges were selected because each is located in different and unique environments. These three lodges have provided unique SC challenges with an opportunity. Hence, the data collection were of a diverse range, which was used in the case study research method. However, all three lodges belong to the same tourism company, therefore, the administrative processes and company policies would be the same across the three case studies.

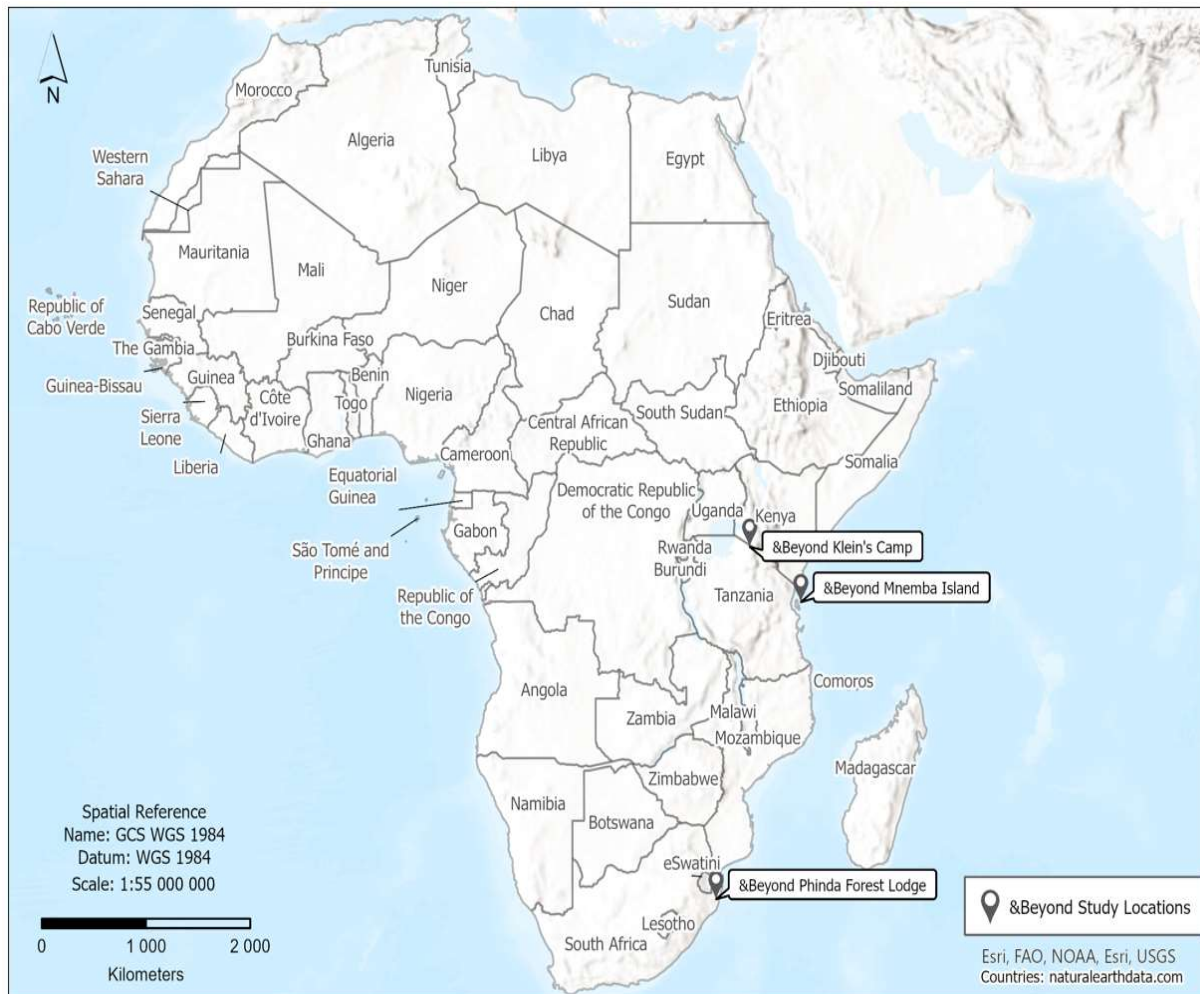


Figure 4.1 &Beyond lodges of the study
Source: Esri, FAO, NOAA, USGS, naturalearthdata.com

4.2.1 Klein’s Camp – Serengeti

Within the Serengeti National Park and surroundings, the following &Beyond lodges are located; (i) Grumeti Serengeti Tented Camp, (ii) Serengeti Under Canvas, and (iii) Klein’s Camp. Klein's camp is located on the north-eastern border of the Serengeti National Park (Figure 4.2). Initially, the camp was built for hunters, which &Beyond leases from the Maasai for the exclusive use of the guests who stay there. A small, luxury lodge that can only accommodate 20 guests at a time is located in a private 10 00-hectare sanctuary. Due to its elevation, there are spectacular views over the valley and the woodland savanna. Guests visiting Klein’s Camp fly from Arusha airport to Lobo airstrip in the morning and then take a one-hour scenic drive through the

Serengeti National Park to reach Klein's Camp, which is situated just outside its borders (Expert Africa, 2019).

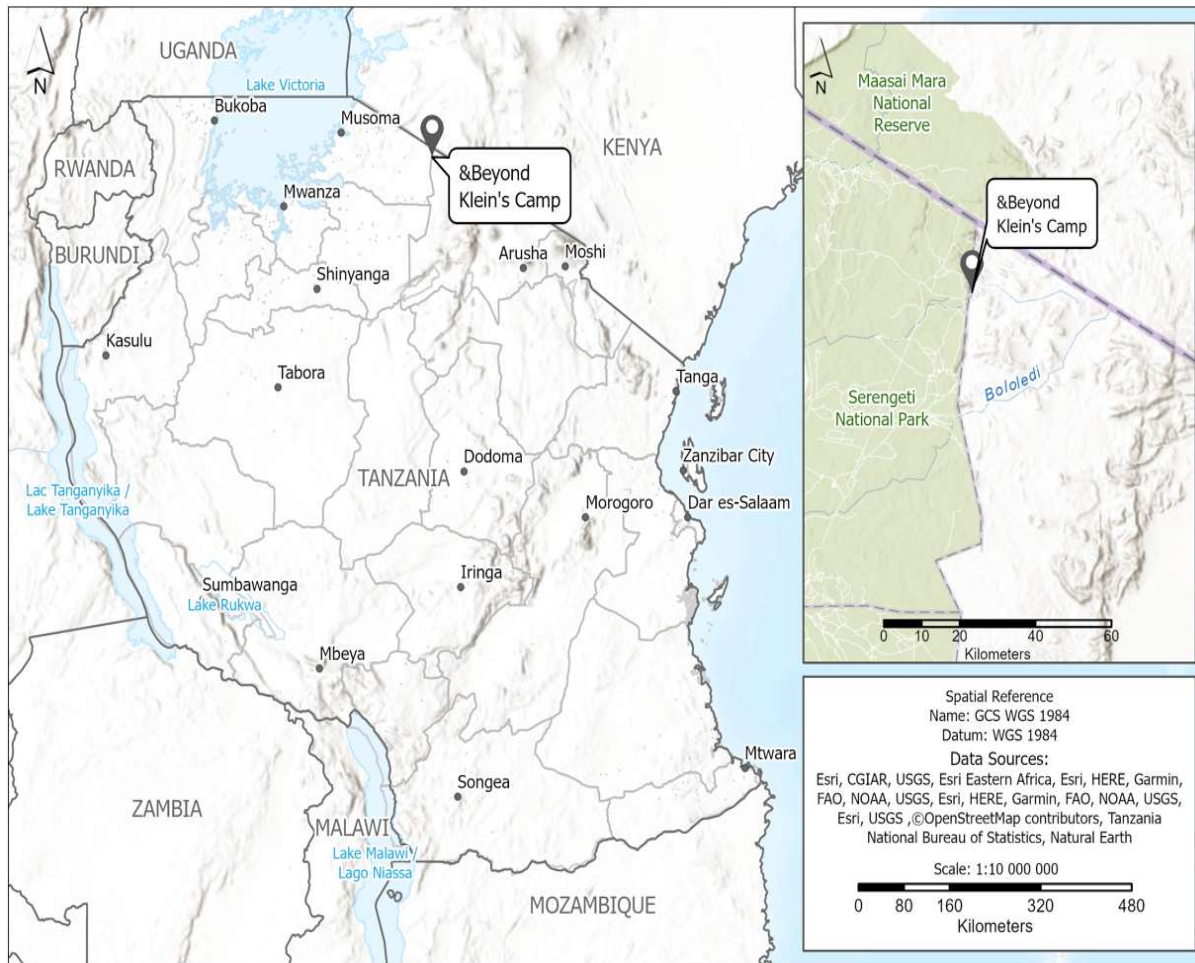


Figure 4.2 &Beyond Klein's Camp
 Source: Esri, FAO, NOAA, USG, naturalearthdata.com

4.2.2 Mnemba Island – Zanzibar

Mnemba Island is a small island in the Indian Ocean just off the coast of Zanzibar. It is visible from the north-eastern beach of Zanzibar and is 1.93km (1.2 miles) from the beach (Figure 4.3). This small private island of &Beyond is situated in the turquoise waters of the warm Indian Ocean. Mnemba Island can only accommodate a maximum of 24 guests at a time. To get to Mnemba Island, guests, staff, equipment, and products must travel from the Muyuni-Mnemba transfer point (Figure 4.4) across the sea in a ski boat. The journey takes 15 minutes, depending on how calm or rough the ocean is. Since there are no jetties (Figure 4.5), departures and landings are directly

to and from the beach of Zanzibar and can become tricky at times (The Luxury Travel Expert, 2019a).

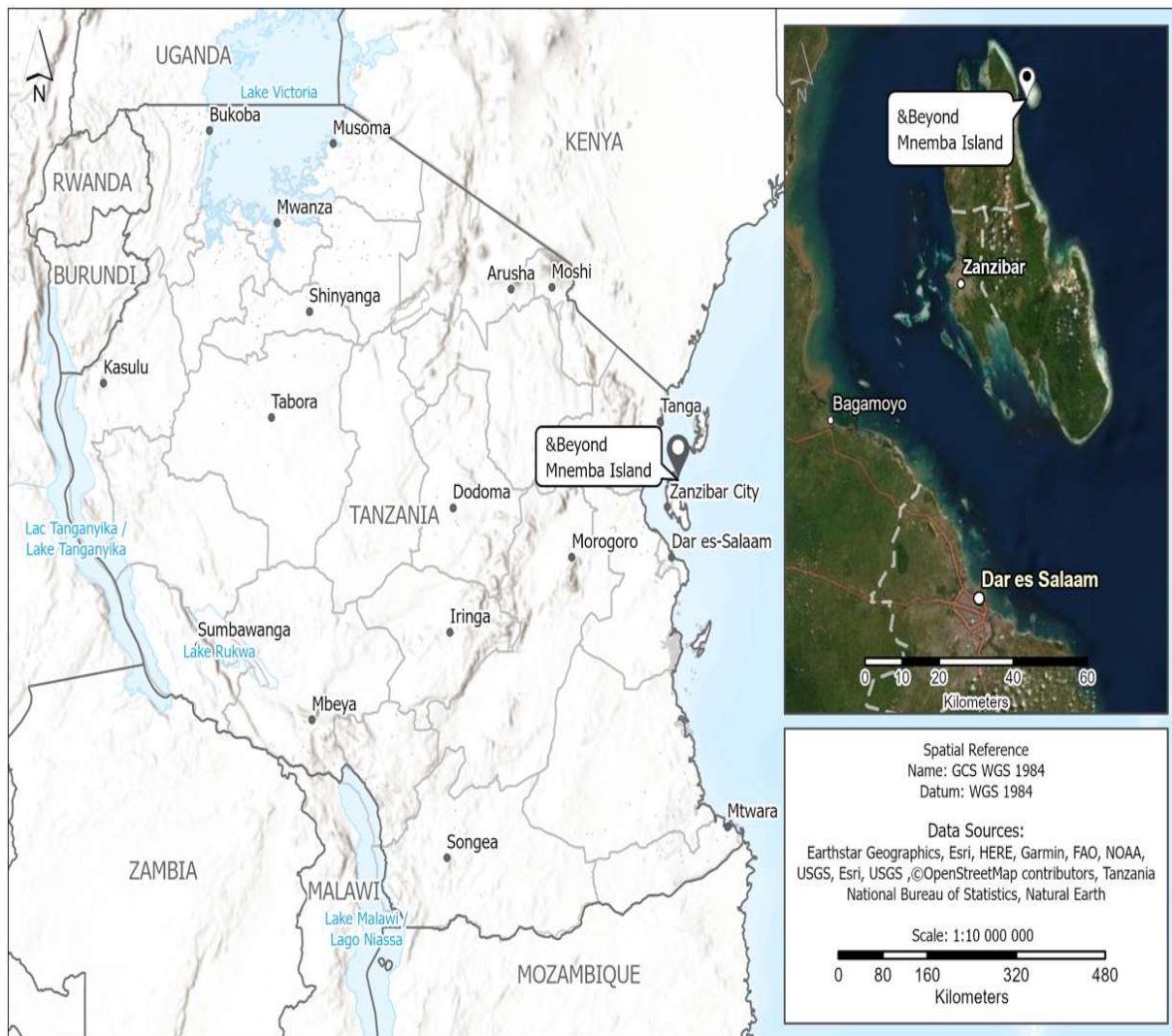


Figure 4.3 &Beyond Mnemba Island
Source: Esri, FAO, NOAA, USGS, naturalearthdata.com

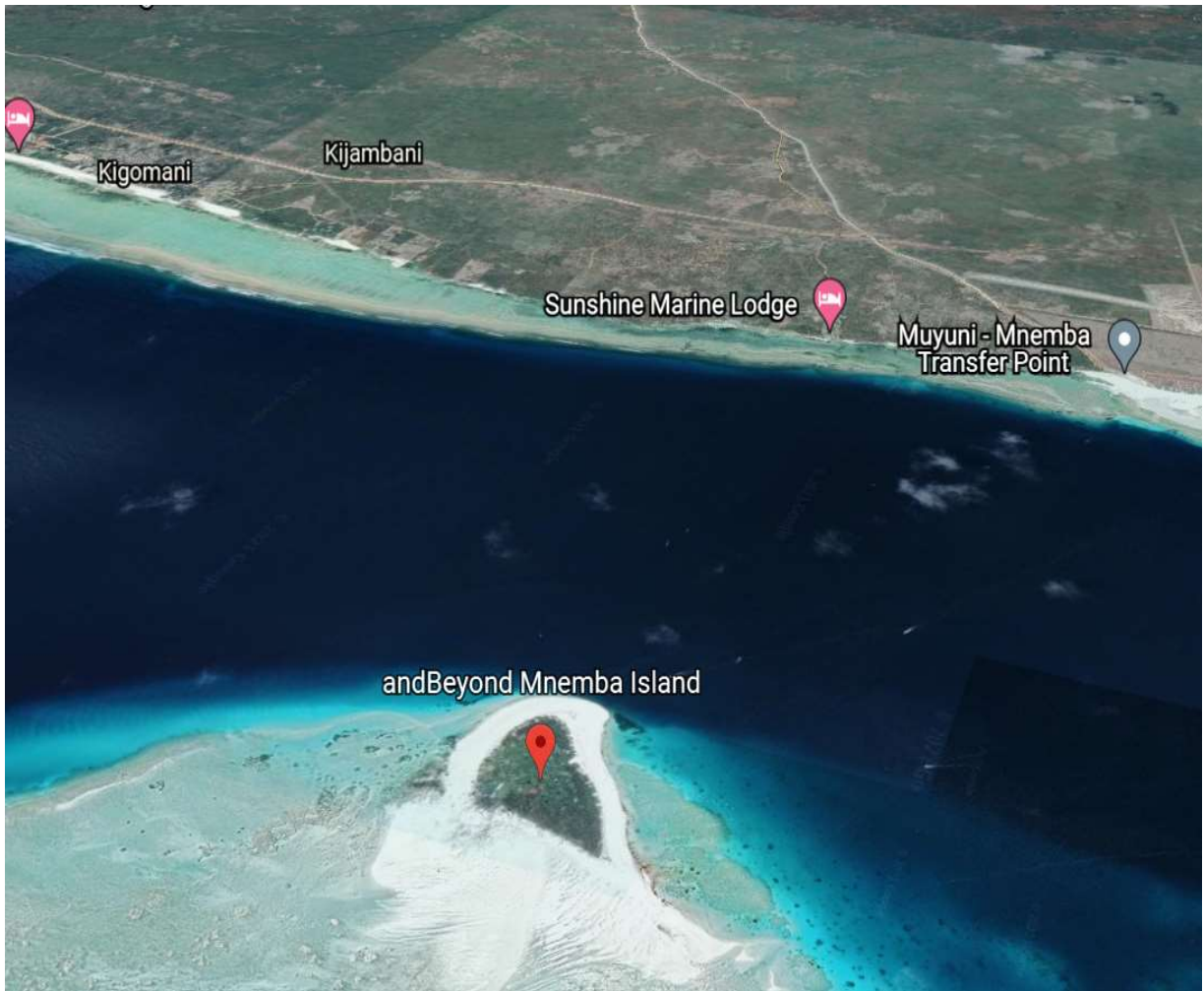


Figure 4.4 Aerial photo of &Beyond Mnemba Island
Source: www.earth.google.com



Figure 4.5 Departing to Mnemba Island

Source: theluxurytravelexpert.com/2018/02/14/review-mnemba-island/

4.2.3 Phinda Private Game Reserve – KwaZulu-Natal

The &Beyond Phinda Private Game Reserve is located in northern KwaZulu-Natal (Figures 4.6 and 4.7). This private game reserve was founded in 1991 when ecotourism was a form of sustainable tourism that focused on community development and conservation. The word Phinda means 'the return' in the isiZulu language. Thus, symbolising the goal of returning the area to its natural state that it is now. Phinda Private Game Reserve covers an area of 34,600m². Within the &Beyond Phinda Private Game Reserve, the following lodges are located; (i) Phinda Homestead, (ii) Phinda Forest Lodge, (iii) Phinda Mountain Lodge, (iv) Phinda Vlei Lodge, (v) Phinda Rock Lodge, and (vi) Zuka Lodge. Two rivers, the Munyawana and the Mzinene, run through the reserve and to the south are the rocky foothills of the Lebombo Mountains (South-African-Lodges, 2019).

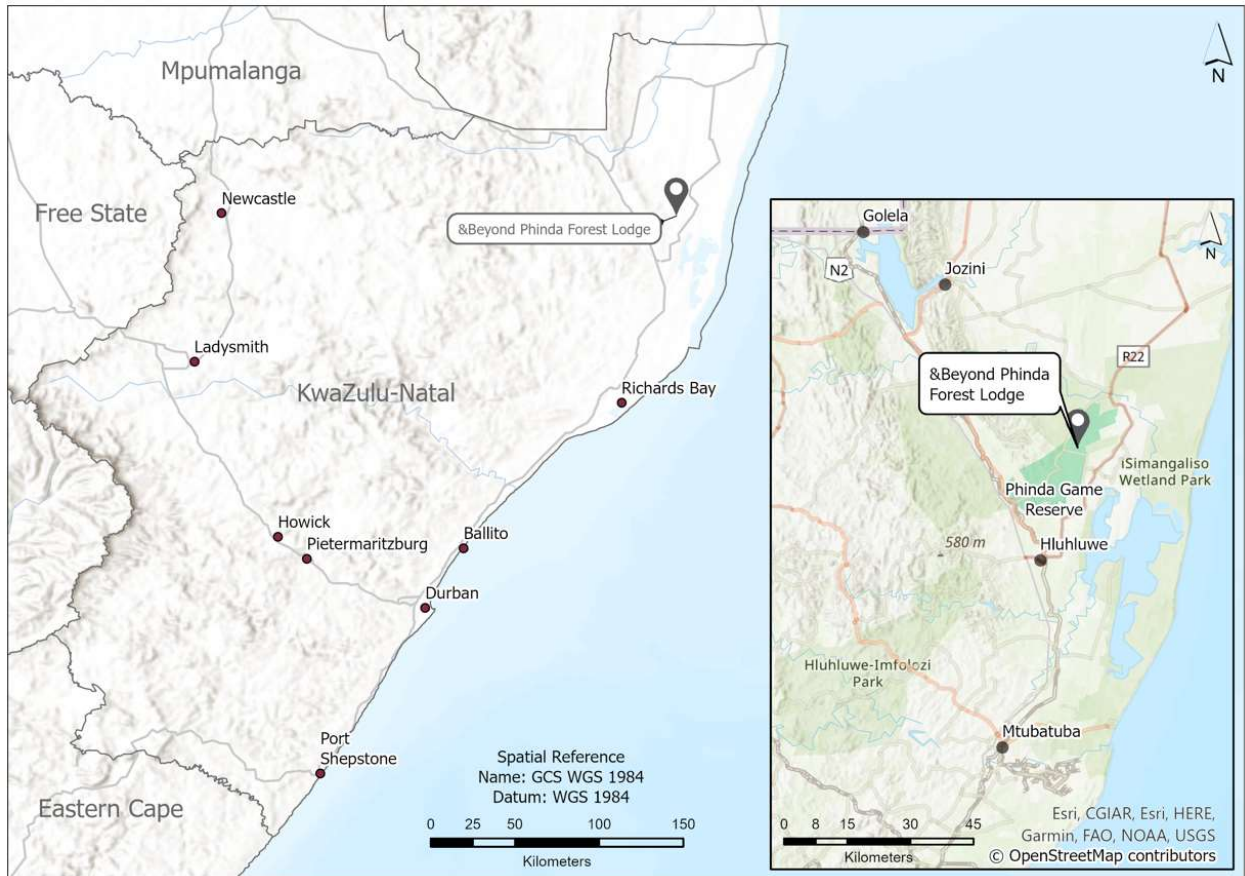


Figure 4.6 &Beyond Phinda Private Game Reserve, Forest lodge

Source: Esri, FAO, NOAA, USGS, naturalearthdata.com



Figure 4.7 &Beyond Phinda Private Game Reserve, Forest lodge

Source: www.andbeyond.com/destinations/africa/south-africa/kwazulu-natal/phinda-private-game-reserve/

4.3 Procurement and supply pathway of products to the &Beyond lodges

According to C. Jardine (2020, 12 February), several seven-day cycle menus for lunch, dinner, and high tea are developed for all the &Beyond lodges by a team of experts in the &Beyond head office in Johannesburg. These menus are sent to all the &Beyond lodges (Appendix H). The lodge managers and the head chefs use these menus as a basis to plan the different meals and high teas for the guests staying at the lodges. Each of the lodges is free to add any type of food item to their menus to elevate the dining experience and the quality of the serving, or to accommodate a specific food requirement for a guest. Once these orders are captured, all the &Beyond lodges send the orders through to a particular &Beyond office. The various articles and food products are procured and distributed to the &Beyond lodge concerned.

A Preferential Procurement Policy (PPP) was implemented by &Beyond in July 2018. The PPP encourages active participation of &Beyond's business partners to establish a broader and meaningful business relationship. Through business relationships, the vision of &Beyonds is to; (i) help create economic growth within a specific area/community; (ii) promote sustainable development of the business partners within a specific area/community; (iii) contribute to job creation within a specific area/community; (iv) establish the possibility of new business opportunities in a specific area/community, and (v) contribute to the general prosperity of a specific area/community (B. Brenner, 2019, 16 July).

According to K. Pretorius (2019, 4 August), when implementing the PPP, preference is given first, to suppliers and service providers who have corporate social responsibility programmes in place and are able to supply products equal to the price and quality requirements of &Beyond. Second, suppliers and service providers without established corporate social responsibility programmes but are able to supply &Beyond with products equal to the price and quality requirements of &Beyond. The functionality of the PPP is to; (i) provide a fair and transparent process for &Beyond's procurement policies; (ii) contribute to economic empowerment by supporting local businesses and service providers who have established corporate social responsibility programmes, and (iii) manage and monitor progress against the procurement

objectives and regularly report on this aspect by the &Beyond impact team. The ordering and delivery of products for the 29 &Beyond camps and lodges are remarkably intricate. The following sections will only focus on the procurement and supply pathways of; (i) Forest Lodge in Phinda Private Game Reserve, (ii) Klein's Camp in the Serengeti, and (iii) Mnemba Island in Zanzibar.

The lodge managers of the three different &Beyond lodges are responsible for submitting their orders to the &Beyond offices. Phinda Private Game Reserve sends their orders to the &Beyond office in Johannesburg, Mnemba Island to the &Beyond offices in Stonetown in Zanzibar, and Klein's Camp to the &Beyond offices in Arusha in Tanzania (R. Beumer, 2019, 19 June). The orders received are for a diverse range of products. Some products are kept in the &Beyond offices in Johannesburg, Arusha, and Zanzibar but if not available at these places, the new order/s will be sent to the supplier/s of that particular product.

The orders, which have been sent to the suppliers, usually are delivered to the &Beyond relevant warehouses of Johannesburg, Zanzibar or Arusha (S. De Vos, 2019, 14 July). Orders for low-demand products (i.e., linen, uniforms, cutlery, crockery, kitchen equipment) are sent to the &Beyond warehouses of Johannesburg and Arusha once every three months. In contrast, the orders in higher demand and FMCG products (e.g. alcoholic beverages, dried fruit and nuts, flour, oils, spices) are sent to Zanzibar, Arusha and Johannesburg once a week. The time window allocated for all the &Beyond lodges to receive the higher demand and FMCG products will take a minimum delivery time of two to three days. The maximum delivery time for orders received from the &Beyond lodges is seven days.

As seen from the above paragraphs, the ordering and delivery of products for only three of the 29 &Beyond camps and lodges are in some instances fairly similar and in other instances not similar, depending on the dietary requirements of guests staying at the different &Beyond camps and lodges. The following sections will only focus on the SCs, procurement, as well as supply pathways of; (i) Forest Lodge in Phinda Private Game Reserve in KwaZulu-Natal, (ii) Klein's Camp in Tanzania adjacent to the Serengeti, and; (i) Mnemba Island in Zanzibar.

4.3.1 Procurement and supply pathway for Klein's Camp – Serengeti

As mentioned, Klein's Camp is located on the northern border adjacent to the Serengeti National Park. To a certain extent, it is isolated and can sometimes take a day or two to reach, depending on the mode of transport (K. Malcommes, 2019, 4 February). The orders from the lodges in the Serengeti region are sent to the &Beyond Arusha office. The procedures cited below are performed by the &Beyond Arusha office to ensure the orders for Klein's Camp are executed correctly:

1. The lodge will send their orders (Appendix I) through to the &Beyond office in Arusha on a Sunday or a Monday morning before 08h00.
2. The Arusha office will capture and print these orders. After the orders have been verified, the products will be sourced from various suppliers in and around Arusha.
3. Products, such as crockery, cutlery, uniforms, maintenance and repair amenities and kitchen aids are ordered from the &Beyond office in Johannesburg, South Africa, once or twice a year.
4. After the products have been sourced, the products are packed according to the orders for the specific lodges in the Serengeti National Park (Figure 4.8). The truck will depart from the Arusha office on Tuesday the following week to deliver the orders for the specific lodges in the Serengeti National Park.
5. Most of the orders for Klein's Camp are transported by road.
6. If one of the Serengeti lodges needs a particular product urgently, for example, Klein's Camp, then that particular order will be transported multi-modal, first by air to the Lobo airstrip, then by road to Klein's Camp. The urgent orders would be transported on a small aircraft used for guest transportation to Klein's Camp.

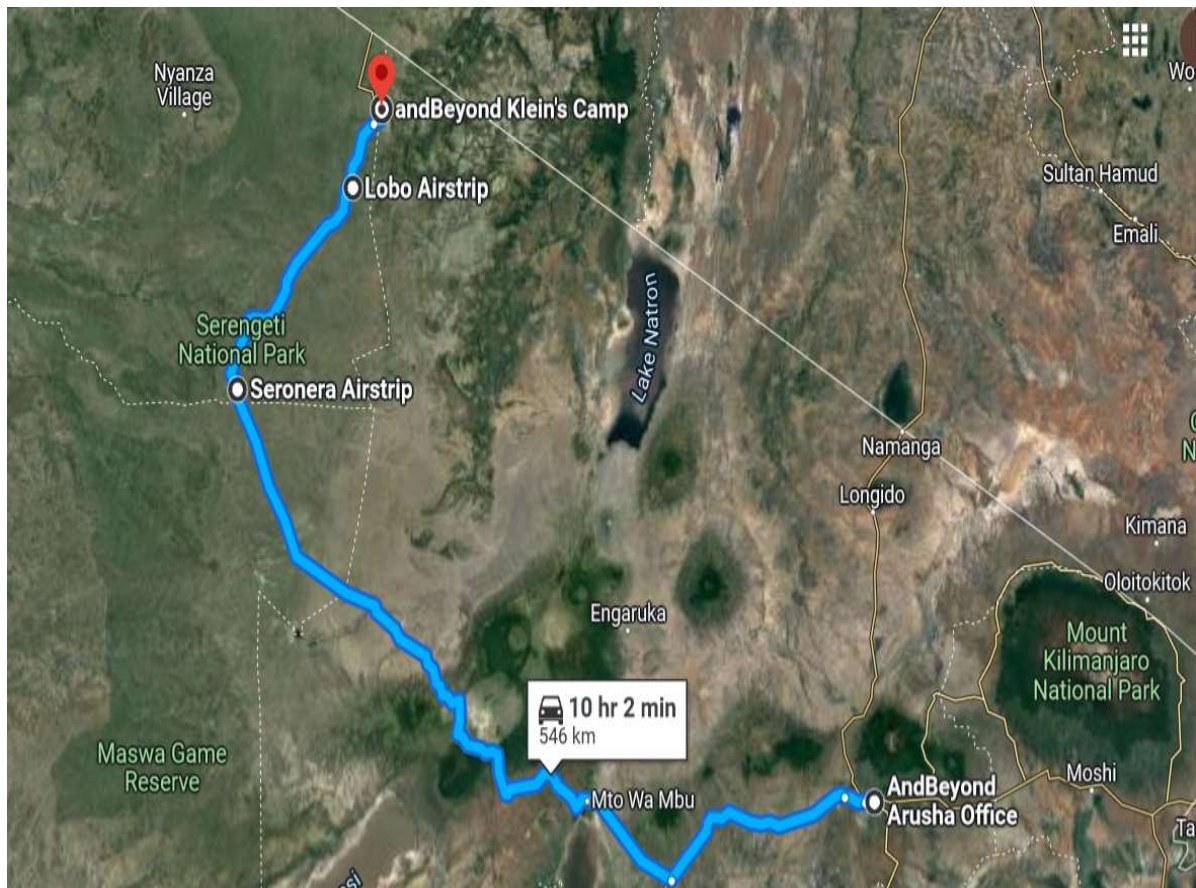


Figure 4.8 Distance by road between &Beyond Arusha and Serengeti lodges

Source: www.google.co.za/maps/dir/AndBeyond+Arusha+Office,+an-dBeyond+Kleins-Camp

7. The small aircraft usually land at Seronera, where guests visiting other lodges would disembark. The aircraft then departs for the Lobo airstrip, close to Klein's Camp.
8. The urgent orders are collected by &Beyond employees at the Lobo airstrip and delivered to Klein's Camp by road (Figures 4.9 and 4.10).

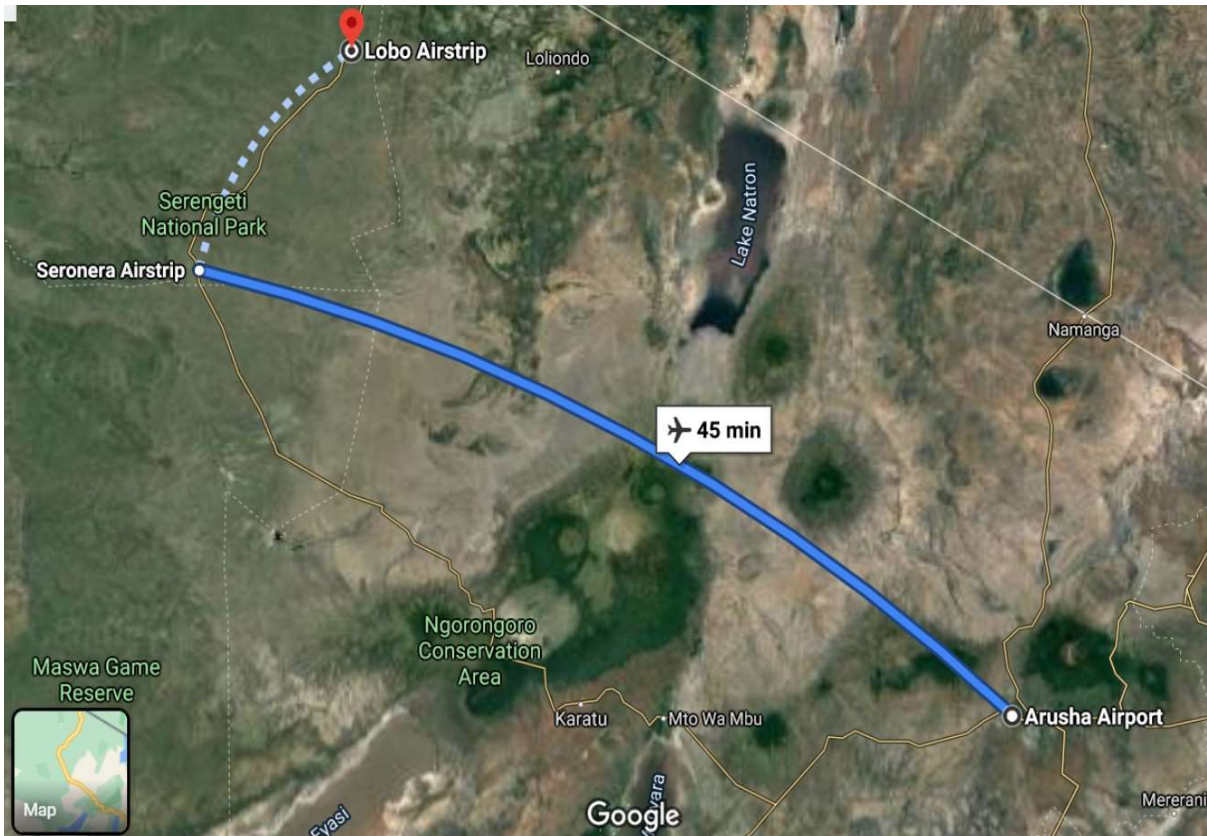


Figure 4.9 Distance between Arusha airport and Lobo airstrip

Source: www.google.co.za/maps/dir/AndBeyond+Arusha+Tanzania/Seronera

9. When the products from the Arusha office are received at Klein's Camp, they are verified against the orders placed.
10. When the orders are confirmed, they will be received on a goods received voucher in Panstrat, the software system used by &Beyond. The products will be categorised according to the different store allocations. When products are required in other locations, for example, if cleaning materials are needed, the store person will draw the stock from the storeroom. The quantity of the particular product will be subtracted from the product quantity listed on Panstrat.

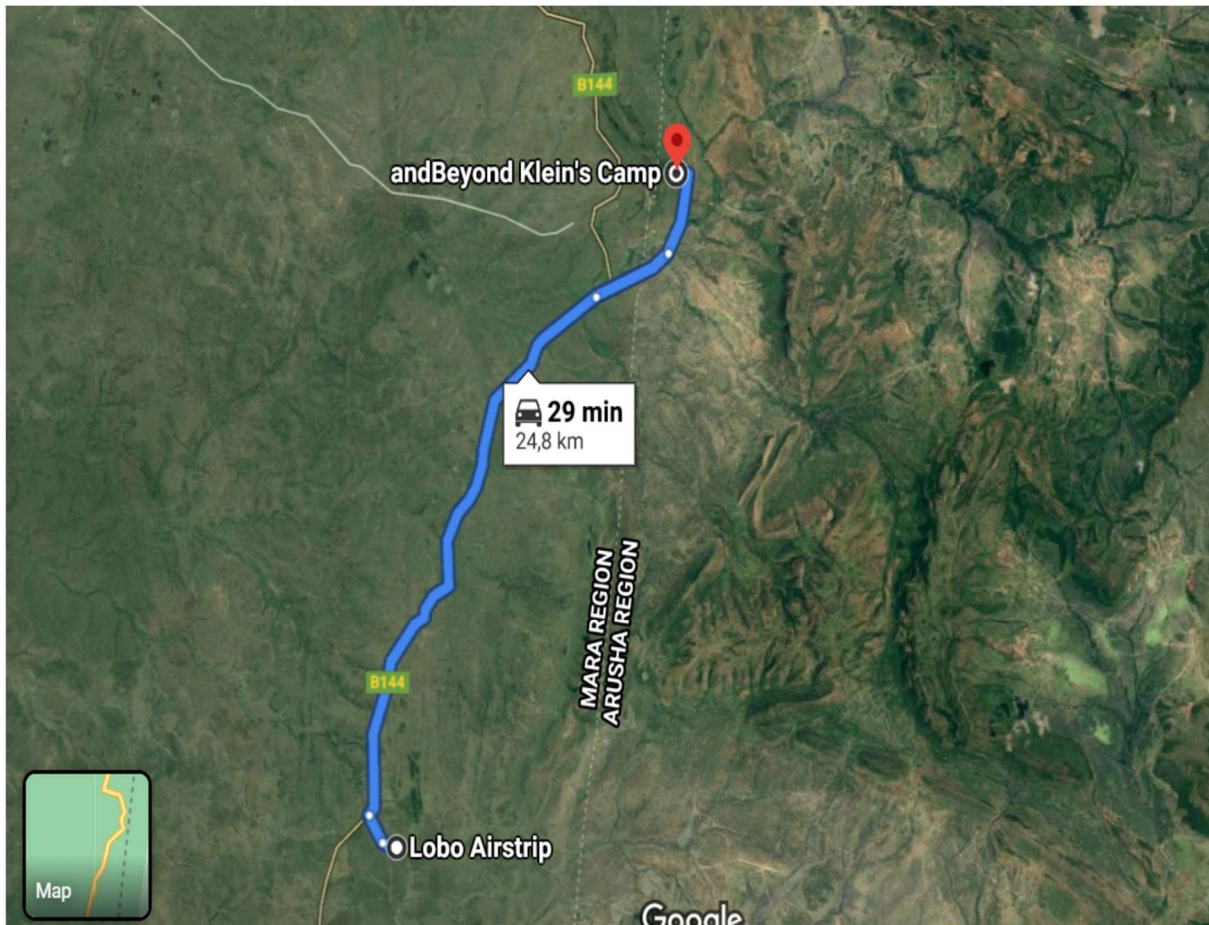


Figure 4.10 Distance between Lobo airstrip and Klein's camp

Source: www.google.co.za/maps/dir/andBeyond+Klein's+Camp,+Tanzania/Lobo+-Airstrip

The order process according to the above information can sometimes be lengthy. The reason is, the road (B144) in the Serengeti National Park is one of many roads within the Park, with wildlife sometimes found alongside and on the road. Hence, the drivers of the &Beyond vehicles must be vigilant and cannot drive fast. In addition, when entering the Serengeti National Park, vehicles are not permitted to exceed the maximum speed limit of 60km/h. As a result, the time to complete all the deliveries to Klein's Camp can take up to two days. When a small aircraft is used to deliver an urgent order, it can also be problematic. In addition, when urgent orders are scheduled to be delivered with small aircraft, the delivery times can sometimes be longer than delivery by road. Stormy weather will ground small aeroplanes at Arusha airport, such as torrential storms. Therefore, it can sometimes be difficult for the Arusha office to supply Klein's Camp with an estimated time and date of delivery. In summary, the ordering process for Klein's Camp is depicted in the flow diagram (Figure 4.11), and

the inclusion of a shamba, an agroforestry system practiced in East Africa, (Shamba Network, 2022) is highlighted. Therefore, with the inclusion of the shamba in the last-mile distribution process of Klein’s Camp, the ordering cycle time for some of the fresh produce can be reduced.

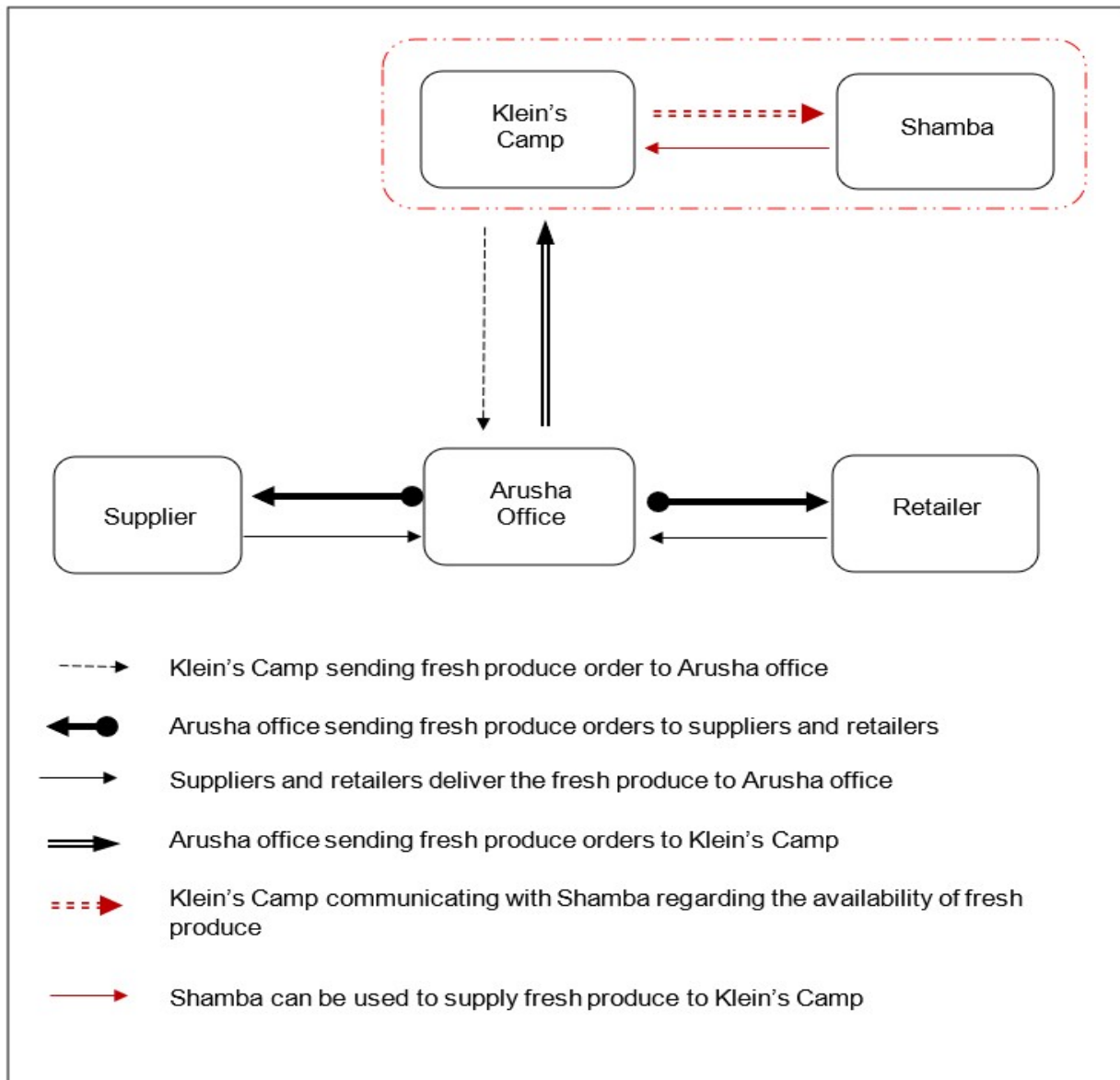


Figure 4.11 Flow diagram of fresh produce for Klein’s Camp
 Source: Developed by the author, 2021

4.3.2 Procurement and supply pathway for Mnemba Island – Zanzibar

According to N. Davids (2019, 4 February), once an order is received from Mnemba Island, the following actions and procedures take place in Stonetown and the Arusha

offices. These procedures cited below must be carried out accurately to make sure the order from Mnemba Island is executed correctly:

1. Mnemba Island sends their orders (Appendix J) to the &Beyond office in Stonetown before 08h00 on Monday and Wednesday mornings.
2. The Stonetown office will capture and print these orders. Once an order has been verified, it will be sourced from various suppliers in Zanzibar.
3. Mnemba Island also sends orders through to the Arusha office, and these products are shipped from Arusha to the Stonetown office (De Villiers, 2019). These products (i.e., maintenance products, different kinds of fresh and dry foods, spices, alcoholic and non-alcoholic beverages) will be delivered to Mnemba Island, together with the Stonetown orders (Figure 4.12).
4. According to B. Brenner (2020, 17 October), the primary mode of transport for delivering orders and products from the &Beyond Arusha office to the Stonetown office in Zanzibar is air transportation (Figure 4.13). Therefore, all the orders and products destined for Mnemba Island must be coordinated and packed correctly.



Figure 4.12 Distance between Zanzibar office and Mnemba Island

Source: www.google.co.za/maps/dir/Andbeyond+Zanzibar+Office,+Zanzibar+andBeyond+Mnemba+island



Figure 4.13 Distance between &Beyond Arusha office and Mnemba Island

Source: www.google.co.za/maps/dir/AndBeyond+Arusha+Office,+Tanzania/Andbeyond+Zanzibar+Office,+andBeyond+Mnemba+Island

5. Once all the products have been assembled, the Stonetown office will pack all the products, which are destined for delivery to Mnemba Island, early

Tuesday and Thursday mornings or late afternoons during high tide (Y. De Villiers, 2019, 14 July). For example, the tide table of April 2020 (Appendix K) would have provided the exact times the products and orders must have been on the shore for successful delivery. Deliveries to Mnemba Island during low tide are difficult because the motorboat cannot reach the shore, and the products must be carried far into the sea to reach the motorboat (Figure 4.5).

6. Mnemba Island also sends orders directly to suppliers in Zanzibar (K. Malcomess, 2020, 6 August). Some of the suppliers send their products to the Zanzibar office. In contrast, other suppliers send their orders to the north-eastern beach of Zanzibar, where they will be grouped and loaded onto the motorboat from Mnemba Island.
7. According to N. Davids (2019, 12 June), these products must reach the Muyuni-Mnemba transfer point on time to be delivered with the orders from the Zanzibar office.

According to the above information, the order process seems simple; in reality, it can be very challenging. The reason is that most orders delivered to Mnemba Island are multi-modal. Environmental factors, such as torrential rain, strong winds, and rough seas can hamper the deliveries to Mnemba Island. In summary, the ordering process for Mnemba Island is depicted in the flow diagram (Figure 4.14); the inclusion of local community farmers close to Mnemba Island are highlighted. Therefore, with the inclusion of the local community farmers in the last-mile distribution processes of Mnemba Island, the ordering cycle time for some of the fresh produce used by Mnemba Island can also be reduced.

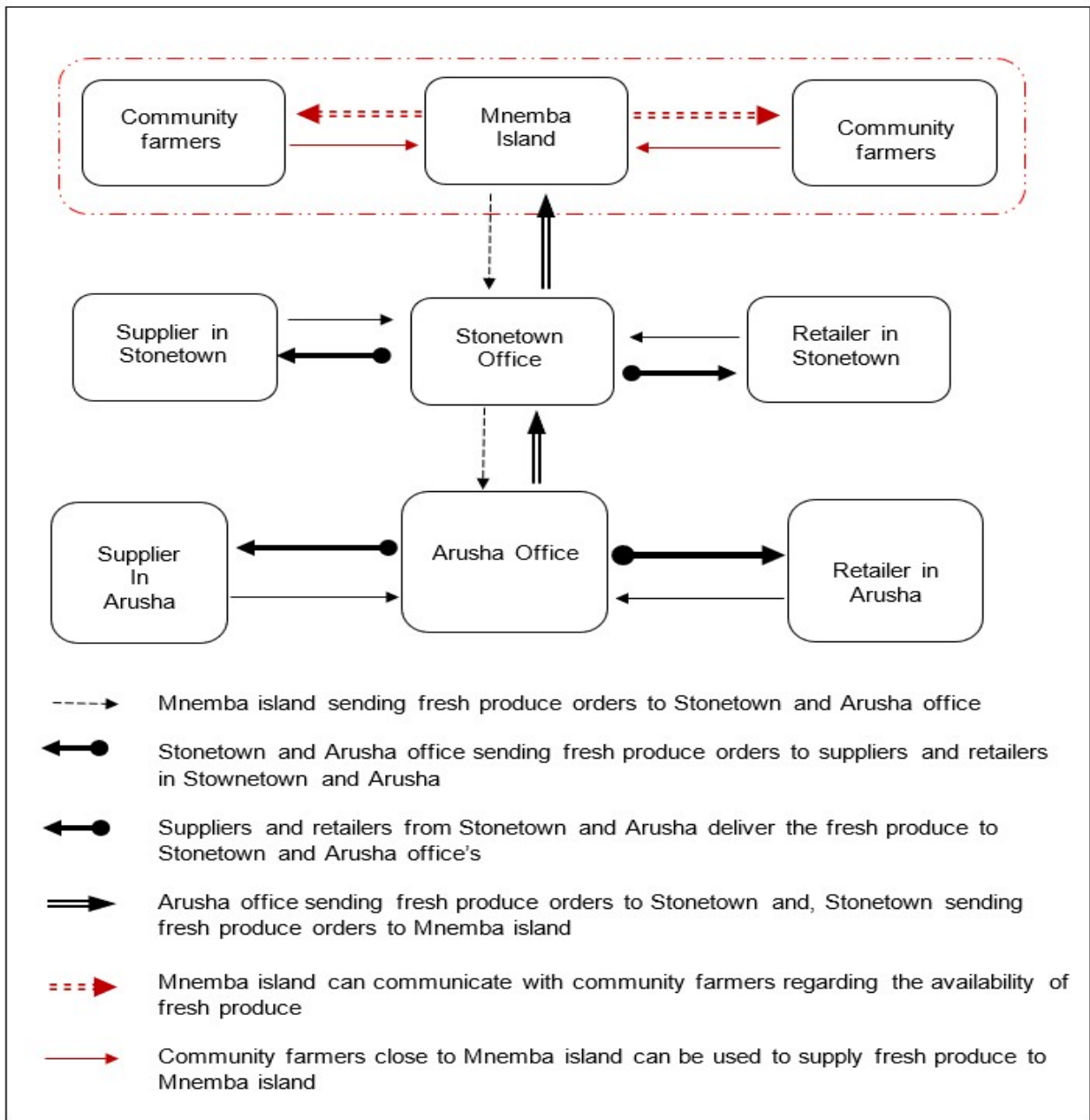


Figure 4.14 Flow diagram of fresh produce for Mnemba Island

Source: Developed by the author, 2021

4.3.3 Procurement and supply pathway for Phinda Private Game Reserve – KwaZulu-Natal

Phinda Private Game Reserve is the only &Beyond destination with six luxury tourism lodges; (i) Phinda Homestead, (ii) Phinda Forest Lodge, (iii) Phinda Mountain Lodge, (iv) Phinda Vlei Lodge, (v) Phinda Rock Lodge, and (vi) Zuka Lodge within one

location. According to C. Jardine (2020, 26 September), each of the luxury tourism lodges within Phinda Private Game Reserve operate independently. The procedures cited below are a fundamental ordering process for Phinda Forest Lodge in Phinda Private Game reserve:

1. Phinda Forest Lodge sends their orders through on a Monday to the &Beyond office in Johannesburg.
2. The order from Phinda Forest Lodge is received, captured, and processed by the Johannesburg office (R. Beumer, 2020, 17 October).
3. After all the products are assembled, the Johannesburg office packs the order for Phinda Forest Lodge, together with the orders for the other lodges. Therefore, all the orders destined for Phinda Forest Lodge must be coordinated correctly.
4. The primary mode of transport for orders delivered to Phinda Private Game Reserve is by road, and are delivered on a Friday (Figure 4.15).

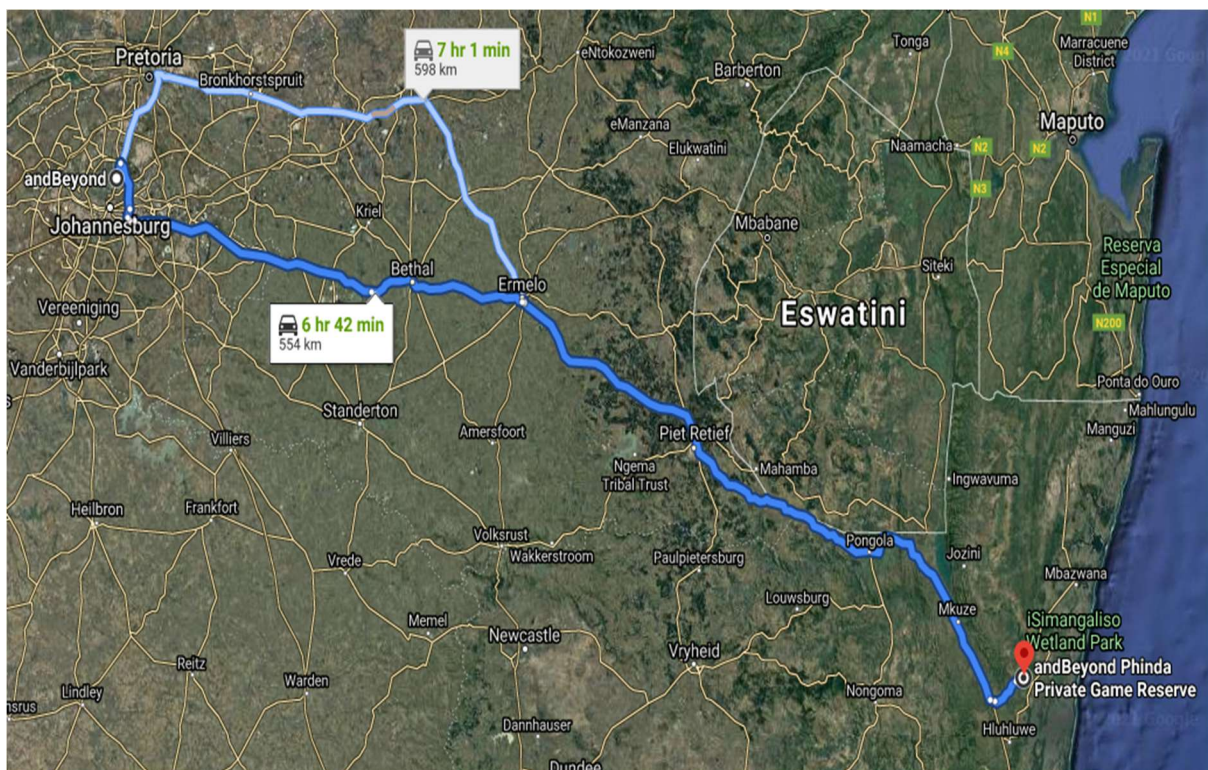


Figure 4.15 Distance between &Beyond Johannesburg and Phinda Private Game Reserve
 Source: www.google.co.za/maps/dir/andBeyond,+Katherine+Street,+Sandown,+Johannesburg/andBeyond+Phinda+Private+Game+Reserve

5. When the truck arrives at Phinda Forest Lodge, all the products for the different lodges are verified against their orders.

6. After the orders have been verified, the lodge that has a particular order is contacted and informed that it is ready for collection at Phinda Forest Lodge.
7. It must be noted, Phinda lodges also procure certain types of FMCG products directly from various retail companies (Appendix L) in the vicinity of Phinda Private Game Reserve. This occurs when there is an urgent need for a specific product at a specific lodge, and the delivery from Johannesburg will only reach that specific lodge a day or two after the need arose (C. Jardine, 2020, 26 September).

In summary, the procurement and supply pathways of products for Klein's Camp, Mnemba Island and Phinda Private Game Reserve are similar. However, the location, travel distance, mode of delivery, and the different types of products each lodge requires, makes each method and mode of delivery unique. In closing, the ordering process for Phinda Forest Lodge is depicted in the flow diagram (Figure 4.16). The inclusion of local community farmers around Phinda Forest Lodge is highlighted. Therefore, with the inclusion of the local community farmers in the last-mile distribution processes of Phinda Forest Lodge, the ordering cycle time for some of the fresh produce can be reduced. The following section provides an overview of the different kinds of fresh produce needed by Klein's Camp, Mnemba Island and Phinda Forest Lodge.

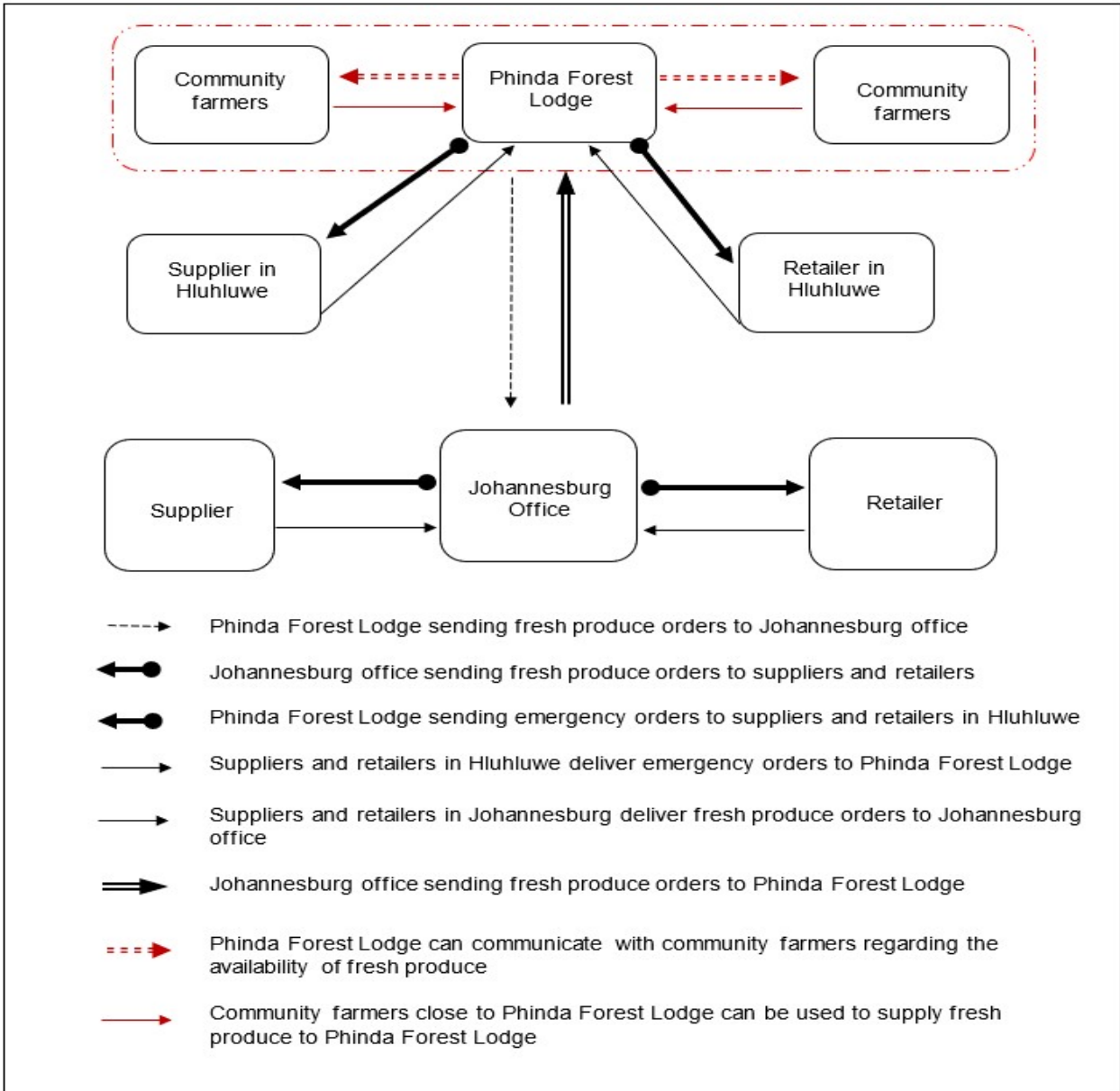


Figure 4.16 Flow diagram of fresh produce for Phinda Forest Lodge
Source: Developed by the author, 2021

4.4 Fresh produce requirements for Klein’s Camp, Mnemba Island and Phinda Forest Lodge

The &Beyond lodges order a variety of products based on the specific requirements of each particular lodge. This section determined the supply and demand of fresh produce for Klein’s Camp, Mnemba Island and Phinda Forest Lodge. The &Beyond managers of these lodges did supply the author with a large number of completed

orders. It must be noted that; first, the orders which were examined, did not include every order sent by Klein's Camp, Mnemba Island and Phinda Forest Lodge to the &Beyond offices over the past few years because some of the orders were not relevant to this research (Appendix M). The reason being fresh produce was not part of some of the orders. Second, all the orders obtained from the &Beyond lodges contained detailed information, which was considered sensitive. This information was removed from the orders listed in the appendices. Finally, some of the purchasing orders received were not official internal &Beyond orders as these were copies of invoices issued by various retail companies to some of the &Beyond lodges. These orders that included a variety of products, including fresh produce, were delivered directly to the &Beyond lodges by the retail companies.

An estimate of the demand for fresh produce had to be determined for Klein's Camp, Mnemba Island and Phinda Forest Lodge. All three lodges supplied the author with available internal &Beyond orders from 2019 to 2021, as well as the invoices from the retail companies. After examining the orders, the author was able to compile a usage list of 56 fresh produce for Klein's Camp, Mnemba Island and Phinda Forest Lodge (Table 4.1). It must be noted that one (1) type of fresh produce, casava, a type of vegetable – similar to potatoes, are cultivated by farmers around Mnemba Island and Phinda Forest (Table 4.2) but none of the &Beyond lodges were using it for guests or staff meals.

Table 4.1 Fresh produce demand of Klein's Camp, Mnemba Island and Phinda Forest Lodge

Fresh produce	Klein's Camp	Mnemba Island	Phinda Forest Lodge	Fresh produce	Klein's Camp	Mnemba Island	Phinda Forest Lodge	Fresh produce	Klein's Camp	Mnemba Island	Phinda Forest Lodge
Apples - Green	✓	✓	✓	Gem squash	✓	✓	✓	Passion Fruit	✓	✓	✓
Arrowroot (Magimbe)	✓	✓	✓	Green Beans	✓	✓	✓	Papaya	✓	✓	✓
Asparagus	✓	✓	✓	Granadilla	✓	✓	✓	Paw-Paw	✓	✓	✓
Aubergine	✓	✓	✓	Grapefruit	✓	✓	✓	Pears - Pacham	✓	✓	✓
Avocados	✓	✓	✓	Guava	✓	✓	✓	Pears - Sugar Snap	✓	✓	✓
Bananas	✓	✓	✓	Kiwi fruit	✓	✓	✓	Pepper, Green	✓	✓	✓
Beetroot	✓	✓	✓	Lemon	✓	✓	✓	Pepper, Red	✓	✓	✓
Broccoli	✓	✓	✓	Lettuce	✓	✓	✓	Pineapples	✓	✓	✓
Butternut	✓	✓	✓	Lime	✓	✓	✓	Potatoes, Iris	✓	✓	✓
Brown Lentils	✓	✓	✓	Maize	✗	✗	✓	Pumpkin	✓	✓	✓
Cabbage	✓	✓	✓	Mango	✓	✓	✓	Raspberries	✓	✓	✓
Carrot	✓	✓	✓	Mangoes	✓	✓	✓	Strawberries	✓	✓	✓
Casava	✗	✗	✗	Melon, Sweet	✓	✓	✓	Spinach	✓	✓	✓
Cauliflower	✓	✓	✓	Naartjies	✓	✓	✓	Spinach, Wild	✓	✓	✓
Chilies	✓	✓	✓	Oranges	✓	✓	✓	Sweet Potatoes	✓	✓	✓
Corn - Baby	✓	✓	✓	Onion, Red	✓	✓	✓	Tomatoes	✓	✓	✓
Cucumber	✓	✓	✓	Onion, Spring	✓	✓	✓	Tomatoes, Cherry	✓	✓	✓
Garlic - Fresh	✓	✓	✓	Onion, White	✓	✓	✓	Watermelon	✓	✓	✓
Ginger - Fresh	✓	✓	✓	Paw-Paw	✓	✓	✓	Zucchini	✓	✓	✓
	18	18	18		18	18	19		19	19	19

57 types of fresh produce were identified, none of the three Lodges used Casava,
 Therefore the demand was only for 56 types of fresh produce
 Klein's Camp use 55 of the 56 different types of fresh produce
 Mnemba Island use 55 of the 56 different types of fresh produce
 Phinda Forest use all the different types of fresh produce

Source: Developed by the author, 2021

The information of the orders provided an overview of the quantities of fresh produce used at Klein's Camp, Mnemba Island and Phinda Forest Lodge. The importance of identifying the demand for fresh produce for each of the lodges provides an overall view of the orders placed for the different fresh produce. The focus of the research was to identify the different types, not the quantities, of fresh produce that the three lodges were using. Since the outbreak of the COVID-19 pandemic in 2020 and travel restrictions across the globe became a reality, the demand for fresh produce declined substantially at all the &Beyond lodges. Therefore, it was difficult to determine the volume for different types of fresh produce for guests and staff. According to

Melkonyan *et al.* (2020), the SCs, due to unforeseen circumstances, such as road accidents, congestion, protests, and disruptions to the delivery of products, for example, fresh produce, were inevitable. That is why luxury wildlife tourism destinations, such as &Beyond, can use this information to create a working relationship with fresh produce suppliers to safeguard themselves against future disruptions. Therefore, a clear indication of the quantity of fresh produce available from community farmers is important.

4.5 Fresh produce supply capabilities of local communities around Klein's Camp, Mnemba Island and Phinda Forest Lodge

The previous section provided the essential context of the use of fresh produce for Klein's Camp, Mnemba Island and Phinda Forest Lodge. This required an understanding of the demand for different types of fresh produce. The purpose of this section was to identify the types of fresh produce local communities around Klein's Camp, Mnemba Island and Phinda Forest Lodge are currently producing. The relevance and the possible importance of this information of the supply of fresh produce to the lodges by local farmers was investigated.

A total of 60 local community farmers, (30 around Mnemba Island and 30 close to Phinda Forest Lodge) were visited to determine the different types of fresh produce these community farmers were cultivating. As described in Section 4.2.1, Klein's Camp is the only lodge with one local community, a Maasai village, approximately 10km away. Also, there was no community farmer within this village. In 2015 staff from Klein's Camp assisted the people from the Maasai village to develop a vegetable garden, known as a shamba, according to the Maasai people (Figure 4.17). According to K. Strautmann (2020, 8 March), after nine months, the shamba produced 10 different kinds of fresh produce for Klein's Camp and the people within the Maasai village. The author visited shamba in 2018 to gain insight into the different types of fresh produce the local farmers were producing.

An estimate of the fresh produce produced by the 60 local farmers from the shamba needed to be determined. Because of COVID-19, countries worldwide implemented travel restrictions to minimise the spread of the coronavirus.



Figure 4.17 Shamba near &Beyond Klein's Camp
Source: Taken by the author, 2018

Because of the travel restrictions, the author could not visit Klein's camp, Mnemba Island nor Phinda Forest Lodge. Fortunately, two local &Beyond employees at Mnemba Island and Phinda Forest Lodge were contracted to assist the author in collecting data (Appendix N). The lodge manager of Klein's Camp, Mr Strautmman, collected data from the shamba near Klein's Camp. Unfortunately, because of the COVID-19 pandemic, tourists could not visit Klein's Camp, therefore, the demand for fresh produce declined, which resulted in the shamba becoming obsolete and was forced to shut down. According to K. Strautmman (2020, 8 March), when normality returns after the COVID-19 pandemic, the shamba will hopefully start to produce fresh produce again. After the data were collected (Appendix O) and examined, the

information was used to provide an overview (Table 4.2) of the fresh produce produced by local farmers around Mnemba Island and Phinda Forest Lodge.

Table 4.2 Fresh produce produced by local farmers

Fresh produce	Shamba near Klein's Camp	Farmers around Mnemba Island	Farmers around Phinda	Fresh produce	Shamba near Klein's Camp	Farmers around Mnemba Island	Farmers around Phinda	Fresh produce	Shamba near Klein's Camp	Farmers around Mnemba Island	Farmers around Phinda
Apples - Green	x	x	x	Gem squash	x	x	✓	Passion Fruit	x	x	x
Arrowroot (Magimbe)	x	x	x	Green Beans	x	x	✓	Papaya	x	x	✓
Asparagus	x	x	x	Granadilla	x	x	✓	Paw-Paw	x	x	x
Aubergine	✓	✓	x	Grapefruit	x	✓	x	Pears - Pacham	x	x	x
Avocadoes	✓	x	✓	Guava	x	x	x	Pears - Sugar Snap	x	x	x
Bananas	x	x	✓	Kiwi fruit	x	✓	x	Pepper, Green	x	✓	✓
Beetroot	✓	x	✓	Lemon	✓	x	x	Pepper, Red	x	x	✓
Broccoli	✓	x	✓	Lettuce	x	x	✓	Pineapples	x	✓	x
Butternut	x	x	✓	Lime	x	✓	x	Potatoes, Iris	x	x	✓
Brown Lentils	x	x	✓	Maize	✓	✓	✓	Pumpkin	✓	✓	✓
Cabbage	✓	x	✓	Mango	x	✓	✓	Raspberries	x	x	x
Carrot	x	x	✓	Mangoes	x	✓	✓	Strawberries	x	x	x
Casava	x	✓	✓	Melon, Sweet	x	x	x	Spinach	✓	✓	✓
Cauliflower	x	x	✓	Naartjies	x	x	✓	Spinach, Wild	x	x	✓
Chilies	x	✓	✓	Oranges	x	x	✓	Sweet Potatoes	✓	✓	✓
Corn - Baby	x	x	x	Onion, Red	x	x	✓	Tomatoes	✓	✓	✓
Cucumber	x	x	x	Onion, Spring	x	x	✓	Tomatoes, Cherry	x	x	x
Garlic - Fresh	x	x	x	Onion, White	x	x	✓	Watermelon	x	✓	✓
Ginger - Fresh	x	x	x	Paw-Paw	x	✓	x	Zucchini	x	x	x
	5	3	11		2	7	12		4	7	10

Shamba near Klein's Camp cultivated 11 of the 57 types of fresh produce

Farmers around Mnemba Island cultivated 17 (30%) of the 56 types of fresh produce

Farmers around Phinda cultivated 33 (58%) of the 56 types of fresh produce

Source: Developed by the author, 2021

The information has provided an overview of the fresh produce the local community farmers, and from the shamba, are currently producing. It was important to identify the types of fresh produce the communities could supply so as to provide an overall view of what was available. However, it is clear that the community farmers around Mnemba, on average, produce only 17 of the 56 different types of fresh produce

required by Mnemba Island. The community farmers around Phinda Forest Lodge, on average, produce 33 of the 56 different types of fresh produce required by Phinda Forest Lodge. In Tanzania, the shamba can only produce 11 of the 56 different types of fresh produce required by Klein's Camp. Therefore, it is evident that the community farmers are only producing a small number of fresh produce that can contribute to the demand requirements of Klein's Camp, Mnemba Island and Phinda Forest Lodge.

4.6 Conclusion

This section laid a foundation for the ordering processes of Klein's Camp, Mnemba Island and Phinda Forest Lodge. The demand for the different types of fresh produce has been highlighted. Furthermore, it was determined what the different types of fresh produce the community farmers, close to the Phinda Forest Lodge, Mnemba Island and the shamba near Klein's Camp, could produce and supply. According to C. Jardine (2020, 19 October), it has always been an important endeavour to provide guests visiting any of the &Beyond lodges a memorable culinary experience, which involves a level of seniority to enable the chefs at the lodges to prepare high quality meals. Therefore, good quality fresh produce must be used to satisfy the guests' requirements.

The information obtained from Klein's Camp, Mnemba Island and Phinda Forest Lodge helped establish a demand pattern for fresh produce for these three lodges. Besides the information gathered for this study, no other sources of information exist pertaining to the supply of fresh produce by the local communities in KwaZulu-Natal in South Africa, Tanzania or Zanzibar, which could have been used to obtain an idea for the demand and availability of different fresh produce. The data collected for the research was during March 2020 and April 2020. Therefore, a conclusive supply pattern was not established. The author was personally responsible for funding the collection of data. Hence, financial limitations made it difficult to continue collecting data for the remainder of the months in 2020.

In the following chapter (Chapter 5), the results are presented of the adapted Delphi technique used to ascertain the perception of industry experts. The experts'

perceptions of the inclusion of local fresh produce suppliers in the last-mile SC processes of luxury wildlife tourism destinations, will be investigated.

Chapter 5: Research through the use of an adapted Delphi technique

5.1 Introduction

The previous chapter (Chapter 4) focused on the basic context of the supply and demand of fresh produce for Klein’s Camp, Mnemba Island and Phinda Forest Lodge. The supply capabilities of local community fresh produce farmers around Mnemba Island, Phinda Forest Lodge and a shamba was determined. This required an understanding of the general food requirements and how fresh produce impacts the experience of tourists enjoying the meals prepared by the chefs at these lodges.

The purpose of this chapter was to determine, by using an adapted Delphi technique (as discussed in chapter 3), whether it is possible to include fresh produce from local communities in the SCs of the above-mentioned lodges. The relevance and the importance of possibly including fresh produce from local communities was achieved by obtaining opinions from industry experts of luxury wildlife tourism destinations and transport companies.

5.2 Delphi questionnaire results

According to Almeida and Silveira (2021), when using questionnaires, feedback is an important component of the type of *controlled feedback* to be given by a researcher to the panel of experts. Holt *et al.* (2021) believe that the questionnaires can provide incomplete assessments because the dependence is on a panel of experts reaching consensus regarding a specific component. Karabasevic *et al.* (2017) agree with Holt but state that adequate feedback can influence the level of consensus. The expert coefficient percentage of the luxury wildlife tourism destinations and the transport companies are shown in Table 5.1.

Table 5.1 Expert coefficient of questionnaires

Organisations	Rounds	Questionnaires sent out	Questionnaires recovered	Expert coefficient
Luxury wildlife tourism destinations	1	21	21	100%
	2	21	21	100%
	3	21	15	75%

Transport companies	1	30	30	100%
	2	30	30	100%
	3	30	20	66.67%

Source: Developed by the author, 2021

5.2.1 Response of luxury wildlife tourism destinations

Round 1

As mentioned in Section 3.4.5, questionnaires were not sent to luxury wildlife tourism destinations in Tanzania and Zanzibar. In the first round, 21 questionnaires were sent and 21 were recovered, with an expert coefficient of 100%. The luxury wildlife tourism destinations in South Africa are buying fresh produce for guests and staff meals from Pick and Pay (43%), Woolworths (29%) and a local fresh produce supplier (71%), more than a few times a week (62%). The fresh produce expectancy (PE) criteria of extremely important, of the luxury wildlife tourism destinations, is indicated from the highest percentage to the lowest; (i) freshness (100%), (ii) quality (100%), (iii) availability (90%), (iv) variety (72%), (v) quantity (62%), and (vi) price (52%). It is evident in Figure 5.1 that the majority of luxury wildlife tourism destinations are procuring fresh produce from a particular fresh produce supplier and that freshness, quality and the availability are the three most important when purchasing from established companies.

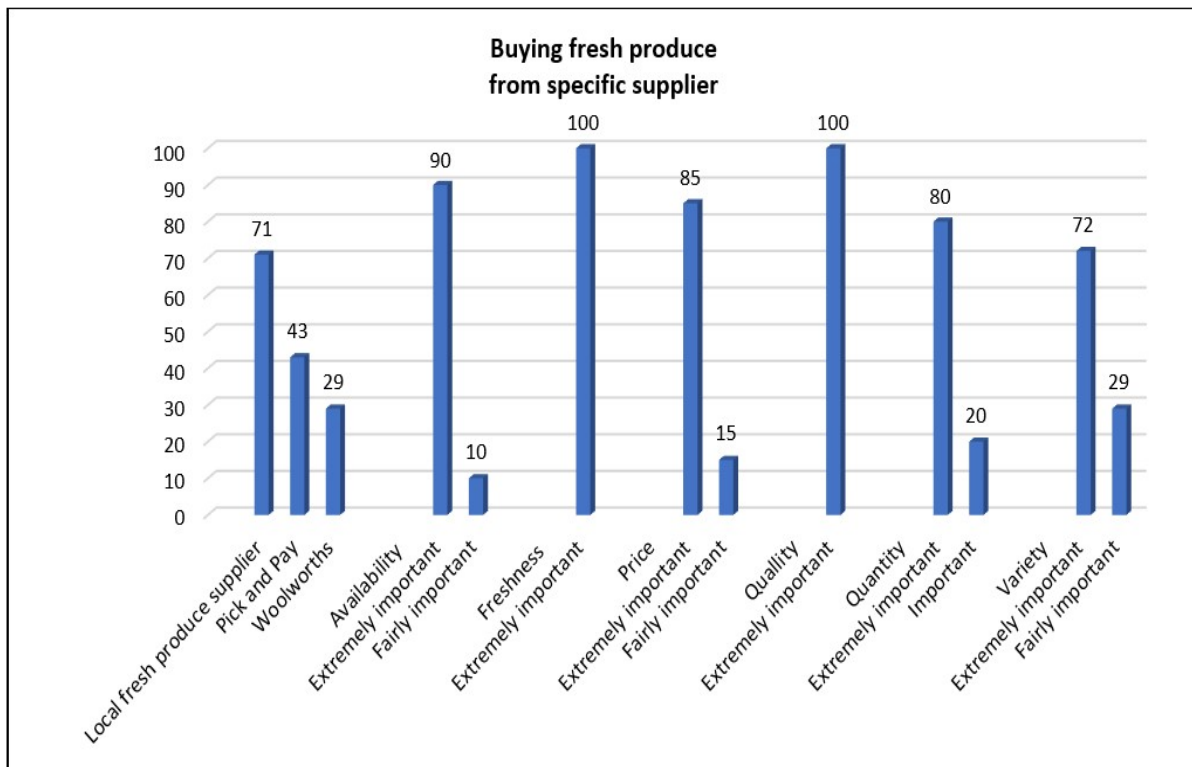


Figure 5.1 Expert coefficient of questionnaire
Source: Developed by the author, 2021

The luxury wildlife tourism destinations indicated (Table 5.2a) that BG1 refers to bookings for two guests (57%), four guests (24%) and for more than four guests (19%). NS1 is the length of stay for four nights (86%), for three nights (10%), and for two nights (4%). PS1 is the occupation during the year in April (9%), September (15%) and December (76%), during the other months of the year occupation ranges between 20% to 40%.

Table 5.2a Questionnaire results of Round 1

Luxury wildlife tourism destinations – Round 1	Results
Demographics	
BG1. When a booking (BG) is made, it is primarily for the number of guests?	57% for 2 guests 24% for 4 guests 19% for 6 guests
NS1. What is the average length of stay (nights), a guest would stay (NS) in the lodge?	86% staying 4 nights 10% staying 3 nights 4% staying 2 nights
PS1. Which month or months is the peak season (PS) at the lodge?	76% in December 15% in September 9% in April

<p>RT1. When buying fresh produce from a retailer/greengrocer the factors most applicable or not applicable</p>	<p>Availability 90% Extremely important 10% Fairly important</p> <p>Freshness 100% Extremely important</p> <p>Price 85% Extremely important 15% Fairly important</p> <p>Quality 100% Extremely important</p> <p>Quantity 80% Extremely important 20% Important</p> <p>Variety 71% Extremely important 29% Fairly important</p>
---	--

Source: Developed by the author, 2021

The retail trustworthiness (RT) criteria of the luxury wildlife tourism destinations when buying fresh produce from a retailer or greengrocer indicates; RT1 *Availability* – extremely important (90%), fairly important (10%), *Freshness* – extremely important (100%), *Price* – extremely important (85%), fairly important (15%), *Quality* – extremely important (100%), *Quantity* – extremely important (80%), important (20%), *Variety* – extremely important (71%), fairly important (29%). The data show that all the above characteristics of fresh produce is a major concern for all the luxury wildlife tourism destinations.

The retail trustworthiness (RT) criteria of the luxury wildlife tourism destinations when buying fresh produce (Table 5.2b) from a specific (the luxury wildlife tourism destination preferred or choice) retailer or greengrocer are indicated as RT2 *Buying from a specific retailer/greengrocer* – disagree (52%), agree (33%), neither agree nor disagree (15%), *Quality is better at their retailer/greengrocer* – strongly agree (71%) neither agree nor disagree (19%), disagree (10%), *Fresh produce is not available, they will go to another retailer/greengrocer* – strongly disagree (47%), agree (38%), neither agree nor disagree (15%), *Fresh produce is not available, will come back another day* – disagree (53%), neither agree nor disagree (28%), agree (19%), *Distance to travel*

to a specific retailer/greengrocer is not a problem – strongly disagree (72%), strongly agree (28%).

Table 5.2b Questionnaire results of Round 1

Luxury wildlife tourism destinations – Round 1	Results
Retail Trustworthiness (RT)	
<p>RT2. When buying fresh produce from a specific retailer/greengrocer which factors are most agreed or not agreed is applicable or not applicable</p>	<p>Buying from a specific retailer/greengrocer 33% Agree 15% Neither agree nor disagree 52% Disagree</p> <p>Quality is better at their retailer or/greengrocer 71% Strongly agree 19% Neither agree nor disagree 10% Disagree</p> <p>Fresh produce is not available, they will go to another retailer/greengrocer 38% Agree 15% Neither agree nor disagree 47% Strongly disagree</p> <p>Fresh produce is not available, will come back another day 28% Strongly agree 19% Neither agree nor disagree 53% Disagree</p> <p>Distance to travel to specific retailer/greengrocer is not a problem 28% Strongly agree 72% Strongly disagree</p>

Source: Developed by the author, 2021

The majority of luxury wildlife tourism destinations are concerned about the quality and availability of fresh produce from the local community farmers. Nevertheless, it is also evident in Figure 5.2, that if good quality fresh produce is available, the luxury wildlife tourism destinations will not have a problem to drive-out to the community farmers to purchase good quality fresh produce.

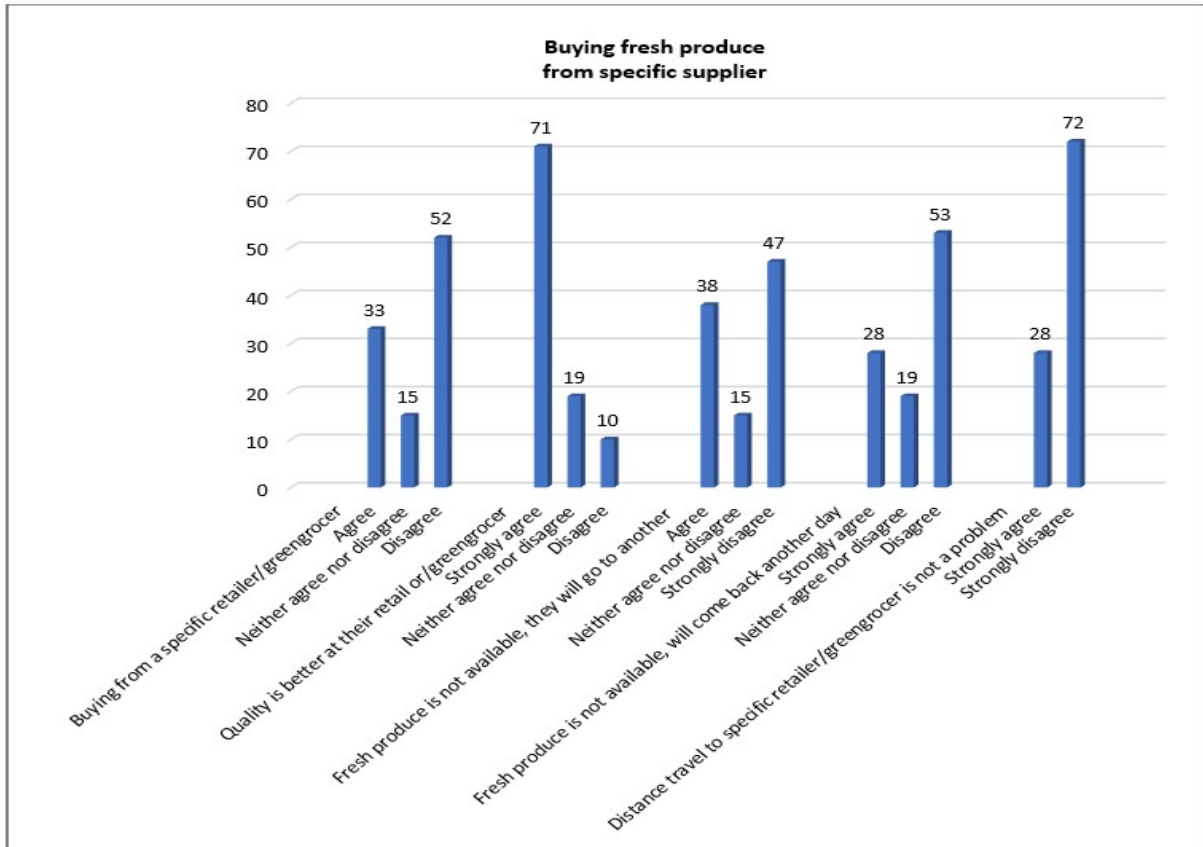


Figure 5.2 Expert coefficient of questionnaire
Source: Developed by the author, 2021

After the data were collected and captured, the results of the first round were emailed to all the panel members who had completed the questionnaires. The second round of questionnaires were emailed to all the panel members.

Round 2

In the second round, 21 questions relating to the acquisition and distribution of fresh produce from the local communities were sent to the luxury wildlife tourism destinations. The respondents had to select from the criteria: 'strongly agree, agree, neither agree nor disagree, disagree and strongly disagree'. The number of questionnaires recovered was 21, with an expert coefficient of 100%. According to Hirschhorn (2019), the purpose of Delphi is to accumulate the most reliable consensus of the panel of experts. In Round 2 a total of 18 questions were asked and the results of the majority luxury wildlife tourism experts ranged between a similarity of 40% and 76%.

The performance expectancy (PE) of the luxury wildlife tourism destinations related to the fresh produce supplied by local community farmers is indicated as a percentage (Table 5.3a). This indicates if the luxury wildlife tourism destinations agree or disagree with a statement; PE1 *Using fresh produce from the local community farmers is a social responsibility for a lodge* – strongly agree (66%), agree (29%), neither agree nor disagree (5%), PE2 *The same fresh produce that is available at the general retailer should be available from the local community farmers* – strongly agree (52%), agree (29%), neither agree nor disagree (10%), disagree (9%), PE3 *Ordering and collecting/delivery of fresh produce is/would be slower when sourced from a retail company* – disagree (62%), neither agree nor disagree (24%), strongly agree (14%), PE4 *Collecting fresh produce from the local community farmers is/would be more costly than buying from a retailer* – agree (38%), disagree (38%), neither agree nor disagree (24%), PE5 *Collecting fresh produce from local community farmers is/would be more dangerous than collecting from a retailer* – disagree (48%), strongly agree (23%), strongly disagree (19%), agree (10%) PE6 *When paying the local community farmers, the lodge expects/would expect some sort of invoice for the fresh produce* – strongly agree (52%), agree (48%), PE7 *The lodge informs/will inform their guests that they are consuming fresh produce supplied by the local community farmers* – strongly agree (52%), agree (48%), PE8 *The lodge would not inform their guests that they are consuming fresh produce supplied by the local community farmers* – strongly disagree (67%), agree (33%), PE 9 *The lodge would expect the local community farmers to be able to supply the required amount of fresh produce which is required* – agree (52%), strongly disagree (48%).

The luxury wildlife tourism destinations are of the opinion that the fresh produce available from the local community farmers will be of good quality and do not foresee any problems when sourcing good quality fresh produce. They will inform their guests that the fresh produce is supplied by the local community farmers. However, the luxury wildlife tourism destinations do require an invoice when fresh produce is purchased from the community farmers.

Table 5.3a Questionnaire results of Round 2

Luxury wildlife tourism destinations – Round 2	Results
Performance Expectancy (PE)	
PE1. Using fresh produce from the local community farmers is a social responsibility for a lodge	66% Strongly agree 29% Agree 5% Neither agree nor disagree
PE2. The same fresh produce that is available at the general retailer should be available from the local community farmers	52% Strongly agree 29% Agree 10% Neither agree nor disagree 9% Disagree
PE3. Ordering and collecting/delivery of fresh produce is/would be slower when sourced from a retail company	14% Strongly agree 24% Neither agree nor disagree 62% Disagree
PE4. Collecting fresh produce from the local community farmers is/would be <i>more costly</i> than buying from a retailer	38% Agree 24% Neither agree nor disagree 38% Disagree
PE5. Collecting fresh produce from local community farmers is/would be <i>more dangerous</i> than collecting from a retailer	23% Strongly agree 10% Agree 48% Disagree 19% Strongly disagree
PE6. When paying the local community farmers, the lodge expects/would expect some sort of invoice for the fresh produce	52% Strongly agree 48% Agree
PE7. The lodge <i>inform/will</i> inform their guests that they are consuming fresh produce supplied by the local community farmers	52% Strongly agree 48% Agree
PE8. The lodge <i>would not</i> inform their guests that they are consuming fresh supplied by the local community farmers	33% Agree 67% Strongly disagree
PE9. The lodge would expect the local community farmers to be able to supply the required amount of fresh produce which is required	52% Agree 48% Strongly disagree

Source: Developed by the author, 2021

The distribution expectancy (DE) criteria of the luxury wildlife tourism destinations are as follows (Table 5.3b); DE 10 *The lodge prefers/would prefer a central marketplace where fresh produce from the local community farmers can be inspected and bought* – strongly agree (67%), neither agree nor disagree (28%), disagree (5%), DE 11 *The lodge prefers/would prefer to collect the fresh produce from the local community farmers* – strongly agree (45%), agree (31%), neither agree nor disagree (14%), disagree (5%), strongly disagree (5%), DE 12 *The lodge prefers/would prefer that the local community farmers deliver the fresh produce to the lodge* – strongly agree (23%), agree (29%), neither agree nor disagree (23%), disagree (11%), strongly

disagree (14%). It is evident that the luxury wildlife tourism destinations are positive about purchasing good quality fresh produce from community farmers.

Table 5.3b Questionnaire results of Round 2

Luxury wildlife tourism destinations – Round 2	Results
Distribution Expectancy (DE)	
DE10. The lodge prefers/would prefer a central marketplace where fresh produce from the local community farmers can be inspected and bought	67% Strongly agree 28% Neither agree nor disagree 5% Disagree
DE11. The lodge prefers/would prefer to collect the fresh produce from the local community farmers	45% Strongly agree 31% Agree 14% Neither agree nor disagree 5% Disagree 5% Strongly disagree
DE12. The lodge prefers/would prefer that the local community farmers deliver the fresh produce to the lodge	23% Strongly agree 29% Agree 23% Neither agree nor disagree 11% Disagree 14% Strongly disagree

Source: Developed by the author, 2021

The quality expectancy (QE) criteria of the luxury wildlife tourism destinations are as follows (Table 5.3c); QE13 *Fresh produce from local community farmers has/will have a long storage life* – strongly agree (46%), neither agree nor disagree (20%), agree (15%), disagree (14%), strongly disagree (5%), QE14 *Fresh produce from local community farmers is/will be free of defects* – strongly disagree (33%), agree (24%), neither agree nor disagree (19%), strongly disagree (10%), QE15 *Fresh produce from local community farmers has/will have excellent taste/flavour* – strongly agree (48%), agree (47%), neither agree nor disagree (5%), QE16 *Fresh produce from local community farmers has/will have excellent nutritional value* – agree (52%), strongly agree (38%), disagree (10%), QE17 *Fresh produce from local community farmers has/will have a high-quality appearance* – agree (43%), strongly agree (38%), neither agree nor disagree (14%), disagree (5%). The data shows that the luxury wildlife tourism destinations are of the opinion that community farmers will be able to supply good quality fresh produce.

Table 5.3c Questionnaire results of Round 2

Luxury wildlife tourism destinations – Round 2	Results
Quality Expectancy (QE)	
QE13. Fresh produce from local community farmers has/will have a long storage life	46% Strongly agree 15% Agree 20% Neither agree nor disagree 14% Disagree 5% Strongly disagree
QE14. Fresh produce from local community farmers is/will be free of defects	14% Strongly agree 24% Agree 19% Neither agree nor disagree 33% Disagree 10% Strongly disagree
QE15. Fresh produce from local community farmers has/will have excellent taste/flavour	48% Strongly agree 47% Agree 5% Neither agree nor disagree
QE16. Fresh produce from local community farmers has/will have excellent nutritional value	38% Strongly agree 52% Agree 10% Disagree
QE17. Fresh produce from local community farmers has/will have a high-quality appearance	38% Strongly agree 43% Agree 14% Neither agree nor disagree 5% Disagree

Source: Developed by the author, 2021

The effort expectancy (EE) criteria are as follows (Table 5.3d); EE18 *The lodge find/would find it easy to work with and communicate with local community farmers* – agree (38%), strongly agree (33%), neither agree nor disagree (14%), disagree (10%), strongly disagree (5%), EE19 *The distance the lodge has/would have to travel to buy fresh produce from local community farmers would not be a problem* – disagree (47%), strongly disagree (29%), agree (14%), strongly agree (10%), EE20) *The lodge finds/would find it easy to source fresh produce from local community farmers* – disagree (47%), agree (38%), neither agree nor disagree (14%), strongly agree (5%). It is evident that the luxury wildlife tourism destinations will have no problems in forming a working relationship with community farmers.

Table 5.3d Questionnaire results of Round 2

Luxury wildlife tourism destinations – Round 2	Results
Effort Expectancy (EE)	
EE18. The lodge finds/would find it easy to work with and communicate with local community farmers	33% Strongly agree 38% Agree 14% Neither agree nor disagree 10% Disagree 5% Strongly disagree
EE19. The distance the lodge has/would have to travel to buy fresh produce from local community farmers would not be a problem	10% Strongly agree 14% Agree 47% Disagree 29% Strongly disagree
EE20. The lodge finds/would find it easy to source fresh produce from local community farmers	38% Agree 14% Neither agree nor disagree 43% Disagree 5% Strongly disagree

Source: Developed by the author, 2021

Finally, the behavioural intention (BI) criteria of the luxury wildlife tourism destinations are indicated in terms of a percentage for 'Yes, No and Not applicable are as follows (Table 5.3e); BI21 *The lodge intends to start buying fresh produce from local community farmers* – yes (76%), no (14%), not applicable (10%), BI22 *The fresh produce the lodge intends to buy or is been bought from local community farmers is/will only be used for staff meals* – no (57%), yes (38%), not applicable (5%), BI23) *The fresh produce the lodge intends to buy or is been bought from local community farmers is/will only be used for guest meals* – no (56%), yes (40%), not applicable (4%), BI24 *The lodge intends to continue buying fresh produce from local community farmers* – not applicable (48%), no (33%), yes (19%). The data shows that some luxury wildlife tourism destinations are willing to purchase good quality fresh produce that will be used for guests and staff meals. However, there is a small percentage of luxury wildlife tourism destinations that are indecisive about procuring and using good quality fresh produce for staff and guest meals.

Table 5.3e Questionnaire results of Round 2

Luxury wildlife tourism destinations – Round 2	Results
Behavioural Intention (BI)	
BI21. The lodge intends to start buying fresh produce from local community farmers	76% Yes 14% No 10% Not applicable
BI22. The fresh produce the lodge intends to buy <i>or</i> has bought from local community farmers is/will only be used for staff meals	38% Yes 57% No 5% Not applicable
BI23. The fresh produce the lodge intends to buy <i>or</i> has bought from local community farmers is/will only be used for guest meals	40% Yes 56% No 4% Not applicable
BI24. The lodge intends to continue buying fresh produce from local community farmers	19% Yes 33% No 48% Not applicable

Source: Developed by the author, 2021

After the data were collected and captured, the results of the second round were emailed to all the panel members who had completed the questionnaires. Finally, the third round of questionnaires were emailed to all the panel members.

Round 3

In the final round of the questionnaires, the personal opinions were asked of the panel of experts relating to the acquisition and the distribution of fresh produce from local communities to luxury wildlife tourism destinations. When all the responses of the panel of experts were returned, the information was sorted and captured. In the final round, 21 questionnaires were sent and 15 were recovered, with an expert coefficient of 75%. The panel of experts were thanked for their willingness to assist in data collection using the adapted Delphi technique.

The personal opinions of the panel of experts from the various luxury wildlife tourism destinations are as follows;

Positives: Supporting local communities is an important social responsibility for the various luxury wildlife tourism destinations. Buying produce from local communities creates a story about the fresh produce served to the guests. The luxury wildlife tourism destinations explain to their guests how they are trying to create a farm-to-

table ethos, by sourcing fresh produce from the local communities. When a luxury wildlife tourism destination supports a local community farmer, it creates a sense of accomplishment. While most community farmers are family-run, the positive connection with a luxury wildlife tourism destination can contribute to more families aspiring to become community farmers for a luxury wildlife tourism destination. When a luxury wildlife tourism destination supports a community farmer it generates income for the community farmer, which in turn contributes to the local economy of the community.

Concerns: Luxury wildlife tourism destinations think that local community farmers are unable to continuously supply fresh produce. The reason given is that community farmers only focus on hardy vegetables, such as onions, potatoes, cabbages and cauliflower, which are produced at certain times of the year. It is a concern of the luxury wildlife tourism destination that community farmers are unable to supply a variety of fresh produce. Unexpected weather conditions, such as droughts, floods or pests will certainly influence the ability of a local community farmer to continuously supply the luxury wildlife tourism destination with fresh produce. Also, the freshness and the shelf life of the fresh produce can be problematic because minimal effort is sometimes taken by the community farmers to ensure that their fresh produce is of good quality. When a luxury wildlife tourism destination requires fresh produce, the chef sometimes needs to visit the community farmer to inspect the fresh produce available because the majority of local community farmers are unable to deliver their fresh produce to the luxury wildlife tourism destinations. This exercise can be time consuming and create problems for the chef because enough time is needed to prepare quality food for the guests.

Despite the concerns the luxury wildlife tourism destinations have about the fresh produce from the community farmers, all the respondents were positive about the availability of fresh produce from community farmers. As seen in Table 5.2a, the three important fresh produce factors, freshness, quality and availability, are important for luxury wildlife tourism destinations when serving meals to guests. However, luxury wildlife tourism destinations are of the opinion that although some fresh produce from community farmers are not suitable for guests' meals, the fresh produce can still be

used for staff meals, therefore, luxury wildlife tourism destinations will continue to support community farmers. Other luxury wildlife tourism destinations were considering supporting the fresh produce farmers from the local communities in their surrounding area.

5.2.2 Responses of transport/logistics companies

Round 1

In the first round, 30 questionnaires were sent and 30 were recovered, with an expert coefficient of 100% (Table 5.4). From a distribution perspective it is evident that loading assistance of the goods was considered to be extremely important by all the transport companies (100%). The transport companies also indicated (Figure 5.4) when collecting products from any organisation, the criteria for the loading requirements (LR) are extremely important; these are indicated from the highest percentage to the lowest; LR1 *Availability of people to assist with loading* – extremely important (75%), important (25%), LR2 *Proof of delivery (POD) documentation must be given* – extremely important (70%), important (30%), LR3 *Operating hours, loading times* – extremely important (70%), important (30%), LR4 *Weight of the load is known prior to loading* – important (90%), neither important nor unimportant (10%), LR5 *Load is verified against POD and then loaded onto pallets* – important (90%), neither important nor unimportant (10%), LR6 *When it is raining, will loading still continue?* – important (73%), neither important nor unimportant (14%), unimportant (13%) LR7 *Size of the truck and trailer to a company can accommodate* – extremely important (70%), important (30%), LR8 *Products are packed onto pallets and loaded into a loading cage prior to loading* – extremely important (53%), important (27%), neither important nor unimportant (20%), and LR9 *The type of ground cover in the loading areas is known* – important (58%), unimportant (31%), neither important nor unimportant (11%).

Table 5.4 Questionnaire results of Round 1

Transport/Logistics companies – Round 1	Results
Loading Requirements (LR)	
LR1. The availability of people to assist with the loading	75% Extremely important 25% Important
LR2. Proof of delivery (POD) documentation must be given to the driver	70% Extremely important 30% Important
LR3. The time available for loading, only during normal business hours, only after hours or both	70% Extremely important 30% Important
LR4. Is it important to know the total weight relevant to the load capacity of the vehicle	90% Important 10% Neither important nor unimportant
LR5. After the load is checked against the POD, the product is packed onto pallets	90% Important 10% Neither important nor unimportant
LR6. When there is a chance of rain, or it's raining, will loading be possible?	73% Important 14% Neither important nor unimportant 13% Unimportant
LR7. The biggest size of truck and trailer the company can accommodate must be given prior to loading	70% Extremely important 30% Important
LR8. The different products are packed in a loading cage prior to loading	53% Important 20% Neither important nor unimportant 27% Unimportant
LR9. The type of ground cover in the loading area, ashes, cement surface, paving, tarmac or natural ground	58% Important 11% Neither important nor unimportant 31% Unimportant

Source: Developed by the author, 2021

In Table 5.4 above, it is evident that all transport companies are very concerned about the loading processes. The majority of transport companies require assistance during loading and that a POD must be given. Also, the size of the truck to be loaded and the possibility to load when it rains are important requirements for all the transport companies. It is evident from Figure 5.3 that it is extremely important for transport companies to know the weight of a load, and that the products are packed onto pallets. The reason being, when transport companies encounter difficulties when loading, there is a possibility that the truck might miss the scheduled off-loading times at delivery destinations and then the truck has to wait in a queue for an off-loading time. When transport companies deliver fresh produce, it is critical that the trucks keep to the off-loading times, because the longer off-loading takes, the shorter the freshness time-window becomes.

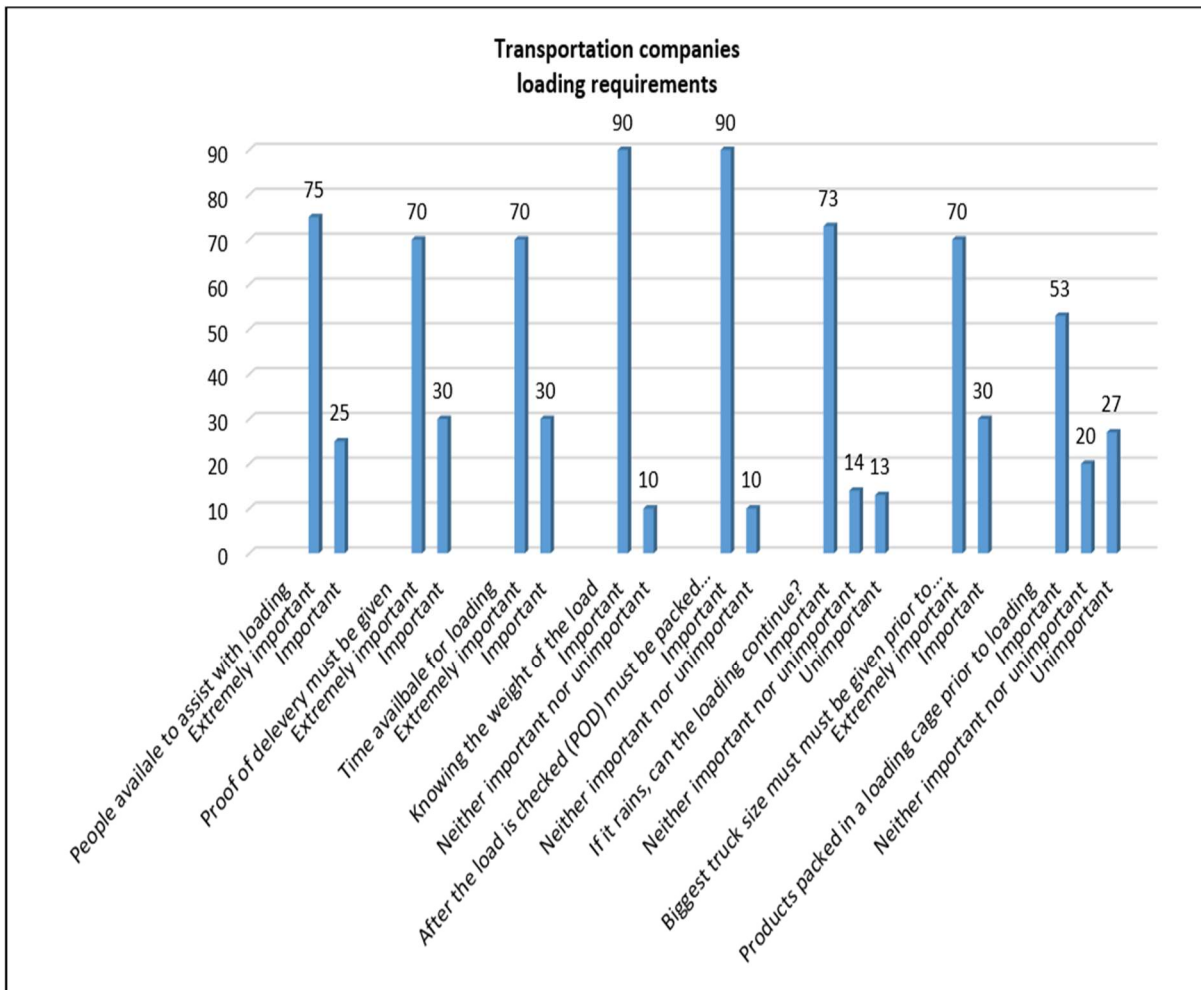


Figure 5.3 Expert coefficient of questionnaires

Source: Developed by the author, 2021

After the data were collected and captured the results of the first round were emailed to all the panel members who had completed the questionnaires. The second round of questionnaires were emailed to all the panel members.

Round 2

In the second round, 30 questionnaires relating to loading and the distribution of fresh produce from local communities to luxury wildlife tourism destinations were sent to transport companies. The answer to each question must indicate one of the following; strongly agree, agree, neither agree nor disagree, disagree or strongly disagree. The results are indicated in terms of the percentage of the most responses in a section. The questionnaires recovered were 30, with an expert coefficient of 100%. This indicates whether the transport companies agree or

disagree with a load planning expectancy (LPE) statement. In Round 2, a total of 15 questions were asked and the results of the majority of luxury wildlife tourism experts ranged between a similarity of 30% and 83%.

The results of the LPE (Table 5.5a) are as follows; LPE1 *To include fresh produce from the local community farmers into the load for a lodge is considered a social responsibility for the company* – strongly agree (73%), neither agree nor disagree (27%), LPE2 *The inclusion of fresh produce onto existing loads could be problematic due to factors, such as geographical location (on route or not), part loads and insufficient loading volume* – strongly agree (100%), LPE3 *Information (quantity, weight, size, type of fresh produce and others) must be given to a company prior to the loading of the fresh produce in a local community* – strongly agree (100%), LPE4 *The local community farmer must be able to supply documentation, (proof of delivery, invoice) to the driver* – Strongly agree (60%), LPE5 *To locate a local community farmer might be problematic within a local community (the availability of a physical address)* – strongly agree (83%), neither agree nor disagree (17%), LPE6 *The roads in local communities might be difficult to access with a truck and trailer* – strongly agree (100%), LPE7 *To enter and exit property of the local community farmer with a truck and trailer might be challenging* – strongly agree (77%), neither agree nor disagree (23%), LPE8 *The safety of the driver and the truck is very important when loading fresh produce in a local community* – strongly agree (100%).

The data shows the majority of transport companies are willing to include loads from community farmers into/onto existing loads. However, the safety, the state of the roads in local communities, the location of the community farmer, information of the load and documents (POD) supporting the additional load are some of criteria that can make the inclusion of a load of fresh produce from a community farmer difficult to execute.

Table 5.5a Questionnaire results of Round 2

Transport /Logistics companies – Round 2	Results
Load Planning Expectancy (LPE)	
LPE1. To include fresh produce from the local community farmers in the load for a lodge is considered a social responsibility for the company	40% Strongly agree 33% Agree 27% Neither agree nor disagree
LPE2. The inclusion of fresh produce on existing loads could be problematic due to factors, such as geographical location (on route or not), part loads and insufficient loading volume	63% Strongly agree 37% Agree
LPE3. Information (quantity, weight, size, type of fresh produce) must be given to a company prior to the loading of the fresh produce in a local community	83% Strongly agree 17% Agree
LPE4. The local community farmer must be able to supply documentation (proof of delivery, invoice) to the driver	60% Strongly agree 40% Agree
LPE5. To locate a local community farmer might be problematic within a local community (the availability of a physical address)	47% Strongly agree 36% Agree 17% Neither agree nor disagree
LPE6. The roads in local communities might be difficult to access with a truck and trailer	67% Strongly agree 33% Agree
LPE7. To enter and exit a property of the local community farmer with a truck and trailer might be challenging	50% Strongly agree 27% Agree 23% Neither agree nor disagree
LPE8. The safety of the driver and the truck is very important when loading fresh produce in a local community	57% Strongly agree 43% Agree

Source: Developed by the author, 2021

The criteria of the loading requirements (LR) of the transport companies (Table 5.5b) are as follows; LR9 *A loading time must be agreed upon with the local community farmer prior to loading* – strongly agree (100%), neither agree nor disagree (27%), LR10 *The fresh produce must be sorted by the local community farmers prior to loading* – strongly agree (100%), LR11 *The weight of the fresh produce must be calculated prior to loading* – strongly agree (100%), LR12 *The fresh produce must be loaded onto pallets after checked by the farmer and the driver* – strongly agree (70%), strongly disagree (17%), neither agree nor disagree (13%), LR13 *The fresh produce must be loaded into suitable/appropriate bags* – strongly agree (100%), LR14 *The local community farmer must have people available to assist with the loading* – strongly agree (64%), neither agree nor disagree (23%), strongly disagree (17%),

LR15 A loading time must be agreed upon with the local community farmer prior to loading – strongly agree (50%), strongly disagree (40%), neither agree nor disagree (10%).

Table 5.5b Questionnaire results of Round 2

Transport/Logistics companies – Round 2	Results
Loading Requirements (LR)	
LR9. A loading time must be agreed upon with the local community farmer prior to loading	53% Strongly agree 47% Agree
LR10. The fresh produce must be sorted by the local community farmers prior to loading	57% Strongly agree 43% Agree
LR11. The weight of the fresh produce must be calculated prior to loading	70% Strongly agree 30% Agree
LR12. The fresh produce must be loaded onto pallets after it has been checked by the farmer and the driver	33% Strongly agree 37% Agree 13% Neither agree nor disagree 17% Strongly disagree
LR13. The fresh produce must be loaded into suitable/appropriate bags	60% Strongly agree 40% Agree
LR14. The local community farmer must have people available to assist with the loading	17% Strongly agree 47% Agree 23% Neither agree nor disagree 13% Strongly disagree

Source: Developed by the author, 2021

It is evident that the requirements of the transport companies are much the same with regards to the loading requirements of fresh produce at community farmers.

After the data were collected and captured, the results of the first round were emailed to all the panel members who had completed the questionnaires. The third round of questionnaires were emailed to all the panel members.

Round 3

In the final round of the adapted Delphi, the personal opinions were asked of the panel of experts relating to the collection and distribution of fresh produce from local communities to luxury wildlife tourism destinations. When all the responses were returned, the information was sorted and captured. In the final round, 30 questionnaires were sent and 20 were received, with an expert coefficient of

66,67%. The panel of experts were thanked for their willingness to assist in the data collection using the adapted Delphi technique.

A summary of the personal opinions of the panel of experts from the transport companies is as follows:

Positives: To support local communities according to the transport companies, is a social responsibility. Also, the involvement of a local community being able to add to an existing load destined for luxury wildlife tourism destinations, will allow the local community farmer to improve their source of income. This would allow them to have a regular delivery of fresh produce to luxury wildlife tourism destinations so that they could plan and project their production of fresh produce accordingly. Another way of possibly including the fresh produce from community farmers is to create a type of distribution network for the transport company that is servicing the luxury wildlife tourism destinations. This might be possible if it is a closed-loop system, for example, using an 8-ton refrigerated truck when doing milk runs for the luxury wildlife tourism destinations, with a scheduled collection point in the local community.

Concerns: The biggest problem area, according to the transport companies, when combining fresh produce with existing loads of luxury wildlife tourism destinations, is freight compatibility. In Round 2, the concerns of the transport companies were identified by strongly agreeing with certain statements. However, when a load consists of a variety of products that are consolidated for the luxury wildlife tourism destinations, the following are the opinions of the transport companies as to why it might be challenging to include fresh produce from a local community with the existing load:

- ❖ The fresh produce must be temperature controlled. If the fresh produce is exposed to the environment, such as heat or cold, it can deteriorate while in transit
- ❖ The cost of deviating from a fixed route will increase the cost of the transport. If the quantify of the fresh produce is small, the cost of the transport will not justify the collection and the delivery of the fresh produce to the luxury wildlife tourism destinations

- ❖ Long-distance trucks have scheduled pick-up and delivery points which are usually booked in advance. If such a truck must collect fresh produce from a community farmer, who is normally located on the outskirts of their main delivery routes, the long-distance trucks will lose time. The time lost can create problems because the pick-up and delivery times for upcoming transport bookings will be affected

The responses of the transport companies were 50/50, some indicated that it might be possible to include fresh produce onto existing loads destined for luxury wildlife tourism destinations. However, to make it economically viable in the long run, this concept must be investigated thoroughly. Other transport companies indicated that too many problem areas must be addressed, which will make it difficult to include fresh produce with existing loads destined for luxury wildlife tourism destinations.

5.2.3 Results and analysis

The results of the questionnaires for Rounds 1 and 2 of the luxury wildlife tourism destinations and the transport companies indicated similarities and differences. In Round 1 of the luxury wildlife tourism destinations, fresh produce elements, such as freshness, quality and availability were presented as extremely important (100%) elements when procuring fresh produce. For transport companies, the availability of people to assist with loading, POD documentation, operating hours and the size of the truck and trailer were presented as extremely important (100%) elements when loading.

According to Adams and Lawrence (2018), data analysis is a process researchers use to interpret qualitative data to decipher and comprehend rationalisation of the gathered data. Answers to the questions were indicated in a percent for the most responses for the scale of 'strongly agree, agree, neither agree nor disagree, disagree and strongly agree' and for 'extremely important, fairly important and Important.' In Round 1, for luxury wildlife tourism destinations, 11 statements relating to fresh produce elements were measured. For the transport companies, nine statements relating to the elements when loading fresh produce were measured. An analysed summary is given in Figure

5.4 of the data gathered in Round 1. The elements that stood out the most in Round 1 were how extremely important (87.6%), the *availability, freshness, price, quality, quantity* and *variety* of fresh produce were during the procuring processes for luxury wildlife tourism destinations.

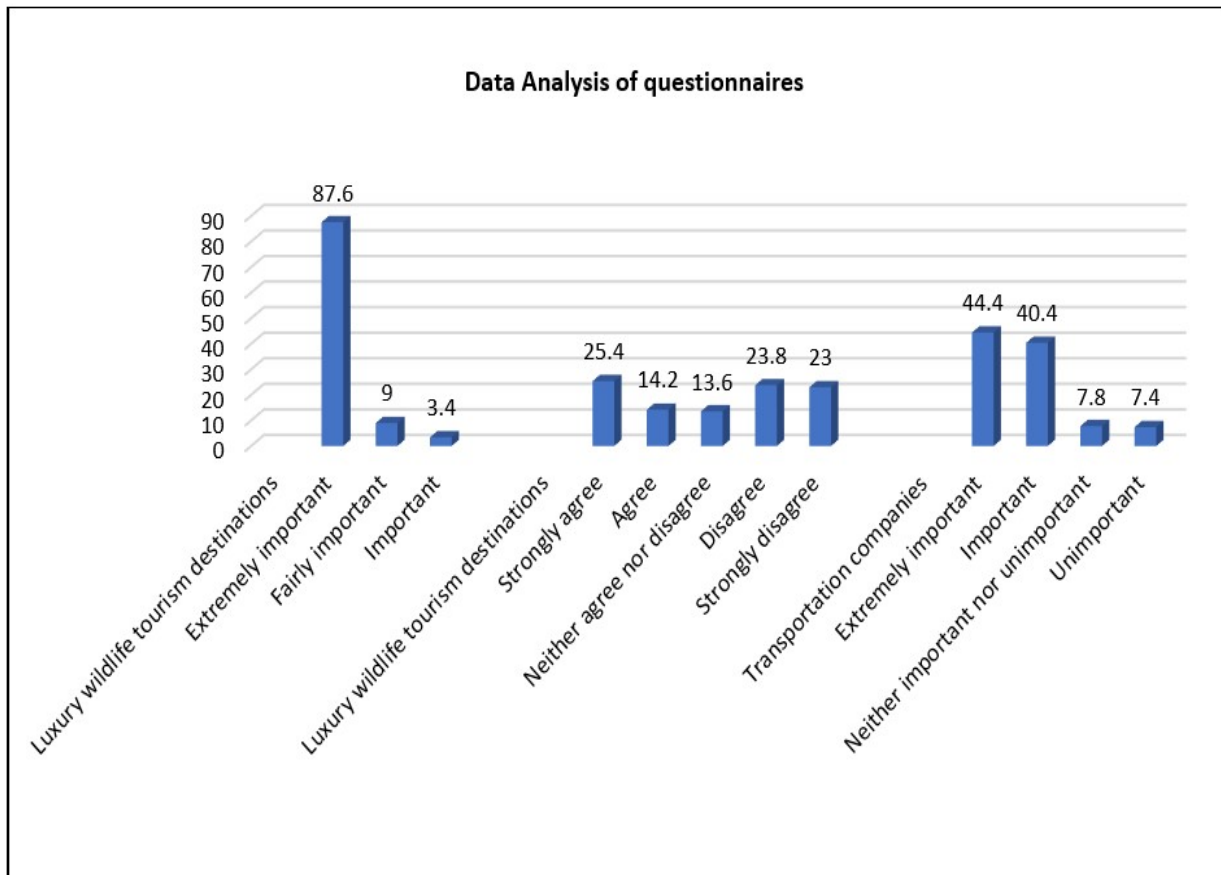


Figure 5.4 Data analysis of questionnaires
Source: Developed by the author, 2021

In Round 2 of the luxury wildlife tourism destinations, 20 statements relating to fresh produce elements were measured. For the transport companies, 15 statements relating to the elements when loading fresh produce were measured. An analysed summary is given in Figure 5.5 of the data gathered in Round 2. The elements that stood out the most in Round 2, were how strongly 87.7% of the transport companies agreed with eight of the 15 statements relating to the loading of fresh produce. Furthermore, the luxury wildlife tourism destinations agreed (56.5%) with three of the 20 statements relating to the usage of fresh produce supplied to the luxury wildlife tourism destinations by the local community farmers. Finally, 43.25% of luxury wildlife

tourism destinations are considering procuring fresh produce from local community farmers close to them.

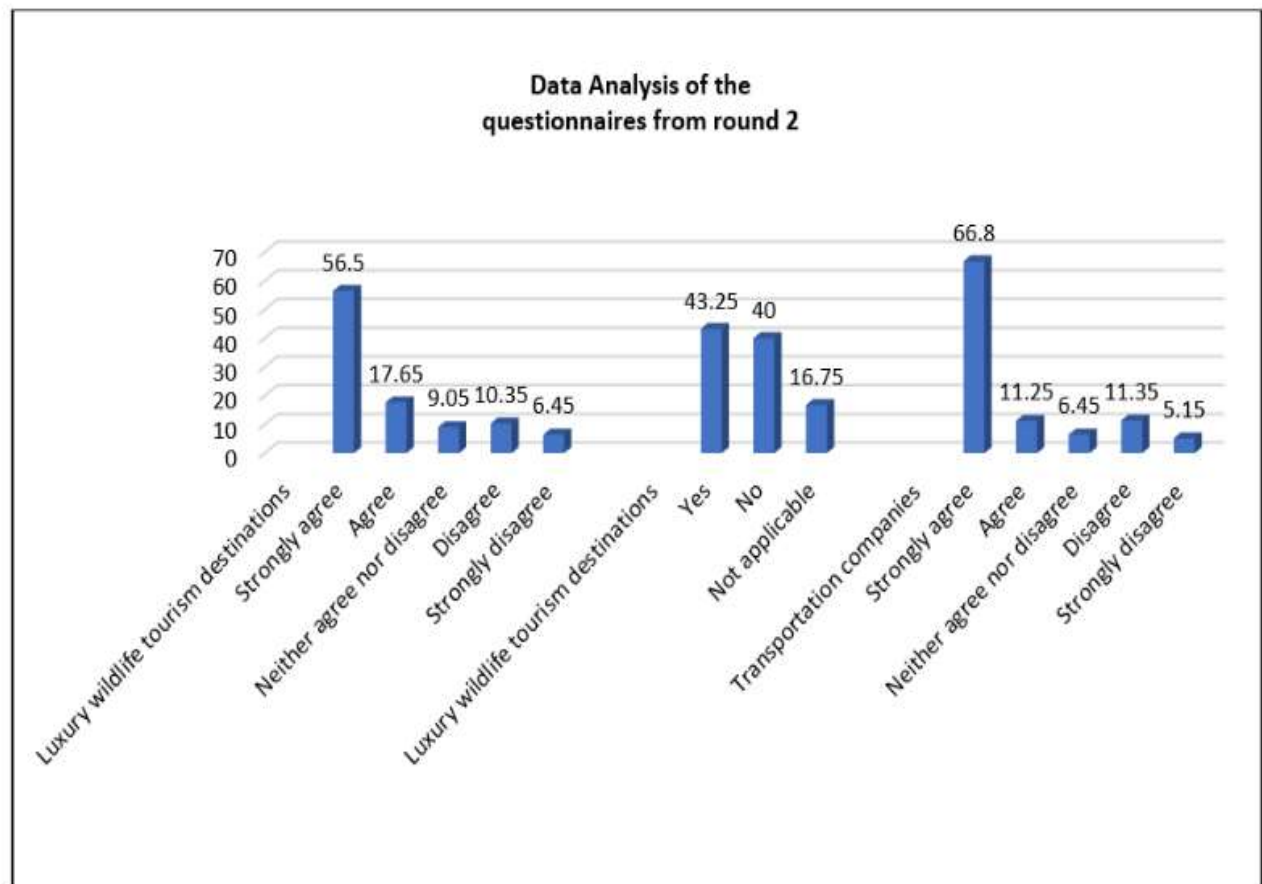


Figure 5.5 Data analysis of questionnaires
Source: Developed by the author, 2021

The next section will provide an overview of the process the author has developed to determine whether it will be viable for a luxury wildlife tourism destination to include fresh produce from community farmers in their last-mile SC processes.

5.3 Framework for the Inclusion of local community farmers in the last-mile supply chain processes of luxury wildlife tourism destinations

The data gathered through the questionnaires during the two rounds of questionnaires from the panel of experts of both the luxury wildlife tourism destinations and the transport companies will be used to design a framework. This framework will provide an overview of what the luxury wildlife tourism destination companies considered as

the important concepts for possibly including fresh produce from local community farmers in last-mile SC processes. The framework also provides an overview of what transport companies considered as important concepts, when fresh produce from local community farmers would be loaded and delivered to luxury wildlife tourism destinations. The framework supports the fundamental structure of the research. The framework contributed to a multiplicity of higher-order thinking processes, which were used to develop the criteria for possibly including fresh produce from local community farmers in their last-mile SC processes.

5.3.1 Framework criteria for luxury wildlife tourism destinations

The data gathered from luxury wildlife tourism destinations during the two rounds of questionnaires were sorted and captured, which were then arranged to determine what was considered important for the luxury wildlife tourism destinations (Table 5.6). The data collected in Rounds 1 and 2 were summarised into 22 concepts (Table 5.6). However, it must be noted that only the 10 most important concepts applicable to the possible inclusion of fresh produce from the local community farmers in last-mile SC processes were selected for the framework.

Table 5.6 Results of data collected from luxury wildlife tourism destinations

1. When buying fresh produce from a retailer/greengrocer which factor is the most applicable or not applicable. quality, freshness, availability, price, quantity, variety?	12. The lodge found/would find it easy to work with and communicate with local community farmers
2. The lodge prefers/would prefer to collect the fresh produce from the local community farmers	13. Fresh produce from local community farmers has/will have excellent taste/flavour
3. The lodge intends to start buying fresh produce from local community farmers	14. Fresh produce from local community farmers has/will have excellent nutritional value
4. The distance the lodge has/would have to travel to buy fresh produce from local community farmers would not be a problem	15. Fresh produce from local community farmers has/will have a high-quality appearance
5. When paying the local community farmers, the lodge expects/would expect some sort of invoice for the fresh produce	16. Fresh produce from local community farmers is/will be free of defects
6. Using fresh produce from the local community farmers is a social responsibility for a lodge	17. The lodge would expect the local community farmers to be able to supply the required amount of fresh produce
7. The same fresh produce that is available at the general retailer should be available from the local community farmers	18. The lodge found/would find it easy to source fresh produce from local community farmers

8. The lodge informed/will inform their guests that they are consuming fresh produce supplied by the local community farmers	19. Collecting fresh produce would be more costly than buying from a retailer
9. Collecting fresh produce from local community farmers is/would be more safe and secure (might get lost, roads can damage the vehicle) than collecting from a retailer	20. Ordering and collecting/delivery of fresh produce is/would be slower when sourced from a retail company
10. The lodge prefers/would prefer a central marketplace where fresh produce from the local community farmers can be inspected and bought	21. The lodge prefers/would prefer that the local community farmers deliver the fresh produce to the lodge
11. Fresh produce from local community farmers has/will have a long storage life	22. The fresh produce the lodge intends to buy or bought from local community farmers is/will only be used for guest meals

Source: Developed by the author, 2021

The data gathered from luxury wildlife tourism destinations during the two rounds of questionnaires were sorted and captured, which were then arranged to determine what was considered important for the luxury wildlife tourism destinations (Table 5.7). After the data were arranged, the 10 most important concepts applicable to the possible inclusion of fresh produce from local community farmers in last-mile SC processes, were selected. The concepts are arranged in order of importance, where 1 represents the most important and 10 represents an important concept. When a luxury wildlife tourism destination is considering purchasing fresh produce from a community farmer, the author created a checklist for the framework criteria (Table 5.7). This checklist would give an indication to a luxury wildlife tourism destination whether this venture is worth pursuing or not.

From the research conducted in a variety of study areas, it was established that an acceptable or good percentage rate of success would be between 80 and 95% to consider to inclusion of local community farmers in the last-mile SC processes of luxury wildlife tourism destinations. Therefore, in Table 5.7 and Table 5.9, 80% will be used as the minimum level to continue with determining the possibility of including fresh produce from local community farmers in the last-mile SC processes.

Table 5.7 Criteria checklist for wildlife tourism destinations

Criteria for the inclusion of fresh produce from local community farmers	Yes	No
1. The <i>quality</i> of the fresh produce from the community farmer is adequate		
2. The <i>freshness</i> of the fresh produce from the community farmer is acceptable		
3. The community farmer has enough fresh produce <i>available</i>		
4. The <i>price</i> of the community farmers' fresh produce is more than acceptable compared to retail stores		
5. The <i>quantity</i> of fresh produce the community farmer is able to supply is acceptable		
6. The <i>variety</i> of the fresh produce from the community farmer is adequate		
7. <i>Travelling</i> to the community farmer to buy fresh produce will not be a problem		
8. The community farmer is able to produce an <i>invoice</i> for the fresh produce brought		
9. The lodge will <i>inform their guests</i> that the fresh produce served is sourced from local community farmers		
10. It is <i>safe</i> to travel in the local community to go and buy fresh produce at the premises of the community farmer		

Source: Developed by the author, 2021

After completion of the framework criteria and if the outcome is 80% or higher, the luxury wildlife tourism destination can continue with the checklist for the inclusion criteria related to the community farmer (Table 5.8). If the outcome is lower than 80%, it would not be worthwhile for the luxury wildlife tourism destination to continue with the community farmer checklist of inclusion criteria.

5.3.2 Framework criteria for transport companies

The data gathered from transport companies during the two rounds of questionnaires were sorted and captured. After Rounds 1 and 2 were completed, the data were captured and summarised into 22 concepts which were considered by the transport companies to be important for the collection of loads (Table 5.8). Similar to Section 5.3.1, only the 10 most important concepts applicable to the collection of fresh produce from local community farmers were selected for the framework.

Table 5.8 Results of data collected from transportation companies

1. Is it important to know the total weight relevant to the load capacity of the vehicle	12. When there is a chance of rain, or it is raining, will loading be possible?
2. Information (such as quantity, weight, size, type of fresh produce) must be given to the company prior to the loading of the fresh produce in a local community	13. To enter and exit the property of the local community farmer with a truck and trailer might be challenging
3. The availability of people to assist with the loading	14. The inclusion of fresh produce onto existing loads could be problematic due to factors, such as geographical location (on route or not), part loads and insufficient loading volume
4. Proof of delivery (POD) documentation must be given to the driver	15. A loading time must be agreed upon with the local community farmer prior to loading
5. After the load is checked against the POD, the product is packed onto pallets	16. The fresh produce must be sorted by the local community farmers prior to loading
6. The local community farmer must be able to supply documentation (e.g., proof of delivery, invoice) to the driver	17. The fresh produce must be loaded into suitable/appropriate bags
7. The biggest size truck and trailer the company can accommodate must be given prior to loading	18. The inclusion of fresh produce onto existing loads could be problematic due to factors, such as geographical location (on route or not), part loads and insufficient loading volume
8. Is it important to know the total weight relevant to the load capacity of the vehicle	19. To include fresh produce from the local community farmers into the load for a lodge is considered a social responsibility for the company
9. The roads in local communities might be difficult to access with a truck and trailer	20. The type of ground cover in the loading area, i.e., ashes, cement surface, paving, tarmac or natural ground
10. The safety of the driver and the truck is very important when loading fresh produce in a local community	21. The different products are packed in a loading cage prior to loading
11. To locate a local community farmer might be problematic within a local community (the availability of a physical address)	22. The time available for loading, only during normal business hours, only after hours or both

Source: Developed by the author, 2021

The data were arranged after being captured and the 10 most important concepts applicable to the possible collection of fresh produce from local community farmers were selected. These concepts were arranged in order of importance, where 1 represents the most important and 10 represents an important concept. To determine if a transport company should consider the collection of fresh produce from a community farmer, the author created a checklist for the framework criteria (Table 5.9). This checklist would give an indication to a transport company whether this venture is worth pursuing or not.

Table 5.9 Criteria checklist for transport companies

Criteria for the loading of fresh produce from local community farmers	Yes	No
1. Will the <i>exact weight</i> of the load be available prior to the loading of the fresh produce at the premises of the community farmer?		
2. Will <i>people be available</i> to assist with the loading of the fresh produce at the premises of the community farmer?		
3. Is the community farmer able to produce a <i>proof of delivery</i> (POD) when loading the fresh produce at the premises of the community farmer?		
4. Will the fresh produce be <i>palletised</i> when loading at the premises of the community farmer?		
5. Can the community farmer describe the <i>size of the truck and trailer</i> they will be able to accommodate at their premises?		
6. Can the <i>quality of the roads</i> within the local community influence the effective movement of the truck and trailer?		
7. Are the community farmers able to assure the <i>safety and security</i> of the driver and the truck while loading fresh produce at their premises?		
8. <i>Will the driver be able to locate</i> the premises of the community farmer easily in the local community?		
9. When it is <i>raining</i> , can the loading of fresh produce at the premises of the community farmer continue?		
10. Will the driver be able to <i>enter and exit</i> the premises of the community farmer easily with a truck and trailer?		

Source: Developed by the author, 2021

In order for a transport company to decide whether it will be worthwhile to collect or include fresh produce from a community farmer, the framework criteria must be completed. When the outcome is 80% or higher, the luxury wildlife tourism destination must liaise with a transport company to formalise the details, such as the collection and delivery of fresh produce from the community farmer.

To summarise, this section has laid the foundation of the 10 concepts luxury wildlife tourism destinations can use to determine if the fresh produce from local community farmers can be included in the FMCG SCs and last-mile SC processes of luxury wildlife tourism destinations. The author has created Figure 5.6 to graphically depict the conceptualising of the framework. The framework is essential in assisting luxury wildlife tourism destinations in making informed decisions whether a possibility exists to include local community farmers in the FMCG SCs and last-mile SC processes of luxury wildlife tourism destinations.

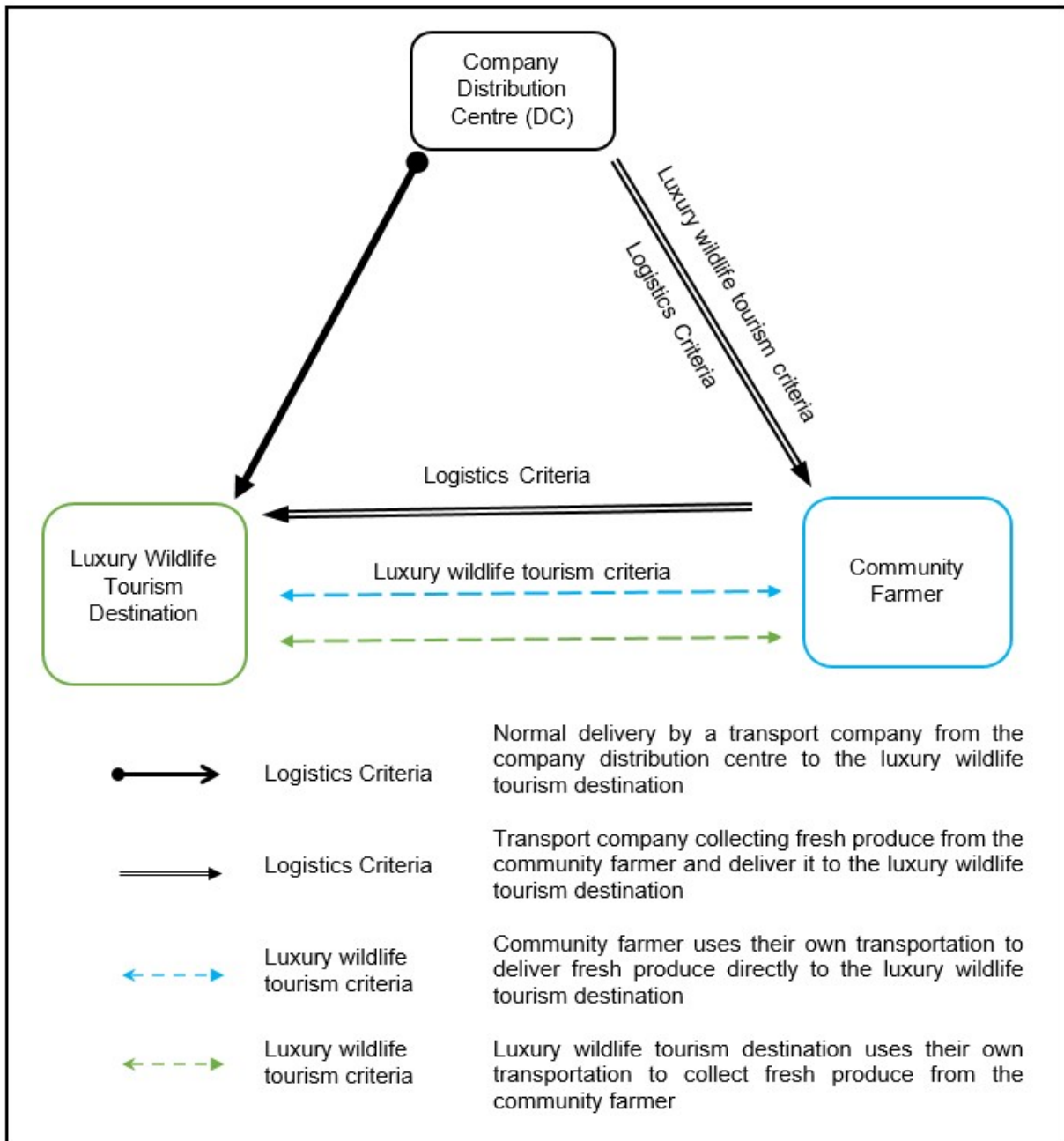


Figure 5.6 Conceptualising of the framework
 Source: Developed by the author, 2022

5.4 Community farmer inclusion criteria checklist

The aim of this section was to identify and determine the inclusion criteria for fresh produce supplied by community farmers. According to Spiegel, Bolus, Harris, Lucak, Chey, Sayuk, Esrailian, Lembo, Karsan, Tillisch & Talley (2010), it is hypothesised that

the fresh produce produced by community farmers will have different characteristics that could be used to determine the possibility of including the community in the last-mile SC processes of luxury wildlife tourism destinations. Patino and Ferreira (2018) together with Spiegel *et al.* (2010,) state that when high-quality research procedures are planned, the inclusion criteria for the study must be determined precisely to answer the research questions. Therefore, the author has used the questionnaires of Rounds 1 and 2 to determine the inclusion criteria that will be applicable to use in the check list for the fresh produce (Table 5.10). As mentioned in Section 5.3.1 above, 80% will be used as the minimum level of continuing with the inclusion of the local community farmer in the FMCG SCs and last-mile SC processes.

Table 5.10 Community farmer inclusion checklist

Fresh produce requirements from the Lodge

Fresh produce available at the community farmer

Type of Fresh produce	Yes (✓) No (X)	Type of Fresh produce	Yes (✓) No (X)	Type of Fresh produce	Yes (✓) No (X)	Type of Fresh produce	Yes (✓) No (X)	Type of Fresh produce	Yes (✓) No (X)	Type of Fresh produce	Yes (✓) No (X)
Apples - Green		Gem squash		Passion Fruit		Apples - Green		Gem squash		Passion Fruit	
Arrowroot (Magimbe)		Green Beans		Papaya		Arrowroot (Magimbe)		Green Beans		Papaya	
Asparagus		Granadilla		Paw-Paw		Asparagus		Granadilla		Paw-Paw	
Aubergine		Grapefruit		Pears - Pacham		Aubergine		Grapefruit		Pears - Pacham	
Avocadoes		Guava		Pears - Sugar Snap		Avocadoes		Guava		Pears - Sugar Snap	
Bananas		Kiwi fruit		Pepper, Green		Bananas		Kiwi fruit		Pepper, Green	
Beetroot		Lemon		Pepper, Red		Beetroot		Lemon		Pepper, Red	
Broccoli		Lettuce		Pineapples		Broccoli		Lettuce		Pineapples	
Butternut		Lime		Potatoes, Iris		Butternut		Lime		Potatoes, Iris	
Brown Lentils		Maize		Pumpkin		Brown Lentils		Maize		Pumpkin	
Cabbage		Mango		Raspberries		Cabbage		Mango		Raspberries	
Carrot		Mangoes		Strawberries		Carrot		Mangoes		Strawberries	
Casava		Melon, Sweet		Spinach		Casava		Melon, Sweet		Spinach	
Cauliflower		Naartjies		Spinach, Wild		Cauliflower		Naartjies		Spinach, Wild	
Chilies		Oranges		Sweet Potatoes		Chilies		Oranges		Sweet Potatoes	
Corn - Baby		Onion, Red		Tomatoes		Corn - Baby		Onion, Red		Tomatoes	
Cucumber		Onion, Spring		Tomatoes, Cherry		Cucumber		Onion, Spring		Tomatoes, Cherry	
Garlic - Fresh		Onion, White		Watermelon		Garlic - Fresh		Onion, White		Watermelon	
Ginger - Fresh		Paw-Paw		Zucchini		Ginger - Fresh		Paw-Paw		Zucchini	

Community farmers' criteria	Yes	No	Do Not Know
The lodge is responsible for collecting the fresh produce at the premises of the community farmer			
The community farmer will be able to deliver the fresh produce to the lodge			
The community farmer is 20km or less away from the lodge			
The community farmer has a bank account			
The community farmer has a cellular phone			

Source: Developed by the author, 2021

Once the community farmer check list of inclusion criteria has been completed and the result is 80% or higher, the next step is to use the community farmer inclusion coefficient (*Cfic*) to determine the probability of including or not including a local community farmer in the last-mile distribution activities.

5.5 Development of a possibility instrument for the inclusion of community farmers in the supply chain of a luxury wildlife tourism destination

As mentioned in Section 2.2, to include emerging economies (a local community farmer) in the last-mile activities of a luxury wildlife tourism destination, the organisation can assist the local community farmer to prosper and help grow the local economy. In Round 2 of the adapted Delphi technique, 67% of luxury wildlife tourism destinations acknowledged that it is a social responsibility of organisations to support local communities, and 76% were considering procuring fresh produce from local community farmers. However, before a luxury wildlife tourism destination decides to procure fresh produce from local community farmer/s, it would be wise to investigate whether the inclusion of local community farmer/s in the last-mile activities of a luxury wildlife tourism destination will be beneficial.

The author has developed a possibility instrument (Figure 5.7) that a luxury wildlife tourism destination can use to determine if it will be worthwhile to procure fresh produce from local community farmer/s. As mentioned in Section 4.5, COVID-19 travel restrictions made it difficult for the author to visit Klein's Camp, Mnemba Island and Phinda Forest Lodge to test the viability of the procedure.

5.5.1 Related statistical indicators

For the research, it is reasonable to indicate that the coefficient as a probability in Figure 5.7. Therefore, the author has named this coefficient the community farmer inclusion coefficient (*Cfic*). In the formula, *Cf* represents community farmer coefficient, *f* represents the current fresh produce supplier, (*x*) represents the mark allocation for fresh produce of the current supplier, *g* represents the community farmer,

(x) represents the mark allocation for fresh produce of the community farmer, and n represents the number of fresh produce criteria.

$$Cfic = \frac{\sum f(x)}{n} - \frac{\sum g(x)}{n}$$

Figure 5.7 Community farmer probability calculation
Source: Developed by the author, 2021

The author used data from the questionnaires to create a 31 point fresh produce characteristic scale. In the study, this 31 point fresh produce characteristic scale was used to determine the community farmer inclusion probability score. The marks of the three different *Cfic* tests indicated the following; (i) if the answer of *Cfic* falls between 11.94 and 18.22, the probability is high that the luxury wildlife tourism destination can include fresh produce from a local community in their last-mile distribution activities, (ii) if the answer of *Cfic* falls between 1.63 and 3.59 the probability of including fresh produce from a local community farmer in their the last-mile distribution activities of a luxury wildlife tourism destination is questionable, and (iii) if the answer of *Cfic* falls between -10.00 and -20.03 there would not be a probability that the luxury wildlife tourism destination can include fresh produce from a local community in their last-mile distribution activities.

As mentioned in Section 5.3 above, the author was unable to test the strategic framework at Klein's Camp, Mnemba Island and Phinda Forest Lodge. However, the author did manage to perform three strategic framework tests at three different luxury wildlife tourism destinations in South Africa. However, two purchasing requirement questionnaires were sent electronically to luxury wildlife tourism destinations and were returned after completion. One purchasing requirement questionnaire was completed by telephone with the luxury wildlife tourism destination. The results of the community farmer inclusion coefficient (*Cfic*) of the three luxury wildlife tourism destinations are as follows;

❖ Luxury wildlife tourism destination A

After the data were collected and calculated, the answer of *Cfic* was 12,82. The outcome indicates that a positive probability exists for the luxury wildlife tourism

destination to include fresh produce from a community farmer in the last-mile SC processes of the company. The luxury wildlife tourism destination can determine the necessary processes needed to create a method of including the community in their SC.

❖ Luxury wildlife tourism destination B

After the data were collected and calculated, the answer of C_{fic} was -10,25. The outcome indicates that there is a negative probability; it will not be worthwhile for the luxury wildlife tourism destination to include fresh produce from a community farmer in the last-mile SC processes of the company.

❖ Luxury wildlife tourism destination C

After the data were collected and calculated, the answer of C_{fic} was -13,12. The outcome indicates that there is a negative probability; it will not be worthwhile for the luxury wildlife tourism destination to include fresh produce from a community farmer in the last-mile SC processes of the company.

In closing, this section has laid the foundation for the basic context of the Delphi technique. It considered the rounds to obtain information and focused on the probability of including fresh produce from community farmers in the last-mile distribution activities of luxury wildlife tourism destinations. Drumm *et al.* (2021) state that the Delphi technique has a drawn-out history because it was designed for the air force by a group of researchers in America to predict occurrences in 1952. In 1962, the Delphi was introduced to the public for the first time and since then it has been used extensively for research in fields, such as business management, education, politics, science and technology. The role of SCM has developed into a core element of general management and has since spread into other business functions – including tourism and environmental science. For SCM in the tourism and environmental science environment to be efficient, it must involve a level of seniority that will enable SCM professionals to carry out the possible inclusion of fresh produce from community farmers in the last-mile distribution activities of luxury wildlife tourism destinations.

5.6 Conclusion

This chapter has provided, by using the adapted Delphi technique, a detailed overview of the probability of including fresh produce from community farmers in the last-mile distribution activities of luxury wildlife tourism destinations. It has shown that fresh produce characteristics from established retailers, as well as from community farmers, can lead to various possibilities for the procurement of fresh produce, if the strategic framework process relating to the probability measures of community farmers is carried out correctly. It has therefore, highlighted the importance of a clear and well-structured fresh produce procurement procedure.

The final chapter (Chapter 6) will provide an overview of the different chapters of this study. Conclusions and recommendations regarding the possibility of including fresh produce from community farmers in the last-mile distribution activities of luxury wildlife tourism destinations will be made.

Chapter 6: Synthesis, recommendations and conclusions

6.1 Introduction

Research studies have revealed several aspects that support the objectives of this study. This chapter aims to highlight findings and interpret the empirical analyses. In the literature review, relevant literature was explored and reviewed to understand the concepts and goals of incorporating fresh produce from local farmers in the SC process of luxury wildlife tourism destinations. The final chapter discusses the analysis done in Chapters 4 and 5. This discussion will synthesise the research strategy and indicate how the findings are related to the theories and literature discussed and how the results have addressed the research objectives.

This chapter will conclude the thesis with a discussion of the significance and the limitations of the study, the recommendations and future research. At the start of the study, it was unknown whether a probability existed of including FMCG, specifically fresh produce from local community farmers in the last-mile SC processes of luxury wildlife tourism destinations. These objectives were highlighted in the research problem (Section 1.3.1).

6.2 Synthesis

The theoretical framework that emanated from the literature review in chapter 2 provided two concepts (Figure 6.1) that have to be considered when including community farmers into the SC's of luxury wildlife tourism destinations.

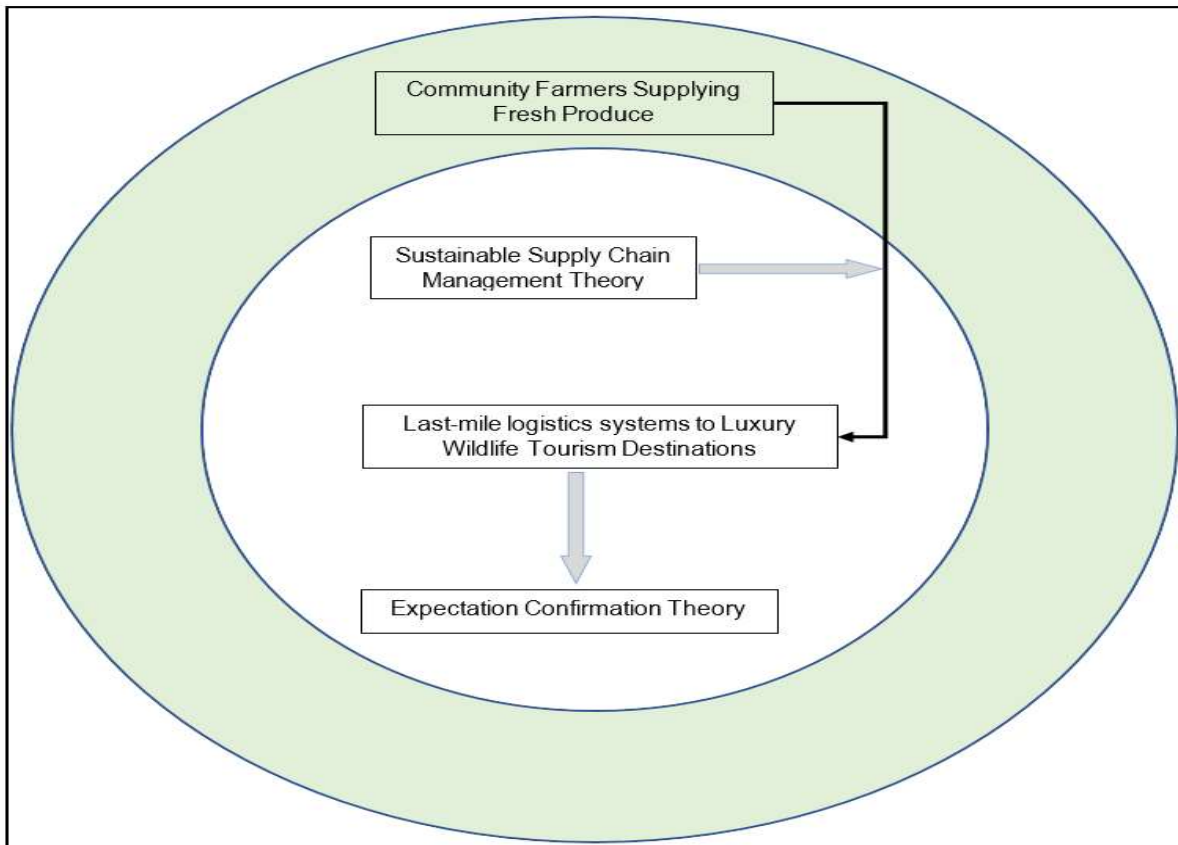


Figure 6.1 Conceptualising of the theoretical framework
Source: Developed by the author, 2023

The two key theories that has to be considered and kept in mind when discussing the results of the study are the SSCMT and the ECT. Subsequently, a summary of the research aims and answers was achieved, and what it meant for the research is discussed.

Objective 1: To investigate the end-to-end fresh produce SC for selected &Beyond lodges

This objective was accomplished by examining the supply chains of fresh produce for three &Beyond lodges; (i) Klein’s Camp in the Serengeti, (i) Mnemba Island in Zanzibar, and (iii) Forest Lodge in Phinda Private Game Reserve. As mentioned in Section 4.2, only these three &Beyond lodges were selected because each is located in a different and unique environment. All three &Beyond lodges followed the same procedures for ordering as per SSCMT. Orders are sent through to the &Beyond offices in Arusha, Johannesburg and Stonetown. The &Beyond offices send requests for fresh produce to approved &Beyond suppliers which are then delivered to the three

&Beyond lodges. Mnemba Island, Forest Lodge and Klein's Camp are all subjected to environmental and economic risks as per SSCMT (Sections 4.3 and 4.3.1). An increase in the earth's temperatures as a consequence of global warming, has given rise to climate changes, such as more droughts, severe storms, rising sea levels, warmer oceans and melting glaciers (Mitchell, 2022). The result is increasing global environmental and economic risks, which will directly affect the SCs of fresh produce across the globe.

Objective 2: To determine current procurement pathways and decision-making practices of the strategically selected fresh produce SCs

Objective 2 was reached by investigating the current processes followed by the three &Beyond lodges when products are ordered and delivered (Figures 4.11, 4.14 and 4.16). All three &Beyond lodges are subjected to the availability of fresh produce from suppliers as per the SSCMT. B. Brenner (2019, 6 July) mentioned (Section 4.2) that &Beyond uses a PPP. &Beyond operates in 29 camps and lodges in locations from the Serengeti, the Okavango Delta, to islands in the Indian Ocean, where a well-structured PPP assists in developing a working relationship with possible community farmers adjacent to specific &Beyond lodges. From the research, the information portrayed in these sections has shown Klein's Camp, Mnemba Island and Phinda Forest Lodge follow the same ordering procedures. All &Beyond destinations work with structured menus for the entire group (Appendix 4.1) which has highlighted demand requirements for various products, including fresh produce. The result is that the demand for 57 different types of fresh produce was established (Table 4.1). As mentioned in Objective 1 above, the ordering process for fresh produce is the same for the three &Beyond lodges. However, according to Jardine (2021), the fresh produce ordering process can be different in certain instances. The reason being a chef in a specific &Beyond lodge may require specific produce which is not ordered on a regular basis. The chefs in the three &Beyond lodges have the authority to include different kinds of fresh produce in the set menus when there is a request from a customer or when the dietary requirements of customers require a specific product. As mentioned in Section 4.4, all the &Beyond lodges send the orders through to a particular &Beyond office because the head chefs use similar ingredients for meals and high tea menus for the guests staying at the lodges. However, chefs at the lodges

are free to add any type of food ingredient to their menus to enhance the enjoyment of the meals prepared for the guests.

Objective 3: To assess latent, new and current possibilities in the potential contribution of neighbouring communities to & Beyond lodges in the fresh produce SC needs

Objective 3 was achieved through practical fieldwork conducted in and around Klein's Camp, Mnemba Island and Phinda Forest Lodge in 2020 (Appendix 4.8). Because of COVID-19, countries across the world implemented travel restrictions to minimise the spread of the coronavirus. The author was unable to visit Klein's Camp, Mnemba Island and Phinda Forest Lodge; however, two local &Beyond employees at Mnemba Island and Phinda Forest lodge were contracted to assist the author in collecting data (Section 4.5). Thirty community farmers around Mnemba Island and 30 community farmers around Phinda Forest Lodge were visited and interviewed by the two local &Beyond employees. In the Serengeti, the &Beyond lodge manager of Klein's camp provided data related to the fresh produce that the shamba was able to supply. The data provided a holistic view of the fresh produce used by the &Beyond lodges and the possibility of including fresh produce in the demand requirements of luxury wildlife tourism destinations.

According to the ECT (Section 2.8), an expectation can be created for the possible inclusion of fresh produce from local communities for Mnemba Island and Phinda Forest Lodge. Only a total of 56 similar types of fresh produce (Table 4.2), (local communities are producing 11 of the 56 for Klein's Camp, 17 of the 56 for Mnemba Island and 33 of the 56 for Phinda Forest Lodges in Kwazulu-Natal) have been identified which community farmers are producing. The result is that a possibility does exist in Klein's Camp, Mnemba Island and Phinda Forest Lodge to use fresh produce from local communities. However, a lot of work must be done by these lodges to establish a working relationship with the community farmers. For Klein's Camp, because of its location, there is no expectation currently for the possible inclusion of fresh produce from the local community outside of the Serengeti National Park. However, before the COVID-19 pandemic outbreak, the shamba did exist near Klein's

Camp and the fresh produce cultivated was included in meals provided to guests, as well as staff meals (Section 4.5). Unfortunately, because of COVID-19 and the global travel restrictions in 2020, there were no guests visiting Klein's Camp, resulting in the shamba closing down and now it no longer exists (the shamba could, however, be re-established with support of &Beyond management at Klein Camp).

Objective 4: To obtain expert opinions of the complexities and challenges of including fresh produce from local communities in last-mile SC processes of luxury wildlife tourism destinations

This objective was achieved by obtaining information using questionnaires in the adapted Delphi technique from two different panels of experts. The questionnaires were distributed in three rounds to panel members from luxury wildlife tourism destinations and transport companies. These questionnaires assisted the author to determine, using the adapted Delphi technique, the opinions of the panel members concerning the acquisition and distribution of fresh produce from local community farmers. The result was a total of 170 questionnaires were sent to 30 different transport/logistics companies (Tables 5.5, 5.6a and 5.6b). The opinions of the panel of experts were expressed according to the expectations and perceived performance as per ECT in Section 5.3.

Objective 5: To develop and test a possibility instrument for including fresh produce from local communities in the last-mile SC processes of luxury wildlife tourism destinations.

This objective was fulfilled by the information gathered and processed from the panel members of the luxury wildlife tourism destinations and transport companies, which was then used to develop a community farmer inclusion coefficient (*Cfic*) (Section 5.5.1). However, before the inclusion coefficient is used, a luxury wildlife tourism destination must complete a community farmer inclusion checklist (Table 5.7). This checklist will determine whether a possibility does or does not exist that fresh produce from a local community farmer should or should not be sourced. After a luxury wildlife tourism destination has completed the checklist and the outcome is 80% or higher, the luxury wildlife tourism destination can continue with the probability coefficient. If the

outcome is lower than 80%, it would not be worthwhile for the luxury wildlife tourism destination to continue with the probability coefficient.

The (*Cfic*) will be used to determine a positive or negative probability inclusion coefficient. A positive probability coefficient would indicate the inclusion of fresh produce from a local community farmer in the last-mile distribution activities of a luxury wildlife tourism destination can be achieved. A negative probability coefficient would indicate the inclusion of fresh produce from a local community farmer in the last-mile distribution activities of a luxury wildlife tourism destination can be challenging or it would not be worthwhile to engage in such a venture. The result is a 31-point fresh produce characteristic scale (Section 5.5.1) used to determine a probability inclusion coefficient of three luxury wildlife tourism destinations. The author did perform three strategic framework tests at three different luxury wildlife tourism destinations in South Africa. As mentioned in Section 4.5, COVID-19 travel restrictions made it difficult for the author to visit Klein's Camp, Mnemba Island and Phinda Forest Lodge to test the viability of the procedure. However, the author tested (Section 5.4.1) the community farmer probability calculation to determine if this can be used by luxury wildlife tourism destinations. Three different luxury wildlife tourism destinations were contacted, and the following tests were conducted: two purchasing requirement questionnaires were sent electronically to luxury wildlife tourism destinations and after completion, were returned to the author. One purchasing requirement questionnaire was completed by a telephone interview with a luxury wildlife tourism destination. The realisation of the objectives made it possible to answer the main research questions.

Research Question 1: What is the nature of the current SC of fresh produce in the selected &Beyond lodges?

The first question was answered and the nature of the present SCs of fresh produce to the selected &Beyond lodges was established. All three &Beyond lodges followed approximately the same process (Sections 4.3.1, 4.3.2 and 4.3.3). Sometimes there are exceptions when one or more of the three & Beyond lodges are deviating from the standard order processes because of legitimate reasons (Objective 1 above), as per the minimum requirements of the performance of the chain in the SSCMT. The answer to this question; the selected &Beyond lodges used approximately 56 different types of fresh produce (Table 4.1). An alignment of similarity in the use and characteristics

of fresh produce in all three &Beyond lodges appeared to be high, around 98.8%. The results of the questionnaires from Round 1, of the nature of the SC and fresh produce characteristics of the luxury wildlife tourism destinations were very similar. It is evident (Table 5.3a) that freshness (100%), quality (100%) and availability (90%) are the three most important factors when luxury wildlife tourism destinations are procuring fresh produce from a particular supplier. From Table 5.3b, the luxury wildlife tourism destinations strongly agreed (71%) that the quality of the fresh produce from their particular suppliers were better than general retailers. Lastly, the majority of respondents (72%) did not have a problem with the distance they had to travel to reach their particular fresh produce supplier.

Research Question 2: What are the current procurement pathways of the fresh produce SCs to the selected lodges?

The second question was answered, and the current procurement pathways for various products, including fresh produce, could be determined. The answer to this question is that the selected &Beyond lodges follow specific procedures when products are ordered. However, although the ordering processes are similar, the actual delivery of the products was different, because the locations of the three lodge were totally different; Figures 4.11, 4.14 and 4.16 and Sections 4.3.1, 4.3.2 and 4.3.3 support the barriers and supporting factors in the SSCMT. From the data gathered it was established that the environment and the surrounding areas adjoining the selected &Beyond lodges are different and unique, which made the delivery of products, including fresh produce, to the selected &Beyond lodges challenging. The results of the questionnaires in Round 2, found the current procurement pathway of fresh produce SCs of luxury wildlife tourism destinations, were also similar. All of the luxury wildlife tourism destinations strongly agreed (100%) that; (i) an invoice is needed when buying fresh produce, (ii) luxury wildlife tourism destinations will inform their guests that they are consuming fresh produce from local community farmers, and (iii) it is expected that the local community farmers supply the required amount of fresh produce. Nearly all of the luxury wildlife tourism destinations agreed (95%) that it is a social responsibility to support a local community. Furthermore, the luxury wildlife tourism destinations disagree (67%) that it would be more safe and secure (might get lost, roads can damage the vehicle) to collect fresh produce from community farmers.

This supported the factor that the luxury wildlife tourism destinations agree (53%) that local community farmers must deliver the fresh produce to the lodges. Lastly, 43% of the luxury wildlife tourism destinations disagree that the fresh produce from local community farmers will be free of defects. However, luxury wildlife tourism destinations strongly agree (96%) that the fresh produce from the local community farmers would have a unique taste/flavour. The lodges strongly agree (63%) that the fresh produce will have a long storage life. This coincides with the expectations of the ECT.

Research Question 3: What are the current decision-making practices performed by the key decision-makers?

The third question could be answered, and the strategic research objectives were completed in the sections mentioned above. The procurement personnel from &Beyond offices in Arusha, Stonetown and Johannesburg procure various products from approved suppliers for the selected &Beyond lodges. These products are delivered to the selected &Beyond lodges three to four days after the order was received by the &Beyond offices. According to C. Jardine (2021, 19 October), the lodge managers have the authority to procure products when there is an urgent need for a particular product or when the suppliers for Arusha, Stonetown and Johannesburg are unable to supply the required products. As mentioned in Objective 1, all three of the &Beyond lodges are subjected to environmental and social risks (S4.3.1, 4.3.2 and 4.3.3), under risk avoidance as per SSCMT. The results of the questionnaires in Round 2, the current decision-making practices performed by key decision-makers of luxury wildlife tourism destinations were also similar. If the need arises to purchase fresh produce from community farmers, luxury wildlife tourism destinations (76%) indicated that they would do so. Furthermore, if fresh produce were to be used, luxury wildlife tourism destinations (57%) indicated that the fresh produce will only be used for staff meals. Lastly, luxury wildlife tourism destinations strongly disagree (48%) that they would find it difficult to source fresh produce from local community farmers.

Research Question 4: What are the latent, new and current possibilities for neighbouring communities to contribute fresh produce in luxury wildlife tourism destinations last-mile SC processes?

It must be noted that a PPP was developed at &Beyond in 2018 (Section 4.3). Factors of importance were established and the probability of including fresh produce from neighbouring communities in luxury wildlife tourism destinations' last-mile SC processes were investigated. Mnemba Island and Phinda Forest Lodge are both subjected to expectation and perceived performance factors (Section 4.5, as per ECT). The results of the questionnaires in Round 2, the latent, new and current possibilities of neighbouring communities to contribute fresh produce in the last-mile SC processes of luxury wildlife tourism destinations, were also similar. The majority (76%) of luxury wildlife tourism destinations indicated that the lodge would consider buying fresh produce, and the luxury wildlife tourism destinations agreed (90%) that the fresh produce from community farmers will have high nutritional value. Interesting enough, the luxury wildlife tourism destinations disagreed (66%) that to communicate with local community farmers will be challenging. Also, the luxury wildlife tourism destinations stated (57%) that the fresh produce will be served to guests. However, in contradiction with the willingness of luxury wildlife tourism destinations to purchase fresh produce from community farmers, the lodges strongly disagreed (48%) that it would be easy to source fresh produce from community farmers.

Research Question 5: How can the identified challenges and opportunities of the neighbouring communities be overcome to facilitate the contribution of fresh produce in the last-mile SC processes of luxury wildlife tourism destinations?

The fifth question was answered with the information gathered from a panel of experts from transport companies by using the adapted Delphi technique. Information of the challenges and opportunities associated with the procurement, collection, and distribution of fresh produce from local community farmers was gathered during three rounds of the adapted Delphi technique. The results of the questionnaires in Round 1 and Round 2, identified how the challenges and opportunities of the neighbouring communities can be overcome to facilitate the contribution of fresh produce in the last-mile SC processes of luxury wildlife tourism destinations, again were similar. The information from the panel of experts was subjected to expectations and perceived performance as per ECT in Section 5.3.

In Round 1 the extremely important factors were identified by all (100%) of the transport/logistics companies; (i) people from the company are available to assist with the loading of the vehicle, (ii) relevant proof of delivery (POD) documentation is supplied with the load, (iii) a loading time is given prior to loading, and (iv) the size of the truck the company can accommodate is given prior to loading. Furthermore, transport/logistics companies indicated that it is important (90%) that the weight of the load is given and that the products are palletised. Cover/protection from the elements, such as rain, is important (73%), as is the type of ground cover of the loading bay (58%) for transport/logistics companies.

During Round 2 of the adapted Delphi technique, all the transport/logistics companies strongly agreed (100%) on the following factors; (i) the inclusion of fresh together with existing produce will create problems, (ii) information regarding the load must be given prior to loading, (iii) the local community farmer must be able to supply relevant documentation when loading, (iv) the roads in a local community might be difficult to access with a truck and trailer, and (v) the safety of the driver and the truck is very important when loading in a local community. The transport/logistics companies also strongly agreed (83%) that it might be problematic to locate a local community farmer without a physical address. Furthermore, transport/logistics companies strongly agreed (77%) that it might be challenging to enter and exit the property of a local community farmer with a truck and trailer. Lastly, the respondents strongly agreed (73%) that the inclusion of fresh produce from local community farmers onto existing loads for luxury wildlife tourism destinations is a social responsibility for an organisation.

Once all the information was collected and processed from all the rounds of the adapted Delphi technique, the author used the information to address the final research question:

What are the design elements required to develop the strategic framework for maximising the community contribution in the last-mile SC processes of luxury wildlife tourism destinations?

Research Question 6: What are the criteria that are required for inclusion in a framework for consideration of the inclusion of local community farmers in the last-mile SC processes of luxury wildlife tourism destinations?

The final question could be answered with the data obtained from the physical fieldwork and from the three rounds of an adapted Delphi research technique. The data obtained from the physical fieldwork were used to develop a 31 point fresh produce characteristic formula. Thereafter, the data were used to develop a framework, as well as a possibility instrument to determine the probability of including fresh produce from local community farmers in their last-mile SC processes. Finally, a coefficient formula was used to determine the community farmer inclusion probability coefficient score (Section 5.6.1). The reason for the probability factor was to present a luxury wildlife tourism destination with adequate information to make an informed decision whether it will be worthwhile to investigate the inclusion of the fresh produce from a community farmer in their last-mile SC processes. Klein's Camp, Mnemba Island and Phinda Forest Lodge were all subjected to expectation and perceived performance, disconfirmation and satisfaction factors (Section 5.4.1, as per ECT). It must be noted, due to the COVID-19 pandemic, the testing of an intensive probability factor was not possible to conduct at the three &Beyond lodges. However, the author did perform a probability coefficient strategic framework test at three luxury wildlife tourism destinations. As mentioned in Section 5.6.1, the identity of the employees and the names of the luxury wildlife tourism destinations were anonymous and confidential. The results of these tests were described in Section 5.6.1. The author acknowledges that the results of the three tests are insufficient to draw a realistic conclusion with regards to the outcome of the probability coefficient strategic framework, thus, the probability factor still needs to be determined through intensive testing in the future.

Now that the objective and research questions and results were discussed it is important to bring the SSCMT and the ECT back into the consideration of including local community farmers into the SC's of luxury wildlife tourism destinations. In the SSCMT one need to remember to include all the aspects of sustainability into the SC namely, ecological, economical, and environmental factors within the context of local communities being incorporated into the SC's of luxury wildlife tourism destinations.

In the ECT it is critical to consider the expectations performance and satisfaction of the guests at luxury wildlife tourism destinations.

6.3 Relevance of this study

In today's fresh produce SCE, the overlapping impacts of globalisation, plus disruptions, require a paradigm shift and rethinking of the sustainability of SC (Guan *et al.*, 2020; Rizou, Galanakis, Aldawoud & Galanakis, 2020). This initiative involved a complete fresh produce profile analysis of fresh produce suppliers in local communities and the possibility of linking it with the last-mile SC process of luxury wildlife tourism destinations. Such analysis should cover all fresh produce areas of the respective SC.

In the luxury wildlife tourism environment, the fresh produce SCs can contribute directly to the success of guest experiences during breakfast, lunch and dinner, when quality locally sourced fresh produce is served. Therefore, quality fresh produce, locally sourced, can fulfil a strategic role in the luxury wildlife destinations environment. The locally sourced fresh produce contributes to the '*wow factor*' experience for guests during meals. Fresh produce SCs are essential to the operations of a luxury wildlife destination and contribute a small portion to their financial success.

Globally, SCM is becoming a growing problem and service interruptions can impact the ability of luxury wildlife destinations to operate as planned and as expected by their customers (Bi *et al.*, 2017; Kolenko, 2021; Zheng *et al.*, 2017). Consequently, when a local community develops a working relationship with a luxury tourism destination, the relationship can be beneficial due to the provision of fresh produce and community members being employed at the luxury tourism-lodge destination. Furthermore, tourists can taste and consume a variety of different locally produced fresh produce and have an opportunity to visit a local community farmer to see the cultivation of the local fresh produce (Thomas-Francois *et al.*, 2017).

The continued pressure and competition between transport/supply chain companies locally and globally have influenced road transport SCs directly during the past few decades. Tourism fresh produce SCs have not undergone significant changes except

for those that have occurred related to the systems or processes supporting road transport.

However, fresh produce SCs will continue to play an important role in the transport of fresh produce and SCM of luxury wildlife destinations (Shan & Wang, 2018). Globalisation has opened up the world, and transport and SC risks previously associated with only one mode of transport in one or two countries, now permeate more modes of transport worldwide. As the demand for perishables continues to grow in sub-Saharan Africa and globally, the risks are increasing, and this is reflected in the demand for more modes of transport. Before COVID-19, the tourism industry was a significant contributor to the GDP in sub-Saharan African countries. Hence, the increase in demand for good quality fresh produce from international visitors to luxury wildlife tourism destinations (Kumar, Sharma & Malviya, 2020). Luxury wildlife tourism destinations are also under pressure to continue supplying products needed for sustainability and the creation of wealth. Therefore, the concept of including fresh produce from community farmers in the last-mile SC processes of luxury wildlife tourism destinations must be clearly understood, so that the implementation of measures and procedures will assist in determining the probability coefficient.

The conclusion is that fresh produce SCs of luxury wildlife tourism destinations in sub-Saharan African countries are exposed to various SC risks. The demand for products, including fresh produce, continues to increase globally and in Africa, while the risk of supply disruptions due to the high demand is also growing. Therefore, the need to satisfy increased demand through alternative SCs can benefit luxury wildlife tourism destinations in sub-Saharan African countries.

6.4 Placement of results back into the literature

When tourists visit luxury wildlife destinations, they pay a considerable amount of money to be surrounded by wildlife and experience unparalleled customer service and exceptional culinary enjoyment (Rylance *et al.*, 2017). Therefore, if a luxury wildlife destination wants to offer its guests a unique experience, many of its products must be sourced from local and international suppliers. As tourists visit luxury destinations,

transportation, accommodation, communications, and consumer goods demand increases. These products and services have been introduced into a tourism SC to meet the needs of tourists visiting local and international luxury wildlife destinations. Tourist connections in a country's tourism sector are advantageous over other economic sectors. Benefit refers to the spending effect that tourists have on the local economy. This tourist expenditure can be viewed as an additional source of income for the local community (Rylance & Spenceley, 2017). As evidenced by the results gathered in this study, the SCs of luxury wildlife destinations like &Beyond have unique and complex SCs. The study aims to develop a potential inclusion instrument that will allow &Beyond to determine the feasibility of including fresh produce from local community farmers in the last mile SC process. According to the Ministry of Tourism (2018), a local community is a social group of any size whose members share a common cultural and heritage and live in a specific place. A typical local community consists of entrepreneurs, civil servants, and local residents and their interactions. This includes sharing resources, information and support and building commercial relationships between local businesses, consumers and possibly luxury wildlife destinations.

Luxury wildlife tourism destinations, such as &Beyond, must search for community farmers in the local community, According to Dodds *et al.* (2016) there will always be dedicated community members committed to growth and the betterment of society within the community. With the assistance of the luxury wildlife tourism destinations, these community members must educate and train fellow members in the local community to create a sustainable working relationship between the local community and a luxury wildlife tourism destination. According to Thomas-Francois *et al.* (2017), agro-trade is a connection between a luxury wildlife tourism destination and a local community that can facilitate the supply of local products to the destination. This connection creates a forward and backward linkage. A forward connection is local and community-based, where the local community will supply the tourism destination with products that create job opportunities and alleviate economic pressure. A backward connection is tourism destination-based, where the luxury wildlife tourism destination benefits from products produced or manufactured in the local community (Robert, Frash, DiPietro & Smith, 2015). The luxury wildlife tourism destination will also be able

to provide job opportunities for people living in the local community. Therefore, sourcing locally produced fresh produce can be viewed as a critical economic contributor to the micro-economic environment (Rylance & Spenceley, 2017; Sanches-Pereira *et al.*, 2017). A formal B2B process between the local community and the luxury wildlife tourism destination can benefit both parties. The local community can benefit economically from this relationship, and guests from the luxury wildlife tourism destination will enjoy nutritious, better-tasting, and naturally produced products from the local community (King & Dinkoksung 2014; Budhiasa & Riana 2019).

In the literature review, various authors have emphasised the importance of including local communities into their business operations. Such an inclusion can be beneficial for the local community in terms of job creation, financially contributing to the local economy, a possible decrease in communal poverty, and a reduction CO₂ emissions to the atmosphere, because the SCs of luxury wildlife tourism destinations can contribute 75% of CO₂ emissions to the atmosphere.

However the study found that the inclusion of local communities is far more complex and has to include aspects such as the quantity and quality of the fresh produce, the supply and demand requirements, and the related logistical aspects must be taken into consideration as well. This study explored several of the above mentioned aspects in greater detail and serves as the basis for further study on the inclusion of local community farmers into last-mile SC processes of luxury wildlife tourism destinations.

6.5 Contribution to the body of knowledge

6.5.1 Supply and demand requirements for fresh produce

A formal business-to-business (B2B) process between local farmers and luxury wildlife tourism destinations provides an opportunity to promote the sustainable development of local communities. This is because food needs account for approximately 30% of spending at luxury wildlife tourism destinations (Saarinen & Rogerson, 2015). Given the consistently high demand for fresh produce in luxury wildlife tourism destinations, fresh produce suppliers within local communities can meet a portion of the demand for fresh produce (Saarinen & Rogerson, 2015). Fresh produce from local communities should be seen as something other than just a product for luxury wildlife tourism destinations. This should be a formal service delivery process that needs to be managed from a management perspective to create value rather than just a normal functionalist process (Thomas-Francois et al., 2017; Spenceley et al., 2019). Successful collaborations and entrepreneurial networks must be based on passion, trust and loyalty. When these elements are focused, this partnership has the potential to be an economical and viable entrepreneurial network between local farmers and &Beyond-Lodges (Boesen et al., 2017). In this study, a mixed-methods approach was used to explore the fresh produce demand for three selected & Beyond lodges (Klein's Camp, Mnemba Island, and Phinda Forest Lodge), as diverse data were collected within a single case study (Johnson & Christensen, 2012).

A total of 61 local community farmers (30 around Mnemba Island, 30 close to Phinda Forest Lodge and one shamba near Klein's Camp) were visited to determine the different types of fresh produce these community farmers were cultivating. This was compared with an estimated demand for 56 different types of fresh produce for the selected &Beyond lodges. Phinda Forest Lodge was the only lodge with 100% usage for all the different kinds of fresh produce, while Klein's Camp and Mnemba Island had 98% usage for 55 of the 56 different types of fresh produce. The data collected from 61 local community farmers provided an overview of the fresh produce these local community farmers could supply. The shamba near Klein's Camp supplied 11 (19%) of the 56 different types of fresh produce. The community farmers around Mnemba Island could provide 17 (30%) of the 56 different types of fresh produce. The community farmers around Phinda Forest Lodge could supply 33 (58%) of the 56 different types of fresh. The data gathered indicated that the community farmers can only satisfy a limited demand for fresh produce for the selected &Beyond lodges.

6.5.2 Theories linked to the research

Theorising means generating a body of knowledge and moving beyond immediate interest to something more enduring (Saunders *et al.*, 2019). The theory is a step towards broad assumptions and detailed methodologies that guide efforts to find knowledge and facts rather than achieving goals (Creswell, 2014). A theoretical framework is a set of related concepts from similar studies and methods from relevant literature (Saunders, Lewis & Thornhill, 2019). A theoretical framework anchors the research's chosen theoretical perspective (Fouché, Strydom & Roestenburg, 2021). The theories selected to form the theoretical framework were the expectation confirmation theory (ECT) and the sustainable supply chain management (SSCM) theory.

6.5.2.1 Expectation confirmation theory

The four main components of the ECT model are (1) expectations, (2) performance, (3) disapproval, and (4) satisfaction. Expectations reflect expected behaviour and are predicted in the future by specifying expected product attributes. ECT is widely used to study customer satisfaction, post-purchase behaviour, and service marketing.

6.5.2.2 Sustainable supply chain management theory

The SSCM arose from identifying the strategic importance of purchasing and supply activities in achieving long-term corporate performance and addressing sustainability issues in business capabilities (Touboullic & Walker, 2015). SSCM comprehends sustainability as one of the company's strategically essential functions. Critical components are (i) barriers and enablers, (ii) supplier evaluation, (iii) risk avoidance, and (iv) chain performance. For change to occur, an organisation must consciously

adjust its behaviour in response to changes in the SCs of the organisation and must consciously link activities to outcomes (Dubey et al., 2017).

Both ECT and SSCMT are related to the SC research field. However, ECT and SSCMT have received little attention in the tourism industry in the existing literature (Mandal & Saravanan, 2019). Through the adapted Delphi technique, the author has used the components of the ECT and SSCMT theories to develop questionnaires. These questionnaires were used to gather data that could determine whether fresh produce from local community farmers is possible in the last-mile SC processes of luxury wildlife tourism destinations.

6.5.3 Adapted Delphi technique

The adapted Delphi Technique were used to collect data through non-physical interactions with members selected to be part of the panel. In this study, an adapted and modified Delphi's approach was used to systematically collect expert opinions from luxury wildlife tourism destinations and transport/logistics companies and relevant information, which use to develop three rounds of questionnaires. The adapted Delphi technique is designed to provide multiple interactions with panel members, voice their opinions, and provide knowledge on specific topics and issues (Limon, 2021). In round 1, questionnaires were sent to 21 experts from luxury wildlife tourism destinations and 30 experts from transport/logistics companies. The questionnaires were 21 from luxury wildlife tourism destinations and 30 from transport/logistics companies. The expert coefficient result was 100% for luxury wildlife tourism destinations and transport/logistics companies. In round 2, questionnaires were sent to 21 experts from luxury wildlife tourism destinations and 30 experts from transport/logistics companies. The questionnaires were 21 from luxury wildlife tourism destinations and 30 from transport/logistics companies. The expert coefficient result was 100% for luxury wildlife tourism destinations and transport/logistics companies. In the final round, questionnaires were sent to 21 experts from luxury wildlife tourism destinations and 30 experts from

transport/logistics companies. The questionnaires were 15 from luxury wildlife tourism destinations and 20 from transport/logistics companies. The expert coefficient result for luxury wildlife tourism destinations was 75%, and for the transport/logistics companies was 66.67%.

After all the information from the experts from luxury wildlife tourism destinations was sorted and captured, the results indicated that luxury wildlife tourism destinations would consider including fresh produce from local community farmers in the last-mile SC processes of the luxury wildlife tourism destinations.

After all the information from the experts from transport/logistics companies was sorted and captured, the results indicated that transport/logistics companies would consider including fresh produce from local community farmers in existing deliveries for luxury wildlife tourism destinations.

6.5.4 Statistical indicator

The author used data from the questionnaires sent to luxury wildlife tourism destinations and transport/logistics companies to create a 31-point fresh produce characteristic scale *Cfic*. The study used this 31-point fresh produce characteristic scale to determine whether a probability exists to include a community farmer in the last-mile SC processes of three luxury wildlife tourism destinations.

First luxury wildlife tourism destination A – the statistical indicator showed a positive probability for the inclusion of a community farmer into the last-mile SC processes of luxury wildlife tourism destination.

Second luxury wildlife tourism destination B – the statistical indicator showed a negative probability for the inclusion of a community farmer into the last-mile SC processes of luxury wildlife tourism destination.

Third luxury wildlife tourism destination C – the statistical indicator also showed a negative probability for the inclusion of a community farmer into the last-mile SC processes of luxury wildlife tourism destination.

6.5.5 Theoretical framework

In conclusion, the inclusion of local community farmers into the last-mile SC processes of luxury wildlife tourism destinations could benefit a local community and a luxury wildlife tourism destination. However, for the theoretical framework to be successful, in other words, SSCMT + ECT = success, various factors must be identified and addressed to increase the probability of successful inclusion of local community farmers into the last-mile SC processes of luxury wildlife tourism destination.

6.6 Limitations of the study

This section will discuss the aspects that the results could not reveal, as well as any limitations. The focus of this study was to determine if the fresh produce from local communities could be included in the last-mile SC processes of luxury wildlife tourism destinations. It was beyond the scope of this study to investigate other areas, such as service delivery, for example, of construction, electrical work or plumbing, that can be included in the operations processes of luxury wildlife tourism destinations.

All the literature used in this thesis consisted of international literature and publications, seeing that African publications and literature on including local community farmers in the last-mile distribution activities of luxury wildlife tourism destinations is very limited. Another limitation that the author realised was that tourism SCs receive little exposure from, *first*, the South African Government; *second*, the SC business environment; and *last*, from South African academic institutions. Finally, because of COVID-19, the travel restrictions South African authorities imposed in 2019 and 2020 made it difficult to personally visit the three selected &Beyond lodges to conduct the research, although a series of pilot visits were conducted by the author before the COVID-19 pandemic.

6.7 Recommendations

This research aimed to determine if it would be possible to include fresh produce from community farmers in luxury wildlife tourism destinations last-mile SC processes. The findings and results of this study propose future research topics, and therefore, a research agenda for the future may be set. The analysis done in this research suggests that further research should focus on themes, such as egg supply, indigenous fresh flower supply and service delivery. The research conducted for this thesis identified specific actions and recommendations which are important within the scope and nature of this study and its findings. As indicated in Section 6.4, SCs have been researched thoroughly, but unfortunately not tourism fresh produce SCs. Nevertheless, the following recommendations within the scope and nature of this research study are made:

- ❖ It is recommended that the luxury wildlife tourism destinations identify potential fresh produce farmers in the local community. Once they are identified, the luxury wildlife tourism destination can inform the fresh produce farmer about the type, quantities and the quality of fresh produce they require.
- ❖ After the fresh produce farmers are identified and if the community farmer is unable to deliver the fresh produce to the luxury wildlife tourism destination, the parties can negotiate a reduced selling price for the fresh produce if collected at the premises of the local community farmer.
- ❖ Alternatively it is recommended that luxury wildlife tourism destinations work more closely with transport companies to determine the loading and transport criteria when considering including fresh produce from local community farmers with existing loads.
- ❖ Another recommendation is to establish a communal market place. The purpose of the market would be to create a platform where urban farmers can sell their fresh produce to community consumers and to luxury wildlife tourism destinations on a Saturday, for example.
- ❖ The establishment of a communal market place can necessitate the need for secure storage facility such as a type of a warehouse. This will assist in

protecting the fresh produce from community from the elements so that the fresh produce will be useable for longer.

- ❖ Another benefit linked to the fashioning of a warehouse facility is the possibility to process and preserve fresh produce not sold. With the assistance of an existing business involved with processing and preservation of fresh produce, a community can establish a working relationship with such a business which can contribute further the economic growth, job creation and new business opportunities within a specific area or community.
- ❖ Food SCs of luxury wildlife tourism destinations are dominated by large retail organisations and distributions companies. In the SC of fresh produce, the final food miles of distribution are regarded as one of the most expensive and CO₂ emissions is also very high. When a warehouse facility exists, community members would be able to coordinate a collective distribution of fresh produce to more than one destination. The result of this would be that the price of fresh produce produced by community farmers can be lower because of the food miles between the warehouse facility and the luxury wildlife tourism destinations is shorter.
- ❖ Last, it is recommended that luxury wildlife tourism destinations in a certain area, work together to create a social media platform that can be used to list the community farmers in a certain area. The platform can be accessed by other lodges, the general public and businesses with information about the fresh produce the community farmers in a certain area are cultivating (Van den Berg & Mearns, 2021). Once this information is available, the possibility exists that it can contribute to community development and job creation in a certain area.

The above mentioned recommendations serve as further guidelines for luxury wildlife tourism destinations and their logistics partners as the basis of the improvement and the potential inclusion of fresh produce from local community farmers into the last-mile

SC processes. However, the above mentioned recommendations also serve as potential areas for further research.

6.8 Conclusion

The purpose of this study was to identify the possibilities of including fresh produce from community farmers in the last-mile SC processes of luxury wildlife tourism destinations. It has emphasised the need for a holistic approach to the essential requirements to establish a strategic framework to determine the probabilities for the inclusion of community farmers in the last-mile SC processes of luxury wildlife tourism destinations.

Since 31 December 2019, many organisations around the world that are directly or indirectly related to SCs are working together to identify and rationalise the full range of SC impediments faced by these organisations. To successfully deal with these obstacles, the luxury wildlife tourism destinations can do one of the following; *first*, do a complete analysis of their current product SCs, including fresh produce. *Second*, obtain information regarding alternative suppliers, focussing on local community farmers as a potential business opportunity. *Last*, luxury wildlife tourism destinations must implement a strategic framework for the possible inclusion of fresh produce from community farmers as part of a long-term strategy of creating an alternative sustainable fresh produce SC objective.

Finally, the author acknowledges the need for a more comprehensive investigation of the many disruptions associated with fresh produce SCs in sub-Saharan countries. The author is aware that unaddressed perishable SCs may exist. Nonetheless, the author believes this study will help raise awareness of fresh food issues in relevant SCs for the benefit of luxury wildlife tourism destinations across sub-Saharan Africa.

REFERENCES

- Abbasi, M. (2017). Towards socially sustainable supply chains—themes and challenges. *European Business Review*. 29(3): 261-303.
- Acquaye, A., Ibn-Mohammed, T., Genovese, A., Afrifa, G.A., Yamoah, F.A. and Oppon, E. (2018). A quantitative model for environmentally sustainable supply chain performance measurement. *European Journal of Operational Research*. 269(1): 188-205.
- Adams, K.A. and Lawrence, E.K. (2018). *Research methods, statistics and applications*. SAGE Publications, Thousand Oaks, California.
- Afrane, S.K. and Adjei-Poku, B. (2016). Institutionalising corporate social responsibility for local community development: processes and outcomes. *International Journal of Business and Social Science*. 4(13): 255-266.
- Aized, T. and Srari, S.J. (2014). Hierarchical modelling of Last Mile logistic distribution system. *International Journal of Advanced Manufacturing Technology*. 70(5): 1053-1061.
- Alexandru, C. (2014). An exploratory approach to integration of business practices in supply chain management. *Annals of the University of Oradea, economic science series*. 23(1):1125-1134.
- Allen, C., Metternicht, G. and Wiedmann, T. (2018). Initial progress in implementing the Sustainable Development Goals (SDGs): A review of evidence from countries. *Sustainability science*. 13(5): 1453-1467.
- Allen, M.W., Walker, K.L. and Brady, R. (2012). Sustainability discourse within a supply chain relationship: Mapping convergence and divergence. *Journal of business communication*. 49(3): 210-236.

- Aljazeera News (2022). Russia-Ukraine war: List of key events, day. Online. Available: [Russia-Ukraine war: List of key events, day 227 | Russia-Ukraine war News | Al Jazeera](#) [Accessed October 1, 2022].
- Almeida, I. and Silveira, L. (2021). Collaborative Tourism Planning in Small Municipalities. The Creation of a Local Development Strategy for Pombal (Portugal) Through the Application of the Delphi Technique. *Revista portuguesa de estudos regionais*, (57): 58-69.
- Al-Odeh, M. and Smallwood, J. (2012). Sustainable supply chain management: Literature review, trends, and framework. *International Journal of Computational Engineering & Management*. 15(1): 85-90.
- Andbeyond. (2019a). Phinda Private Game Reserve. Online Available: <https://www.andbeyond.com/destinations/africa/southafrica/kwazulu-natal/phinda-private-game-reserve/> [Accessed August 5, 2019].
- Andbeyond. (2019b). Phinda Private Game Reserve, Forest Lodge. Online Available: <https://www.andbeyond.com/destinations/africa/southafrica/kwazulu-natal/phinda-private-game-reserve/> [Accessed August 5, 2019].
- Anderson, T.D., Mossberg, L. and Therkelsen, A. (2017). Food and tourism synergies: perspectives on consumption, production and destination development. *Scandinavian Journal of Hospitality and Tourism*. 17(1): 1-8.
- Angilella, S. and Mazzu, S. (2015). The financing of innovative SMEs: A multicriteria credit rating model. *European Journal of Operational Research*. 244(2): 540-554.
- Arampantzi, C. and Minis, I. (2017). A new model for designing sustainable supply chain networks and its application to a global manufacturer. *Journal of Cleaner Production*. 156(6): 276-292.

- Asenahabi, B.M. (2019). Basics of research design: A guide to selecting appropriate research design. *International Journal of Contemporary Applied Researches*. 6(5): 76-89.
- Atapattu, M., Sedera, D., Ravichandran, T. and Grover, V. (2016). Customers' view of agility: The expectation-confirmation theory perspective. *Asia pacific journal of information systems*. 26(1): 80-108.
- Aubry, C. and Kebir, L. (2013). Shortening food supply chains: A means for maintaining agriculture close to urban areas? The case of the French metropolitan area of Paris. *Food policy*. 41(0): 85-93.
- Badghan, F., Namdar, R. and Valizadeh, N. (2020). Challenges and opportunities of transgenic agricultural products in Iran: convergence of perspectives using Delphi technique. *Agriculture & Food Security*. 9(1): 1-13.
- Bala, M. and Kumar, D. (2011). Supply chain performance attributes for the fast moving consumer goods industry. *Journal of Transport and Supply Chain Management*. 5(1): 143-157.
- Bali Swain, R. and Yang-Wallentin, F. (2020). Achieving sustainable development goals: predicaments and strategies. *International Journal of Sustainable Development & World Ecology*. 27(2): 96-106.
- Bányai, T. (2018). Real-time decision making in first mile and last mile logistics: How smart scheduling affects energy efficiency of hyperconnected supply chain solutions. *Energies*. 11(7): 1833-1858.
- Batini, D., Peretti, U., Persona, A. and Sgarbossa, F. (2014). Application of humanitarian last mile distribution model. *Journal of Humanitarian and Supply Chain Management*. 4(1): 131-148.

- Barbosa-Póvoa, A.P., Da Silva, C. and Carvalho, A. (2018). Opportunities and challenges in sustainable supply chain: An operations research perspective. *European Journal of Operational Research*. 268(2): 399-431.
- Baregheh, A., Rowley, J. and Sambrook, S, (2009). Towards a multidisciplinary definition of innovation. *Management decision*. (47): 1323-1339.
- Barrett, T.E., Feng, Y. and Wang, H.H. (2020). Food safety in the classroom: Using the Delphi technique to evaluate researcher-developed food safety curriculum aligned to state academic standards. *Journal of Food Science Education*. 9(3): 152-172.
- Bell, J.E., Bradley, R.V., Fugate, B.S. and Hazen, B.T. (2014). Logistics information system evaluation: Assessing external technology integration and supporting organizational learning. *Journal of Business Logistics*. 35(4): 338-358.
- Bhatt, T., Buckley, G., McEntire, J.C., Lothian, P., Sterling, B. and Hickey, C. (2013). Making traceability work across the entire food supply chain. *Journal of Food Science*. 7(8): 21-27.
- Biao, L., Liang, W. and Liang, L. (2014). A multi-agent-based research on tourism supply chain risk management. *Journal of Advanced Manufacturing Systems*. 13(3): 133-153.
- Bi, R., Davison, R.M, and Smyrnios, K.X. (2017). E-Supply Chain Coordination and SME Performance: An Empirical Investigation. *Electronic Journal of Information Systems Evaluation*. 20(2): 1-16.
- Bienhaus, F. and Haddud, A. (2018). Procurement 4.0: Factors influencing the digitisation of procurement and supply chains. *Business Process Management Journal*. 24(4): 965-984.

- Bleijlevens, M.H., Wagner, L.M., Capezuti, E. and Hamers, J.P. International Physical Restraint Workgroup. (2016). Physical restraints: Consensus of a research definition using a modified Delphi technique. *Journal of the American Geriatrics Society*. 64(11): 2307-2310.
- Bodosca, S. and Streimikiene, D. (2015). Cradle to cradle: A step further for sustainable development in tourism. *Transformations in business and economics*. 14(2b): 548-556.
- Boesen, M., Sundbo, D. and Sundbo, J. (2017). Local food and tourism: an entrepreneurial network approach. *Scandinavian Journal of Hospitality and Tourism*. 17(1): 76-91.
- Boluk, K.A., Cavaliere, C.T. and Higgins-Desbiolles, F. (2019). A critical framework for interrogating the United Nations Sustainable Development Goals 2030 Agenda in tourism. *Journal of Sustainable Tourism*. 27(7): 847-864.
- Book 'n Stay. (2019). Online. Zanzibar Tides
Available: <https://www.kwathabeng.co.za/tides/Zanzibar-tides-Apr-2020.html#-gsc.tab=0> [Accessed August 5, 2019]
- Boparai, J.K., Singh, S. and Kathuria, P. (2018). How to design and validate a questionnaire: a guide. *Current clinical pharmacology*. 13(4): 210-215.
- Bowersox, D.J., Closs, D.J. and Cooper, M.B. (2009). *Supply Chain Logistics Management, (3rd Edition)*. McGraw-Hill Companies, New York.
- Budhiasa, I.G.S. and Riana, I.G. (2019). Managing local community participation to foster sustainable tourism development, the case of Bali destination, Indonesia. *Journal of Engineering and Applied Sciences*. 15(1): 291-298.
- Buldeo Rai, H., Verlinde, S. and Macharis, C. (2019). The “next day, free delivery” myth unravelled: Possibilities for sustainable last mile transport in an

omnichannel environment. *International Journal of Retail & Distribution Management*. 47(1): 39-54.

Buyukkeklik, A., Ozoglu, B. and Kemer, E. (2014). Buyer-supplier relationship in tourism supply chains: A research in Cappadocia region in Turkey. *Journal of applied sciences*. 14(7): 660-1327.

Cannella, S., Di Mauro, C., Dominguez, R., Ancarani, A. and Schupp, F. (2019). An exploratory study of risk aversion in supply chain dynamics via human experiment and agent-based simulation. *International Journal of Production Research*. 57(4): 985-999.

Car, T., Pilepic, L. and Simunic, M. (2014). Mobile Technologies and Supply Chain Management--Lessons for the Hospitality Industry. *Tourism and Hospitality Management*. 20(2): 207-219.

Carrasco-Santos, M.J., Peña-Romero, A. and Guerrero-Navarro, D., 2023. A Luxury Tourist Destination in Housing for Tourist Purposes: A Study of the New Airbnb Luxe Platform in the Case of Marbella. *Journal of Theoretical and Applied Electronic Commerce Research*. 18(2): 1020-1040.

Carter, C.R. and Rogers, D.S. (2008). A framework of sustainable supply chain management: moving toward new theory. *International journal of physical distribution & logistics management*. 38(5): 360-387.

Chen, H., Daugherty, P.J. and Landry, T.D. (2009). Supply chain process integration: A theoretical framework. *Journal of business logistics*. 30(2): 27-46.

Cheraghalipour, A., Paydar, M.M. and Hajiaghaei-Keshteli, M. (2019). Designing and solving a bi-level model for rice supply chain using the evolutionary algorithms. *Computers and Electronics in Agriculture*. 162(4): 651-668.

- Cleophas, C. and Ehmke, J.F. (2014). Considering Order Value and Transport Capacity in Demand Fulfillment for Last-Mile Deliveries in Metropolitan Areas. *Business & Information Systems Engineering*. 6(3): 153-163.
- Coghlan, R. and Brannick, T. (2014). *Doing Action Research in Your Organization (4th Edition)*. SAGE Publications, Thousand Oaks, California.
- Cohen, L., Manion, L. and Morrison, K. (2018). *Research in Education (Eighth edition)*. Routledge, Oxon.
- Cooney, R., Roe, D., Dublin, H., Phelps, J., Wilkie, D., Kaene, A., Travers, H., Skinner, D., Challender, D.W.S., Alan, J.R. and Biggs, D. (2016). *A journal of the Society for Conservation Biology*. 10(3): 367-374.
- Corominas, A. (2013). Supply chains: What they are and the new problems they raise. *International journal of Production Research*. 51(23): 6828-6835.
- Costa, M.T.G.D. & Carvalho, L.M.C. (2014). The sustainability of tourism supply chain: A case study research. *Tourismos*. 6(2): 393-406.
- Couto, J., Tiago, T., Gil, A., Tiago, F. and Faria, S. (2016). It's hard to be green: Reverse green value chain. *Environmental research*. 149(1): 302-313.
- Creswell, J.W. (2014). *Research Design, Qualitative, Quantitative & Mixed Methods Approaches (4th Edition)*. SAGE Publications, Thousand Oaks, California.
- Dabhilkar, M., Bengtsson, L. and Lakemonf, N. (2016). Sustainable supply management as a purchasing capability: A power and dependence perspective. *International Journal of Operations & Production Management*. 36(1): 2-22.
- Dahwa, M.P., Al-hakim, L. and Ng, E. (2013). The Importance of Trust in Procurement Practices and Their Impact on Business Performance: An Empirical

Investigation from the Perspective of the Buyer-Supplier Dyad. *Journal of Relationship Marketing*. 12(4): 280-300.

Darshan, E.M. and Teja, B.R. (2019). A study on customer purchasing behaviour on durable goods in Kukatpally, Hyderabad. *International Journal of Trend in Scientific Research and Development*. 3(2): 949-952.

Da Silva, F.P., Brandão, F. and Sousa, B. (2019). Towards socially sustainable tourism in cities: local community perceptions and development guidelines. *Enlightening tourism. A pathmaking journal*. 9(2): 168-198.

De Hemmer Gudme, R. (2017). A new strategic role for purchasing: business partner for value(s) creation. *Strategic Direction*. 33(2): 27-29.

Del Borghi, A., Gallo, M., Strazza, C. and Del Borghi, M. (2014). An evaluation of environmental sustainability in the food industry through Life Cycle Assessment: the case study of tomato products supply chain. *Journal of Cleaner Production*. 78(9): 121-130.

Department of Tourism (2020). Strategic Plan 2020/21 - 2024/25. Online. Available: <https://www.tourism.gov.za/AboutNDT/Publications/Strategic%20Plan%20%202021%20to%20%202425.pdf#search=strategic%20-PLAN%20%2F21%20-%202024%2F25> [Accessed November 13, 2021].

Department of Tourism (2018). Tourism Destination Planning Manual. Online. Available: <https://www.tourism.gov.za/Tenders/Documents/Tourism-%20Destination%20Planning%20Manual%20-%20TOR%20-%20NDT0006-17.pdf#search=Tourism%20Destination%20Planning%20Manual> [Accessed October 23, 2020].

Deshpande, D.S., Narayan B. and Londhe R.J. (2017). *Enhancing Academic Research with Knowledge Management Principles*. IGI Global, Hershey PA, USA.

- Dodds, R., Ali, A. and Galaski, K. (2016). Mobilizing knowledge: determining key elements for success and pitfalls in developing community-based tourism. *Current Issues in Tourism*. 10(1080): 1-22.
- Dorit, N. (2015). Expectation-Confirmation Theory. Online Available: https://is.theorizeit.org/wiki/Expectation_confirmation_theory [Accessed November 14, 2012].
- Drake, P.R., Lee, D.M. and Hussain, M. (2013). The lean and agile purchasing portfolio model. *Supply Chain Management: An International Journal*. 18(1): 3-20.
- Drumm, S., Bradley, C. and Moriarty, F. (2022). More of an art than a science'? The development, design and mechanics of the Delphi Technique. *Research in Social and Administrative Pharmacy*. 18(1): 2230-2236.
- Dubey, R., Gunasekaran, A., Papadopoulos, T., Childe, S.J., Shibin, K.T. and Wamba, S.F. (2017). Sustainable supply chain management: framework and further research directions. *Journal of Cleaner Production*. 142(2): 1119-1130.
- Dwivedi, Y.K., Lal, B., Williams, M.D. Schneberger, S.L. and Wade, M. (2009). *Handbook of research on contemporary theoretical models in information systems*. IGI Global, Hershey PA, USA.
- Elgazzar, S., Tipi, N. and Jones, G., (2019). Key characteristics for designing a supply chain performance measurement system. *International Journal of Productivity and Performance Management*. 68(2): 296-318.
- Eksoz, C., Mansouri, S.A. and Bourlakis, M. (2014). Collaborative forecasting in the food supply chain: A conceptual framework. *International Journal of Production economics*. 158 (1): 120-135.

- Estol, J., Camilleri, M.A. and Font, X. (2018). European Union tourism policy: an institutional theory critical discourse analysis. *Tourism Review*. 73(3): 421-431.
- Expert Africa (2019). Online. Klein's Camp
Available: <https://www.expertafrica.com/tanzania/serengeti-migration-area/kle-ins-camp> [Accessed August 5, 2019].
- Fahimnia, B., Sarkis, J. and Davarzani, H. (2015). Green supply chain management: A review and bibliometric analysis. *International Journal of Production Economics*. 162(1): 101-114.
- Famiyeh, S., Kwarteng, A., Asante-Darko, D. and Dadzie, S.A. (2018). Green supply chain management initiatives and operational competitive performance. *Benchmarking: An International Journal*. 25(2): 607-631.
- Farrington, S.M. (2018). Psychological well-being and perceived financial performance: an SME perspective. *South African Journal of Business Management*. 44(4): 47-56.
- Fayet, L. and Vermeulen, W.J.V. (2014). Supporting Smallholders to Access Sustainable Supply Chains: Lessons from the Indian Cotton Supply Chain. *International Journal of Production Research*. 52 (7): 1858-1896.
- Fayezi, S., Zomorodi, M. and Bals, L. (2018). Procurements sustainability tension: an integrative perspective. *International Journal of Physical Distribution & Logistics Management*. 48(6): 586-609.
- Feng, Y., Hu, Y. and He, L. (2021). Research on Coordination of Fresh Agricultural Product Supply Chain considering Fresh-Keeping Effort Level under Retailer Risk Avoidance. *Discrete Dynamics in Nature and Society*. 2021(1): 1-15.

- Fisher, H., Erasmus, A.C. and Viljoen, A.T. (2020). Adaptation of the Delphi technique for electronic application in the food industry. *African Journal of Hospitality, Tourism and Leisure*. 9(5): 823-841.
- Firth, A.M., O'brien, S.M., Guo, P., Seymour, J., Richardson, H., Bridges, C., Hocaoglu, M.B., Grande, G., Dzingina, M., Higginson, I.J. and Murtagh, F.E. (2019). Establishing key criteria to define and compare models of specialist palliative care: a mixed-methods study using qualitative interviews and Delphi survey. *Palliative medicine*. 33(8): 1114-1124.
- Font, X., Tapper, R., Schwartz, K. and Kornilaki, M. (2013). Sustainable supply chain management in tourism. *Business strategy & the environment*. 17(4): 260-271.
- Fouché, C.B., Strydom, H., and Roestenburg, W.J.H. (2021). *Research at Grass Roots. For the social science and human services professions, (Fifth Edition)*. Van Schaik Publishers, Pretoria.
- Frash Jr, R.E., DiPietro, R. and Smith, W. (2014). Pay More for McLocal? Examining Motivators for Willingness to Pay for Local Food in a Chain Restaurant Setting. *Journal of Hospitality Marketing & Management*. 24(4): 411-434.
- Frehe, V., Mehmman, J. and Teuteberg, F. (2017). Understanding and assessing crowd logistics business models – using everyday people for last mile delivery. *Journal of Business & Industrial Marketing*. 32(1): 75-97.
- Food and Agriculture Organization of the United Nations (FAO). (2021). Family Farming Knowledge Platform. Online. Available: <https://www.fao.org/familyfarming/home/en/> [Accessed November 20, 2021].
- Fu, J, Chakpitak, N. and Goldsmith, P. (2012). A Knowledge Supply Chain: Reengineering e-Tourism Curriculum Design. *E-review of Tourism Research*. 10(2): 56-62.

- Fung, W.S.L. and Fung, R.Y.K. (2014). The development of a supply chain model for tourism crisis management. *IEEE international conference on management of innovation and technology (ICMIT)*. Singapore, 23-25 September 2014.
- Gandhi, A.V., Shaikh, A. and Sheorey, P.A., (2017). Impact of supply chain management practices on firm performance: Empirical evidence from a developing country. *International Journal of Retail & Distribution Management*. 45(4): 366-384.
- Gangurde, S.R. and Chavan, A.A. (2016). Benchmarking of purchasing practices using Kraljic approach. *Benchmarking an International Journal*. 23(7): 1751-1779.
- Gattorna, J. (2015). *Dynamic Supply Chains. How to design, build and manage people-centric value networks*, 3rd Edition. Pearson Education. Harlow, United Kingdom.
- Gereffi, G. (2020). What does the COVID-19 pandemic teach us about global value chains? The case of medical supplies. *Journal of International Business Policy*. 3(3): 287-301.
- Głabiński, Z. and Duda, T. (2017). The local community perception of tourism development. The case of Gryfino County – Western Pomerania, Poland. *Bulletin of Geography. Socio-economic Series*. 37(21): 7-23.
- Go2Africa. (2019). &Beyond. Online. Available: <https://www.go2africa.com/top-safari-brands/andbeyond> [Accessed October 29, 2019].
- Google Earth. (2019). Klein's Camp. Online Available: www.earth.google.com/web/search/andBeyond+Klein%27s+Camp+_+Tanzania/2A [Accessed April 5, 2021].
- Google Earth. (2019). Distance between Arusha Airport and Lobo Airstrip. Online

Available: <https://www.earth.google.com/web/search/andBeyond+Klein%27s-+Camp,+Tanzania/2A> [Accessed April 7, 2021].

Google Maps. (2019). Distance between &Beyond Zanzibar Office and Mnemba Island. Online. Available: www.earth.google.com/web/search/andBeyond+Mnemba+Island,+Zanzibar,+Tanzania/@ [Accessed April 5, 2021].

Google Maps. (2019). Aerial Photo of &Beyond Mnemba Island. Online Available: <https://www.google.co.za/maps/dir/Andbeyond+Arusha+Tanzania/-Seronera> [Accessed April 8, 2021].

Google Maps. (2019). Distance by road between &Beyond Arusha and Serengeti Lodges. Online. Available: <https://www.google.co.za/maps/dir/AndBeyond+Arusha+Office,+andBeyond+Kleins-Camp> [Accessed April 5, 2021].

Google Maps. (2019). Distance between Lobo Airstrip and Klein's Camp. Online Available: <https://www.google.co.za/maps/dir/andBeyond,+Klein's+Camp,+Tanzania/Lobo+Airstrip> [Accessed April 8, 2021].

Google Maps. (2019). Distance between &Beyond Zanzibar Office and Mnemba Island. Online. Available: <https://www.google.co.za/maps/dir/AndBeyond+Zanzibar+Office,+Zanzibar+andBeyond+Mnemba+Island> [Accessed April 9, 2021].

Google Maps. (2019). Distance between &Beyond Johannesburg and Phinda Private Game Reserve. Online. Available: <https://www.google.co.za/maps/dir/AndBeyond,+Katherine+Street,+Sandown,+Johannesburg/andBeyond+Phinda+Private+Game+Reserve> [Accessed April 9, 2021].

Gordon, I. and Harris, J. (2015). The not so 'all inclusive' tourism in Jamaica: Economic linkages to local supply. *Journal of International and Interdisciplinary Business Research*. 2(69965): 1-23.

- Govindan, K., Rajeev, A., Padhi, S.S. and Pati, R.K. (2020). Supply chain sustainability and performance of firms: A meta-analysis of the literature. *Transportation Research Part E: Logistics and Transportation Review*, 137(1): 1-22.
- Grzybowska, K. and Gajdzik, B. (2014). Logistic strategies in purchasing process of metallurgical companies. *Metalurgija*. 53(1): 127-130.
- Guan, D., Wang, D., Hallegatte, S., Davis, S.J., Huo, J., Li, S., Bai, Y., Lei, T., Xue, Q., Coffman, D.M. and Cheng, D. (2020). Global supply-chain effects of COVID-19 control measures. *Nature human behaviour*. 4(6): 77-587.
- Gurbuz, I.B. and Macabangin, M. (2019). Factors affecting consumer's behaviour on purchasing and consumption of food products. *Scientific Papers Series Management, Economic Engineering in Agriculture and Rural Development*. 19(1): 215-222.
- Gutierrez, E. L., (2018). Transforming Tourism Value Chains – Activities (PCEPSDI). Online. Available: <https://pcepsdi.org.ph/projects/transforming-tourism-value-chains/activities/#:~:text=Definition%20of%20Tourism%20Value%20Chain,%2C%20financing%2C%20marketing%2C%20distribution%2C> [Accessed July 21, 2023].
- Gyula, L.F. (2013). Analysis of the impact of the supply chain performance on the overall organisational performance. *Annals of the University of Oradea, economic science series*. 22(1): 1505-1510.
- Habibi, A., Sarafrazi, A. and Izadyar, S. (2014). Delphi technique theoretical framework in qualitative research. *The International Journal of Engineering and Science*. 3(4):8-13.
- Hayakawa, K. and Mukunoki, H. (2021). Impacts of COVID-19 on global value chains. *The Developing Economies*. 59(2): 154-177.

- Hesping, V.H. and Schiele, H. (2015). Purchasing strategy development: A multi-level review. *Journal of Purchasing & Supply Management*. 21(2): 138-150.
- Hirschhorn, F. (2019). Reflections on the application of the Delphi method: lessons from a case in public transport research. *International Journal of Social Research Methodology*. 22(3): 309-322.
- Hoberg, K. and Thonemann, U.W. (2014). Modeling and analysing information delays in supply chains using transfer functions. *International Journal of Production economics*. 156(1): 132-145.
- Holt, N., Hutcheson, Z., Crowe, K. and Lynagh, D. (2021). Using a modified Delphi process to develop a structured case-based handover assessment tool. *MedEdPublish*. 10(1):1-6.
- Huong, C.T.T., Huong, H.T.L. and Thuc, T. (2016). Developing the Indicators for Monitoring the Adaptation Actions for Quang Ngai Province, Vietnam using the Delphi Technique. *International journal of sciences*. 6(3): 80-86
- IGI Global. (2022). Local community in Tanzania. Online
Available: <https://www.igi-global.com/dictionary/localcommunity/44951>
[Accessed February 16, 2022].
- India Today (2022). Online. Interesting facts about Africa
Available: <https://www.indiatoday.in/educationtoday/gkcurrentaffairs/story/interestingfacts-about-africa-divd-1592141-2019-08-27> [Accessed February 14, 2022].
- Jaggernath, R. and Khan, Z. (2015). Green supply chain management. *World Journal of Entrepreneurship, Management and Sustainable Development*. 11(1): 37-47.

- Jeżewska-Zychowicz, M., Plichta, M. and Królak, M. (2020). Consumers' fears regarding food availability and purchasing behaviors during the COVID-19 pandemic: The importance of trust and perceived stress. *Nutrients*. 12(9): 2852-2866.
- Jing, F., Chakpitak, N., Goldsmith, P., Sureephong, P. and Kunarucks, T. (2013). Creating a knowledge supply chain for e-tourism curriculum design: Integrating knowledge management and supply chain management. *International Journal of Knowledge Management*. 8(4): 71-94.
- Johnson, B. and Christensen, L. (2012). *Educational research: quantitative, qualitative, and mixed approaches*. SAGE Publications, Thousand Oaks, California.
- Juhász, J. and Bányai, T. (2018). November. Last mile logistics: An integrated view. In *IOP Conference Series: Materials Science and Engineering*. 448(1): 1-10.
- Junayduloevich, A.A., Mukhammedrizaevna, T.M. and Bakhritdinovna, A.N. (2020). Environmentally friendly and sustainable supply chain management in the platform economy. *Economics*. 3(46): 23-25.
- Karabasevic, D., Stanujkic, D., Urosevic, S., Popovic, G. and Maksimovic, M. (2017). An approach to criteria weights determination by integrating the Delphi and the adapted SWARA methods. *Management: Journal of Sustainable Business and Management Solutions in Emerging Economies*. 22(3): 15-25.
- Keenan, L., O'Sullivan, A. and Downes, M. (2021). Teachers' experiences and understanding of executive functions in Irish primary school classrooms: Findings from a mixed-methods questionnaire. *Irish Educational Studies*. 40(1): 101-114.
- Kellner, F., Otto, A. and Busch, A. (2012). Understanding the robustness of optimal FMCG distribution networks. *Logistics Research*. 6(4): 173-185.

- Keshavarz Ghorabae, M., Amiri, M., Zavadskas, E.K. and Antucheviciene, J. (2017). Supplier evaluation and selection in fuzzy environments: A review of MADM approaches. *Economic research-Ekonomska istraživanja*. 30(1): 1073-1118.
- Kilcarr, S. (2015). Transitioning to a “last mile” world. Online Available: <http://www.fleetowner.com/fleetmanagement/transitioninglastmile-world> [Accessed March 19, 2018].
- King, R. and Dinkoksung, S. (2014). Ban Pa-Ao, pro-poor tourism and uneven development. *An International Journal of Tourism Space, Place and Environment*. 16(4): 687-703.
- Koberg, E. and Longoni, A., (2019). A systematic review of sustainable supply chain management in global supply chains. *Journal of cleaner production*. 207(1): 1084-1098.
- Kolenko, S. (2021). A Brief History of Modern Supply Chain Management and Best Practices. Online. Available: <https://blog.procurify.com/2014/12/17/brief-history-modern-supply-chain-management-supply-chain-management-best-practices/> [Accessed November 20, 2021].
- Koskey, K.L., Sondergeld, T.A., Stewart, V.C. and Pugh, K.J. (2018). Applying the mixed methods instrument development and construct validation process: The transformative experience questionnaire. *Journal of Mixed Methods Research*. 12(1): 95-122.
- Košić, K., Demirović, D. and Dragin, A. (2017). Living in a rural tourism destination—the local community's perspective. *Tourism in South East Europe*. 4(1): 267-278.
- Kovačić, N., Topolšek, D. and Dragan, D. (2013) Tourism sector, travel agencies, and transport suppliers: Comparison of different estimators in the structural equation modelling. *Logistics & sustainable transport*. 6(1):11-34.

- Kraines, M.A., Uebelacker, L.A., Gaudiano, B.A., Jones, R.N., Beard, C., Loucks, E.B. and Brewer, J.A. (2020). An adapted Delphi approach: The use of an expert panel to operationally define non-judgment of internal experiences as it relates to mindfulness. *Complementary therapies in medicine*. 51(1): 1-4.
- Krishnapillai, G., Hamid, A.A. and Rashid, S.A. (2011). Perceived Barriers of Supply Chain Management Practices: Empirical Study on Malaysian Tourism Firms. *Amity Global Business Review*. 6(1): 203-215.
- Kumar, D., Sharma, P. and Malviya, R. (2020). *Corona Virus: A Review of COVID-19*. In 2020. *Eurasian Journal of Medicine and Oncology*. 4(1): 8–25.
- Kushner, S. (2017). *Evaluative Research Methods: Managing the Complexities of Judgment in the Field*. Information Age Publishing, Charlotte.
- Laari, S., Töyli, J. and Ojala, L. (2017). Supply chain perspective on competitive strategies and green supply chain management strategies. *Journal of cleaner production*. 141(1): 1303-1315.
- Lavastre, O., Ageron, B., Chaze-Magnan, L. and Spalanzani, A. (2014). Innovative Supply Chain Practices (ISCP) in Supply Chain Management: Development and Validation of a Measurement Scale. *M@n@gement*. 17(4): 263–298.
- Layder, D. (2018). *Investigative research: theory and practice*. SAGE Publications, Thousand Oaks, California.
- Lee, J. and Kim, Y.K. (2020). Online reviews of restaurants: expectation-confirmation theory. *Journal of Quality Assurance in Hospitality & Tourism*. 21(5): 582-599.
- Leede, P.D. and Ormond, J.E. (2015). *Practical Research: Planning and Design, Global Edition*. Harlow, England.

- Legeza, D.G., Brunner, T., Kerimova, Y.K., Kulish, T.V. and Konovalenko, A.S. (2019). A model of consumer buying behavior in relation to eco-intelligent products in catering. *Innovative Marketing*. 15(1): 54-65.
- Lekhaya, L.M., Olajumoke, N.G. and Nirmala, D. (2017). Exploring fast moving consumer goods (FMCG): small, medium and micro enterprises manufacturers' need for innovation to achieve growth. *Journal of Environment Economics*. 8(2): 8-16.
- Lewis, L. (2022). Online. African Budget Safaris
Available: <https://www.africanbudgetsafaris.com/blog/3-reasons-africa-is-the-best-place-to-travel-to-in-the-world/> [Accessed February 14, 2022].
- Lim, S.F.W.T., Sraj, J.S., and Jin, X. (2017). Consumer-driven e-commerce: A literature review, design framework, and research agenda on last-mile logistics models. *International Journal of Physical Distribution & Logistics Management*. 10(2): 1-62.
- Limon, M.R. (2021). Validation of a researcher-developed food safety curriculum guide for junior high school students using Delphi technique. *Food Control*. 125: (2021): 108011-108023.
- Liu, T. (2013). A Retrospective Review of Research into the Tourism Value Chain and the Potential for Future Research. *Tourism Tribune*. 28(2): 60-66.
- Liu, L., Li, F. and Qi, E. (2019). Research on risk avoidance and coordination of supply chain subject based on blockchain technology. *Sustainability*. 11(7): 2182-2196.
- Liu, W., Bai, E., Liu, L. and Wei, W. (2017). A framework of sustainable service supply chain management: A literature review and research agenda. *Sustainability*. 9(3): 421-446.

- Lorentz, H., Laari, S., Engblom, J. and Tanskanen, K. (2019). Attention-based view on achieving ambidexterity in purchasing and supply management. *Journal of Purchasing and Supply Management*, 25(5): 100560-100571.
- Lottering, C. (2021). Discovering Wildlife Destinations in South Africa. Online Available: <https://southafrica.co.za/top-wildlife-destinations-south-africa.html> [Accessed September 14, 2012].
- Lukhele, S.E. and Mearns, K.F. (2013). The operational challenges of community-based tourism ventures in Swaziland. *African Journal for Physical Health Education, Recreation and Dance*. 19(3): 199-216.
- MacKenzie, C.A. and Apte, A. (2017). Modeling disruption in a fresh produce supply chain. *The International Journal of Logistics Management*. 28(2): 656-679.
- Maestrini, V., Luzzini, D., Maccarrone, P. and Caniato, F. (2017). Supply chain performance measurement systems: A systematic review and research agenda. *International Journal of Production Economics*. 183(2017): 299-315.
- Mandal, S. and Saravanan, D. (2019). Exploring the influence of strategic orientations on tourism supply chain agility and resilience: An empirical investigation. *Tourism Planning & Development*. 16(6): 612-636.
- Mangiaracina, R., Perego, A., Seghezzi, A. and Tumino, A. (2019). Innovative solutions to increase last-mile delivery efficiency in B2C e-commerce: a literature review. *International Journal of Physical Distribution & Logistics Management*. 49(9): 901-920.
- Mani, V. and Gunasekaran, A., (2018). Four forces of supply chain social sustainability adoption in emerging economies. *International Journal of Production Economics*. 199(5): 150-161.

- Manning, L. and Monaghan, J. (2019). Integrity in the fresh produce supply chain: solutions and approaches to an emerging issue. *The Journal of Horticultural Science and Biotechnology*. 94(4): 413-421.
- Maršanić, R. (2014). Logistic traffic - a supply chain management factor in hospitality. *Tourism & hospitality management*. 20(2): 221-233.
- Martins, C.L. and Pato, M.V. (2019). Supply chain sustainability: A tertiary literature review. *Journal of cleaner production*, 225(1): 995-1016.
- Mathew, P.V. and Sreejesh, S. (2017). Impact of responsible tourism on destination sustainability and quality of life of a community in tourism destinations. *Journal of Hospitality and Tourism Management*. 31(7): 83-89.
- Maxwell, J.A. (2017). *Qualitative research design: an interactive approach*. SAGE Publications, Thousand Oaks, California.
- Mazza, C.P. (2014). Last-Mile Visibility in a Global Supply Chain. Online Available: <http://www.mhlnews.com/globalsupplychain/lastmilevisibilityglobalsupplychain> [Accessed March 13, 2018].
- McCamley, C. and Gilmore, A. (2017). Aggravated fragmentation: A case study of SME behaviour in two emerging heritage tourism regions. *Tourism Management*. 60(1): 81-91.
- Melkonyan, A., Gruchmann, T., Lohmar, F., Kamath, V. and Spinler, S. (2020). Sustainability assessment of last-mile logistics and distribution strategies: The case of local food networks. *International Journal of Production Economics*. 228(6): 107746-107763.
- Melnyk, S.A., Narasimhan, R. and De Campos, H.A. (2012). Supply chain design: issues, challenges, frameworks and solutions. *International Journal of Production Research*. 52(7): 1887-1896.

- Mgidlana, L.M. (2013). Factors affecting the adoption of E-procurement technologies from a supplier perspective. *Gordon Institute of Business Science, University of Pretoria*. 1(1): 12-89.
- Mligo, E.S. (2016). *Introduction to Research Methods and Report Writing. A Practical Guide for Researchers in Social Sciences and Humanities*. World Scientific Publishing Co, Singapore.
- Michailidou, A.V, Vlachokostas, C., Achillas, C., Maleka, D., Moussiopoulos, N. and Feleki, E. (2016). Green tourism supply chain management based on life cycle impact assessment. *European Journal of Environmental Sciences*. 6(1): 30-36.
- Mikalef, P., Pateli, A., Batenburg, R.S. and Van de Wetering, R. (2015). Purchasing alignment under multiple contingencies: a configuration theory approach. *Industrial Management & Data Systems*. 115(4): 625-645.
- Minculete, G. and Olar, P. (2014). New Approaches to Supply Chain Management Concept. Logistics Integration of “Hub and Spoke” Model. *Valerian Journal of Economic Studies*. 5(19): 21–32.
- Mitchell, M. (2022). Senior Vice President of Climate Change at WWF. Online. Available: <https://www.worldwildlife.org/threats/effects-of-climate-change#:~:text=More%20frequent%20and%20intense%20drought,on%20people's%20livelihoods%20and%20communities.&text=As%20climate%20change%20worse%20C%20dangerous,becoming%20more%20frequent%20or%20severe>. [Accessed January 213, 2022].
- Mitchell’s NY. (2018). Overcoming Last Mile Logistics Challenges. Online. Available: <https://logistics.mitchellsny.com/?s=last+mile+logistics&id=4614> [Accessed February 27, 2018].

- Mogre, R., Lindgreen, A. and Hingley, M. (2017). Tracing the evolution of purchasing research: future trends and directions for purchasing practices. *Journal of Business & Industrial Marketing*. 32(2): 251-257.
- Morali, O. and Searcy, C. (2013). A review of sustainable supply chain management practices in Canada. *Journal of Business Ethics*. 117(3): 635-658.
- Mouton, J. (2008). *How to succeed in your master's and doctoral studies: a South African guide and resource book*. Van Schaik Publishers, Pretoria.
- Musau, E.G. (2015). Determinants of Procurement Function and Its Role in Organizational Effectiveness. *IOSR Journal of Business and Management*. 17(2): 12-25.
- Nazri, E.M., Misiran, M. and Abdullah, S. (2015). Utilizing Local Communities towards the Marketability of EDC-UUM: A Supply Chain Model. *International Journal of Supply Chain Management*. 4(4): 63-70.
- Ndivo, R.M. and Cantoni, L. (2015a). Rethinking local community involvement in tourism development. *Annals of Tourism Research* 57. 10(1016): 1-16.
- Ndivo, R.M. and Cantoni, L. (2015b). Economic empowerment of communities through tourism: A Pro-Poor tourism value chain approach. *Advances in Hospitality and Tourism Research (AHTR). An International Journal of Akdeniz University Tourism Faculty*. 3(2): 116-134.
- Nguyen, T.H. and Waring, T.S. (2013). The adoption of customer relationship management (CRM) technology in SMEs: An empirical study. *Journal of Small Business and Enterprise Development*. 20(4): 824-848.
- Nijaki, L.K. and Worrel, G. (2012). Procurement for sustainable local economic development. *International Journal of Public Sector Management*. 25(2): 133-153.

- Noyan, N. and Kahvecioğlu, G. (2018). Stochastic last mile relief network design with resource reallocation. *OR Spectrum. Quantitate Approaches in Management*. 40(1): 188-231.
- Nsanzya, N.M.K. (2021). *Evaluating Tourism-Agriculture Linkages for Inclusive Growth in Zambia*. PhD in Tourism Management. Faculty of Economic and Management Sciences. University of Pretoria.
- O'Dwyer, L.M. and Bernauer, J.A. (2014). *Quantitative research for the qualitative researcher*. SAGE Publications, Thousand Oaks, California.
- Ogden, S.R., Culp Jr, W.C., Villamaria, F.J. and Ball, T.R. (2016). Developing a checklist: consensus via a modified Delphi technique. *Journal of cardiothoracic and vascular anaesthesia*. 30(4):855-858.
- Oláh, J., Zéman, Z., Balogh, I. and Popp, J. (2018). Future challenges and areas of development for supply chain management. *LogForum*. 14(1): 127-138.
- Olsson, J., Hellström, D. and Pålsson, H. (2019). Framework of last mile logistics research: A systematic review of the literature. *Sustainability*. 11(24): 7131-7156.
- Omisore, A.G. (2018). Attaining Sustainable Development Goals in sub-Saharan Africa; The need to address environmental challenges. *Environmental development*. 25(3): 138-145.
- Othman, N., Latip, R.A. and Ariffin, M.H. (2019). Motivations for sustaining urban farming participation. *International Journal of Agricultural Resources, Governance and Ecology*. 15(1): 45-56.
- Paesbrugge, B., Sharma, A., Rangarajan, D. and Syam, N. (2018). Personal selling and the purchasing function: where do we go from here? *Journal of Personal Selling & Sales Management*. 38(1): 123-143.

- Patino, C.M. and Ferreira, J.C. (2018). Inclusion and exclusion criteria in research studies: definitions and why they matter. *Jornal brasileiro de pneumologia: publicacao oficial da Sociedade Brasileira de Pneumologia e Tisiologia*. 44(2), 84-84
- Patten, M.L. and Newhart, M. (2018). *Understanding Research Methods. An Overview of Essentials (Tenth Edition)*. Routledge, New York.
- Pavy, E., (2021). European Parliament, Fact Sheets on the European Union. Online. Available: <https://www.europarl.europa.eu/factsheets/en/sh-eet/5/the-treaty-of-lisbon> [Accessed November 15, 2021].
- Paulraj, A. & Schuetz, K. (2013). Supply chain collaboration and sustainability: a profile deviation analysis. *International Journal of Production Management*. 34(5): 639-663.
- Pellegrin-Romeggio, F. and Leszczyńska, D. (2014). Dynamic tourism supply chain assembly: A new lever for managerial innovation. *Supply Chain Forum: International journal*. 14 (1): 28-40.
- Perboli, G., Rosano, M., Saint-Guillain, M. and Rizzo, P. (2018). Simulation–optimisation framework for City Logistics: an application on multimodal last-mile delivery. *IET Intelligent Transport Systems*. 12(4): 262-269.
- Pillai, M., Talari, P.C. and Elluri, P.V. (2014). Performance analysis of some supply chain replenishment strategies. *International Journal of Logistics: Research & applications*. 17(5): 357-376.
- Pienaar, L. and Traub, L. (2015). Understanding the smallholder farmer in South Africa: Towards a sustainable livelihood classification. Online. Available: <https://ageconsearch.umn.edu/record/212633/files/PienaarUnderstanding%20the%20smallholder%20farmer%20in%20South%20Africa-1233.pdf>

[Accessed November 20, 2021].

- Piera, C., Roberto, C., Giuseppe, C. and Teresa, M. (2014). E-procurement and E-supply Chain: Features and Development of E-collaboration. *IERI Procedia*. 6(2014): 8-14.
- Pooe, R.I.D. and Mahlangu, D. (2017). Enhancing SME performance through supply chain integration, collaborative planning, and supply chain capabilities – research. *Journal of Contemporary Management*. 14(1): 238-269.
- Raj, A., Biswas, I. and Srivastava, S.K. (2018). Designing supply contracts for the sustainable supply chain using game theory. *Journal of Cleaner Production*. 185(6): 275-284.
- Rajhans, V., Rege, S., Memon, U. and Shinde, A. (2020). Adopting a modified Delphi technique for revisiting the curriculum: a useful approach during the COVID-19 pandemic. *Qualitative Research Journal*. 20(4):373-382.
- Rakoma, M. and Schulze (2015). Challenges in Adult Education in the Rural Areas of Limpopo Province in South Africa. *Studies of Tribes and Tribals*. 13(2): 163-171.
- Ranieri, L., Digiesi, S., Silvestri, B. and Roccotelli, M. (2018). A review of last mile logistics innovations in an externalities cost reduction vision. *Sustainability*. 10(3): 782-799.
- Rao, K. (2017). Purchasing Behaviour of Rural Consumers in South India with reference to FMCG. *International Journal of Research in Commerce & Management*. 8(8): 2-18.
- Reddy, D. (2014). Criticality analysis and the supply chain: Leveraging representational assurance. *Technovation*. 34(7): 362-379.

- Ren M.Y. and Bai H. (2014). A composite collaborative tourism supply chain risk-sharing model. *Journal of Scientific Research and Reports*. 4 (3): 235-474.
- Rizou, M., Galanakis, I.M., Aldawoud, T.M. and Galanakis, C.M. (2020). Safety of foods, food supply chain and environment within the COVID-19 pandemic. *Trends in food science & technology*. 102(8): 293-299.
- Robert, E., Frash, Jr., DiPietro, R. and Smith, W. (2015). Pay More for McLocal? Examining Motivators for Willingness to Pay for Local Food in a Chain Restaurant Setting. *Journal of Hospitality Marketing & Management*. 24(4): 411-434.
- Rodriguez- Escobar, J.A. and González_Benito, J. (2017). The effect of strategic alignment on purchasing management. *Management Research Review*. 40(11): 1175-1200.
- Roller-Wirnsberger, R., Masud, T., Vassallo, M., Zöbl, M., Reiter, R., Van den Noortgate, N., Petermans, J., Petrov, I., Topinkova, E., Andersen-Ranberg, K. and Saks, K. (2019). European postgraduate curriculum in geriatric medicine developed using an international modified Delphi technique. *Age and ageing*. 48(2): 291-299.
- Ruiz-Torres, A., Mahmoodi, F. and Ayala-Cruz, J. (2012). Supply chain management research in Latin America: A review. *Supply chain forum: International journal*. 13(1): 20-36.
- Rusko, R.T., Kylänen, M. and Saari, R. (2013). Supply chain in tourism destinations: The case of Levi resort in Finnish Lapland. *International Journal of Tourism Research*. 11(1): 71-87.
- Rylance, A. and Spenceley, A. (2013). Living outside the fence: opportunities for neighbouring communities to supply products and services to the Sabi Sand

Game Reserve, South Africa. *African Journal for Physical Health Education, Recreation and Dance*. 19(3): 294–308.

Rylance, A. and Spenceley, A. (2017). Reducing economic leakages from tourism: A value chain assessment of the tourism industry in Kasane, Botswana. *Development Southern Africa*. 34(3): 295-313.

Rylance, A., Snyman, S. and Spenceley, A. (2017). The contribution of tourism revenue to financing protected area management in Southern Africa. *Tourism Review International*. 21(2): 139-149.

Saarinen, J. and Rogerson, C.M. (2015). Tourism and the Millennium Development Goals@ perspectives beyond 2015. *An International Journal of Tourism Space, Place and Environment*. 16(1): 23-20.

Sajjad, A., Eweje, G. and Tappin, D. (2015). Sustainable supply chain management: motivators and barriers. *Business Strategy and the Environment*. 24(7): 643-655.

Sanches-Pereira, A., Onguglo, B., Pacini, H., Gómez, M.F., Coelho, S.T. and Muwang, M.K. (2017). Fostering local sustainable development in Tanzania by enhancing linkages between tourism and small-scale agriculture. *Journal of Cleaner Production*. 162(6): 1567-1581.

Sariskumar, N. and Bhavan, T. (2018). The impact of responsible tourism on destination sustainability and quality of life in Passikudah tourism destination. *International Journal of Social Science and Economic Research*. 3(11): 5933-5959.

Saunders, M.N.K., Lewis, P. and Thornhill, A. (2019). *Research Methods for Business Students. (Eighth Edition)*. Pearson Education, Harlow, United Kingdom.

- Schermer, M. (2015). From 'food from nowhere' to 'food from here:' changing producer-consumer relations in Austria. *Agriculture and human values*. 32(1): 121-132.
- Schmalz, U., Spinler, S. and Ringbeck, J. (2021). Lessons Learned from a Two-Round Delphi-based Scenario Study. *MethodsX*. 8(2): 101179.
- Sgroi, F., Di Trapani, A.M., Testa, R. and Tudisca, S. (2017). The rural tourism as development opportunity or farms. The case of direct sales in Sicily. *American Journal of Agricultural and Biological Sciences*. 9(3): 407-419.
- Shahbaz, M.S., Rasi, R.Z.R., Ahmad, M.B. and Sohu, S. (2018). The impact of supply chain collaboration on operational performance: Empirical evidence from manufacturing of Malaysia. *International Journal of Advanced and Applied Sciences*. 5(8): 64-71.
- Shamba Network. (2022). ReFi Solution. Online. Available: <https://shamba.network/>
[Accessed 11 November, 2022]
- Shan, W. and Wang, J. (2018). Mapping the landscape and evolutions of green supply chain management. *Sustainability*. 10(3): 597-620.
- Shiau, W.L., Huang, L.C. and Shih, C.H. (2011). Understanding continuance intention of blog users: A perspective of flow and expectation confirmation theory. *Journal of Convergence Information Technology*. 6(4): 306-317.
- Shinohara, M. (2010). Reconsidering Supply Chain Management Paradigms: A Question of Efficiency. *The IUP Journal of Supply Chain Management*. 7(1/2): 21–33.
- Shinohara, M. (2010). Reconsidering Supply Chain Management Paradigms: A Question of Efficiency. *The IUP Journal of Supply Chain Management*. 7(1 & 2): 21–33.

- Sigala, M., Parsa, H.G., Segarra-Oña, M., Jang, S., Chen, R. and Singh, A.J. (2012). Customer involvement in sustainable supply chain management: A research framework and implications in tourism. *Cornell Hospitality Quarterly*. 55(1): 76-163.
- Singh, R. and Acharya, P. (2014). Identification and evaluation of supply chain flexibilities in Indian FMCG sector using DEMATEL. *Global journal of Flexible Systems Management*. 15(2): 91-100.
- Skippari, M., Laukkanen, M. and Salo, J. (2017). Cognitive barriers to collaborative innovation generation in supply chain relationships. *Industrial Marketing Management*. 62(3): 108-117.
- Solaimani, S. and van der Veen, J., 2022. Open supply chain innovation: an extended view on supply chain collaboration. *Supply Chain Management: An International Journal*, 27(5), pp.597-610.
- South African Government (2017). National Tourism Sector Strategy (NTSS) 2016-2026. Online. Available: https://www.gov.za/sites/default/files/gcis_document/201712/nationaltourism-sector-strategy-ntss-2016-2026a.pdf [Accessed November 2, 2021].
- South African Lodges. (2019). andBeyond Phinda Private Game Reserve. Online Available: <https://www.south-african-lodges.com/lodges/phinda-game-lodge/>. [Accessed August 5, 2019].
- Song, Y., Chen, Z., Zhang, S., Wang, J., Li, C., Li, X., Yuan, J. and Zhang, X. (2020). Comprehensive evaluation system of occupational hazard prevention and control in iron and steel enterprises based on a modified Delphi technique. *International journal of environmental research and public health*. 17(2): 667-684.

- Soto-Acosta, P., Colomo-Palacios, R. and Popa, S. (2014). Web knowledge sharing and its effect on innovation: an empirical investigation in SMEs. *Knowledge Management Research & Practice*. 12(1): 103-113.
- Spasić, V. (2013). Integrating sustainable tourism in tour operators' supply chain. *Singidunum journal of applied sciences*. 9(1): 60-66.
- Spiegel, B.M., Bolus, R., Harris, L.A., Lucak, S., Chey, W.D., Sayuk, G., Esrailian, E., Lembo, A., Karsan, H., Tillisch, K. and Talley, J. (2010). Characterizing abdominal pain in IBS: guidance for study inclusion criteria, outcome measurement and clinical practice. *Alimentary pharmacology & therapeutics*. 32(9): 1192-1202.
- Spenceley, A., Snyman, S. and Rylance, A. (2019). Revenue sharing from tourism in terrestrial African protected areas. *Journal of Sustainable Tourism*. 27(6): 720-734.
- Statistics South Africa. (2020). Tourism and Migration, October 2020. Online. Available: http://www.statssa.gov.za/?page_id=1856&PPN=P0351&S-CH=-7687 [Accessed December 11, 2021].
- Statistics South Africa. (2021). Tourism and Migration, November 2020. Online. Available: http://www.statssa.gov.za/?page_id=1856&PPN=P0351&SCH=76-05 [Accessed December 11, 2021].
- Storey, V.A. and Hesbol, K.A. (2016). *Contemporary Approaches to Dissertation Development and Research Methods*. IGI Global, Hershey PA, USA.
- Suh, C.J. and Lee, I.T. (2018). An empirical study on the manufacturing firm's strategic choice for sustainability in SMEs. *Sustainability*. 10(2): 572-595.

- Su, M.M., Wall, G., Wang, Y. and Jin, M. (2019). Livelihood sustainability in a rural tourism destination-Hetu Town, Anhui Province, China. *Tourism Management*. 71(1): 272-281.
- Swiss Federal Institute of Intellectual Property (IGE/IPI). (2021). Online. What is an Invention? Available: <https://www.ige.ch/en/protecting-your-ip/patents/patent-basics/what-is-an-invention> [Accessed February 15, 2022].
- Tan, W. (2017). *Research Methods: A Practical Guide for Students and Researchers*. World Scientific Publishing Co. Toh Tuck Link, Singapore.
- Tham, A., Ogulin, R., Selen, W. and Sharma, B. (2015). From Tourism Supply Chains to Tourism Value Ecology. *Journal of New Business Ideas & Trends*. 13 (1): 47-65.
- The Luxury Travel Expert. (2019a). Departing to Mnemba Island. Online. Available: <https://theluxurytravelexpert.com/2018/02/14/-review-mnemba-island> [Accessed April 9, 2021].
- The Luxury Travel Expert. (2019b). Review: &Beyond Mnemba Island (Zanzibar, Tanzania). Online. Available: <https://theluxurytravelexpert.com/2018/02/14/-review-mnembaisland> [Accessed April 9, 2021].
- The World Bank. (2019). Preferential Procurement Policy Framework Act. Online Available: <https://ppp.worldbank.org/publicprivatpartnership/library/preferential-procurement-policy-framework-act-2000-preferential-procuremenregulations> [Accessed November 20, 2021].
- Thomas, F. (2014). Addressing the Measurement of Tourism in Terms of Poverty Reduction: Tourism Value Chain Analysis in Lao PDR and Mali. *International Journal of Tourism Research*. 10(16): 368-376.

- Thomas-Francois, K., Von Massow, M. and Joppe, M. (2017). Strengthen farmers-hotel supply chain Relationships: A service management approach. *Tourism Planning & Development*. 14(2): 198-219.
- Tippayawong, K.Y., Ramingwong, S., Kamkorkaeo, C. and Jangkrajarn, V. (2015). Risk in Chiang Mai tourism supply chain. *International journal of Applied Engineering Research*. 10(14):33958-33962
- Touboulic, A., Chicksand, J. and Walker, H. (2014). Managing Imbalanced Supply Chain Relationships for Sustainability: A Power Perspective. *Journal of the Decision Scientist's Institutes*. 45(4): 577-619.
- Touboulic, A. and Walker, H. (2015). Theories in sustainable supply chain management: a structured literature review. *International Journal of Physical Distribution & Logistics Management*. 45(1/2): 16-42.
- Tsalis, T.A., Malamateniou, K.E., Koulouriotis, D. and Nikolaou, I.E. (2020). New challenges for corporate sustainability reporting: United Nations' 2030 Agenda for sustainable development and the sustainable development goals. *Corporate Social Responsibility and Environmental Management*. 27(4): 617-1629.
- Tseng, M.L., Islam, M.S., Karia, N., Fauzi, F.A. and Afrin, S. (2019). A literature review on green supply chain management: Trends and future challenges. *Resources, Conservation and Recycling*. 141(1): 145-162.
- Tumpa, T.J., Ali, S.M., Rahman, M.H., Paul, S.K., Chowdhury, P. and Khan, S.A.R. (2019). Barriers to green supply chain management: An emerging economy context. *Journal of Cleaner Production*. 236(11): 1-12.
- Vahidi, F., Torabi, S.A. and Ramezankhani, M.J. (2018). Sustainable supplier selection and order allocation under operational and disruption risks. *Journal of Cleaner Production*. 174(2018): 1351-1365.

- Van den Berg, U., Labuschagne, J.P. and Van den Berg, H. (2013). The effects of greening the supplier and innovation on environmental performance and competitive advantage. *Journal of Transport and Supply Chain Management*. 7(1): 1-7.
- Van den Berg, H. and Mearns, K. (2021). An exploration of guesthouse fresh produce purchasing behaviour and supply chains in Johannesburg. *Journal of Transport and Supply Chain Management*. 15(1): 1-8.
- Van der Schoor, T. and Scholtens, B. (2015). Power to the people: Local community initiatives and the transition to sustainable energy. *Renewable and sustainable energy reviews*. 43 (2015): 666-675.
- Van der Vost, G.A.J., Tromp, S. and Van der Zee, D. (2009). Simulation modelling for food supply chain re-design; integrated decision making on product quality, sustainability and logistics. *International Journal of Production Research*. 47(23):6611-6631.
- Van der Willik, E.M., Meuleman, Y., Prantl, K., Van Rijn, G., Bos, W.J.W., Van Ittersum, F.J., Bart, H.A., Hemmelder, M.H. and Dekker, F.W. (2019). Patient-reported outcome measures: selection of a valid questionnaire for routine symptom assessment in patients with advanced chronic kidney disease—a four-phase mixed methods study. *BMC nephrology*. 20(1): 1-11.
- Varzandeh, J., Farahbod, K. and Zhu, J. (2014). An empirical investigation of supply chain sustainability and risk management. *Journal of Business & behavioural sciences*. 26(2): 119-126.
- Wang, W. (2012). *Supply chain management systems benefits: the expectation-confirmation theory perspective*. PhD thesis, Queensland University of Technology, Brisbane.

- Wang, M.M. and Wang, J.J. (2019). Understanding solvers' continuance intention in crowdsourcing contest platform: an extension of expectation-confirmation model. *Journal of theoretical and applied electronic commerce research*. 14(3): 17-33.
- Wang, X., Wong, Y.D., Teo, C.C., Yuen, K.F. and Li, K.X. (2019). Decomposing service conveniences in self-collection: An integrated application of the SERVCON and Kano models. *International Journal of Physical Distribution & Logistics Management*. 49(4): 356-375.
- Wang, Y., Zhang, D., Liu, Q., Shen, F. and Lee, L.H. (2016). Towards enhancing the last-mile delivery: An effective crowd-tasking model with scalable solutions. *Transport Research Part E*. 93(1): 279-293.
- Warr, D., Cox, S., Guillemin, M. and Waycott, J. (2016). *Ethics and Visual Research Methods Theory, Methodology, and Practice*. Springer Nature, New York.
- Weerawardhana, P.L., Meegoda, M.K.D.L. and Goonewardena, S.E. (2022). Modified Delphi in adapting a tool to assess the level of knowledge and practice on adult enteral nutrition therapy among nurses. *Asian Journal of Medical Sciences*. 13(5): 36-44.
- William, N. (2018). *Research Methods: the basics*. Routledge, Oxon.
- Winter, S. and Lasch, R. (2016). Environmental and social criteria in supplier evaluation—Lessons from the fashion and apparel industry. *Journal of Cleaner Production*. 139(7): 175-190.
- World Data Atlas. (2022). Online. United Republic of Tanzania - Contribution of travel and tourism to GDP. Available: <https://knoema.com/atlas/United-Republic-of-Tanzania/topics/Tourism/Travel-and-Tourism-Total-Contribution-to-GDP/Contribution-of-travel-and-tourism-to-GDP-LCU> [Accessed February 14, 2022].

- World Travel & Tourism Council (WTTC). (2012). Economic Impact Reports. Online. Available: <https://wttc.org/Research/Economic-Impact> [Accessed November 10, 2021].
- Wowak, K.D., Craighead, C.W., Ketchen, D.J. and Hult, G.T. (2013). Supply chain knowledge and performance: A meta-analysis. *Decision sciences*. 44(5): 843-875.
- Yagc, K. and Akdag, G. (2014). The effects of supply chain management applications on the performances of accommodation establishment operating in the tourism industry. *Tourism*. 8(2):195-408.
- Yakovleva, N., Sarkis, J. and Sloan, T. (2012). Sustainable benchmarking of supply chains: The case of the food industry. *International journal of production research*. 50(5): 1297-1317.
- Yanes, A., Zielinski, S., Diaz Cano, M. and Kim, S.I. (2019). Community-based tourism in developing countries: A framework for policy evaluation. *Sustainability*. 11(9): 2506-2529.
- Yang, C., Lin, R., Kruimiede, D., Stickel, E. and Sheu, C. (2013). Efficacy of purchasing activities and strategic involvement: an international comparison. *International Journal of Operations & Production Management*. 33(1): 49-68.
- Yin, R.K. (2014). *Case Study Research. Design and Methods (Fifth Edition)*. SAGE Publications, Thousand Oaks, California.
- Younis, H., Sundarakani, B. and Vel, P. (2016). The impact of implementing green supply chain management practices on corporate performance. *Competitiveness Review*. 26(3): 216-245.
- Your Matter. (2022). What is Globalization? Online

Available: <https://youmatter.world/en/definiti-on/definitionsglobalizationdefiniti-on-benefits-effects-examples/> [Accessed February 15, 2022].

Zailani, S., Iranmanesh, M., Yusof, N. and Ansari, R. (2014). Effects of service supply chain practices on the profitability of tourism firms. *Anatolia: An international journal of tourism & hospitality research*. 26(4): 612-623.

Zhang, X., Song, H. and Huang, G.Q. (2014). Progress in tourism management: Tourism supply chain management: A new research agenda. *Tourism management*. 30(3): 345-358.

Zhang, W.Q. and Xi, Z.L. (2021). Application of Delphi method in screening of indexes for measuring soil pollution value evaluation. *Environmental Science and Pollution Research*. 28(2021): 6561-6571.

Zhao, R., Liu, Y., Zhang, N. and Huang, T. (2017). An optimization model for green supply chain management by using a big data analytic approach. *Journal of Cleaner Production*. 142(2): 1085-1097.

Zheng, S. and Fang, F. (2014). Development of a Model for a Cluster-based Virtual Tourism Supply Chain. *Tourism Tribune*. 29(2): 46-54.

Zheng, Q., Leromonachou, P., Fan, T. and Zhou, L. (2017). Supply chain contracting coordination for fresh products with fresh-keeping effort. *Industrial Management & Data Systems*. 117(3): 538-559.

Zou, T., Huang, S.S. and Ding, P. (2014). Towards A Community-driven Development Model of Rural Tourism: the Chinese Experience. *International Journal of Tourism Research*. 16(2): 261-271.

Personal Interaction

Beumer, R., 19 June, 2019, 17 October, 2020. &Beyond, Lodge Support & Service Director, Johannesburg.

Bell, K.R. Personal Communication, 14 October 2021. Senior Transport Specialist. *Standard Bank, 30 Baker Street.*

Brenner, B., 6 July, 2019, 17 October, 2020. &Beyond, Logistics Manager, Johannesburg.

Davids, N., 4 February, 2019, 12 June, 2020, October 16, November 29, 2021. &Beyond, Procurement Manager, Johannesburg.

De Villiers, Y., 14 July, 2019, 18 February, 2020, 10 October, 2021. &Beyond, Lodge Manager, Mnemba Island, Zanzibar, Tanzania.

De Vos, S., 14 July, 2019. &Beyond, Operational Manager, Tanzania, Kenia & Zanzibar.

Jardine, C., 12 February, 2020, 19 October, 2021. &Beyond, General Manager, Phinda Forest, Vlei and Homestead Lodges.

Malcommes, K., 4 February, 2019. &Beyond, Lodge Manager, Tanzania. Johannesburg.

Pretorius, K., 4 August, 2019. &Beyond, Procurement Manager, Johannesburg.

Strautmann, K., 8 March, 2020. &Beyond, Lodge Manager, Tanzania.



CAES GENERAL RESEARCH ETHICS REVIEW COMMITTEE
National Health Research Ethics Council Registration no: REC-170616-051

Date: 10/03/2017

Ref #: **2017/CAES/057**
Name of applicant: **Mr H Van den Berg**
Student #: **57297940**

Dear Mr Van den Berg,

Decision: Ethics Approval

Proposal: The inclusion of local communities into the last mile logistics distribution systems of luxury wildlife tourism destinations

Supervisor: Prof K Mearns

Qualification: Postgraduate degree

Thank you for the application for research ethics clearance by the CAES Research Ethics Review Committee for the above mentioned research. Approval is granted for the project, *subject to submission of the relevant permission letters.*

Please note that the approval is valid for a one year period only. After one year the researcher is required to submit a progress report, upon which the ethics clearance may be renewed for another year.

Due date for progress report: 31 March 2018

Please note the points below for further action:

1. Permission letters from the local community leaders, as well as those tourism institutions that are not managed by &Beyond are outstanding and must be submitted before data gathering from these target groups may commence.
2. Unisa has a standard consent form that must be used to obtain consent from participants. The researcher may not use any other consent form, and is requested to submit the corrected draft consent form to the Committee for record purposes.



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

The application was reviewed in compliance with the Unisa Policy on Research Ethics by the CAES Research Ethics Review Committee on 10 March 2017.

The proposed research may now commence with the proviso that:

- 1) The researcher/s will ensure that the research project adheres to the values and principles expressed in the UNISA Policy on Research Ethics.*
- 2) Any adverse circumstance arising in the undertaking of the research project that is relevant to the ethicality of the study, as well as changes in the methodology, should be communicated in writing to the CAES Research Ethics Review Committee. An amended application could be requested if there are substantial changes from the existing proposal, especially if those changes affect any of the study-related risks for the research participants.*
- 3) 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.*

Note:

The reference number [top right corner of this communiqué] should be clearly indicated on all forms of communication [e.g. Webmail, E-mail messages, letters] with the intended research participants, as well as with the CAES RERC.

Kind regards,



Signature
CAES RERC Chair: Prof EL Kempen



Signature
CAES Executive Dean: Prof MJ Linington

Approval template 2014

University of South Africa
Pretter 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 B



Dear Kristine

My name is Hugo van den Berg, I am busy with my PhD at UNISA from the Department of Environmental Sciences. I am researching the possibility of including fresh produce supplied by local communities into the supply chains of luxury wildlife tourism destinations. The research method is the Delphi Technique and the research will be conducted through three (3) rounds.

Thank you for agreeing to assist me with my research in completing the questionnaire for round 1 below.

Yours sincerely

Mr H van den Berg



University of South Africa
Pretorius 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

Name of the lodge: [REDACTED]

Name of contact person at the lodge: Kristine Moodie

Title: Executive Chef

Email address: [REDACTED]

Section A:	Demographics
-------------------	---------------------

Please indicate with **X** in the box that corresponds to your answer.

1. When a booking (BG) is made, it is primarily for how many guests?

BG 1	1 person	1
BG 2	2 people	2
BG 3	3 people	3
BG 4	4 people	4
BG 5	5 people	5
BG 6	6 people	6
BG 7	More than 6 people	x

2. On average, how many guests would be staying at the lodge per month (PM)?

PM1	Between 1 and 20 guests	1
PM2	Between 20 and 30 guests	2
PM3	Between 30 and 40 guests	3
PM4	More than 40 guests	x

3. What is the average length of stay (nights), a guest would be staying (NS) in lodge?

NS1	Only 1 night	1
NS2	2 nights	x
NS3	3 nights	3
NS4	4 nights	4
NS5	5 nights	5
NS6	6 nights	6
NS7	7 nights	7
NS8	Longer than 7 nights	8



4. Which month or months is the peak season (PS) at the lodge?

PS1 Jan	PS2 Feb	PS3 March	PS4 April x	PS5 May	PS6 June
PS7 July	PS8 Aug x	PS9 Sept x	PS10 Oct x	PS11 Nov x	PS12 Dec x

Section B: Buying of fresh produce

5. From which retailer or greengrocer or supplier do you primarily buy (PB) the fresh produce?

PB1 Checkers	PB2 Game	PB3 Food Lovers Market	PB4 Pick and Pay
PB5 Spar	PB6 Woolworths	PB7 Local greengrocer	PB8 Other x

6. How often do you buy fresh (BF) produce from your primary retailer/greengrocer or supplier?

BF1	Daily	1
BF2	Once a week	x
BF3	Few times a week	3

Section C: Fresh produce factors

Please indicate the extent of importance with each of the statements listed below with an X over the number that corresponds to your answer.

7. When buying fresh produce from a retailer/greengrocer the following factors are applicable or not applicable

Fresh Produce Expectancy (PE)		Extremely important	Fairly important	Important	Neither important or Unimportant	Unimportant
PE1	Availability	x	2	3	4	5
PE2	Freshness	x	2	3	4	5
PE3	Price	x	2	3	4	5



PE4	Quality	x	2	3	4	5
PE5	Quantity	x	2	3	4	5
PE6	Variety	x	2	3	4	5

Section D: Fresh produce suppliers

Please indicate the extent to which you agree or disagree with each of the statements listed below with an X over the number that corresponds to your answer.

8. When buying fresh produce from a specific retailer/greengrocer the following factors is applicable or not applicable

<i>Retail Trustworthiness (RT)</i>		Strongly agree	Agree	Neither agree or disagree	Disagree	Strongly disagree
RT1	Buying fresh produce will only be bought from one specific retailer/greengrocer	1	2	3	x	5
RT2	The <i>quality/availability/variety</i> etc. of fresh produce in the specific retailer/greengrocer is better than any other retailer/greengrocer	x	2	3	4	5
RT3	When specific fresh produce is not available from the specific retailer/greengrocer you will go to another retailer/greengrocer	1	x	3	4	5
RT4	When specific fresh produce is not available from the specific retailer/greengrocer you will return the following day to buy the fresh produce	1	x	3	4	5
RT5	Travel distance to a specific retailer/greengrocer in not a concern	1	2	3	x	5

Thank you for your time and participation in completing the questionnaire. Your feedback is much appreciated!



APPENDIX C



I

Dear Mr Bruwer

My name is Hugo van den Berg, I am busy with my PhD at UNISA from the Department of Environmental Sciences. I am researching the possibility of including fresh produce supplied by local communities into the supply chains of luxury wildlife tourism destinations. The research method is the Delphi Technique and the research will be conducted through three (3) rounds.

Thank you for agreeing to assist me with my research in completing the questionnaire for round 1 below.

Yours sincerely

Mr H van den Berg



University of South Africa
Pretter 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

Name of the distribution company: [REDACTED]

Name of contact person at the distribution company: Dirk Bruwer

Title: National Contract Logistics Manager

Email address: [REDACTED]

Section A:	Loading Requirements
-------------------	-----------------------------

When your company is picking up a load for the first time, what are the critical factors that must determine/established before loading?

Please indicate the extent of importance with each of the statements listed below with an X over the number that corresponds to your answer.

1. When loading for the first time the following factors are applicable or not applicable

Loading Requirements (LR)		Extremely Important	Fairly Important	Important	Neither Important nor Unimportant	Unimportant
LR1	The availability of people to assist with the loading	X	2	3	4	5
LR2	The availability of loading equipment (Forklifts etc.) to load the product onto the trailer	X	2	3	4	5
LR3	The time available for loading, only during normal business hours, only after hours or both	1	X	3	4	5
LR4	The availability of a weighbridge on the premises to calculate the empty weight and loaded weight	1	X	3	4	5
LR5	When there is a chance of rain, or it's raining will loading be possible?	X	2	3	4	5
LR6	The type of ground cover in the loading area, ashes, cement surface, paving, tarmac or natural ground	1	2	X	4	5
LR7	The biggest size of truck and trailer the company can accommodate must be given prior to loading	X	2	3	4	5



LR8	Proof of delivery (POD) documentation must be given to the driver	X				
-----	---	---	--	--	--	--

Section B: Product Requirements
--

Please indicate the extent of importance with each of the statements listed below with an **X** over the number that corresponds to your answer.

2. When loading the product the following factors are applicable or not applicable

Product Requirements (PR)		Extremely important	Fairly important	Important	Neither important nor Unimportant	Unimportant
PR1	The different products are packed in a loading gage prior to loading	1	X	3	4	5
PR2	The product/s must be palletized so the load can be checked against the POD	X	2	3	4	5
PR3	Once the product is packed onto pallet's it must be properly covered	X	2	3	4	5
PR4	Is it important to know the total weight relevant to the load capacity of the vehicle	X	2	3	4	5

Thank you for your time and participation in completing the questionnaire. Your feedback is much appreciated!



APPENDIX D



Round 2	FP6
Questionnaire number	

Name of the lodge: [REDACTED]

Name of contact person at the lodge: Rodney Steyn

After you have looked at the pictures of actual fresh produce farms in local communities, please answer the questions below regarding fresh produce produced within a local community.

Section D: Fresh produce supplied by Local Community

Please indicate the extent to which you agree or disagree with each of the statements listed below with an **X** over the number that corresponds with your answer.

Performance Expectancy (PE)		Strongly agree	Agree	Neither agree or disagree	Disagree	Strongly disagree
PE1	Using fresh produce from the local community farmers is a social responsibility for a lodge	1	X	3	4	5
PE2	The same fresh produce that is available at the general retailer should be available from the local community farmers	1	X	3	4	5
PE3	Ordering and collecting/delivery of fresh produce is/would be slower when sourced from a retail company	1	2	3	X	5
PE4	Collecting fresh produce from the local community farmers is/would be more costly than buying from a retailer	1	X	3	4	5
PE5	Collecting fresh produce from local community farmers is/would be more dangerous than collecting from a retailer	1	2	3	X	5
PE6	When paying the local community farmers the lodge expects/would expect some sort of invoice for the fresh produce	1	X	3	4	5
PE7	The lodge <i>inform/will</i> inform their guests that they are consuming fresh produce supplied by the local community farmers	X	2	3	4	5



University of South Africa
 Pretorius 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
 University of South Africa
 Pretorius 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

PE8	The lodge <i>would not</i> inform their guests that they are consuming fresh produce supplied by the local community farmers	1	2	3	4	X
PE9	The lodge would expect the local community farmers to be able to supply the required amount of fresh produce which is required	X	2	3	4	5
<i>Distribution Expectancy (DE)</i>		Strongly agree	Agree	Neither agree or disagree	Disagree	Strongly disagree
DE1	The lodge prefer/would prefer a central marketplace where fresh produce from the local community farmers can be inspected and bought	1	2	X	4	5
DE2	The lodge prefer/would prefer to collect the fresh produce from the local community farmers	1	2	3	X	5
DE3	The lodge prefer/would prefer that the local community farmers deliver the fresh produce to the lodge	X	2	3	4	5
<i>Quality Expectancy (QE)</i>		Strongly agree	Agree	Neither agree or disagree	Disagree	Strongly disagree
Fresh produce quality relates to colour, flavour/taste and aroma, texture, nutritional value, appearance, storage life, presence/absence of defects/disease, degree of excellence, high standard, high value						
QE1	Fresh produce from local community farmers has/will have a long storage life	X	2	3	4	5
QE2	Fresh produce from local community farmers is/will be free of defects	X	2	3	4	5
QE3	Fresh produce from local community farmers has/will have excellent taste/flavour	X	2	3	4	5
QE4	Fresh produce from local community farmers has/will have excellent nutritional value	X	2	3	4	5
QE5	Fresh produce from local community farmers has/will have a high-quality appearance	X	2	3	4	5
QE6	Fresh produce from local community farmers is/will be free of disease	X	2	3	4	5



Source: Developed by the author 2020

Round 2 Questionnaire number	T7.2
---------------------------------	------

Name of the distribution company: XXXXXXXXXX

Name of contact person at the distribution company: Eurico Gonçalves

After you have looked at the pictures of actual fresh produce farms in local communities, please answer the questions below regarding fresh produce produced within a local community.

Section C: Loading Fresh produce in a Local Community

Please indicate the extent to which you agree or disagree with each of the statements listed below with an X over the number that corresponds with your answer.

<i>Load Planning Expectancy (LPE)</i>		Strongly agree	Agree	Neither agree or disagree	Disagree	Strongly disagree
PLE1	To include fresh produce from the local community farmers into the load for a lodge is considered a social responsibility for the company	X	2	3	4	5
LPE2	The inclusion of fresh produce onto existing loads could be problematic due to factors such as geographical location (on route or not), part loads and insufficient loading volume.	X	2	3	4	5
LPE3	Information (quantity, weight, size, type of fresh produce etc.) must be given to company prior to the loading of the fresh produce in a local community	X	2	3	4	5
LPE4	The local community farmer must be able to supply documentation (Proof of delivery, Invoice etc.) to the driver	X	2	3	4	5
LPE5	To locate a local community farmer might be problematic within a local community (the availability of a physical address)	X	2	3	4	5
LPE6	The roads in local communities might be difficult to access with a truck and trailer	X	2	3	4	5
LPE7	To enter and exit property of the local community farmer with a truck and trailer might be challenging	X	2	3	4	5



LPE8	The safety of the driver and the truck and is very important when loading fresh produce in a the local community	X	2	3	4	5
<i>Loading Requirements (LR)</i>		Strongly agree	Agree	Neither agree or disagree	Disagree	Strongly disagree
LR1	A loading time must be agreed upon with the local community farmer prior to loading	X	2	3	4	5
LR2	The fresh produce must be sorted by the local community farmers prior to loading	X	2	3	4	5
LR3	The weight of the fresh produce must be calculated prior to loading	X	2	3	4	5
LR4	The fresh produce must be loaded onto pallets after it has been checked by the farmer and the driver	X	2	3	4	5
LR5	The fresh produce must be loaded into a suitable/appropriate bags	X	2	3	4	5
LR6	The local community farmer must have people available to assist with the loading	X	2	3	4	5
LR7	The local community farmer must have loading equipment available to assist with the loading	X	2	3	4	5

Thank you for your time and participation in completing the questionnaire. Your feedback is much appreciated!



APPENDIX F



Round 3 Questionnaire number	T11.3
---------------------------------	-------

Name of the distribution company: [REDACTED]

Name of contact person at the distribution company: Daphne Mayer

After you have looked at the pictures of actual fresh produce farms in local communities, please give a brief explanation regarding the positives and/or negatives or concerns regarding the inclusion of fresh produce from farms in local communities into existing loads for luxury wildlife tourism destinations.

Fresh produce is considered problematic to transport, as things like the expiry date, weather (heat in specific), distance, loading and offloading must be considered prior to loading. The conditions at the loading point (whether the roads permit large trucks) must also be considered. I would suggest that this produce gets transported in a temperature controlled environment in order to prohibit waste of the produce on route. Please note that Imvusa Transport does not specialize in this field and this is just our opinion on transporting fresh foods items.

Finally, please indicate with an X in the statements listed below, the statement that corresponds with your opinion

<i>It can be worthwhile to include fresh produce from farms in local communities into existing loads for luxury wildlife tourism destinations</i>	x
<i>It cannot be worthwhile to include fresh produce from farms in local communities into existing loads for luxury wildlife tourism destinations</i>	

Thank you for your time and participation in completing the questionnaire. Your feedback is much appreciated!



University of South Africa
 Pretter 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

Source: Developed by the author 2020

APPENDIX G



Round 3 Questionnaire number	FP4.3
---------------------------------	-------

Name of the lodge: [REDACTED]

Name of contact person at the lodge: Jaco Hough

After you have looked at the pictures of actual fresh produce farms in local communities, please give a brief explain regarding the positives and/or negatives or concerns when buying fresh produce for the lodge from farmers in local communities.

Positives: Supporting local is very Important to Kwandwe, we like to have a story about our food regarding freshness, sourcing methods, print and impact, upliftment and support

More organic, healthy and feel good

Lower carbon footprint, supporting the small scale as opposed to the big industry

Negatives: Constant and Efficient supply of stock

Quality of stock, delivery/transport issues

Finally, please indicate with an X in the statements listed below, the statement that corresponds with your opinion

<i>It can be worthwhile to include fresh produce from farms in local communities into existing loads for luxury wildlife tourism destinations</i>	x
<i>It cannot be worthwhile to include fresh produce from farms in local communities into existing loads for luxury wildlife tourism destinations</i>	

Thank you for your time and participation in completing the questionnaire. Your feedback is much appreciated!



University of South Africa
 Peller 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

Source: Developed by the author 2020

APPENDIX H



VERANDA MENUS

DAY 1

Soup

Dukkah Spiced
Pumpkin Soup &
Harissa Yoghurt

Starter

Cheese Croquettes
Mustard Dressing,
Pickled Cucumber &
Rye Wafer

Main Course

Roasted Leg of Lamb
Mint Pesto, Roasted
Ratatouille Vegetables,
Pea Puree, Crushed
Potatoes & a Port Jus

Slow Roasted Duck
Sweet Potato Spring
roll, Green Beans,
Baby Carrots & a
Bigerade Sauce

Roasted Root
Vegetables

Potato Rosti,
Parmesan, Slow
Roasted Tomato Sauce
& Toasted Sunflower
Seeds

Dessert

Baked Chocolate Tart
Berries & Berry Sorbet

Cheese

Cheese Board of Local
Cheeses

DAY 2

Soup

Pea & Potato Soup

Starter

Warm Smoked Trout

Remoulade, Semi –
Dried Tomatoes,
Pickled Cucumber &
Fennel Seed Crackers

Main Course

Grilled Ostrich Fillet
Green Peppercorn
Crumble, Roasted Red

Cabbage, Broccoli,
Fondant Potato & a
Mustard Seed Jus

Roasted Chicken

Gremolata, Leeks,
Baby Carrots &
Lyonnais Potatoes &
Soubise

Cumin Roasted
Cauliflower

Toasted Pumpkin
Seeds, Curried Carrot
Puree, Mint Yoghurt &
Braised Lentils &
Brown Rice

Dessert

Crème Brulee,
Honeycomb & Coffee
Ice Cream

Cheese

Cheese Board of Local
Cheeses

DAY 3

Soup

Roasted Tomato &
Basil Soup

Starter

Veggie Garden

Beetroot Hummus,
Confit Tomato,

Fermented Cabbage,
Labne & Seed Cracker

Main Course

Beef Fillet

Butternut Puree,
Truffled Peas,
Mushroom Ragout,
Feta Crushed Potato &
an Olive Jus

Farmed Kob

Mustard Veloute`,
Tomato Dressing,
Lyonnais Potatoes &
Roasted Vegetables

Risotto

Asparagus, Leek,
Mushroom, Toasted
Almonds, Pesto &
Parmesan

Dessert

Deconstructed
Pineapple Cake &
Homemade Ice Cream

Cheese

Cheese Board of Local
Cheeses

DAY 4

Soup

Butternut, Cumin &
Apple Soup

Starter

Basil & Mozzarella
Arrancini

Parmesan Crisps, Corn
& Slow Roast Tomato
Sauce

Main Course

Beef Fillet

Chargrilled Onion, BBQ
Carrot, Roasted Sweet
Potato & Bourbon Jus

Slow Roasted Pork
Belly

Crackling, Curry Potato
Spring Roll, Corn,
Green Beans & an
Anise Sauce

Pumpkin & Chickpea
Tagine

Dried Fruit Chutney,
Polenta Chips & Carrot
Salad

Dessert

Campari Panna Cotta

Lemon Sorbet, Citrus
Shortbread &
Chocolate

Cheese

Cheese Board of Local
Cheeses

DAY 5

Starter

Lentil, Vegetable &
Parmesan Soup

Boma Salad Selection

Main Course

Beef Boerewors

Lamb Curry

Sambals & Raita

Chermoula Marinated
Chicken

Grilled Impala Loin

Tomato Chutney

Whole Roasted
Butternut

Zulu Cabbage

Spiced Vegetable
Tagine

Samp & Beans

Basmati Rice

Roasted Sweet
Potato

Dessert

Malva Pudding
Custard, Peach
Compote & Brandy
Snap

Cheese Board

DAY 6**Starter**

Mushroom Soup &
Sundried Tomato Pesto

Boma Salad Selection

Main Course

Venison Boerewors

Beef Sirloin

Beef & Red Wine
Reduction

Chimichurri

Grilled Kob

Herbed Lemon Butter

Tandoori Spiced
Chicken Skewers

Raita

Eggplant, Sweet Potato
& Pea Curry

Whole Roasted
Cauliflower

Braised Spinach

Samp & Beans

Roasted New Potatoes

Brown Rice Pilaff

Dessert

Apple Tarte Tatin

Crème Anglaise, Apple
Chip & Vanilla Ice
Cream

Cheese Board

DAY 7**Starter**

Carrot, Ginger &
Coconut Soup

Boma Salad Selection

Main Course

Butter Chicken Curry

Sambals

Dukkha Rubbed Kudu
Fillet

Roasted Leg of Lamb

Mint Pesto

Lamb Jus

Ethiopian Style Braised
Lentils

Harissa

Pesto Roasted
Vegetables

Roasted Pumpkin

Pap & Sheba

Jollof Rice

Rosemary & Garlic
Roasted Potato
Wedges

Dessert

Chocolate Brownie

Chocolate Ganache,
Tuille, Berry Ice Cream

Source: Courtesy of Forest Lodge in Phinda Private Game Reserve


APPENDIX I

&Beyond Order

Lodge Name:		Klein's Camp		Order Placed By:		Andrea			
Lodge Purchase Order Number:	27495	Time: TBC		Order Date:		04/03/2021			
Order Sheet Valid:				Collection Date:		07/03/2021			
				Received		Despatched		Received by Lodge	
CATEGORY	SUPPLIER	Item Description	QTY	Qty	Date	Qty	Date	Qty	Date
Guest food	Escape Tz	Garlic - Fresh - Imported - 1 kg	1						
Guest food	Escape Tz	Ginger - Fresh - 1 kg	2						
Guest food	Escape Tz	Arrowroot (Magimbe) - 1 kg	3						
Guest food	Escape Tz	Apples - Green - 1 box x 135 pcs	1						
Guest food	Escape Tz	Green Beans - 1 kg	2						
Guest food	Escape Tz	Potatoes - Irish - 1 kg	15						
Guest food	Escape Tz	Lemon - 1 pc	80						
Guest food	Escape Tz	Lime - 1 pc	60						
Guest food	Escape Tz	Mango - 1 pc	8						

&Beyond Order

Lodge Name:		Mnemba	Order Placed By:		Stacy White
Lodge Purchase Order Number:	12478	Time: TBC	Order Date:		19/01/2021
Order Sheet Valid:			Collection Date:		21/01/2021

























& BEYOND

Received		Despatched		Received by Lodge	
Qty	Date	Qty	Date	Qty	Date

CATEGORY	SUPPLIER	Item Description	QTY
DRINKS	ANDBEYOND TANZANIA LTD - TSH	SODA WATER-BOTTLE-330ML	48
DRINKS	ANDBEYOND TANZANIA LTD - TSH	TONIC WATER-BOTTLE-330ML	48
DRINKS	ANDBEYOND TANZANIA LTD - TSH	KANONKOP ESTATE PINOTAGE 750ML	6
GUEST_FOOD	MASOUD MAULID HAMAD - DRY GOODS	COCONUT MILK-TIN-400ML	15

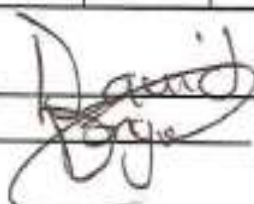
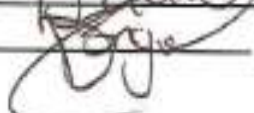
GUEST_FOOD	MASOUD MAULID HAMAD - DRY GOODS	SAFA MILK-1L	24
GUEST_FOOD	MASOUD MAULID HAMAD - DRY GOODS	FULL CREAM MILK PER L	24
GUEST_FOOD	MASOUD MAULID HAMAD - DRY GOODS	PASTA-PENNE-500G	2
GUEST_FOOD	MASOUD MAULID HAMAD - DRY GOODS	SUNFLOWER OIL-5 LITRE	2
GUEST_FOOD	MASOUD MAULID HAMAD - DRY GOODS	CORNFLOUR-400G	2
GUEST_FOOD	MASOUD MAULID HAMAD - DRY GOODS	WHIPPING CREAM-LITRES	15
GUEST_FOOD	MASOUD MAULID HAMAD - DRY GOODS	SALT-1 KG	2
GUEST_FOOD	MOHD MKUBWA SULEIMANI	ORANGES-SINGLE	100

ZANZIBAR TIDE TABLE APRIL 2020

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
<p>FISH-O-METER</p> <p>Best fishing days</p> <p>Good fishing days</p> <p>Slow fishing days</p> <p>Solunar Theory</p> <p>Please note that the best fishing periods are for the leisure fisherman and peak fishing times during night time have not been listed.</p> <p>Spring Tide: 09 Apr 2020 @ 16:51 (4.66 m)</p> <p>Lowest Tide: 09 Apr 2020 @ 23:04 (-0.23 m)</p>			 1 1st Q	 2	 3	 4
			SOLAR	SOLAR	SOLAR	SOLAR
			Sunrise 06:25 Sunset 18:28	Sunrise 06:25 Sunset 18:27	Sunrise 06:25 Sunset 18:27	Sunrise 06:25 Sunset 18:26
			LUNAR	LUNAR	LUNAR	LUNAR
			Underfoot 06:20 Moonrise 12:46 Overhead 18:48 Moonset ---:--	Moonset 00:49 Underfoot 07:16 Moonrise 13:41 Overhead 19:44	Moonset 00:46 Underfoot 08:12 Moonrise 14:37 Overhead 20:41	Moonset 01:43 Underfoot 09:09 Moonrise 15:31 Overhead 21:37
TIDE TIMES	TIDE TIMES	TIDE TIMES	TIDE TIMES			
High 08:07 Low 13:59 High 20:41 Low 03:00	Low 03:29 High 09:38 Low 15:24 High 22:34	Low 05:51 High 12:11 Low 18:02 High 00:36	Low 07:20 High 13:33 Low 19:30 High 01:46			
BEST FISHING 12:25 to 13:27	BEST FISHING 13:50 to 14:52	BEST FISHING 01:08 to 02:10	BEST FISHING 02:18 to 03:20			
						
 5	 6	 7	 8 FULL	 9	 10	 11
SOLAR	SOLAR	SOLAR	SOLAR	SOLAR	SOLAR	SOLAR
Sunrise 06:25 Sunset 18:26	Sunrise 06:25 Sunset 18:25	Sunrise 06:25 Sunset 18:25	Sunrise 06:24 Sunset 18:25	Sunrise 06:24 Sunset 18:24	Sunrise 06:24 Sunset 18:24	Sunrise 06:24 Sunset 18:23
LUNAR	LUNAR	LUNAR	LUNAR	LUNAR	LUNAR	LUNAR
Moonset 03:43 Underfoot 10:05 Moonrise 16:25 Overhead 22:32	Moonset 04:41 Underfoot 10:59 Moonrise 17:17 Overhead 23:27	Moonset 05:38 Underfoot 11:54 Moonrise 18:08 Overhead ---:--	Overhead 00:21 Moonset 06:35 Underfoot 12:48 Moonrise 18:59	Overhead 00:17 Moonset 07:32 Underfoot 13:42 Moonrise 19:51	Overhead 01:11 Moonset 08:30 Underfoot 14:38 Moonrise 20:45	Overhead 03:06 Moonset 09:29 Underfoot 15:35 Moonrise 21:40
TIDE TIMES	TIDE TIMES	TIDE TIMES	TIDE TIMES	TIDE TIMES	TIDE TIMES	TIDE TIMES
Low 08:09 High 14:20 Low 20:23 High 02:35	Low 08:49 High 15:00 Low 21:07 High 03:00	High 03:17 Low 09:25 High 15:37 Low 21:47	High 03:56 Low 10:00 High 16:14 Low 22:26	High 04:34 Low 10:35 High 16:51 Low 23:04	High 05:12 Low 11:10 High 17:28 Low 23:42	High 05:49 Low 11:46 High 18:05 Low 00:21
BEST FISHING 03:07 to 04:09	BEST FISHING 15:32 to 16:34	BEST FISHING 15:05 to 16:09	BEST FISHING 15:42 to 16:46	BEST FISHING 15:17 to 16:19	BEST FISHING 15:54 to 16:56	BEST FISHING 16:31 to 17:33
						

Source: <https://www.kwathabeng.co.za/tides/Zanzibar-tides-Apr-2020.html#gsc.tab=0>

APPENDIX L

GM DE HAAS. T/A 777 P O BOX 201 HLUHLUWE 3960 CELL: 084 671 0010 E-MAIL: gerriedehaas747@gmail.com VAT NO: 4860277955				INVOICE INVOICE NO: 191 DATE: 17.07.2019		
PINDA FOREST LODGE STAFF And Beyond South Africa (PTY) LTD P/BAG X6001.Hluhluwe.3960 VAT NO: 4950121253				P/F Staff 001755		
NR	DESCRIPTION	UOM	QTY	AMOUNT	TOTAL	
1	Carrots ✓	kg	10	R 9.00	R 90.00	
2	Cucumbers ✓	each	10	R 17.00	R 170.00	
3	Lettuce Iceberg ✓	head	6	R 14.00	R 84.00	
4	Mushroom ✓	1 box kg	5	R 70.00	R 350.00	
5	Onions ✓	1 bag kg	10	R 9.10	R 91.00	
6	Peppers green ✓	kg	5	R 28.00	R 140.00	
7	Potatoes ✓	2 bag kg	20	R 7.10	R 142.00	
8	Potatoes sweet ✓	kg	5	R 18.00	R 90.00	
9	Tomatoes ✓	2 box kg	10	R 12.20	R 122.00	
10	Apples green ✓	1 box kg	18	R 16.11	R 290.00	
11	Baby tomatoes ✓	packt	10	R 16.00	R 160.00	
					R 1,729.00	
BANK DETAILS: GM DE HAAS T/ A 777 FNB HLUHLUWE ACC NR: 62587634108 VAT NO: 4860277955				Checked by:  Received: 		

Source: Courtesy of Forest Lodge in Phinda Private Game Reserve

APPENDIX M

Item Request

Lodge Name:



**Klein's
Camp**

Lodge Purchase Order No:

27495

Order Sheet Valid:

March-20

Order Placed By:

ANDREA

Order Date:

**22-January-
20**

Collection Date:

Description with Part Number	QTY
working light [Massey Ferguson] model 440	3
Axile oil seal front [Massey Ferguson] model 440- 4wd	4
Cylinder head gasket [generator Olympian gpx 30 / 27 kva Perkins engine	1
radiator mounting [generator Olympian gpx 30 /27 kva	2
Wood glue	3
Sanding disc no 36	10
Sanding Machine	1
wire connector 30 amps set	5
Termite Poison liters	2
Insolation tape rolls	20
Electrical cable 3mm roll	1

Instructions

If you would like an item which is currently not on the order sheet, please use the item request above.

Source: Courtesy of &Beyond Klein's Camp

APPENDIX N



Dear Kundi Haji
& Beyond Mnemba Island

RE: Assisting in collecting data form local communities on my behalf

Due to the Corona virus I am unable to visit Zanzibar and collect data for my studies. I am very grateful that you are willing to assist me with collecting data in the local communities.

Please visit following communities, (1) Kigomani, (2) Matemwe, and (3) Kijambani. These communities are the closes to Mnemba Island Lodge. In these communities, could you please locate a **maximum of 10 households** in each community (**30 households in total**), who are growing fruit and vegetables and ask them if they would be willing to participate in a research project. These can be randomly selected adult residents (above 18 years of age). Basic demographic information is required along with their views and thoughts regarding the ability to produce and supply Mnemba Island Lodge with fresh produce. Please could photographs be taken of the community gardens and produce. Please note that photographs can only be taken with the permission of the relevant interviewee or community member. To protect the anonymity of the community members, these photographs will be used in a manner that facial features are not revealed.

Please could you undertake the following activities at each household when you visit the community:

1. Write down the name of the local community.
2. Write down the owner's initials and surname of the vegetables garden or fruit farm.
3. Ask the following questions:
 - What fruit and vegetables do you grow throughout the year?
 - The fruit and vegetables which are grown, are they only for your family use or do you sell it to other community members as well?
 - Do you sell the fruit and vegetables at a local market or do people from the community come to your vegetable garden to buy?
4. Take five (5) pictures with your cell phone of the fruit and vegetable garden.

You will be payed the following for conducting the above activities:

The amount of 13 500 Tanzanian Shilling per interview, which consists of a fully completed questionnaire and 5 photos of the fruit and vegetable garden. Giving a total of 405 000 Tanzanian Shillings for 30 interviews (10 in each community).

Thank you very much for your assistance.

Friendly regards

Hugo van den Berg



University of South Africa
Pretter 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

Source: Developed by the author 2020

APPENDIX O

Hi Thandiwe

Please fill in this form when you visit people from a local community. You can take a picture of the form and WhatsApp the picture back to me.

NEVER DO NOT throw the form away, please give it back to Clinton when you have filled in the form.

1. Name of the local community: NSIMANE
2. Owner's initials and surname of the vegetables garden: N. MASINDA
3. Does the person own a car/motor cycle (YES or NO)? NO
4. What fruit and vegetables do you grow throughout the year?
MEALIES, SWEET POTATOES, SPRING ONIONS
RED/WHITE ONIONS, SPINACH, CABBAGES,
BETROOTS, LETTUCE, PEPPERS (GREEN + RED)

5. The fruit and vegetables which are grown, are they only for your family use or do you sell it to other community members as well? (Put an ✓ in the box below)

Only for my family	
For my family and people from the community	
Only sell to people from the community	✓

6. Do you sell the fruit and vegetables at a local market or does people from the community come to your vegetable garden to buy it? (Put an ✓ in the box below)

Only sell at a local market	
Only sell from my garden to people from the community	✓
Sell at a local market and from my garden	

7. Take five (5) pictures with your cell phone of the fruit and vegetable garden.

Source: Developed by the author 2020

DECLARATION OF COPY EDITING

This serves to confirm that I have copy edited the thesis with the title of

INCLUSION OF LOCAL COMMUNITY FARMERS IN THE LAST-MILE SUPPLY CHAIN
PROCESSES OF LUXURY WILDLIFE TOURISM DESTINATIONS

by

HUGO VAN DEN BERG
(57297940)

DOCTOR OF PHILOSOPHY

in

ENVIRONMENTAL MANAGEMENT

at

UNISA

Supervisor: Prof K Mearns

Changes were suggested in track changes and comments provided but allowed for the 'student voice' to be maintained; implementation was the responsibility of the student.

The services excluded correcting contextual language, addenda, formatting and checking for plagiarism.

Sincerely



Prof Jane Spowart (Emeritus, UJ)

Date: 25 November 2022

Professional
EDITORS
UK

100% Success
Full-time service
48 hours a day, 7 days a week
November 2022 - March 2023
100% Success
Full-time service
48 hours a day, 7 days a week
www.ediths.com

Turnitin Originality Report

Processed on: 26-Nov-2022 12:26 SAST

ID: 1963514969

Word Count: 59197

Submitted: 1

Turnitin final PhD H van den Berg By Hugo van den Berg

Similarity by Source	
Similarity Index 24%	Internet Sources: 22%
	Publications: 13%
	Student Papers: 15%

3% match (Internet from 23-Oct-2019) http://initourismstudies.com/wp-content/uploads/2018/12/ITSA-2018-Conference-Proceedings10-dec2018final.pdf
1% match () Van den Berg, Hugo. "Risks associated with South African energy pipelines", 2012
< 1% match (Internet from 14-Oct-2022) https://uir.unisa.ac.za/bitstream/handle/10500/29267/thesis_sambo_ta%20%281%29.pdf?isAllowed=y&sequence=1
< 1% match (Internet from 17-Sep-2020) http://uir.unisa.ac.za/bitstream/handle/10500/26663/thesis_queiros_dr.pdf?isAllowed=y&sequence=1
< 1% match (Internet from 22-Nov-2022) https://uir.unisa.ac.za/bitstream/handle/10500/27988/dissertation_malherbe_ar.pdf?isAllowed=y&sequence=1
< 1% match (Internet from 14-Oct-2022) https://uir.unisa.ac.za/bitstream/handle/10500/29049/thesis_vanwyk_i.pdf?isAllowed=y&sequence=1
< 1% match (Internet from 22-Dec-2016) http://uir.unisa.ac.za/bitstream/handle/10500/21726/dissertation_kotane_jm.pdf?isAllowed=y&sequence=1
< 1% match (Internet from 19-Oct-2022) https://uir.unisa.ac.za/bitstream/handle/10500/27994/thesis_nyathi_b.pdf?isAllowed=y&sequence=1
< 1% match (Internet from 27-Oct-2017) http://uir.unisa.ac.za/bitstream/handle/10500/23266/thesis_mamabolo_me.pdf?isAllowed=y&sequence=1
< 1% match (Internet from 22-Nov-2022) https://uir.unisa.ac.za/bitstream/handle/10500/27451/dissertation_mathebula_e.pdf?isAllowed=y&sequence=1

Source: [Turnitin - Originality Report - Turnitin final PhD H van den Berg](#)