

THE ROLE OF CORPORATE SOCIAL RESPONSIBILITY IN SUSTAINABLE  
DEVELOPMENT IN GHANA: A CRITICAL PERSPECTIVE ON ANGLOGOLD  
ASHANTI, GHANA

by

VICTORIA MENSAH NYAMADI

submitted in fulfilment of the requirements for the degree of

DOCTOR OF PHILOSOPHY

in the subject

DEVELOPMENT STUDIES

at the

UNIVERSITY OF SOUTH AFRICA

SUPERVISOR: PROFESSOR LINDA CORNWELL

## ABSTACT

The aim of this research was to identify and assess the extent to which AngloGold Ashanti (AGA) Mining Company has been able to apply its corporate social responsibility (CSR) policies in its operations, in a participatory manner, in contributing to sustainable development in its area of operation. The mixed method approach was used. Cluster sampling under the random sampling and purposive sampling methods were used to select both the respondents and communities affected by mining. Six communities were surveyed from the Obuasi Municipality in the Ashanti region of Ghana. Participatory interviews, questionnaires, focus group discussions and participant observation techniques were used to gather data. The study identified that the CSR initiatives of AGA are evaluated on five main principles, namely commitment to core values, compliance with legal provisions, managerial discretion in taking actions, economic contributions and participatory mechanisms. The study found that, to some extent, the local people have been engaged in the implementation of AGA's CSR activities. 25.2% were involved in project planning and design, and more than 80% were informed before the start of projects. Also, the results reveal that AGA's mining activities have had both positive and negative impacts on the economic well-being of residents within the selected communities. The impact of AGA's mining activities on the environment, especially on water quality, soil quality, sanitation and noise levels, was found to be negative, resulting in major health problems for residents in mining communities. As a contribution to knowledge, the study shows how community members (respondents) perceive AGA's CSR activities as fulfilling just one aspect of CSR (philanthropic dimension) and not necessarily rectifying the effect of their mining activities on the environment (ethical dimension). The study therefore recommends that comprehensive CSR measures principled through the lens of non-philanthropic considerations be developed to reverse the general negative outcomes of mining on communities economically, socially and environmentally, especially regarding the growing unemployment and displacement of communities.

**Key words:** *Corporate social responsibility, sustainable development, mining, development, resource, sustainability, resource curse*

## ISIFINQO

Inhloso yalolu cwaningo kwakuwukuhlonza nokuhlola ukuthi iNkampani yeMayini i-AngloGold Ashanti (AGA) ikwaze kanjani ukusebenzisa izinqubomgomo zayo zegunya lokubambisana kwezenhlalo (GLK) ekusebenzeni kwayo, ngendlela yokubamba iqhaza, ekunikelweni entuthukweni esimeme emkhakheni esebenza kuyo. Kusetshenziswe indlela ehlanganisiwe. Iqoqo lamasampula ngaphansi kwesampula engahleliwe nezindlela zokwenza amasampula ahlosiwe asetshenziselwe ukukhetha bobabili abaphendulayo kanye nemiphakathi ethintekayo ezimayini. Kuhlolwe imiphakathi eyisithupha ivela kuMasipala wase-Obuasi esifundeni i-Ashanti eGhana. Izingxoxo zokubamba iqhaza, iqoqo lemibuzo, izingxoxo zamaqembu okugxilwe kuwo kanye namasu wokubuka ababambiqhaza asetshenziselwe ukuqoqa idatha. Ucwanningo lukhombisa ukuthi izinhlelo ze(GLK) le-AGA zihlolwa ngemigomo engqala emihlanu, okungukuthi ukuzibophezela kumanani ayisisekelo, ukuhambisana nezinhlinzeko zomthetho, ukuqonda ekuthatheni izinyathelo ezithile, iminikelo yezomnotho nezindlela zokubamba iqhaza. Ucwanningo luthole ukuthi, ukuya ezingeni elithile, abantu bendawo babambe iqhaza ekwenzeni imisebenzi ye-AGA's ne GLK. Ama-25.2% abambe iqhaza ekuhleleni nasekuklanyweni kwamaprojekthi, kwathi abangaphezu kuma-80% aziswa ngaphambi kokuqala kwamaprojekthi. Futhi, imiphumela iveza ukuthi imisebenzi yezimayini ye-AGA ibe nemithelela emihle nemibi enhlalweni yezomnotho yabahlali emiphakathini ekhethiwe. Umthelela wemisebenzi yezimayini ye-AGA emvelweni, ikakhulukazi kwizinga lamanzi, ikhwalithi yenhlabathi, ukuthuthwa kwendle namazinga omsindo, kutholakale kukubi, okuholele ezinkingeni ezinkulu zezempilo kubahlali emiphakathini yezimayini. Njengokunikela olwazini, ucwanningo lukhombisa ukuthi amalungu omphakathi (abaphendulayo) bayibona kanjani imisebenzi ye-AGA's CSR njengokufeza isici esisodwa seGLK (ubukhulu bokusiza) hhayi ukuthi kulungiswe umthelela wemisebenzi yabo yezimayini emvelweni (ubukhulu bokuziphatha).Ngakho-ke ucwanningo luncoma ukuthi izinyathelo eziphelele ze-GLK eziqondiswa ngokusebenzisa ukuqondwa kwezinto ezingenkulu ezingezona zokusiza zithuthukiswe ukuguqula imiphumela emibi ejwayelekile yezimayini emiphakathini ngokwezomnotho, kwezenhlalo nangokwezemvelo, ikakhulukazi maqondana nokwanda kwemiphakathi engasebenzi kanye nokufundiswa kwayo.

*Amagama abalulekile: IGunya lokubambisana kwezenhlalo, intuthuko esimeme, intuthuko kuyizimayini, izinsiza, ukusimama, isiqalekiso sezinsizakusebenza*

## SETSOPOLWA

Maikemišetšo a dinyakišišo tše ke go tseba le go sekaseka bogolo bjo ka bjona Khamphani ya Moepo ya AngloGold Ashanti (AGA) e kgonneggo go phethagatša melawana ya ona ya maikarabelo a khamphani setšhabeng (CSR) ka mešomong ya yona, ka mokgwa wa go kgatha tema ga badudi, ka nepo ya go tsenya letsogo go tllhabollo ya go ya go ile ka lefelong leo e šomelago go lona. Mokgwa wo o hlakantšego mekgwa o šomišitšwe ka mo dinyakišišong tše. Go dira sampole sehlopha ka fase ga mekgwa ya go dira sampole ka sewelo le go dira sampole ka maikemišetšo go šomišitšwe go kgetha bobedi baarabi le ditšhaba tšeo di amilwego ke meepo. Go ile gwa dirwa dinyakišišo go metse ye tshela ka Masepaleng wa Obuasi ka seleteng sa Ashanti sa Ghana. Dipoledišano tšeo baarabi ba kgathago tema ka go tšona, lenaneo la dipotšišo tša dinyakišišo, dipoledišano tša dihlopha tšeo di nepišitšwego le mekgwa ya go lekola bakgathatema e šomišitšwe go kgoboketša tshedimošo. Dinyakišišo di utollotše gore maitekelo a CSR a AGA a sekasekwa go melawana ye mehlano ye megolo, e lego boikgafgo maitshwaro a bohlokwa, go obamela ditlhagišo tša melao, sephetho sa ba taolo sa go tšea dikgato, seabe sa ekonomi le mekgwa ya go kgatha tema. Dinyakišišo di utollotše gore, go fihla mo go itšego, go rerišanwe le batho ba tikologo ka go phethagatšeng ga ditiro tša CSR tša AGA. 25.2% ya bona e kgathile tema ka peakanyong le tlhamo ya protšeke, gomme palo ya go feta 80% e tsebišitšwe pele ga ge diprotšeke di ka thoma. Gape, dipoelo di utolla gore mešomo ya meepo ya AGA e bile le bobedi diabe tše botse le tše mpe go seemo sa ekonomi sa badudi ka metseng ye e kgethilwego. Seabe sa mešomo ya meepo ya AGA go tikologo, kudukudu go boleng bja meetse, go boleng bja mobu, go kelelatšhila le go maemo a lešata, go hweditšwe gore e bile ao a sego a loka, gomme se ile sa feletša ka mathata a magolo a tša maphelo go badudi ba ka metseng yeo meepo e lego gona. Bjalo ka seabe go tsebo, dinyakišišo di bontšha ka fao maloko a setšhaba (baarabi) ba bonago mešomo ya CSR ya AGA e lego yeo e phethagatšago fela selo se tee sa CSR (e lego ditiro tša go abela setšhaba) e sego go phošolla seabe sa mešomo ya bona ya meepo go tikologo (e lego ditiro tša maitshwaro). Dinyakišišo ka fao di šišinya gore magato ka kakaretšo a CSR ao a beilwego go se gwa lebelelwa go abela setšhaba a phethagatšwe ka nepo ya go phošolla dipoelo tša kakaretšo tšeo di sego tša loka tša mešomo ya meepo go ditšhaba mabapi le tša ekonomi, tša leago le tikologo, kudukudu mabapi le go tlhokego ya mešomo ye e golago le go tloša ditšhaba mafelong a tšona.

***Mantšu a bohlokwa:*** Maikarabelo a khamphani setšhabeng, tllhabollo ya go ya go ile, meepo, tllhabollo, mothopo, tirišo ya go ya go ile, tirišobošaedi ya methopo

## **DEDICATION**

This thesis is dedicated to my parents, my husband, my children, my siblings and my friends for their unflinching love, care and support throughout my studies.

## DECLARATION

I, Victoria Mensah Nyamadi, do hereby declare that this thesis, “The Role of Corporate Social Responsibility in Sustainable Development in Ghana: A Critical Perspective on AngloGold Ashanti, Ghana”, is my original work towards the award of a Doctor of Philosophy in Development Studies. This dissertation is my research except where external sources have been quoted and have been duly acknowledged. I certify that this dissertation has not been submitted for any other degree to any institution of higher learning either in part or as a whole.

SIGNATURE:

A handwritten signature in black ink, appearing to read 'Victoria Mensah Nyamadi', written over a horizontal line.

DATE:

29<sup>th</sup> February, 2020

(Victoria Mensah Nyamadi)

## **ACKNOWLEDGEMENTS**

I would like to express my profound gratitude to Almighty God for seeing me through this doctoral thesis journey. Indeed, Ebenezer, this is how far the LORD has brought me. I am particularly thankful to my supervisor, Professor Linda Cornwell, for her support, care and guidance. It is her immense scrutiny and criticism that has pushed me to refine this work to its current state. My special thanks go to my husband, Franklin Russell Nyamadi, for his support in managing my home and my research work. To my children, Mawuena, Nana Esi and Ewurabena thank you for understanding me during the many times I was not available to you when you needed me. I am also immensely grateful to my mother, Ekua Tawiah, for her encouragement and her support. My dad and my siblings, Joseph, Maame Efua and Lennin also deserve special mention. To my friends, Nana Yaa Amponsah, Harriet, Tope, Rita, Ethel, Festus, Francis, Ebenezer and all my students, thank you for your support. I would not have completed this research without the unflinching support of the staff of the Sustainability Department of AngloGold Ashanti as well as the staff of Obuasi Municipal Assembly. To those whose names have not been mentioned, I am grateful. God bless every one of you, Amen.

## ABBREVIATIONS

AGA	AngloGold Ashanti
AIDS	Acquired Immunodeficiency Syndrome
CSR	Corporate Social Responsibility
DFID	Department for International Development
EPA	Environmental Protection Agency
EU	European Union
FDI	Foreign Direct Investment
GDP	Gross Domestic Product
GER	Gross Enrolment Rate
GNMC	Ghana National Manganese Corporation
GSS	Ghana Statistical Service
HIV	Human Immunodeficiency Virus
ILO	International Labour Organization
IMF	International Monetary Fund
ISSER	Institute of Statistical Social and Economic Research
LDCs	Less Developed Countries
LEEP	Livelihood Enhancement and Community Empowerment Programme
MDAs	Ministries, Departments and Agencies
MDGs	Millennium Development Goals
MNE	Multinational Enterprise
MPCU	Municipal Planning and Coordinating Unit
NDPC	National Development Planning Commission
NER	Net Enrolment Rate
NGOs	Non-Governmental Organisations



OECD	Organisation for Economic Co-operation and Development
OWG	Open Working Group
PNDC	Provisional National Defence Council
PNDCCL	Provisional National Defence Council Law
SD	Sustainable Development
SDGs	Sustainable Development Goals
SEED	Sustainable Community Empowerment and Economic Development
SFSB	Syarikat Faiza Sendirian Berhad
SGMC	State Gold Mining Corporation
SRI	Socially Responsible Investment
SSM	Small Scale Mining
UNCTAD	United Nations Conference on Trade and Development
UNDP	United Nations Development Programme
UNICEF	United Nations Children's Fund
UNIDO	United Nations Industrial Development Organisation
WHO	World Health Organisation
WTO	World Trade Organisation

## TABLE OF CONTENT

ABSTACT .....	I
ISIFINQO .....	II
SETSOPOA.....	III
DEDICATION.....	IV
DECLARATION .....	V
ACKNOWLEDGEMENTS.....	VI
ABBREVIATIONS .....	VII
TABLE OF CONTENT.....	IX
LIST OF TABLES.....	XV
LIST OF FIGURES .....	XVI
CHAPTER ONE.....	1
INTRODUCTION AND BACKGROUND To THE STUDY .....	1
1.1 Background to the Research Problem.....	1
1.2 Problem Statement.....	3
1.3 Research Objectives .....	4
1.4 Research Questions .....	5
1.5 Scope of the Study.....	6
1.6 Literature Review .....	7
1.7 Research Methodology .....	8
1.8 Relevance of the Study .....	9
1.9 Limitations of the Study.....	9
1.10 Chapter Layout.....	10
CHAPTER TWO .....	11
EXPLORING AND UNDERSTANDING THE NEXUS BETWEEN MINING, CSR AND SUSTAINABLE DEVELOPMENT: PERSPECTIVES FROM THE LITERATURE .....	11
2.0 Introduction .....	11
2.1 Definitions of Corporate Social Responsibility.....	12
2.2 Drivers of CSR.....	13
2.2.1 Government Legislation.....	14
2.2.2 Customers' Expectations of Firms.....	14
2.2.3 Consumer Lobby Groups.....	15
2.2.4 The Extent of Costs Involved.....	15
2.2.5 The Type of Industry.....	15

2.2.6 Potential for a Competitive Advantage by Image .....	15
2.2.7 Corporate Culture and Top Management Values.....	15
2.3 The Role of Government in the Implementation of CSR.....	16
2.4 Criticisms against CSR Promotion and Implementation.....	16
2.5 Theoretical Review.....	17
2.5.1 Theories of Corporate Social Responsibility (CSR) .....	17
2.5.2 Theories of Natural Resource Endowment and Development .....	21
2.5.2.1 The Theory of Social Disruption.....	21
2.5.2.2 Resource Curse Theory .....	22
2.5.2.3 Theories, CSR and Sustainable Development: The Linkages.....	23
2.6 Theoretical Framework of the Study.....	24
2.7 Mining .....	27
2.7.1 Definition of Mining .....	27
2.7.2 Mining and its Development Implications .....	27
2.7.3 Small Scale Mining .....	32
2.7.4 An Overview of Mining and Gender .....	34
2.7.5 Ghana and Mining: Broad Overview .....	35
2.7.5.1 Development of Mining in Ghana.....	36
2.7.5.2 The Structure of Mining in Ghana .....	38
2.7.5.3 Illegal Mining Activities and their Development Outcomes in Ghana .....	40
2.7.5.4 Legal, Institutional and Policy Underpinnings of Mining in Ghana .....	41
2.8 CSR - An Avenue for Mining Companies to Contribute to Sustainable Development .....	46
2.8.1 The Concept and Definition of Corporate Social Responsibility.....	46
2.8.2 Principles of Corporate Social Responsibility .....	49
2.8.3 Approaches to Corporate Social Responsibilities .....	52
2.8.4 Evolution of Corporate Social Responsibility.....	54
2.8.4.1 CSR in Pre-Twentieth Century .....	54
2.8.4.2 CSR in the Twentieth Century .....	55
2.8.4.3 CSR in the Twenty-First Century .....	58
2.8.5 Legal and Regulatory Framework of CSR.....	60
2.8.5.1 International Labour Organisation’s Multinational Enterprise (MNE) Declaration .....	62
2.8.6 The Process of Developing a CSR Policy.....	62
2.9 The Nexus between CSR and Sustainable Development .....	66
2.9.1 CSR and Society .....	66
2.9.2 CSR and the Economy .....	67
2.9.3 CSR and the Environment.....	67

2.10 Sustainable Development in Mining Communities .....	68
2.11 The Concept of Sustainable Development .....	70
2.11.1 The Genesis of Sustainable Development.....	70
2.11.2 Other Theories of Sustainable Development .....	73
2.11.2.1 The People-Centred Approach to Sustainable Development.....	73
2.11.3 The Technocratic View of Sustainable Development.....	75
2.11.4 The Transition from MDGs to SDGs in Perspective .....	76
2.11.5 The Sustainable Development Goals .....	79
2.12 Summary of the Chapter.....	83
<b>CHAPTER THREE .....</b>	<b>85</b>
<b>RESEARCH METHODOLOGY.....</b>	<b>85</b>
3.1 Introduction .....	85
3.2 Research Area .....	85
3.2.1 Location and Size .....	85
3.2.2 Governance and Administrative Structure.....	87
3.2.3 Population and Growth Trends .....	92
3.2.4 Economic and Social Characteristics .....	93
3.2.4.1 Social Services .....	94
3.2.5 Profile of AngloGold Ashanti.....	96
3.3 Research Philosophy .....	97
3.4 Research Design.....	98
3.5 Sampling .....	100
3.6 Data Sources.....	101
3.6.1 Secondary Data .....	102
3.6.2 Primary Data Sources and Collection .....	102
3.7 Data Analysis .....	104
3.8 Ethical Considerations .....	105
3.9 Summary of the Chapter.....	106
<b>CHAPTER FOUR.....</b>	<b>107</b>
<b>AGA’S MINING ACTIVITIES AND IMPACT: ECONOMIC, SOCIAL AND</b>	
<b>ENVIRONMENTAL IMPLICATIONS FOR LOCAL COMMUNITIES .....</b>	<b>107</b>
4.1 Introduction .....	107
4.2 Economic Implications of AGA’s Mining Activities .....	107
4.2.1 Major Sources of Livelihood (Economic Dimension of Sustainable Development).....	107
4.2.2 Respondents’ View of the Overall Impact of Mining on their Economic Condition.....	110

4.2.2.1 Positive Impact of Mining on Economic Activities .....	111
4.2.2.2 Negative Impact of Mining on Economic Activities .....	113
4.3 Social Implications of AGA’s Mining Activities .....	114
4.3.1 Detailed Analysis of the Negative Social Effects Mining Companies have had on Mining Communities .....	116
4.4 Environmental Implications of AGA’s Mining Activities .....	119
4.4.1 Water Quality .....	119
4.4.2 Soil Quality .....	121
4.4.3 Sanitation .....	123
4.4.4 Major Health Problems Faced by Mining Affected Communities .....	124
4.4.5 Noise .....	125
4.5 Summary of the Chapter .....	127
CHAPTER FIVE .....	128
CRITICAL INSIGHTS INTO THE CSR PRINCIPLES, POLICIES AND ACTIVITIES OF AGA .....	128
5.1 Introduction .....	128
5.2 Principles of CSR within the Context of AGA .....	128
5.2.1 Principle 1: AGA’s Commitment to its Values.....	128
5.2.2 Principle 2: Legal Compliance.....	133
5.2.3 Principle 3: Managerial Discretion in Actions taken by AGA.....	135
5.2.4 Principle IV: The Economic Advancement of Affected Individuals .....	136
5.2.5 Principle V: Implementation of Broad Stakeholder Participation Mechanisms .....	136
5.3 Participation of Communities and Institutions in AGA’s CSR Activities .....	138
5.3.1 Participation by Local Communities in CSR Activities .....	138
5.3.2 Participation of the Local People in the Design and Planning of Projects.....	138
5.3.3 Participation by Local Institutions in CSR Activities Design and Planning.....	141
5.3.3.1 The Traditional Setup.....	141
5.3.3.2 The Unit Committees .....	142
5.3.3.3 Assembly Members.....	143
5.3.4 Participation of Institutions and Individual Residents in Project Implementation.....	143
5.3.5 Participation of Local Communities in Project Sustainability .....	145
5.4 CSR Policies and Activities of AGA .....	146
5.5 An Overview of CSR Projects and Activities of AGA in the Obuasi Municipality and others since 1990 .....	147
5.5.1 Water and Sanitation Projects .....	149
5.5.2 Sports and Social Investment .....	149

5.5.3 Transportation .....	149
5.6 Major Comprehensive CSR Programmes of AGA .....	150
5.6.1 The Apprenticeship Training and Skills Development Programme .....	150
5.6.2 Rural Electrification Programme .....	151
5.6.3 National Farmers Day Celebration Programme .....	152
5.6.4 Alternative Livelihood and Local Economic Development Projects .....	153
5.6.4.1 Prago Aquaculture Project .....	153
5.6.4.2 The Obuasi Garment Project .....	153
5.6.4.3 Piggery Project .....	153
5.6.4.4. Malaria Control Programme .....	154
5.6.4.4.1 The Obuasi Integrated Malaria Control Programme .....	154
5.6.4.4.2 AGA Malaria (AGAMal) Control Programme .....	154
5.6.4.5 Community Trust Fund .....	154
5.6.4.5.1 Principles of the Trust Fund .....	155
5.6.4.5.2 Allocation of Community Funds .....	155
5.6.4.5.3 Achievements of the Trust Fund .....	156
5.7 Summary of the Chapter .....	158
CHAPTER SIX .....	160
CRITICAL APPRAISAL OF THE IMPLICATIONS OF AGA’S CSR ACTIVITIES FOR SUSTAINABLE DEVELOPMENT IN MINING AFFECTED COMMUNITIES .....	160
6.1 Introduction .....	160
6.2 Economic Contributions .....	160
6.3 Social Contributions .....	163
6.3.1 Education .....	163
6.3.2 Health .....	165
6.3.3 Water and Sanitation .....	166
6.3.4 Other Social Development Projects .....	171
6.4 Environmental Contributions .....	172
6.5 Summary of the Chapter .....	173
CHAPTER SEVEN .....	175
SUMMARY OF KEY FINDINGS, RECOMMENDATIONS AND CONCLUSION .....	175
7.1 Introduction .....	175
7.2 Key Findings and Implications .....	175
7.2.1 Objective One: Principles of CSR and their Attainability .....	175
7.2.2 Objective Two: CSR Policies of AGA and their Implementation .....	177

7.2.3 Objective Three: Participation in CSR Activities by Residents.....	177
7.2.4 Objective Four: The Impacts of Mining Activities on Local Livelihoods .....	178
7.2.5 Contributions of AGA to Sustainable Development in Mining Affected Communities ...	180
7.3 Recommendations.....	181
7.3.1 Adoption of Comprehensive Sustainability and Feedback Assessments (CSFA) .....	181
7.3.2 AGA’s Provision of Clear-Cut Sustainability Measures in CSR Initiatives.....	181
7.3.3 Transforming the Use of Mining Royalties in a Manner that Enhances Direct Impact on Mining Affected Communities .....	182
7.4 Conclusion .....	184
REFERENCES .....	185
APPENDICES .....	223
Appendix A-Questionnaire .....	226
Appendix B - Interview Guide For Key Informants .....	232
Appendix C- Interview Guide For District Assembly .....	234
Appendix D-Construction and Rehabilitation Projects are undertaken by AGA from 1992 to 2012 .....	238
Appendix E- Health and Sanitation Projects .....	239

## LIST OF TABLES

Table 2.1: Outline of definition and boundaries of CSR .....	55
Table 2.2: Dimensions of CSR .....	59
Table 3.1: Brahabebome-Akaproriso Zonal Council.....	88
Table 3.2: Tutuka-Odumasi Zonal Council .....	89
Table 3.3: Tutuka-Odumasi Zonal Council .....	89
Table 3.4: Obuasi Central Zonal Council .....	90
Table 3.5: Kunka-Anyinam Zonal Council .....	90
Table 3.6: The Municipality’s Projected Population (2013-2017) .....	92
Table 3.7: Selected communities and sample size determination.....	101
Table 3.8: Study objectives, data sources and tools for collection .....	103
Table 4.1: Economic activities of respondents (sources of livelihood).....	109
Table 4.2: The impact of mining on the economic condition of respondents.....	111
Table 4.3: Major source of water for households .....	120
Table 4.4: Proximity of the mining site and towns.....	124
Table 4.5: Major health problems affecting residents of mining communities .....	125
Table 5.1: Rubric Assessment Tool Matrix .....	130
Table 5.2: AGA’s level of attainment in relation to its values .....	131
Table 5.3: Level of Participation by the Local inhabitants in Project Design and Planning .	139
Table 5.4: AGA’s electrification projects in some communities.....	152
Table 5.5: AGA’s provision of electricity poles to some districts in Ghana .....	152
Table 6.1: Educational projects implemented by AGA in selected communities .....	164
Table 6.2: AGA’s water and sanitation projects in mining affected communities.....	168



## LIST OF FIGURES

Figure 2.1: Links Between CSR and Sustainable Development.....	24
Figure 2.2 Theoretical framework of the study .....	26
Figure 2.3: Mining and its development implications .....	31
Figure 2.4: CSR and sustainable development with insights from the literature.....	84
Figure 3.1 Obuasi Municipality in the context of Africa, Ghana and Ashanti Region.....	87
Figure 3.2 Flow process chart for the research .....	105
Figure 4.1 Economic activities of respondents in selected communities .....	110
Figure 4.2 Number of years respondents have lived in their community .....	115
Figure 4.3 Respondents' view of the displacement of some people due to mining activities	116
Figure 4.4 Buildings for relocated households .....	119
Figure 4.5: Nature of buildings for relocated households.....	118
Figure 4.6: Mine related displacements of communities .....	119
Figure 4.7: Mining Activities and Noise Pollution.....	126
Figure 5.1 Local inhabitants' participation in the design and planning of projects.....	139
Figure 5.2 Means of involvement in project implementation by the local people. ....	144
Figure 5.3 Involvement of local people in sustaining CSR projects .....	145
Figure 5.4: Means of contribution to project sustainability.....	146
Figure 5.5 Projects that have been undertaken by AGA from 1990 to 2012.....	148
Figure 5.6: AGA's training centre .....	151
Figure 6.1 Road provided by AGA, Sanso (1).....	162
Figure 6.2 Road provided by AGA, Sanso (2).....	162
Figure 6.3 Pre-School, Nhyiaeso .....	166
Figure 6.4 Pre-School, Nhyiaeso .....	164
Figure 6.5: Non-Functional Borehole, Abompekrom.....	169
Figure 6.6: Mechanised Borehole, Sanso .....	169
Figure 6.7: Non-functional toilet facility, Sanso .....	169
Figure 6.8: Functional toilet facility, Bidiem.....	170
Figure 6.9: Functional borehole, Kokotiasua.....	170
Figure 6.10: Functional borehole, Nhyiaeso.....	170
Figure 6.11: Non-functional borehole, Anyinam.....	171
Figure 6.12: Chief Palace, Sanso .....	172
Figure 6.13: Culvert, Kokotiasua.....	172

## CHAPTER ONE

### INTRODUCTION AND BACKGROUND TO THE STUDY

#### 1.1 Background to the Research Problem

In recent times, the term sustainable development has been a major topic of discussion. Consequently, the international community has set for itself key sustainable development goals, which have become its focus with regard to global development. By 1992, the World Bank Group had had substantial global deliberations and movements towards promoting a sustainable development model (UNDP, 2002, cited in Opoku Antwi, 2010:11). This initiative by the World Bank Group was strengthened by the United Nations Conference on Environment and Development in 1992 and the World Summit on Sustainable Development in 2002. Following deliberations, the World Bank (2013) emphasised the Brundtland definition (1987:43) by explaining sustainable development as “development that meets the needs of the present without compromising the ability of future generations to meet their own needs”.

The concept of sustainable development has given birth to the idea of sustainable mining. Sustainable mining refers to mining activities that balance financial, social and environmental issues to ensure sustainable livelihoods for local communities (International Finance Corporation, 2014:8); which involves community engagement and key investments, respect for human rights as well as protection of the environment. Consequently, the Ghana Chamber of Mines has made it a policy that all mining companies in Ghana should undertake their corporate activities in line with international best practices. Though there has been some progress since the implementation of the policy, there still exists some level of casualties (Aubyn, 2012:5). The casualties come in the form of polluted water bodies, destroyed farmlands and high noise levels in mining areas. The casualties are as a result of mining companies generally continuing to undertake their activities in an unsustainable manner.

Globally, the activities of the mining industry have had extreme consequences for human health, food security, loss of means of livelihood and the environment in host communities. In Ghana, specifically, there is mercury pollution due to the utilisation of mercury in the extraction of gold. This practise is most common among small scale miners where wastewater containing mercury used to extract gold is drained into nearby streams and water bodies. This polluted water, when used, leads to toxicological effects. Hence, Hilson’s (2001) study in Dumasi, a community in the Western Region of Ghana, indicates that surface and groundwater have been seriously polluted with mercury and as a result, fishes have been

contaminated to the point where they should not be consumed. During Hilson's study in Tarkwa, a mining community in Ghana, the concentration of mercury in hair samples collected revealed a mean mercury value of 7.4µg/kg, despite recommendations by the World Health Organisation that, on average, this should not exceed 5µg/kg. In addition, a study performed by the United Nations Industrial Development Organisation (cited in Hilson, 2001:16) indicates the prevalence of a mercury problem in mining host communities where 40 per cent of the people who claimed to have health problems were diagnosed with neurological disorders as a result of mercury overexposure. This finding has serious health implications for the lives of residents. Additionally, most large-scale mining companies resort to discharging toxified wastewater back into rivers, which comes with serious health consequences.

Furthermore, mining has led to land use consequences as a result of the conversion of agricultural lands for mining purposes. In other words, mining has led to the clearing of vast expanses of forest, digging of trenches, and the removal of vegetative cover for mining activities. These activities leave the land bare, expose it to erosion and make it unsuitable for agricultural purposes; which have had serious implications for food security as farmers have lost their farmlands and means of livelihood (International Finance Corporation, 2014:18). In Ghana, several farmers have lost their means of livelihood as their farmlands have been taken away for mining purposes. In this light, Hilson (2001:16) estimates that farmers located within the environs of mining companies lose about fifteen thousand hectares of their farmlands to mining activities per annum. Although such farmers are promised compensation, they lose their source of livelihood for a very long time while they anticipate the benefits of the gold mine. However, mining firms, after acquiring their lands and starting operations, forget their promises, leaving host communities to remain poor and undeveloped (Marshall, 2001:25).

In addition to the above, mining operations are associated with several socio-cultural issues. The moment a mine starts operation, the culture, social life and even the spiritual life of residents of these gold mining communities are invaded and replaced with new lifestyles, which are introduced by the influx of people into the community as a result of the mining boom. In addition, the ecological footprints of the local communities are destroyed as a result of the disruption of the natural setting to which local communities are attached. This destruction occurs as a result of the loss of forest resources. Ababio and Boon (2009:5) identified some other social issues such as low levels of education, with emphasis on the school participation rate, since people in these areas would want to start work at tender ages in the mines.

Notwithstanding the above negative consequences of mining, in Africa and most developing countries, gold mining is classified as a major contributor to socio-economic development. Economically, mining accounts for about 9.1% of Ghana's GDP, employing about 260,662 households formally (Ghana Statistical Service, cited in Allan and Fatawu, 2014:1). Also, the industry contributes significantly to the country's export earnings and contributed about 42% of the country's gross export revenue in the year 2012 (Aubynn, 2012:11). This figure reveals how significant the sector is with regard to Ghana's balance of payment and general economic development. Socially, mining-based organisations are engaged in corporate social responsibility and have, as a result, inculcated corporate social responsibility into their overall policies (Aubynn, 2012:23).

Corporate social responsibility comprises activities performed by firms to ensure that they offset the effects of their activities in their host communities (Siegel, 2014:1). Utting (2000:18) indicates, however, that the performance of these activities should not only be economic but should be "more responsive to the environmental and social concerns" of the society in which they operate. Therefore, the focus should be on promoting sustainable development, which has its main principle as development that is economically, socially, and environmentally sound (Osborn, Cutter and Ullah, 2015:3)

## **1.2 Problem Statement**

Ghana is endowed with rich mineral resources. It was formerly called Gold Coast during the colonial era because of the abundance of large quantities of gold in most parts of the country. Although the country attained independence in 1957, the extraction of gold continues and it contributes enormously to the socio-economic development of the country (Fatawu and Allan, 2014:1). Despite the above contributions, mining activities have been associated with great changes in the physical environment and the general socio-economic climate of host communities. These include water pollution, land degradation, loss of agricultural lands and means of livelihoods as well as the loss of social capital (Hilson, 2001:16; International Finance Corporation, 2014:18; Ababio and Boon, 2009:5).

To offset the negative socio-economic and environmental effects of mining in host communities, a global call for mining firms to undertake corporate social responsibilities (Roitto, 2013:25) has been made. As a result, the concept of corporate social responsibility has received some level of attention in more recent years. For instance, in Ghana's mining sector today, corporate social responsibility has become an important means for promoting development, which has led to mining companies collaborating with their host communities to

fund developmental projects. Examples of such projects are the Sustainable Community Empowerment and Economic Development (SEED) project by Gold Fields Mining Company, Tarkwa, where a 5-year US\$5 million community development programme was developed for the benefit of eight primary stakeholder communities. Another example is the Livelihood Enhancement and Community Empowerment Programme (LEEP) by Newmont Mining Company. In all, in the year 2012, an estimated amount of US\$ 26 million was voluntarily committed by mining companies to fund projects in their host communities and the country as a whole (Aubynn, 2012:20).

Notwithstanding the above, the practice of corporate social responsibility is still hindered by many challenges. For instance, in Ghana, the legislative framework for mining is laid down in the Minerals and Mining Law, 1986 (PNDCL 153), and amended by the Minerals and Mining (Amendment) Act of 1994 (Act 475) and the Minerals and Mining Bill of 2005 (Law No. 703). However, the law does not make any provision for guidelines that bind mining companies to undertake social responsibility in the communities in which they operate in a particular manner. Apart from the mining regulatory framework, there is no national policy framework that guides corporate social responsibility implementation.

Mining companies are, therefore, not bound by any law to implement CSR activities (Ababio and Boon, 2009:4). However, mining companies in Ghana, on moral convictions, have developed their individual CSR policies for implementation in their areas of operation based on their intuition. Research (Utting 2000:18; Osborn, Cutter and Ullah, 2015:3; Crowther and Aras 2008:20) has suggested that CSR should not just be a shortlist of activities based on intuition but should be geared towards ensuring sustainable development in a participatory manner. However, there is a paucity of studies that investigate how the corporate social responsibility activities of mining companies have been geared towards attaining sustainable development in their host communities. As very few studies have looked into how corporate social responsibility activities are driving sustainable development, the attention of policymakers may not be drawn to put together policies to guide corporate social responsibility practices in Ghana. There seems to be a gap in the literature and body of knowledge on the contribution of the corporate social responsibility activities of AngloGold Ashanti to sustainable development in the Obuasi Municipality in Ghana.

### **1.3 Research Objectives**

The primary objective of the study is to identify and assess the extent to which AngloGold Ashanti has been able to apply its CSR policies in their operations, in a

participatory manner, to contribute to the sustainable development of the community where they operate. In order to achieve the purpose of the study, the following secondary objectives were set to guide the study:

1. to identify the company's principles of CSR and assess their attainability
2. to assess the existing CSR policies of AngloGold Ashanti and the extent to which these policies are being implemented
3. to examine the extent to which local communities have been engaged in the design and implementation of the CSR policies of AngloGold Ashanti
4. to assess the impact of mining activities on the livelihoods of local communities within the Obuasi Municipality, with regard to economic and socio-cultural lifestyles as well as the natural environment
5. to assess the extent to which the CSR policies of AngloGold Ashanti has contributed to the sustainable development of its host communities
6. to make recommendations on mining and CSR policies

#### **1.4 Research Questions**

Corporate social responsibility (CSR) in recent years has become a strategy used by the government of Ghana to ensure that mining companies give back to their host communities because of the immediate negative effects they have on the lives and the environment in such communities. It is, therefore, interesting to look into the CSR policies of AngloGold Ashanti, which is one of the giants in the mining industry in Ghana, and assess how the company has been able to apply its existing policies, if any, in their operations, especially within the local communities where they operate, to contribute to sustainable development within these communities.

Based on the research objectives, the study sought to find answers to the following questions:

1. What are the principles of CSR in AngloGold Ashanti, and to what extent are they attainable?
2. What are some of the existing CSR policies of AngloGold Ashanti, and to what extent have they been implemented?
3. What has been the role of local communities in the design and implementation of the CSR policies of AngloGold Ashanti?
4. What are the impacts of AngloGold Ashanti's activities on the livelihoods of the local communities within which it operates with regard to their economic and socio-cultural lifestyle as well as the natural environment?

5. To what extent have the CSR policies of AngloGold Ashanti contributed to sustainable development in the Obuasi Municipality?
6. What are the recommendations for the mining industry in its conduct of CSR in Ghana?

### **1.5 Scope of the Study**

Conceptually, the present study focuses on the concept of sustainable development and mining in Ghana. The study specifically scrutinises the linkages between mining, corporate social responsibility and sustainable development. More specifically, the study focuses on how the corporate social responsibility activities of AngloGold Ashanti have been used to contribute to sustainable development in its host mining communities. In addition, the study covers how participatory AngloGold Ashanti has been in the formulation and implementation of its CSR policies. Furthermore, the study focuses on the impact of the company's activities on the socio-cultural, economic and natural environment of its host communities.

Geographically, the study is limited to AngloGold Ashanti, which is located in the Obuasi Municipality on latitude 6°12'4.35"N and longitude 1°41'28.5"W, West Africa, in the Ashanti Region of Ghana. The AngloGold mine is one of the biggest in the country; it seems to be committed to setting and implementing good CSR policies, having developed a CSR policy in 2007 (Yeboah, 2008:6; Owusu-Mensah, 2015:42-62). This has motivated its selection for the study.

## 1.6 Literature Review

This study presents a review of literature in three major thematic areas. These thematic areas are the theoretical review, empirical review and conceptual framework. These reviews offer a strong foundation for the study. A brief highlight is provided in this section, but the relevant literature is discussed in detail in Chapter 2. The empirical review focuses on the development of SDGs, the definition of CSR and its relation with SDGs. The other areas covered under the empirical review are the development of mining in Ghana, the structure of mining in Ghana and sustainable development in mining communities.

Theories serve as an important framework and guide for research. It is, therefore, important to review some theories which relate to the subject matter. Hence, this section presents an introduction to some theories related to mining and sustainable development as well as corporate social responsibility (a more detailed discussion is provided in Sections 2.1 and 2.5). The theory of social disruption and the resource curse theory are the theories that underpin this study.

The theory of social disruption, as proposed by Damon (2012:3), suggests that the abundance of resources in a locality has adverse effects on the social systems of the people as it breaks social ties and distorts existing cultural and social structures. A boom in natural resources could cause social disruption, resulting in the erosion of affected communities and could burden social service systems, worsen poverty, reduce productivity and even negatively impact the health of people as well as the financial stability of countries. This could adversely affect growth and development.

On the other hand, the resource curse theory was proposed by Di John (2010:7). The theory is based on the premise that mineral and fuel abundance does not enhance growth and development, but rather distorts the economic performance of developing countries. This means that abundant natural resources are a ‘curse’ in disguise for developing countries that have weak institutional mechanisms and technology for effective and efficient utilisation of these resources for the betterment of their people. The outcomes of such abundant resources are poor economic performance, increase in corruption, high political discrepancies, and violence, in most cases. The resource curse theory appears to give a true reflection of the condition of developing countries that possess natural resources. This is because many studies conducted on natural resource endowed countries and non-resource endowed countries indicate that developmental challenges bedevil the former. The paradox still baffles economists in particular, as it is assumed that natural resources increase the wealth of nations.



These theories and other empirical studies have informed the construction of the conceptual framework of the study.

### **1.7 Research Methodology**

Considering the phenomenon under study, a mixed-methods approach is used to investigate the subject. A mixed-methods approach combines both qualitative and quantitative data to help to interpret the findings of an investigation. This approach has been adopted because it will help to understand how respondents perceive CSR and sustainable development. The target population for this study includes households within selected communities affected by the mining activities of AngloGold Ashanti. Also, key informants from institutions such as AngloGold Ashanti, the Chamber of Mines, the Environmental Protection Agency (EPA), the Obuasi Municipal Assembly and local NGOs constitute part of the study's population. Data from both primary and secondary sources are used for the study. Primary data is obtained from the field, while secondary data is obtained through the review of existing literature sources such as books, newspapers, journals, articles and the internet.

A total sample size of 345 respondents was used in gathering data from the field. Out of the 345, 338 comprise quantitative data, while seven are qualitative data. Three data collection instruments (questionnaire, focus group discussion guide and interview guide) are used for data collection. The simple random sampling approach is used for gathering quantitative data, whereas purposive sampling is used for the collection of qualitative data. The data gathered was cleaned to correct any inconsistencies that may have occurred during the data collection stage. Analysis of the data then followed, as well as data processing. Quantitative data were analysed using SPSS, whereas qualitative analysis was done manually using Microsoft Word. The analysis involved making various descriptive and explanatory inferences out of the raw data gathered. In terms of ethical issues, the researcher made sure that before data collection, ethical clearance was obtained from her university's ethics review committee and ensured all ethical issues such as informed consent, anonymity and confidentiality in the research were adhered to. This protects all parties that are involved in this study. Notifications were sent to the selected communities and institutions to be interviewed to inform them and seek their permission. The aims and objectives of the study were explained to them in order to make them aware that it was purely for academic purposes. Individual respondents were also made aware that participation in the study was voluntary and that it would not attract any financial reward.

## **1.8 Relevance of the Study**

Over the years, there has been a debate as to whether developing countries should engage in mining activities since mining communities seem to have no substantial connection to sustainable development (see Ross, 2001:3). This makes the present study very necessary since it will greatly contribute to the current debate on the connection between mining activities and sustainable development in mining communities. The study, therefore, provides inputs to inform how best mining activities could be harnessed to contribute significantly to sustainable development. The study draws the attention of mining companies and other corporate bodies to inculcate the perspectives of society into the formulation of their development plans and policies.

It will further serve as a reminder to mining companies and corporate bodies to make corporate social responsibility an integral component of their activities. The findings of this study will also add to available research on sustainable development, corporate social responsibility (CSR) and mining. This will, therefore, help to expand the frontiers of sustainable development, corporate social responsibility and mining activities. Again, the findings from this study could be used as a data source for further studies. Lecturers, students and other actors in the academic world could use the outputs of this study for other studies so as to enhance their knowledge on sustainable development, CSR and the connection between the two for effective development. Also, state entities such as ministries, departments and agencies (MDAs,) private bodies as well as other concerned agencies/bodies could benefit from the recommendations of this study in terms of initiating policies, programmes and projects in order to enhance sustainable growth and development.

## **1.9 Limitations of the Study**

Access to information has always been a major challenge for most research, and this research was not an exception. Access to institutional documents such as environmental and social assessment reports was difficult to obtain as they were either unavailable or deemed to be sensitive information. The next challenge had to do with research fatigue among community members. Some stakeholders in the initial stages of contact were reluctant to respond to the survey as they perceived the research was being conducted by AngloGold Ashanti or other institutions which they indicated had contacted them several times for similar studies, but they had not seen any positive results in relation to their living conditions. Some stakeholders were unwilling also to participate because there were no financial incentives. However, upon further explanations, most of the potential respondents who initially resisted being surveyed and

interviewed gave their consent. Those who still insisted they were uninterested in the research were not pressured or forced into responding. The research is also limited by its scope as it is a single country case study, is limited to a particular mining company and located in a few communities that form less than 1% of the entire gold mining communities in Ghana. This limits the extent to which the results generated can be generalised and applied to different geographic regions. However, by corroborating the research findings with existing literature and similar research, generalisable results can be identified, and the contradictory results appreciated.

### **1.10 Chapter Layout**

The study is organised in seven chapters. The first chapter focuses on the general introduction for the study, the problem statement, the objectives of the study, the research questions, scope, relevance and limitations of the study. The second chapter presents a review of related studies on mining, corporate social responsibility and sustainable development. The third chapter serves as the locus for the research methodology and study profile. This forms the framework for appropriate data collection, the review of the profile of the study locations, ways of collecting data, the determination of sample size, the techniques used in sampling and how data was interpreted for understanding. The fourth, fifth and sixth chapters present the findings of the study. The organising principle is related to the objectives set for the study. The final chapter is the seventh one. This chapter presents the summary of the study's findings, recommendations and conclusion.

## CHAPTER TWO

### EXPLORING AND UNDERSTANDING THE NEXUS BETWEEN MINING, CSR AND SUSTAINABLE DEVELOPMENT: PERSPECTIVES FROM THE LITERATURE

#### 2.0 Introduction

The traditional role of the government as the main body responsible for improving the living conditions of the society has become less feasible with increased demands on public resources, which has shifted focus onto the role of businesses in society (Hertog, 2006; Jamali and Mirshak, 2007; Ali and Al-Ali, 2012; Park 7 Wilding, 2014; Abdull, 2015). CSR is increasingly becoming an important factor in corporate decision-making, where many companies are considering how to improve their relationship with their customers, the environment and the community while ensuring that their businesses are successful (Visser, 2008; Reinhardt and Stavins, 2010; Mandurah et al., 2012). With the growth of corporate organisations, the society expects these organisations to contribute to development, at least within the confines of their geographical locations. Therefore, CSR has become the channel for corporate contributions to societal growth and development (Carroll, 1999). The rapid growth of globalisation has heightened competition among corporate institutions in an attempt to meet the diverse needs of the society within which they operate uniquely. A study by Boon and Ababio (2009:2-6) has confirmed that corporate bodies are now aware that providing services outside the scope of their operations to solve community development problems is an innovative avenue to win the heart of the society, ensure their growth, success and sustainability.

Despite the inclinations of many organisations to provide support to enhance societal growth, mining companies mostly operate without doing so. This explains why Jenkins (2004:36) posits that mining companies usually display the “devil may care” attitude with regard to the outcomes of their activities on the societies in which they operate. The attitudes of many mining companies toward “giving back to society” are disheartening since their operations have adverse outcomes on the environment, economic and social components of the communities within which they operate. The unwillingness of mining companies to perform corporate social responsibilities (CSRs) has aroused the interest of civil society groups, non-governmental organisations (NGOs) and many other advocacy groups to fight for communities and to pressurise mining companies to perform their CSRs. This has led to some positive outcomes in

recent times, as many mining companies have embraced CSRs as an important aspect of their operations in order to contribute to sustainable development in the communities they operate in (Boon and Ababio, 2009:2-6).

This chapter starts with the theoretical footprint of the research. Then, it reviews the literature on mining, corporate social responsibility (CSR) and sustainable development, with emphasis on mining and development, small scale mining, mining and gender, and mining in Ghana, which have all been linked to the concept of corporate social responsibility. The chapter further brings to bear Ghanaian perspectives, principles and approaches, as well as the legal and regulatory framework of the process involved in developing CSR policy, and the nexus between CSR and sustainable development. The various issues discussed in the chapter have been logically linked to one another to ensure synergy and a balanced literature overview. The problems mentioned above have been considered in order to widely explore and understand the various facets of CSR, mining and sustainable development in a coherent manner.

## **2.1 Definitions of Corporate Social Responsibility**

The term corporate social responsibility has been in the development discourse for some time now; however, the definition of the term is still evolving. Corporate social responsibility sometimes referred to as social responsibility, has been explained to encompass many different or similar things at different points in time for different purposes and time. Carroll (1999) has penned down about twenty-five (25) definitions of corporate social responsibility (Carroll, 1999, cited in Melé, 2008:1). Although there have been different definitions of the concept of CSR, several similarities run through these definitions. The modern idea of CSR began in the 1950s and grew through the 1960s (Carroll, 1999:268) and has gone through many phases to its current state where it has gained governmental, non-governmental and international recognition.

CSR means different things to different people. As Freeman and Hasnaoui (2011:435) indicate, the definitions of CSR differ across countries and even within countries. Hofstede and Hofstede (2005) stipulate the divergence of culture and the possibility of its influences on CSR's definition. From Matten and Moon's (2004:329) perspective, arriving at a universal definition of CSR may be possible through CSR education and CSR implementation in focal communities. Subsequently, they called for the inclusion of CSR in educational programmes of communities for better appreciation of the concept. Based on the heterogeneous nature of the definition of CSR, this study combines Carroll's (1999) position and the triple bottom line

as well as other vital elements such as education and morality to contextualise the term corporate social responsibility.

It is worthy to note that the two definitions have been recognised as very useful for this research. The International Finance Corporation proposed the first definition, which is used by the study. It defines CSR as “the commitment of businesses to contribute to sustainable economic development by working with employees, their families, the local community and society at large to improve their lives in ways that are good for business and for development” (IFC, 2013, cited in Lazzeri, 2007:1). It is acknowledged that the multi-stakeholder dimension of CSR, confirms that the plan of businesses should not be skewed only towards their shareholders. Another relevant definition is that of Carroll (1999).

According to Carroll (1999: 283), CSR “encompasses the economic, legal, ethical, and discretionary expectations that society has of organisations at a given point in time”. This definition emphasises the fact that at any particular point in time, society expects businesses to be responsible. As time and conditions change, society expects businesses to also change their responsibilities towards them to meet their current needs. These definitions of CSR form the basis for the theoretical framework for the analysis of this study. In this regard, CSR is visualised as corporate interventions and activities that are largely legal, ethical, discretionary and socio-economically desirable and are responsive to the needs of broad stakeholders, especially community members and employees, and address as well as correct social ills/problems, and are desirable for the growth and development of society. Per this definition, CSR should improve the economic, social and environmental wellbeing of all stakeholders and should go beyond the financial and technical interests of corporations, with education and morality serving as integral pillars of interventions.

This study also aligns with the definition by Chen (2019), which indicates that corporate social responsibility (CSR) is a self-regulating business model that helps a company to be socially accountable — to itself, its stakeholders and the public to contribute to societal goals through philanthropic activities or charitable ventures, or engaging in volunteering or ethically-oriented practices.

## **2.2 Drivers of CSR**

CSR is driven by a multiplicity of factors engineered by government, communities as well as civil society organisations, including the media and other stakeholders. This implies that pressures for corporate bodies to perform CSR come from both internal and external stakeholders (Aguilera et al., 2007:842). Through this, companies have primarily used formal

strategic planning processes to assess the expectations and pressures from their stakeholders to take requisite actions and interventions (McWilliams et al., 2006:7). Crouch (2006:1542) exemplified in his studies how corporate bodies account for externalities, and then develop response packages that are commensurate to the needs of stakeholders. Organisations could be regarded as irresponsible, based on how their beliefs, values and assumptions fuel CSR actions (Herndon et al., 2001:80). It is, therefore, very necessary for organisations to systematically monitor the drivers of CSR in their environment of operation, assess the needs of stakeholders to generate the required information to guide CSR interventions (O'Shannassy, 2003; Miles et al., 2009).

Within the academic and corporate space, CSR has been promoted through a common preposition “business has obligations to society”. It, further, goes to demonstrate that corporate bodies are seen as trustees in the provision of “safety, security, or means of support for that part of the community which is unable to earn its living in the normal channels of work or trade” (Freeman and Hasnaous, 2011:420). Goodpaster (2011) makes the most tacit declaration on the promotion of CSR activities. He states, “I think many people assume, wrongly, that a company exists simply to make money. While this is an important result of a company’s existence, we have to go deeper and find the real reasons for our being. As we investigate this, we inevitably come to the conclusion that a group of people get together and exist as an institution that we call a company so that they are able to accomplish something collectively that they could not accomplish separately—they make a contribution to society, a phrase which sounds trite but it is fundamental” (see Freeman and Hasnaous, 2011:420). Some key drivers that have encouraged larger companies to be more socially responsible are discussed in more detail below.

### **2.2.1 Government Legislation**

Governments also sometimes impose legislation which requires companies to conform and behave in a certain manner (Almatrooshi et al., 2018). Organisations that are impacted by this legislation usually only comply with the various requirements because of regulation and not necessarily because of their quest to adopt CSR (Almatrooshi et al., 2018; Yuniarta et al., 2019).

### **2.2.2 Customers’ Expectations of Firms**

Consumers are becoming more aware of social and environmental issues, and taking into consideration the future, which is becoming very important when consumers consider purchase decisions (Saeidi et al., 2015). As a result, some consumers will expect that certain companies

behave in an appropriate manner relative to society and communities. The changing expectations of consumers have resulted in firms being more responsive to these issues and adopting a more corporate responsible outlook (Khan, Ferguson and Pérez, 2015).

### **2.2.3 Consumer Lobby Groups**

Again, the internet and social media have made it much easier for consumer lobby groups to form, to generate attention and get media coverage and, therefore, achieve its goals of change (Aguilera et al., 2007:842). Therefore, companies become more likely willing to engage in corporate social responsibility initiatives to avoid negative attention and bad media coverage.

### **2.2.4 The Extent of Costs Involved**

A shift to increase social responsibility may come at a reasonable cost to the organisation (Pedersen and Neergaard, 2016). The motives for adopting CSR, the costs and barriers involved as well as the benefits and the relationship between costs and benefits are significant factors or drivers of CSR adoption by firms (de Jong and van der Meer, 2017).

### **2.2.5 The Type of Industry**

There are several significant industries where there are greater pressure and expectation for firms to be responsible corporate citizens (Bostan et al., 2016; Andrews, 2016). Following the global financial crisis, there has been an increased expectation on banks and other financial institutions to be more transparent and ethical in their business operations (Lock and Seele, 2015). The extractive and manufacturing sectors are both industries under great pressure, particularly heavy extractive firms involved in mining, where there could be significant pollution (Asmeri et al., 2017), to contribute to sustainable development.

### **2.2.6 Potential for a Competitive Advantage by Image**

Some companies are attempting to build their core image or at least parts of their brand association around their socially responsible behaviour. Some companies highlight that they are ethical and even forego some profitability in order to contribute to society or certain communities (Dupire and M'Zali, 2018; Clark et al., 2018).

### **2.2.7 Corporate Culture and Top Management Values**

Corporate social responsibility is also a reflection of the overall corporate culture and top management values (Singh and Verma, 2018). Hence, how important making a contribution to society is to the senior management of an organisation will guide how social responsibility is embedded in their overall strategy (Jamali and Karam, 2018; Chandler, 2019).



### **2.3 The Role of Government in the Implementation of CSR**

In many countries across certain industries, the government has imposed legislation that requires companies to conform and behave in a certain manner; consequently, organisations affected by this legislation only comply with the various requirements because of regulations (Almatrooshi et al., 2018; Yuniarta et al., 2019). They (firms) may or may not be willing to incorporate social responsibility initiatives into the day-to-day operations of their overall strategy. Examples include legislation relating to the environment, pollution, use of workers and working conditions, product disposal, materials used in production, and so on. Therefore, the requirement imposed upon them by government pushes them to engage in corporate social responsibility activities.

### **2.4 Criticisms against CSR Promotion and Implementation**

Despite the immense support from diverse groups that CSR has to be promoted, others have criticised the entire idea underpinning the CSR regime. Christian Aid (2004) indicates that companies do CSR just for reputation and public relations instead of advancing growth and development; it deflects criticisms from unacceptable operations and is used as a strategic public relations weapon to deliberately respond to some companies' exploitation and misuse of societal resources and people. Some CSR projects have failed and are usually unable to rectify the complex problems created by a firm's activities. It is also used as a barrier for mandatory international regulations of the activities of corporate bodies. Blowfield (2004:82-90) also adds that CSR interventions are usually provided for priority issues such as health and education, especially when such interventions occur in the global south.

Some scholars, including Milton Friedman, believe and argue that a corporation's purpose is to maximise returns for its shareholders and that obeying the laws of the jurisdictions within which it operates constitutes a socially responsible behaviour (Milton, 1970). Though some CSR supporters claim that companies practising CSR, especially in developing countries, are less likely to exploit workers and communities, critics argue that CSR itself imposes outside values on local communities with unpredictable outcomes (Idemudia and Kwakyewah, 2018). Hence, these critics believe that better governmental regulation and enforcement, rather than voluntary measures, are better alternatives to CSR that move decision-making and resource allocation from the public to private bodies (Ganguly, 1999).

Again, McKibben (2006) believes that CSR programmes are undertaken by companies to distract the public from ethical questions posed by their core operations. McKibben argues that the reputational benefits that CSR give (cited above as a benefit to the corporation)

demonstrate the hypocrisy of the approach. Aguinis and Glavas (2012) support the assertion of McKibben, which states that the primary reason for firms to engage in CSR was the expected financial benefits associated with CSR, rather than being motivated by a desire to be responsible to the society. Moreover, some studies find that corporate management's interests motivate CSR programmes at the cost of shareholders such that there is some agency problem in corporations (Adhikari, 2016; Huang, Cheng and Cheng, 2017), whereas Elliott, Grant and Rennekamp (2017) and others argue that the primary purpose of CSR is to provide legitimacy to the power of businesses because as wealth inequality continues to increase, it becomes increasingly necessary for businesses to justify their position of power.

## **2.5 Theoretical Review**

Theories serve as an important framework and guide for research. This makes it pertinent to review related theories on corporate social responsibility and sustainable development. This section presents related theories, which establish the theoretical bedrock of the study.

### **2.5.1 Theories of Corporate Social Responsibility (CSR)**

CSR is an old concept in development discussions. The term started in the 1950s and was commonly treated as social responsibility. Habisch et al. (2005:337) posit that social responsibility has four main underpinnings; economic, legal, ethical and discretionary expectations from society in relation to the services of firms and organisations with regard to societal growth and development. Social responsibility assumed a new name 'Corporate Social Responsibility', which, according to Douglas et al. (2004:387), was as a result of the mandate to implement policies and measures as well as make informed decisions which conform with the objectives and values of society. The term CSR has now gained prominent attention, and various theories have emerged to explain its meaning and diverse nature. CSR has grown to cover issues of public policy, business, societal growth, stakeholder consultation and management, and corporate accountability (Garriga and Mele, 2004, cited in Ismail, 2009:200) as well as other important recent issues, including Corporate Citizenship (Ismail, 2009:202) and Corporate Sustainability (Van Marrewijk, 2003).

CSR has been defined in different ways, depending on how scholars perceive the term. This explains why Carroll (1994:14) who is one of the recognised scholars in the field of CSR opines that the field of CSR has become like "an eclectic field with loose boundaries, multiple memberships and different training or perspectives; broadly rather than focused,

multidisciplinary; wide breadth; brings in a wider range of literature, and interdisciplinary”. Despite the discrepancies in the understanding of the concept of CSR, other scholars have focused on developing a comprehensive and widely accepted concept of CSR (See Frederick, 1998; Garriga and Mele, 2004:65). Theories have, therefore, emerged to expatiate on the concept of CSR. Notable among these theories are the instrumental theories, the political theories, the integrative theories and the ethical theories (Garriga and Mele, 2004:52-56).

The instrumental theories posit that organisations perform CSR with the sole purpose of creating wealth or gaining profit. Therefore, these theories emphasise the economic connections between businesses/organisations and the society, with the organisations extracting benefits from the relationship or contributions made to societal growth (Windsor, 2001:226; Mitchell et al., 1997:515; Garriga and Mele, 2004:53; McWilliams and Siegel, 2001). To this end, corporate organisations hold the perspective that CSR is an instrument for wealth creation, and as such, corporate bodies treat their economic relationship with society as very important. Friedman (1970) is seen as a pioneer of instrumental theories. He postulates that “the only one responsibility of business towards society is the maximisation of profits to the shareholders within the legal framework and the ethical custom of the country” (Friedman, 1970:32-33). Windsor (2001:226) also adds that within the confines of the existence of businesses, “a leitmotiv of wealth creation progressively dominates the managerial conception of responsibility”.

Therefore, businesses see CSR as necessary and warrant some level of investments to gain profits for existence and sustainability (McWilliams and Siegel, 2001). Based on the instrumental theorists’ preposition, studies such as Roman et al. (1999), and Griffin and Mahon (1997) have largely drawn a positive relationship between CSR and the financial performance of corporations. Rowley and Berman (2000) accept this relationship but reveal that such relationships should always be read with caution as it is difficult to measure the degree of correlation. Garriga and Mele (2004) indicate that three perspectives of the instrumental theories are based on the economic objective of the companies concerned. If the economic objective is to maximise the value of shareholders, then profit maximisation is usually short-term in nature. However, in order to yield long term profits, the emphasis is placed on the competitive advantages of the organisation. The third objective is linked to cause-related marketing, which has a close relationship with the second objective (Garriga and Mele, 2004:54). According to Varadarajan and Menon (1988:60), cause-related marketing is “the process of formulating and implementing marketing activities that are characterised by an offer

from the firm to contribute a specified amount to a designated cause when customers engage in revenue-providing exchanges that satisfy organisational and individual objectives”.

The political theories of CSR recognise organisations as political set-ups and, therefore, have social power and mandate to contribute to the welfare of the society within which they operate. Specific theories, including Integrative Social Contract Theory presented by Donaldson and Dunfee (1994), Corporate Constitutionalism presented by Davis (1960) and Corporate Citizenship highlighted by Altman and Vidaver-Cohen (2000) and Davis (1973:314) have been propounded as political theories of CSR. The theory of corporate constitutionalism is engineered by Davis (1960), who explored the power-role of businesses in society and the related social influence. Therefore, he introduced ‘business power’ as an element in CSR debate—businesses are social institutions with a power which needs to be utilised responsibly. In his position, both internal and external factors contribute to the creation of the ‘business power’, leading to shifting dynamics in the social-economic-political context.

Hence, to place CSR in the context of only economic gains, as instrumental theorists argue, is to lose the entirety of what CSR stands for in business operations. The ‘business power’, alternatively called social power, which underpins the political theories of CSR, can be expressed in two forms— ‘the social power equation’ and ‘the iron law of responsibility’. While the former relates to the amount of power in possession by a company, the latter relates to the negative outcomes of the failure to use the power by a company. Davis (1960:63) states that “whoever does not use his social power responsibly will lose it. In the long run, those who do not use power in a manner which society considers responsible will tend to lose it because other groups eventually will step in to assume those responsibilities”. Within the context of political theories emanated the term “corporate citizenship” in the 1980s as another useful component of such theories (Altman and Vidaver-Cohen, 2000). According to Andriof and McIntosh (2001), corporate citizenship has become popular since the late 1990s and the early part of the 21<sup>st</sup> century, not only in business but also, in academia. Proponents of corporate citizenship see businesses as a member of the community; hence, corporate bodies are entreated to have ‘a sense of belonging to a community’ and, as such, have rights, roles and responsibilities as well as commitments to support the development of the community in which it is a citizen/member (Garriga and Mele, 2004:57).

The integrative theories propose that firms are social entities and depend on society for their survival; consequently, without society, organisations cannot exist and survive. It is, therefore, very necessary for organisations to deliver social services for the growth of the society in which they operate (Post and Preston, 1981; Sethi, 1975:58-65). The principles of

public responsibility (Post and Preston, 1981), stakeholder management (Garriga and Melé, 2004), and corporate social performance (Carroll, 1979:499) have been identified as integrative theories or approaches. Emphasising on the principle of public responsibility, Preston (1981) stresses on the significance of public processes in CSR interventions, instead of personal-morality perspectives and socially-minded ideology that defines the scope of responsibilities of organisations. They note that the guideline for legitimate managerial behaviour is found within the context of relevant public policies, which are broad patterns of social direction “reflected in public opinion, emerging issues, formal legal requirements and enforcement or implementation practices” (Garriga and Mele, 2004:58).

Within the confines of integrative theories emanate stakeholder management, which combines and calls for individuals with interest in firms to be part of the managerial decision-making processes (Bendheim et al., 1998). Scholars who support the stakeholder dimension of CSR call for firms to engage stakeholders, including community members, governments and other interest groups in interventions. Therefore, the views of stakeholders through the adoption of participatory paradigms such as dialogue, meetings and others should reflect in CSR interventions. According to Kaptein and Van Tulder (2003: 208), stakeholder dialogue, for instance, “not only enhances a company’s sensitivity to its environment but also increases the environment’s understanding of the dilemmas facing the organisation”. There are also ethical theories which stress on the ethical requirements expected from organisations to promote societal growth and development. Here, firms are to accept CSR as an ethical obligation above any other considerations in the organisations’ dealings (Donaldson and Preston, 1995:65-91).

Ethical theories are mainly composed of the normative stakeholder theory, which is underpinned by two main prepositions. First, stakeholders are identified through their interests in an organisation, whether or not there is a corresponding functional interest of the organisation in relation to them. Secondly, the interest of stakeholders is intrinsic— each stakeholder qualifies for special considerations by the organisation to further the interests of some groups; for instance, share-holders. Companies, corporations and firms need to pay critical attention to the legitimate interest of all stakeholders, and should also be able to balance the multiplicity of interests of stakeholders in a manner that considers the divergent needs of their stakeholders (Freeman and Philips, 2002).

## **2.5.2 Theories of Natural Resource Endowment and Development**

Since the study looks at the link between natural resources exploration and development, two theories of natural resources and development are reviewed. These are the theory of social disruption, which places accent on the social dimension of natural resource exploration and development, and the theory of resource curse, which emphasises the environment, social and economic dimensions of development and resource endowment. These theories make it clear that natural resources such as minerals can easily impede the sustainable development of the developing world.

### **2.5.2.1 The Theory of Social Disruption**

The theory of social disruption, as indicated by Damon (2012:3), suggests that the abundance of resources in a locality has adverse effects on the social systems of the people as it breaks social ties and distorts existing culture and social structures. Countries with abundant resources should, therefore, undertake social analysis concerning the implications of the utilisation of their natural resources on the social life of affected community members. A boom in natural resources could cause social disruption, resulting in the erosion of affected communities and can burden social service systems, worsen poverty, reduce productivity and can even impact negatively on the health of people as well as the financial stability of countries with such resources. This could adversely affect growth and development. The outcomes of social disruption are frustration, democratic disconnection, fragmentation, polarisation and escalation (Bishop, 2014). Through social disruptions, large communities can become a small neighbourhood, organising themselves to defend their identity and socio-cultural positions against others who are treated as outsiders (Bauman and Skitka 2012). In most circumstances, such social groups identify themselves through lifestyle, wellbeing or even voting (Jaeger-Erben et al., 2015).

Communities become fragile, polarised and tend to lose strong social connections for cooperation and development. In such instances, Putnam and Feldstein (2009) have explained the need to create a bridge for social connection, technically referred to as “bridging social capital”. This, however, takes time, but building social capital between people who share similar cultural heritage, moral identity, ethnicity, or any other social attributes can make social connections a bit easier and sustainable. In mining communities, for instance, relocation of some groups of people to another community due to mining activities can easily contribute to social distortions.

This theory is appropriate for this study as it emphasises the negative effects of resource availability and exploration on existing social systems. This hinders the social aspect of sustainable development. The study, therefore, explored how this theory applies in the study area by assessing how mining has affected social systems in host communities. Subjects such as relocation and breakdown in social cohesion due to mining activities were explored through surveys of households and detailed interviews with key informants such as traditional authorities using a questionnaire and interview guides, and focus group discussions, respectively. The results were presented using a mixed research orientation with general survey views from households gathered through questionnaires presented in descriptive statistics in tables and charts. Detailed explanations of the general views gathered from households, and key informants were presented qualitatively through direct quotations and inductive explanations.

#### **2.5.2.2 Resource Curse Theory**

The resource curse theory has been described by Di John (2010:7). The theory is based on the premise that mineral and fuel abundance does not enhance growth and development, but rather distorts the economic performance of developing countries. This means that abundant natural resources are a ‘curse’ in disguise for developing countries, which have weak institutional mechanisms and technology for effective and efficient utilisation of these resources for the betterment of their people. The theory suggests that mineral and fuel abundance generates growth-restricting forms of state intervention and extraordinarily large degrees of rent-seeking and corruption, which adversely affect the outcomes of economic growth. The outcomes of such abundant resources are poor economic performance, increase in corruption, and high political discrepancies and violence in some cases. Before this theory, scholars such as Innis (1930), Watkins (1963) and Gelb et al. (1998) have indicated that there is a strong positive correlation between the abundance of natural resources and industrial growth, which lead to economic growth and development. As Gelb et al. (1998:17-18) contend, the natural resource rents, for instance, when utilised properly by governments of natural resource-endowed countries could reduce resource constraints such savings, foreign exchange and fiscal constraints.

The resource curse theory seems to have been validated in many studies conducted between natural resource-endowed countries and non-resource endowed countries. The paradox still baffles economists in particular, as it is assumed that natural resources increase

the wealth of nations. As indicated by Wizarat (2013:36), in the 17<sup>th</sup> century, for instance, the Netherlands, with limited natural resources, outperformed Spain, which has abundant natural resources such as silver and gold. Again, economies such as Taiwan, Korea, Hong Kong and Venezuela, which have very limited natural resources, outperform most resource-abundant economies in the world. Sachs, Sachs and Warner (2001) cited in Wizarat (2013:36) attribute the poor economic performance of natural resource-rich countries to the slow savings and investment cultures of these countries (this is supported by Gylfason, 2001; Auty, 2001; Torvik, 2001; Gylfason and Zoega, 2003; Auty, 2007). It has been concluded that the Dutch disease is a major factor in poor performance, as well as the negative impact of rent-seeking and poor governance which lead to the poor economic growth of resource-abundant economies.

This theory focuses on how resource exploration impedes development. It is, therefore, appropriate as this study focuses on natural resource endowment in the Obuasi municipality and its effects on development. The study, thus, explores the social, economic and environmental effects of mining in the Obuasi area.

### 2.5.2.3 Theories, CSR and Sustainable Development: The Linkages

The resource curse theory, social disruption theory, as well as the concepts of sustainable development and CSR, are linked. The resource curse and social disruption theories argue that where abundant resources exist, socio-economic and environmental development (sustainable development) is hampered. This occurs as a result of the negative externalities of mines. With regard to this, exploration companies need to undertake CSR activities to overcome these negative externalities. Since, the negative externalities of exploration activities span across social, economic and environmental aspects of host communities, these key areas need to be considered by mining organisations in their CSR activities. Thus, CSR activities should not only focus on one area but should focus on all important areas, ensuring this will bring about sustainable development. Figure 2.1 summaries the above assertion.

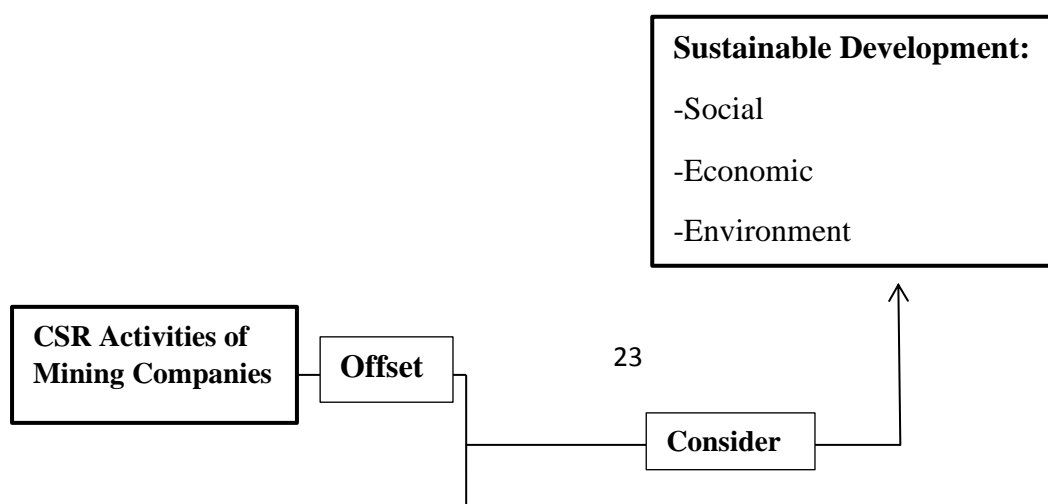




Figure 2.1: Links Between CSR and Sustainable Development  
Source: Researcher's Construct, 2020

## **2.6 Theoretical Framework of the Study**

The theoretical framework of the study focuses on policymaking and implementation of CSR. The use of CSR as a sustainable development tool would only be effective when community members (recipients of such development) are fully involved in the formulation and implementation of such policies. Governments in the developing world are striving to achieve growth and development. These governments must promote the social component of development through collaboration between the state and the private sector, especially those in the corporate sector (Hopkins, 2004:4). The promotion of social development should pay attention to CSR. This implies that actors in the corporate world should develop CSR policies as and when necessary instead of making CSR a subsidiary corporate effort.

Sustainable development focuses on social development as well as environmental sustainability and sustainable economic gains. Sustainable development goes beyond the natural environment to include the social environment where people interact. Therefore, organisations can contribute to sustainable development when CSR is given much priority since CSR concentrates on the social nature of organisations and their need to promote social development. The promotion of social development should, therefore, consider the participation of social beings (the local people) who are the target/primary beneficiaries of CSR initiatives. Communities should have an important role to play in the formulation and implementation of CSR policies if such policies would contribute enormously to sustainable development.

As indicated in Figure 2.1, mining activities in developing countries have contributed to environmental destruction, slow pace of economic growth, social inequality and worsened poverty. This explains why Ross (2001:3) highlighted that mining activities should be stopped if mining centres are negatively affected in terms of downward development (proven by the Social Disruptive Theory and Resource curse theory). This study acknowledges the viewpoint expressed by the above proponents but argues that effective CSR policy and implementation will ensure that mining communities get an equitable share of sustainable growth and development. Therefore, mining companies should involve community members in the formulation and implementation of CSR policies.

The necessity of CSR for mining firms is explained by the instrumental, political, integrative and ethical theories (Windsor, 2001:226). The effective delivering of social responsibilities will counteract the negative outcomes which adversely affect the sustainable development of mining communities. Apart from neutralising the negative outcomes associated with mining activities in affected areas, CSR will also contribute to the sustainable development of mining communities provided it comprehensively addresses the social needs of local members.

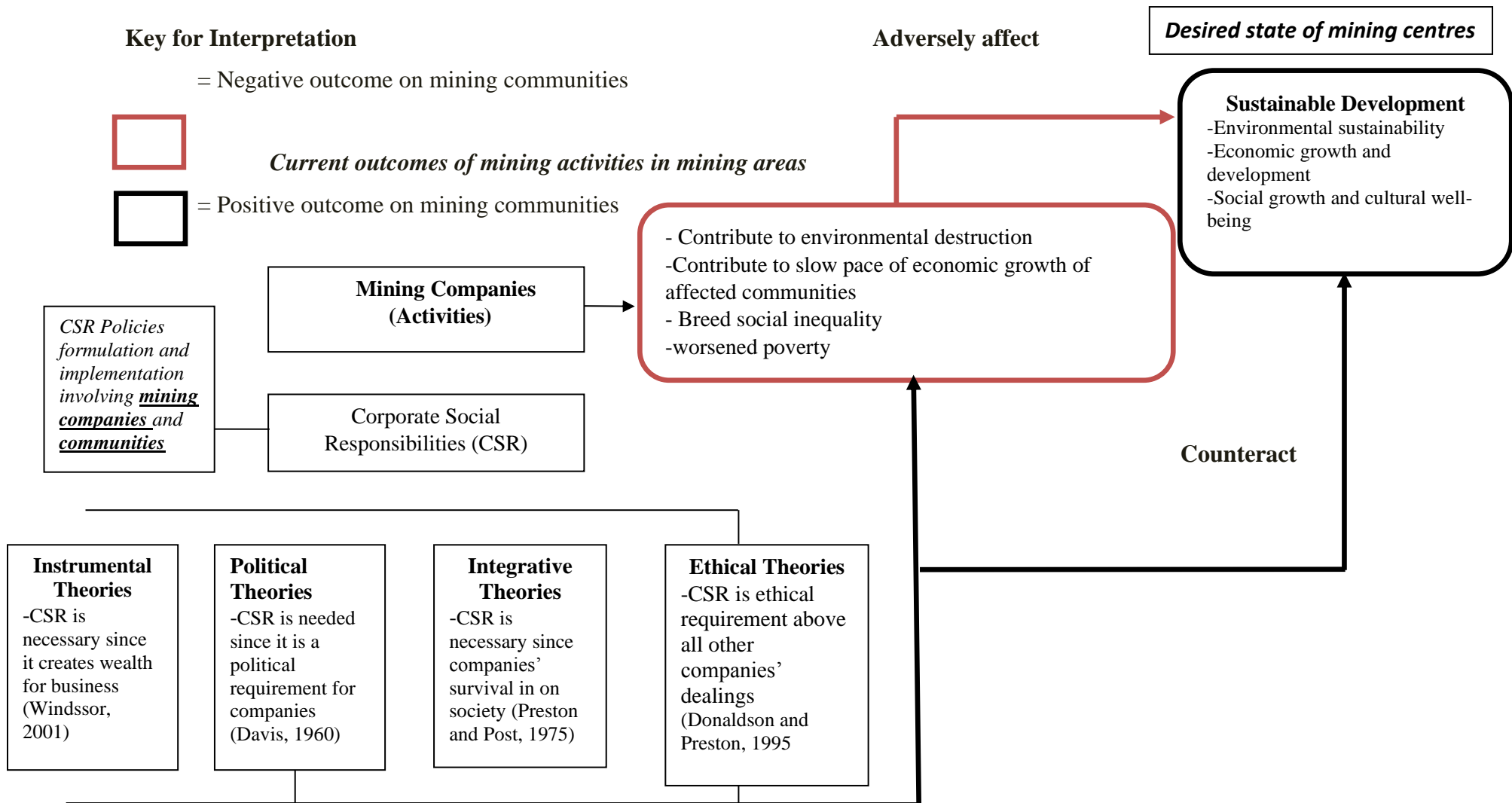


Figure 2.2 Theoretical framework of the study

Source: Author's Construct (2016)

## **2.7 Mining**

### **2.7.1 Definition of Mining**

Mining has become an integral component of the existence of humanity. Mining is generally defined as the extraction of mineral substances, which could be solid, liquid or gas, from the earth or even from heavenly bodies for utilitarian purposes. Acheampong (2004) posits that mining is an activity involving the removal of minerals from the crust of the earth. Products of mining include coal, diamond, bauxite, iron, lead, limestone, nickel, phosphate, uranium, rock salt and molybdenum and its activities/processes include mineral prospecting, exploration, estimation and mine planning, feasibility studies, creation of access to ore, exploitation, and reclamation.

### **2.7.2 Mining and its Development Implications**

Over the years, the outcomes of mining have created a hot debate regarding the contributions of mining to the overall growth and development of nations. There are two schools of thought in this regard; one believes that mining is a pathway for the development of rich-mineral resource countries to achieve the desired growth (Davis and Tilton, 2005); and secondly, mining will not lead to the sustainable development of nations with rich natural resources (Power, 2002 as cited by Whellams, 2007:22). The first school of thought bases its argument on the successes of mineral-rich nations around the world who have used their mineral resources to enhance sustainable development. Countries such as the United States, Australia and Canada have used their mineral resources to attain a level of development which is worthy of emulation for other countries, especially mineral-rich developing countries. The second school of thought argues that though mineral-rich nations such as Canada, the United States and Australia have achieved the desired growth predominantly due to the appropriate utilisation of their mineral resources, this illustration should not be used as a stance to promote mining activities in the developing world.

This perspective, according to Power (2002), is ‘reasoning based on historical analogy’, which is too simplistic and fails to take into consideration other fundamental factors that have made such countries successful in their mining activities. These fundamental factors, which have contributed to the success of these countries are their huge internal markets, institutional capital, restricted national market, and limited labour requirements. Again, the current change

in the world economy makes it tough to accept that mining should be used as the basis for development. Today, the economy of the world has changed too significantly.

Unlike the industrialisation period where countries were the centres for mineral processing and finishing, now mineral resources from mineral rich developing countries have to be transported at a faster pace and a lower cost to ‘giant’ countries for processing and finishing. The outcome of this has been a substantial reduction in knowledge and technology transfer to mineral-rich developing countries as well a significant decrease in investment in these countries. Foreign actors have dominated the mining economy of these mineral rich-poor countries to the extent that these investors own, mine and process mineral resources. The wealth generated from the resources is, therefore, transferred to investors’ countries instead of the host countries (Stevens et al., 2003:3-42; Bulte et al., 2005:1029-1044). Current mineral-rich countries, which are predominantly developing countries, are faced with reversed economic growth and development, especially for countries that are highly dependent on their mineral resources for development (Ross, 2001; Sachs and Warner, 2001:827-838).

Hamann (2003:237-254) further expatiates that in the context of mineral rich-poor countries witnessing downward development, those in communities where these resources are mined are worse off than areas with no mining activities. As a result, people in mining centres are adversely affected economically, socio-culturally and environmentally by the outcomes of mining activities (Miranda et al., 2003:34). The perspective of Miranda et al. (2003) has been affirmed in countries such as Peru (Aramburu, 2006) and Bolivia (Aruquipa, 2005). Other negative externalities associated with mining in the affected communities are environmental destruction and contamination, agitation and conflicts, social vices such as prostitution and high rates of alcoholism (Miranda et al., 2003).

Despite the arguments spearheaded against mining and development, proponents such as Stevens (2003:3-42) and Pegg (2006:376-387) still support the idea of mining contributing enormously to development. For instance, in Peru, as of 2014, the mining sector accounted for more than 50% of the total export earnings of the country. Also, in South Africa, the mining sector (gold) made contributions of about 27.4% in the country’s mineral revenues for 2014, with the gold mining sub-sector employing about 56% of the mine’s labour force (McMahon and Moreira, 2014:37). These individuals are of the view that if appropriate structures are instituted in terms of economic, social and political make-ups, governments in developing countries with mineral resources would be able to harness these resources to substantially push their countries to a higher and sustained level of growth and development.

Mining has become part of the world's economic activities, and countries such as Canada, United States, Australia, Chile, South Africa, Peru, Ghana, and Tanzania among others are known to be mining hotspots. Among these countries, the United States of America, Canada, Australia, South Africa and Chile are known as the traditional leaders in global mining in terms of their exploration techniques and advanced mining technology (Mbendi, 2007; p.13). It is well-known that mining serves as employment avenues for millions of people in mining countries (see Mbendi, 2002 for the South African case), but claims from the United Nations Industrial Development Organisation (UNIDO, 2001) indicate that it is rather the high levels of unemployment which have forced people into mining activities, especially at the small scale level.

Further estimations from the UNIDO have indicated that in developing countries where mining activities are carried out, especially in Africa and Asia, there are over six million artisanal mining actors. Mining has also been noted to have health implications as established in some available mining literature and studies. As affirmed by Stephens and Ahern (2001), mining activities pose health risks, including short-term injuries, accidents and diseases such as cancer, pneumoconiosis, asbestosis and silicosis. Stephens and Aherns (2001), further, add that deep mining affects employees in terms of heat exhaustion, increased blood pressure, a disorder in the nervous system, and myocardial infarction. In countries such as South Africa, mining centres are noted to be centres for the widespread HIV/AIDS in the country (see Campbell et al., 2000:487; Corbett et al., 2000:2,764) and this has been affirmed by mining companies, which have implemented health programmes with the aim of preventing the spread of HIV/AIDS (Corbett et al., 2000).

Not only does mining have implications on employment and health, but on the environment as well. The impact of mining activities on the environment has generally been negative (Asiedu, 2013; Warhurst, 1999 in Whellams, 2011:36). Yelapaala (2004) affirms the negative development consequences mining has on land and the environment. Gold mining, for instance, leads to the exposure of the environment to mercury as well as the toxicity associated with its extraction and processing (Tirado et al., 2000:712; Drasch et al., 2001:160). Drasch et al.'s (2001) study cited in Harada et al.'s (1999:251) study in Tanzania unveils some negative outcome of mining on the environment, which have affected the lives of people living in mining affected areas in these countries. Mining's destruction of lands and vegetation through deforestation and its negative outcomes on agricultural production are also identified in the research of Akabzaa and Darimani (2001, cited in Yirenkyi, 2008:181)

In Figure 2.3, the general overview of the effects of mining on development has been indicated to enhance a better appreciation of how mining affects development in both negative and positive ways.

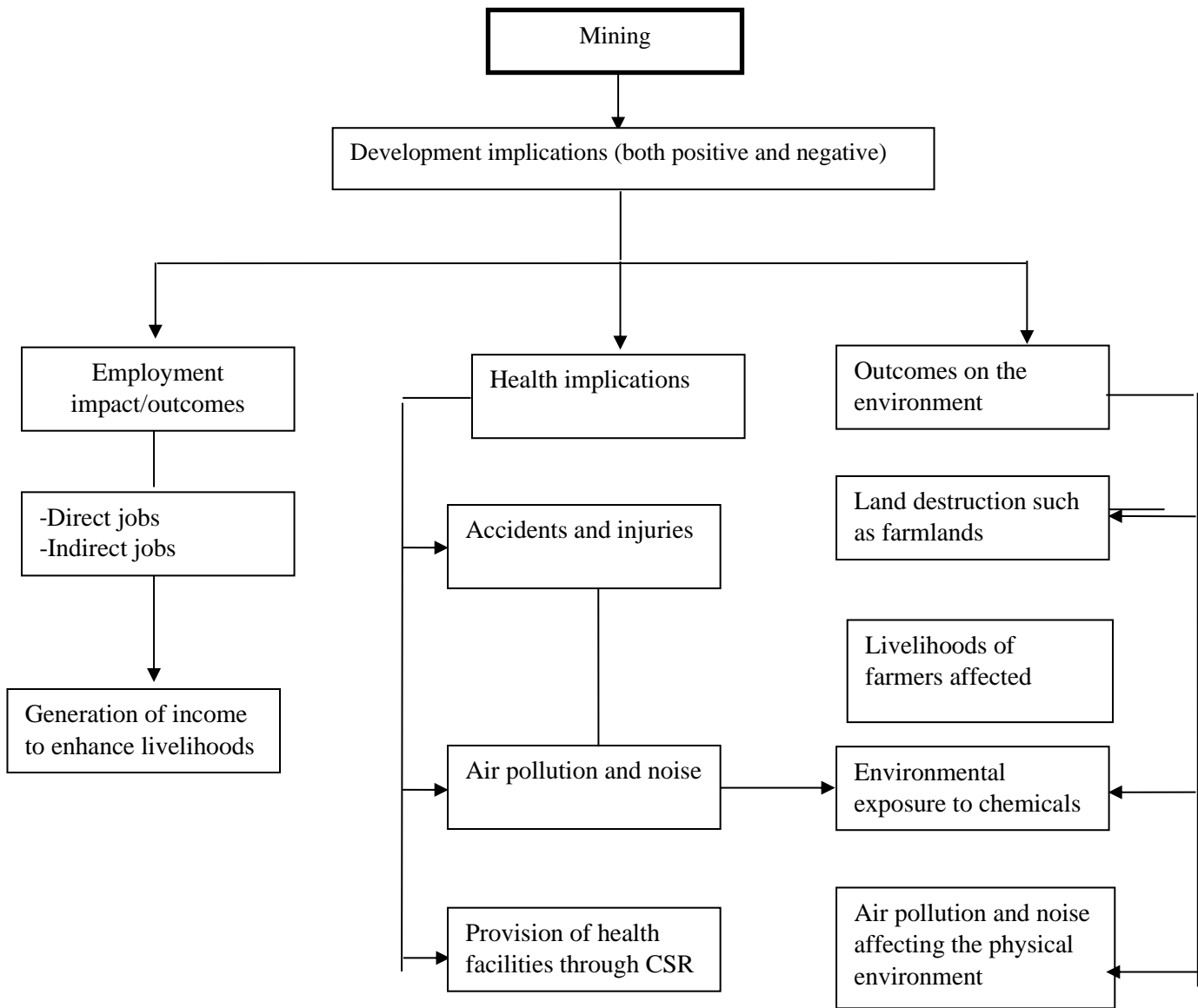


Figure 2.3: Mining and its development implications

Source: Author's Construct (2016)



### 2.7.3 Small Scale Mining

Small Scale Mining (SSM) has received considerable attention in many countries due to its huge potential in enhancing the livelihoods of people through job creation. Despite the prominence of SSM in the mining literature, its definition has been very elusive. This is because of the subjective attribution of what small scale means. While a country could perceive the operations of some groups as a small scale, in other countries, the same operations by the group could be tagged as a medium or large scale. Due to the lack of a universal meaning of SSM, Chatterjee (1993, cited in Opoku-Antwi, 2010:47) suggests that the concept of SSM should be perceived in both descriptive and quantitative terms. The quantitative component should, therefore, be premised on the country under consideration, the mineral in perspective and time as a factor. Proponents such as Chatterjee (1993) and Zhu et al. (2014) propose that the term SSM should be defined using the following yardsticks; ownership type, capital investment, level of mechanisation, depth of work, nature of work, employment, size of deposit, value and production. Opoku-Antwi (2010:45) posits that countries such as Ghana and Indonesia define SSM, using 'ownership' as a key indicator.

SSM is defined as entities whose ownership is held by individuals or cooperatives (Mineral and Mining Act, 2006 (Act 703) of Ghana; Mining Law of Indonesia). Using capital investment as an indicator, SSM is mining activities with low capital (Chatterjee, 1993). Based on the 'level of mechanisation', SSM is seen in developing countries as mining activities which are done by intensive use of labour (Bryceson and Jønsson, 2010). This implies that though some level of mechanisation is used as in the case of India and Peru, greater proportions of mining activities are done using human labour. Anders et al. (1978) have, however, reiterated the use of mechanisation as the basis for defining SSM. In the United States, for instance, mechanisation has been used to differentiate SSM from other types of mining. Based on mechanisation, SSM is described as shallow underground mining (Franik, 2005) and is done on a seasonal basis depending on the nature of the work. Others have also used employment as the basis for defining SSM, and this seems to have gained ground in many countries.

In India, for instance, SSM is defined by the Mines Act as a mining activity employing less than 60 people (Chatterjee, 1993). Size of deposit as a criterion is used in countries such as Tanzania and India, where an area with a small amount of deposit is left for SSM actors for their mining activities. In the direction of value as an indicator for defining SSM, Anders et al. (1978) highlight the amount of turn-over from mining and posit that if the turnover is less than some accepted amount, the activities are considered as SSM. Production level is a highly

accepted way of defining SSM. According to the United Nations (1992), a mining operation with a yearly production of ore, not more than 50,000 tonnes is SSM.

The ILO (1999, cited in Opoku-Antwi, 2010:49) indicate that SSM is done by 20% of mining workers around the globe and even in developing countries, the number of people employed is around 8 to 10 million. Using a region-wise data, ILO (1999) further revealed that for eighteen developing countries in Latin America, SSM employs more than six hundred thousand to one million people; in twenty African mineral-rich countries, more than eight million to ten million people; and in the ten Asia-Pacific mineral resource countries, almost seven million people are employed by the SSM. SSM, if given the much-needed attention, holds huge potentials for enhancing national output levels and revenue generation for advanced development (Hilson, 2001:33).

The World Bank (1995) affirms that rural-urban migration control could be achieved through the framework of SSM activities. This is because mineral resources are usually located in rural areas, and because of the economic benefits that could be derived from these resources, the youth, who will have otherwise moved to urban centres for greener pastures would rather stay behind and engage in SSM. Apart from SSM's control of rural-urban migration, it contributes substantially to foreign exchange and utilisation of resources, which would have otherwise been considered as uneconomic (World Bank, 1995). Despite the benefits from SSM, many governments on the global scale are unenthusiastic to support the operations of SSM due to its health, occupational, and environmental risks (Hilson, 2001:33). Research has shown that the use and discharge of heavy metals in mining poses a great threat to plants, humans and microorganisms (Fashola, Ngole-Jeme and Babalola, 2016). These heavy metals include, but are not limited to, Zinc (Zn), Cadmium (Cd), Lead, Chromium (Cr), Nickel (Ni), Arsenic (As), Copper (Cu) and Mercury (Fashola et al., 2016).

Heavy metals such as Arsenic have been found to be associated with peripheral vascular diseases as well as lung, kidney and bladder cancer which may lead to haemolysis and bone marrow depression (Rahman, Ng and Naidu, 2009). Other infractions of heavy metals include zinc (vascular shock, asthma and pancreatitis) (Rattan et al., 2005); Nickel (cancer of the nasal cavity and lungs); Copper (skin rashes, weakened immune system as well as liver and kidney damage). Mercury is volatile and, when inhaled by humans, it could lead to serious health conditions (Fashola et al., 2016).

#### **2.7.4 An Overview of Mining and Gender**

The roles of different gender groups in general development have become important globally, especially for gender proponents and activists. This has been strengthened by the outcome of the Beijing Conference in 1995, where gender equity in development was discussed. There are, however, certain industries such as mining where studies have confirmed a wide gap between the two gender groups, male and female. The literature on mining has, in most cases, paid attention to mining, health and safety; the legal issues of mining, mining and development; mining technologies and global markets. Some studies on mining and gender have confirmed a gender gap in favour of males. According to Ampofo (2014, cited in Rufai et al., 2014:265), one can only make substantial contributions to gender discussions if the person understands what gender stands for. From his perspective, many people fail to understand the true meaning of gender, and at its worst, they use 'gender' to mean 'women' as if 'men' do not have gender. Gender is not biologically inclined but is defined by social traits (social situations and arrangements). It is, therefore, possible that one can be a male by 'sex' but a female by 'gender'.

Benya (2000, cited in Rufai et al., 2014:265) states that employing women in the mining industry has been a challenge since mining is perceived as men's work. Though from the universal overview, men are the dominant actors, studies from countries such as Belgium, Germany and India have indicated that women were an active force in underground mining in the mining sector until the 20<sup>th</sup> century, and this, to some extent, was influenced by post-World Wars (Mohanty, 2003). In India, for instance, women could work in opencast mines. However, as time went on, women were taken out of the mining industry and were rather replaced by men. In some countries, one of the requirements for getting a job in the mining sector was a person's gender as a male that is there was gender preference for males in the mining sector (Purevjah, 2010 cited in Rufai et al., 2014:267). This preference, according to Bryant and Jaworski (2011), has led to skill shortages in the mining sector of some countries, notably, in Australia. However, with the recent improvement in technology, Abrahamson and Jahanson (2006:657) indicate that there are new jobs being created in the mining industry which are not masculine in nature and, as such, can equally be done by females. This increase in technology has changed the physically demanding nature of the mining sector.

In Ghana, only 0.6% of miners are females per the Population and Housing Census of 2010. The mining sector contributes substantially to the development of Ghana; however, the sector is dominated by males. Benya (2009) affirms that historical exclusion, culture and legislative restrictions have ruled out women from the mining sector of Ghana. The gender

disparity is unfair, and the mining sector needs to put in place gender-sensitive policies to ensure gender equity in the mining industries (Ampofo, 2014 cited in Rufai et al., 2014: 266). Gender restrictions against women in Ghana are caused by factors such as taboos, domestic and family commitments of females (Yakovleva, 2007), limited skills and culture (Kwame, 2007:9). Gender can, therefore, be fairly represented in the mining sector only when the factors spearheading restrictions are tackled.

### **2.7.5 Ghana and Mining: Broad Overview**

Ghana is noted as one of the major mining countries in the world. The country is noted for the mining of gold, diamond, bauxite, manganese and other resources. Magai and Marquez-Velazquez (2011:3) place Ghana among the top 20 countries in relation to mining of gold, precisely taking the 12<sup>th</sup> position in the world in 2007, with approximately 2.2% of the share of the world gold exports. Mining has a historical connotation for Ghana, as evidenced in its former name ‘Gold Coast’ (Akabzaa and Darimani, 2001:32). Reports from the Ghana Chamber of Mines (2008) indicate that about 2.5 billion US dollars are earned from exports of mineral resources, with about 520,000 people employed within the sector, both at the small- and large-scale mining levels. The sector also contributes more than 7% to corporate taxes, 12% revenue solicited through the services of the country’s Internal Revenue, 5% GDP with 41% of total export receipts as at 2008.

According to Aubynn (2012:30), the mining sector has contributed to the expansion of Ghana’s financial resource base through revenue, foreign exchange and foreign direct investment. In the direction of revenue from mining, Ghana obtains two sources of revenue from mining – direct and indirect sources. The direct revenue sources are from royalties, mining taxes, profit (dividends) and levies, while the indirect sources are rather through taxes and fees obtained by the country through the supply chain. In terms of foreign exchange, the mining sector contributes to Ghana’s development export revenues, mineral revenues and impact on the international reserve position of the country. The mining sector in 2012, for instance, accounted for 42% of gross export revenue and returned about 3.2 billion US dollars through the Central Bank and Commercial Banks. The mining sector is also the most attractive sector for Foreign Direct Investment (FDI).

The Minerals Commission (2011) records show that FDI in the mining sector in 2011 was 1 billion US dollars while it was previously 9 million in 1983. The mining sector is also a major employment source for many people in the country. Findings, as contended by Aubynn (2012:30), show that the number of indirect jobs or mining-induced jobs that have been created

is about six times the number of people employed directly into the sector. The sector has also contributed to human resource development through training, education, sensitisation and apprenticeship programmes. Large scale mining companies have also engaged in community development interventions with the intention of enhancing the livelihood of locals. This is backed by the voluntary commitment of about 26 million US dollars to community-based projects by mining companies in Ghana in 2012 (Aubynn, 2012: 30).

Also, findings from Institute of Statistical Social and Economic Research (ISSER) (1998) shows that in 2000 for instance, the mining sector's contribution to total export earnings exceeded that of cocoa and timber, with the sector contributing 38.96% compared to cocoa of 22.51% and timber of 9.03%. Findings from UNCTAD (2005) and Baah (2005:177) show that though available data on the contributions of mining to Ghana's economy vary year-in-year-out, the mean score of the contribution is approximately 5% of GDP. In 2011, the Ghana Chamber of Mines (2011) unveiled that the mining sector's contribution to mechanised export stood at 40%. These indications make Ghana's mining industry an integral component of the country's economic growth and development.

In terms of the negative outcomes of mining in the country, several studies have established that mining has adverse environmental and health outcomes. Based on the detrimental attributes of mining in the Ghanaian domain, Awudi (2002:9) maintains that despite the contributions of mining to the development of the country, its overall contributions to the development of the country are minimal. The public has become concerned about the operations of mining actors due to their pollution of water resources and lands, including forest, and escalations of social conflicts in affected communities; yet these actors engaged in mining are yet to accept that their activities are a threat to Ghana's development (Awudi, 2002:9). In many mining centres, mining operators use dynamite for blasting large rocks for excavation, and this has resulted in the production of unwanted sounds (noise). In many areas, buildings are affected due to the effects of blasting. The use of cyanide in gold recovery has affected aquatic life and crop production. Obuasi Mine Report (2006) affirmed that the failure in dam treatment in a community known as Kokotesua in 2005 was later attributed to illegal mining activities in the community two years earlier. This bad outcome also affected neighbouring communities such as Abompekrom and Nkamprom.

#### **2.7.5.1 Development of Mining in Ghana**

Ghana's mining tradition, specifically gold mining dates back to the 19<sup>th</sup> century. The mining industry was then controlled by the British and other foreign investors (Akabzaa and

Darimani, 2001:6). The industry was vibrant during the pre-independence period, and its contributions to the economy cannot be downplayed. During this period, private Ghanaian gold miners were banned in 1933 from operating mines due to the promulgation of the mercury law. The British began large scale mining in Ghana, based on the formulated mineral policy prepared by the Colonial Office in London (Tsikata, 1997 cited in Akabzaa and Darimani, 2001:1). This policy was purposely aimed at ensuring the self-sufficiency of the British Empire in relation to mining as well as to establish a legal and administrative framework that would facilitate mining operations. Mineral production during this period had its ups and downs. Its production peak was termed as the “jungle boom”, whereas poor periods were attributed to various factors including the two world wars.

The ownership of the mineral industry reverted to the state after independence. The state gained total control over its natural resources. The government set up the State Gold Mining Corporation (SGMC) and the Ghana National Manganese Marketing Corporation (GNMC). The role of SGMC was to collect gold from 5 mining sites (Bibiani, Tarkwa, Prestea, Konongo and Dunkwa mines) while GNMC took over the management of manganese operations at Nsuta from the Africa Manganese (AMG) under the British Colony. In 1972, the government of Ghana became the highest shareholder of Ashanti Goldfields, owning 55 per cent of its total shares. The main aim of the government for taking control over the mine was to create employment for indigenes, generate revenue and have full control of its resources. However, state mining faced challenges such as lack of investment and exploration, lack of modernisation and maintenance. These factors made the companies unattractive to investors, and as a result, Bibiani and Konongo mines were shut down. Therefore, production in the mineral industry slowed down over the years due to the inability of the industry to attract private investors until 1986 when the mining industry began to grow once again.

Ghana’s mining sector has undergone several changes in the past years. The gold mining sector has seen development such as improved exploration, mining and processing technology. The formulation of mineral policies in developing countries is one of the emerging changes in the mining sector. These policies are geared toward the enhancement of private sector participation in the mining sector. This move was supported by the World Bank and the International Monetary Fund (IMF) (Feeney, 1998 cited in Akabzaa and Darimani, 2001:2) to “attract private investment, promising geological environment, conducive policies, legislative and administrative framework more conducive to business needs to be established”. The privatisation programme renewed investor confidence in the industry, which led to an increase in the volume and value of minerals produced in Ghana. Gold production, which declined from

a peak of 915,317 ounces in 1960 to 282,299 ounces in 1984, bounced back to 998,195 ounces in 1992, exceeding the 1960 peak value. Minerals, especially gold, has assumed and maintains a leading role in Ghana's foreign exchange since the country's independence to date.

#### **2.7.5.2 The Structure of Mining in Ghana**

Two forms of mining dominate in Ghana; they are surface mining and underground mining. Surface mining requires a large area of land and involves the extraction of minerals through open pits and/or borrows. From the perspective of Yirenkyi (2008), surface mining has gained great popularity in Ghana than underground mining for different reasons. Firstly, underground mining involves more inputs such as fuel, chemicals, power and other equipment, which increase mining costs; consequently, these make underground mining more expensive than surface mining. Again, the health and safety risks involved in surface mining are very low compared to underground mining. Other factors that contribute to the high interest in surface mining include the low grade of ore, location of the ore bodies, and competition among gold-producing countries for investors. Out of the sixty (60) mining companies operating in Ghana, twenty (20) are foreign-owned companies (Acheampong, 2004:45), of which only two (2) companies (Ashanti Gold Fields Company and Prestea Gold Resources Limited) are into underground mining; all the remaining mining companies rather engage in surface mining (Aawaar, 2006).

Individual mining actors in Ghana, including companies, are either into small scale or large-scale mining (LSM). Small scale mining (SSM) involves individuals, while large scale mining is done by mining companies with huge capital. The Minerals and Mining Act, 2006 (Act 703) of Ghana defines SSM as the mining of mineral resources such as gold through the use of effective and efficient methods, with no significant expenditure incurred by the party or parties involved whose size does not go beyond nine persons or by a corporate body composed of a minimum of ten members. The activities of SSM are done by both legal and illegal miners. The actors in illegal SSM are known as 'galamsey', which has its root from 'gather' and 'sell'. Ghana saw an increase in the number of people engaged in SSM between 1984-2004, there was a rise in SSM actors by nearly 942% immediately after the passing of the Small-Scale Gold Mining Law, PNDC Law 218 of 1989 (Ministry of Lands, Forestry and Mines, 2008). Findings from a country-specific study by the International Labour Organisation (1999) revealed that SSM in Ghana has contributed to the local economic development (LED) of many communities in Ghana. In the two dominating regions of SSM, Ashanti and Western regions, between 40 to 85 per cent of households obtain their income from SSM activities either directly or indirectly.

Through mining, local communities, which otherwise, do not qualify for certain services get the opportunity to be provided with these services to serve mining actors, and this helps individuals in affected areas to have access to them without experiencing long-distance travel and inconveniences. For instance, in the Western region, specifically, the Wassa Amenfi East District, data available from the District Assembly show that individuals engaged in SSM have supported local development through the provision of financial resources to local leaders (Wassa Amenfi East District Assembly, 2008).

Though SSM is beneficial to local development, David's (1993:33) analysis of the skills of the human resource involved in SSM attested that a greater number of the miners are individuals who have no formal training and employ archaic techniques for mineral search, utilisation and value addition. This revelation underpins Jennings' (1993) finding that due to a large number of unskilled labour in Ghana's SSM (about 91% as confirmed by Minerals Commission, 2007) and the limited resources possessed by SSM actors, the SSM sub-sector will continue to experience very low productivity and limited income as well as the health and safety risks associated with this form of mining due to the fact that mining activities are undertaken with no safety measures at the sites (Minerals Commission, 2002). In addition, SSM contributes significantly to the environmental destruction of affected areas (supported by Gueye, 2001). A report by UNIDO (1997) discusses the health and safety risks of workers in SSMs in Ghana. The report indicates that in 1993, small scale mining of gold recorded a fatality of 20 compared to 13 for large scale mining. This number, as indicated by ILO (1999), could be understated, as many small-scale miners under-report or fail to report all cases of accidents that occur at mining sites so as to avoid public attention. In 2005, Daily Graphic reported that about 40 small scale miners had died due to a fatal on-site accident which happened at a mining community known as Nyafoman-Noyem in the Eastern region of Ghana (Daily Graphic, August 15, 2005, in Opoku-Antwi, 2010:23).

Therefore, SSM has been beneficial to Ghana's economy, but the country is overwhelmed by its negative outcomes on people, the environment and the economy (Appiah, 1998). LSM is done by large scale industries. As indicated in Ghana's Country Report submitted to the United Nations Conference on Sustainable Development in 2010, the country has seven large scale companies that are into large scale gold mining. Bauxite has only one large scale company, and the same holds true for manganese. Large scale mining companies undertake their mining activities in compliance with the Mining Act of Ghana. These companies make their contributions to the development of Ghana by showing commitment in the payment of corporate taxes and royalties as well as profit tax and income tax obtained



through workers' wages and salaries. Large scale mining companies currently provide jobs for more than 24,000 people within the formal sector of the country.

Aryee (2001 cited in Opoku-Antwi, 2010:92) has indicated that Ghana does not only engage in the mining of gold, diamond, bauxite and manganese but also, kaolin, limestone, sand and silica, which are produced on a very small scale compared to other mineral resources. The mining sector of the country is rather dominated by foreign investors, with local private entities and the government accounting for not more than 15% of mining shares. In the context of SSM, however, foreign actors are highly restricted, and the sub-sector is based on open ground mining for local actors.

### **2.7.5.3 Illegal Mining Activities and their Development Outcomes in Ghana**

Illegal mining activities in Ghana have become an issue of much concern in recent years. The problems associated with illegal mining, popularly known as 'galamsey', are well researched. Actors in illegal mining activities employ the open cast mining method with the use of primitive equipment and machinery. Adjei et al. (2012:38-55) have indicated that illegal mining activities have a negative environmental impact on affected communities. The destruction of lands, pollution of water bodies, and heavy metal contamination of soils are environmental outcomes associated with illegal mining. Studies by the Environmental Protection Agency (EPA) (1996) established that in illegal mining centres in Ghana, the degree of soil erosion on abandoned mining sites is about 2-400 tons per square kilometre. The use of dredging in mining and the illegal means of mining minerals from rivers and water bodies are the major causes of water pollution in Ghana (Aryee, 2003). Illegal miners utilise harmful metals such as copper, cadmium, chromium, mercury as well as lead, and this is a major cause of soil destruction in terms of nutrient content for agricultural purposes (Means and Hinchee, 1994 cited in Danyo and Osei-Bonsu, 2016:113).

Apart from the environmental destruction associated with illegal mining activities, Adjei et al. (2012:38-55) have revealed the danger associated with such mining activities. There is evidence of death caused by drowning, pit collapse and landslides. Studies by Adjei et al. (2012:37) and Aryee (2003) have found such instances in Dunkwa On-Offin and Attaso, respectively. According to Danyo and Osei-Bonsu (2016:115), many farmers in mining communities are migrant farmers and do not have usufruct right on the lands used for farming. This has made it easy for illegal miners to invade such farming lands for their mining activities, leading to loss of livelihoods and negative implications on food security. They further assert that in some cases, compensations are paid to the affected farmers, especially when the

landowners agree to give out their lands to miners. However, the compensation given to these farmers is meagre in terms of relocation and temporal livelihood support.

Oblokuteye (2010:46) adds that in many of these affected communities, illegal mining activities pollute water sources used for fish farming, which serve as a source of livelihood for some of the local people. This also has negative implications on food security due to a halt in fish farming. Further, in areas where these mining activities are done, the cost of living goes up greatly (Danyo and Osei-Bonsu, 2016:115). There is also evidence to indicate that the individuals involved in illegal mining activities are faced with health issues, ranging from eye problems, skin infections and even mental issues due to the hazardous metals used in mining.

#### **2.7.5.4 Legal, Institutional and Policy Underpinnings of Mining in Ghana**

Mining in Ghana is regulated through a framework of legal instruments, institutional support and regulations and policy set-ups. The framework has been instituted with the overarching aim of ensuring sustainable mining in Ghana to contribute immensely to Ghana's economic advancement. During the colonial period, mining legal underpinnings and their institutions were influenced by concession procedures, protection, restrictions, safety, health, corporate tax and export duty. The legal dimensions of mining were catered for by Ghana's Concession Ordinance instituted in 1900, the Gold Mining Products Protection Ordinance of 1909, the Minerals Duty Ordinance of 1952, the Gold and Diamond Protection Ordinances of 1909, the Mercury Ordinance of 1932, and the Ghana Duty Ordinance (Amendment) of 1951. Other legal instruments enacted during the colonial period are the Explosive Ordinance (Cap 56) of 1928, the Forest Ordinance (Cap 56) of 1928, the Immigration Restriction Ordinance (Cap 70) of 1928, the Mining Health Ordinance (Cap 106) of 1928 and Cap 150), the Mining Rights Regulation Ordinance (Cap 107) of 1928, the Rivers Ordinance (Cap 142), the Radio-Active Mineral Ordinance (Cap 151), the Survey Ordinance (Cap 159) and the Minerals N.T. Ordinance (Cap 155) (Opoku-Antwi, 2010:28).

The legal instruments instituted in the post-colonial era focused on concession procedures, capital investment, company code, land administration, conservation and development, stool lands settlement, subversion, income tax and environmental protection. The Mineral Act, 1962 (Act 126); the Minerals and Mining Law (1986) (PNDC Law 153); the Small-Scale Gold Mining Law, 1989 (PNDC Law 218); and the Minerals and Mining Act, 2006 (Act 703) are some of the legal tools enacted during the post-colonial period. As indicated by Annin (1994 cited in Opoku-Antwi, 2010:22), other enactments on mining after the colonial period are the Environmental Protection Law, 1994; the Precious Marketing Corporate Law

1989 (PNDC Law 219); Minerals and Royalty Regulations 1987 (Legal Instrument 134); the Investment Code, 1981; the Lands Commission (Amendment) Decree 1980 (AFRCD 63); Capital Investment (Amendment) Decree 1977 (SMCD 123); Minerals Duty Decree 1975 (NRCD 346); Gold Export Levy Decree 1974 (NRCD 269); Exchange Control (Amendment) Decree 1973 (NRCD 220); Income Tax (Amendment) Decree 1973 (NRCD 202); Lands Commission (Amendment) Decree 1973 (NRCD 192); Capital Investments Decree 1973 (NRCD 172); Exchange Control (Amendment) Decree 1972 (NRCD 112); Minerals Duty (Amendment) Decree 1971 (Act 374); Lands Commission Act 1971 (Act 362); Mining Regulation L.I. 665 of 1970; Mining Regulation L.I. 231; Minerals Act and Regulations Decree 1968 (N.L.C.D 308); the Minerals Control of Smuggling (Amendment) Act 1965 (Act 296); the Minerals (Control of Smuggling) Act 1965 (Act 298); the Mines and Minerals (Conservation and Development) Act 1965 (Act 278); Capital Investment (Amendment) Act, 1965 (Act 267); the Companies Code, 1963 (Act 179); Minerals (Off-Shore Regulation) 1963 (L.I. 257); Capital Investment Act, 1963 (Act 172); Minerals Duty (Amendment) Act of 1963 Act 167; the Minerals Act (Act 126); the Administration of Lands Act 1962 (Act 123); the Concessions Act 1962; the Exchange Control Regulations 1961 (Legislative Instrument 133); and the Exchange Control Act 1961 (Act 71).

Focusing on SSM, Akabzaa et al. (2001:23) established that the regulatory framework for SSM is made up of General Mining Laws, Regulations, Small Scale Mining Enactments, and Relevant Codes of Practices. In terms of the General Mining Laws, there are the Diamonds Decree of 1972 (NRCD 32); Environmental Protection Council Decree of 1974 (NRCD 239), Additional Profit Tax Law of 1985; Minerals and Mineral Law of 1986 (PNDL 153); Diamonds (Amendment) Law of 1986 (PNDCL 217); Small Scale Gold Mining Law of 1989 (PNDL 218); Precious Minerals Marketing Corporation Law of 1989 (PNDCL 219); Mineral Commission Act of 1993 (Act 450) and Minerals and Mining Act of 2006 (Act 703). Small-Scale Mining Regulations include the Mining Regulations of 1970 (LI 665); the Explosive Regulations of 1970; Minerals (Royalties) Regulations of 1987; and the Minerals and Mining Act of 2006 (Act 703) Section 110. The enactment component of the SSM regulatory framework are Diamond Mining Industry Protection Regulations, 1927; Concessions Ordinance, 1939 (c.136, Laws of G.C. 1951 Revision); the Gold Mining Products Protection Ordinance Laws of the Gold Coast, 1951 (Revision); Mining Health Areas Ordinance (c. 150, Laws of the Gold Coast 1951 Revision); the Mining Health Areas Regulations, 1935 (Vol. VIII, 1954 Laws of the Gold Coast); Prospecting and Digging Licence Regulations, 1950 (Vol. VIII, 1954 Laws of the Gold Coast); Minerals Commission Act, 1993 (Act 450); the

Environmental Protection Agency Act, 1994 (Act 490); Water Resources Commission Act, 1996 (Act 552); the Minerals and Mining Law, 1986; and Minerals and Mining Act of 2006 (Act 703) Sections 82-99. The codes of practice of SSM are the Code of Practice for Small Scale Gold Mining Operations and the Mining and Environmental Guidelines.

The Minerals and Mining Law of 1986 (PNDC Law 153), which is one of the legal underpinnings of mining in Ghana, the essence of its enactment was to create a conducive atmosphere for actors, both local and foreigners, who are involved in the Ghanaian mining sector. Depending on the economic outcomes of the activities of mining companies, the law mandates these entities to pay for royalties within a minimum rate of 3% and a maximum rate of 12%. Again, the lease granted to mining activities attracts a 45% income tax, but in instances where financial/economic returns of mining activities exceed some agreed levels, the mining companies are entreated to make some additional profit tax payments depending on the level of returns gotten from mining activities. The law has made it compulsory for holders of mining lease to be granted a 75% capital expenditure allowance incurred per annum of their investment and subsequently, a 50% allowance in the following years. As indicated by Biney (1998), the Minerals and Mining Law of 1986 led to a reduction in the income taxes of mining firms and some fiscal allowances with the aim of reducing the general tax burden on mining firms.

Another mining sector instrument is the Small-Scale Gold Mining Law of 1989 (PNDC Law 218), which legalised SSM in Ghana. This law is composed of three sections – Section One is on the formal registration of SSM activities; Section Two is on the operations of SSM actors, and Section Three deals with licensing and provisions for miscellaneous. The law emphasises that mining licence can be given to a citizen aged 18 years and above to undertake mining activities in compliance with mining regulations for a maximum of three years subject to renewal. Corporate bodies and individuals given permission to mine are required to operate using good practices in accordance with health and safety rules and protection of the environment.

The use of explosives in mining is not permitted by law, but individuals are permitted to buy mercury from legal dealers, and the quantities bought should be used solely for the purposes of mining. Small scale miners should also be allowed to operate without the payment of any income tax and royalties for the first three-year period of their operations. A review of the Small-Scale Gold Mining Law of 1989 (PNDC Law 218) indicates a gap, which is the failure to effectively consolidate SSM activities into the mining act. The law also failed to effectively reflect on the new technologies and development in the mining sector. These

criticisms of the Mining Law of 1989 led to the enactment of the Mineral and Mining Act (2006) (Act 703) to fill these gaps.

The Mineral and Mining Act (2006) (Act 703) is the contemporary Act of the mining sector. Its content is like the Mining Law of 1989 in terms of sections and the issues covered. Mineral resources found in every part of Ghana either on land or in water bodies belong to Ghana, and power is vested in the President to put these resources in trust for the people of Ghana. The Minister for Lands and Natural Resources is responsible for mines on behalf of the President. The Minerals Commission can engage in negotiations, grant, revocation, suspension or renewal of mineral rights, based on the provisions of the Act. Mining actors are mandated to have mineral rights, which must be granted before the person engages in mining activities in the country.

The institutional framework of mining in Ghana is made up of institutions which have been established for administration and regulations of mining activities in the interest of the country (IMF, 1994). These institutions include the Ministry of Lands and Natural Resources, the Minerals Commission of Ghana, the Chamber of Mines, the Precious Mineral Marketing Company (PMMC), the Geological Survey Department, and the Environmental Protection Agency. The Minerals Commission (2007) notes that while the Ministry of Lands and Natural Resources is in existence to ensure effective, appropriate and sustainable use and management of Ghana's lands and natural resources, including forests, wildlife, water resources and mineral resources for the 'well-being' of the country, the Mines Department under the ministry is the main authority responsible for coordination, advice, and review of licences and other related tasks connected to the mining sector. The Minerals Commission regulates and manages the use of the country's minerals and coordinates mining policies.

This institution was created by the Mineral Commission Act, Act 1993 (Act 450). The Environmental Protection Agency (EPA) was also established with the core mandate of protecting the environment through policy initiatives and regulations. The institution came into existence through the EPA Act of 1994 (Act 140). While the Geological Survey Department was created to undertake research and deal with issues such as collection and analysis of geoscientific data and knowledge, and also provide advisory services to Ghanaians in relation to geological issues and their development implications on the environment. The Precious Minerals Marketing Company is engaged in the purchase of precious minerals from SSM actors for foreign exchange.

In the direction of the mining policy framework, Hillson (2001) indicates that the sector's policy framework forms an important component of the Economic Recovery

Programme (ERP) initiated in 1983. Also, under the Structural Adjustment Programme (SAP), the World Bank provides policy recommendations to inform the mining policy of the country. The recommendations given are in relation to joint initiatives in the rehabilitation of state-owned mines, financial support and incremental divestiture of mines to private investors (World Bank, 1986). There have also been mining sector policy reforms in the direction of increasing fiscal liberation of the mining sector, strengthening government support, the involvement of the private sector in the mining arena, changes in legal underpinnings of the sector and enactment of environmental laws (Songsore et al., 1994). Based on the mining policy reforms, financial incentives in the form of loans were given to some mining companies to facilitate their activities while others received management services through contracts to enhance their efficiencies (Akabzaa et al., 2004). While Ashanti Goldfields benefited from the former provision, Tarkwa Goldfields, Prestea Mine and Ghana Consolidated Diamond Company benefited from the latter provision. After the financial incentives and management provisions, gradual privatisation of the mining sector was given considerable attention. Government's shares in these mining companies were sold to private entities, and there was the divestiture of public mining companies. As pinpointed by Songsore et al. (1994) and Hilson (2001), the Bauxite Company of Ghana had a reduction in public shares from 55% to 20% in 2008 while Ashanti Goldfields saw a reduction from 55% to 19%. This was done for the private sector to take ownership of mining companies. Both large and small mining companies are required to have mineral rights before they can engage in mining activities in the country (the Minerals and Mining Act of 2006, Act 703). These rights are classified as reconnaissance licence, prospecting licence, mining lease, restricted mineral right and SSM right.

The purpose of the Reconnaissance Licence is to undertake regional mineral exploration without any drilling and excavation works within an area made up of blocks of 21 hectares not more than 5,000 contiguous blocks. This licence is subject to renewal every year. The Prospecting Licence is required for mineral search within an area not more than 750 contiguous blocks subjected to a 3-year renewal, with reduction of the area coverage to not less than half. The mining lease as a type of mineral right is valid for a maximum of 30 years, depending on the mine life renewal. This right is used for the extraction of minerals with an area not exceeding 300 contiguous blocks. While the restricted mineral right is used for building and industrial minerals, SSM licence is used for mineral extraction. The restricted mineral right could be valid for 15 years or less, depending on the mine life renewal. SSM right is rather for 5 years subject to renewal after the elapse of the years.

## **2.8 CSR - An Avenue for Mining Companies to Contribute to Sustainable Development**

The mining industry is made up of large, medium and small-scale entities, which are engaged in mining activities. Large scale mining companies are expected to perform corporate social responsibility (CSR) to advance the development of the country in which they operate, particularly, mining affected communities. In order to appreciate and understand the role of CSR in the mining industry, there is a need to explore and understand the various facets of CSR deeply. Hence, this subsection of the chapter will delve into CSR, its concept and definition, the principles underpinning it, and other related issues.

### **2.8.1 The Concept and Definition of Corporate Social Responsibility**

In the business world, corporations have historically focused on making money and increasing shareholder value, and financial responsibility has been the sole driving force of corporations. In the last decade, however, corporate responsibilities have been defined broadly, without focusing on only financial returns but the environment, local communities, working conditions, and ethical practices (Kumar, 2013:1; Baumberg et al., 2014). Baumberg et al. (2014) have unveiled the need for corporate social responsibility (CSR) initiatives by corporations. As indicated by Mahajan (2011), Ioannou and Serafeim (2010) and Roitto (2013:25), there has been increased pressure from civil society, globalisation, advancement in technology, consumers and other actors demanding for adherence to socio-environmental standards.

In relation to the definition of CSR, Hohnen and Potts (2007:4) see it as an evolving phenomenon, which cannot have a fixed and rigid definition. The Parliamentary Joint Committee on Corporations and Financial Services (2006) in Rahim (2013:2) indicate that the reason behind the fragility in the definition of CSR is its interchangeable and overlapping characteristics with other terminologies as well as the ever-changing and dynamic character of CSR. The body further blames the fragile nature of CSR on its increasing scope as a result of increased demands from society and current development issues. Different scholars have, therefore, defined and viewed CSR from their perspectives, but all seem to point to the same direction.

Rionda et al. (2002:5) and Siegel (2014:1) indicate that CSR is the way by which corporate bodies take action to advance the goals of key stakeholder groups as well as general societal objectives towards enhancing different aspects of social and environmental issues. Also, Fontaine (2013:2) asserts that CSR should be the way that firms develop innovative and

economically viable products, processes and services within their core business, resulting in improved environmental protection and social conditions to achieve a balance between their business objectives and economic, social, and environmental responsibilities. According to Dzimiri (2007), this will address both shareholder and stakeholder expectations. Sexy (2004:2), further, refers to CSR as corporate accountability, corporate ethics, corporate citizenship, corporate sustainability, and views the concept as a general management activity manifested in a corporation's values, culture, decision making, strategy, and reporting mechanisms. From the above, CSR can be defined as the decision by a corporation to move away from its core mandate of making profits to undertake some non-profit activities to advance the social, economic and environmental wellbeing of people. In all the definitions available for the term, the words social, economic and environmental keep coming up, indicating the relationship between CSR and sustainable development.

Also, CSR can be manifested in the type of goods, products or services a firm produces. Consequently, when a firm produces goods and services that protect the wellbeing of its customers, then it is said to be undertaking a CSR activity.

According to Alemu-Kesto, (2017:3), the basic idea behind corporate social responsibility is that society and corporate bodies cannot be viewed as distinct entities and that there is a strong interrelationship between CSR, corporate performance and society. He indicates that CSR can yield both positive and negative results both on the society and the corporate body. In the view of Alemu-Kesto (2017:3) and Fontaine (2013:6), the negative effects of CSR are mostly on corporate financial performance (CFP). Alemu-Kesto (2017:3) asserts that only a few studies have concluded the positive effects of CSR activities on CFP, while others found that the effects are negative or have no relationship.

This argument, however, was refuted by Margolis and Walsh (2003 in Alemu-Kesto, 2017:6) who found that only 4% of 160 studies they examined revealed a negative relationship between CSR and financial performance, with 55% and 22% showing a positive relationship and no relationship, respectively. He summarises CSR as the economic, social, and environmental value that a corporation adds or destroys; there is still some evidence of negativity. Alemu-Kesto's definition is refuted by a definition of the concept by Honhen and Port (2007:13) as the whole set of issues, values, and processes that corporations must address in order to reduce any harm resulting from adding value to their products or -destroying activities. From this definition, the negative aspect of Alemu-Kesto's idea is refuted, as minimising harms generally aims at yielding positive results.



Fontaine (2013:1) links CSR to the public interest by noting that corporations have for ages measured their success primarily on profits, but profits do not necessarily guarantee their continual existence. He believes that the continued existence of a corporate body does not solely depend on profit-making, but other non-profit activities they undertake as well. According to him, a corporation that focuses on CSR, by encouraging community growth, development and voluntarily eliminating harm to the public sphere, regardless of existing legalities, indirectly gains the interest and respect of the public because of enhanced reputation. Fontaine perception suggests that corporations at the end of the day attain more markets and profits as well as are guaranteed continual existence as a result of the interest the public develops in their activities when they perform CSR activities. This is as a result of the cordial interrelationship developed between CSR and the public since the public considers their interest to be considered. Protecting the interest of the public, however, requires the following of a laid down participatory system that allows citizens to express their views, which need to be integrated into the CSR planning and implementation process.

Simplifying issues, Fontaine sees CSR as a deliberate inclusion of public interest into corporate decision-making and defines CSR as a form of a self-regulated activity integrated into a corporation's policy functions as a built-in mechanism to monitor and ensure its active compliance with ethical standards, and international norms. He, further, asserts that CSR seeks to cater for the company's actions on the environment, consumers, employees, communities, stakeholders and all other members of the public sphere and encourage a positive impact through its activities. Here, it can also be seen that CSR activities are voluntary and that companies undertake them under their regulations. This suggests that corporations are not bound by any law to implement CSR activities; hence, such activities are done based on corporations' moral convictions and intuitions rather than legal obligations. In situations where there are no external regulations of CSR, it means that corporations can undertake their CSR activities in a way that might not cater to the negative impact of their activities. This is likely to create many issues between corporations and stakeholders, which could lead to the collapse of the firm.

There is the need, therefore, for a global framework to be set within which corporations should undertake their CSR activities rather than allowing them to develop their own. On the other hand, McWilliams and Siegel (2001) disagree with Fontaine and indicate that CSR has some legal implications in some instances. They add to the generally known idea of CSR as a means of doing social good beyond a firm's interest and emphasises that CSR is required by law. In their view, CSR is a mandatory activity which firms must undertake. The contrasting

views of Fontaine (2013) and McWilliams and Siegel (2001) suggest that some CSR activities can be either mandatory or required by law, while others can be voluntary. This might depend on the kind of activity which the corporate body is into, the extent of its impact as well as the location of the activity.

All the definitions outlined above confirm the notion that there is no conclusive definition of CSR and that it can have different meanings to different people and different organisations. It is, however, clear that CSR hinges on certain common traits and elements. The most basic elements include the need to consider the social, environmental, and economic impacts of corporate operations as well as firms being responsive to the needs and expectations of their stakeholders. The definitions also suggest that though the production of goods and services by corporations and making a profit from the core goal of the corporation, they need to go beyond that and perform other non-financial profit activities. Corporations, in performing these other responsibilities, help to solve societal problems, especially the problems they have created themselves. Also, from the definitions, corporations must consider a wider stakeholder interest than stockholders and shareholders alone. This stems from the fact that the impact of their activities does not end once marketplace transactions are completed. In the context of this research, CSR is a way by which corporate bodies seek to balance achieving corporate business goals and those of key stakeholder groups by giving back to society to address the economic, social and environmental impact of their activities.

### **2.8.2 Principles of Corporate Social Responsibility**

Mujtaba and Cavico (2013:1) liken the principles of CSR to a building. They assert that every safe building should stand on a strong foundation. Hence, in aligning entities to the strong building, they affirm that every business which seeks to be sustainable should stand on three main foundations (the principles of strong values, legal compliance, and high ethical standards). In their view, values and ethical standards are pillars that are established as one's norms and beliefs which guide their behaviour. According to them, values are based on moral ethics and that if one holds moral values, one must do things right, no matter the circumstances and consequences. This suggests that businesses based on the grounds of moral values should make sure they undertake their activities in the right manner, notwithstanding its consequential effects on their activities. This principle, though very good for societal wellbeing, can be detrimental to a business. This is because as a business tries to do everything right on the grounds of ethics and morality, it could threaten its continued existence due to financial burden.

Another defect of the principle is that it fails to describe what it is right, which raises serious questions. Is it when an action favours the corporation, or when it favours stakeholders or the general society? In the researcher's view, doing the right thing can stand for the situation where corporations seek a balance between their goals as well as those of stakeholders and the society at large. Legal compliance as a principle also seeks to ensure that businesses operate within the legal provisions of the system in which they operate by performing their functions legally in the pursuit of profit. In summary, this principle by Mujtaba and Cavico indicate the need for firms to consider morality and ethical considerations in their activities while abiding by existent legal framework establishing the code of conducts in their areas of operation.

McGraw-Hill Ryerson Ltd (2008) also indicates that the three principles of CSR are legitimacy, public responsibility and managerial discretion. According to the body, the principle of legitimacy refers to the appropriate use of power and the legitimacy granted to a business by citizens and the business' appropriate use of that power without which there is a possibility of losing that power. This principle suggests that firms can operate because of the legitimacy granted to them by society and that society has the right and power to recognise or reject businesses by serving as a watchdog among its institutions as well as defining their legitimate functions. This means that in case a corporation fails to function within the legitimate framework given by citizens, it could lead to a sanction in the form of boycott and the consequential collapse of the business. The second principle, which is the principle of public responsibility, suggests that businesses are responsible for the effects their activities have on the areas where they operate. The principle holds the view that corporations should be responsible and should take charge of solving the adverse effects they create on society.

Lastly, the principle of managerial discretion refers to corporate bodies as moral actors who are expected to exercise their will and choice to generate socially responsible results from their activities. The principle argues that managers should not totally and always follow prescribed and strict corporate procedures for profit-making but should sometimes use their discretion to undertake or avoid some activities all aimed at promoting the socio-economic and environmental wellbeing of the general public. In summary, the idea of McGraw-Hill Ryerson Ltd is in line with that of Mujtaba and Cavico (2013:1) who hold the perspective that corporate bodies need to abide by the laws governing their operations, take care of the impact of their activities and use their discretion to undertake activities, which though may not be mandatory but could be beneficial to society.

Other scholars such as Alemu-Kesto, (2017) summarise CSR under four major principles: the societal, environmental, economic and stakeholder principles. The social or

societal principle of CSR suggests that corporations should inculcate social concerns into their corporate strategies and be mindful of the scope and impact of their activities on societies with the overall goal of helping to build better societies. Issues like human rights, fair wage policies, fair trade and ethical issues and production of safe goods all fall under this principle. From these examples, it is clear that the social principle of CSR suggests fair treatment, respect for humanity as well as a consideration of the health and safety of the public. The economic principle lays key emphasis on the fact that firms should make sure they are efficient in their production activities, but should be mindful of social and environmental concerns. This principle means that while corporations are trying as much as possible to fulfil their financial obligations to their shareholders, they should also be concerned with the economic wellbeing of the people by putting some economic interventions in place to improve the lives of the people economically.

The environmental principle states that businesses and companies should not cause damage to the environment in order to maximise their profit and that companies should have a strong role in repairing environmental harm caused by their irresponsible use of natural resources. Finally, the principle of stakeholder suggests that the interests of stakeholders should be prioritised in corporate activities. This is because corporations exist because of the legitimacy granted to them by stakeholders, and they expect that this legitimacy is put into use by protecting their interest and wellbeing. This means that any corporation which does not respect the legitimate interest of its stakeholders stands the chance of losing recognition, which may lead to its downfall.

Millon (2011) summarises all the above principles of CSR with the principle of sustainability. The idea behind the sustainability principle of CSR is that companies must perform their corporate functions in a way that will make them economically viable in the long term; however, in so doing, they should consider other stakeholders beyond the shareholders. This principle is based on the premise that the long-run prosperity of corporations depends on the well-being of the stakeholders of the corporation. These stakeholders, according to him, includes workers, suppliers, and customers. The sustainability principles propose the recognition that firms need continuous existence and availability of natural resources and good natural environment for the survival of a corporation and its various components. This runs through all the other principles. In a nutshell, ten main principles of CSR are identified by different scholars, with some of the principles sharing the same idea. These principles can be summarised as strong values, legal compliance, high ethical standards, legitimacy, public responsibility and managerial discretion, societal, environmental, economic and stakeholder

principles. From these principles, it is realised that the foundation of CSR is to protect humanity as well as the natural environment which provides the resources needed for people's continual existence.

### **2.8.3 Approaches to Corporate Social Responsibilities**

In order to contribute to the elucidation of the various forms of CSR, the aim here is to map the approaches within which CSR activities are situated. Bertezene, Vallat and Martin (2014) identify four main approaches for CSR. The first approach is what they term as technical CSR. Technical CSR deploys a technical and customer approach which allows organisations to explain the implementation principles of a CSR activity. However, there is no known management reason for embracing the implementation of CSR. This approach to CSR considers conforming to rules or norms guiding the production and purchase of goods or products. In this approach, therefore, a firm is said to be socially responsible when it produces goods that maximise the characteristics and performance identified in the referential or guide laid down. It is based on the premise that the firm respects its customers and considers their satisfaction when they go by laid down guidelines, hence, increasing their degree of responsibility.

The second approach is what they refer to as Total CSR. Unlike the Technical CSR where the focus is only on satisfying the customer, this approach strategically integrates all stakeholders, as the technical aspects are considered. This approach is referred to as "total CSR" because it seeks to operationalise the same level of interest to three aspects of CSR; economic, social, and environmental issues, in organisational and strategic dimensions. Doucin (2012), cited in Bertezene, Vallat and Martin (2014), argues that this approach is implemented within the framework of the ISO 26000 standard, following the logic of the Triple Bottom Line developed by Elkington (1997), which considers financial results, social results and environmental results.

The approach is based on the idea that firms cannot only focus on their economic performance since that can create tension and dissatisfaction on the part of its stakeholders while focusing solely on the social aspect of CSR could also threaten their economic performance and survival. Likewise, although focusing only on an environmental strategy would improve the image of firms in the eyes of customers, investors, media and other stakeholders, it could be detrimental to its economic results and generate dissatisfaction among certain people who might feel neglected. They also reveal the third approach as the hybrid approach. A hybrid CSR integrates all the dimensions of CSR, but it is done more strategically.

This approach has a holistic view, which centres more on only one of the aspects of CSR, which could be the ISO 14000 certification for the environmental or SA 8000 for the social aspects of CSR.

Similarly, Hohnen and Potts (2007:30-32) identify four main approaches of CSR, based on the major activity performed. The first approach is the environment path of CSR. The idea is like Bertezene, Vallat and Martin's (2014) environmental component of Total CSR. According to Hohnen and Potts (2007), the environmental path to CSR seeks to reduce the consumption of water, energy and other natural resources as well as emissions of harmful substances. It also uses or produces recycled and recyclable materials, minimises packaging through effective design and increases the durability of products; that is, it reduces, reuses and recycles. Also, an environmental CSR activity establishes an environmental management system with the aim and procedures for evaluating progress, transferring good practices and minimising negative impact. The second approach is the human resource management approach. This CSR approach focuses on establishing policies to promote the wellbeing of employees by ensuring their health and safety and ensuring that they make business decisions that affect them positively and improve their work environment. This approach is, therefore, contrary to Technical CSR, which agrees to customers' support to employees of a firm. The third approach is the Community approach. This approach to CSR encourages employees to volunteer in communities and make financial contributions and render other forms of assistance. This approach makes some products or services available for free or at a cost to charities and community groups. This approach is also referred to as philanthropic CSR (Visser, 2008:18).

According to Visser, philanthropic CSR often occurs in developing countries and gives four main reasons for such an occurrence. According to Visser, developing countries have a lot of socio-economic needs, which make philanthropy an expected norm. Also, companies in developing countries realise that they cannot succeed in societies with a lot of challenges and that for them to succeed; they need to enhance the development of the communities in which they operate. Also, the long period of reliance on foreign aid by developing countries has ingrained the culture of philanthropy. Visser, finally, argues that CSR is basically at its early stages in developing countries and the only means which the people can see the social responsibility of firms is through philanthropy.

## **2.8.4 Evolution of Corporate Social Responsibility**

The concept of CSR is rooted in history (Georgescu, 2016: 5). Successions of different shapes and shades mark the development and evolution of CSR. History reveals that CSR has constantly been redefined, and its evolution shows the dynamism of the concept. According to Chandler et al. (2013:7), in recent years, CSR has become an inclusive and global concept that embraces social responsibilities, responsiveness, and the full range of socially beneficial activities of businesses (Godfrey et al., 2007). This means that CSR has been practised at different times and different places. The subsequent subsections highlight the evolution of CSR.

### **2.8.4.1 CSR in Pre-Twentieth Century**

According to BRASS Centre (2007: 4), CSR began 5,000 years ago. Notably, around 1,700 BC, the Ancient Mesopotamia's King Hammurabi introduced codes that sought to sanction farmers, builders and innkeepers to death if their actions and inactions caused great harm and death to local citizens. Around the same era, senators of Ancient Rome protested against the failure of companies to contribute adequate taxes to finance military escapades. On the contrary, Mensah (2015) indicates that the industrial revolution of the seventeenth and eighteenth centuries started the reformation of social structures. In addition, communities observed growing industrial institutions and increasing unregulated businesses whose owners amassed wealth at the expense of the wellbeing and working conditions of employees and the society at large, as asserted by Karl Marx and Friedrich Engels.

Wayne (2010) reveals that CSR has been practised for about four thousand (4,000) years; this was evident in ancient Vedic and Hinduism texts and the Jatakas of Buddhism, which involved the principled references to moneylending or the charge of the excessive interest rate. According to Georgescu (2016:5), ancient civilisations such as Egypt used rules for commerce, and this was instituted to facilitate trade and ensure that the interest of the public was taken care of. Moreover, Mensah (2015) asserts that during the 19<sup>th</sup> century, societies protested and criticised businesses for the exploitation of society as well as irresponsible business behaviour. It can be established from the literature that CSR issues started to take on a new dimension when corporations began to use part of their wealth to support the activities and ventures of the society.

### 2.8.4.2 CSR in the Twentieth Century

20<sup>th</sup> century marks the commencement of official writings on social responsibilities. Albdour and Altarawneh (2012) indicate the modern dimension of CSR in the last 50 years has developed from the philanthropic initiatives of businessmen, and this has changed the social responsibility of businesses to the generally accepted modern form of CSR. Mensah (2015) postulates that the effects of World War II and the resultant agreement of the world to focus on peace and socio-economic development resulted in the emergence of newly independent nations. Similarly, the focus on economic growth and development began the exploitation of natural resources as well as the setting up of large factories in most cities and towns.

Consequently, these cities and towns experienced population growth, pollution and depletion of natural resources. This caused the world to focus its attention on the issues of sustainable development, as a result of the Brundtland Commission’s discourse on sustainable development. According to Srivastava et al. (2008:37), major events such as the hints of growth published by the club of Rome in 1972, the UN Stockholm Conference on Human Environment in 1972 as well as the World Conservation Strategy in 1980 address issues about ensuring societal growth. However, Chandler et al. (2013) indicate that the evidence of social activism against corporations dates as far back as the 1790s when one of the first consumer boycotts was organised against a sugar plantation in British West India. Furthermore, Srivastava and Sahay (1995) state that by the end of the 1970s, there was growth in interest for sustainable development, which resulted in clearer definitions and boundaries being set for CSR, as indicated in Table 2.1.

Table 2.1: Outline of definition and boundaries of CSR

Year	Author	Research	CRS Issues
1790	Morell Heald (1970)	The Social Responsibilities of Business	The concept of social responsibility must finally be written in the actual policies
1971	Harold Johnson (1971)  Committee for Economic Development (1971)	Business in Contemporary Society  Social responsibilities of business corporations	A multiplicity of interest, stakeholder approach, utility maximisation (multiple goals rather than just maximum profits)  Three concentric circle theory of social responsibility



<b>1973</b>	Henry Eilbert and Robert Parket (1973)  Keith Davis (1973)	Current status of corporate social responsibilities  The Case for and against Business Assumptions of Social Responsibilities: Academy of Management Journal	Practices-oriented survey, “good neighbourliness” two-step (not doing bad and doing good)  Quoted Milton Friedman and Paul Samuelson: Social responsibility is beyond legal requirements
<b>1975</b>	Jules Backman (1975)  S. Prakash Sethi (1975)  Lee Preston and James Post (1975)	Social Responsibility and Accountability  The dimension of Corporate Social Performance  Private Management and Public Policy	The term social accounting, social indicators and social audit cover performance  Social responsibility being prescriptive goes beyond social obligation, which is proscriptive  Drew attention to public responsibility functions of OM within public life
<b>1979</b>	Abbott and Monsen (1979):  Thomas Zenisek (1979)	SID (Social Involvement Disclosure) from Content Analysis of Report of Fortune 500 Companies	An empirical investigation for CSR theory building
<b>2000s</b>	European Commission (2011)  Schwartz and Carroll (2003)	Three-domains approach  New concept	Three domains of corporate social responsibilities encompass economic, legal and ethical issues  The process to integrate social, environmental, ethical and human rights into business operations and core strategy in close corporation with stakeholders

Source: Srivastava and Sahay (1995); Masato and Wanida (2013)

Moreover, in the early 1980s, the discourse on CSR reached its crescendo. An increasing number of CSR codes were developed in relation to occupational health and safety (Georgescu, 2016). According to Van Zile (2012), human-induced environmental disasters in

the era enhanced the growing concern that required businesses to prove their positions on social and environmental matters. In other words, businesses were expected to offer a response to how they would account for the impact of their activities in both social and environmental dimensions. A lot was written about CSR, which focused on corporate/social responsibility and the public sector (Aman, 2001). Georgescu (2016:5) reveals that the 1990s marked the development of sustainability concepts which followed the “Earth Summit” in Rio de Janeiro in 1992. Therefore, both CSR and sustainable development are considered ‘appraisees’ in the sense that they are valued and are not simply empirical concepts.

During the 1990s, two broad themes were the focus of CSR advocacy (Srivastava and Sahay, 2008). The first theme concentrated on how CSR was linked to the broad organisational framework, more particularly, the process of inculcating CSR into the company’s organisational setting. The second theme, on the other hand, emphasised how to link a business’ social and financial performance. This era also witnessed a surging involvement of international actors such as the World Bank, World Trade Organization (WTO), International Monetary Fund (IMF), governments, non-governmental organisations in the discourse of CSR (Mensah, 2015). The involvement of the actors resulted in all forms of initiatives, policies and codes that introduced restrictions on business and trade. For instance, OECD inventory in 2001 discovered that corporations, companies and trade organisations issued about 250 guidelines in order to address CSR differently.

Governments also contributed to CSR (Georgescu, 2016), and this was evident in initiatives such as the Clinton Administration’s Fair Labour Association, which was instituted to fight sweatshop. Also, the appointment of a Minister for CSR by the UK government was geared towards promoting CSR. Another dimension of government involvement is shown by inter-governmental organisations such as OECD, EU WTO and many others. According to Mensah (2015), the plethora of initiatives by the organisations mentioned includes the Global Reporting Initiative and Sustainability Reporting Guidelines, and the UN Global Compact 1999, etc.

During this period, the growing activities of international NGOs were geared toward promoting CSR. However, Mensah (2015) states that 40 per cent of international NGOs existed worldwide and were predominantly located in Europe and North America. They engaged in advocacy in relation to the need of businesses to approach the issue of CSR with greater interest as well as the need for the development of a more international direction for dealing with global issues. Following the emergence of CSR industries and consultancies such as Price Waterhouse Coopers, KPMG, and CSR Europe, these firms provided CSR services and consultancies to

major companies in a bid to protect them from remonstrations and activism against their operations.

#### **2.8.4.3 CSR in the Twenty-First Century**

CSR beginning in the 2000s, it has been classified as the era of mainstreaming of CSR and maturation of the phenomenon. Georgescu (2016:5-7) explicates that during this period, an entire industry of CSR experts, agencies, reporting standards, and publications have emerged. The public is also more receptive and watchful over the private sector and pressures corporations to be more transparent and accountable as a result of multiple corporate scandals. Horrigan (2007:99) asserts that CSR in the 21<sup>st</sup> century has been progressive business sensitisation and more dynamics of governance beyond government and responsiveness beyond responsibility. This means that CSR is growing rapidly across many distinct industries, industrial sectors and geopolitical regions between systems and dynamics of governance, regulation and responsibility.

Following the discourse of CSR and sustainable development, analysts have gone as far as possible to suggest that CSR investments feed directly into sustainable development. Certainly, companies may benefit in terms of reputation, employee satisfaction, investor attractiveness, and innovation (Lantos, 2001:55). Gjoberg (2011) posits that CSR in the 1990s had a linkage with the anti-globalisation movement. However, in the new era (the 2000s), CSR is beyond the situation where businesses comply with set regulations. In other words, businesses, industries and trades voluntarily improve their social and environmental performance.

Additionally, Georgescu (2016:10) note that in Ethiopia, “Organized Movement” was formed in the 2000s as a non-profit organisation that seeks to unite the many Ethiopian ethnic groups into a solidarity movement that called for social justice in a non-violent way. This was influenced by globalisation and by the flourishing of CSR in the world. Also, the notion of “shared value” became famous in the field of CSR (Porter and Kramer, 2006, 2-15). The League of Corporate Foundations endorsed this movement in the Philippines by involving them in educational projects and other collaborative initiatives performed through their committees on Arts and Culture, Education, Enterprise Development, Environment and Health. Koestoeer (2007:1-5) indicate that numerous companies in Indonesia are involved in the development of the education and health sectors by improving infrastructure and providing various empowerment projects for the communities in terms of health services provision. It is believed that many more are doing the same thing; however, several groups of companies adopt CSR in

slightly different ways in the 21<sup>st</sup> century. It implies that multinational companies have acquired CSR beliefs and strategies that have been informed by practices in their home countries. Additionally, some state-owned companies have an obligation to contribute to society and environmental development as a mandatory requirement by the government. Koestoer (2007: 1-5) indicates that, to some extent, the basic understanding and practice of CSR in both developing and developed countries seem to be the same; however, interestingly developing countries are the areas where these interventions are most needed.

Several publications have been made on CSR as a way of enhancing the world’s understanding of promoting the social responsibilities of businesses or companies. For example, contributing to CSR in the 21<sup>st</sup> century, Horrigan (2007:5-7) posits that at the G8 Summit of World Leaders in 2007, CSR attracted global attention and was considered as a primary international policy issue. It was listed at par with international security, climate change and sustainable development. Horrigan adds that the 21<sup>st</sup>-century business atmosphere will continue to experience an increasing need for corporate responsiveness to a wide range of governance, regulatory and responsibility drivers. In addition, there is an increasing interconnection of business concerns and CSR related issues; for instance, corporate legal and regulatory measures, which are formulated and stress on Socially Responsible Investment (SRI) and Environmental, Social and Governance (ESG) considerations in corporate and investment decision making, corporate responsibility and sustainability as well as standard-setting initiatives, both nationally and internationally.

Rahman (2011) highlights ten dimensions of the evolution of CSR since the 1950s. During the 21<sup>st</sup> century, the dimensions of CSR encompassed the integration of social and environmental concerns, volunteering ethical behaviour, economic development, improving the quality of life of the citizens, human rights; labour rights, protection of the environment, fight against corruption, transparency and accountability. Table 2.2 presents the various dimensions of CSR and the era they occurred in.

Table 2.2: Dimensions of CSR

<b>Year</b>	<b>Dimension</b>
1950s	Obligation to society
1960s	Stakeholder involvement
1970s	Improving the quality of life, ethical responsibilities and economic development

1980s	Law abiding and environmental protection
1990s	Obligation to the society, law-abiding, environmental protection, and stakeholder involvement
2000s	Law abiding, transparency and accountability, human rights, voluntariness, an obligation to the society, economic development, ethical responsibility, improving the quality of life and stakeholder involvement

Adopted from Rahman (2011)

### 2.8.5 Legal and Regulatory Framework of CSR

Carroll (1991:41) opines that societies do not only sanction businesses to operate according to the profit motive but also expect businesses to comply with the laws and regulations set by governments and states as a ground-rule under which they operate. According to McBarnet (2009:1), CSR requires a change in the focus of profit growth for shareholders within the obligation of the law to respond to a broader range of stakeholders, which include concerns such as protecting the environment as well as accountability in relation to principles and legal obligations. She adds that CSR involves a commitment by businesses, which are usually articulated in their corporate-specific codes of conduct to enhance concern for human rights, the environment, and fairness to societies.

CSR has grown in significance, and critics over the years have raised legal objections to it. Legal champions have drawn attention to it, and argue the case that company law, far from preventing CSR, should be permitting, and perhaps, requiring CSR practices. Bichta (2003:1) observed that even though there had been a lot of advocacy for corporations to be held accountable for their actions and inactions, the government had not been able to institute an obligatory legal framework to serve as a guide for global corporations with regard to their environmental behaviour. In other words, the postures of governments have been to admit the voluntary contribution and commitment of corporations in relation to CSR. Additionally, the increase in interest in the role of government and corporations in keeping the natural environment and enhancing social development and inclusion has led the discourse on CSR to take a new dimension in recent times (Mensah, 2015:21). Governments have been urged to assume responsibility to ensure that the antecedents of market failure are regulated

appropriately in order to achieve sustainable development, which encompasses environmental and economic sustainability.

Consequently, CSR has a linkage with laws and regulations. Carroll (1991:40-42) sees CSR as partial fulfilment of the “social contract” between corporations and the society; therefore, firms are expected to pursue their missions within the framework of law as summarised below:

1. Firms are expected to operate in a way that would not be contrary to set laws.
2. It is important to conform to various states and local regulations.
3. Firms are supposed to abide by the law.
4. A successful firm must be defined as one that fulfils its legal obligations.
5. It is important to provide goods and services that at least meet minimum legal requirements.

On the one hand, governments with the support of international institutions, have established a regulatory framework – “a minimum requested by law”; and on the other hand, the international community may consider building an international commonly accepted legal framework to regulate the global activities of multi-national enterprises. Such an approach would help to boost the law enforcement capacity of developing countries. There are legal and institutional frameworks that guide CSR (Maon et al., 2009:73). However, there is a need to merge existing mechanisms in one comprehensive framework to be adopted by countries. For instance, the OECD convention of 1997 had the objective of making bribery by businesses illegal and provide a good example in relation to the way to go (Maon et al., 2009:71-74). In order to push forward efforts on the creation of a comprehensive CSR framework, collective action is needed. Governments of developed countries have been encouraged to amend their laws in order to make companies from their countries to be held accountable for the environmental hazards they cause worldwide

According to Mensah (2015), the UN Global Compact provides an avenue for the sector to embrace universal principles and to establish partnerships with the United Nations. The UN Global Compact engages the private sector to partner with the United Nations and NGOs and academia in order to identify and spread the practices of CSR in the areas of human rights, labour rights and environmental protection. Hohnen and Potts (2007:18-30) postulate that the UN Global Compact inspires the private sector to accept, support and enact a set of key values in the areas of labour standards, human rights as well as the environment within their scope of influence.

### **2.8.5.1 International Labour Organisation's Multinational Enterprise (MNE)**

#### **Declaration**

In the 1970s, the ILO Tripartite Declaration of Principle in relation to multinational enterprises as social policy became important benchmarks for developing CSR activities among MNEs (Mensah, 2015). However, it has been updated several times. The International Organisation of Employers (2004:6) notes that the International Labour Organisation's MNE declaration was aimed at encouraging MNEs to contribute to economic and social progress positively as well as to minimise the difficulties, which may result from their operations. Additionally, MNEs contribute immensely to employment in the global economy; as a result, they form an integral part of economic life. According to Bantekas (2004: 317-325), before the mid-1990s, the ILO, OECD and certain subsidiary organs of the United Nations undertook an exercise on the subject, through the examination of the impact of MNEs on LDCs. The question of whether multinational enterprises are subject to any international regulatory regime(s) necessarily involves an examination of their international legal personality. It can be deduced from the literature that corporations have important roles to play in the promotion of sustainable development and alleviation of global poverty. Additionally, businesses and corporations do not only hold the potential and resources, but the power to be persuasive and be heard. The frameworks and guidelines aid them to use their resources and power to help society.

### **2.8.6 The Process of Developing a CSR Policy**

According to Friedman and Miles (2002:3-7), from a CSR standpoint, corporations provide the drivers that can help develop the world. Pinkston and Carroll (1994:24) opine that corporations are pressured to show accountable corporate social responsibility. Consequently, they develop and update programmes and policies, which serve as guidelines for achieving and measuring their social and environmental performance. Firms engage in consultation with stakeholders and communicate their standards to environmental groups, communities and governments. The development and implementation of CSR policies could be considered as an organisational change (Georges and Jones, 1995). Likewise, Dawson (2003) sees it as a new way of working to align a corporation to the dynamic demands of the business and social environment by recognising and managing the expectations of stakeholders. Maon et al. (2009:71-72) state that there are four main stages involved in the development of a CSR policy.

The first stage involves the abolishment of the past practices associated with the status quo by managers. The next is the moving stage where the cooperation is guided to develop a new set of assumptions. The third stage is the implementation of the new state, and in this stage,

managers are expected to reframe the new cultural assumptions. According to Katz and Kahn (1978), taking into consideration the degree of change, reframing may contain wider changes that build structures and processes to support the new state. Maon et al. (2009:72) state that a learning orientation is essential to ensure the reframing CSR-oriented cultural values because a cooperation's learning orientation signifies a resource that influences the quality of CSR-related behaviours. The final stage is sensitisation, and at this stage, top management is informed of the importance of sustainable matters.

Additionally, Maon et al. (2009) expand these four stages into nine steps, which include raising CSR awareness inside the organisation, assessing corporate purpose in a societal context, establishing a working definition and vision for CSR, assessing current CSR status, developing an integrated CSR strategic plan, implementing the CSR integrated strategic plan, maintaining internal and external communication, evaluating CSR-related strategies and communication, and institutionalising the CSR policy. These steps are explicated below.

### **Step 1: Raising CSR Awareness Inside the Organisation**

Increasing the understanding of a corporation on the environment in general and CSR issues can be done through the influence of four key drivers, namely economic, social, political, and individual. According to Mazurkiewicz (2004), economic, social, and political drivers may be market-based that is they are initiated when a corporation anticipates a risk associated with the impact of its operation on society. However, the individual driver is value-based, and the focus is on a manager's role in shaping the norms of the corporation. The way management perceives its business and societal environment often triggers the development of a CSR vision. As a result of this, managerial perceptions may be categorised as either reactive or proactive. The reactive may result from external environmental pressures, while the proactive is perceived when personal values of individuals or groups inside the organisation highly increase, in which case a sense of personal morality drives CSR.

### **Step 2: Assessing Corporate Purpose in its Societal Context**

According to Maignan et al. (2005), the improvement of a corporation requires a CSR programme that is aligned with its values and mission. It also demands the knowledge and understanding of the organisation's vision and customs and their relationship with the corporation's core practices. Lyon (2004) posits that to incorporate CSR into long-term strategies and decision-making criteria, corporations must shift from a target-driven culture to a value-driven culture. In other words, corporations must establish their corporate values in a



manner to create an organisational culture that is amenable and can sustain a CSR strategy over the long haul. Additionally, the corporation must identify the key stakeholders and categorise them either under primary (directly affected) or secondary (affected indirectly). The critical issues of stakeholders must also be identified, and their expectations must be managed.

### **Step 3: Establishing a Vision and Working Definition for CSR**

To develop a working definition for CSR, managers and stakeholders must work on the same track in order to establish the foundation for ensuring CSR assessment. According to Maignan et al. (2005:956-972), the working definition for CSR must emphasise two key elements, which are the motivation that supports a commitment to CSR and stakeholders as well as issues identified as most important to the organisation. The working definition for CSR should also establish a constructive and socially responsible vision.

### **Step 4: Assessing the Current CSR Status**

There should be a review of mission statements, codes of conduct, principles and other operating documents as well as external documents associated with programmes the organisation is involved in. Key functional managers inside the organisation and CSR experts must be consulted to gain insight. Additionally, the objective of an audit of current practices is to identify organisational characteristics related to five key CSR aspects; the social and environmental dimensions, impact of organisational activities, corporate governance issues, corporate commitment to sustainability and the social dialogue process. There is also the need to benchmark competitors' practices and CSR norms as well as standards. The benchmarking criteria must be in line with the features of the industrial sector under scrutiny.

### **Step 5: Developing a CSR Integrated Strategic Plan**

Planning is necessary for CSR in the sense that a well-planned process is a successful process effectively undertaken. According to Maon et al. (2009:72), this stage involves translating values, visions, or policy statements into commitments, expectations, and guiding principles. They add those goals, targets and performance measures must be set simultaneously. At this stage, corporations must conduct a CSR assessment and develop a CSR strategy based on the results. Hohnen and Potts (2007:29-35) indicate that the CSR assessment provides the chance for the managers of corporations to understand better problem areas, opportunities or challenges and their significance for the business. Likewise, it assists in identifying CSR gaps and opportunities and improves decision-making in the business.

### **Step 6: Implementing the CSR Integrated Strategic Plan**

Maon et al. (2009:76-80) state that some organisations already have existing guidelines that enhance the successful implementation of CSR plans. For instance, they indicate that in Canada, the government has offered useful and detailed guidelines and checkpoints, which help corporations to implement their CSR plans. According to Mensah (2015), this is the stage where several actions are undertaken regarding the plan implementation.

Additionally, Hohnen and Potts (2007:29-35) indicate that two main activities are expected to be undertaken under this stage. These are the development of CSR commitments and implementation of CSR commitments. These two main activities aid to easily communicate the nature and direction of a corporation's social and environmental activities to stakeholders. The implementation process includes developing an integrated CSR decision-making structure; preparing and implementing a CSR business plan; setting measurable targets and identifying performance measures; engaging employees and others to whom CSR commitments apply; designing and conducting CSR training; establishing mechanisms for addressing problematic behaviour; creating internal and external communication plans; and making public commitments (Hohnen and Potts, 2007 cited in Mensah, 2015).

### **Step 7: Communication of CSR Commitments and Performance**

Continuous internal communication must be done to increase awareness of CSR commitments. The plan for internal communication must identify communication channels such as newsletters, annual reports, meetings, and training. Furthermore, during the moving phase, communication must consist of reporting on changes and reassuring employees by informing them about the programme's progress and clarifying any misconceptions.

### **Step 8: Evaluating CSR Integrated Strategies and Communication**

The future improvement of CSR programme necessitates evaluation based on measuring, verifying and reporting with regard to viable indicators. Hence, the evaluation should be done with the objectives of determining what works well, why and how to ensure it will continue; investigating what is not working well and why it is not as well as exploring barriers to success and mitigation measures. This stage enables stakeholders to track and measure progress and activities as well as enhance transparency and accountability.

### **Step 9: Institutionalising Corporate Social Responsibility**

Cramer (2005:73-75) posits that the introduction of any new strategy and initiative that starts with eagerness may not survive in a corporation, especially in times of economic recession, which could create enormous risks. To be able to ensure sustainability, activities

must be established into the corporation and considered as part of its culture. This is because they have been adopted as the long-term strategy and decision-making guide. Creating business value and supporting social change ensures sustainable development. Also, creating a CSR plan can have a major impact on a company's bottom line in a good way.

## **2.9 The Nexus between CSR and Sustainable Development**

Corporate social responsibility could be said to be one of the important factors that can help developing countries to achieve sustainable development. The World Business Council for Sustainable Development (2000) indicate that sustainable development takes into consideration the social aspect of development, which cannot be separated in the promotion of development.

### **2.9.1 CSR and Society**

This dimension of sustainable development is often neglected. As indicated by several studies (including Labuschagne and Brent, 2006 cited in Ebner and Baumgartner, 2006:6), the weakest pillar of sustainable development is the social dimension of sustainable development. The social component of sustainable development emphasises interventions that meet the social needs of people and society as well as leads to the creation of socially sustainable systems characterised by social equity; provision of adequate social products and services such as water and sanitation, education and health; political accountability and societal participation (Harris, 2000:6), which contribute to poverty eradication. CSR can, therefore, only contribute to sustainable development when its social interventions lead to the creation of a sustainable social system. In this regard, companies should be committed to responsible social practices in an attempt to contribute to sustainable social development (DFID, 2003:1).

Hockerts (2003, cited in Mitra and Borza, 2010:65) simplifies sustainable social development by highlighting the efforts and concerns of companies for a community through the development of human capital as contributions to sustainable development. The World Bank (2004) explains sustainable social development and highlights the roles CSR should play in relation to ensuring sustainable development. Hence, World Bank indicates that the CSR efforts of companies should establish norms, values and rules both formally and informally, which would create social change through the creation of social structures that support inclusion, unity and societal empowerment. CSRs should, therefore, play a role in promoting inclusion through egalitarianism with regard to access to opportunities; creating a common social powerhouse (cohesion) in addressing social problems; and ensuring transparency in operations and support of public interest. Whellams (2007:29) has indicated that some

companies perform the roles of either supporting community development projects or providing extensive HIV/AIDS prevention programmes as their CSR for sustainable social progress. CSR efforts in advancing sustainable social development should meet the needs of employees, clients and the people living in areas where a company operates. It is, therefore, obvious that the social instability created as a result of the company's operations, corruption in businesses and many other social insensitive services affect CSR efforts of companies in relation to sustainable development.

### **2.9.2 CSR and the Economy**

The operations of businesses should support both local and national sustainable economic development. Sustainable economic development ensures the creation of a sustainable system that is economically viable, such a system produces goods and services that help to prevent imbalances in the different sectors of the economy and maintain manageable levels of government and external debt (Harris, 2000:5). CSR can be a mechanism or instrument that enhances economic and overall sustainable development (Frynas, 2005:581-598). In line with CSR's role in sustainable economic development, the DFID (2003:1) indicates that companies can skew their contributions to the enhancement of economic growth through capital, transfer of technology, integration of production across local and regional borders and access to specialised skills and recruitment as well as respect for employees.

Hockerts (2003 cited in Borza, 2010:66), in his study, contends that sustainable economic development is directly linked with sustainable social development and to some extent ecological preservation, which implies that the advancement of CSR roles to ensure sustainable economic development should support the delivery of quality goods and services in a profitable manner that enhances the quality of lives of people, by improving their economic conditions as well as protecting their environment and social systems. Companies should also ensure that their CSR efforts in relation to economic progress increase economic and social investment portfolio, while creating awareness and concerns on social issues and development as well as environmental issues. Specific CSR economic roles could include poverty alleviation projects, creation of jobs for locals, provision of economic infrastructure, and social intervention schemes to enhance livelihoods, among others (SFBSB, 2009:18).

### **2.9.3 CSR and the Environment**

CSR could play a role in sustainable development through good environmental sustainability interventions. This concern was first highlighted by Stivers (1976 cited in Mitra and Borza, 2010:66) who drew the attention of corporate bodies to recognise the importance

of ensuring environmentally-friendly management practices. As indicated by Harris (2000:6), the roles of CSR could be aligned to efforts of companies to maintain biodiversity, atmospheric stability, and other ecosystem functions to create an environmentally sustainable system through the avoidance of excessive exploitation of environmental resources whether renewable or non-renewable. This implies that CSR should sustain the environment for both current and future populations. Organisations should, therefore, recognise the need for wise and effective use of resources as well as their conservation and management. A typical example of the role of companies in using CSR for a sustainable environment is the efficient utilisation of natural resources and prevention of the emissions of harmful environmental substances that cannot be absorbed by the environment (Hockerts, 1993). In Malaysia, for instance, many companies have subscribed to the slogan “We green the earth” in their quest to ensure environmental sustainability. In this country, organisations and corporate entities are involved in advocacy works to protect and manage the environment.

As further indicated by Ismail (2009:205), there are also NGOs that focus on making sure companies operate and perform CSR projects that preserve the environment. These organisations research into the effects of their operations on their surrounding environment and campaign for stronger laws and their enforcement by their companies in line with environmental responsibilities. Gasinski and Piskalski (2010:17) posit that the specific CSR roles performed by companies vary and in order to ensure good ecological balance, they should be geared toward the following -- a reduction in energy and raw materials consumption; reduction in the release of hazardous waste and environmental pollution; due recognition, respect and restoration of natural ecosystems; identification of the potential negative impacts of a company’s operations and implementation of measures to deal with them; introduction of internal mechanisms to external environmental costs; striving to achieve ecological objectives by the implementation of strategies; technologically-driven approaches to dealing with the environment; and promotion of sound ecological behaviour within operations of organisations among others.

## **2.10 Sustainable Development in Mining Communities**

In recent years, one important issue that has gained attention globally is the sustainable growth and development of countries. The global focus is on sustainable development as it underpins the Sustainable Development Goals (SDGs) of the globe. In achieving sustainable development, there cannot be one universal mechanism/approach to it. The diverse conditions of countries call for country-specific approaches to achieve sustainable development (Osborn,

Cutter and Ullah, 2015:4). Generally, in mining communities, especially those in the least developed countries (LDCs), there are high levels of environmental destruction, social inequality, poverty, and low economic growth. Sustainable development, therefore, seems to be out of context in mining affected areas. This contradicts the concept that mining leads to sustainable development, especially in affected localities through the creation of wealth, social well-being, economic contributions and effective environmental management approaches (Davis and Tilton, 2005 cited in Whellams, 2007:23).

Contrary to the previous impression, findings of some studies have revealed contrary perspectives on mining and sustainable development in mining communities in developing countries. As affirmed by Ross (2001:3), there is a rise in mining activities in many localities in developing countries, but there is no corresponding improvement in the social, economic and environmental wellbeing of affected centres to lead to the sustainable growth and development of these mining affected communities and countries. Gelb (1985a cited in Davis and Tilton, 2002:8) argues that developing countries that engage in mining activities should stop doing so since mining has weak or sometimes even no connection to sustainable development in these mining centres. Local communities where mining is done tend to bear the negative environmental outcomes and social disorder while the profit gained from mining goes to the central government, who in most cases does not pay attention to the sustainable development of mining centres.

While some scholars accept this assertion, there are still others who hold that mining should be done (Davis, 1995; Lederman and Maloney, 2002 cited in Davis and Tilton, 2002:14); however, those in favour of mining posit that there should be effective measures put in place to ensure the development of affected areas. As a result, some scholars recommend that substantial or equitable percentage of the gains obtained from mining must be given to affected mining communities to improve their well-being in order to ensure their sustainable growth and development. Without this provision, some scholars propose that there is no need for companies to engage in mining (McMahon and Remy, 2001 cited in Davis and Tilton, 2002:19). Mining companies, government officials and local people have a distinctive role to play. Emphasizing mining companies, it is affirmed by the World Economic Forum (2016) that sustainable development in mining communities could be influenced by mining firms/companies. This is because based on their activities, they can either positively or negatively impact sustainable development. The poor state of many mining communities in the world are caused by mining activities that degrade the environment, worsen economic

conditions, breed social inequality, lead to conflicts and many other problems, which affect the sustainable development of such places.

Despite the negative influences of mining activities, mining has the potential to generate substantial revenue through taxations and royalties, jobs for local people, and expansion of existing infrastructure which can contribute to sustainable growth and development of such affected centres (World Economic Forum, 2016:6). It is obvious from the reviewed literature that corporate social responsibility (CSR) has important underpinnings for ensuring successful mining activities; that is, mining leading to the sustainable development of mining communities and the country at large. Mining companies would be able to depend on an effective corporate social strategy to change the current poor state of mining centres to promote development.

## **2.11 The Concept of Sustainable Development**

Despite some insights previously provided on sustainable development in relation to CSR, this sub-section provides an in-depth discussion of the concept of sustainable development.

### **2.11.1 The Genesis of Sustainable Development**

Two major concepts linked to environmental ethics in the 1980s are ‘anthropocentrism’ and ‘ecocentrism’. Anthropocentrism places much importance on the extraction of the needs of humanity from the natural environment, without much thought to the ecological effects of such extractions (Veil, 2001). It argues that all other living organisms are subjects of humanity and are, therefore, in existence to sustain humanity solely. The natural environment is, therefore, seen as a resource that humanity could exploit, using every possible means. Kolb, Wagner and Covington (1994) liken this concept to the relationship of a tenant and his/her landlord where the tenant is subject to the dictates of the landlord. Veil (2001) indicates that the main principles guiding anthropocentrism are domination and economic gain. This means that economic growth is the main objective of anthropocentrism.

In contrast to anthropocentrism, ecocentrism places a priority on the conservation of the natural environment. Ecocentrism argues that no economic improvement should precede a healthy environment (Veil, 2001). From the above, it can be inferred that these two concepts have no common grounds. Nevertheless, these two concepts have to be blended in order to satisfy both economic and environmental needs. The premise of this blend is to establish an

approach that carefully draws themes from both sides to achieve harmony (Veil, 2001). The concept of sustainable development is born out of this.

Sustainable development has been accepted as the legal framework for global development as regards economic, social and environmental needs. In every stage of an economy, these three components are very important. The United Nation's World Commission on Environment and Development (WCED, 1987:16) defines sustainable development as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs". Hurley (2009) posits that this definition is too generic and recommends that the need for more specific definitions. Several scholars have, therefore, explored different definitions of the concept. Campbell (1996) defines sustainable development as an evolutionary progression towards practices that seek to sustain simultaneously and balance three sometimes competing and complementary systems: social, economic and environment. According to Berke and Conroy (2000), sustainable development is a process by which the needs of the present and future generation are anticipated and accommodated by communities in ways that reproduce and balance local, social, economic, and ecological systems. Similarly, Saha and Paterson (2006) define sustainable development as a change in consumption and production patterns that are ecologically sensitive, economically sound, and socially just. The keywords used in all the different definitions are social, economic, and the environment as used in the Brundtland declaration of 1987.

Social sustainability seeks to promote equal rights over natural, physical and economic capital that support the livelihoods and lives of local communities in order to ensure fairness, inclusiveness and cultural adequacy. This component of sustainable development advocates for cultural adequacy, respect for cultural heritage and cultural diversity, as well as the participation of the citizenry in the development process, with a focus on poor and marginalised groups. The focus of economic sustainability, on the other hand, is to ensure the derivation of long-term benefits from natural resources by communities through capacity building to utilise these resources. Aside from ensuring that people can earn a living by providing them with the necessary skills, sustainable development proposes that natural resources should not be damaged or depleted while putting them into productive use. Environmental sustainability emphasises the importance of upholding the integrity and health of the environment in production and consumption activities. It indicates that environmental resources are fragile; hence, long-term consideration of the effects of the numerous demands exerted on them is necessary. In all, environmental sustainability seeks to influence human activities and decisions by ensuring the commitment of policymakers to factor the environment in social and economic



policy. Studies on sustainability concluded that to achieve true sustainability; there is a need for blending the various components of sustainability. However, Hurley (2009) sees this assertion as quite unrealistic.

According to Hurley, this assertion is based on the peculiar challenges that the achievement of individual sustainable development components in more recent years have witnessed. Unfavourable terms of trade, declining incomes and severe poverty, heavy debt burden and capital flight are some of the problems of economic sustainability, while the social component suffers from civil wars and ethnic conflicts as well as uncontrolled population growth. Natural resource declination, rise in global temperatures resulting in rising sea levels as well as changing global climatic conditions are also some of the challenges faced by the attainment of environmental sustainability. Apart from the above, the blending of the components becomes a huge challenge as a result of the frictional effects they would have on each other. For example, environmental conservation has a detrimental effect on economic sustainability by not making available the needed resources for productive activities. Also, one challenge is payment for ecosystem services. This arises when owners of land refuse to allow for the conservation of natural resources since they see it as a deprivation of their means of livelihood. This is worsened by the failure of the government to pay for property rights (compensations) while these financial resources are used to settle government deficits to achieve economic growth. As a result, landowners are discouraged from preserving their lands and ecosystem services but use them for their economic gains.

From the above, the friction between environmental sustainability and economic sustainability is seen as the desire to ensure that environmental sustainability deprives people of their wellbeing. In the same way, tension is triggered between economic development, and social wellbeing and systems when there is a desire to achieve economic sustainability and social sustainability. This is because the quest to achieve economic growth and development adversely affects the social lives of people. This is according to the social disruption theory, which suggests the possibility of the erosion of a whole community and a burdening of social systems. The effects of this include worsening of poverty reduced productivity and adverse health conditions. Likewise, getting the social balance is a challenge. Also, cultural heritage is lost due to the destruction of historical monuments such as old structures and their surrounding space. To ensure the protection of these monuments, incentives must be paid to their owners, without which the owners would think space has been put into use to bring maximum profits will sell it out to economic developers. Again, some people believe that these monuments and old structures are waste and threaten urban beauty (Hurley, 2009).

As a result of the above challenges, sustainable development has been defined to encompass certain key elements to meet present situations. A new component termed as sustainable governance has, therefore, been introduced to ensure well-functioning governmental systems to steer and manage the relationship between the three components. It could, therefore, be argued that the components of sustainable development have shifted from three to four, which are social sustainability, economic sustainability, environmental sustainability and sustainable governance.

### **2.11.2 Other Theories of Sustainable Development**

This section of the chapter discusses some recent theoretical developments in relation to the concept of sustainable development. These theoretical developments include the human-centred and technocratic views of sustainable development.

#### **2.11.2.1 The People-Centred Approach to Sustainable Development**

Development is given different definitions by various people. The UNDP (2011) indicates that 'human development' is about expanding the choices available to people in order to ensure that they live valuable lives. Høgh-Jensen et al. (2010:908) assert that economic growth is important, but it is truly only a means for enlarging those choices. Under the sustainable development agenda in the 1990s, a serious attempt was made to promote a pattern of economic growth that does not result in widespread environmental degradation or social exclusion (Wedchayanon & Chorkaew, 2014:7). This, however, has often led many people to equate sustainable development with environmental protection or "eco-efficiency". According to Ramia (2020:1-6), in recent years, there has been a rediscovery of links between conservation and human welfare. UNDP has vigorously promoted the concept of "sustainable human development",. The Copenhagen Declaration and Programme of Action adopted in 1995 at the World Summit for Social Development reminded us that we should be "preserving the essential bases of people-centred sustainable development.

Furthermore, Bester (2011:1) indicates that despite the economic contributions of organisations (such as mining companies), they have affected the environment and society for many decades. In accordance with this, Warhurst (1998:3) states that although mining companies have positively contributed to social development, they have also been associated with some negative impacts; for example, deepening disparities in wealth, creating poor labour

conditions, participating in corruption, polluting, failing both health and safety standards and disrespecting human rights.

The people-centred approach to sustainable development is very critical of the role of large institutions in development (Wedchayanon & Chorkaew, 2014:2). The authors (Wedchayanon & Chorkaew, 2014:2) argue that big development projects by these institutions aimed at macro-level goals such as increasing GDP and neoliberal strategies of deregulation often do not improve the lives of people at the grass-root. In this sense, Seng (1999) argues that development needs to be about giving people independence, so they have real power and choice over their day to day situations; it should not be ‘top-down’ coming from the west via governments, and then trickling down to the people (Ruiz Sánchez, 2019:107).

According to Deneulin (2018), people-centred development theorists have a much broader conception of what ‘development’ could actually mean. In other words, they do not believe that development can be described as becoming more like the West and development should not be seen in narrow terms such as industrialising and bringing about economic growth; development projects should be on a much smaller scale, much more diverse, and come from people living in developing countries. Subudhi (2019:426) opines that a more sustainable and productive approach to agriculture can be achieved through reinstatement of a system of farming in India that is more centred on engaging women. This means that people-centred development theorists reject Western definitions of ‘underdevelopment’ – just because some cultures are rural, non-industrialised, and do not trade, it does not mean that they are inferior.

The Human Development Report of UNDP presented in 1996, principally emphasised human development and economic growth. It consistently argues that human development is the end while economic growth is a means (Malik, 2014:16-24). Moreover, rearticulating it from the perspective of the sustainability of economic growth, the report states that, “Short-term advances in human development are possible, but they will not be sustainable without further growth. In other words, economic growth is not sustainable without human development.” Costantini and Monni (2005:129-132) assert that sustainable development can be achieved by ensuring human-centred development while enhancing economic growth. A major concern to the idea of people-centred development is whether or not the benefits of economic growth due to economic development would filter down to individuals in the form of increased employment and income as well as improved wellbeing. It also focuses on whether

or not individuals would be allowed to partake in the process of development on their own accord.

### **2.11.3 The Technocratic View of Sustainable Development**

Since the idea of sustainable development emerged, many strategies have been implemented by heads of states and international institutions such as the United Nations. The application of technology in achieving sustainable development has taken centre-stage in recent paradigms. From a technocrat's perspective, the use of science and technology is the best way to solve society's problems. During the past decades, the world has witnessed a massive technological advancement, which is changing the world and making positive impacts in the lives of many people. New technologies have been developed that could be used in various sectors of the economy, including the health, agriculture, water, manufacturing and mining sectors, among others (Dano et al., 2014:1)

On the other hand, the use of energy globally has been rising continuously. Energy derived from fossil fuels allows for the use of technologies that demand high levels of energy such as industrial production, air conditioning, transportation and many others (Caetano et al., 2017: 7). However, energy from fossil fuels poses several threats to the environment and people due to the fact that it is not renewable, and distributed evenly, which makes it expensive. Also, the use of fossil fuels releases large quantities of carbon dioxide and other chemicals that affect the ozone layer, cause global warming and other environmental issues (Caetano et al., 2017:7). In the face of the threats caused by fossil fuels, there has been an increase in the demand for renewable energy, but its rate of growth is decreasing due to economic recession and a decrease in oil and gas prices (Noh 2015:752).

In terms of agriculture, mechanisation and agricultural processing technologies have replaced the simple tools initially used for farming. This has increased food security and has reduced the amount of work done manually on farms (Diao et al., 2014:168). Also, waste management is of great concern to city authorities all over the world. Increase in population comes with a corresponding increase in the amount of waste generated. The place of technology in waste management is evident through the efforts being made towards waste management. Technologies that allow recycling and reuse of waste, vehicles used in the collection and transportation of waste, composting of organic waste, waste segregation and many others have been developed to aid in the management of waste (Istudor Ion & Gheorghe Florin:2013).

From the foregoing, technology has contributed significantly to sustainable development, and also promises a future of many possibilities. However, other evidence indicates that in spite of all the benefits of technological advancement, there are some disadvantages that are worth discussing. According to a United Nations report in 2016, technology promotes high levels of inequality with not more than a hundred persons controlling a greater percentage of the world's wealth. Technology has also caused high levels of unemployment as workers have been replaced with automated machines that perform tasks that were previously performed by humans. Also, genetically engineered crops and products are usually cited for causing changes in plants and products' genes, which result in the production of toxins that are not safe for human health (Sudan & Sharma, 2019:259). In spite of the above, technology can attain higher heights in sustainable development if it is combined with effective institutions and steering mechanisms to minimise its negative effects.

#### **2.11.4 The Transition from MDGs to SDGs in Perspective**

At the start of the new millennium, world leaders gathered at the United Nations to develop a broad vision to fight poverty in its many dimensions (United Nations, 2015:4). The commitment made by countries centred around the socio-economic and political development of people. This commitment was recognised to be innovative because it holistically focuses on the interdependency of growth, poverty reduction and sustainable development (Peet and Hartwick, 2009:105-106). The broad vision was further broken down into eight frameworks, which became known as the Millennium Development Goals (MDGs). MDGs aimed to eradicate extreme poverty and hunger; achieve universal primary education; promote gender equality and women empowerment; reduce child mortality; improve maternal health; combat HIV/AIDS, malaria and other diseases; ensure environmental sustainability; and develop a global partnership for development (UNDP and NDPC, 2012:3). The framework was built on fostering global, national, regional and local collaboration and partnerships in order to eradicate extreme poverty in the world through time-bound objectives. The commitment made by many countries towards the achievement of MDGs was reaffirmed at the 2010 High-level Plenary Meeting of the General Assembly of the United Nations on the Millennium Development Goals (United Nations, 2011:8). MDGs became the principal development framework for the world from 2000 to 2015.

Globally, efforts have been made by countries in relation to the achievement of the Millennium Development Goals since its inception in 2000. MDGs have saved the lives of millions and improved the living conditions of many more. Even the poorest countries have made unprecedented progress towards poverty eradication. The United Nations (2015:7-8) indicates that extreme poverty has declined. In 1990, nearly half of the population in developing countries (47 per cent) lived on less than \$ 1.25 a day; however, this number reduced to 14 per cent in 2015. In addition, primary school enrolment reached 91 per cent in 2015 from 83 per cent in 2000. Moreover, statistics for 2000-2016 show that more girls are in school compared to 16 years before.

Despite the rapid population growth experienced in developing countries, the total number of under-five mortality declined from 12.7 million in 1990 to about 6 million in 2015, with maternal mortality reducing by 45 per cent globally. Infections in relation to HIV dropped by 40 per cent from 2000 and 2013 while 6.2 million deaths resulting from malaria were averted. In addition, ozone-layer depleting substances have been reduced since the 1990s and access to improved drinking water sources reached 91 per cent compared to 76 per cent in 1990. Again, official development assistance from developed countries to developing nations increased by 66 per cent from 2000 to 2014. This shows that significant progress was made globally with regard to all eight goals (United Nations, 2015:7). However, Africa's progress in relation to the attainment of these goals mainly concentrated on five out of the eight goals, which are MDG 2: primary school enrolment; MDG 3: gender equality and women empowerment; MDG 4: reducing child mortality; MDG 6: combating the spread of HIV and AIDS, malaria and tuberculosis; and MDG 7: ensuring environmental sustainability. Progress has been made to eradicate extreme poverty and hunger in Africa albeit progress has been rather slow as poverty declined from 56.9 per cent to 42.8 per cent, which is still lower than the estimated 28.45 per cent for the MDG target (African Union, Economic Commission for Africa, African Development Bank and United Nations Development Programme, 2016:5). For instance, countries like Benin, Zambia and Ivory Coast experienced an increase in poverty levels by 4.3 per cent, 13.2 per cent and 8.5 per cent, respectively. Other countries like Ghana, Congo, and Senegal were on target to reach their poverty goals in 2012. Africa's slow pace in poverty reduction has been attributed to high unemployment levels and lack of industries to employ the youth and women to earn an income. While the informal sector provides numerous opportunities for the youth to escape poverty, the sector remains disorganised. For instance, artisanal mining activities have very little legal protection and is highly risky for health and environmental sustainability (World Bank, 2005:8).

In Ghana, a total evaluation of the country's level of attaining the various MDGs has shown a generally positive performance. With the informal economy accounting for 86-90 per cent of total employment while gold and cocoa remain the leading export earner of the nation. Ghana's economic performance suggests that poverty levels declined between 2006 and 2010. For example, the employment to population ratio is significantly higher in rural areas than in urban areas, with 73.3 per cent and 62.3 per cent, respectively (Ghana Statistical Service, 2013:66-78). This shows that the country is on course in providing gainful employment for all.

Moreover, Target 3 of MDG 1 data showed that Ghana was on track to achieve two out of the three child malnutrition indicators ahead of 2015. However, the indicator for reducing by half the number of underweight children had already been achieved ahead of 2015. With regard to MDG 2, available data suggest that Ghana made tremendous efforts to increase Gross Enrolment Rate (GER) by 5.1 per cent and Net Enrolment Rate (NER) 11.5 per cent through programmes like the capitation grant, school feeding programme and free school uniform distribution (UNDP and NDPC, 2012:3). As of 2010, net enrolment for primary school for age (6-11 years) was 74.6 per cent compared to 61.4 per cent in 2000. There are huge disparities in net enrolment for rural (68.6 per cent) and urban areas (81.8 per cent) in Ghana (Ghana Statistical Service, 2013:43-63).

Demand for environmental resources like gold and timber has adversely affected the attainment of MDG 7. There has been a reduction in environmental resources as well as the country's forest cover, which is depleting at an alarming rate. Many people in Ghana depend on extractive commodities for sustenance, which in turn has serious social, environmental and security consequences. Environmental degradation as a result of regulated or unregulated mining activities, further stress already vulnerable mining communities. This heightens the need for sustainable development, and as a result, mining companies should be mandated to reinvest their returns on extractive commodities in mining communities.

The findings show that Ghana's progress in achieving MDGs was significant, although some of the targets were not achieved. As the need to develop sustainably remains a key topic in national policy frameworks, Ghana participated in the United Nations Conference on sustainable development in 2012 held in Brazil (Rio de Janeiro) to launch processes to develop a set of goals for global development as a successor to MDGs. Here, 70 countries, including Ghana, were grouped into Open Working Groups (OWG) to propose a set of Sustainable Development Goals as a result of the inability of countries to achieve the set targets of MDGs. Through several consultations and negotiations, the OWG came out with a draft in June 2014 for consideration at the 68<sup>th</sup> United Nations General Assembly. The report included 17 goals,

169 targets and 230 indicators. Member countries adopted the goals and signed on to the 2030 Agenda for Sustainable Development. This has become a global framework for achieving sustainable development in its three dimensions: economic, social and environmental in a more balanced manner.

### **2.11.5 The Sustainable Development Goals**

The term sustainable development (SD), which was propounded in the World Conservation Strategy, has become the focus for most leaders around the globe. Despite the different meanings given to this concept since its introduction, the commonest explanation is given by Brundtland (1987: 43). This report contains the issues discussed during the World Commission on Environment and Development meeting on the theme, “Our Common Future”. During this meeting, sustainable development was defined as a development approach that ensures the maintenance and improvement on the present needs of humanity while ensuring that the needs of future generations are not compromised (Brundtland, 1987: 43) as has been defined in Chapter One. The entire Millennium Development Goals (MDGs) were underpinned by sustainable development. Global attention for sustainable development surged after the era of Millennium Development Goals (MDGs) lapsed in 2015, with a new set of global development goals introduced as “Sustainable Development Goals (SDGs)”. According to Osborn, Cutter and Ullah (2015:3), Sustainable Development Goals have a wider scope compared to the Millennium Development Goals because they have the vision to provide a broader framework to serve as a yardstick for the evaluation of every country’s success in the direction of sustainable development.

Sustainable Development Goals (SDGs) are clearly articulated in 17 thematic areas, covering the social, environmental and economic components of development. SDGs one, two, three, four and five can be grouped under the social sector. The thematic areas of these goals no poverty; zero hunger; good health and wellbeing; quality education and gender equality respectively, focus on social development. SDG One, for instance, aims at combating poverty of all types by the year 2030. It aims at improving access to basic resources and services for the vulnerable and provides relief support to victims of conflict and climatic disasters. SDG Two, which aims at eradicating hunger and malnutrition, seeks to ensure food security. The goal seeks to ensure access to a balanced diet all year round for all people, with key emphasis on children. A critical look at SDGs one to five shows the global target of enhancing the wellbeing of people, especially the weak and vulnerable.



Also, the environment is the focus of SDGs six, seven, twelve, thirteen, fourteen and fifteen, which have thematic areas such as clean water; affordable and clean energy; responsible consumption and production; climate action; life below water and life on land. These could be classified under the environment. These goals mainly focus on the physical environment by ensuring safe life below water, on land and in the air. Likewise, economic goals are covered by SDGs eight and nine, with thematic concerns such as decent work, and economic growth and industry as well as innovation and economic growth, respectively. These goals generally seek to boost production and economic growth. There are other sustainable development goals such as sustainable built environment; goals ten and eleven seek to ensure a resilient built environment. These goals have a thematic focus on sustainable cities and communities. They aim to provide a safe and habitable human settlement by ensuring that people have access to safe and affordable housing while slums are upgraded. The goals also seek to ensure the use of a more participatory and all-inclusive means to ensure a functional public transport system, green public spaces, and improve urban planning and management. To ensure coordination and prevent frictions between the goals, the last two SDGs propose a well-functioning governance system. Governance, peace, justice, strong institutions and partnerships are, therefore, the main thrust of the 16<sup>th</sup> and 17<sup>th</sup> SDGs.

The advent of sustainable development goals has led to countries adopting improved ways of doing things to ensure that cities become more sustainable and contribute effectively to socio-economic and environmental development. Transportation, housing, and education are part of the key areas that have witnessed sustainable development technologies. Some of the technologies include bio-solar roofing, planting around already existing walls, green roofing, growing of more trees along streets and within neighbourhoods, clean energy usage in vehicles, electrical energy use, among others. The emergence of these technologies is causing a paradigm shift in knowledge about sustainable development. In the United States, the location of the Wilmington city in proximity to the Delaware River and the Atlantic Ocean necessitated a climate change action. This action was meant to deal with the fears of a rise in sea levels, an increase in weather-related natural disasters, including hurricanes and rising temperature. The Climate Sustainability Plan was, therefore, drafted with the target of reducing carbon emissions by 12 per cent. Car sharing programmes, consumption of clean fuels and fuel-efficient vehicles are some of the strategies adopted under this plan. An evaluation of the plan against the sustainability criteria as indicated by Saha and Paterson (2006), gives a 61% goal achievement rate. In 1999, Pennsylvanian city authorities also began their sustainability efforts through a local action plan on climate change. This plan aimed at reducing greenhouse emissions by 10%

by 2010. The plan aimed at reducing the city's susceptibility to rising prices of energy while lowering energy consumption by 30%. The city experienced huge success after analysis, recording an achievement rate of 86.1% for implementing sustainability initiatives based on Saha and Paterson's index (Hurley, 2009). In the UK, since the 20<sup>th</sup> century, the Metropolitan Green Belt policy has been in existence as part of the Abercrombie's 1944 Greater London Plan (Mace et al., 2000).

This green belt policy, in more recent years, has been revisited and integrated into the National Planning Policy Framework (NPPF) (2018-2021), which has the fundamental aim of preventing urban sprawl. The goals of this policy include tackling uncontrolled sprawl as a means of preventing cities from merging, safeguarding encroachment of the countryside, maintaining and conserving the setting and special character of historic towns and ensuring the reuse of brownfields and other urban lands to ensure urban regeneration (Mace et al., 2000).

Furthermore, the idea of sustainable development in China also started around 1958 through the drafting of the Beijing General Plan, which saw the Beijing greenbelt construction (Yang and Jinxing, 2007). Around 1958, China noticed that the physical development of cities was leading to their uncontrolled expansion. As a remedy to this problem, the government decided to divide the city into lots of urban clusters with each cluster performing particular functions. Croplands, vegetable gardens, trees, orchards, and water surfaces were then preserved and interspersed between the various clusters to separate them from each other. According to the Editorial Board of Beijing Annals (2000), the reserved spaces in between the city clusters were also used to distinguish cities from a rural area. In 2007, a new green belt with proposed tree plantations, parks and open spaces, reserved agricultural lands was proposed for the city of Beijing (Yang and Jinxing, 2007).

Even though some cities have impeccably implemented sustainable development ideas, other regions, especially in developing countries, have found it difficult to get the balance right. For instance, corporate social responsibility has been adopted by mining companies in Ghana as a means of paying for the adverse destruction caused in host mining communities. Though this move has seen infrastructural and other major investments in mining affected communities, according to Mensah (2015), the impact of these interventions in the lives of residents have been minute because the planning and implementation of these investments do not engage the people most affected. However, participation is a key component of sustainable development. Ideological critics have also questioned the idea of integrating economic, environmental and social interests; they argue that this approach is artificial (Campbell, 1996). According to the ideology of incrementalism, the achievement of a sustainable society requires huge ecological

and social information as well as a lot of risks. The advocacy ideologists also see the non-existence of any common social interest, as portrayed by the sustainable development idea. According to them, the sustainable development idea will invariably lead to the sacrificing of the vulnerable and of nature.

Nonetheless, Campbell (1996) sees great potential in the contemporary notion of sustainable development as he argues its prospects for achieving the planning goal of the social-environmental system. According to Campbell, sustainable development is an all-encompassing concept, which caters for different environmental concerns. It provides clear cut established social priorities and explicitly articulates the value society places on the economy, equity and the environment. Theoretically, aside from the concept providing the indicators for measuring attainment levels, it also assists in measuring the level of achievement. Nonetheless, the concept can still be improved to be of better use to planners. There is the need to make it more precise, based on what is outlined in the sustainable development goals in an evolutionary progression (Campbell, 1996). In addition, the ideological arguments of the impossibility of attaining a perfect balance need to be appreciated to some extent by diverging sustainable development towards ensuring the ability of the system to reproduce rather than focusing on achieving a perfect balance continually. This approach should also be extended to economic and political systems. This suggests that there is a need to ensure the rational utilisation of present resources to ensure their continued existence for production through the implementation of effective macro-economic policies.

This can take the form of economic policy and corporate strategies through investment, training and monetary policy towards ensuring a continual reproduction in macro- and micro-economic systems. Similarly, there is a need for government and its agents, private corporations, and other labour unions to strive to revitalise institutional interests. It is also very important to draw a clear-cut line between specific (local) and general (global) sustainability since this will facilitate easy imagination and achievement of sustainability. The review generally shows that sustainable development is at the centre of global development efforts. It is established that sustainable development, which is a coalescence of the principles of economic, social, cultural and environmental sustainability, is very important, especially, to developing countries. However, the documentation of these principles is not the challenge, but how economic, social, cultural and environmental sustainability can be ensured in poverty-stricken areas in the world is the real question that needs to be answered.

## **2.12 Summary of the Chapter**

The review indicates that corporate bodies mostly execute their activities in an unsustainable manner, which has led to adverse socio-economic and environmental effects on society. However, the review further demonstrates that corporate bodies can sustainably undertake their activities by using their corporate social responsibility policies. Though CSR could have adverse effects on firms, the review showcased its positive consequences both for firms, and the society are quite numerous. CSR has three main components; environmental, economic and societal approaches. Environmental CSR activities are undertaken to curb the environmental consequences of corporate activities. These include wise use of natural resources and reduced emission of harmful substances. With regard to the economic component or approach to CSR, economic sustainability could be attained through poverty alleviation projects, creation of jobs in localities as well as the provision of socio-economic infrastructure. Concerning the social/societal approach, the review indicates that CSR could be used as a tool to attain equity and inclusive society through social intervention schemes, provision of adequate social products and services and the promotion of political accountability. The above insight on sustainable development is summarised in figure 2.4.

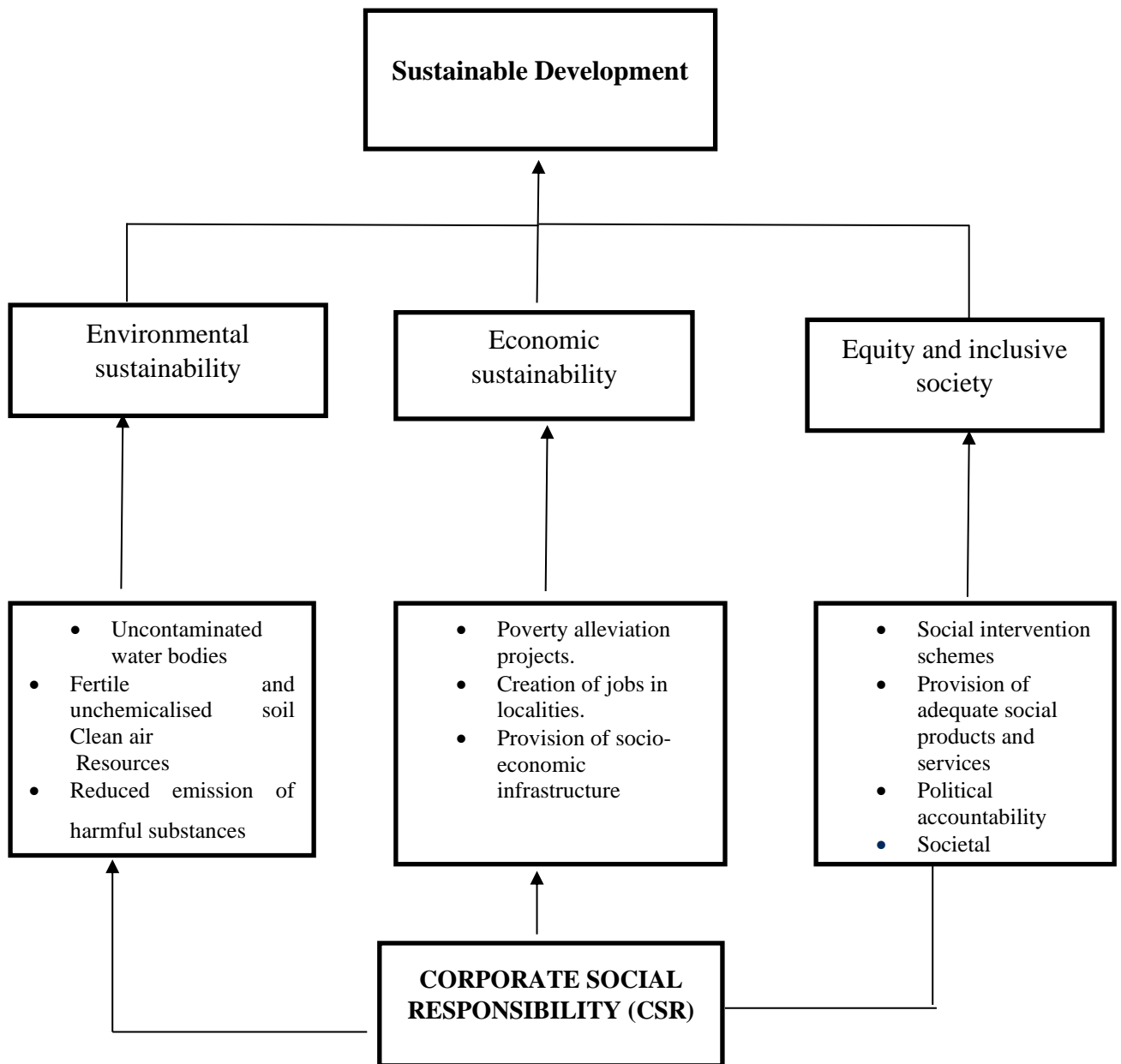


Figure 2.4: CSR and sustainable development with insights from the literature.

Source: Author's Construct, 2017

## CHAPTER THREE

### RESEARCH METHODOLOGY

#### 3.1 Introduction

This chapter discusses the research methodology utilised to conduct the study. The chapter discusses the scientific methods that are employed by the researcher to gather information for this study. The overview of the research design, profile of the study district, population and sampling, data sources and their collection instruments as well as how the data are analysed are all presented in this chapter.

#### 3.2 Research Area

The location utilised for the study is the Obuasi Municipality. Obuasi is a popular town in Ghana because of its association with gold mining. The area is known for the large quantities and quality of gold it has produced over the years. Obuasi is undoubtedly one of the richest gold mines around the world, and this serves as a pull factor that attracts both large and small scale mining companies as well as illegal miners popularly known as “galamsey” in Ghana. As a result, the mining sector, together with other mining economic activities create nearly thirty-five per cent of all employment opportunities in the area. The growth and development of Obuasi are connected to its enormous gold deposits, and hence, the Ashanti Goldfields company limited is seen as the core or strength of the town (Ofosu-Mensah, 2011).

##### 3.2.1 Location and Size

Obuasi is the ninth-largest town in the country and the second largest town after Kumasi in the Ashanti Region. The area falls under the jurisdiction of the Obuasi Municipal Assembly, and it is one of the thirty administrative districts in the Ashanti Region of Ghana. The Obuasi Municipal Assembly was created by the legislative instrument (L.I.) 1795 on 17 March 2004; before this time, the area was under the former Adansi West District. The Obuasi Municipal Assembly can be found in the south-western part of the Ashanti Region and is about sixty-four kilometres from the regional capital, Kumasi. Covering a total land area of about 162.4 square km, the municipality falls within latitudes 5 °35N and 5 °65N, and longitudes 6°35’W and 6°90’W (Opoku et al., 2016). It shares boundaries with Adansi North District to the North, Adansi South to the East and Upper Denkyira District of the Central Region and Amansie

Central to the South and West, respectively. The national census conducted in 2010 records Obuasi's population as 168,641, and further projected that by 2013 its population would have increased to 188,888. The report also shows that there were more females (87,625) than males (81,015) in the area. The area also records a growth rate of 4.0%, which is higher than the national growth rate of 3.0% (Ghana Statistical Service, 2014).

The terrain of the area is undulating and is about 500 meters above sea level. The Pompo range is the highest point within the area, which is about 634 metres above sea level. The geology formation of the area is mostly Tarkwain and upper Birimian, which are known for their potential rich mineral deposits. The area experiences semi-equatorial climate conditions and double rainfall maxima. This creates a conducive environment for 25 per cent of the working population who are engaged in agriculture. Most farmers are into subsistence farming and cannot afford other methods of sustaining their farms such as irrigation. The temperature of the area is relatively uniform and high all year round with its highest temperature recorded in March when the temperature recorded is usually 30 degree Celsius. It has water bodies such as the Pompo, Nyame, Akapori, Kunka and Wheaseammo, which make their way through the valleys of the ranges within the municipality. These water bodies have been polluted heavily due to the intensive mining activities in the area (Ghana Statistical Service, 2014). The location of Obuasi in the context of Africa and Ghana is shown in Figure 3.1.

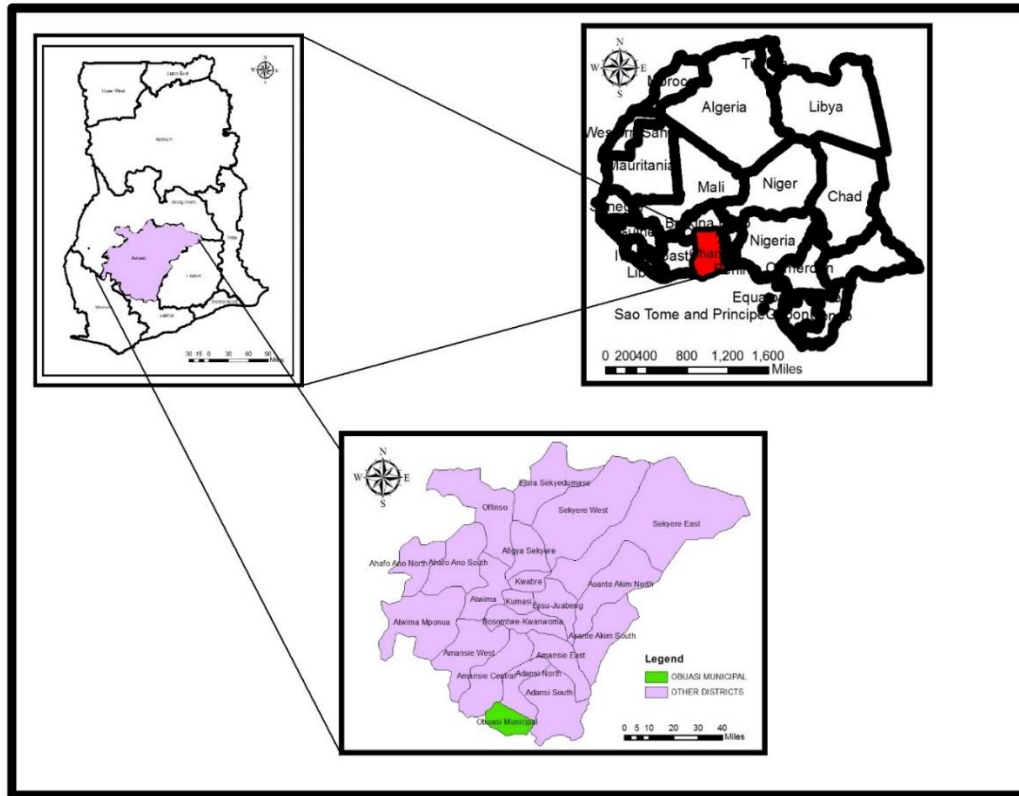


Figure 3.1 Obuasi Municipality in the context of Africa, Ghana and Ashanti Region  
 Source: Researcher's Construct, 2016

### 3.2.2 Governance and Administrative Structure

The Ghana Statistical Service's report in 2014 on the Obuasi Municipality states that the Obuasi Municipality falls under the jurisdiction of the Fomena Traditional Council. The Fomena Traditional Council has certain stool lands under its control. These stool lands are under the leadership of sub-chiefs enstooled by the paramount chief.

The Obuasi Municipality has two constituencies, the Obuasi East and Obuasi West constituencies, and thus, it has two members of parliament and 38 electoral areas. The Municipality also has eight sub-committees that perform different functions and seventy-eight unit committees. The sub-committees include development planning, works, justice and security, finance and administration, social services, environmental, education and agricultural. There are also Non-Governmental Organisations and CBO's operational in the area. These organisations' main area of interest generally include health/HIV/AIDS, child labour, education, water and sanitation. The Obuasi Municipality has 62 communities and 5 administrative zones, namely Brahabebome-Akaproriso, Tutuka-Odumasi, Wawasi-



Kwabrafoso, Obuasi Central and Kunka-Anyinam Zonal councils (Ghana Statistical Service, 2014). The tables below show the list of communities under each zonal division and their population.

Table 3.1: Brahabebome-Akaproriso Zonal Council

COMMUNITY	FEMALE (Population)	MALE (Population)	POPULATION (Total)
Akaproriso	6561	6470	13031
Ansokore	485	480	965
Ayiase	458	451	909
Bossman	7031	6931	13962
Diawuoso	862	688	1714
Domeabra	513	506	1019
Jimiso Kakraba	692	682	1374
Kwabenakwa	1341	1323	2664
Nyamesomyede	205	201	406
Nyanfrase	70	67	137
Pomposo	2745	2708	5453
Brahabeome	6109	6023	12132
Boete	5564	5489	11058
Mamapamhwe	844	831	1675

Source: Ghana Statistical Service, OMA (2014)

Table 3.2: Tutuka-Odumasi Zonal Council

COMMUNITY	FEMALE (Population)	MALE (Population)	POPULATION (Total)
Aboagyekrom	85	84	169
Ahansonyewodea	3445	3395	6840
Ahwiamu	473	467	940
Tutuka	8820	8694	17514
Odumasi	1963	1935	3898
Kwadwokrom	303	300	603
Sampsonkrom	435	429	864
Tiatiaso	434	430	864

Source: Ghana Statistical Service, OMA (2014)

Table 3.3: Tutuka-Odumasi Zonal Council

COMMUNITY	FEMALE (Population)	MALE (Population)	POPULATION (Total)
PTP Estates	1700	1676	3376
Anyimadukrom	1479	1458	2937
Wawasi	4427	4363	8790
Kwabrafoso	3803	3749	7552

Source: Ghana Statistical Service, OMA (2014)

Table 3.4: Obuasi Central Zonal Council

COMMUNITY	FEMALE (Population)	MALE (Population)	POPULATION (Total)
New Nsuta	2997	2954	5951
Obuasi Central	86821	85580	172401
Zongo	4450	4413	8863
Kokoteasua	1532	1511	3043
Muansey Valley	1312	1293	2605
Bidieso Old Town	1958	3889	3889
New Nsuta Estates	1886	1864	3750

Source: Ghana Statistical Service, OMA (2014)

Table 3.5: Kunka-Anyinam Zonal Council

COMMUNITY	FEMALE (Population)	MALE (Population)	POPULATION (Total)
Abaamu	83	81	164
Abompekrom	1766	1746	3512
Adaasi	539	532	1071
Anyinam	3745	3691	7436
Apitikooko	509	502	1011
Asratoase	138	137	275
Awona	102	101	203

COMMUNITY	FEMALE (Population)	MALE (Population)	POPULATION (Total)
Bediem	868	855	1723
Binsere	942	927	1869
Bogobiri	2292	2260	4452
Bruno Estates	517	510	1027
Dokyiwaa	558	550	1108
Gausu	5340	5264	10604
Koffekrom	1959	1930	3889
Komforkrom	116	115	231
Kunka New Town	2421	2387	4808
Kunka Junction	3642	3590	7232
Mamiriwa No. 1	308	305	613
Mamiriwa No. 2	433	428	861
Mangoase	1708	1683	3391
Mensahkrom	1456	1435	2891
Nhyiaso	629	621	1250
Nkanprm	1561	1541	3102
Ntonsua	286	281	567
Nyamebekyere	435	429	864
Nyameso	2301	2268	4569

COMMUNITY	FEMALE (Population)	MALE (Population)	POPULATION (Total)
Sansu	1519	1497	3016
Sam Jonah Estates	645	632	1281
Precious	668	658	1326
Dankwah Estates	256	253	509

Source: Ghana Statistical Service, OMA (2014)

### 3.2.3 Population and Growth Trends

Obuasi Municipality has a total population of 168,641 (see Ghana Statistical Service, 2013). According to the Obuasi Municipal Assembly (MTDP, 2010-2017), the population growth rate of the Municipality remains at 2.1%. Projections made by the Municipal Planning and Coordinating Unit (MPCU) (2014) indicate that the population of Obuasi Municipality should stand at 296, 994 in 2017. Details are given in Table 3.6 below.

Table 3.6: The Municipality's Projected Population (2013-2017)

Year	Population
2013	223,650
2014	241,986
2015	260,322
2016	278,658
2017	296,994

Source: Obuasi Municipal Assembly (2014)

### **3.2.4 Economic and Social Characteristics**

The Population and Housing Census 2010 report states that out of the total population (168,641), 63.7 per cent are economically active while the remaining 32.7 per cent are not economically active. 90 per cent of the economically active population is employed while the remaining 10% are unemployed. In the Obuasi Municipality, the service and commerce sector, mining industry and agriculture are the sectors that offer the most employment opportunities. 25% of the working population is engaged in agricultural activities while the mining industry employs about 35%. Also, the service and commerce sectors employ the largest percentage of the working population, constituting about 40% of the overall population. In addition, a total of about 18 per cent of the population get their source of income from illegal mining activities.

The municipality has a youthful population with those aged 15-64 constituting about 61 per cent of the total population, followed by those aged 15 and below forming 36.3 per cent, and lastly, those aged sixty-five years and above constituting 2.1 per cent. The youthful population of the Obuasi Municipality has the potential to propel economic development within the municipality. It presents a large labour force and also serves as a ready market that has the potential to attract investors into the municipality. However, a youthful population is not a guarantee for positive economic development, the state or authorities must invest in economic policies that support small scale and startup businesses, education, infrastructure and health services. These policies will ensure that the large labour force is given an enabling environment that promotes education, thereby creating a skilled labour force and at the same time creating a conducive environment for investors and small scale businesses. For instance, the population reference bureau's 2013 report indicates that Thailand is the perfect example of a country that has taken advantage of its youthful population through the right actions such as investing into its human resources to ensure that its labour force is healthy, educated and equipped with skills and opportunities to enable them to contribute to the country's economic growth. The Obuasi Municipality can replicate this on a smaller scale to boost economic development. According to the medium-term development plan for the Obuasi municipality, mining and its related activities have a major influence on the municipality's economy, employing about 4,500 persons. Also, the commerce sector employs about 40 per cent of the total population, which implies that a greater percentage of people engage in their own businesses. Therefore, the municipality can invest in education to provide skilled labour for its mining sector and provide an enabling economy for its numerous private businesses. This will go a long way to attract

investors and improve the standard of living of the people, and in the long run, cause positive economic development.

The total number of households in the Obuasi Municipality is 41,312 with females making up about 52.1 per cent and 47.9 per cent being males. In every household, there are at least 4 children in every 10 persons counted, which means that children make up the largest part of every household, constituting about 44.4 per cent. The total housing stock in the municipality is 20,247, with an average of 2.0 households per house. On average, there are a total of 8.2 persons in a house in the municipality, but the urban areas record slightly higher number of persons per house (8.7 persons), while rural areas have 6.1 persons per house. The average household size in the municipality is 4.0. Also, more than 60 per cent of the households with a population between 1 to 4 persons are single rooms. This implies that there is a higher occupancy rate of 4 or more persons per room instead of the UN standard of 2.5 persons per room. However, the data also proves that houses in urban areas are more crowded as they have an average of 8.7 persons per house compared to that of rural areas (6.1 persons).

A greater percentage of the population (81.7%) are affiliated with Christianity followed by Islam with 13.3%, while the least practised religion is traditional religion with 0.2% (OMA, MTDP, 2014).

### **3.2.4.1 Social Services**

#### *Education*

The importance of education for an economy's development cannot be undermined. 87.4 per cent of the total number of people from 11 years and above in the Municipality can read and write, and hence, they are considered as literate while 12.6 per cent can neither read nor write. Also, out of the total population of school-going age children, 17.3 per cent is in pre-primary school while 63.7 per cent is in basic school. In addition, 15.5 per cent is currently in SHS while 0.3 per cent is in vocational/technical schools. The population at the tertiary level is 2.5 per cent (OMA, MTDP, 2014). Data from the MTDP also indicates that out of the total number of those who previously attended school, 13.1% attended primary school, 29.0% attended JHS and 27.3% attended middle school while 17.6 attended senior high school. Also, persons who attended vocational/technical/commercial schools are 3.4 per cent, while those who attended post middle/secondary school training are 2.3 per cent and tertiary institutions are 7.3 per cent.

The data implies that a relatively lower number of people who start school end up attending higher learning institutions. This is evident both in those currently in school and those who have previously attended school. Out of the total number of those who previously attended school, only 7.3 per cent made it to the tertiary level. The data also shows that more males attended tertiary schools as compared to females even though this is not the case in lower levels of education. This could be as a result of many reasons, ranging from early childbirth or marriage, financial constraints, learning a trade, among many others.

The municipality's medium-term development plan for 2014 indicates that there are a total of 433 educational facilities in the municipality, both private and public. Out of this number, 2 are technical/vocational schools, 5 are senior high schools, 114 junior high schools, 164 primary schools, and 140 kindergarten schools. According to the MTDP (2014-2017) of the Obuasi Municipality, these educational facilities are very inadequate, looking at the consistent increase of its population. For both private and public schools, there are a total of 2,600 teachers, comprising of 1,447 trained teachers and 1,213 untrained teachers. 88.1% of teachers in public schools are trained while only 15% of teachers in private schools are trained.

### *Health*

There are 14 health facilities in Obuasi, out of this number only 4 are government-owned with the remaining 10 belonging to private entities. The municipality is fortunate to have levels of health facilities that provide high and low order services. The municipality has a hospital, a health centre, a clinic, a maternity home and a CHIPS compound. There are 7 hospitals in the Municipality, one located in each of these towns, Bedieso, Abompekrom, Gausa, Mensakrom, Boete, Brahabebome and Wawase. There are also two health centres located at Obuasi Central and Kunka Junction. Similarly, there are 4 maternity homes located at Estates (Old/New), Boete, Sampsonkrom, Kwabrafosso (one in each town), 4 clinics located at Mensakrom, Bediem, Brahabebome and Tutuka, and 1 CHIPS compound located at Adaase. The municipality has 26 doctors with a doctor to patient of ratio 1:6,486. These doctors are assisted by 17 medical assistants, 203 nurses/midwives and 368 paramedics (OBM, MTDP, 2014-2017). This implies that even though the current doctor to patient ratio is relatively lower when compared to the standard of 1:20,000, it is still higher than the WHO recommended ratio of 1:1000.



### *Waste Management*

Waste generation increases as population increases. It is, therefore, important that measures are put in place to ensure that waste is properly managed. Waste management starts from the source where waste is generated to when it is finally disposed at the final disposal site. In efforts to achieve effective waste management, the assembly partnered with Zoomlion Ghana Limited to handle waste that is mostly generated in the CBD. The area has 22 twelve meter skip bins and two off loaders used to transport waste to the final disposal site. Also, nearly 29 per cent of households dump their waste at a public dump (open space), this means that about 12,146 persons dump their refuse in an open space. Averagely, a person is expected to generate about 0.47kg of waste daily (Preprah et al., 2018). This implies that 5,708.62 kg of waste is left in the open, creating poor sanitary conditions and other health issues caused by filth.

About sixty per cent of households do not have access to private toilet facilities, and therefore, make use of public toilet facilities in the area, which are a total of 70. Also, only 0.6 per cent of the liquid waste generated is disposed of through a sewerage system, this further proves that waste management is an issue in the municipality.

### *Markets and Banking Services*

The municipality's 2014 medium-term development plan indicates that the municipality has one main market situated at Obuasi Central and 7 satellite markets. These markets serve the municipality as well as other districts. The markets are easily accessible to people except for those who reside in communities like Mampamhwe, Mammiriwa No.1 and 2, Ayease, Nyanferase and other rural communities, and this is mostly due to the poor nature of their roads. There are also 7 commercial banks, 3 rural banks and 4 microfinance institutions that provide various services to support the economy of the municipality.

#### **3.2.5 Profile of AngloGold Ashanti**

AngloGold Ashanti is a global gold mining company with its headquarters in Johannesburg, South Africa. It is the world's third-largest gold mining company in terms of production (AngloGold Ashanti, 2015:3). In Ghana, AngloGold Ashanti is located in Obuasi, a town that is situated 64 km south of Kumasi, the capital of the Ashanti Region of Ghana. AngloGold Ashanti, Ghana, was established by three men from Cape Coast – Joseph Biney, Joseph Brown and Joseph Elias. Since the establishment of the mine, it has gone through several changes. It was officially incorporated and listed on the London Stock Exchange in

1897 by Edwin Arthur Cade to raise funds to expand and modernise the mine (AngloGold Ashanti, 2006, cited in Yeboah, 2008:72-73).

Also, the company was listed on the London Stock Market. Lonrho, in the late 1960s, took over the management and leadership of the then Ashanti Goldfields Company. In 1969, the Ghanaian government took a 20% stake in the company, with Lonrho owning the rest. Following a coup d'état in 1975 in Ghana, the ownership structure of the company changed, with the government of Ghana getting a 55% stake in the company. However, the technical management of the mine was left in the hands of the minority shareholder (Lonrho), now Lonmin. In the history of the company, an African, a Ghanaian, to be precise, Sam Jonah, was appointed as the Managing Director in 1986 when he was 35 years old (AngloGold Ashanti, 2006, cited in Yeboah, 2008:72-73). The government of Ghana, in 1994, sold between 20-25% of its 55% shares in a share floatation, which led to the company being listed on the London and Ghana stock exchanges, the then-largest floatation by any gold mining company around the globe.

Following key developments, in 1996, the company was listed on the New York Stock Exchange; it was the first African Company to achieve that (AngloGold Ashanti, 2006, cited in Yeboah, 2008:72-73). However, there came a time that the then Ashanti Goldfields needed a partner with a high level of expertise and financial ability to collaborate its efforts. This led to the merging of Ashanti Goldfields and AngloGold, giving the company its current name AngloGold Ashanti. In 2014, AngloGold Ashanti produced 4.4 million ounces of gold and generated US\$5.2 billion in gold income, utilising US\$1.2 billion in capital expenditure (AngloGold Ashanti, 2015:3). In 2007, the company developed a corporate social responsibility policy (Yeboah, 2008:6; Owusu-Mensah, 2015:42-62) to aid its operations.

### **3.3 Research Philosophy**

The study adopted the pragmatist philosophy, which primarily involves both the collection and conversion of data into numerical forms to allow statistical calculations to be made and objective conclusions to be drawn (Creswell and Creswell, 2017). This philosophy assumes that all authentic knowledge is solely obtained using scientific methods, and is built on the premise that words and thoughts can be used as tools and instruments for prediction, to solve problems and take actions; it also rejects the idea that the function of thought is to describe, represent, or mirror reality. It, therefore, favours both quantitative and qualitative approaches.

### **3.4 Research Design**

Research design is the overall framework for the collection and analysis of data (Leedy and Omrod, 2001). Creswell and Creswell (2014) posit that the choice of a research design is primarily dependent on the approach adopted. Creswell and Creswell (2014) further indicate three (3) major approaches: quantitative, qualitative and mixed approaches. Creswell and Creswell (2017) argue that the quantitative approach functions by the development of testable hypothesis as well as theories which can be generalised. The quantitative approach is based on information that can be measured numerically; hence, it is the purpose or objective of the survey that determines the direction or the approach that should be used. The data collection techniques used under the quantitative research approach are usually questionnaires, surveys, personality tests and standardised research instruments (Creswell and Clark, 2017).

The quantitative research approach is generally applied in the natural sciences and is useful for data that is numeric (Creswell and Curtis, 2018). In contrast, the qualitative approach is defined by Creswell (2013) as an inquiry process of understanding a social or human problem based on building a complex, holistic picture with words, reporting of detailed information given by informants, and is conducted in a natural setting. The subjective opinion of the researcher is normally mirrored in the techniques, findings, interpretations, as well as the conclusions that are drawn. It is suitable for scenarios where an in-depth understanding of a situation is needed (Creswell and Creswell, 2017; Phillippi and Lauderdale, 2018). The common data collection techniques adopted under this approach include observation, case studies and interview guides (Creswell and Clark, 2017).

Additionally, it is scientific, fast and an easier alternative, which allows statistical analyses of data, the generalisation of findings and drawing of logical conclusions based on numerical values and comparability of studies (Crotty, 1998; Amaratunga, Baldry, Sarshar and Newton, 2002). It is also possible to use a quantitative method in analysing data with statistical methods since it is easier to generalise the findings. Another advantage is that the final results are based on quantity rather than interpretations, which may simplify potential future development and comparison with the work. The quantitative approach is, however, criticised for its rigidity, artificial nature and ineffectiveness in gauging human behaviour as well as not helping generate theories (Crotty, 1998).

The mixed-methods approach involves researchers collecting, analysing, and integrating both quantitative and qualitative data in a single study or in a sustained long-term programme of inquiry to address their research questions (Creswell and Creswell, 2017). The mixed-methods approach is preferred because it allows validation or corroboration of the

results obtained from other methods. Also, it offers strengths that offset the weaknesses of both quantitative and qualitative approaches. The disadvantage or limitation of this approach is that it can be very complex (Fetters and Molina-Azorin, 2017, 2018, 2019).

Bryman (2006) posits that a mixed-method approach allows for a diversity of views – this includes two slightly different views, which combines researchers’ and participants’ perspectives through quantitative and qualitative research and uncovers the relationships between variables through quantitative research while also revealing meanings among research participants through the qualitative research approach (Bryman, 2006:106). Therefore, employing a mixed strategy allows validation or corroboration of the results obtained from other methods. It also provides strengths that offset the weaknesses of both the quantitative and qualitative approaches. For this study, elements of both the quantitative and qualitative approaches (mixed) are adopted.

The qualitative research design was employed to collect detailed qualitative data from various key informants such as the management of AngloGold Ashanti, traditional authorities, assembly members, opinion leaders, among others. This was done through key informant interviews, focus group discussions and observations. According to Silverman (2006:1-19), studies which focus on the life, history and behaviour of people should use the descriptive approach instead of the strict quantitative research mechanism. The descriptive/qualitative approach is flexible compared to the quantitative approach and creates a platform for researchers to study the dynamic attributes of society. A survey of households affected by mining was also used to generate quantitative data. A combination of qualitative and quantitative designs allowed for more complete and synergistic utilisation of data.

The study also applies the case study approach. With this research approach, data is collected at a specific time and presented through a variety of data collection procedures over a sustained period. This approach provides an opportunity for an in-depth study of an individual unit, emphasising development factors in relation to the unit’s environment. Similarly, because the study requires multiple sources of evidence, which the researcher has limited or no control over, it makes the case study approach suitable for this study. The subjects that would be discussed here include the CSR policies of AngloGold Ashanti, how participatory these policies are and the contribution of these policies to sustainable development in the host communities, Obuasi. Finally, the findings of this chapter are descriptively presented in a quantitative form to give a clear picture of respondents’ views.

### 3.5 Sampling

For the purposes of data collection and ensuring equal representation of respondents, the sample size was predetermined. This was done by considering the communities selected for the research. With regard to the sampling method, cluster sampling under the random sampling method was used to select respondents from different communities within the Obuasi municipality. Thus, Obuasi's zonal divisions based on the Ghana Statistical Service 2014 report was used as clusters. Out of the five zones, the zones that had benefited from at least one corporate social responsibility project by AGA through its Obuasi Community Trust Fund were selected. This led to the selection of two zones, which are the Obuasi Central and Kunka-Anyinam Zonal councils. From these zones, the purposive sampling technique under the non-probability sampling method was used to select communities affected by mining activities that have benefited from at least one corporate social responsibility project by AGA through its Obuasi Community Trust Fund. Five of the communities: Sanso, Bidiem, Nhyiaeso, Abompekrom, and Anyinam fell under the Kunka-Anyinam Zonal Council while one (Kokotiasua) fell under the Obuasi Central Zonal Council. The total population for the selected mining affected communities is 19,980. The number of households which served as the unit of analysis for the research is 4,996 (See Table 3.7)

The Yamane's formula, otherwise known as the Slovin's mathematical method (Miller and Brewer, 2003:24), was used to estimate the sample of the study. This was done with a coefficient interval of 95% and an error margin (white term) of 5%. The formula is given as:

$$n = N / 1 + N(e^2)$$

Where n = sample size

N = sample frame

e = white term

Therefore, n is computed as:

$$n = 4,996 / 1 + 4,996 (0.05)^2 = 370$$

This means that 370 residents, aside from the institutions, were to be selected for the study. However, during the fieldwork, data were solicited from 338 residents, which represents approximately 91% of the sample size computed for the research. This was done because the point of saturation was reached when it was realised that responses being gathered were the same during the fieldwork.

The proportional mathematical approach was used to determine the sample size of the six purposively selected communities. Therefore, the community with the highest number of households will invariably have the largest sample size and vice versa.

Table 3.7: Selected communities and sample size determination

Community	Population	Number of households (NH=Population/Average Household size)	Proportionate Sample size ( $\frac{\text{District Sample size} \times \text{NH}}{\text{District Sample frame}}$ )
Sanso	7,436	7,436/4=1,859	$\frac{370 \times 1,859}{4,996} = 138$
Bidiem	1,723	1,723/4=431	$\frac{370 \times 431}{4,996} = 32$
Nhyiaeso	1,250	1,250/4=313	$\frac{370 \times 313}{4,996} = 23$
Abompekrom	3,512	3,512/4=878	$\frac{370 \times 878}{4,996} = 65$
Kokotiasua	3,043	3,043/4=761	$\frac{370 \times 761}{4,996} = 56$
Anyinam	3,016	3,016/4=754	$\frac{370 \times 754}{4,996} = 56$
Total	<b><i>P=19,980</i></b>	<b><i>N=4,996</i></b>	<b><i>n=370</i></b>

Source: Adapted from Obuasi Municipal Assembly's Statistical Office, 2017

Since every household in the selected communities qualifies to be enrolled on to the study, the researcher solicited data from household heads who were available at the time of her visit to the selected communities. In order to reduce bias in responses from respondents, the researcher randomly selected only the household head from a house, and data were collected from them. In terms of the qualitative aspect, the sample size selected was seven, which comprised traditional leaders, community leaders/opinion leaders, officials of AGA and the Obuasi Municipal Assembly. They were sampled purposively due to their in-depth knowledge on mining and CSR activities in the Obuasi Municipality.

### 3.6 Data Sources

Data used for the study were gathered from two major sources (secondary and primary sources). A combination of these two data sources allows the research to make use of existent information in the literature as well as gather data from the field.

### **3.6.1 Secondary Data**

Secondary data was obtained through the review of existent literature relevant to the study. This was done from sources such as books, newspapers, journals, articles, etc. The researcher used a variety of criteria for both the inclusion and exclusion of sources. With regard to data suitability, the study ensured that secondary data relevant to the problem of the study were utilised. This was done through the evaluation of the original purpose and objectives of the studies used. Also, the publication dates of the secondary data were taken into consideration to ensure that the most current sources were used except a few sources.

### **3.6.2 Primary Data Sources and Collection**

The primary data was obtained from the field with the help of a questionnaire, interview guides, observation, focus group discussions, as well as key informant interviews. The questionnaire utilised contained both open-ended and closed-ended questions. While closed-ended questions are useful for obtaining factual information, open-ended questions allow respondents to provide additional information from their perspective. The administration of the data collection tool was done using face to face interview and self-administered approaches. The target population for this study included households within communities affected by mining activities in the Obuasi Municipality. Also, institutions, as indicated in Table 3.8, such as AGA and Obuasi Municipal Assembly, were interviewed because they have access to information relevant to the study.

The criteria for selection of interviewees was based on their access to relevant information, how accessible they were in terms of their availability, how willing they were to provide information and who was in the position to give highly relevant information. The questionnaire captured all the variables that were needed from the households and institutions, based on the objectives of the study. The main data collection was preceded by a pilot survey, which was done to pre-test to check the completeness and consistency of the questions. On and off-site cleaning of data were done during and after data collection to ensure the reliability and validity of the answers obtained. Also, data were obtained from unpublished sources or documents such as planning documents, annual reports, AGA's internal documents (specifically in relation to their CSR), which increased the reliability and validity of this study.

Table 3.8: Study objectives, data sources and tools for collection

Objectives	Key variables	Data Sources	Tools/Techniques for Data Collection
<p>1. To assess the impact of mining activities on the livelihoods of selected communities within the Obuasi Municipality with regard to their economic, socio-cultural lifestyle and the natural environment.</p>	<ul style="list-style-type: none"> <li>- They are measured from the viewpoint of community residents in relation to how mining activities have impacted their lives.</li> <li>- Viewed from the stakeholders' perspective.</li> </ul>	<ul style="list-style-type: none"> <li>- Community members</li> <li>- Community leaders</li> <li>- AngloGold Ashanti</li> </ul>	<ul style="list-style-type: none"> <li>-Interview guides</li> <li>-Questionnaire</li> <li>-Focus Group discussions</li> <li>- Participant observation</li> <li>- Moderator</li> </ul>
<p>2. To assess the extent to which the CSR policies of AGA has contributed to sustainable development in its host communities.</p>	<ul style="list-style-type: none"> <li>- Assesses how CSR initiatives have advanced all components of sustainable development</li> </ul>	<ul style="list-style-type: none"> <li>- Community members</li> <li>- AngloGold Ashanti</li> <li>- Secondary data (books, reports, journal articles etc.)</li> </ul>	<ul style="list-style-type: none"> <li>- Focus Group Discussions</li> <li>- Questionnaires</li> </ul>
<p>3. To identify the principles of CSR and assess their attainability.</p>	<ul style="list-style-type: none"> <li>- Measured in relation to key literature on the principles of cooperate social responsibility.</li> </ul>	<ul style="list-style-type: none"> <li>- Secondary information from scholarly literature</li> </ul>	<ul style="list-style-type: none"> <li>- Secondary data analysis</li> </ul>
<p>4. To find out the CSR policies of AGA and the extent to which these policies have been implemented in Ghana</p>	<ul style="list-style-type: none"> <li>- Measured in relation to the present and past CSR policies implemented by mining companies</li> <li>- Assessed in line with the implementation status of the policies</li> </ul>	<ul style="list-style-type: none"> <li>- AngloGold Ashanti (AGA)</li> <li>- Obuasi Municipal Assembly</li> </ul>	<ul style="list-style-type: none"> <li>- Interview guides</li> </ul>



	- Assessed in relation to how implemented policies conform to SDGs and the principles of CSR.		
5. To assess the extent to which local communities have been involved in the design and implementation of the CSR activities of AGA	<ul style="list-style-type: none"> <li>- They are assessed using the Arnstein ladder of participation.</li> <li>- Assessed using communities' engagement in the planning and implementation phases of AGA's CSR activities</li> </ul>	<ul style="list-style-type: none"> <li>-Community members</li> <li>- AngloGold Ashanti</li> <li>-Traditional Authorities</li> <li>- Obuasi Municipal Assembly</li> </ul>	<ul style="list-style-type: none"> <li>-Focus group discussions</li> <li>-Questionnaires</li> <li>-Interview guides</li> </ul>
6. To make recommendations with regard to mining and corporate social responsibility	- Will be done, taking into consideration the key findings of the study.	- Primary data gathered	Not applicable

Source: Author's Construct, 2018

### 3.7 Data Analysis

Data were analysed in both descriptive and quantitative terms through the use of secondary sources or *capta* (earlier papers on corporate social responsibility in the study district and communities), primary sources or *generata* (questionnaires, interviews and observation) and scholarly literature (published papers and dissertations on corporate social responsibility). In relation to primary data, the analysis was carried out only when the data had been cross-checked and edited to ensure that there were no errors in the responses given by participants of the study. This process is known as data cleaning. Once the data had been cleaned, data processing started. This was done through data transcription (for qualitative data) and data entry into SPSS. After the data processing, content analysis, as well as the generation of quantitative variables and their interpretation, started. This involved various descriptive and explanatory inferences drawn out of the raw data. Descriptive statistics, such as frequency

tables were generated and explained. Apart from the use of frequency tables, quantitative data were presented in charts such as bar and pie charts. The analysis was also linked to the literature through discussions to confirm or challenge the findings of related studies. The discussions helped to establish new findings that were brought to bear by the study. In order to ensure a coherent flow, the analysis was aligned with the objectives of the research.

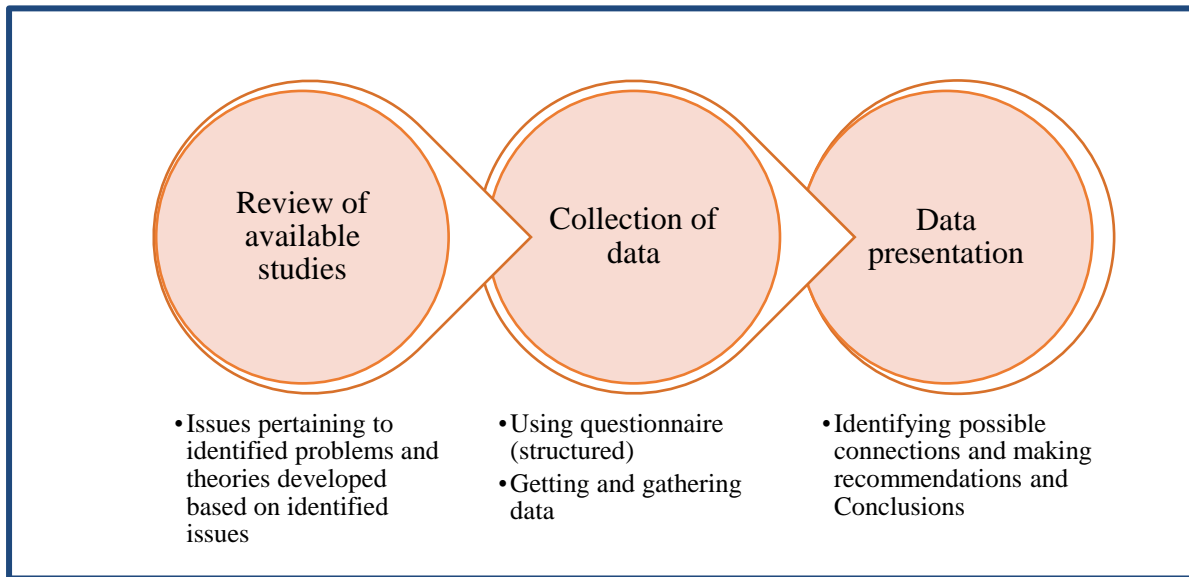


Figure 3.2 Flow process chart for the research

Source: Author's Construct, 2017

### 3.8 Ethical Considerations

The researcher obtained official letters, which were sent to AngloGold Ashanti and District Chief Executives of the Obuasi Municipal Assembly. Also, before data collection, the objective of the research was explained to respondents to seek their consent, which was freely granted verbally. AngloGold Ashanti required that the researcher signed a document, which indicated that the researcher would use the information obtained from the company strictly for academic purposes. The objectives of the study were verbally explained to the community members in the local dialect (since many of them could neither read nor write) and also the fact that their participation was voluntary was also explained to them. Information received from the respondents were kept safe with passwords. In addition, all authors of secondary information cited have been given the necessary acknowledgement in the study.

### **3.9 Summary of the Chapter**

This chapter dealt with the research methods employed to perform the study. The key elements discussed were the study area, research design, population, sampling procedure, data collection instruments, data collection procedure, ethical considerations, and data processing and analysis. The quantitative approach and descriptive research design were adopted in the study. Also, descriptive statistical tools such as percentages and frequencies were used to analyse data gathered by the questionnaire in a bid to answer the research questions of the study. Results of the interviews were transcribed and analysed to validate the quantitative findings. The next chapter presents the results of both the quantitative analysis and the interviews conducted.

## **CHAPTER FOUR**

### **AGA'S MINING ACTIVITIES AND IMPACT: ECONOMIC, SOCIAL AND ENVIRONMENTAL IMPLICATIONS FOR LOCAL COMMUNITIES**

#### **4.1 Introduction**

This chapter evaluates the impact of mining activities on the livelihoods of the selected communities. Both the positive and negative impact of mining activities are analysed and discussed in light of available literature and theories. Firstly, the chapter discusses the major economic activities of participants (primary respondents), which serve as their sources of livelihoods and the implications of mining activities for their livelihoods (that is the economic aspect of sustainable development), the effects of mining outcomes on the social aspect of sustainable development as well as the environmental component of sustainability. The views of respondents are collected in relation to their perception of the impact mining activities have had on their economic activities, whether positive or negative. Qualitative and quantitative data are presented in this chapter. With regard to the qualitative data that is presented, pseudonyms are used instead of the real names of respondents in order to conceal their identity and ensure confidentiality.

#### **4.2 Economic Implications of AGA's Mining Activities**

Most business ventures have both negative and positive impact on the communities within which they operate and even the nation(s) at large; gold mining is no exception to this. The economic implications of mining activities have been discussed in the subsections below. Mining of gold in Obuasi has directly and indirectly affected the economic livelihoods of the communities in the Obuasi Municipality and Ghana as a whole. As a multinational company, AngloGold Ashanti has contributed to the country's Gross Domestic Product, provided jobs and improved the lives of many people in Ghana.

##### **4.2.1 Major Sources of Livelihood (Economic Dimension of Sustainable Development)**

The sustainable livelihood of communities is central to development efforts across the globe. Activities that seem to affect the livelihoods of people are seen as bad for achieving SDG 1. DFID (1997) developed the sustainable livelihood approach in an attempt to unravel assets (human, social, physical, financial and natural capitals) that promote sustainable livelihoods. Also, De Neubourg and Weigand (2000) have established that markets, families,

social networks, membership of associations and public authorities play significant roles in advancing the livelihoods of people. This study investigates the major source of livelihoods of respondents due to the importance of local livelihoods. As indicated in Table 4.1, trading is the major source of livelihood of the inhabitants in the selected communities; this is followed by farming. An aggregate proportion of 26.3% of respondents is into trading, while 26.0% of them are engaged in farming.

Farming used to be the main source of livelihood of locals; however, mining activities have transformed the economic structure of these communities. Per community-specific analysis, the research identified that communities such as Bidiem (45.9%), Abompekrom (41.5%) and Kokotiasua (49.9%) are engaged in trading (see Figure 4.1). In Sanso, however, the major share of the respondents is into farming (38.7% of the respondents are engaged in farming). However, the numbers are lower for the other five communities; 8.3% in Bidiem, 10.5% in Nhyiaeso, 2.4% in Abompekrom, 8.8% in Kokotiasua, and 2.0% in Anyinam. It is not surprising that Sanso has a greater proportion of its respondents engaged in farming. This is because Sanso is more rural, and has vast lands for agricultural activities than the other communities. Abompekrom and Kokotiasua, for instance, are communities that are becoming more urbanised; hence, they do not have large lands available for farming. This indicates why very few of their indigenes engage in farming (Abompekrom, 2.4%; Kokotiasua, 2.0%). Qualitative data solicited from some respondents are presented below to answer why few inhabitants in these communities engage in farming.

[1] *“I was relocated to this community after AGA took over my farmland. When I was brought here, I had to look for another source of livelihood. I love farming, but there is no way I can go back to it. Farmlands in nearby communities have been destroyed, and those that might still be good to farm on are located very far from here. I just had to stop farming to do something else.”* (Kwaku, Abompekrom)

[2] *“As you can see in this community, all lands have been used to build houses. The houses you see over there are the ones provided by AGA. There are no lands available here for farming, and the land I used to farm on has been destroyed. I am now into trading.”* (Maame Serwaa, Anyinam)

[3] “AGA did not consider our economic activities before relocating us. Our houses have been built on small land sizes, and they are sited very close to each other. We don’t have any space we can even use for backyard farming.” (Odikro, Bidiem)

The above comments suggest that much attention was not given to the economic livelihoods of residents who were relocated as only their housing needs were catered for in their new locations. This has disrupted the economic base of the people.

Furthermore, quite a significant portion of respondents are artisans. Artisans are individuals who work with their hands to create unique things using traditional methods. About 24.6% of the respondents are artisans. Anyinam and Nhyiaeso have a high number of their respondents being artisans, with each community recording a respective percentage of 37.3% and 36.8% respectively. The remaining communities recorded lower percentages; Bidiem (20.8%), Abompekrom (29.3%), Kokotisua (29.4%) and Sanso (17.2%).

Despite some community members making efforts to meet their livelihood needs by engaging in economic activities, others are unemployed and are still searching for jobs. These individuals make up 23.1% of the total respondents. They attribute their unemployment status to mining activities, which they say have taken away their sources of livelihood. This finding is line with the assertion of Miranda et al. (2003), Aruquipa (2005) and Aramburu (2006) who believe that people in mining communities are usually disjointed in relation to the economic outcomes associated with mining, which take away their sources of livelihood coupled with environmental degradation and socio-cultural alterations. The percentage of unemployed respondents is composed of 33.3% respondents from Anyinam, 26.8% from Abompekrom, 26.3% from Nhyiaeso, 19.6% from Sanso, 25.0% from Bidiem and 11.8% from Kokotiasua.

Table 4.1: Economic activities of respondents (sources of livelihood)

Economic activities	Number of respondents (f)	Proportion (%)
Farming	88	26.0
Trading	89	26.3
Artisan	83	24.6
Unemployed	78	23.1
Total respondents	338	100.0

Source: Field data, 2018

The community-specific percentages of respondents who are engaged in farming, trading, artisanship or are unemployed are shown in Figure 4.1. Respondents from Sanso are predominantly engaged in farming; those from Bidiem, Abompekrom and Kokotiasua mostly engage in trading, while those from Nhyiaeso and Anyinam are mostly artisans.

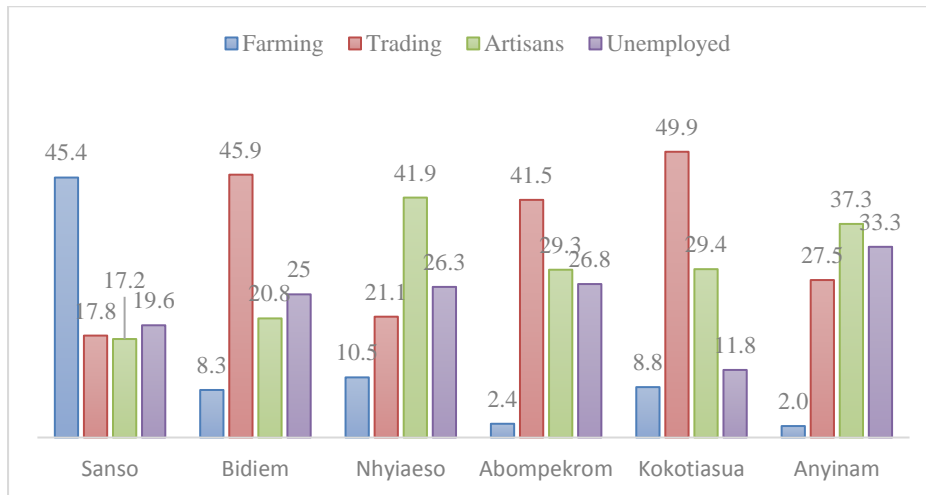


Figure 4.1 Economic activities of respondents in selected communities

Source: Field Survey, 2018

#### 4.2.2 Respondents' View of the Overall Impact of Mining on their Economic Condition

Having looked at the economic background of the respondents in the previous subsection, the overall view of how their economic activities have been disrupted by mining activities is discussed in this chapter. To quantify the views of respondents about the impact of mining on their economic conditions, predetermined variables/options made up of “*extremely positive, positive, neutral, negative and extremely negative*” were given to respondents to choose from. As argued by Boone and Boone (2012), the use of such predetermined variables helps to reveal the ‘greater than’ outcome of the issues under consideration. Hence, using this approach, the researcher was able to assess the responses of respondents in relation to their experiences with mining and its impact on their economic situation or livelihoods. Nearly half of the respondents (approximately 42%) indicate that mining has had a ‘*negative*’ impact on their economic condition. Further, nearly three-tenths (approximately 28%) graded the impact of mining on their economic condition as ‘*extremely negative*’.

In Awudi’s (2002) study, he posits that mining is yet to make any meaningful economic contribution to the livelihoods of people in Ghana, especially communities close to mining companies that are rather severely affected by mining operations. Therefore, the findings of this study with regard to the majority of the respondents indicating the negative impact of

mining on their economic situation affirm available literature (see Tirado et al., 2000; Drasch et al., 2001; Yelapaala, 2004). However, others believe that mining has positively impacted their economic condition. While a little over five per cent (5.6%) answered that mining has had an ‘*extremely positive*’ effect on their economic situation, about 12.7% answered ‘*positive*’. There are, however, other respondents (nearly 12%) who hold a ‘*neutral*’ position regarding the impact of mining on their economic state. Details are given in Table 4.2.

Table 4.2: The impact of mining on the economic condition of respondents

Nature of impacts of mining	Number of respondents (f)	Proportion (%)
Extremely positive	19	5.6
Positive	44	13.0
Neutral	39	11.5
Negative	141	41.7
Extremely negative	95	28.2
<b>Total</b>	<b>338</b>	<b>100.0</b>

Source: Field data, 2018

#### 4.2.2.1 Positive Impact of Mining on Economic Activities

The burgeoning literature on mining and its effect on the general wellbeing of people and the environment has been overly negative (Campbell, 2004; Corbett et al., 2000; Warhurst, 1999). Mbendi (2007), however, posits that mining could have a significant positive outcome on people’s livelihoods and general development. This assertion by Mbendi (2007) is undeniably true; nevertheless, concerns have been raised in relation to who benefits from mining with regard to enhancing livelihoods. Is it inhabitants of mining-affected communities or outsiders? The research sought the views of respondents about how mining has positively impacted their economic activities. Even though more than half of the respondents indicate that they have not seen any positive impact mining activities have had on their economic activities or livelihoods, some attested to the positive impact mining has had on their economic activities. While mining has created jobs for some people in the selected communities (see Mbendi, 2007), others indicate that mining has increased the market base for their businesses, which has led to them earning more from their businesses.

Nevertheless, interactions with the majority of inhabitants of the selected communities indicate that they do not believe that mining has had a positive impact on their economic



activities. However, through direct observation, it was observed that in communities such as Sanso and Anyinam, the mining company had provided them with free access to electricity. As a result, residents of these communities do not pay monthly bills for their usage of electricity. Adom (2011:19) indicates that access to electricity has positive implications on the economic wellbeing of people and communities as it is used for a wide range of activities that enhance businesses, individual outputs and their quality of life. The free provision of electricity to these communities has generated different electricity-dependent economic activities, which undeniably have had positive impacts on the economic conditions of residents in both Sanso and Anyinam. Again, the implementation of CSR projects has led to temporary recruitment of some semi-skilled workers from these communities, who in turn earn a living from their jobs. Some verbatim qualitative expressions from respondents on the positive aspects of mining on their economic lives are presented below.

*“...AGA has taken charge of the electricity expenses of the people in Sanso and Anyinam, which are the most affected communities. People in these communities are, therefore, not allowed to pay a penny for electricity. ...Many people are operating businesses that use electricity. When you visit the two communities, you can see a lot of such businesses along their roads. We see this as a social investment, and the company pays millions of Cedis every month to the Electricity Company of Ghana. ...We have our local employment procedure in place. When we ask a contractor to construct a project for us, we ask them to recruit local people as part of the labourers who work on the project. This is done to help local people with the required skills to earn a living. You know, AngloGold is concerned about the advancement of the welfare and livelihood of people who have been affected by our activities” (Mr Kwao, AGA).*

Other extracts from the field research that affirm the positive implications of mining activities on the economic situations of these communities are presented below:

[1] *“The company has employed me, and so it is my source of livelihood.”* (Issah, Anyinam)

[2] *“...My business was growing, and I was earning a very good income from my business when the company was at its peak. Now, mining has somewhat declined, and so my business*

*has slowed down a bit. I am hoping that mining would pick up to its peak again so that I can earn more.”* (Adwoa, Kokotiasua)

The views expressed above indicate that mining generates both direct and indirect jobs for residents of host communities. First of all, residents are directly employed by mines, creating jobs. Also, energy-free usage means that people can save money to engage in other businesses as they do not pay for electricity. Mining activities also provide a ready market as a result of the volume of people who arrive at the host communities to enjoy the multiplier effects of the mines. This is good for businesses. As indicated, a lot of residents run businesses. This is likely to offset the cost of loss of farmlands.

#### **4.2.2.2 Negative Impact of Mining on Economic Activities**

Mining can have negative consequences on people’s livelihood sources. In rural communities, mining could destroy water sources for farming, the fertility of farmlands could also be altered, and these have negative implications for the outputs of farmers. As Stephens and Ahern (2001: 12-14) assert, economic actors on mining fields are exposed to hazardous chemicals that increasingly affect their health conditions, reduce their strength for active work to earn a living as well as spend huge sums of their hard-earned income on treating diseases connected to mining even in their old age.

During field interviews, 61.2% of the respondents agreed that their relocation from their traditional communities to new communities by the mining company means that their economic activities have been taken away from them. Farmlands were taken over, and community members were compensated with meagre sums of money. Respondents indicate that they had to look for alternative jobs, which took considerable time and persistence. During an interview with officials of AGA in relation to the detrimental consequences of their activities on residents’ economic activities, especially farming, an official noted that:

*“The company has polluted rivers like Nyam and Kwabrefo, which was due to a lack of the right technology. But now, we have advanced technologies that ensure that our activities do not leave a negative footprint on the environment. In relation to the land, the mining law stipulates that once a concession is acquired, the affected community will only have surface right to the land. This means that when a land is taken over, the company will have to pay for the crops and other things on the surface of the land to the rightful owner. The Land Valuation Board does the valuation of the crops and any other property on the surface of the land. So,*

*we comply with the law and settle all affected people who have lost their lands. We do not provide any alternative jobs for them, but we have trained their women in soap making.”* (Mr Kwao, AGA)

Per discussions with AGA, farmers whose lands are taken possession of by the company are paid only for the value of their crops; hence, the compensation is expected to be meagre. It may, therefore, be inferred that such compensations cannot be used by the beneficiaries to start a business. Consequently, this affects the livelihoods of people. Respondents further note that individuals who have alternative lands they can use for farming have been restricted from going to their farms. This is because the route to their farmlands lies within the mining enclave, which the company has classified as unsafe for farmers. In Bidiem and Sanso, in particular, farmers have had to abandon their crops due to these restrictions as security guards severely punish those who try to sneak into their farms and are arrested. This situation has affected the economic activities of community members as expressed below.

[1] *“...look at me and my condition, I barely get money to buy food. My 20-acre farmland has been taken away from me all due to mining, which does not even benefit me.”* (Kwame, Bidiem)

[2] *“Now, this land is no longer fertile. This is because of the residue from mining chemicals that have contaminated the land. Even when you plant here, the yield will be poor, and the crops will affect your health when they are consumed. That’s the problem here, so we sit here and play together. I need a job so help me.”* (Kwaku, Nhyiaeso)

From the above, it could be inferred that residents who farm are not getting the expected yields due to the pollution of soils by mining chemicals. This does not only have economic implications but also health implications as well. This indicates how livelihoods have been worsened in host communities due to mining activities.

#### **4.3 Social Implications of AGA’s Mining Activities**

In assessing the social implications of AGA’s operations, respondents were asked if the company had been in operation when they were moved to the communities where they currently live. Also, they were asked if some residents of their communities had been displaced

as a result of the company’s operations; they were likewise asked to indicate their relationship with these people as well as to rate the impact mining has had on them socially. Regarding the social impact of mining, Chimonyo (2016), has identified that mining can result in the creation of a new social order in affected communities. This is probably due to the formation of new social relationships, which gradually dilute a community’s indigenous rich traditional relationships and norms. Usually, new entrants or foreigners disregard local customs and introduce new dimensions to social relationships, which are sometimes damaging to the culture of their host communities. From the data gathered, about 51% of the respondents indicate that they have lived in their present community for between 15-34 years. Those who have lived in their community for over 30 years but less than 60 years were 26.3%, while those who have lived there for over 60 years were nearly 6%.

Respondents who have lived in the community for the least number of years (below 15 years) were almost 17% (see Figure 4.2). However, since most of the respondents have lived in their community for more than 30 years, they were able to give a vivid account of the social implications of mining. Figure 4.2 presents how many years residents have stayed in their respective communities.

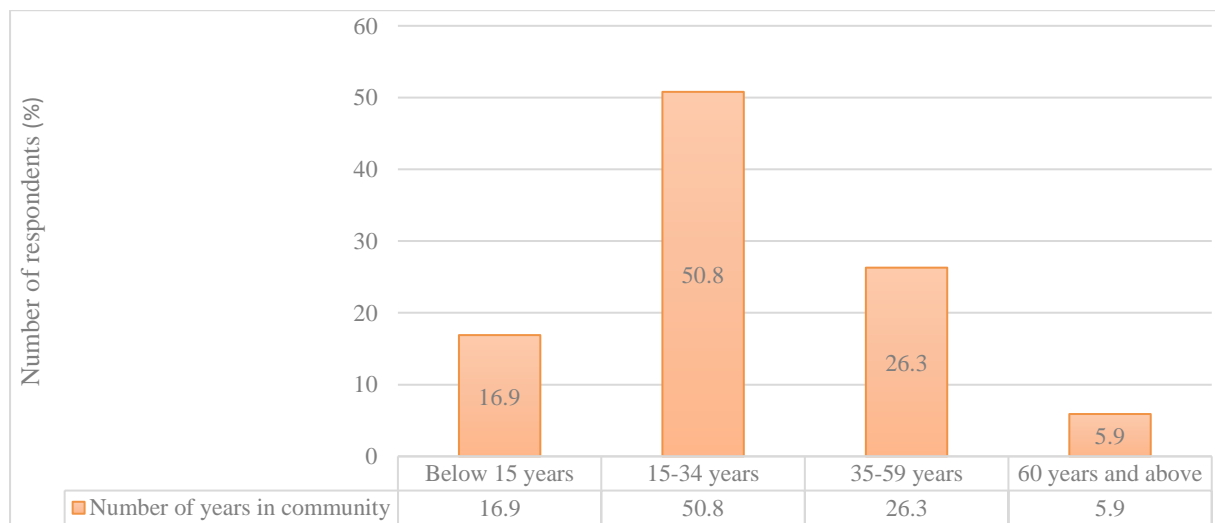


Figure 4.2 Number of years respondents have lived in their community

Source: Field Data, 2018

Generally, there was a unanimous response by the respondents that mining activities in the Obuasi Municipality have negatively affected their social systems.

### 4.3.1 Detailed Analysis of the Negative Social Effects Mining Companies have had on Mining Communities

AGA has been operating close to these communities since 2004, and its operations have led to the intrusion of new settlers in some communities (Abompekro, Kokotiasua and Nhyiaeso), which are located far from the mining concession. In relation to Sanso and Anyinam, the respondents indicate that some of their members have been relocated to other communities, including Abompekrom, Kokotiasua and Bideim since they were seriously affected by mining operations. This displacement and subsequent relocation of some affected community members were reported by more than half of the respondents (61.2%) (See Figure 4.3).

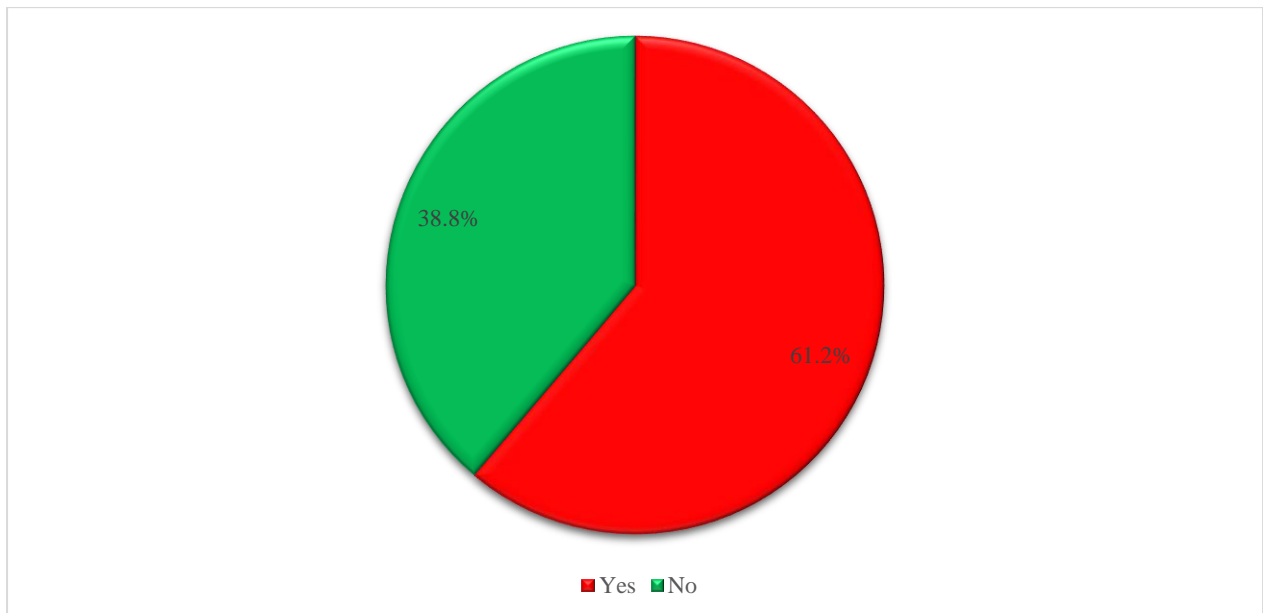


Figure 4.3 Respondents' view of the displacement of some people due to mining activities

Source: Field Data, 2018

In support of the above statistics, extracts of the grievances of respondents in relation to their displacements are subsequently presented.

[1] *“A lot of people have been relocated to new areas especially to the company’s apartment at Bidiem. Some of them were my friends, but they used to live downstream, which was closer to the site of the company.”* (Mr Okyere, Unit Committee member, Sanso)

[2] *“People who were very close to the mining site at Anyinam were moved to this community. I am one of those people. You see the buildings that are similar to mine in terms of design; this is where those of us who were relocated here live. I lost my farmland, and my friends also lost theirs.”* (Yaa, Bidiem).

The above assertions indicate that social systems have been disrupted by mining activities due to relocations. This affirms the view of Chimonyo (2016) that mining can result in the creation of a new social order in affected communities. As indicated above, relatives and friends have been separated through relocations, leading to the loss of social capital.

As indicated in Figure 4.3, about 61.2% indicate that some community members have been displaced as a result of the company’s operations. This percentage is also made up of respondents who have been themselves relocated to different communities. About 38.8%, however, indicate that they are not aware that some individuals have been displaced and evacuated from their communities.

Though the level of displacements varied by communities, more than 90% of the respondents in Bidiem confirmed that some of their community members have been relocated due to the mining activities of AGA. This is not very surprising as Bidiem serves as the main centre for the apartments provided by AGA to house individuals affected by their activities. The community is, therefore, made up of a large number of individuals who have been relocated from other communities. In Bidiem, for instance, over 60% of the respondents indicate that they have been relocated due to mining activities. In Anyinam, one of the most affected mining communities, about 87% of the respondents (some community members) indicate that they have been relocated compared to 13.2% who indicated otherwise. In Abompekrom and Sanso, the majority of respondents affirmed that people have been displaced because of AGA’s activities (Abompekrom: 78.0% answered ‘yes’ to displacement, while 22.0% answered ‘no’; in Sanso, 52.1% answered ‘yes’ compared to 47.9% who indicated ‘no’). General observations likewise indicate that the designs of the new buildings varied from the traditional compound house style of housing, which promoted social cohesion, to a more individualistic habitation. These are shown in Figures 4.4 and 4.5.



Figure 4.4 Buildings for relocated households Figure 4.5: Nature of buildings for relocated households

Source: Field Data, 2018

In line with the social implications associated with mining, Kilian (2008) calls for the need for mining companies to develop and integrate Social Impact Assessment (SIA) into their operations as a form of management tool. He argues that mining companies have over the years created social disintegration and other harmful social outcomes, but have failed to commit their resources to the social aspects of their operations.

Mining companies have invested huge amounts of capital into mining development and openly stated that they are contributing to socio-economic development at the grassroots level in mine affected communities. In reality, however, communities have usually been completely bypassed by any development benefits from the project and are often left in a marginalised state, in which they are far worse off than before the mine opened. (Kilian, 2008:1)

The need for Social Impact Assessments for AGA's operations is, therefore, a vital one even though findings from other communities such as Kokotiasua and Nhyiaeso indicate that there has been no relocation of their members as a result of the operations of the company. However, 52.9% in Kokotiasua and 78.9% in Nhyiaeso answered in the affirmative. Details of the findings are presented in Figure 4.6.

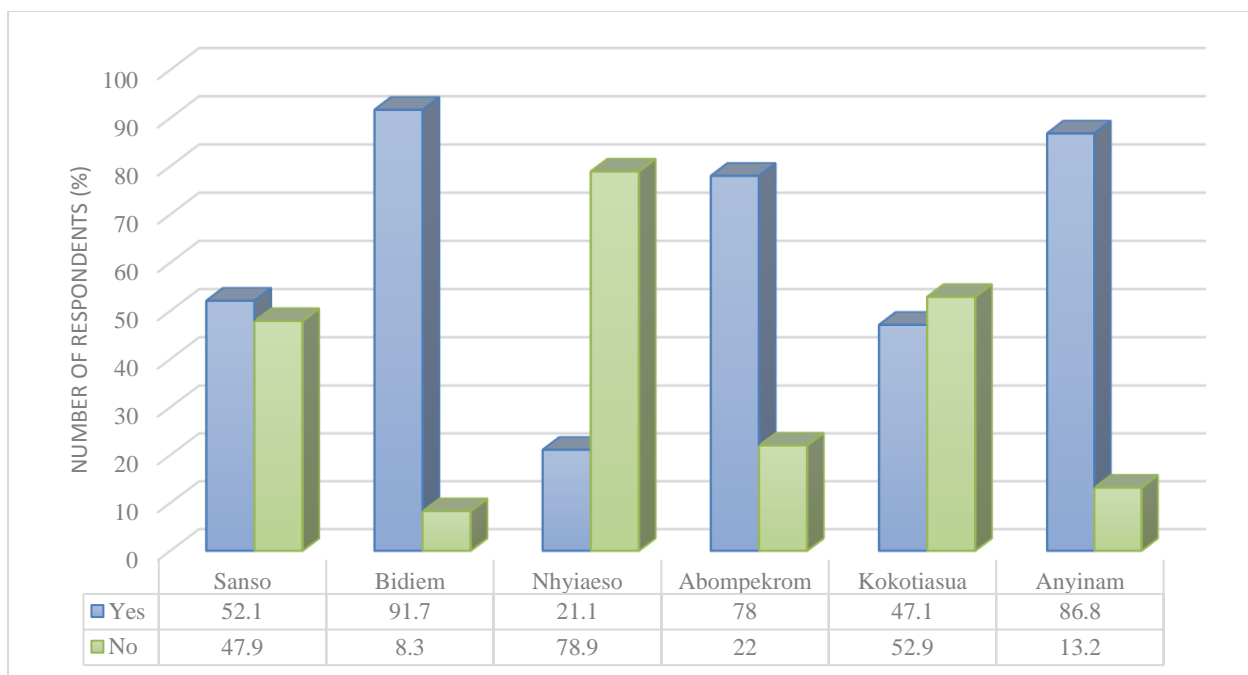


Figure 4.6: Mine related displacements of communities

Source: Field Data, 2018

#### 4.4 Environmental Implications of AGA’s Mining Activities

In this section, attention is given to the impact AGA’s operations has on the natural and physical environment. The natural environment comprises water quality and soil quality, while the physical environment comprises sanitation issues and noise levels produced by mining. Studies such as Miranda et al. (2003), Aruquipa (2005) and Aramburu (2006) assert the harmful outcomes associated with mining on both the natural and physical environment. The study found negative effects of mining on both the natural and physical environment, including water and soil quality, sanitation and noise, which affirm the assertion of the writers cited above. These have resulted in negative health effects on the residents.

##### 4.4.1 Water Quality

Access to safe drinking water is essential for livelihood advancement, improvement in the quality of life, and the wellbeing of people. It is recommended that the minimum daily water intake for humans is between 1.5 to 1.8 litres (Gleick, 2000). Also, according to Howard et al. (2011: 214), the World Health Organization recommends 7.5 litres per capita per day as the minimum condition for most people under most conditions. It is, therefore, not surprising that an aspect of the Sustainable Development Goal 6 (SDG 6) pays attention to the sustainable management of water resources. Based on available data, over two (2) billion people in the



world are experiencing water crises and stress (Ghebreyesus, 2017), making the need for water protection very crucial (Hanrah and Dosu, 2017). In the researcher’s bid to find out how mining has affected local communities, data were gathered from the respondents in relation to the major sources of water available for households. The majority of the respondents (63.3%) depend on water from boreholes as their major source of water, followed by 33.4% who depend on pipe-borne water. A little over three per cent (3.3%) depend on water from wells

Except for Anyinam, where a large number of respondents depend on pipe-borne water as their main water source, all the remaining communities largely depend on boreholes. In communities such as Bidiem, Abompekrom and Kokotiasua, some households (3.3%) rely on wells as their water source. Table 4.3 indicates the major source of water of the respondents.

Table 4.3: Major source of water for households

Water source	Number of respondents (f)	Proportion (%)
<b>Pipe-borne</b>	113	33.4
<b>Borehole</b>	214	63.3
<b>Well</b>	11	3.3
<b>Total</b>	<b>338</b>	<b>100.0</b>

Source: Field Data, 2018

Residents indicated that AGA had provided them with boreholes after their major source of water (the rivers) had been polluted through mining; hence, accounting for the major usage of boreholes. This notwithstanding, in neighbouring communities, especially Sanso, residents raised concerns about the quality of water from these boreholes. According to them, in some cases, water from these boreholes are brownish in colour, and sometimes they find chemical particles at the bottom of the water. Because of this, some households who have financial resources depend on filtered water known as ‘sachet water’ as their main source of drinking water, which is very expensive Extracts of key statements by respondents on the challenge of water in host communities are summarised below.

[1] *“Let me go and show you the water we use in the community. Just come, my house is not too far.... This is the water. See, it is brown; when you drink it, it tastes very sour. People have*

*been getting sick from drinking this water. All the chemicals are as a result of AGA's operations.”* (Kwaku, Opinion leader of Sanso).

[2] *“We thank God a private investor came to provide this pipe. It looks good to use, but we have to pay for it. All our natural water sources are gone....”* (Maame Yaa, Kenkey seller, Sanso)

[3] *“...There are chemicals in the water we drink, which are destroying our skin. The water has become acidic. We, the traditional leaders, have raised concerns to the company. Last time, they came to fetch samples of the water which they said, they were going to test. Since then, we have not heard from them.”* (Focus Group Discussions with Traditional leaders, Nhyiaeso).

[4] *“My husband and I decided to provide our household with a borehole. When we were relocated here, we realised access to water was a big challenge. The boreholes which we depended on are no longer functioning. We incurred a cost of about GHS 1,500.00 as the cost for the well. We are happy because we have no problem with water. We also allow other households to fetch water from our borehole.”* (Interview session with Abena and her husband, Bidiem)

#### **4.4.2 Soil Quality**

Sustainable Development Goal 15 (SDG-15) focuses on soil, with emphasis on biodiversity management and sustainable land governance (Ghebreyesus, 2017). The global focus highlights the significance of soil for livelihood sustainability and the local economic development (LED) of communities. Qualitative data gathered during the field research reveal that mining has significantly affected the quality of the soil of nearby communities. Respondents who were initially farmers indicate that the chemicals used by the company have affected the fertility of their soil. The few individuals who are still into farming indicate that the yields they get from farming have greatly reduced compared to communities not close to the mining sites. For instance, the percentage ratio of crop yield per hector for communities

close to mining sites is 33.2% compared to those located far away from mines who get 86.5%. Even though the communities whose soil has been affected by the company's activities have complained to them, they are yet to get any feedback or solution from the company. Boxes 4.1 and 4.2 are the specific concerns raised by community leaders regarding the impact of mining on the soil quality of their communities.

**Box 4.1: Meeting with UC Members, Two Elders and One Opinion Leader at Sanso**

*During a meeting with the community leaders, several issues were discussed. One prominent issue of critical concern to the community leaders was the extent to which the soil fertility has been reduced as a result of large-scale mining. The soil, as indicated by the leaders, has been exposed to excessive chemicals released by company during its operation. Heaps of waste have been deposited at the extreme end of the community. This waste is made up of gold dust, which contains cyanide, a hazardous chemical which destroys the quality of surrounding soils. The waste site of the mining company is located close to the farmlands of some farmers who were not relocated by the company.*

*Every three months, the leaders meet with other leaders from neighbouring communities and the company's staff to discuss issues of concern. The deterioration of soil quality has been discussed during these meetings, but the company has refused to address this issue. In fact, because people are aware of the critical challenge we face here, anytime the small group of farmers in the community send their produce to sell in the market, people refuse to buy them because they are afraid of contracting diseases when they consume the produce.*

*Based on interactions, the researcher believes that it will be better for farmers in Sanso to stop farming and find other alternative jobs to do.*

**Box 4.2: Meeting with an Assembly member, a UC member and an Elder at Anyinam**

*In Anyinam, the leaders believe that they are the most affected community in relation to the effects of mining on their lands. According to them, Anyinam was a prominent farming community, with majority of its inhabitants engaged in cash crops and vegetable farming. They confirmed that the mining company is very aware that its activities have depleted the quality of the soil used for farming. According to them, the mining company relocated only a section of the community, leaving the rest of them exposed to the chemicals released regularly into the soil.*

*The emergence of mining has transformed the community. Farming has reduced substantially. Due to the destruction of the soil, underground water has also been affected.*

#### **4.4.3 Sanitation**

Sanitation is vital for development, but access to good sanitation has become a critical problem for many countries as about 2.6 billion people do not have access to adequate sanitation (WHO & UNICEF, 2015). A report by the Water Supply and Sanitation Collaborative Council (2004) discovered that the lack of access to adequate sanitation had increased the global health burden with not less than 4,000 children losing their lives due to sanitation related diseases. The World Health Organisation (2019) also postulated that poor sanitation which leads to diarrhoea causes about 432 000 deaths in tropical regions. Inadequate sanitation in Africa is also linked to diseases such as intestinal worms, schistosomiasis and trachoma (WHO, 2019). Globally, attention must be given to enhance access to sanitation as the sustainable development goal (SDG 6) focuses on not only water but sanitation as well. In mining communities, good sanitation is a key challenge as mining affected communities are usually exposed to a large volume of mining waste. In the selected communities used for this research, sanitation was discovered to be a major challenge. The absence of disposal bins as well as the limited toilet facilities available for residents of resettlement communities such as Bidiem and Abompekrom have contributed to poor sanitation. During the field research, it was observed that in Bidiem, AGA had provided the community with a toilet facility, which, according to respondents, is not adequate to serve over 1,000 re-settlers. A similar situation was identified in Abompekrom, where some residents have, therefore, resorted to ‘open defecation’, a practice which exposes the entire community to diseases such as cholera.

In the case of Sanso, Nhyiaeso and Kokotiasua, the mining company has created a dumping site where it disposes of its gold dust. These dumping sites are very close to residential areas, especially in Sanso and Nhyiaeso. In Sanso, the dumping site is located close to some farmlands and is not too far (0.5-5km) from the nearest building. In the case of Nhyiaeso, the dumping site is just about 30 meters opposite a residential area, and can easily be seen from the homes of residents. During wind storms or strong winds, gold dust can easily be transported to people’s houses. With Kokotiasua, the dumping site has been sited very far from residential areas, and cannot easily be seen by residents. During the discussions with community members and the Assembly member, it became clear that the dumping site is associated with a pungent smell, especially after the raining season. Extracts of statements from a section of households are presented below.

*“In most of the communities, including this one, sanitation is a critical problem. Our community is the centre for disposal of gold waste. The dumping site is over there. This usually pollutes the atmosphere, causing a lot of respiratory diseases. We need the government to intervene for us.”* (Kwabena, a household head at Sanso).

The above extract suggests that communities are located close to the mines; hence, they suffer from the mines’ poisonous by-products.

Table 4.4 gives an accurate picture of the proximity of some of the towns close to the mining site.

Table 4.4: Proximity of the mining site and towns

Community	Distance from the Mining Site
Sanso	0.5-1.5km
Anyinam	0.5-1.5km
Bidiem	0.5-1.5km
Nhyaeso	0.5-1.5km
Kokotiasua	0.5-1.5km
Abompekrom	1.5-3km

Source: Field Data, 2018

From Table 4.4, it could be said that communities are located very close to the mines, and therefore, they are exposed to health risks as subsequently discussed.

#### **4.4.4 Major Health Problems Faced by Mining Affected Communities**

The study investigates the major health problems affecting mining communities as a result of mining activities. The results, as indicated in Table 4.5, confirm that skin rashes are the leading health problem suffered by people who live in these communities. Almost half of the total number of respondents (49.4%) indicate that they suffer from skin rashes, while about 14.5% usually suffer from coughs. These findings are confirmed by reports from local clinics in the selected communities. The clinics give similar statistics regarding the number of hospital-reported cases of coughs and other health problems experienced by residents of mining communities. Respondents experience other health problems such as typhoid (12.4%), headache (10.9%), heart problems (9.5%) and eye problems (3.3%). Similar studies by Awudi (2002), Gueye (2001), and Danyo and Osei-Bonsu (2016) demonstrate the detrimental effects mining has on the health of residents in mining affected communities. For instance, Danyo and

Osei-Bonsu (2016) have identified health issues ranging from skin infections and eye problems, which they attribute to the hazardous metals that are used by miners for their operations.

Table 4.5: Major health problems affecting residents of mining communities

Health problem	Number of respondents (f)	Proportion (%)
Skin rashes	167	49.4
Typhoid	42	12.4
Eye problem	11	3.3
Cough	49	14.5
Heart problem	32	9.5
Headache	37	10.9
<b>Total</b>	<b>338</b>	<b>100.0</b>

Source: Field data, 2018

Table 4.5 indicates that the majority (167, 49.4%) of respondents suffer from skin rashes, followed by cough, represented by 49 (14.5%). Also, 42 (12.4%) and 37(10.9%) of the respondents, suffer from typhoid and headache, respectively, while 32 (9.5%) of them indicate that they suffer from heart problems. Lastly, 11 (3.3%) of them indicate that they have eye problems. All these, to a large extent, can be attributed to the dust and noise pollution caused by mining activities.

#### 4.4.5 Noise

The environmental concerns associated with mining and other activities are regulated by the Environmental Protection Agency (EPA). The EPA Act, Act 490 (1994) as well as the Environmental Assessment Regulation L.I 1652 (1999) serves as a guide for environmental issues and gives the requirements that are used to address environmental concerns, including noise pollution. In line with the legal provisions, mining companies are expected to take into consideration noise levels. Noise levels are expected to fall within EPA's permissible levels and should be well monitored by companies (see Prescribed guidelines in EPA Act, Act 490,

1994). The study set out to find out from respondents whether or not the company's operations produce noise levels that affect them. The results are indicated in Figure 4.5.

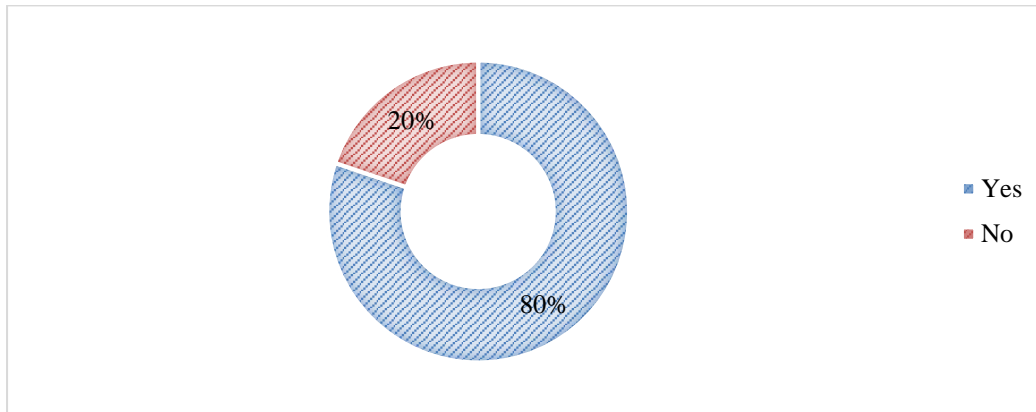


Figure 4.7: Mining Activities and Noise Pollution

Source: Field Data, 2018

As shown in Figure 4.7, about 80% of the respondents indicated that the company produces very high noise levels during its operation, particularly in communities that are very close to the mining site. This suggests an exposure of communities to the social and health effects of environmental noise. The health and social implications of environmental noise could be very dangerous (Jariwala et al. 2017:1) Noise leads to hearing loss, sleep disruption, cardiovascular disease, social handicaps, reduced productivity, negative social behaviour, annoyance reactions, absenteeism and accidents. However, qualitative data extracted through in-depth interviews with respondents indicate that noise levels used to be very high in the previous years, but that the noise level is gradually reducing. According to the respondents, this is because of the frequent complaints from community members to local government institutions such as the Obuasi Municipal Assembly and AGA. An extract from a focus group discussion is presented below.

*“At first, we couldn't sleep. Noise levels from the mining were very high. This usually comes through blasting. Apart from the noise, our buildings had begun to crack, so we became serious and decided to do whatever we could do to stop our buildings from collapsing. When the company realised how serious we were, they reduced the frequency of the blasting, and the*

*noise levels were also reduced. Now, it is quite ok to stay in the community without excessive noise from the mining company.”* (Focus Group Discussion; chief and elders of Nhyiaeso).

The in-depth qualitative explanations above suggest that the negative effects of the noise produced by mines are likely to be minimal.

#### **4.5 Summary of the Chapter**

This chapter sought to present findings on AGA’s mining activities. It began with a highlight on the major economic activities of respondents and the effects of mining activities on these economic activities (the economic aspect of sustainable development), the effects of mining on the social aspect of sustainable development as well as its effect on the environment of the local communities. The results indicate that AGA’s mining activities have had both positive and negative effects on the economic well-being of residents of these communities. However, the combined overall negative impact of 69.8% (made up of those who are of the view that AGA’s activities have had an extremely negative impact, 28.1%, and negative impact, 41.7% on various aspects of their lives) exceeds the overall positive impact of 30.1% (comprising those who are of the view that AGA’s activities have had a positive impact, 13%; those who are neutral, 11.5% and 5.6% for extremely positive impact). Also, the findings show that AGA’s mining activities have resulted in a disruption in the social structure (displacement of residents in local communities). Finally, the results show that the impact of AGA’s mining activities on the environment, especially on water quality, soil quality, sanitation and noise levels are negative, which have led to major health problems for residents of these mining communities.



## CHAPTER FIVE

### CRITICAL INSIGHTS INTO THE CSR PRINCIPLES, POLICIES AND ACTIVITIES OF AGA

#### 5.1 Introduction

Chapter Four of the study indicated that the overall negative impacts (69.8%) of AGA's mining activities surpassed the positives. This chapter delves into attempts made by AGA to compensate communities for the negative consequences of their activities through its CSR activities. This chapter of the research will discuss the principles of corporate social responsibility (CSR), the policies and activities within the context of AGA. In relation to the principles of CSR, the literature available on CSR principles is fragmented, with diverse perspectives in relation to what should be considered as CSR principles. Several principles have been identified in the literature, but most of them discuss the same issue, even though they are given different names. The principles of CSR are discussed in light of the literature review presented in the second chapter of this study. All the findings in this section will be discussed in relation to the principles highlighted in the literature review (see Sindhi et al., 2017; Mujtaba and Cavoc, 2013:1; Millon, 2011; McGraw-Hill Ryerson Limited report, 2008). The principles are (i) the commitment of companies to strong values that set them apart from others; (ii) the legal underpinnings of all activities conducted by the company; (iii) managerial discretion in relation to actions taken; (iv) the economic advancement of all actors involved; and (v) broad stakeholder participation in issues that affect them. Also, the findings on CSR activities and policies will be aligned with the literature to bring out the novel contribution of this study. In analysing the results of the study, the names of respondents will be presented as *nom de plume*, in compliance with research confidentiality, anonymity and ethics.

#### 5.2 Principles of CSR within the Context of AGA

Five principles were considered, and the findings of the study have been presented in tandem with these principles in the subsections that follow.

##### 5.2.1 Principle 1: AGA's Commitment to its Values

Every establishment has core values that drive its activities. The values of a company define what it stands for in its quest to operate in their areas of interest. As postulated by

Mujtaba and Cavoc (2013:1), the values that underpin companies are essential and as such, companies have to stick to their core values. The core values of AGA are safety, dignity and respect for one another, recognition of diversity, accountability for actions and commitment to deliver on the outcomes of actions, commitment to the development of the communities within which it operates, and respect for the environment (AGA Report, 2017). These values of the company cover a broad spectrum of issues, and the company's commitment to these values will undeniably ensure operational peace and project the goodwill of AGA.

The outcome of the discussions held with officials of AGA reveals that the company has a huge interest in its workers as well as other parties such as the environment and communities within which they operate (Mensah, 2009: 49). The first three values of the company highlight its interest in its employees, making sure that they feel secure in their working environment. The company believes that it can only support communities if workers are very efficient and productive; consequently, the need to pay attention to them. Among the top three values of the company, the safety of its workers comes first. As well as the safety of its workers, the company ensures that its employees work in a very protective and serene environment. Quoting an official of AGA:

*“Here, we don't joke with workers' safety at all. Every Tuesday is a safety meeting day, where we expose the workers to health and safety training and precautionary measures at the mining site. We provide workers with all the necessary outfit to make them safe while they are at the post”* (Mr Appiah, AGA).

Using direct observation during visits to the mining site of AGA, it was observed that workers were dressed in protective gears such as protective shoes, gloves, caps, etc. Also, there was the use of different equipment, and visitors to the site were restricted from accessing some parts of the site as a safety measure. Interactions with some employees revealed that the company is committed to its workers' safety, dignity and respect, despite their diversity. This is contrary to the findings of a study (Stocklin-Weinberg, Veiga, Villegas, Sulaiman, Michaux, 2017:18) conducted in Indonesia, which showed that mining companies were not committed to the safety of their miners as miners were found not wearing proper personal protective gears like goggles, boots, earplugs, respirators, gloves and coveralls.

Despite the company's commitment to the safety, dignity, respect and diversity of its workers, its commitment to its other values such as accountability for their actions and development of the communities within which it operates seem to be mixed. Several mining-

affected communities are poorly developed, and inhabitants of these communities have disclosed their dissatisfaction with the effects of mining on their social, economic and environmental sustainability. An official of AGA notes that:

*“We do admit that we have somehow contributed to the environmental destruction of these communities. This was due to the use of obsolete technology. But now, we have advanced, and as such, our operations are technologically driven. This means that our operations no longer have any profound negative outcomes on the state of the communities around us. We have over the years strived to develop these communities. Most of the facilities you see in the communities were provided by AGA.”* (Mr Kwao, AGA)

The company admits that it has somewhat been responsible for environmental pollution; however, its commitment to being accountable for the outcomes of its actions, a core value of the company, has not been attained. More effort is still needed to strengthen AGA’s commitment towards being accountable for the outcomes of its actions. The company has provided a good number of facilities in mining affected communities (malaria control, piggery and garment projects) (Mensah, 2009: 51–57), but the level of development of these communities is still very poor. The assertion that the level of development in the communities was poor was proven using the Rubric Assessment Tool (RAT).

As indicated in Table 5.1, the Rubric Assessment Tool (RAT) was adapted to gage the level of the attainability of AGA’s core mandates. RAT is a performance-based assessment tool, composed of using words to describe the performance of an entity in relation to certain agreed standard or values. RAT assesses the performance level of an entity/individual, provides a separate score for each criterion and may include a composition score for overall performance (Selke et al., 2017).

### **The scale of attainability/performance in relation to AGA’s core values**

Table 5.1: Rubric Assessment Tool Matrix

<b>Name of Corporate Entity:</b> AngloGold Ashanti
--

<b>90% (+)</b>	<b>80% (+)</b>	<b>70 (+)</b>	<b>60% (+)</b>	<b>Less than 60%</b>
<b>Mastered</b>	<b>Exceeded</b>	<b>Attained</b>	<b>Approaching</b>	<b>Unattained</b>
Company's activities and efforts feed directly into its core values without any doubt.	Company's activities and efforts feed directly into most of its core values. There are very few setbacks in attaining a limited number of the core values it stands for.	Company's activities and efforts feed directly into most of its core values. There are some setbacks in attaining the core values it stands for.	Company's activities and efforts feed directly into some of its core values. There are quite significant setbacks in attaining the core values it stands for.	Company's activities and efforts feed indirectly into most of its core values. There are several difficulties and concerns in attaining the core values it stands for.

Source: Author's construct based on Selke et al. (2017)

Table 5.2: AGA's level of attainment in relation to its values

<b>Values of AGA</b>	<b>Assessment Score</b>	<b>Level of attainability</b>	<b>Justification for the chosen level of attainability</b>
Safety	85	Exceeded (Table 5.1)	Safety and precautionary mechanisms have been put in place. Safety training is also available, but the nature of the site still exposes workers to safety and health issues.
Dignity and respect	87	Exceeded (Table 5.1)	All workers are accorded the needed recognition, and the positions assigned to them are based on each individual's expertise. The highest positions are, however, occupied by foreigners.

			Workers are satisfied with the positions given to them.
Value diversity	86	Exceeded (Table 5.1)	The workforce is diversified; it is made up of individuals from diverse backgrounds, including foreigners. There is, however, room for improvement with regard to diversity.
Accountable for actions and delivers on commitments	65	Approaching (Table 5.1)	AGA is making efforts to initiate projects through CSR; however, their efforts are not commensurate with the outcomes of their actions. A greater level of commitment is, therefore, needed.
Development of the communities in which AGA operates	54	Unattained (Table 5.1)	All mining affected communities are in a poor state.
Respect for the environment	56	Unattained (Table 5.1)	Environmental destruction has been severe, but AGA has not implemented any extensive environmental sustainability project to ensure environmental justice.

Source: Author's Construct, 2018

Based on the results from the RAT analysis, AGA has not been able to improve on the development of the communities and the environment within which they operate. The poor state of the communities around AGA can be deduced from the hierarchy of their core mandate, which gives much priority to its employees than the people of the affected communities and the environment.

### **5.2.2 Principle 2: Legal Compliance**

Legal compliance as a principle contends that corporate entities must operate within the confines of existent legal provisions; that is, all efforts toward making profits and delivering services should not go beyond the boundaries of the legal framework (Mujtaba and Cavico, 2013). In Ghana, there are several laws regulating mining, and notable among them are the 1992 Constitution of Ghana, the Minerals and Mining Act (2006) Act 703; the EPA Act, 1994 (Act 490); LI 1652; Environmental Assessment regulations; the Internal Revenue Act, 2000 (Act 592) and its amendments; the draft regulations which operationalised Act 703, including minerals (royalties), mines (support services) mines (compensation and resettlement), explosives (mining and civil), regulations on health and safety, mineral licensing regulations and mining (general). The legal provisions define the framework within which mining companies are expected to work. Before mining companies can commence operation in the country, they have to be licensed before they can start operation. All land acquisition processes, local eviction, compensation, and resettlement are guided and regulated by the Mining Act (2006). AGA has been in operation since 2008, and its existence and operations are in line with the provisions of the Mining Act (2006), Act 703. As part of the Act, AGA is mandated to pay royalties to the government through the consolidated funds, which the company has been doing since its inception. The company's claim of offering philanthropic support can be asserted by the study of Abraham et al. (2018: 485). A preprint of the interview session concerning some legal issues of AGA is indicated in Box 5.1:

**Box 5.1: Field discussions on AGA's operations in the light of legal provisions**

*Interviewer: Tell me more about the activities of AGA in relation to Ghana's legal provision.*

*Respondent: ...for the land, we passed through the right process to acquire the land. AGA has the mineral right to the land [concession], so we are supposed to mine and pay royalties.*

*Interviewer: So, the royalties are paid to the chiefs, right?*

*Respondent: No, according to the Mining Act, all royalties are to be paid to the government annually through the consolidated fund, from where they are later disbursed to the traditional council.*

*Interviewer: Ok...[listening]*

*Respondent: Again, as required by law, AGA pays property rates to the Obuasi Municipal Assembly. I am aware that once the royalties are paid to government, there is a statutory percentage which goes to the chief. Once the money is paid, the government is expected to use it for the development of these communities. So, CSR is not our obligation; it is merely a philanthropic gesture!*

*Interviewer: What about the environment? I know that there is the EPA Act which all companies must comply with?*

*Respondent: Yeah, that's true. All our activities are in line with the EPA Act. That is why we don't have any legal problems with the government.*

*Interviewer: What about issues of compensation and resettlement? It seems communities are dissatisfied with their compensation and resettlement provisions?*

*Respondent: The law states that once farmers' lands are affected, they have to be compensated. The compensation is calculated by the Land Valuation Board. As enshrined in the law, communities have surface right to such lands while the mining company [AGA] has the mineral rights. The community members affected are paid based on what is/are on the land. Once there are crops, the Valuation Board values the crops and then we pay to the rightful owner of the land. This is in line with the legal provision on compensation. All resettlements have been done in accordance with the law. Therefore, we have not faulted in any of the legal provisions since our operations.*

Despite the company's claim of compliance with legal provisions, the physical conditions of the environment of the affected communities are poor. This is explained by the study of Yeboah (2008), which states that there are land degradation, water pollution and air pollution within the Obuasi Municipality. Furthermore, a review article on the impact of mining on the environment by Aboka, Cobbina and Doke (2018:46) show that the Obuasi Municipality suffers from noise and water pollution. "Most streams, rivers and other water bodies are either polluted with chemicals or dried up" (Aboka, Cobbina and Doke, 2018: 46). According to Narh (2020), mining is noted to impose socioeconomic costs on its host and neighbouring communities through land acquisitions, environmental degradation, pollution and a high cost

of living. This is in sharp contrast to the EPA Act, 1994 (Act 490) and LI 1652, Environmental Assessment regulations that call for sound environmental management and sustainability in project-affected communities.

### **5.2.3 Principle 3: Managerial Discretion in Actions taken by AGA**

The managerial discretion principle is underpinned by pro-social rule-breaking, which refers to the violation of rules and regulations for the sake of organisational success (Dahling, 2012). This implies that the management of AGA is not expected always to follow strict laid down procedures for making profits, but can use their discretion to initiate activities that advance the socio-economic and environmental wellbeing of the general public.

The management of AGA has, over the years, initiated interventions outside the scope of the Obuasi Municipality. Notable among them is AGA's support package for all small and medium scale enterprises in Ghana to sustainably build and grow such enterprises so that they can compete effectively at all levels, and access new markets and finance to improve their long-term success and sustainability. Also, the company owns and manages a football club known as Ashanti Gold Football Club that actively participates in the Ghana Premier League. These interventions were unique and were based on the discretion of the management in an attempt to advance development in Ghana and to project the image of the company. Shalley and Gilson (2004) argue that discretion outside the confines of an organisation is risky where the outcomes could be enormous. Also, they posit that it takes employees and a management with high psychological empowerment to show such sense of control and influence at work, characterised by a certain autonomy and decision making power, the ability to resort to surrounding resources and the confidence to deviate from organisational rules and to venture into areas that are directly not aligned with the companies' operations and CSR policies.

The discretionary interventions of AGA are not directly in line with its CSR mandate, as many surrounding communities are expected to benefit directly from CSR initiatives, but are yet to see any profound contributions made by AGA towards their development. Hence, for management to initiate actions for development outside the scope of the affected communities, it was somehow risky and could have triggered a conflict between the company and the communities that are yet to benefit from the company's CSR projects. Despite the risks involved, officials of AGA opine that such discretionary decisions taken by the management have made AGA a well-known company with goodwill in many parts of Ghana. This has also influenced the profits of the company in a positive direction.



#### **5.2.4 Principle IV: The Economic Advancement of Affected Individuals**

This principle of CSR echoes the need for corporate bodies to contribute to the advancement of the economic situations of all individuals directly involved, including internal customers (workers), clients and affected communities. In relation to employees, AGA has support packages for its permanent professional staff members; these include the provision of accommodation for its top and medium level staff members, health and educational support packages, and payment of monthly salaries. Again, the company has put in place local employment procedures for the recruitment of workers from surrounding communities; they mostly work as casual workers. Discussions with officials of the company revealed that in the award of a contract to a contractor to execute a CSR project, measures are put in place to ensure that the contractor makes use of locals to assist in the provision of the project, provided there are local experts to assist in such a task. Community members likewise state that the company initiated a livelihood empowerment project that trained some of their inhabitants in some employable skills.

Again, the provision of free electricity in Anyinam and Sanso has led to an increase in private businesses, helping many local members to have a source of livelihood for their economic advancement. All these measures are in place to ensure that the company's operation aligns with its CSR principle. Despite the company's level of contributions in mining affected communities, the take-over of community lands with meagre compensation has led to the restriction of people from farming. The detrimental impact associated with the company's operations on the environment has trapped many community members into poverty, leading to a decline in their economic status. Hence, the company's contributions to economic advancement are of mixed results. While some local members have benefited from interventions by the company, there are several of them trapped in economic crisis due to its operations.

#### **5.2.5 Principle V: Implementation of Broad Stakeholder Participation Mechanisms**

According to McHugh, Domegan, and Duane (2018), stakeholder participation is the systematic mapping of potentially influential actors who can affect or be affected by the intervention(s). As a concept, stakeholder participation includes the promise that a stakeholder's contribution will influence decisions; stakeholder participation refers to the practice of seeking input from participants and incorporating their views into decisions (Devenin & Bianchi, 2018). Stakeholder participation is known to have significant positive

outcomes on development (Rogers, 2016; Devenin and Bianchi, 2018), and as such corporate bodies are expected to utilise the model of broad stakeholder participation. Through participation, stakeholders can share their concerns in line with activities or actions which directly affect them (Moynihan, 2007). In this regard, corporate bodies utilising the principle of broad stakeholder participation will be able to empower local members and get to know their views to drive change to ensure development (Viveros, 2016).

However, just soliciting the inputs of stakeholders is not enough; it should be followed by implementation. AGA, for instance, has had several meetings with government officials, NGOs, community leaders and the general population where the views of all these actors have been solicited, but the implementation of stakeholders' views has been rather very low. The community leaders in all the communities visited affirmed that AGA officials regularly visit them, but their concerns have still not been addressed. The following extracts (see below) confirm AGA's adoption of the broad stakeholder participation mechanism, but capturing other stakeholders' perspective has been very low. Arnstein (1969) describes this as a consultation, which is fourth on the ladder of participation. Arnstein posits that it is a mere window-shopping ritual, and does not trigger any significant positive outcomes.

[1] *"We meet with the community once every quarter to discuss issues of interest to both parties. We solicit their inputs and listen to their concerns. But most times, what the community asks for is difficult to implement, looking at the company's financial position. But we take their inputs and somehow, it informs our needs assessment for the various communities."* (Mr Appiah, AGA)

[2] *"We often meet with them. We raise issues about the detrimental outcomes of their activities and the need for them to support us to grow. The company officials always promise to consider our concerns, but they don't. Most often, the projects they implement are not the ones we are interested in. You see the chief's palace, the company provided it without our concerns being resolved. Since as leaders, we are concerned about our communities, anytime they call for a meeting we have to go. The company doesn't even give us transportation fare."* (Mr Kofi, Unit Committee member, Sanso)

These submissions from the staff of AGA and a unit committee member are not different from the studies of Abraham et al. (2018: 485). Their study found out that the CSR projects carried

out by AGA were mainly philanthropic, and the inhabitants in communities around AGA were not satisfied with these projects. This shows that there is a gap between the inhabitants' expectation and the company's CSR objectives (Abraham et al., 2018: 485). However, the subsequent section elaborates on some of the collaborative CSR activities between communities, institutions and AGA.

### **5.3 Participation of Communities and Institutions in AGA's CSR Activities**

This section will highlight the participation of communities and institutions in AGA's CSR activities. It will specifically touch on participation by local communities in CSR activities, their participation in designing and planning of projects, their level of participation, the participation of local institutions in designing and planning of these projects and the involvement of local inhabitants in sustaining them. The CSR activities of AGA, in this regard, are discussed in this subsection.

#### **5.3.1 Participation by Local Communities in CSR Activities**

Involving local people in designing and planning of developmental activities is very important for smooth implementation, success and sustainability. This section of the research presents the results on local inhabitants' level of participation in the planning and design, implementation, and sustainability of AGA's corporate social responsibility activities.

#### **5.3.2 Participation of the Local People in the Design and Planning of Projects**

When residents were asked about their level of involvement in the design and planning of the corporate social responsibility (CSR) activities of AGA, majority (71%) of them indicated that they had not been involved in project planning and design, while only 25.2% indicated that they had been involved in the design and planning of the CSR projects of the company for their communities. 3.8% of them, however, did not respond either in the affirmative or negative. This is shown in Figure 5.1.

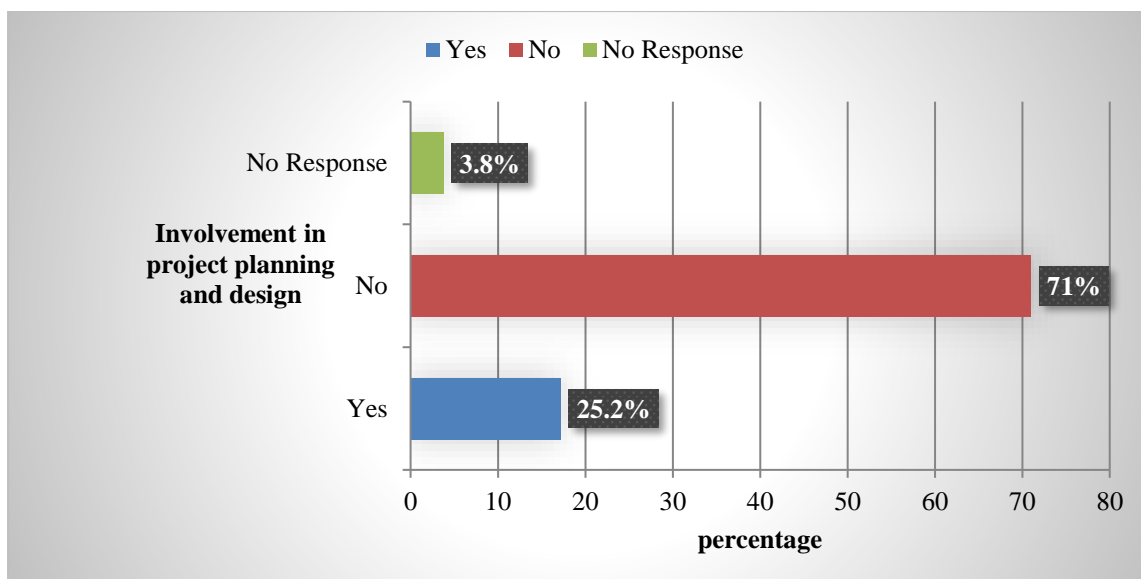


Figure 5.1 Local inhabitants’ participation in the design and planning of projects

Source: Author’s Construct, 2018

With regard to the few respondents who indicated their involvement in the design and planning of the CSR activities of AGA, the survey discovered that the depth of their involvement was very shallow. This is as depicted in Table 5.3.

Table 5.3: Level of Participation by the Local inhabitants in Project Design and Planning

Participation Level	Percentage
<b>Of the opinion that the proposed CSR activity was the best, hence, should be supported</b>	13.70
<b>Informed about the project when it was about to start</b>	80.30
<b>View on how the project should be carried out was collected</b>	1.5
<b>A member of a committee of the citizens that advised or planned the project</b>	4.5
<b>Total</b>	<b>100</b>

Source: Author’s Construct, 2018

From Table 5.3, it is clear that the few respondents who were involved in the design of the projects were either manipulated to accept the project, were informed, their views were

collected or served on committees. It was indicated that mostly, the local people were just informed when a CSR project was just about to begin. About 80% of the respondents indicated this. A direct explanation by a respondent is presented below.

*“We do not take part in choosing what AngloGold does for us...all that we hear is a project is about to be done.”* (Mr Yaw, a resident in Asanso community)

The second frequent level of involvement is the level where citizens are educated and convinced to endorse a particular project before its implementation. A total of 13.7% of the respondents were involved at this level. A resident expressed himself as follows.

*“Sometimes, when they (AngloGold) are about undertaking a project, our community leaders come to us and explain the need for that project, but it is not very often.”* (A resident of the Abompekrom community)

Using Arnstein’s levels of participation, the results of the study indicate that the depth of participation of local inhabitants in the planning and designing of CSR projects in their communities is very low. The people are mainly involved in the first two stages of participation, according to Arnstein’s ladder of participation, that is the informing and manipulation stages. Also, 1.5% of the respondents who indicated participating in projects stated that their views on how the project should be carried out were collected. However, they note that they do not see the manifestation of their views in the final project implementation. A resident in the Anyinam community expressed himself as follows.

*“Even when we express our views, we do not see the mines taking them; they just do what they have decided to do already.”* (Mr Kofi Owusu, a resident of Anyinam).

Arimah (2010) indicates that in a world where many problems have hardly been structured and understood, participatory planning is more appropriate than the “scientific”, top-down, approach. Furthermore, according to Narh (2020), one of the weaknesses of mining companies, which makes them fail to achieve their CSR was found to be related to the appointment of local management committee members. His findings revealed that the way local management committee members are selected disenfranchises inhabitants in these mining communities as people are not allowed to elect their representatives. This is because the people who live in such places are those projects are planned for; hence, they must play a key role in the selection of their representatives (Purwanto, Sugiri and Novian, 2017). Other studies have found that participation improves project performance, impact and sustainability. According to

Purwanto et al. (2017), participation enhances the feasibility of projects by ensuring stakeholder collaboration through demand responsiveness and opening clear channels for communication of grievances or complains; this helps to resolve resource challenges through the provision of communal labour or financial contributions; the usage of local information and know-how, which ensures that the project management unit makes more informed decisions. Similarly, it improves targeting by knowing more about beneficiary communities and the needs of the various groups; promotes stakeholders' cost-consciousness with regard to urban services and infrastructure as well as enhances sustainability by ensuring stakeholder ownership. The minimal level of involvement of the local people is, therefore, likely to affect their level of responsiveness to the CSR projects initiated for them and negatively affect the implementation of the project and its sustainability.

### **5.3.3 Participation by Local Institutions in CSR Activities Design and Planning**

The various local institutions, including traditional authorities, unit committees and assembly members, were interviewed to find out about their involvement in the design, planning and implementation of CSR activities of AGA. The involvement of these institutions is very key since they serve as the mediators between the inhabitants and external bodies that come into their communities and also serve as the drivers of development in their local communities. At the local community level in Ghana, the institutions that comprise it include traditional authorities, unit committee and assembly members. The level of involvement of these institutions in CSR activities is presented below.

#### **5.3.3.1 The Traditional Setup**

In Ghana, before the formation of the modern political system, traditional authorities served as the governing body, mostly, at community levels. Even though the powers of traditional authorities have reduced in the presence of political institutions, they are still revered by their people as they serve as custodians of the land and a symbol of unity for the local people. Their involvement in CSR activities in their communities is, therefore, very important. From the survey, the various traditional authorities indicated that they are engaged by AGA whenever the company wants to execute a project in their communities. For instance, at Sanso, the traditional leaders indicate that whenever a project is going to be initiated by AGA, they

are convinced to accept the proposed intervention through persuasion. Also, before a project starts, the institution indicates that it is informed. They also note that their views on how projects should be carried out are normally collected, and some of their views have been used in the design, planning and implementation of projects.

Also, the authority indicated that they had a representative on joint committees who partner with AGA to carry out all projects in their communities. Using Arnstein's ladder of participation, the above suggests that the authority is at a high level when it comes to participation compared to the level of participation of ordinary inhabitants. The above is contrary to what happens at Abompekrom where the traditional authority indicates that the institution is just informed about the start of a project; they are not allowed to contribute to the design of the project. Also, this is contrary to what happens at Sanso, though sometimes their views are solicited; however, they are not reflected in the final project. This is similar to what happens in Nhyiaeso, according to the traditional authorities there.

### **5.3.3.2 The Unit Committees**

The unit committee in the Ghanaian local government system plays a significant role when it comes to development. They are the direct drivers of local development. Since they are indigenes, they are well abreast with the community's challenges and can, therefore, make informed contributions before project design, planning and implementation. There is, therefore, the need for them to be involved in the implementation of CSR interventions.

The unit committees of the various communities visited indicated that, to some extent, they are engaged by AGA in its corporate social activities. For instance, in the Nhyiaeso community, the unit committee indicated that it was involved in basically two levels of participation: manipulation and information stages. According to the committee, it is usually convinced to accept projects proposed by AGA and, following their acceptance; they are informed when the project will start. This process was common for four of the communities visited. It was only in Sanso that the committee indicated that usually, their views on how projects should be carried out are collected. The unit committee of this community also indicated that it has a representative in a joint committee composed of local community members and AGA to discuss and advise them on how projects should be carried out.

### **5.3.3.3 Assembly Members**

In the Ghanaian local government system, assembly members are elected by the local community in a national election to represent them at the district assembly level. They mostly serve as members of the unit committee of their areas of jurisdiction. Their involvement in CSR activities is, therefore, important. The assembly members of the various communities indicate that they are the initiators of most of the CSR activities undertaken by AGA. This is done through the drafting of proposals to the company to assist their respective communities with regard to developmental challenges. The assembly members also indicate that they serve as informants to the community whenever a project is about to commence. They, however, state that although they make suggestions when a project is about to commence, their views are not binding on AGA as they do not meet most of their demands.

Considering the responses of local government leaders (the assemblymen/women and unit committee members) who are deemed to be the best people to be engaged in the planning and implementation of CSR projects, the findings of this study indicate that they are only partially engaged in all the stages of CSR projects and programmes. This affirms the findings of Narh (2020), where he recommends for a participatory approach in planning and implementing CSR.

### **5.3.4 Participation of Institutions and Individual Residents in Project Implementation**

Both institutions and individual residents in the surveyed communities indicate that they play key roles when it comes to the implementation of projects contrary to what happens during project planning and design. The traditional authorities in the area indicate that they provide lands for the siting of physical projects. The unit committee, Assembly Members and traditional authorities all indicate that they coordinate and organise inhabitants to provide labour during project implementation. These institutions also note that they employ caretakers to ensure projects are maintained. Some of these projects include toilet facilities and boreholes.

The individual community members likewise note that they perform key roles during project implementation. However, the majority of them (about 80%) indicate that they do not contribute to project implementation in any way. As indicated in Figure 6.2, 65% of the 20% who contribute to the implementation phase do so in terms of labour, while 21% of the 20% who perform key roles during the implementation of the project do so in terms of financial contribution. Also, in relation to labour and financial contribution, only 7% of the 20% who contribute to the implementation phase do so; the remaining 7% of the 20% who perform key



roles during project implementation do so in other areas. This perhaps could be due to the low level of their involvement during project planning and design. The 20% of the respondents who indicated their involvement was at the implementation stage of the projects where they served as labourers; for example, in the construction of boreholes, building of chief’s palaces, construction of schools and toilet facilities in their respective communities. The various avenues through which inhabitants are involved in the implementation of projects are shown in Figure 5.2.

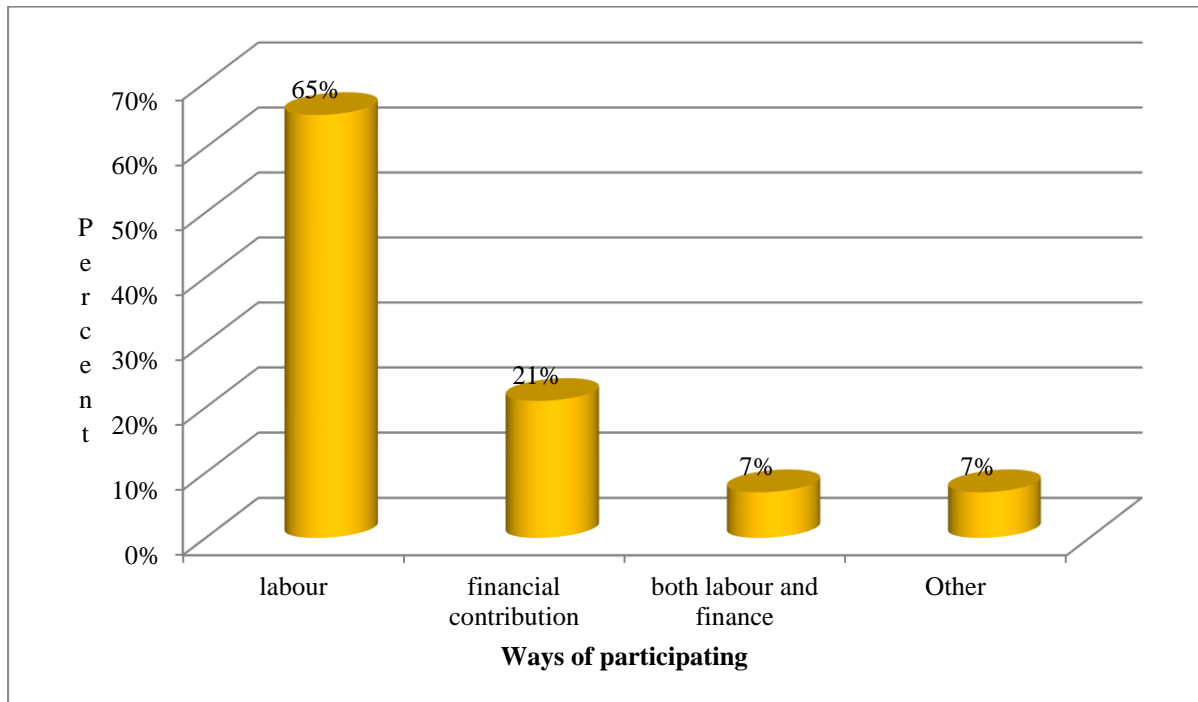


Figure 5.2 Means of involvement in project implementation by the local people.

Source: Field Data, 2018

From Figure 5.2, it can be observed that the major form of involvement by locals is through the provision of free labour during the implementation of projects, more especially in relation to construction projects. Through the survey, the local people said that during projects, instead of hiring people to provide labour, which does not need specific skills, the local people, through their community leaders, organise themselves and provide assistance in the form of land preparation, digging of foundation and carrying of mortar. This helps to reduce the labour cost incurred for such projects. Aside from labour, the study found that local inhabitants sometimes make financial contributions in the form of commitment fee, which is about 5% of the total project cost. This fee helps to ensure the assumption of ownership of these projects by the local communities, hence, helping to sustain them.

Despite the perceived marginalisation of the local people in CSR projects and activities, the results above have shown some potential to generate substantial income through jobs for the local people, and expansion of existing infrastructure, which can contribute to the sustainable growth and development of such mining affected areas (World Economic Forum, 2016:6).

### 5.3.5 Participation of Local Communities in Project Sustainability

Majority of local respondents indicated that they play some roles in sustaining the CSR projects carried out in their local communities. Their responses are presented in Figure 5.3.

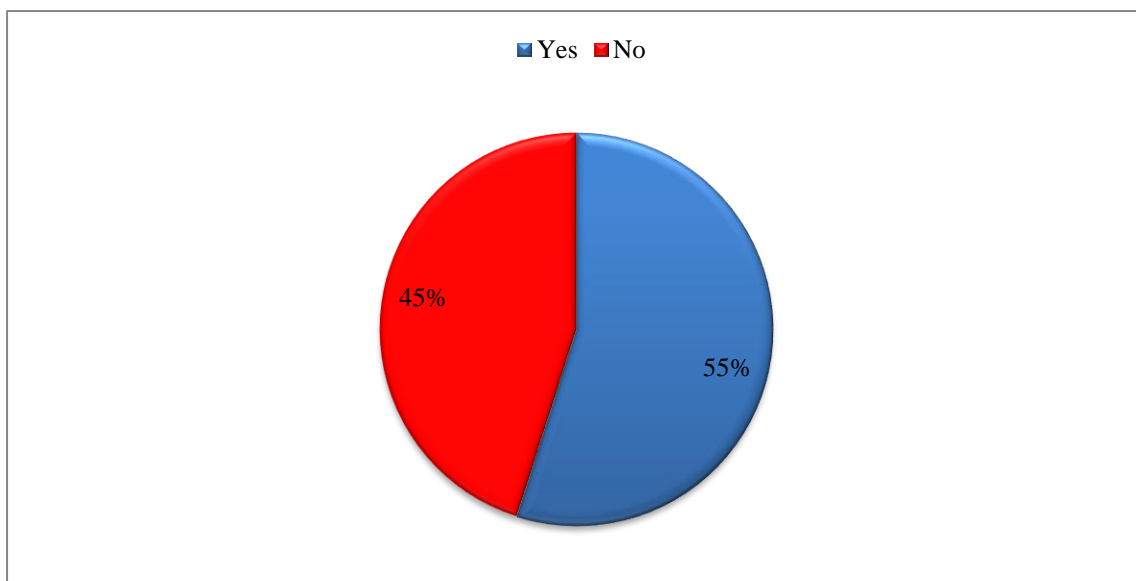


Figure 5.3 Involvement of local people in sustaining CSR projects

Source: Field Data, 2018

Some local respondents who indicated that they contribute to the sustainability of projects in their community stated that one of the ways they do so is by paying regular monthly contributions of GHC1. This is mostly done for projects such as boreholes and toilet facilities. In other communities, it was discovered that even though there are no formal payment systems, the community members contribute money when a facility breaks down to repair it. This system is used in the Asanso community. Furthermore, some residents indicated that they contribute in other ways to ensure the sustainability of projects. For example, some of them weed around the locations of projects and serve as caretakers. The responses are presented in Figure 5.4.

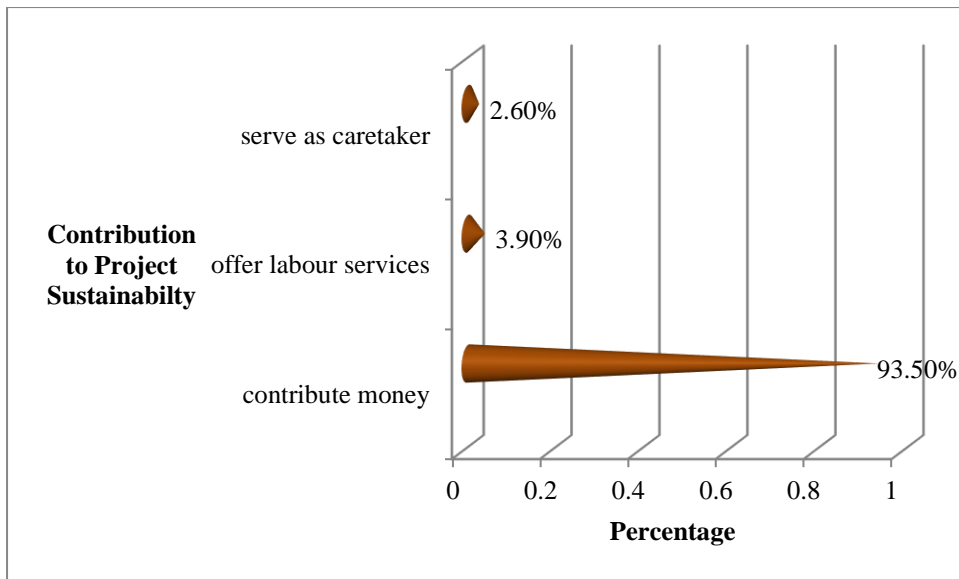


Figure 5:4: Means of contribution to project sustainability

Source: Field Data, 2018

This result is worth noting because even though inhabitants are not engaged in the implementation stage of projects, they are willing to ensure some level of sustainability for projects after they are completed.

#### 5.4 CSR Policies and Activities of AGA

As explained earlier, under subsection 5.2.1 with regard to AGA's commitment to its values; AGA has six core values. First, the company seeks to ensure the safety of its staff and the people living in the communities they operate in. The company considers this as its first core value. It also seeks to treat people with dignity and respect and ensure value for diversity, which constitute the second and third values of the company. In its fourth value, the company sees itself as accountable for its actions and seeks to put in place measures to take care of their actions. This they seek to achieve with their fifth value of ensuring that the communities and societies within which they operate become better off with its presence in these communities. Their final value is their respect for the environment. As regards this value, the company seeks to ensure the protection of the environment of the local communities they operate in.

All the above values of AGA could be seen to be geared towards improving the living conditions and wellbeing of the inhabitants of the communities within which they operate to take care of the effects of their operations. These values, however, can only be achieved through effective corporate social responsibility policies and activities.

Interviews with AGA indicated that they had performed CSR activities in the Obuasi municipality and beyond over the years. However, further interactions indicated the non-existence of documented policies in relation to the performance of their CSR activities. When the director of sustainability at AGA was asked whether they needed to undertake CSR activities, his response was:

*“It is not our responsibility. We are just helping them as much as possible to enhance our social licence to operate to prevent agitation and confrontation from the people.”*

It was indicated that these activities they perform are mostly philanthropic. Interviews with AGA indicated that though there was no written down guiding policy on its CSR initiatives, AGA has undertaken a lot of projects in the Obuasi Municipality, ranging from education, health, transport and other areas which it regards as CSR. For instance, schools have been built in Gyineso, Kakraba and Anyaase. This has helped people who used to travel long distances to school since there is now a school close to them. This has resulted in increased enrolment in the municipality. The next subsections present details of the CSR projects initiated in the Obuasi municipality and beyond.

### **5.5 An Overview of CSR Projects and Activities of AGA in the Obuasi Municipality and others since 1990**

From 1990 to 2012, AGA has been involved in the provision of support, construction and rehabilitation of about fifty-three (57) projects in Ghana excluding its road construction projects. This survey indicates that AGA has been carrying out CSR activities for decades. It has been doing this since the 1990s in different sectors, ranging from education, health, transport, economy, and capacity building. The organisation’s CSR projects have been summarised under some of the subsequent subsections. In relation to education-related projects; for instance, AGA has constructed sixteen projects (16) such as basic school buildings and toilet facilities, a hostel for KNUST medical students, school parks, fence walls and a canteen; it has also constructed drainage systems and water facilities for the Obuasi Municipality and other communities in Ghana (Appendix E). Likewise, this study shows that

AGA has constructed thirty-one (31) health and sanitation projects as well as six major sponsorship programmes.

These projects include the building of government hospitals, rehabilitation of drainage systems, donation of one refuse truck, disease control programmes for bilharzia and malaria, and toilet facilities, among others (Appendix E). They have contributed to different sectors that range from education, health, transport, economic, and capacity building, which have aided sustainable development as they have enhanced the quality and access to inclusive education, water, sanitation and health care; these are fundamental for the creation of sustainable development. Again, in the long run, the improvement in the quality of life, such as access to inclusive education, can help equip locals with the tools required to develop innovative solutions for the world's greatest problems.

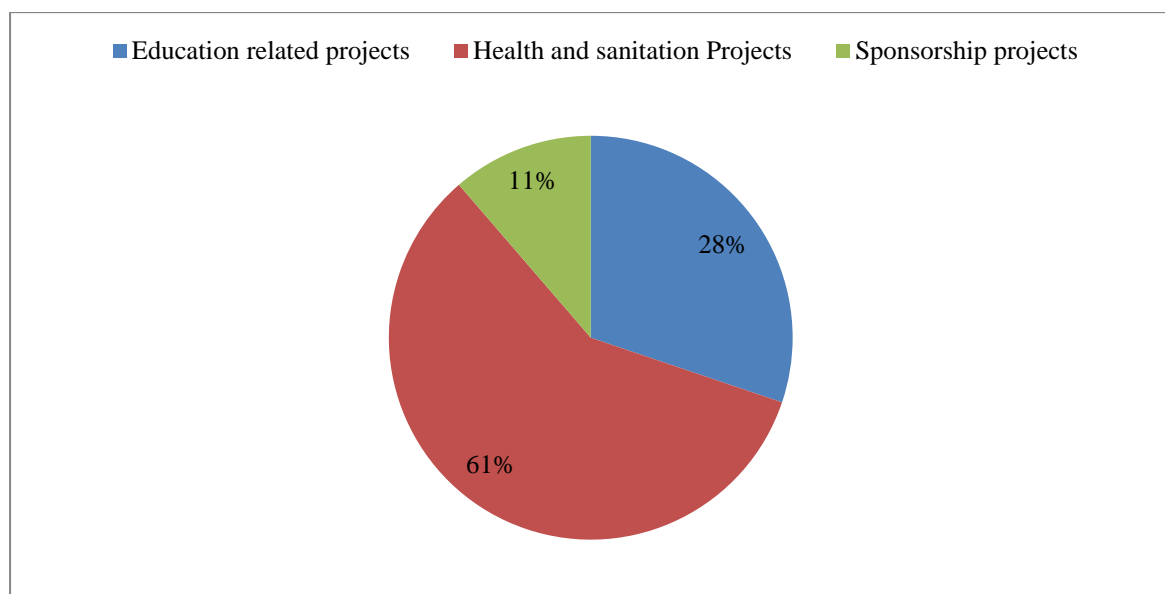


Figure 5.5 Projects that have been undertaken by AGA from 1990 to 2012

Source: Field Data, 2018.

From Figure 6.5, it can be observed that in terms of AGA's contribution to education, sponsorship, health and sanitation projects, majority of its contribution (35 out of the total 57 projects) representing 61% was in health and sanitation projects, followed by education-related projects, which were 16 out of the 57 total projects, representing 28%. The remaining six projects, representing 11%, focused on sponsorship.

### **5.5.1 Water and Sanitation Projects**

In performing its corporate responsibility, AGA has provided borehole and hand-dug well facilities for local communities. According to the company, this was done without having any negative impact on the natural water sources of the local people. AGA provided 120 boreholes for about 70 communities within which the company had concessions to improve their access to a potable water supply. This happened between 1990 and 1994. Since their constructions, these water facilities have undergone several development processes to ensure improved access to water in the Obuasi Municipality. For instance, between June 2012 and February 2013, these facilities were re-developed and pumps were replaced to improve the water quality of the local people. This amounted to a cost of over US\$ 1 million (AngloGold Obuasi Mine, 2018). Additionally, communities which have not benefited from borehole projects like Anyinam, Kreeky, Hasonyewodea and Anwiam communities are connected to the Obuasi mine's treated domestic pipe-borne water supply system.

### **5.5.2 Sports and Social Investment**

Though a look at AGA's report on its contribution to sports and social investment indicates that it has made some inputs towards sports and entertainment, as far as the indigenes are concerned, the company has not done much for them. The projects the company has already executed are seen as part of its efforts to fulfil an aspect of its CSR (philanthropic dimension) by the people, which, to some extent, only contributes to the corporate image of AGA and not necessarily the correction of the effects of their mining activities on the environment (ethical dimension). Therefore, AGA's contribution to these sectors in the form of projects such as the construction of the Central Mosque for the Obuasi Muslim community (Appendix E ); construction of the Len Clay Sports Stadium for sports development in Obuasi (Appendix E); construction of the Ofori Stadium and a football academy to further enhance sports development in the Obuasi area (Appendix E), and clubhouses for hosting social functions in Obuasi. Even though these projects may enhance or contribute to social development, yet, they arguably fail to compensate for the ethical dimension of CSR.

### **5.5.3 Transportation**

According to Pojani and Stead (2015:7784-7805), transportation is the spine of every community. It contributes to the easy movement of freight and people from one point to the other. A proper transportation system is a major necessity for the economic development of

every society. Recognising the relevance of transportation to development, AGA has contributed immensely to the development of the transportation system in the Obuasi area since the 1990s. These include 1990, the construction of Akrofuom concrete bridge following the construction of the Jimi dam reservoir; 1991, the construction of Oda River pipeline road and bridges along the road; 1992, extension of Oda River road to Watreso forest concession area; 1992-1997, exploration and opening of pit roads maintained as feeder roads linking farming communities to markets; 2008, Diawuoso Bridge No. 1 completed at the cost of \$130,000.00; 2009, Diawuoso Bridge No.2 completed at the cost of \$100,000.00; 2010, provision of two (2) footbridges over the Kwabrafo River at Sampsonkrom, and PTP/St Joseph; 2010, construction of access road to Anwiam community; 2011, rehabilitation of 1.6 km road linking Dunkwa-on-Offin trunk road to Sanso community; 2011, construction of a culvert and re-surfacing of Apitikoko-Apitiso feeder road; 2012, rehabilitation of Anyinam-Tiny Rowland urban road linking the Dunkwa-on-Offin trunk road; 2014. rehabilitation of the road linking Jimisokakraba and Diawuoso communities; 2014, construction of two metal footbridges for Nyameso and Kunka communities; 2014, resurfacing, gravelling and the construction of storm water drains along the approximately 400m-stretch road for New Dokyiwaa community; 2014, removal and replacement of damaged metal ducting culvert with wider concrete culverts along Amamom-Aketekyieso road.

## **5.6 Major Comprehensive CSR Programmes of AGA**

The most comprehensive CSR programmes of AGA are elaborated below.

### **5.6.1 The Apprenticeship Training and Skills Development Programme**

This is a 2-year training programme for artisans initiated in 2003. The programme trains 70 artisans each year. Some of these artisans include electricians, mechanics, welders, fabricators and instrumentation technicians. As of 2013, the programme had trained 175 artisans, out of which 157 were from the Obuasi communities. In all, a total of US\$ 5,180 is spent on each trainee per year in the form of allowances and personal protective equipment (PPE). There is an established training centre accredited by the UK City and Guilds. The programme also trains both current and ex-AGA staff, about 287 of such people have gone through this apprenticeship programme at the centre. In 2016, 20 youth from affected mining communities were trained at this centre.



Figure 5.6: AGA's training centre

Training centre established by AngloGold Ashanti

### 5.6.2 Rural Electrification Programme

This programme sought to connect host mining communities onto the national grid to ensure that they have access to electricity. As at the time of the survey, Anyinam and Sanso communities were consuming an average total of US\$ 32,000 of electricity per month from AngloGold Ashanti or the Volta River Authority mains, the Director of Sustainability indicated. However, this arrangement has its disadvantages, hence, there have been attempts to migrate the two (2) communities onto the ECG mains, an initiative which has met oppositions from ECG. This notwithstanding, the company is in pursuance of linking these communities to the national grid since this will reduce their cost burden so that the money can be channelled into other developments in the communities. It is estimated that the cost of transferring both communities onto the ECG grid will cost US\$ 1 million. As part of this programme, the company has provided transformers and generators to the Obuasi Municipality and other nearby districts. This is presented in Table 5.4.



Table 5.4: AGA’s electrification projects in some communities

<b>District</b>	<b>Beneficiary Communities</b>	<b>Type of Assistance</b>
1. Obuasi Municipality	Odumase Adulam Orphanage	2 (256KVA) Transformers 1(8HP) Generator set
2. Amansie Central	Manfo, Odaso, and Mile 9	3 (100 KVA) Transformers

Source: AGA’s CSR Report

In addition to providing transformers and generators, the company has provided 1400 Low Tension Electricity Poles to 40 communities in the Obuasi Municipality and other districts between 1992 and 2000. The details are presented in Table 5.5.

Table 5.5: AGA’s provision of electricity poles to some districts in Ghana

<b>District</b>	<b>Number of Communities</b>	<b>Number of Electricity Poles</b>
<b>1. Obuasi Municipality</b>	10	350
<b>2. Amansie Central</b>	15	300
<b>3. Amansie West</b>	5	200
<b>4. Adanse South</b>	4	250
<b>5. Adanse North</b>	6	300

Source: AGA’s CSR Report

### **5.6.3 National Farmers Day Celebration Programme**

To account for the loss, they have caused to farmers by taking over their farmlands, AGA contributes to the development of agriculture in the municipality through award programmes. The company remains the platinum donor for the Best Farmer award in the Obuasi Municipality. This award takes the form of a corn mill machine and a structure to house it; the award is worth US\$ 25,000. Other deserving farmers, both from the Obuasi Municipality

and other adjoining districts like Amansie Central District, Adansi North District and Adansi South District Assemblies are also given cash rewards and farm tools during the best farmer awards event. The company also has constructed footbridges over some major rivers to link farmers to their farmlands and markets so they can sell their produce.

#### **5.6.4 Alternative Livelihood and Local Economic Development Projects**

In order to ensure the provision of alternative livelihoods for the local people affected by mining activities (such as farmlands being taken over), the company has instituted an alternative livelihood programme with three main projects to ensure that the local people have alternative means of livelihood. These projects are outlined below.

##### **5.6.4.1 Prago Aquaculture Project**

In this project, mined out pits were converted into fish ponds for fish farming purposes. Hatchery units and camp offices were attached to the facility, and fish is bred in floating cages. Community farms were then sited close to the facility to enable all-year-round vegetable production. This project benefited, according to AGA CSR documents, three mining communities; Adubirem, Krodua and Hemang, with over 40 local people employed through this project.

##### **5.6.4.2 The Obuasi Garment Project**

This project is an initiative to outsource production and supply of AGA workers' overall outfit to local entrepreneurs. These entrepreneurs were trained and put together to establish a garment factory, which supplies over 10,000 overalls and other uniforms a year to AGA. The project employs 30 local tailors as well as other workers.

##### **5.6.4.3 Piggery Project**

Under this project, local people were trained on the rearing of pigs. The Obuasi Municipal Assembly, in all, selected six communities in the municipality to benefit from this project. These communities included Mampamhwe, Jimisokakraba, Ahasonyewodea, Binsere, Adaase and Sanso. Three families were then selected at random from each community and were provided with a 4-room pigsty, three piglets, feed and veterinary services to serve as start-up capital. Under this project, 30 and 45 jobs were created directly and indirectly, respectively. The indirect jobs were generated through support services.

#### **5.6.4.4. Malaria Control Programme**

Two main malaria control programmes have been implemented in the Obuasi Municipality by AGA. These are explained briefly below.

##### **5.6.4.4.1 The Obuasi Integrated Malaria Control Programme**

This malaria project focused on inhabitants at the mine, municipality and communities close to the mine. The initial cost of this project was stipulated at US\$ 3.0 million. However, presently, over US\$ 8.6 million has been spent on this project. This project has won awards and recognition from international bodies as a malaria control model. Under this project, over 134,000 households were reached in Obuasi, as well as employment created for 128 local youth. This project also contributed to a reduction in malaria cases in Obuasi by 85%, which in turn led to a reduction in infant and maternal mortality rates in the municipality. However, although the integrated malaria programme resulted in significant health improvement in these local communities, respondents still felt that they had not benefited directly from the presence of AGA in their communities. This, to a large extent, could arguably be attributed to the fact that respondents only associate and attribute benefits to projects from which they (respondents) enjoy immediate direct benefits (be it financial or material). For instance, some indicated that AGA had put up housing facilities for them and had even gone ahead to pay their utility bills, which, to them, was a direct benefit, unlike the malaria control programme, which did not directly benefit them.

##### **5.6.4.4.2 AGA Malaria (AGAMal) Control Programme**

This programme involved the spraying of houses with mosquito insecticides by AGA. This programme was started in 2005, with successes attained against a projected record time. Partnership (\$130m) with Global Fund started in 2009 and expired in 2017. The programme currently protects 900,000 Ghanaians across ten districts.

#### **5.6.4.5 Community Trust Fund**

In its quest to aid poverty alleviation, AGA contributes 1% of its after-tax profits to community development annually. This helps to reduce poverty levels in the local communities in which it (AGA) operates and contributes to meeting the company's management and international standards. The trust fund is linked with other international and national development projects. Firstly, it is aligned to the Millennium Development (now Sustainable Development Goal) of eradicating poverty and hunger. It is also linked to the Ghana Poverty

Reduction Strategy, a programme which seeks to eradicate poverty in Ghana. The Trust Fund is, therefore, planned and used for any development activities in the Obuasi Municipality.

#### **5.6.4.5.1 Principles of the Trust Fund**

The Trust Fund has been established in line with AGA's management standards and best practices. The principles underpinning the Trust Fund include:

- A clear and effective governance structure that operates by the principles of transparency and respect
- A tripartite approach is supposed to be used for planning and executing projects to ensure ownership and participation from AGA, government and local communities to ensure the sustainability of projects.
- Supported projects and activities will be focused on providing added-value support for long-term community development.
- Supported projects and activities will be linked to the business sector to ensure the viability of the company's activities.
- Building upon existing structures and capabilities by backing support of active projects and organisations.
- Effective management of funds to create the largest benefit possible from allocated funds.
- On-going monitoring and evaluation will focus on the outcomes and impact of the project, and this information should be appropriately disclosed to relevant parties; this will enable a review of the success of the fund.
- A clear exit strategy or sustainability strategy for all supported projects to ensure the long-term development impact for the localities where AGA operates.

#### **5.6.4.5.2 Allocation of Community Funds**

The community trust fund is allocated as follows:

- Education and health take 30% plus or minus 10%

- Sustainable business initiatives take a share of 30% plus or minus 10%
- Obuasi Municipal Assembly/town infrastructure - 20% plus or minus 5%
- Traditional leadership (infrastructure and traditional programmes) - 10% plus or minus 5%
- Altruistic assistance - up to 10%
- Other eligible projects/programmes - up to 10%

According to the Director of the Sustainability of AGA, in the utilisation of the funds, communities are allowed to set their priorities to ensure their ownership of the projects. This approach, the Director of Sustainability indicates, increases the success of Trust Fund activities and specifically boosts its sustainability. This notwithstanding, the majority of the local people indicate their limited participation in project planning and design in their various communities. This suggests weak communication between leaders of the communities and their people. It could also mean that community leaders take their decisions without consulting their people. Responses from respondents indicate that this failure to involve them often results in disagreements and tension between them and their community leaders in relation to some projects.

#### **5.6.4.5.3 Achievements of the Trust Fund**

Since the establishment of the trust fund, a lot of developmental activities have been seen in the Obuasi municipality and its environs. Some of these achievements are presented below.

##### **□ 2013**

- Construction of a six-classroom block each for Nyamebekyere and Jimisokakraba communities
- Renovation of the kindergarten and primary school blocks for the Hansoyewodea community
- Construction of a teachers' quarters for the Ayaase community

❑ **2014**

- The mechanisation of a borehole facility for the Kokoteasua community
- Construction of a borehole facility for the Market Square electoral area
- Construction of a toilet facility for Akatechieso and Kunka communities

❑ **2015**

- Completion and handing over of a 20-seater capacity community flush toilet facility with a biogas biodigester system and a mechanised borehole with an overhead tank
- Completion and handing over of a mechanised borehole facility with a 10,000L-capacity overhead water tank.

❑ **2016**

- Construction of a mechanised borehole with an overhead tank for Akrofuom SHS
- A 5-seater WC and five shower rooms
- A mechanised borehole with an overhead tank for the Brahabebome community
- A mechanised borehole with an overhead tank for the Odumase community
- A mechanised borehole with an overhead tank for Anyankyirem
- A mechanised borehole with an overhead tank for Christ the King Senior High School
- A mechanised borehole with an overhead tank for the Bekwai Traditional Council
- Educational grant for 100 first-year SHS students

❑ **2017**

- Construction of a two-unit kindergarten block with an ancillary facility for Nhyieaso community

- Construction of a Community Health and Planning Services compound (CHPS compound) with an ancillary facility for the Amamom community

Considering the achievements of AGA's CSR projects and activities, it is worth noting that they are committed to fulfilling their CSR objectives. However, it seems the efforts of the company is not appreciated by these communities as there is a communication gap between them. This affirms the findings of Abraham et al. (2018) whose study looked at the public's perception of AGA's CSR projects and activities. The study found that the CSR activities of AGA are good but they have not been done to the satisfaction of the members of the Obuasi municipality, thereby creating a gap between the perceived and the observed CSR activities of the company. In terms of ensuring sustainable development, AGA seems to be making efforts but the amount of money in gold taken out of these communities cannot be compared to what the company gives back through CSR. This confirms the findings of Ross (2001:3) whose study shows that even though there is a rise in mining activities in many localities in developing countries, there is no corresponding improvement in the social, economic and environmental wellbeing of those areas affected by mining activities. In other words, the activities of mining companies do not lead to the sustainable growth and development of mining affected communities and countries. This has served as motivation for Davis and Tilton (2002:8) who advocate that mining activities in developing countries should be stopped since mining has weak or even no connection to sustainable development in mining centres. In attempts to ensure sustainable development for its neighbouring communities, AGA must bridge the existent gap between their CSR initiatives and the expectations of the inhabitants of the communities within which they operate. For instance, the perceived gap between AGA and members of these communities could be bridged if SDG 17 is encouraged. In SDG 17, AGA would treat members of the communities as partners and not just the beneficiaries of their philanthropic activities.

## **5.7 Summary of the Chapter**

The chapter gave a critical insight into CSR principles, policies and activities of AGA and their implications on the sustainable development of the six local communities visited. Specifically, the chapter touched on the Rubric Assessment Tool Matrix used by AGA for evaluating its CSR principles, policies and activities in terms of the company's commitment to strong values that sets them apart or distinguishes them from others; the legal underpinnings of all activities conducted by the company; managerial discretion in actions taken; the

economic advancement of all actors involved; and broad stakeholder participation in issues affecting them. The chapter closed with specific CSR projects and activities as well as achievements of AGA in the Obuasi municipality and beyond from 1990 to 2017.



## CHAPTER SIX

### CRITICAL APPRAISAL OF THE IMPLICATIONS OF AGA'S CSR ACTIVITIES FOR SUSTAINABLE DEVELOPMENT IN MINING AFFECTED COMMUNITIES

#### 6.1 Introduction

The previous chapter (Chapter Five) indicated that AGA had undertaken key CSR projects to offset the negative consequences of their activities as it was indicated in Chapter Four. This section will critically appraise how AGA's CSR activities have contributed to the sustainable development of the selected mining affected communities by giving due diligence to social, economic and environmental development. In line with the economic dimension of sustainable development, the company's perspective on its achievements in the affected communities will be analysed. Also, the inhabitants of the communities were questioned about the kind of support AGA offers them and how it has boosted/impacted their economic activities. The research also investigated the social development projects that have been implemented by the company as well as the inhabitants' level of satisfaction with these projects. Moreover, the chapter will also look at AGA's social development projects in relation to education, health, water and sanitation. Also, the company's contribution to the environmental management and sustainability affected communities are discussed in this chapter. Pseudonyms have been used to identify respondents to ensure their anonymity and confidentiality.

#### 6.2 Economic Contributions

Scholars, including Harris (2000) and Frynas (2005), highly recommend that every company's operations, including mining firms, should foster local economic development (LED) to enhance sustainable development through corporate social responsibility (Harris, 2000:5; Frynas, 2005:581-598).

In line with ensuring local economic prosperity, companies, including mining companies, should, therefore, strive to alleviate poverty through job creation for locals and the provision of economic infrastructure (SFSB, 2009:18). Despite the ecological damages caused by AGA, however, the company has implemented some interventions to support the economic wellbeing of the inhabitants of the areas where they operate. A review of AGA's report (2011-2015)

indicates that the company has made the following economic contributions to mining affected communities:

- i. The provision of financial grants to farmers in mining affected communities to engage in the cultivation of oil palm and cassava plantation (about 2,000 acres). This was done to support the government's effort in advancing local development through the Presidential Special Initiative (PSI) project.
- ii. Some qualified indigenes have been employed to work with AGA as either full-time or casual workers.
- iii. The provision of vocational and technical training programmes for both men and women in the fields of hairdressing, dressmaking, auto-mechanics, welding and metal fabrication.
- iv. Sensitisation programmes have been provided to maize farmers to boost their production, while their yields are directly purchased by AGA through off-taker's agreement to feed its poultry project.

Discussions with officials from AGA indicate that the company is committed to the promotion of sustainable development, hence each year, it prepares a report on sustainable development to measure its level of contribution to local sustainability and development. Although community members are generally not content with the company's operations, some admit its contributions to their communities in the following extracts:

[1] *"I don't like AGA at all, but I have to admit that they pay for our electricity bills. I think we are not the only community the company pays electricity bills for. I can say, this has been the major benefit we the people of Anyinam have gained from AGA."* (Kofi Mensah, Anyinam)

[2] *"...Yeah. I am aware. I remember the company trained some of the women in this community in dressmaking, hairdressing, soap-making and other skills. Many women joined and were trained, but most of our women here did not use the skills they gained to start businesses. I think the company should have supported the women to set up businesses instead of merely training them."* (Agya Adu, Nhyiaeso).

[3] *“Our community is the last community on this road. At first, the road was very bad, but the mining company has tarred the road for us. Now, we have a lot of commercial vehicles moving into this community. People can transport their goods conveniently, and this has aided economic activities in the community”* (Unit Committee member, Sanso).



Figure 6.1 Road provided by AGA, Sanso (1)

Source: Field Data, 2018



Figure 6.2 Road provided by AGA, Sanso (2)

Source: Field Data, 2018

The projects undertaken by AGA have positive implications for the economic development of the communities. For instance, with the provision of electricity, businesses that require electricity can now be established, as well as processing factories that utilise electricity. This will consequently lead to the creation of decent jobs, leading to a rise in income levels. The construction of roads will also boost the economy of communities as it will aid the transportation of goods and services. Investments are also more likely to be attracted owing to

good roads, which will lead to the creation of jobs. As a result, these projects could help in achieving Sustainable Development Goal Eight (Decent Work and Economic Growth). Offering training opportunities for women will also help to empower women economically and bridge the gender gap; hence, achieving the Sustainable Development Goal 5 of the United Nations (Gender Equality), which seeks to empower women and children.

### **6.3 Social Contributions**

Mining companies are expected to be committed to responsible social practices to contribute to sustainable social development (DFID, 2003:1). This, as indicated by Hockerts (2003), and Mitra and Borza (2010:65), should include all efforts in relation to human resource development, education, health, water and sanitation. In line with this, AGA has undertaken key social projects, which have contributed to social development in host communities. These are subsequently discussed.

#### **6.3.1 Education**

Goal Four of the United Nations Sustainable Development Goals is “Quality Education”. As such, a review of AGA’s Annual Report (2011-2015) indicates that the company has implemented different educational projects made up of classroom blocks for both primary and junior high schools in deprived communities in the Obuasi Municipality. A new school building has been built to replace a dilapidated school structure at Sanso and scholarships have been given to dependants of employees as well as brilliant students from deprived families. In relation to the education-related projects listed by AGA as implemented, the researcher interacted with community leaders and residents in the selected communities to find out whether they have been carried out as the company says. The results are given in Table 6.1.

Table 6.1: Educational projects implemented by AGA in selected communities

Name of community	Type of educational project	Number of the project(s)
Sanso	Primary school	1
Bidiem	-	-
Nhyiaeso	Pre-school	1
Abompekrom	-	-
Kokotiasua	-	-
Anyinam	-	-
Total		2

Source: Field Data, 2018

The primary school at Sanso is a 6-unit classroom block built by AGA. The government runs the school, and it serves as the only functional government school in the community. At the time of the visit to the Nhyiaeso community, the pre-school built by the company is yet to be commissioned. The school is well furnished with the necessary teaching and learning materials and is located less than 50 metres from the residential area of the community and the mining site.



Figure 6.3 Pre-School, Nhyiaeso



Figure 6.4 Pre-School, Nhyiaeso

Source: Field Data, 2018

The company has offered scholarships to assist residents; this has been confirmed by field research. During discussions with some respondents, the following views were shared by them.

[1] “...yes. It is true. I am aware of a woman whose child was granted a scholarship by the company. But I must admit that most of the scholarships are given to people who work with the company.” (Siaw, Abompekrom)

[2] “I am yet to see anyone who has been given a scholarship by AGA. However, I hear people saying it, so I believe that the company assists people in their education. The fact that I have not received a scholarship does not mean that other people are not being supported.” (Agya Osei, Opinion leader, Kokotiasua).

The construction of schools and award of scholarships by AGA have made education both physically and economically accessible in host communities. This helps to ensure that residents are able to attain quality education, hence, achieving the Sustainable Development Goal Four of the United Nations.

### **6.3.2 Health**

In all the six communities visited, none of them had visibly benefited from a health project conducted by AGA. This, to a large extent, could be attributed to the fact that residents do not associate health projects with AGA. Also, although discussions with officials of the company show that AGA has supported health programmes such as malaria control, HIV/AIDS etc., they note that the company does not prioritise physical projects, especially physical health structures such as clinics, CHPS compounds and other health facilities. This is because such projects would require that AGA makes special arrangements with the Ghana Health Service, the Ministry of Health and the Municipal Health Directorate. An official at AGA indicated the following:

*“You hardly see our company investing in physical projects, especially as regards health because of how complicated such projects are. For instance, before we can provide a health facility, we have to first discuss the project with the Ministry of Health and other concerned*

*bodies who will have to show commitment to supporting us in terms of logistics and even posting of health officials. You know, those who will work in such facilities have to be paid, and the willingness to pay must come from government. So, when we even show commitment, Ghana Health Services and the others do not. This is one major reason why you don't see physical projects with regard to health being executed by the company. Hence, we mostly choose to invest in health programmes that do not require that we build physical structures.”*  
(Mr Kwao, AGA)

The company's annual reports (2011-2015) show that the health-based contributions provided by the company include the provision of a \$1.23 million upgrading project of the Edwin Cade Memorial Hospital; a \$1.162 million malaria prevention programme in some communities, including the municipal capital, Obuasi; HIV/AIDs prevention programmes through Voluntary Counselling and Testing (VCT); community education programmes in relation to reproductive health; the provision of primary health care for communities in the municipality, the provision of free diagnosis for opportunistic infections; and provision of Anti-Retroviral Treatment to employees, their dependants and community members who have financial challenges and cannot afford such treatments. As a company whose activities have a direct effect on people's health, contributing to their well-being is very important and must be prioritised (Koestoer, 2007:4; Corbett et al., 2000). Hence, this role of the company should not be seen through the lens of philanthropism, but as a mandatory requirement for such mining companies (Stephens and Ahern, 2001). The health activities of AGA contribute to the achievement of Sustainable Development Goal Three (Good Health and Wellbeing)

### **6.3.3 Water and Sanitation**

AGA has been very active in the provision of water and sanitation development projects. In all the communities visited by the researcher, each community has either benefited from a water project, a sanitation facility or both. However, the maintenance of such projects has been a key challenge. The company provides these projects without giving the communities any maintenance manual to guide them on how best to maintain the facilities. As a result, most of these projects are no longer functional. In communities such as Nhyiaeso, Bidiem and Sanso, many facilities have broken down, and only a few of such facilities are still functioning. This implies the absence of a sustainability plan. With no technical knowledge on project maintenance, the community members are allowed to take full responsibility for ensuring the sustainability of water and sanitation projects. However, because such communities do not have knowledge of how to maintain these facilities, they are unable to sustain the facility for

very long. Hence, these facilities eventually breakdown. Moreover, the absence of sustainability strategies for such projects implies that community members will have to go back to AGA to request for the same facilities to be reconstructed when the ones they have to break down due to the lack of a good maintenance culture, which will increase the financial burden of the business. One of the residents noted that:

*“Initially, the community leaders mandated all households to pay a monthly user fee of GH¢15.00 so that such monies could be used for maintenance. The community members accepted to pay this amount; however, they gave excuses whenever the money collectors visited them. Hence, those households who were paying felt cheated, and so they stopped. When the facility got spoilt, I heard the money gathered was insufficient to repair it, so our leaders persistently insisted that the company should provide a new one, and so they succumbed and provided us with the one behind me.” (Minta, Abompekrom).*

From Table 6.2, the company has provided a total number of 37 water and sanitation projects in the six communities selected for this study. However, 62.2% of these projects are non-functional, with nearly 57% made up of water-related projects and the remaining 5.4% made up of sanitation projects. The company has greatly invested in water projects, comprising nearly 84% and sanitation projects consisting of about 16%. More efforts are, however, needed to strengthen the sustainability aspect of these projects from both AGA and the communities involved.



Table 6.2: AGA's water and sanitation projects in mining affected communities

Name of community	Type of project	Functional project	Non-functional project	Total number of projects	Social sector
Sanso	Borehole	1	5	6	Water
	Mechanised borehole	2	-	2	Water
	WC-Toilet facility	-	1	1	Sanitation
Bidiem	Borehole	1	2	3	Water
	WC-Toilet facility	1	-	1	Sanitation
Nhyiaeso	Borehole	1	4	5	Water
Abompekrom	Borehole	1	2	3	Water
	WC-Toilet facility	1	-	1	Sanitation
Kokotiasua	Borehole	1	4	5	Water
	WC-Toilet facility	1	-	1	Sanitation
	Mechanised borehole	1	-	1	Water
Anyinam	Borehole	2	4	6	Water
	Toilet facility	1	1	2	Sanitation
<b>Total</b>		<b>14</b>	<b>23</b>	<b>37</b>	

Source: AGA's Annual Report

The water and sanitation projects of AGA helps in the achievement of Sustainable Development Goal six (Clean Water and Sanitation) in host communities. Below are some pictures of selected water and sanitation projects in selected mining-affected communities.



Figure 6.5: Non-Functional Borehole, Abompekrom



Figure 6.6: Mechanised Borehole, Sanso



Figure 6.7: Non-functional toilet facility, Sanso



Figure 6.8: Functional toilet facility, Bidiem



Figure 6.9: Functional borehole, Kokotiasua



Figure 6.10: Functional borehole, Nhyiaeso



Figure 6.11: Non-functional borehole, Anyinam

#### **6.3.4 Other Social Development Projects**

In addition to education, health, water and sanitation projects, AGA has likewise engaged in other social development projects, which are the construction of a chief's palace at Sanso and the provision of a culvert at Kokotiasua. While the chief's palace is expected to solidify tradition and culture for indigenous development in Sanso, the provision of the culvert is to aid social mobility and enhance the wellbeing of the people in Kokotiasua. With the culvert in place, residents do not have to worry about getting drowned when crossing the gutter, especially after a heavy downpour. During interactions with some inhabitants of Sanso, they showed dissatisfaction with the provision of the chief's palace. They argue that the company should have invested in other projects that would have a tangible socio-economic impact on the entire community, for instance, a market. In the case of Kokotiasua, inhabitants were displeased with the type of facility AGA had provided them and predicted that the culvert would soon collapse.



Figure 6.12: Chief Palace, Sanso



Figure 6.13: Culvert, Kokotiasua

#### **6.4 Environmental Contributions**

Companies are expected to operate in a manner that complies with environmental management and protection. Harris (2000:6) has emphasised the importance of maintaining the biodiversity, atmospheric stability and other ecosystem functions for environmental sustainability. Mining companies, including AGA, are, consequently, expected to work towards the protection and management of the environment (Ismail, 2009:205). It will take conscious efforts to operate in a manner that ensures ecological integrity and put in place mechanisms to safeguard affected communities from environmental destruction. AGA's operations, in particular, have led to severe environmental destruction, as indicated by community members and leaders, and as such, the company must do more to protect the environment.

Insight from the company's Sustainable Development Report (AGA Report, 2017:45) reveals its commitment to environmental stewardship. According to the report, the company has instituted a multidisciplinary working group that focuses on specific environmental themes to actively identify and embed environmental awareness strategies in all of its activities. Local communities are of the view that the company does not have strategies to protect the environment and their communities. Perhaps, if there are environmental measures, then they are implemented within the mining site and not the communities. In all the six communities selected for the study, neither inhabitants nor their leaders could identify any specific environmental project that has been initiated by the company.

Available documents on the company's operations (AGA Annual Reports, 2011-2015) show that the company has provided an ISO 14001-aligned EMS to ensure environmental protection and sustainability in the Obuasi Municipality, and has conducted re-vegetation programmes over the years with a focus on tree and grass planting in areas that have been degraded by surface and open pit mining activities in the municipality. During an interview with an official from the company in relation to their role in ensuring environmental management, his statement is presented below;

*“AGA is very concerned about the environment. We don't want to destroy the environment, so we try to do things under legal provisions on the environment. The company is continuously exploring innovative ways of mining that would have as little effect as is possible on the environment. We have upgraded our technology, and now, the company will not pollute water bodies any more... A time will come when the communities will not even hear any blasting from our work here. We are gradually advancing in environmental considerations”.* (Mr Appiah, an Official of AGA).

## **6.5 Summary of the Chapter**

The chapter discussed the contributions of AGA to the sustainable development of the selected communities utilised by the study. It shows the contribution of AGA with regard to the community trust fund it has established to finance all of its developmental initiatives in the various communities. Also, the chapter highlights the economic contributions made by AGA in the form of grants to farmers, vocational and technical training, employment opportunities, etc. It further discusses the economic contributions of AGA in relation to the provision of social amenities such as roads, health, water and sanitation (such as the provision of boreholes and

toilet facilities), and education (the provision of school buildings and scholarships for students). Finally, it reveals AGA's adherence to environmental sustainability regulations.

## CHAPTER SEVEN

### SUMMARY OF KEY FINDINGS, RECOMMENDATIONS AND CONCLUSION

#### 7.1 Introduction

This is the final chapter of the study; it gives a general overview of the findings of the study. The specific subjects considered in this chapter are the key findings and implications of the study, which have been aligned to the various objectives of the research; recommendations are given in line with the key issues identified by the study, and the conclusion ends the study.

#### 7.2 Key Findings and Implications

The key findings and their implications are discussed based on the objectives of the study.

##### 7.2.1 Objective One: Principles of CSR and their Attainability

CSR is fundamentally premised on the kind of relationship that exists between companies and the external environment, particularly, the local society in which such companies operate. Through CSR, companies can give back to society, which culminates into general growth and development. In many organisations, a separate department is usually created for CSR, which has the mandate to handle CSR initiatives, establish cordial relationships between the organisation and external actors, and to ensure that the activities undertaken by an organisation towards societal growth and development are aligned to the needs and aspirations of the people for whom such provisions are made. Certain principles are needed in order to evaluate the CSR impacts of entities on their external environment to ensure effective outcomes for CSR initiatives. In this research, the CSR initiatives of AGA were evaluated on five main principles, which are commitment to core values, compliance with legal provisions, managerial discretions in taking actions, economic contributions, and participatory mechanisms.

Taking into account the first principle of the company's commitment to its core values, the findings of the study revealed that AGA has not been able to attain some of its values. This contradicts the findings of Katamba et al. (2012), whose study found that some organisations who undertake CSR focus on external factors rather than internal factors such as employee welfare. It is, however, imperative to ascertain that some headways have been made, especially



those values that pay special attention to the staff members of the company. AGA's accountability to its actions toward the communities (one of its core values) in which mining operations have been affected has not been attained, and more efforts will be needed in that direction (in terms of bettering the condition of the communities in which AGA operates and its respect for the environment) as compared to its commitment to its employees.

Therefore, in all affected mining communities which are in poor states (due to the environmental destruction caused by AGA's activities), AGA needs to implement a solid environmental sustainability project to ensure environmental justice. Accountability is very crucial in CSR, and companies that can attain a satisfactory level of accountability acknowledge how their actions have affected the external environment. Such companies appreciate that they form a component of a wider social network, and this induces them to work toward assuming responsibility for the outcomes of their actions in relation to society. However, AGA is yet to get to this level with regard to their accountability to affected communities. In a nutshell, AGA still has a lot to do, in relation to ensuring environmental sustainability, looking at the poor state of the surrounding communities within which it operates. This consolidates and validates the perspective that they need to put in more efforts to ensure satisfactory attainment of all AGA's core values, especially in the area of ecological integrity and environmental justice.

The company is accepted as a legal entity in Ghana, and most of its interventions have been informed by its legal compliance, which is a CSR principle. Working within the legal provisions is widely practised by the company; however, it seems that the company's attention has been concentrated more on legal provisions than environmental and socio-economic issues. Once the company's operations are in line with existing laws, they are regarded as prudent whether or not they impede local growth and sustainability. Generally, AGA has achieved satisfactory compliance with legal provisions, although environmental laws have been overlooked to some extent. This outcome can be attributed to the weak legal and institutional framework present in Ghana.

Some degree of managerial discretion in undertaking actions (a CSR principle) has been identified with AGA's operations (Section 5.2.3). Mid-way attainment, in terms of the company's contributions to the economic wellbeing of mining affected communities, was identified. Nevertheless, participatory mechanisms have generally manifested as a mere ritual as it is not used to critically draw insight from stakeholders to inform the actions and activities of the company. Hence, the attainment of these two principles (economic contributions and broad participatory mechanism) has been minimal, which indicates that more coherent efforts

such as an increment in the inclusion of the local content (local expertise), provision of a livelihood empowerment project to train community members in different employable skills, provision of adequate compensation for farmlands taken over by AGA, inclusion and adherence to the plights of inhabitants (inputs and concerns), are needed to attain them (economic contributions and broad participatory mechanism).

### **7.2.2 Objective Two: CSR Policies of AGA and their Implementation**

The study found that AGA has a policy document that guides its corporate social responsibility responsibilities in the communities within which it operates. However, the two paged document is not detailed enough to serve as a road map to make their projects sustainable. It was not surprising to observe that some of the projects which had been initiated by the company could not be sustained. Many of the piggery and garment projects initiated by AGA had failed or were no longer in operation to ensure the economic empowerment of the beneficiaries. Findings of the study indicate that AGA has a policy of dedicating 1% of its after-tax profits to community development, which is way below the 5% indicated by Narh (2020). This is what the company terms as Community Trust Fund. The fund is available to support the development of the education and health sectors, sustainable business development, the Obuasi Municipal Assembly in its infrastructure development, and traditional leadership development, as well as support projects such as scholarships and other projects which the company considers worth undertaking. Through the community trust fund, the company has engaged in several corporate social activities in the Obuasi Municipality, as shown in the studies of Mensah (2009) and Abraham et al. (2018). These activities include projects on education, transportation, health, agriculture and capacity building programmes. Also, it has constructed schools, established hospitals, constructed roads, trained residents and provided alternative livelihood strategies for people. Among some of its alternative livelihood projects include training and supporting of residents in pig farming. Its malaria control programmes have, likewise, contributed to a drastic reduction in malaria cases in the municipality.

### **7.2.3 Objective Three: Participation in CSR Activities by Residents**

The study found that to some extent, the local people have been involved in the execution of the CSR activities of AGA, which affirms other studies (Mensah, 2009; Narh, 2020). However, there are some limitations to the involvement of local people, which also differ based on the community (location). First of all, before AGA initiates a project through

its Community Trust Fund, local communities are allowed to come out with their priority list. Generally, local institutions like traditional authorities, unit committees and assembly members of the communities indicated their involvement in the CSR activities of AGA. During the planning and designing of projects, these institutions are engaged and convinced to accept a project before it is implemented. Also, they are informed when the project is about to commence. However, these institutions do not have enough power to influence the kind of projects carried out, though their views are sometimes collected. On the side of the people, the study found that they are given limited participatory roles during CSR activities. Mostly, they are only informed of the commencement of projects without getting the opportunity to take part in project planning and design. When the projects are completed, they are handed over to the beneficiaries to manage them. As a result, most of the local people do not participate during the project implementation. However, with regard to the few projects that are still functioning (Table 6.2), such as Figure 6.10, borehole at Nhyiaeso; Figure 6.9, borehole at Kokotiasua; Figure 6.8, toilet facility at Bidiem; and Figure 6.6, mechanised borehole at Sanso, a majority of the local people have contributed to the maintenance and sustainability of these projects after their implementation. They do so through paying user fees, monthly contributions, and weeding around the facility, while some also serve as caretakers. However, this is not the general case as many of the projects which were done through the CSR initiatives of the company are no longer in use due to the inability of beneficiaries to sustain such projects.

#### **7.2.4 Objective Four: The Impacts of Mining Activities on Local Livelihoods**

The mining sector makes great contributions to the local livelihood, both positively and negatively. As identified in this study, the operations of AGA have created direct and indirect jobs for a wide range of people, including some local folk as asserted by Abraham et al. (2018: 494). The majority of the jobs offered to the indigenous people are indirect and casual, which is usually manifested in the form of implementing physical CSR projects. Since the company's CSR projects mostly take the form of programmes such as health campaigns, scholarships and entrepreneurial training, there is no way individuals who serve as labourers for physical CSR projects can earn a sustainable or intermittent income. As a result, the job offerings for many young people have not made any substantial contributions to their livelihoods. This has caused poverty levels to remain high for many inhabitants. In addition, the percentage of royalties paid are low and as such, contributes to the high poverty levels in mining communities (Narh, 2020). However, the provision of free access to electricity in some communities remains the topmost

contribution of AGA in advancing local livelihoods. This provision has had many positive economic implications on beneficiary communities. For local members to directly get employment within the company is very difficult, and this is explained by their lack of the requisite skills for AGA to employ them. For the company to reverse this, their CSR initiative, which tends to innovatively train and place locals on mining sites should be given a priority. Without such an arrangement, the company's current contribution in job offering through the development of CSR projects will only serve as an economic 'handout', which will not in any way influence local livelihoods in a positive direction.

Over the past few years, the company has trained some local members, especially women, in employable skills; but the complete absence of a sustainability measure which relates to supporting these trained individuals with start-up capital or linking them to a source organisation has led to a collapse of this training initiative. Since the company's operations have negatively transformed local economic conditions (destruction of farmlands and restriction of some farmers from their farms, and relocation without economic considerations), the need for a sustainable measure towards local economic advancement should not be downplayed.

There has been the displacement of some local members, distorting bonding and bridging social capital in affected communities. Although emerging forms of bonding and bridging social relations have been established in resettlement communities, the resettled members are still not satisfied with provisions made for them in their newly settled communities. Those left behind in communities very close to the mining site extensively reveal the impact the adverse destruction of the environment by the mining company is having on them. Communities face some level of challenges in obtaining quality water, which has led to the upspring of diseases. Soil quality has diminished due to the release of chemicals over the years by the mining company, while the communities that serve as dumping sites for gold dust face sanitation problems. Noise levels through mining operations have somewhat reduced, not through the effort of AGA, but the deliberate attempt made by local communities and their leaders.

Comprehensive CSR measures coupled with the lens of non-philanthropism are needed to reverse the general negative outcomes of mining on local communities on the economic, social and environmental levels. For instance, the growing displacement of communities in the periphery of the Obuasi township and that of Sanso and Anyinam, who have been relocated to other communities including Abompekrom, Kokotiasua and Bideim, since they were seriously affected by mining activities (Figure 4.3), needs to be addressed through the lens of non-

philanthropism to reverse the general negative outcomes of mining on these local communities. This is because not just the economic livelihood of about 33.3% respondents from Anyinam, 26.8% from Abompekrom, 26.3% from Nhyiaeso, 19.6% from Sanso, 25.0% from Bidiem and 11.8% from Kokotiasua (Figure 4.1) who are currently unemployed are affected; also, their social structure and environment have been affected.

### **7.2.5 Contributions of AGA to Sustainable Development in Mining Affected Communities**

The current development discourse is premised on sustainable development, and as such, every organisation needs to play its role in advancing sustainability, especially within this period to 2030. As already established (Section 6.2 - 6.4), AGA has over the years implemented measures toward economic, social and environmental sustainability in its sphere of influence in terms of operations. The economic contributions of the company, as already discussed, have taken the form of training, provision of indirect jobs and making electricity available for free for some communities. Of all the components of sustainable development, the social component has received the most contributions from the mining company. Some social projects, especially within the water and sanitation sector, have been widely executed. For instance, AGA has provided a total of 37 water, and sanitation projects in the six communities visited (Table 6.2).

The company has highly invested in water projects comprising nearly 84% while sanitation projects makeup for about 16%. Unfortunately, 62.2% (made up of 57% water-related projects and 5.2% sanitation projects) of these projects are no longer functional, due to a lack of technical knowledge in relation to project maintenance by the community members who are allowed to take full responsibility for such projects to ensure their sustainability. Therefore, the absence of deliberate sustainability measures with regard to projects, especially water projects, has led to a large number of these projects provided by AGA to break down. In relation to education, the company's contributions have been in the direction of the provision of educational infrastructure for basic level education and scholarship offers to some individuals. Other social projects have taken the form of the provision of a palace and drainage systems; however, most of the projects provided by the company have failed to meet the satisfaction of the people for whom such projects have been implemented. The contemporary agitations for sustainability, especially the global strategic millennium development goals (SDGs) 11-15, should serve as a clarion call for AGA to implement comprehensive sustainability measures in its interventions done through CSR, especially in the areas where

their mining activities have affected the climate (environment in the local communities), aquatic life, soil quality and plant life.

### **7.3 Recommendations**

Based on the findings of the research, the following recommendations have been provided to inform future actions of the company and all other stakeholders within the mining sector of Ghana.

#### **7.3.1 Adoption of Comprehensive Sustainability and Feedback Assessments (CSFA)**

For over a decade, from 2004 to 2018, AGA's operations have paid little attention to feedback from local stakeholders, especially those from mining affected communities, who persistently share their plights with the company (Raufflet, Barin, and Bres, 2014; Mzembe and Meaton, 2014; Viveros, 2016). Several complaints have been made concerning the effects of mining activities on the economic, social and environmental conditions of local communities (Sections 4.2.1; 4.2.3; 4.3-4.3.5). However, conscious efforts to screen, assess and make decisions to enhance local sustainability have virtually been absent. Many mining companies, including AGA, have usually adopted a defence mechanism to legitimise the consequences of their actions on local communities. This defensive approach towards corporate social responsibility requires rigorous transformation; hence, AGA must adopt an approach which comprehensively delves into operational sustainability and feedback assessments within its catchment areas.

The adoption of comprehensive sustainability and feedback assessments will ensure that responses from local communities in relation to the operations of the company are evaluated and inculcated through sustainability mechanisms. Through this approach, the inputs of local communities will manifest in the actions and operations of AGA, and this will gradually lead to a wider acceptance of the company, especially among the communities that are directly affected by the operations of the company. For instance, from the fact that the populace contributes massively towards the sustainability of projects (Section 5.3.4; Figure 5.4), feedback from local stakeholders, especially those in mining affected communities who persistently share their plight with the company, can be gathered and engaged in making decisions as regards community projects.

#### **7.3.2 AGA's Provision of Clear-Cut Sustainability Measures in CSR Initiatives**

Attempts have been made by AGA to advance local growth and development through its CSR initiatives. Some projects and programmes have been implemented through the

framework of CSR, and this is an indication of the company's quest to play a role in the development of local communities and the country at large. Present efforts of companies are, however, expected to contribute to the global pursuit of sustainable development, an agenda which all individuals, companies and countries are expected to support. This implies that AGA has to take initiatives through which adequate attention is given to sustainability measures and indicators of impact for such initiatives. Many projects implemented through the lens of CSR did not take into consideration their sustainability (Table 6.2; Figure 6.5, borehole at Abompekrom, Figure 6.7, toilet facility at Sanso; Figure 6.11, borehole at Anyinam), and this has led to the poor state of several of the projects implemented by AGA in mining affected communities.

The lack of sustainability in project implementation drains financial resources since many other projects have to be implemented to satisfy the needs of locals, which other unsustainable projects were supposedly designed to meet. It is, therefore, necessary that AGA's CSR projects are tied to comprehensive project-level sustainability measures that specify and recognise the requisite roles of local communities in such interventions. Subsequently, AGA's CSR projects must be initiated with localised maintenance manuals that are prepared through broad participatory mechanisms that appreciate and implement the inputs of local communities for which such projects are designed. Through this measure, AGA can be assured that appropriate sustainable projects are implemented for local communities through its CSR initiatives. This will solidify its contributions to the global goal of sustainable development.

### **7.3.3 Transforming the Use of Mining Royalties in a Manner that Enhances Direct Impact on Mining Affected Communities**

In as much as mining companies are expected to contribute to sustainable development, especially due to the harmful outcomes associated with their operations, there is also the need for the government to make effective use of royalties and taxes taken from such companies. The task of promoting development in mining affected communities should never be left solely to mining companies to handle; state institutions and traditional authorities must also get involved. In all the mining affected communities visited, the government's use of royalties for their development has been very minimal. The current system of not channelling mining royalties towards local development in mining communities does not ensure the fair use of mining royalties. Residents in the local communities (respondents from all six mining communities visited: Sanso, Bidiem, Nhyiaeso, Abompekrom, Kokotiasua and Anyinam),

therefore, expect that royalties from AGA are used to supplement the Municipal Assembly's budgets for local-level development. However, tracking the contributions of royalties with regard to the benefits mining communities have received was cumbersome.

This is because the flow of royalties based on the current system of distribution is problematic and needs to be transformed. The distribution of royalties in Ghana has been structured in a manner that dictates that 80% is paid into the government's consolidated fund to support the national budget while the remaining 20% is allotted for the sub-national level. Within this level, the 20% is shared among the national regulatory and oversight bodies, the local assemblies involved, the traditional land-owning authorities and other communities which are affected by mining activities. A critical analysis of the distribution of the 20% indicates that 10% is paid to the Mineral Development Fund (MDF), which was established in 1992 to support public mining agencies (such as the Mineral Commissions), mining-related research and training, and special projects dedicated to the advancement of the mining sector as well as to supplement the operating budget of the sector's ministry and institutions. The remaining 10% is transferred to the Office of the Administrator of Stool Lands quarterly to be used by various local levels of government to directly support mining affected communities as well as the general development of the districts or municipalities concerned. Within the confines of this research, it was identified that the 10% seems not to be effectively used by the Municipal Assembly, while the accounting and reporting regime for its utilisation was very difficult to ascertain.

The study discovered that much of the revenue from the royalties are used to cater for recurrent expenditure rather than for physical projects in these mining affected communities. In all the six mining communities visited (Sanso, Bidiem, Nhyiaeso, Abompekrom, Kokotiasua and Anyinam) it is clear that an effective monitoring mechanism needs to be instituted by their local assemblies and AGA to ensure that the proportion of royalties going to the local level is used for physical projects that directly impact the economic, social and environmental well-being of mining communities to resolve the negative impact of mining on such communities, especially Abompekrom, Kokotiasua and Bideim. These effective monitoring mechanisms will help to ensure that residents get to enjoy direct benefits from the presence and contributions of AGA. Furthermore, these (effective monitoring mechanisms) will foster and ensure accountability in the relationship between AGA and local government leaders.



## 7.4 Conclusion

This study was undertaken to assess the contribution of mining companies to sustainable development in their host mining communities through their CSR activities. It appraised how due consideration has been given to an integrated idea of development (social-economic and environmental development) in carrying out their CSR activities. The study specifically considered the case of AGA in local Ghanaian communities such as Sanso, Bidiem, Nhyiaeso, Abompekrom, Kokotiasua and Anyinam. In all, 338 residents were interviewed, and the analysis followed a mix of qualitative descriptions and a descriptive presentation of qualitative findings in a quantitative form to give a clear picture of respondents' perspectives on the issues investigated by this study.

Firstly, the study specifically sought to find out the impact of mining on the socio-economic and environmental conditions in host communities. The study concludes that although there have been some positive impacts through infrastructural development, the impact on the environmental elements such as air, water and soil quality, and noise levels have been extremely negative. Mining activities have caused social disruptions, as argued by the social disruption theory in host communities. This has occurred as a result of series of relocations and resettlements. Also, the people have been deprived of their economic livelihoods since their agricultural lands have been taken over by mining companies. They were paid merely small amounts of compensation. The environment has also been polluted due to the use of chemicals that pollute the soil, air and water bodies. Consequently, the study proves the resource curse theory, which suggests a series of socio-economic and environmental challenges faced by communities where there are abundant resources.

Secondly, the study sought to find out the existence of a CSR policy in AngloGold and the extent of the implementation of this policy in local host communities. With this, the study found a two-page document that serves as the CSR policy document of AGA. In addition, the company has a policy of allocating 1% of its after-tax profits to community development. The study can conclude that the company has implemented its 1% after-tax allocation policy, with every community visited testifying of at least receiving some infrastructural investment from the fund. However, the study is dissatisfied with the absence of a detailed CSR policy document, which could have enabled an easy measurement of AGA's performance.

In a nutshell, AGA seems to be engaged in ad hoc activities, which they refer to as "CSR". They do not have a detailed policy that could better guide, structure and coordinate their CSR activities in the selected communities. As a result, although AGA to some extent has contributed to sustainable development in host communities by focusing on social, economic

and environmental development through their CSR activities, these have not been enough to offset the negative socio-economic and environmental consequences of their activities.

## REFERENCES

- Aawaar, G. 2006. The economic impact of mining sector investment in Ghana. Undergraduate Project, Faculty of Social Sciences, Kwame Nkrumah University of Science and Technology, Kumasi.
- Abbott, WF & Monsen, RJ. 1979. On the measurement of corporate social responsibility: Self-reported disclosures as a method of measuring corporate social involvement. *Academy of Management Journal*, 22(3): 501-515.
- Abdul, JA. 2015. The Incidence of Indirect Tax Evasion in Offinso Municipality. Unpublished Master's thesis. Kwame Nkrumah University of Science and Technology, Kumasi, Ghana.
- Abe, M & Ruanglikhitku, W. 2013. Convergence and coherence in international CSRI instruments: Implications for business in the Asian and Pacific Region, In R. Ravi & C. (Eds). *From corporate social responsibility to corporate sustainability: Moving the agenda forward in Asia and the Pacific*, 1-102, Bangkok: United Nations publication.

- Aboka, EY, Cobbina, SJ & Doke, AD. 2018. Review of environmental and health impacts of mining in Ghana. *Journal of Health and Pollution*, 8(17): 43–52. 12/97.18 doi: 10.5696/2156-9614-8.17.43.
- Abraham, EM, Asor, V, Torviawu, F, Yeboah, H & Laryea, F. 2018. Public perception of corporate social responsibility of AngloGold Ashanti in Obuasi Municipality, Ghana. *Social Responsibility Journal*, 14(3): 485–500. doi: 10.1108/SRJ-08-2016-0149.
- Abrahamsson, L & Johansson, J. 2006. From grounded skills to sky qualifications: A study of workers creating and recreating qualifications, identity and gender at an underground iron ore mine in Sweden. *Journal of Industrial Relations*, 48(5): 657-676.
- Acheampong, E. 2004. *Impact assessment of mining activities by Ashanti Gold Fields-Bibiani Limited on the environment and socio-economic development Bibiani*. Masters Dissertation, Faculty of Social Sciences, Kwame Nkrumah University of Science and Technology, Kumasi.
- Adhikari, BK. 2016. Causal effect of analyst following on corporate social responsibility. *Journal of Corporate Finance*, 41(c):201-216.
- Adjei, S, Oladejo, NK & Adetunde, IA. 2012. The impact and effect of illegal mining (galamsey) towards the socio-economic development of mining communities: A case study of Kenyasi in the Brong Ahafo Region. *International Journal of Modern Social Sciences*, 1(1): 38-55.
- Adom, PK. 2011. Electricity Consumption-Economic growth Nexus: The Ghanaian Case. *International Journal of Energy Economics and Policy*, 1(1):18-31.
- Adriana, EA. 2016. *Delivering the 2030 Agenda for Sustainable Development: The role of the UN development system in Middle-Income Countries*. Adriana Erthal AbdenurIgarapé Institute, Rio de Janeiro.
- African Union, Economic Commission for Africa, African Development Bank & United Nations Development Programme. 2017. *Africa Sustainable Development Report: Tracking Progress on Agenda 2063 and the Sustainable Development Goals*. Addis Ababa: Economic Commission for Africa.

[https://www.uneca.org/sites/default/files/PublicationFiles/en\\_agenda2063\\_sdg-web.pdf](https://www.uneca.org/sites/default/files/PublicationFiles/en_agenda2063_sdg-web.pdf). Accessed on 21/05/2018.

- African Union. 2016 *MDGs to Agenda 2063 / SDGs Transition Report 2016*. Addis  
Baba: Economic Commission for Africa.
- Aguilera, RV, Rupp, DE, Williams, CA & Ganapathi J. 2007. Putting the S back in corporate social responsibility: a multi-level theory of social change in organizations. *Academy of Management Review*, 32: 836–863.
- Aguinis H & Glavas A. 2012. What we know and don't know about corporate social responsibility, A review and research agenda. *Journal of Management*, 38(4):932–968.
- Akabzaa, T & Darimani, A. 2001. Impact of mining sector investment in Ghana: A study of the Tarkwa mining region. *Third World Network*, 11(2) :47-61.
- Akabzaa, T, Ofei-Aboagye, E, Thompson, N, Al-Hassan, S & Ayamdo, C. 2004. *Putting miners first: understanding the livelihoods context of small-scale and artisanal mining in Ghana*. Prepared for the Centre for Development Studies, University of Wales, Swansea, Wales, UK.
- Alam, M & Nickson, A. (Eds.). 2006. *Managing change in local governance*. London: Common wealth Secretariat.
- Albdour, AA & Altarawneh, II. 2012. Corporate social responsibility and employee engagement in Jordan. *International Journal of Business and Management*, 7(16):89.
- Albertí, P, Sañudo, C, Bahamonde Rionda, A, Olleta, JL, Panea, B, Goyache, F & Fernández, I. 2002. Spectrophotometric characterisation of colour classification system of beef meat. In *Acts of 48th International Congress of Meat Science and Technology*, 2.
- Alemu Kesto, D. 2017. The impact of corporate social responsibility practices on financial performance of banking sector in Ethiopia. *Global Journal of Management and Business Research*, 17(1-D)

- Ali, AJ & Al-Aali, A. 2012. Corporate social responsibility in Saudi Arabia. *Middle East Policy*, 19(4): 40-53.
- Almatrooshi, SS, Hussain, M & Ajmal, MM. 2017. The role of public policies in promoting corporate social responsibility. *International Journal of Public Sector Performance Management*, 3(4): 398-415.
- Altman, BW & Vidaver-Cohen, D. 2000. Corporate citizenship in the new millennium: Foundation for an architecture of excellence. *Business and Society Review*, 105(1):145-168.
- Aman, A, Jr. 2001. Privatization and the democracy problem in globalization: Making markets more accountable through administrative law. *Fordham Urban Law Journal*, 28: 1477-1506.
- Amankwah, RK & Anim-sackey, C. 2004. Strategies for sustainable development of the small-scale gold and diamond mining industry of Ghana, 29(2003):131–138. <http://doi.org/10.1016/j.resourpol.2004.07.002>. Accessed on 25/10/2016
- Ampofo, AA. 2014. *Gender and society in Africa: An introduction*. Accra: Sub-Saharan Publishers.
- Anders, G, Gramm, WP, Maurice, SC & Smitherson, CW. 1978. *Investment effects on the mineral industry of tax and environmental policy changes: A simulation model, mineral policy*. Background Paper No 5. Minerals Resources. Toronto: Ontario, Ministry of Natural Resources
- Andrews, N. 2016. Challenges of corporate social responsibility (CSR) in domestic settings: An exploration of mining regulation vis-à-vis CSR in Ghana. *Resources Policy*, 47:9-7
- Andriof, J & M. McIntosh (eds.). 2001. Perspectives on Corporate Citizenship (Greenleaf, Sheffield, UK). *Journal of Service Science and Management*, 2 (4) :53-65
- AngloGold Ashanti. 2011. *Report to Society*. AngloGold Ashanti, Obuasi Municipality. [https://thevault.exchange/?get\\_group\\_doc=143/1502871815-2011-2012CommunityReport.pdf](https://thevault.exchange/?get_group_doc=143/1502871815-2011-2012CommunityReport.pdf) Accessed on 17/05/2017

- AngloGold Ashanti. 2012. *Report to Society*. AngloGold Ashanti, Obuasi Municipality. [https://thevault.exchange/?get\\_group\\_doc=143/1502871815-2012-2013CommunityReport.pdf](https://thevault.exchange/?get_group_doc=143/1502871815-2012-2013CommunityReport.pdf) Accessed on 17/05/2017
- AngloGold Ashanti. 2013. *Report to Society*. AngloGold Ashanti, Obuasi Municipality. [https://thevault.exchange/?get\\_group\\_doc=143/1502871815-2013-2014CommunityReport.pdf](https://thevault.exchange/?get_group_doc=143/1502871815-2013-2014CommunityReport.pdf) Accessed on 17/05/2017
- AngloGold Ashanti. 2014. *Report to Society*. AngloGold Ashanti, Obuasi Municipality. [https://thevault.exchange/?get\\_group\\_doc=143/1502871815-2014-2015CommunityReport.pdf](https://thevault.exchange/?get_group_doc=143/1502871815-2014-2015CommunityReport.pdf) Accessed on 17/05/2017
- AngloGold Ashanti. 2015. *Report to Society*. AngloGold Ashanti, Obuasi Municipality. [https://thevault.exchange/?get\\_group\\_doc=143/1502871815-2015-2016CommunityReport.pdf](https://thevault.exchange/?get_group_doc=143/1502871815-2015-2016CommunityReport.pdf) Accessed on 17/05/2017
- AngloGold Ashanti. 2016. *Report to Society*. AngloGold Ashanti, Obuasi Municipality. [https://thevault.exchange/?get\\_group\\_doc=143/1502871815-2016-2017CommunityReport.pdf](https://thevault.exchange/?get_group_doc=143/1502871815-2016-2017CommunityReport.pdf) Accessed on 17/08/2017
- AngloGold Ashanti. 2017. *Report to Society*. AngloGold Ashanti, Obuasi Municipality. [https://thevault.exchange/?get\\_group\\_doc=143/1502871815-2017-2018CommunityReport.pdf](https://thevault.exchange/?get_group_doc=143/1502871815-2017-2018CommunityReport.pdf) Accessed on 17/11/2018
- AngloGold Ashanti. 2017. *Sustainable Development Report*. AngloGold Ashanti, Obuasi Municipality. <http://www.aga-reports.com/17/sd#highlights> Accessed on 17/11/2018
- Anin, H. 1994. *Gold mining in the Gold Coast*. Oxford: Oxford University Press.
- Anku-Tsedde, O & Deffor, EW. 2014 Corporate Responsibility in Ghana: An Overview of Aspects of the Regulatory Regime. *Business and Management Research*, 3(2): 31–41.
- Appiah, H. 1998. Organization of small-scale mining activities in Ghana. *Journal of the Southern African Institute of Mining and Metallurgy*, 98(7): 307-310.
- Aramburu, CE. 2006. Cajamarca: El Proceso Demografico. Presented at Conferencias: Contribuciones para una vision del desarrollo de Cajamarca. Retrieved June 30, 2006, from <http://www.losandes.org.pe/descargas/2006/poblacion.pdf>

- Aras, G & Crowther, D. 2008. Governance and sustainability: An investigation into the relationship between corporate governance and corporate sustainability, *Management Decision*, 46(3): 433-448. <https://doi.org/10.1108/00251740810863870>. Accessed on 17/11/2018
- Arimah, BC. 2004. Poverty Reduction and Human Development in Africa. *Journal of Human Development*, 5: 399–415.
- Arnstein, SR. 1969. A ladder of citizen participation. *Journal of the American Institute of Planners*, 35(4):216-224.
- Aruquipa, JA. 2005. Five centuries with no change. *Latinamerica Press*, 37(2): 10-11.
- Aryee, B. 2003. *Retrospective on the Ghana experience: Overview of artisanal mining and its regulation in Ghana*. In presentation at the 3rd Annual General Meeting of the World Bank Communities and Small-Scale Mining Programme, Elmina, Ghana.
- Aryee, BN. 2001. Ghana's mining sector: Its contribution to the national economy. *Resource Policy*, 27(2): 61-75.
- Asiedu, JK. 2013. Technical report on reclamation of small scale surface mined lands in Ghana: a landscape perspective. *American Journal of Environmental Protection*, 1(2):28-33.
- Asmeri, R, Alvionita, T & Gunardi, A. 2017. CSR disclosures in the mining industry: Empirical evidence from listed mining firms in Indonesia. *Indonesian Journal of Sustainability Accounting and Management*, 1(1): 16-22.
- Aubynn, T. 2012. *Mining and sustainable development: The case of Ghana*. The Ghana Chamber of Commerce: Retrieved from at <http://im4dc.org/wp-content/uploads/2013/07/Mining-and-Sustainable-Development-Ghana.pdf> Accessed on 10/06/2019
- Auty, RM. 2007. Natural resources, capital accumulation and the resource curse. *Ecological Economics*, 61(4): 627-634.
- Awudi, GB. 2002. *The role of foreign direct investment (FDI) in the mining sector of Ghana and the environment*. In Conference on Foreign Direct Investment and the Environment, OECD, Paris.

- Baah, A. 2005. Assessing Labour and Environmental Standards in South African Multinational Companies in the Mining Industry in Africa: A case of Gold Fields Ghana. (In Pillay, D (ed) Mining Africa, comprehensive report on south African MNCs labour and social performance) :176-179.
- Backman, J. (Ed.). 1975. *Social responsibility and accountability*. New York: University Press.
- Bantekas, I. 2004. Corporate social responsibility in international law. *Boston University International Law Journal*, 22:309.
- Bauman, CW & Skitka, LJ. 2012. Corporate social responsibility as a source of employee satisfaction. *Research in Organizational Behavior*, 32: 63-86.
- Baumberg, B, Cuzzocrea, V, Morini, S, Ortoleva, P, Disley, E, Tzvetkova, M & Beccaria, F. 2014. Corporate Social Responsibility. *The British Journal of Sociology*, 68(2): 254-272.
- Bendheim, CL, Waddock, SA & Graves, SB. 1998. Determining best practice in corporate-stakeholder relations using data envelopment analysis: An industry-level study. *Business & Society*, 37(3): 306-338.
- Benya, A. 2009. Women in mining: A challenge to occupational culture in mines. Doctoral dissertation, University of the Witwatersrand, Johannesburg.
- Bester, P., 2011. *An Environmental Analysis of Cycling South Africa* (Doctoral dissertation, University of South Africa).
- Berke, PR & Conroy, MM. 2000. Are we planning for sustainable development? An evaluation of 30 comprehensive plans. *Journal of the American Planning Association*, 66(1): 21-33.
- Bertezene, S, Vallat, D & Martin, J. 2014. *An overview of the main strategies and approaches to CSR*. In Papadimitriou, A, 2017. December. Toulon-Verona Conference Excellence in Services 2008-2016: Primary highlights of the best papers. In Toulon-Verona Conference' Excellence in Services.
- Bichta, C. 2003. *Corporate social responsibility: A role in government policy and regulation?* Bath, UK: Jan Marchant.



- Biney, K. 1998. The Mining Sector-Too Much Concession. *Business Watch*, 2(1).
- Bishop, E. 2014. Critical literacy: Bringing theory to praxis. *Journal of Curriculum Theorizing*, 30(1):51-63
- Blowfield, M & Frynas, JG. 2005. "Setting new agendas: critical perspectives on Corporate Social Responsibility in the developing world", *International Affairs*, 8(99): 499-513.
- Blowfield, M. 2005. Corporate Social Responsibility - The Failing Discipline and why it Matters for International Relations. *International Relations*, 19(2): 173-191.
- Boakye, BB et al. 2012. 'Organizational Antecedents of a Mining Firm's Efforts to Reinvent Its CSR: The Case of Golden Star Resources in Ghana', *Business and Society Review*. 116: 467-507.
- Boakye, D, Dessus, S, Foday, Y.& Opong, F. 2012. *Investing the Mineral Wealth in Development Assets: Ghana, Liberia and Sierra Leone*. Policy research working paper. Washinton, DC: World Bank.
- Boon, AJ. 2009. CSR in the Mineral Exploration and Mining Industry-Perspectives on the role of 'home' and 'host' Governments. Masters Dissertation, University of Ottawa.
- Boon, EK & Ababio, F. 2009. *Corporate social responsibility in Ghana: Lessons from the mining sector*. In 29th annual conference of the international association for impact assessment. Accra: Accra International Conference Centre.
- Boone, HN & Boone, DA. 2012. Analyzing Likert Data. *The Journal of Extension*, 50 (2):1-5. <https://joe.org/joe/2012april/tt2.php>. Accessed on 29/01/2018
- Borza, A & Mitra, C. 2010. The role of corporate social responsibility in social entrepreneurship. *Management & Marketing*, 5: 3-6
- BRASS Centre. 2007. *History of corporate social responsibility and sustainability*. [http://www.brass.cf.ac.uk/uploads/History\\_L3.pdf](http://www.brass.cf.ac.uk/uploads/History_L3.pdf). Accessed on 19/07/2019.
- Brundtland, GH. 1987. *Our Common Future: Report of the World Commission on Environment and Development*. Retrieved from: <https://sustainabledevelopment.un.org/content/documents/5987our-common-future.pdf>. Accessed on 20/09/2017

- Bryant, L & Jaworski, K. 2011. *Gender, embodiment and place: The gendering of skills shortages in the Australian mining and food and beverage processing industries*. London: SAGE Publications.
- Bryceson, DF & Jønsson, JB. 2010. Gold digging careers in rural East Africa: Small-scale miners' livelihood choices. *World Development*, 38(3): 379-392.
- Bryman, A. 2006. Integrating quantitative and qualitative research: how is it done? *Qualitative Research*, 6(1): 97-113.
- Bulte, E, Damania, R & Deacon, R. 2005. Resource abundance, poverty and development: An empirical assessment. *World Development*, 33:1029-54.
- Caetano, N.S., Mata, T. M., Martins, A. A., Felgueiras, M. C., (2017). New Trends in Energy Production and Utilization. *Energy Procedia* 2017, 107, pp. 7-14.
- Cahyandito, MF. 2011. *Accelerating the achievement of Millennium Development Goals (MDGs) through corporate social responsibility (CSR): An actual discussion in Indonesia and Germany*. Working Paper, Albert-Ludwig-Universität Freiburg, Institut für Forstökonomie, No. 57.
- Campbell, C. 2000. Selling sex in the time of AIDS: The psycho-social context of condom uses by sex workers on a Southern African mine. *Social Science and Medicine*, 50(4): 479-494.
- Campbell, S. 1996. Green cities, growing cities, just cities: Urban planning and the contradictions of sustainable development. *Journal of the American Planning Association*, 62(3): 296-312.
- Carroll, AB. 1979. A three-dimensional conceptual model of corporate social performance. *Academy of Management Review*, 4:497-506.
- Carroll, AB. 1994. Social issues in management research. *Business and Society*, 33(1): 5-25.
- Carroll, AB. 1991. The pyramid of corporate social responsibility: Toward the moral management of organizational stakeholders. *Business Horizons*, 34(4): 39-48.

- Carroll, AB. 1999. Corporate social responsibility: Evolution of a definitional construct. *Business & Society*, 38(3): 268-295.
- Carroll, AB & Shabana, KM. 2010. The business case for corporate social responsibility: a review of concepts, research and practice. *International Journal of Management Reviews*, 12 (1): 85–105.
- Chandler, D. 2019. *Strategic corporate social responsibility: Sustainable value creation*. Thousand Oaks: SAGE Publications Incorporated.
- Chandler, D & Werther Jr, WB. 2013. *Strategic corporate social responsibility: Stakeholders, globalization, and sustainable value creation*. New York: Sage Publications.
- Chatterjee, KK. 1993. *An introduction to mineral economics*. New Delhi: Willey Eastern Ltd.
- Chen, T, Dong, H & Lin, C. 2019. Institutional shareholders and corporate social responsibility. *Journal of Financial Economics*, 90(1), 84-103.
- Chimonyo, GR, Mungure, S & Scott, PD. 2016. The social, economic and environmental implications of diamond mining in Chiadzwa. [http://www.crdzim.com/crd\\_implicatns\\_diamond\\_ming\\_chiadzwa\\_130416.pdf](http://www.crdzim.com/crd_implicatns_diamond_ming_chiadzwa_130416.pdf)  
Accessed on 21/06/2018
- Christian Aid. 2004. *Behind the Mask. The Real Face of Corporate Social Responsibility*. Christian Aid, United Kingdom
- Costantini, V., & Monni, S. 2005. Sustainable Human Development for European Countries. *Journal of Human Development*, 6(3), 329-351.
- Corbett, EL, Churchyard, GJ, Clayton, TC, Williams, BG, Mulder, D, Hayes, RJ & De Cock, KM. 2000. HIV infection and silicosis: the impact of two potent risk factors on the incidence of mycobacterial disease in South African miners. *Aids*, 14(17): 2759-2768.
- Cramer, J. 2005. Applying international standards and guidelines on corporate social responsibility: An action plan. *Environmental Quality Management*, 14(3): 71-77.
- Creswell, JW. 2013. *Qualitative Inquiry and Research Design: Choosing among Five Approaches* (3rd ed.). Thousand Oaks, CA : Sage publications.

- Creswell, JW. 2014. *Qualitative Inquiry & Research Design: Choosing among Five Approaches* (4th Ed.). Thousand Oaks, CA: Sage Publications.
- Creswell, JW & Clark, VLP. 2017. *Designing and conducting mixed methods research*. Thousand Oaks, CA : Sage publications
- Creswell, JW & Creswell, JD. 2017. *Research design: Qualitative, quantitative, and mixed methods approaches*. Thousand Oaks, CA : Sage publications.
- Creswell, JW & Poth, CN. 2007. Philosophical, paradigm, and interpretive frameworks. *Qualitative inquiry and research design: Choosing among five approaches*. 2(5) :15-34.
- Creswell, JW. 2014. *Research design: qualitative, quantitative, and mixed methods approaches*. (4th Ed.). Thousand Oaks, CA: Sage Publications
- Crotty, M. 1998. *The foundations of social march: Meaning and perspective in the research process*. In Creswell JW. *Research Design: Qualitative, Quantitative. and Mixed Methods Approaches*. 2nd edition, Sage Publications, London.
- Crouch M & McKenzie H. 2006. The logic of small samples in interview-based qualitative research. *Social Science Information*,45(4):483-499 DOI: 10.1177/0539018406069584. Accessed on 20/05/2018
- Dahling, JJ, Chau, SL & O'Malley, A. 2012. Correlates and consequences of feedback orientation in organizations. *Journal of Management*, 38(2) : 531-546.
- Damon, WA. 2013. *Strategic diversity leadership: Activating change and transformation in higher education*. Stylus Publishing, Sterling.
- Danyo, G & Osei-Bonsu, A. 2016. Illegal small-scale gold mining in Ghana: A threat to food security. *Journal of Food Security*, 4(5): 112-119.
- Davids, J. 1993. The Transformation and Successful Development of Small -Scale MiningEnterprises in Developing Countries. *Journal of Economics*, 2(1): 33-45.

- Davis, GA & Tilton, JE. 2002. *Should developing countries renounce mining? A perspective on the debate*. Report prepared for the International Council on Mining and Metals (ICMM). London: ICMM.
- Davis, GA & Tilton, JE. 2005. The resource curse. *Natural Resources Forum*, 29(3): 233-242.
- Davis, K. 1960. Can business afford to ignore social responsibilities? *California Management Review*, 2(3): 70-76.
- Davis, K. 1973. The case for and against business assumption of social responsibilities. *Academy of Management Journal*, 16:312–322.
- Dawson, P. 2003. Organisational change stories and management research: Facts or fiction. *Journal of Management & Organization*, 9(3): 37-49.
- De Jong, MD & Van Der Meer, M. 2017. How does it fit? Exploring the congruence between organizations and their corporate social responsibility (CSR) activities. *Journal of Business Ethics*, 143(1): 71-83.
- De Neubourg, C & Weigand, C. 2000. Social policy as social risk management. *Innovation: The European Journal of Social Science Research*, 13(4): 401-412.
- Deneulin, S. 2018. Integral Human Development through the Lens of Amartya Sen's Capability Approach and a Faith Community at the Latin American Urban Margins.
- De Waal, AA & Orcotoma Escalante, G. 2011. Does the application of corporate social responsibility support a high performance organisation in achieving better results? The case of mining multinationals in Peru. *International Journal of Sustainable Strategic Management*, 3(1): 33-49.
- Department for International Development. 2003. DFID and Corporate Social Responsibility. <http://www.dfid.gov.uk/pubs/files/corporate-social-resp.pdf> Accessed on 11/04/2018
- Devenin, V & Bianchi, C. 2018. Soccer fields? What for? Effectiveness of corporate social responsibility initiatives in the mining industry. *Corporate Social Responsibility and Environmental Management*, 25(5): 866-879.

- Diao, X., Cossar, F., Housson, N., Kolavalli, S., 2014. Mechanization in Ghana: emerging demand and the search for alternative supply models. *Food Policy* 48, pp. 168-181.
- Di John, J. 2010. The 'resource curse': Theory and evidence. *Elcano Newsletter*, (72) 9.
- Donaldson, T & Dunfee, TW. 1994. Towards a unified conception of business ethics: Integrative social contracts theory. *Academy of Management Review*, 19: 252-284.
- Donaldson, T & Preston, L. 1995. The stakeholder theory of the corporation: Concepts, evidence, and implications. *The Academy of Management Review*, 20(1):65-91. <http://www.jstor.org/stable/258887>. Accessed on 16/09/2018
- Doucine, M. 2012. The second life of the notion of stakeholders in international standards on CSR. *Review of Responsible Organization*, 7(1): 43-52.
- Douglas, A, Doris, J & Johnson, B. 2004. Corporate social reporting in Irish financial institutions. *The TQM Magazine*, 16(6): 387-395.
- Drasch, G, Bose-O'Reilly, S, Beinhoff, C, Roider, G & Maydl, S. 2001. The Mt. Diwata study on the Philippines 1999-- assessing mercury intoxication of the population by small scale gold mining. *Science of Total Environment*, 267(1-3):151-68.
- Dupire, M & M'Zali, B. 2018. CSR strategies in response to competitive pressures. *Journal of Business Ethics*, 148(3): 603-623.
- Dzimiri, GT. 2007. *Business ethics, social responsibility and AIDS in workplaces in Zimbabwe*, Doctoral dissertation, Loma Linda University.
- Ebner, D & Baumgartner, RJ. 2006. The relationship between sustainable development and corporate social responsibility. *Corporate Responsibility Research Conference* 4(59).
- Editorial Board of Beijing Annals. 2000. *Annals of Beijing Road Transportation*. Beijing: Beijing Press (in Chinese)
- Eilbirt, H & Parket, IR. 1973. The practice of business: The current status of corporate social responsibility. *Business Horizons*, 16(4): 5-14.
- Eisenhardt, KM & Graebner, ME. 2007. Theory building from cases: opportunities and challenges. *Academy of Management Journal*, 50 (1): 25-32.

- Elkington J. 1998. *Cannibals with Forks. Gabriola Island BC Canada: New Society Publishers.*
- Elliott, R. 2000. Rigor in psychotherapy research: The search for appropriate methodologies. Unpublished paper, Department of Psychology, University of Toledo, USA.
- Elliott, WB, Grant, SM & Rennekamp, KM. 2017. How Disclosure Features of Corporate Social Responsibility Reports Interact with Investor Numeracy to Influence Investor Judgments. *Contemporary Accounting Research*, 34(3):1596-1621. <https://doi.org/10.1111/1911-3846.12302>
- European Commission, 2011. Commission Regulation (EU) No 10/2011 of 14 January 2011 on plastic materials and articles intended to come into contact with food. *Official Journal of the European Union*, 12: 1-89.
- Fashola, M, Ngole-Jeme, V & Babalola, O. 2016. Heavy metal pollution from gold mines: environmental effects and bacterial strategies for resistance. *International Journal of Environmental Research and Public Health*, 13(11): 1047.
- Fatawu, NA & Allan, A. 2014. Managing the impacts of mining on Ghana's water resources from a legal perspective. *JENRM*, I(3): 156-165
- Feeney, P. 1998. *The Human Rights Implications of Zambia Privatisation Programme*. In Addo, MK. (ed.). Human rights standards and the responsibility of transitional corporations, 1999. Dordrecht, Kluwer Law International.
- Fetters, MD & Molina-Azorin, JF. 2017. The Journal of Mixed Methods Research starts a new decade: The mixed methods research integration trilogy and its dimensions. *Journal of Mixed Methods*, 11(3):291-307
- Fetters, MD & Molina-Azorin, JF. 2019. Rebuttal—Conceptualizing integration during both the data collection and data interpretation phases: A response to David Morgan. *Sage Journals*, 13(1): 205-300
- Fontaine, M. 2013. Corporate social responsibility and sustainability: the new bottom line? *International Journal of Business and Social Science*, 4(4):26-31
- Fox, T. 2004. Corporate social responsibility and development: in quest of an agenda. *Development (Cambridge, England)*, 47 (3): 29–36

- Franik, T 2005. Problems of taking into account price and inflation changes in the assessment of mining investment effectiveness. *Economy of Mineral Materials*, 21 (1): 73-87.
- Frederick, WC. 1998. Moving to CSR4. *Business and Society*, 37(1), 40–60.
- Freeman, I & Hasnaoui, A. 2011. The Meaning of Corporate Social Responsibility: The Vision of Four Nations. *Journal of Business Ethics*, 100: 419-443. <http://dx.doi.org/10.1007/s10551-010-0688-6>. Accessed on 15/06/2018
- Freeman, RE & Philips, RA. 2002. Stakeholder Theory: A Libertarian Defence. *Business Ethics Quarterly*, 12(3):331–349.
- Freeman, RE, Martin, K & Parmar, B. 2007. Stakeholder capitalism. *Journal of Business Ethics*, 74(4): 303-314.
- Freeman, RE, Wicks, AC & Parmar, B. 2004. Stakeholder theory and the corporate objective revisited. *Organization Science*, 15(3) :364–369
- Friedman, A. L. Miles, S. 2002. Developing stakeholder theory. *Journal of Management Studies*, 39(1): 1-21.
- Friedman M. 2007. The Social Responsibility of Business Is to Increase Its Profits. In: Zimmerli WC, Holzinger M, Richter K. (eds) *Corporate Ethics and Corporate Governance*. Springer, Berlin, Heidelberg.
- Frimpong, AKD. 2000. *Chieftaincy, democracy and human rights in pre-colonial Africa: The case of the Akan system in Ghana*. In I. K. Odotei & A. K. Awedoba (Eds.), *Chieftaincy in Ghana: Culture, governance and development* (11–26). Accra: Sub-Saharan Publishers.
- Frynas, J.G. 2005. The false development promise of corporate social responsibility: evidence from multinational oil companies. *International Affairs*, 81(3): 581-598.
- Ganguly, S. 1999. The investor-state dispute mechanism (ISDM) and a sovereign's power to protect public health. *Colum. J. Transnat'l L.* 38: 113.
- Garriga, E & Mele, D. 2004. Corporate social responsibility theories: mapping the territory. *Journal of Business Ethics*, 53 (1–2): 51–71.



- Gasiński, T & Piskalski, G. 2010. *Sustainable business: Handbook for small and medium-sized enterprises*. Poland Ministry of Economy, Warsaw.
- Georges, RA & Jones, MO. 1995. *Folkloristics: An introduction*. Bloomington: Indiana University Press.
- Georgescu, G. 2016. *Patterns of corporate social responsibility in the Philippines: A case study of Japanese Companies operating in the Philippines*. Master's Dissertation, Osaka Jogakuin University Graduate School of International Collaboration and Coexistence in the 21<sup>st</sup> Century.
- Ghana Chamber of Mines. 1996. *Annual Report*. Accra: Ghana Chamber of Mines
- Ghana Chamber of Mines. 2011. *Annual Chamber of Mines Factoid Report 2011*. Accra, Ghana.
- Ghana Minerals Commission. 2007. *Developmental projects*. <http://www.ghana-mining.org/ghweb/en/ma/mincom/mcprojects.htm>. Accessed on 28/02/2018
- Ghana Statistical Service. 2013. *2010 Population & Housing Census Report: Millennium Development Goals in Ghana*. Accra-Ghana.
- Ghana Statistical Service. 2012. *2010 population and housing census: Summary report of final results*. Accra: Ghana Statistical Service.
- Ghana Statistical Service. 2013. *2010 Population & Housing Census: National Analytical Report*. Accra: Ghana Statistics Service.
- Ghana Statistical Service. 2018. *Multiple indicator cluster survey (MICS 2017/18)*. Survey Findings Report. Accra: Ghana Statistics Service.
- Ghebreyesus, TA. 2017. All roads lead to universal health coverage. *The Lancet Global Health*, 5(9): e839-e840.
- Gjoberg, M. 2009. The origin of corporate social responsibility: global forces or national legacies? *Socio-Economic Review*, 7(4): 605–37.
- Gjølborg, M. 2011. Explaining regulatory preferences: CSR, soft law, or hard law? Insights from a survey of Nordic pioneers in CSR. *Business and Politics*, 13(2):1-31.

- Gleick, PH. 1996. Basic water requirements for human activities: meeting basic needs. *Water International*, 21(2) 83-92.
- Godfrey, PC, & Hatch, NW. 2007. Researching corporate social responsibility: An agenda for the 21<sup>st</sup> Century. *Journal of Business Ethics*, 70(1): 87-98.
- Godfrey, PC. 2005. The relationship between corporate philanthropy and shareholder wealth: a risk management perspective. *Academy of Management Review*, 30 (4) :777–798.
- Goodpaster, KE. 2011. Corporate conscience. In *Handbook of spirituality and business* ( 342-348). London: Palgrave Macmillan,
- Gueye, D. 2001. *Small-scale mining in Burkina Faso*. International Institute for Environment and Development. London.
- Gylfason, T. 2001. Natural resources, education, and economic development. *European Economic Review*, 45(4-6): 847-859.
- Gylfason, T. & Zoega, G. 2003. Inequality and economic growth: Do natural resources matter?. *Inequality and Growth: Theory and Policy Implications*. 1: 255. Conches-Geneva, Switzerland: World Business Council for Sustainable Development.
- Habisch, A, Jonker, J, Wegner, M & Schmidpeter, R. (Eds). 2005. *Corporate social responsibility across Europe*. Berlin, Germany: Springer.
- Hamann, R. 2003. Mining companies' role in sustainable development: The 'why' and 'how' of corporate social responsibility from a business perspective. *Development Southern Africa*, 20(2): 237-254.
- Hanrahan, M & Dosu, BJ. 2017. The Rocky Path to Source Water Protection: A Cross-Case Analysis of Drinking Water Crises in Small Communities in Canada. *Water*, 9(6): 388.
- Harada, M, et al., 1999. Monitoring of mercury pollution in Tanzania: Relation between head hair mercury and health. *Science of Total Environment*, 227(2-3): 249-256
- Harris, JM. 2000. *Basic principles of sustainable development*. The Global Development and Environment Institute, Working paper 00-04. <http://ase.tufts.edu/gdae>. Accessed on 19/10/2018

- Harris, JM. 2001. *Macroeconomic policy and sustainability* (No. 1434-2016-118862).
- Heald, M. 1970. *Social responsibilities of business*. New Jersey: Transaction Publishers.
- Heath, MJ, Merefield, JR & Paithankar, AG. 1993. Environmental impact of mining in tropical forest. *Mining Environmental Management*, 1(3):20-21
- Herndon, NC, Fraedrich, J, Yeh, Q. 2001. An Investigation of Moral Values and the Ethical Content of the Corporate Culture: Taiwanese Versus U.S. Sales People. *Journal of Business Ethics*, 30(1):73-85 DOI: 10.1023/A:1006493907563.
- Hofstede, G & Hofstede, GJ. 2005. *Cultures and Organizations - Software of the Mind*. McGraw-Hill: New York
- Hertog, S. 2006. *The new corporatism in Saudi Arabia: limits of formal politics*. In Khalaf, A, & Luciani, G. 2006. Constitutional Reform and Political Participation in the Gulf. Gulf Research Center :241-275
- Hilson, G. 2001. A contextual review of the Ghanaian small-scale mining industry. *Mining, Minerals and Sustainable Development*, **76**:1-29.
- Hockerts, NK. 1993. *Sustainability innovations ecological and social entrepreneurship and the management of antagonistic assets*. Copenhagen: CBS Center for Corporate Social Responsibility.
- Hockerts, NK, 2003. *Sustainability innovations ecological and social entrepreneurship and the management of antagonistic assets*. Copenhagen: CBS Center for Corporate Social Responsibility.
- Hohnen, P & Potts, J. 2007. *Corporate social responsibility: An implementation guide for business*. Winnipeg: International Institute for Sustainable Development Institut international du developement durable.
- Holme, R & Watts, P. 2000. *Corporate social responsibility: making good business sense*. The World Business Council for Sustainable Development (WBCSD).
- Hopkins, M. 2003. *The planetary bargain: corporate social responsibility matters*. London: Earthscan Publications Ltd.

- Hopkins, M. 2004. Corporate social responsibility: an issues paper (Policy integration Department, World Commission on Social Dimension of Globalization). *International Labour Office Geneva Working Paper*, 27.
- Horrigan B. 2007. 21<sup>st</sup> Century corporate social responsibility trends: an emerging comparative body of law and regulation on corporate responsibility, governance, and sustainability. *Macquarie Journal of Business Law*. 4: 85- 122.
- Howard, G, Bartram, J, Water, S & World Health Organization. 2003. *Domestic water quantity, service level and health* (No. WHO/SDE/WSH/03.02). Geneva: World Health Organization.
- Hurley, RE. 2009. *Studying sustainability in urban environments*. Masters dissertation, Urban Affairs & Public Policy Faculty, University of Delaware, USA.
- Hilson, G. 2001. A contextual review of the Ghanaian small-scale mining industry. *Mining, Minerals and Sustainable Development*, 76: 1-29
- Høgh-Jensen, H., Oelofse, M., & Egelyng, H., 2010. New Challenges in Underprivileged Regions Call for People-Centered Research for Development. *Society and Natural Resources*, 23(9), 908-915.
- Idemudia, U. 2007. Corporate Partnerships and Community Development in the Nigerian Oil Industry: Strengths and Limitations. United Nations Research Institute for Social Development Markets, *Business and Regulation Programme Paper 2*, 131–153.
- Innis, H. 1930. *The fur trade in Canada*. New Haven: Yale University Press.
- Institute of Statistical, Social, and Economic Research. 1998. *The State of the Ghanaian Economy in 1998*. University of Ghana, Legon.
- International Finance Corporation. 2012. *IFC Performance Standards on Environmental and Social Sustainability*. Geneva.
- International Finance Co-Operation-World Bank Group. 2013. Sustainable and Responsible Mining in Africa: A Getting Started Guide. <https://www.ifc.org/wps/wcm/connect/dfaac38043fea19b8f90bf869243d457/Sustainable+Mining+in+Africa.pdf?MOD=AJPERES>. Accessed on 23/08/2016.

- International Labour Organisation. 1999. *Labour and social issues in small-scale mines*. Report for Discussion at the Tripartite Meeting on Labour and Social Issues in Small-Scale Mines. Geneva: International Labour Office
- Ioannou, I & Serafeim, G. 2010. *What drives corporate social performance?: International evidence from social, environmental and governance sources*. Cambridge, MA: Harvard Business School.
- Ismail, M. 2009. Corporate social responsibility and its roles in community development: An international perspective. *Journal of International Social Research*, 2(9): 200-209.
- Istudor, I., Filip, F.G., 2014. The Innovator Role of Technologies in Waste Management towards the Sustainable Development. *Procedia Economics and Finance* 8, 420-428.
- Jamali, D & Karam, C. 2018. Corporate Social Responsibility in Developing Countries as an Emerging Field of Study. *British Academy of Management*, 20(1): 32-61
- Jamali, D & Mirshak, R. 2007. Corporate social responsibility (CSR): Theory and practice in a developing country context. *Journal of Business Ethics*, 72(3) :243-262.
- Jamali, D & Neville, B, 2011. Convergence versus divergence of CSR in developing countries: An embedded multi-layered institutional lens. *Journal of Business Ethics*, 102(4):599-621.
- Jamali, D, Karam, C & Blowfield, M. 2015. *CSR in Developing Countries: Towards a Development-Oriented Approach*. London: Greenleaf Publishing
- Jariwala, H.J., Syed, H.S., Pandya, M.J. and Gajera, Y.M., 2017. Noise Pollution & Human Health: A Review. *Indoor and Built Environment*, pp.1-4.
- Jenkins, H. 2004. Corporate social responsibility and the mining industry: Conflicts and constructs. *Corporate Social Responsibility and Environmental Management*, 11(1): 23-34.
- Jenkins, R. 2005. Globalization, corporate social responsibility and poverty. *International Affairs*, 81(3): 525-540.

- Jenning, R. 2000. *Participatory Development as New Paradigm: The Transition of Development Professionalism*. Community Based Reintegration and Rehabilitation in Post-Conflict Settings Conference. Washington DC, USA.
- Jennings, NS. 1993. *Small-scale mining in developing countries: Addressing labour and social issues*. Guidelines for the Development of Small/Medium-Scale Mining. United Nations: New York
- Johnson, HL. 1971. *Business in contemporary society: framework and issues*. Co Belmont, Calif: Wadsworth Publishing.
- Katamba, D, et al. 2012. Corporate social responsibility management in Uganda: Lessons, challenges, and policy implications. *International Journal of Social Economics*, 39(6): 375–90. Doi: 10.1108/03068291211224892. Accessed on 7/02/2018
- Katz, D & Kahn, RL. 1978. *The social psychology of organizations*. 2: 528. New York: Wiley.
- Khan, Z, Ferguson, D & Pérez, A. 2015. Customer responses to CSR in the Pakistani banking industry. *International Journal of Bank Marketing*. 33(4): 471-493.
- Kilian, JM. 2008. Addressing the social impact of mining activities on communities for sustainability: environmental. *Civil Engineering Siviele Ingenieurswese*. 16(8): 22-24.
- Kimura, F, Kohama, H. & Ranis, G. 1998. Resource Richness and Economic Development in Newly-Industrialized Economies: East Asia versus Latin America. In *The Institutional Foundations of East Asian Economic Development*: 144-178. London: Palgrave Macmillan.
- Koestoer, YT. 2007. Corporate social responsibility in Indonesia. In *seminar on good corporate and social governance in promoting ASEAN's regional integration* 17.
- Kolb, TE, Wagner, MR & Covington, WW. 1994. Utilitarian and ecosystem perspectives: Concepts of forest health. *Journal of Forestry*, 92(7): 11.
- Kumar, A. 2013. Indian economy since independence: Persisting colonial disruption. *Vikalpa*, 38(3): 151.

- Kumar, R., Murphy, D. F. & Balsari, V. 2001. *Altered images: the 2001 state of corporate responsibility in India poll. Understanding and encouraging corporate responsibility in South Asia: update one*. Tata Energy Research Institute, New Delhi.
- Kwame, E. 2007. *Women in mining: The minority concerns; threats, challenges and opportunities*. 1<sup>st</sup> International conference on human resources management in the mining industry. Tarkwa Gold Mines.
- Labuschagne, C. & Brent, A. 2006. Social indicators for sustainable project and technology life cycle management in the process industry. *The International Journal of Life Cycle Assessment*, 11(1): 3-15.
- Lantos G. 2002. The ethicality of altruistic corporate social responsibility. *Journal of Consumer Marketing*, 19(3): 205-349.
- Lantos, GP. 2001. The boundaries of strategic corporate social responsibility. *Journal of Consumer Marketing*, 18(7): 595-632.
- Lederman, D & Maloney, W. 2002. *Open questions about the link between natural resources and economic growth: Sachs and Warner revisited*. Working Paper No. 141, Central Bank of Chile.
- Lee EP & James EP. 1981. Private Management and Public Policy. *California Management Review*, 23(3): 56-62
- Leedy, P & Ormrod, J. 2001. *Practical research*. Upper Saddle River, NJ: Merrill.
- Loew, T, Ankele, K, Braun, S & Clausen, J. 2004. *Significance of the CSR debate for sustainability and the requirements for companies*. Summary. Munster: Future e.V. and Institute for Ecological Economy Research GmbH (IO`W).
- Loewe, M. 2012. *Post 2015: How to Reconcile the Millennium Development Goals (MDGs)*. Bonn: Germany.
- Lyon, D. 2004. How can you help organizations change to meet the corporate responsibility agenda? *Corporate Social Responsibility and Environmental Management*, 11(3): 133-139.

- Mace, GM. et al. 2000. It's time to work together and stop duplicating conservation efforts. *Nature*, 405(6785): 393.
- MacKinnon, B. 2007. *Ethics: Theory and Contemporary Issues*. 5<sup>th</sup> edition. Belmont: Thomson/Wadsworth.
- Magai, PS & Márquez-Velázquez, A. 2011. *Tanzania's Mining sector and its implications for the country's development*. DAAD Partnership. Accessed on 21/01/2018.
- Malik, K. 2014. *Human Development Report 2014: Sustaining Human Progress: Reducing Vulnerabilities and Building Resilience*. United Nations Development Programme, New York.
- Mandurah, S, Khatib, J & Al-Sabaan, S. 2012. Corporate social responsibility among Saudi Arabian firms: An empirical investigation. *Journal of Applied Business Research*, 28(5) :1049.
- Mahajan, P. 2011. *Corporate social responsibility: a new wave in corporate governance*. SSRN 1840601. Accessed on 21/07/2017
- Mahama, P & Agalega, E. 2017. Assessing the Unit Committee Model in the Decentralization Programme of Ghana: The Case of the Eastern Region. *Journal of Pan African Studies*, 10(7):45-64.
- Maignan, I, Ferrell, OC & Ferrell, L. 2005. A stakeholder model for implementing social responsibility in marketing. *European Journal of Marketing*, **39**(9/10): 956-977.
- Maon, F, Lindgreen, A & Swaen, V. 2009. Designing and implementing corporate social responsibility: An integrative framework grounded in theory and practice. *Journal of Business Ethics*, 87:71-89.
- Margolis, JD, Walsh, JP. 2003. Misery loves companies: Rethinking social initiatives by business. *Administrative Science Quarterly*, 48(2): 268-305.
- Marshall, IE. 2001. A survey of corruption issues in the mining and mineral sector. *International Institute for Environment and Development*, 15:3-52.



- Materu, PN. 2007. *Higher education quality assurance in Sub-Saharan Africa: status, challenges, opportunities and promising practices* (No. 124). Geneva: World Bank Publications.
- Mazurkiewicz, P. 2004. *Corporate environmental responsibility: Is a common CSR framework possible*. Washington DC: World Bank.
- Mbendi. 2007. *African copper reports independent resource estimate for Thakadu copper-silver project*. Botswana: MBendi Information Services (Pty) Ltd., 2007. [http://www.mbendi.com/a\\_sndmsg/news\\_view.asp?PG=15&I=85525&M=O&CTRL=S](http://www.mbendi.com/a_sndmsg/news_view.asp?PG=15&I=85525&M=O&CTRL=S). Accessed on 15/12/2018
- McBarnet, D. 2009. *Corporate social responsibility beyond law, through law, for law*. University of Edinburgh School of Law. Working Paper No. 2009/03. <https://ssrn.com/abstract=1369305> or <http://dx.doi.org/10.2139/ssrn.1369305>. Accessed 19/11/2018
- Mchugh, P, Duane, S, Domegan CT. 2018. Protocols for Stakeholder Participation in Social Marketing Systems. *Social Marketing Quarterly*, 24(3):152450041876162. DOI: 10.1177/1524500418761626. Accessed on 19/12/2018.
- McGraw-Hill Ryerson Ltd. 2008. Corporate Social Responsibility: In Practice."— Presentation transcript. <https://slideplayer.com/slide/4844267/> Accessed on 30/06/2018.
- McMahon, G & Remy, F. (Eds.). 2001. *Large mines and the community: socioeconomic and environmental effects in Latin America, Canada, and Spain*. International Development Research Centre, Ottawa.
- McMahon, GJR & Moreira, S. 2014. *The contribution of the mining sector to socioeconomic and human development*. Extractive industries for development series. Washington DC: World Bank Group.
- McKibben, B. 2006. Hope vs hype. Mother Jones. [http://www.motherjones.com/news/feature/2006/11/hype\\_vs\\_hope.html](http://www.motherjones.com/news/feature/2006/11/hype_vs_hope.html). Accessed on 14/03/2018

- McWilliams, A & Siegel, D. 2001. Corporate social responsibility: A theory of the firm perspective. *Academy of Management Review*. 26(1): 117-127.
- Means, JL. & Hinchee, RE. 1994. *Emerging technology for bioremediation of metals*. Lewis: Boca Raton.
- Megai, PS & Marquez-Velazquez, A. 2011. *Mining Sector and its implications for country's development*. Berlin Working Papers on Money, Finance, Trade and Development.: 1-29.
- Mele, D. 2002. Not only Stakeholder Interests. The Firm Oriented toward the Common Good Notre Dame: University of Notre Dame Press.
- Mensah, AK, Mahiri, IO, Owusu, O, Mireku, OD, Wireko, I & Kissi, EA. 2015. Environmental impacts of mining: a study of mining communities in Ghana. *Science and Education*, 3(3): 81-94
- Mensah, V. 2009. The Role of Corporate Social Responsibility on Sustainable Development: A Case Study of the mining community in the Obuasi municipality. Master's dissertation, School of Graduate Studies, Agder University, Kristiansand, Norway.
- Mensah, HK. 2015. An exploratory study of corporate social responsibility practices among rural and community banks in Ghana. Doctoral thesis, School of Graduate Studies, Kwame Nkrumah University of Science and Technology, Kumasi.
- Michael, B. 2003. Corporate Social Responsibility in International Development: An Overview and Critique. *Corporate Social Responsibility and Environmental Management*, 10(3): 115-128
- Miles, RE, Miles G, Grant, S, Charles C & Hector O. 2009. The I-Form Organization. *California Management Review*, 35(2): 1-11. Available at SSRN: <https://ssrn.com/abstract=2749378>. Accessed on 15/08/201
- Miller, RL & Brewer, JD. 2003. *A-Z of Social Research*. London: Longman.
- Millon, D. 2011. Two models of corporate social responsibility. *Wake Forest Law Review*, 46:523.

- Minerals Commission and Environmental Protection Council. 1994. *Ghana's mining and environmental guidelines*. Accra: Minerals Commission and Environmental Protection Council.
- Ministry of Food and Agricultural. 2008. *Crop forecast and production for Obuasi municipality 2001-2006*. Unpublished.
- Mitchell, RK, Agle, BR & Wood, DJ. 1997. Towards a theory of stakeholder identification and salience: Defining the principle of who and what really counts. *Academy of Management Review*, 22(4): 853-886.
- Mitra, C & Borza, A. 2010. The role of corporate social responsibility in social entrepreneurship. *The Management and Marketing Challenges for Knowledge Society*, 5(2): 63-76.
- Miranda, M, et al. 2003. *Mining and critical ecosystems: Mapping the risks*. World Resources Institute, Washington, DC.
- Miranda, M, Chambers, D & Counmans, C. 2005. Framework for Responsible Mining: A Guide to evolving standards: 34-62
- Mohanty, CT. 2003. *Feminism without borders: Decolonizing theory, practicing solidarity*. Durham: Duke University Press.
- Moynihan, DP. 2007. Citizen participation in budgeting: Prospects for developing countries. *Participatory Budgeting*, 55-87.
- Mujtaba, BG & Cavico, FJ. 2013. Corporate wellness programs: implementation challenges in the modern American workplace. *International Journal of Health Policy and Management*, 1(3):193.
- Mujtaba, BG & Cavico, FJ. 2013. Corporate social responsibility and sustainability model for global firms. *Journal of Leadership, Accountability and Ethics*, 10(1): 58.
- Narh J. 2020. Ghana's mining communities are still not getting their just dues, *The Conversation*. <https://theconversation.com/ghanas-mining-communities-are-still-not-getting-their-just-dues-128638>. Accessed on 13/01/2020.

- Nelson, J & Prescott, D. 2003. *Business and the Millennium Development Goals: A framework for action*. London: International Business Leaders Forum.
- Neth, D., Kathy, J. W. and Silvia R., 2014. “Addressing the Technology Divides”. Critical Issues in Technology and SDGs. Briefing Paper: Science, Technology and Innovation (STI) 6<sup>th</sup> Session in the Open Working Group on SDGs. <http://sustainabledevelopment.un.org/content/documents/4673dano.pdf>
- Newell, P. 2005. Citizenship, accountability and community: the limits of the CSR agenda. *International Affairs*, 81(3): 541-557
- Noh, C., Kim I., Jang W., & Kim C. (2015). Recent Trends in Renewable Energy Resources for Power Generation in the Republic of Korea. *Resources*, 4, pp. 751-764; DOI:10.3390/resources4040751.
- Oblokuteye, KPH. 2010. The effects of illegal small-scale gold mining on the environment-A case study at gold hall galamsey site, Tarkwa, Ghana. Master’s Thesis, University of Mines and Technology, Tarkwa.
- Obuasi Municipal Assembly. 2010. District Medium Term Development Plan, 2010-2014, Ghana Statistical Service, Accra-Ghana.
- Obuasi Municipal Assembly, 2014. Obuasi District Medium Term Development Plan, (2014 - 2017)
- Odotei, IK & Awedoba, AK. 2006. Chieftaincy in Ghana: Culture. *Governance and Development*. 32(4):324- 700.
- Ofosu-Mensah, A. E., 2011, Gold Mining and the Development of Obuasi in Adansi, *African Journal of History and Culture*, Vol.3 (4), pp.
- Opoku M. P. Atim A. B., Mensah J., Badu J., Nduvi N. S., 2016. Impact of Mining in Obuasi Municipality in Ashanti Region of Ghana: An Assessment of Human Rights Concerns in Mining Communities. *Scholars Academic and Scientific Publishers*, (ISSN 2347-9493).

- Opoku-Antwi, L. 2010. Three Essays on Small Scale Gold Mining Operations in Ghana: An Integrated Approach to Benefit-Cost Analysis. Unpublished doctoral thesis, Department of Economics, Kwame Nkrumah University of Science and Technology, Kumasi.
- Osborn, D, Cutter, A & Ullah, F. 2015. *Universal Sustainable Development Goals: Understanding the Transformational Challenge for Developed Countries, stakeholderforum.sustainabledevelopment.un.org/content/document/1684SF\_SDG\_universality\_report\_May\_2015.pdf*. Accessed on 15/10/2016.
- O'Shannassy, T. 2003. Modern strategic management: Balancing strategic thinking and strategic planning for internal and external stakeholders. *Singapore Management Review*, 25(1):53
- Park, C & Wilding, M. 2014. An Exploratory Study on the Potential of Social Enterprise to Act as the Institutional Glue of Network Governance. *Social Science Journal*, 51(1): 120-129.
- Parliamentary Joint Committee on Corporations and Financial Services. 2005. *Parliamentary Joint Committee on Corporations and Financial Services Inquiry into Corporate Responsibility*. Submissions Received by the Committee.
- Pasricha, P, Singh, B & Verma, P. 2018. Ethical leadership, organic organizational cultures and corporate social responsibility: An empirical study in social enterprises. *Journal of Business Ethics*, 151(4) :941-958.
- Pedersen, ER. 2006. Introduction. In ER. Pedersen, & M. Huniche (Eds.), *Corporate Citizenship in Developing Countries*. New Partnership Perspectives: 7-25. Copenhagen: Copenhagen Business School Press.
- Peet, R & Hartwick, E. 2009. *Theories of development: Contentions, arguments. alternatives*. New York: The Guildford Press.
- Pegg, S. 2006. Mining and poverty reduction: Transforming rhetoric into reality. *Journal of Cleaner Production*, 14(3-4): 376-387.

- Peprah P., Nyonyu J., Ampomah S., Agyemang-Duah W., 2018. “A Review of the Triple Gains of Waste and the Way Forward for Ghana. *Journal of Renewable Energy*, Vol. 2018, Article ID 9737683,2018. <https://doi.org/10.1155/2018/9737683>
- Phillippi, J & Lauderdale, J. 2018. A guide to field notes for qualitative research: Context and conversation. *Qualitative Health Research*, 28(3): 381-388.
- Pinkston, T. S. & Carroll, A. B. 1994. Corporate citizenship perspectives and foreign direct investment in the US. *Journal of Business Ethics*, 13(3): 157-169.
- Pojani, D & Stead, D. 2015. Going Dutch? The export of sustainable land-use and transport planning concepts from the Netherlands. *Urban Studies*, 52(9):1558-1576.
- Population and Housing Census, 2010. District Analytical Report, Obuasi Municipality, Ghana Statistical Service 14th of October, 2014.
- Population Reference Bureau, 2013. World Population Data Sheet, <http://www.prb.org/Publications/Datasheets/2013/2013-worldpopulation-data-sheet.aspx> (assessed 25 August, 2020).
- Porter, M. & Kramer, M. 2006. Estrategia y sociedad. *Harvard Business Review*, 84(12):42-56.
- Post, J & Preston, LE. 2012. *Private management and public policy: The principle of public responsibility*. Stanford University Press.
- Power, TM 2002. *Digging to Development? A Historical Look at Mining and Economic Development*. An Oxfam America Report. [http://www.oxfamamerica.org/newsandpublications/publications/research\\_reports/art3576.htm](http://www.oxfamamerica.org/newsandpublications/publications/research_reports/art3576.htm) Accessed 29/08/2017
- Preston, LE & Post, JE. 1975. *Private management and public policy: The principle of public responsibility*. Englewood Cliffs, NJ: Prentice-Hall.
- Preston, LE & Post, JE. 1981. Private management and public policy. *California Management Review*, 23(3): 56-62.

- Prieto-Carron, M, Lund-Thomsen, P, Chan, A, Muro, ANA & Bhushan, C. 2006. Critical perspectives on CSR and development: what we know, what we don't know, and what we need to know. *International Affairs*, 82(5): 977-987.
- Purevjav, B. 2011. Artisanal and Small-Scale Mining: Gender and Sustainable Livelihoods in Mongolia. *Gendering the field: towards sustainable livelihoods for Mining Communities, 197–212*. Canberra: ANU Press.
- Purwanto, E, Sugiri, A & Novian, R. 2017. Determined Slum Upgrading: A Challenge to Participatory Planning in Nanga Bulik, Central Kalimantan, Indonesia. *Sustainability*, 9(7): 1261.
- Putnam, RD & Feldstein, L. 2009. *Better together: Restoring the American community*. New York: Simon and Schuster.
- Ramia, G. 2020. Governing the Work–Welfare Relationship. In *Governing Social Protection in the Long Term* (pp. 1-39). Palgrave Macmillan, Cham.
- Rahim, MM. 2013. Legal regulation of corporate social responsibility. *CSR, Sustainability, Ethics & Governance. DOI, 100007/ 978-3-642-40400-9*.
- Rahman, MM., Ng, JC & Naidu, R. 2009. Chronic exposure of arsenic via drinking water and its adverse health impacts on humans. *Environmental Geochemistry and Health*, 31(1): 189-200.
- Rahman, S. 2011. Evaluation of definitions: Ten dimensions of corporate social responsibility. *World Review of Business Research*, 1(1): 166-176.
- Rattan, RK, Datta, SP, Chhonkar, PK, Suribabu, K & Singh, AK. 2005. Long-term impact of irrigation with sewage effluents on heavy metal content in soils, crops and groundwater—a case study. *Agriculture, Ecosystems & Environment*, 109(3-4):310-322.
- Raufflet, E, Barin Cruz, L & Bres, L. 2014. An assessment of corporate social responsibility practices in the mining and oil and gas industries. *Journal of Cleaner Production*, 84: 256–270. doi:10.1016/j.jclepro.2014.01.077

- Reinhardt, F & Stavins, R. 2010. Corporate social responsibility, business strategy, and the environment. *Oxford Review of Economic Policy*, 26(2): 164–181.
- Richard Peet, R & Hartwick, E. 2009. *Theories of development*. New York: Guilford Press.
- Rionda, ZL, Baird, V, Kramer, C & Wofford, D. 2002. What is corporate social responsibility? 8 Questions & Answers. *Catalyst Consortium*, July. [http://repository.upenn.edu/cgi/viewcontent.cgi?article=1009&context=od\\_theses\\_mp](http://repository.upenn.edu/cgi/viewcontent.cgi?article=1009&context=od_theses_mp) Rotberg. Accessed on 22/08/2017
- Rogers, A, Ferguson, M, Ritchie, J, Van Den Boogaard, C & Brimblecombe, J. 2016. Strengthening food systems with remote Indigenous Australians: stakeholders' perspectives. *Health Promotion International*, 33(1): 38-48.
- Roitto, A. 2013. Factors effecting corporate social responsibility disclosure ratings: An empirical study of Finnish listed companies. Master's Thesis, Oulu Business School, University of Oulu.
- Roman, RM, Hayibor, S & Agle, BR. 1999. The relationship between social and financial performance: Repainting a portrait. *Business & Society*, 38(1): 109-125.
- Ross, M. 2001. *Extractive sectors and the poor*. An Oxfam America report. <https://docs.google.com/viewer?url=https%3A%2F%2Focw.mit.edu%2Fbitstream%2Fhandle%2F10546%2F620794%2Frr-extractive-sectors-and-the-poor-011001-en.pdf%3Fsequence%3D1> Accessed on 10/06/2019
- Ross, M. 2003. The natural resource curse: How wealth can make you poor. *Natural resources and violent conflict: options and actions*, 17-42.
- Rowley, T & Berman, S. 2000. A brand new brand of corporate social performance. *Business & Society*, 39(4): 397-418.
- Rufai, HK, Anderson, E & Sanda, MA. 2014. Examining gender equity research in Ghanaian mines: A meta-analytical approach. In *2nd UGBS Conference on Business and Development 2014 Conference Proceedings* ( 264).



- Ruiz Sánchez, J. 2019. Development and Quality of Life. a Critical Perspective from the Thought of Amartya Sen. *Aletheia. Revista de Desarrollo Humano, Educativo y Social Contemporáneo*, 11(2), 107-126.
- Sachs, JD, & Warner, AM. 2001. The curse of natural resources. *European Economic Review*, 45(4-6): 827-838.
- Saeidi, SP, Sofian, S, Saeidi, P, Saeidi, SP & Saaeidi, SA. 2015. How does corporate social responsibility contribute to firm financial performance? The mediating role of competitive advantage, reputation, and customer satisfaction. *Journal of Business Research*, 68(2): 341-350.
- Saha, D & Paterson, RG. 2008. Local government efforts to promote the “Three Es” of sustainable development: survey in medium to large cities in the United States. *Journal of Planning Education and Research*, 28(1): 21-37.
- Schwartz, MS & Carroll, AB. 2003. Corporate social responsibility: A three-domain approach. *Business Ethics Quarterly* 13(4):503-530.
- Seele, P, & Lock, I. 2015. Instrumental and/or deliberative? A typology of CSR communication tools. *Journal of Business Ethics*, 131(2), 401-414. DOI: 10.1007/s10551-014-2282-9
- Selke, MJG. 2013. *Rubric assessment goes to college: Objective, comprehensive evaluation of student work*. R&L Education, Lanham.
- Sen, A. 1999. *Development as Freedom*. Oxford: University Press.
- Sethi, SP. 1975. Dimensions of corporate social responsibility. *California Management Review*, 17(3): 58-64
- Shalley, CE & Gilson, LL. 2004. What leaders need to know: A review of social and contextual factors that can foster or hinder creativity. *The Leadership Quarterly*, 15(1):33-53.
- Siegel, D. S. 2014. Responsible Leadership. *Academy of Management Perspectives*, 28(3): 221–223. <https://doi.org/10.5465/amp.2014.0081> Accessed 7/07/2017

- Silverman, S & Manson, M. 2003. Research on teaching in physical education doctoral dissertations: a detailed investigation of focus, method, and analysis. *Journal of Teaching in Physical Education*, 22:280–297.
- Snider, J, Hill, RP & Martin, D. 2003. Corporate social responsibility in the 21<sup>st</sup> century: A view from the world's most successful firms. *Journal of Business Ethics*, 48(2): 175-187.
- Songsore, J, Yankson, PWK & Tsikata, GK. 1994. Mining and the environment: towards a win-win strategy (A study of the Tarkwa–Aboso–Nsuta mining complex in Ghana). In *Study Prepared for the Ministry of Environment, Science, and Technology (MEST-EPC) and the World Bank in Support of the Formulation of a Growth Strategy for the Western Region*.
- Srivastava V & Sahay A. 2008. The Evolutionary Journey of CSR. India, Haryana.
- Srivastava, V, Sahay, A & Sahay, A. 2008. The Evolutionary Journey of CSR. In *11<sup>th</sup> Annual Convention of Strategic Management Forum of India organized at IIT Kanpur*. [http://www. iitk](http://www.iitk). Accessed on 4/07/2019.
- Stephens, C & Ahern, M. 2001. *Worker and community health impacts related to mining operations internationally: A rapid review of the literature*. London: London School of Hygiene and Tropical Medicine.
- Stevens, P. 2003. Resource impact: curse or blessing? A literature survey. *Journal of Energy Literature*, 9(1): 3-42.
- Stivers, R. 1976. *The sustainable Society: Ethics and Economic Growth*. Philadelphia: Westminster Press.
- Stocklin-Weinberg, R., Veiga, M.M., Villegas, C.M., Sulaiman, R. & Michaux, K. (2017a). Occupational health & safety situational analysis & training needs assessment for unconventional (artisanal) miners in Bangka Belitung, Indonesia. <https://www.idhsustainabletrade.com/uploaded/2017/06/PactIDH-TWG-Indonesia-OHS-project-FINALWEBSITE> Accessed on 04/09/2017.

- Stocklin-Weinberg, R. 2017. Occupational Health & Safety Situational Analysis & Training Needs Assessment for Unconventional (Artisanal) Miners in Bangka Belitung. *Indonesia, Washington, DC, US: Pact, Final Report.*
- Sturdivant, FD. 1979. Executives and Activists: Test of Stakeholder Management, *California Management Review*, 22(1): 53–59.
- Subudhi, C. (2019). Staying Alive: Women, Ecology and Development. Vandana Shiva. North Atlantic Books, 2016 (Reprint Edition), 244 pages. ISBN 978-1-62317-051-6. *Journal of International Women's Studies*, 20(7), 426-427.
- Sudan R. K., Bhawna, S., 2019. Perspectives of Information Technology in Risk Evaluation and Development of Genetically Modified Organisms, *UGC Journal*, Vol. (7) 5, pp. 259-265.
- Sulaiman, R. 2007. Indonesia Country Report. Report of the Global Mercury Project. Vienna: UNIDO. 56p.
- Syarikat, FSB. 2009. *Santapan berkhasiat sepanjang hayat.* (An Everlasting Nutritional Food). <http://www.faizarice.com/index.htm>. Accessed on 16/07/2019.
- The World Bank. 1992. *Strategy for African Mining.* World Bank Technical Paper, No. 181. Mining Unit, Industry and Energy Division, World Bank.
- Tirado, V, Garcia, MA, Moreno, J, Galeano, LM, Lopera, F & Franco, A. 2000. Neuropsychological disorders after occupational exposure to mercury vapors in El Bagre (Antioquia, Colombia). *Revista de Neurologia*, 31(8): 712-716.
- Torrico, B.H., Frank, B. & Tavera, C.A. 2018. Corporate social responsibility in Bolivia: meanings and consequences. *International Journal of Corporate Social Responsibility*, 3(1): 7.
- Torvik, R. 2001. Learning by doing and the Dutch disease. *European Economic Review*, 45(2): 285-306.
- Torvik, R. 2002. Natural resources, rent seeking and welfare. *Journal of Development Economics*, 67(2): 455-470.

- Tsikata, F. 1997. The Vicissitudes of Mineral Policy in Ghana. *Resources Policy*, 23(1/2): 9–14.
- UNCTAD. 2005. *World investment report: Transitional cooperation, extractive industries and development*. New York: United Nations
- UNDP & NDPC. 2012. *2010 Ghana Millennium Development Goals Report*. Accra-Ghana.
- UNDP- Ghana, NDPC GOG. 2012. *2010 Ghana Millennium Development Goals Report*. Accra-Ghana.
- UNIDO. 2007. *Media corner, feature: Artisanal gold mining without mercury pollution*. Available at <http://www.unido.org/doc/371455.htmls>. Accessed 15/07/2019.
- United Nations. 2011. *The Millenium Development Goals*. New York.
- UNDP (United Nations Development Programme), 2011. *Human Development Report 2011, Sustainability and Equity: A Better Future for All*. New York: UNDP.
- United Nations. 2015. *The Millennium Development Goals Report*. New York.
- United Nations. 2015. *Transforming our world: The 2030 agenda for sustainable development*. New York: United Nations, Department of Economic and Social Affairs.
- Utting, P. 2001. Promoting Socially Responsible Business in Developing Countries. The Potential and Limits of Voluntary Initiatives, *Report of the UNRISD Workshop 23-24 October, 2000*. Geneva: United Nations Research Institute for Social Development.
- Utting, P. 2005. Corporate responsibility and the movement of business. *Development in Practice*, 15(3 - 4): 375.
- Utting, P. 2005. *Rethinking Business Regulation: From Self-Regulation to Social Control*. Geneva: United Nations Research Institute for Social Development (Technology, Business and Society Programme, Paper-15).
- Van Marrewijk, M. 2003. Concepts and definitions of CSR and corporate sustainability: Between agency and communion. *Journal of Business Ethics*, 44(2-3): 95-105.

- Van Zile, C. 2011. India's mandatory corporate social responsibility proposal: Creative capitalism meets creative regulation in the global market. *Asian Pacific Law and Public Policy Journal*, 13: 269.
- Varadarajan, PR & Menon, A. 1988. Cause-Related Marketing: A Co-alignment of Marketing Strategy and Corporate Philanthropy. *Journal of Marketing*, 52(3): 58–58.
- Veil, J. 2001. Anthropocentrism and ecocentrism: a balanced approach. [https://www.courses.psu.edu/for/for410\\_mem14/Essays/Spr\\_01/Jason\\_Veil.PDF](https://www.courses.psu.edu/for/for410_mem14/Essays/Spr_01/Jason_Veil.PDF). Accessed on 21/7/2019
- Vidaver-Cohen, D & Altman, BW. 2000. Corporate citizenship in the new millennium: Foundation for an architecture of excellence. *Business and Society Review*, 105(1): 145-168.
- Visser, W. 2008. Corporate social responsibility in developing countries. In *The Oxford handbook of corporate social responsibility*. DOI:10.1093/oxfordhb/9780199211593.003.0021. Accessed on 7/ 7/2018
- Visser, W. 2010. CSR: The evolution and revolution of corporates official responsibility. *Responsible business: How to manage a CSR strategy successfully*, 311.
- Visser, W, Matten, D, Pohl, M & Tolhurst, N. 2010. *The A to Z of Corporate Social Responsibility*. John Wiley & Sons.
- Viveros, H. 2016. Examining stakeholders' perceptions of mining impacts and corporate social responsibility. *Corporate Social Responsibility and Environmental Management*, 23(1): 50-64.
- Ward, H. 2004. *Public Sector Roles in Strengthening Corporate Social Responsibility: Taking Stock*. London and World Bank, Washinton, D.C: International Institute for Environment and Development. 1-36
- Warhurst, A. 1999. Mining and the environment: Case-studies from the Americas. Sterling : Stylus Publishing.
- Wassa Amenfi East District Assembly. 2008. *Small-scale mining*. Annual Bulletin.

- Water Supply and Sanitation Collaborative Council. 2004. *Resource Pack on the Water and Sanitation Millennium Development Goals*. WSSCC, Geneva. <https://www.ircwash.org/sites/default/files/WSSCC-2004-Resource.pdf> Accessed on 12/01/2019.
- Watkins, M. H. 1963. A staple theory of economic growth. *Canadian Journal of Economics and Political Science/Revue Canadienne De Economiques Et Science Politique*, 29(2):141-158.
- Wayne, EF. 2001. Investment Performance Evaluation. Annual Review of Financial Economics, 2: 207-234. Available at <http://dx.doi.org/10.1146/annurev-financial-120209-134007>. Accessed 25/05/2018
- WCED, SWS. 1987. World commission on environment and development. *Our Common Future*, 17:1-91.
- Wedchayanon, N., & Chorkaew, S., 2014. The sufficiency economy and people-centered development. *European Journal of Training and Development*, Vol. 38 No. 9, pp. 822-844.
- Whellams, M. 2007. The role of CSR in development: A case study involving mining industry in South America. Master's Thesis, St. Mary's University, Halifax, Nova Scotia Canada.
- WHO. 2019. *Sanitation: Key facts*. World health Organization, Geneva.
- WHO & UNICEF. 2015. *Water for life: making it happen*. World Health Organization, Geneva.
- Windsor, D. 2001. The future of corporate social responsibility. *The International Journal of Organizational Analysis* 9(3): 225-256.
- Wizarat, S. 2013. Natural resources, conflict and growth nexus. *Asian Economic and Financial Review*, 3(8): 1063-1082.
- World Bank. 1995. *Artisanal mining round table: Issues for discussion*. Background Paper for the World Bank's International Round Table on Artisanal Mining: Washington, DC: World Bank.

- World Bank 2004. *Responsible Growth for the New Millennium, Integrating Society, Ecology and Economy*. Washington D.C: World Bank.
- World Bank. 2005. *The Millennium Development Goals small-scale mining*. Washington DC:USA.
- World Economic Forum. 2016. *The future of jobs: Employment, skills and workforce strategy for the fourth industrial revolution*. Global Challenge Insight Report, World EconomicForum, Geneva.
- Yakovleva, N. 2007. Perspectives on female participation in artisanal and small-scale mining: A case study of Birim North District of Ghana. *Resources Policy*, 32(1-2):29-41.
- Yang, J & Jinxing, Z. 2007. The failure and success of greenbelt program in Beijing. *Urban Forestry and Urban Greening*, 6(4): 287-296.
- Yeboah, JY. 2008. Environmental And Health Impact Of Mining On Surrounding Communities: A Case study Of Anglogold Ashanti In Obuasi. A master's thesis. Faculty of Social Science, Kwame Nkrumah University of Science and Technology, Kumasi.
- Yelpaala, K. 2004. Mining, sustainable development and health in Ghana: The Akwatia case study. Brown University, USA.
- Yirenkyi, S. 2008. Surface Mining and Its Socio-economic impacts and challenges. *The Southern African Institute of Mining and Metallurgy*, 1:181-202.
- Zenisek, TJ. 1979. Corporate social responsibility: A conceptualization based on organizational literature. *Academy of Management Review*, 4(3): 359-368.
- Zhu, Z, Wang, C, Kang, J, Li, Y & Wang, M. 2014. Study on the mechanism of zonal disintegration around an excavation. *International Journal of Rock Mechanics and Mining Sciences*, 67: 88-95.

## APPENDICES

### Appendix A-Questionnaire 226

#### HOUSEHOLDS

##### SECTION I: ABOUT YOU

1. Sex: Male  Female
2. Age.....
3. Educational level: No education  Nursery/Primary  Junior High/Middle School  
 Senior High  Tertiary
4. Number of years in community:.....

##### SECTION II: COMMUNITY PARTICIPATION IN THE DESIGN AND IMPLEMENTATION OF CSR

5. Which project(s) has/have been implemented in this community by the mining company?

*Response:*

6. Were you involved in the design of the project(s)? Yes  No
7. If yes, specify the project(s) and how you were involved in its/their design?

*Response:*

8. Were you involved in the implementation of the project(s)? Yes  No
9. a. If yes, specify the project(s) you were involved in its/their implementation.



*Response:*

b. How were you involved? a) labour b) finance c) both labour and finance d) other (specify).....

10. Do you contribute to the maintenance of the mining project(s) in the community? Yes [ ] No [ ]

If yes, in what form?

*Response:*

*If you have any suggestion(s) concerning community participation in project design and implementation, specify here:*

*Response:*

### **SECTION III: IMPACTS OF MINING ACTIVITIES ON LOCAL LIVELIHOOD**

#### **Economic**

11. What economic activity do you engage in as your main source of livelihood? Formal activity [ ] specify ..... Informal activity [ ] specify ..... Semi-formal activity [ ] specify .....

12. How has the mining activity impacted on your economic activity?

i. Positive

*Response:*

ii. Negative

*Response:*

13. How do you rate the impact of mining on your economic state?

Extremely positive [ ] Positive [ ] Neutral [ ] Negative [ ] Extremely negative [ ]

Explain why?

*Response:*

**Social**

14. When did you move to settle in this community?

*Response:*

15. Was the mining company in operation when you first move to settle in the community?

Yes [ ] No [ ]

If No, how do you compare your social relationship before and after the mining company started operation?

*Response:*

16. Have some community members been displaced as a result of the company's operations?

Yes [ ] No [ ]

If yes, i. How many people do you know?.....

ii. Who were these people to you? Relatives [ ] Neighbours [ ] Friends [ ] business partners [ ] No direct relationship [ ]

17. How do you rate the impact of mining on your social state in this community?

Extremely positive [ ] Positive [ ] Neutral [ ] Negative [ ] Extremely negative [ ]

Explain why?

*Response:*

**Environment (Natural and Physical)**

**A. Water quality**

18. What is the major source of water for your household? Pipe borne [ ] borehole [ ]

Well [ ] Stream/river [ ] other (specify)..... [ ]

19. Does the mining operation has any negative implications on your water source Yes [ ] No [ ]

If yes;

i. Explain why?:

*Response:*

ii. What has the community done about it and what is the outcome?

*Response:*

### **B. Soil quality**

20. How has the mining activity affected the soil?

*Response:*

21. What has the community done about it and what is the outcome?

*Response:*

### **C) Sanitation**

22. Briefly explain how the mining operation has affected community sanitation (if any)?

*Response:*

22. What has the community done about it and what is the outcome?

*Response:*

### **D) Noise**

23. Does the mining activity has any noise outcome in your community? Yes [ ] No [ ]

If yes, what has the community done about it and what is the outcome so far?

*Response:*

**E) Environmental health and safety**

24. What is the major health and safety hazard affecting the community due to the mining operation?

*Response:*

25. What has the community done about it and what is the outcome so far?

26. Is there any other environmental issues you want to unveil to the research team in relation to mining; if so, specify here:

*Response:*

**SECTION IV: CONTRIBUTIONS OF THE MINING COMPANY TO SUSTAINABLE DEVELOPMENT**

**Economic**

27. Has you or any member of your household received any support from the mining company in his/her economic activity? Yes [ ] No [ ]

If yes, i. what form of support? Give a brief account

*Response:*

ii. How has this support package impacted on your economic activity?

*Response:*

28. Do you know or have heard that other community members have received support in their economic activity? Yes [ ] No [ ]

If yes, please give a brief account of what you know or heard about the support

*Response:*

29. Please specify if there is any physical project(s) implemented by the mining company that has/have impacted on economic activities in the community. If yes, specify and comment on the project (both positive and negative)

Response:

**Social**

30. Please specify the project type that has been implemented in the community as indicated in the table below

<b>Social sector</b>	<b>Number of projects you know</b>	<b>The specific type of project</b>	<b>Comment about the project (both positive and negative)</b>
Education			
Health			
Water			
Sanitation			
Other.....			

**Environment**

31. What has the mining company done to ensure environmental sustainability in the community?

*Response:*

32. Are you satisfied with the mining company’s contributions to ensure a sound environment in the community Yes [ ] No [ ]

If yes, explain:

If no, what do you think should be done to ensure sustainable environmental management in the community?

*Response:*

## Appendix B - Interview Guide For Key Informants 232

### TYPE OF RESPONDENT (Choose appropriate):

- A) TRADITIONAL AUTHORITIES      B) ASSEMBLY MEMBER      C) UNIT  
 COMMITTEE                              MEMBER                              D)  
 OTHER:.....

1. Name of community: .....
  
2. How do you collaborate with the mining company to ensure sustainable development?

*Response:*

3. Which project(s) has/have been implemented in the community by the mining company  
 (refer to the Table below)

Sector	Name of the project	Status of project: (Yet to start/partially completed/fully completed/abandoned)	How were you involved in the project?	Impacts of the project (positive and negative)
<b>Social</b>				
Education				
Health				
Water and sanitation				
Energy				
Transport				
<b>Economic</b>				

<b>Environment</b>				

4. What measures are in place to ensure the sustainability of the projects?

*Response:*

5. What are the major negative effects of the company's operations on this community?

*Response:*

6. What measures have been put in place to deal with these negative effects?

*Response:*

7. What is your overall impression of the mining company's contribution to the sustainable development of the community?

*Response:*

8. What suggestion do you have in relation to the role the mining company can play to advance the sustainable development of the community?

*Response:*

### Appendix C- Interview Guide For District Assembly 234

Are you aware of any CSR activity of Newmont?

Yes/ No

Specify CSR projects/programmes that have been implemented by Newmont in the district?

Sector	Name of Projects	Location	Objectives
<b>SOCIAL</b>			
Education			
Health			
Water			
Energy			
Transport			
<b>ENVIRONMENT</b>			
Natural Environment			
Sanitation			
<b>ECONOMY</b>			
1.			
2.			
3.			



3. What have been some of the effects of these CSR activities/projects/programmes? (*Fill the table below*)

<b>Sector</b>	<b>EFFECTS</b>
<b>SOCIAL</b>	
Education	
Health	
Water	
Energy	
<b>ENVIRONMENT</b>	
Natural Environment	
Sanitation	
<b>ECONOMY</b>	
1.	
2.	
3.	

5. Who monitors the projects after completion? (*Fill the table*)

<b>Sector</b>	<b>INSTITUTIONS</b>
<b>SOCIAL</b>	
Education	
Health	
Water	

Energy	
ENVIRONMENT	
Natural Environment	
Sanitation	
ECONOMY	
1.	
2.	
3.	

6. Who are the stakeholders involved the operation and maintenance of these projects and what roles do they play?

Stakeholders	Roles

At what stage was the assembly involved in the programme/ projects

.....

.....

.....

.....

.....

.....

7. Did the communities participate in the project implementation? (a) Yes (b) No

7a. If Yes, how did the communities participate?

.....  
.....

9. What are the challenges encountered in undertaking CSR projects in the district?

.....  
.....

10. What measures have been put in place to sustain the CSR projects?

.....  
.....

**Appendix D-Construction and Rehabilitation Projects are undertaken by AGA from  
1992 to 2012 238**

1. 1992 -Odumasi Len Clay Schools (Obuasi)
2. 1993 - Brahabebome Independence (Obuasi)
3. 1995 - Jimisokakraba Basic School (Obuasi)
4. 1996 - Hostel for KNUST Medical students (Kumasi)
5. 1998 - Sanso Primary/ JHS School (Obuasi)
6. 1999 - Binsere Basic School & Toilet facility (Obuasi)
7. 2001 - Ayanfuri Primary School (Upper Denkyira)
8. 2002 - Dadieso Primary & JHS (WassaAmenfi)
9. 2003 - Mosikrom Primary School (Amansie West)
10. 2003 - MansoAfedie Primary School (Amansie West)
11. 2003 - Ayanfuri JHS & Water facility (Upper Denkyira)
12. 2004 - Adubirem JHS & Toilet facility (Amansie Central)
13. 2009 - New Bediem School drainage system and school park construction.
14. 2010 – New Dokyiwa JHS & Toilet facility.
15. 2011 – Construction of perimeter fence wall around New Nsuta cluster of schools.
16. 2011/12 – Rehabilitation of Anyinam Methodist School & provision of canteen & toilet facilities.

## **Appendix E- Health and Sanitation Projects 239**

1. 1990 - Ten (10 No.) 10-seater KVIP Toilet facilities provided to Obuasi communities.
2. 1991 - Two (2) Refuse Trucks plus 16 Skip containers donated to Adansi West D/A now OMA.
3. 1992 - Built Ramia Hospital now Government Hospital for Obuasi
4. 1993 - First de-silting of Hweaseamo drainage system.
5. 1993 - Donation of one refuse truck 10 more skips to AWDA.
6. 1994 - Rehabilitation of Gauso drainage system.
7. 1995 - First de-silting of Kwabrafo River.
8. 1996 - Donation of 200 hospital beds to Obuasi Government
  - a. Hospital.
9. 1996 - Construction of Diawuso Sewerage Stabilization Ponds as a final waste disposal site.
10. 1997 - Bilharzias Control & Mosquito spraying at Jimisokakraba.
11. 1998 - Assisted demolishing of structures to prepare grounds for Obuasi Central Lorry Park.
12. 1999 - Constructed 6-seater flush toilet facility for Obuasi Central Police Barracks.
13. 2000 - De-silting of Anwiam, Hasonyewodea and Odumase drains.
14. 2001 - Obuasi Street cleaning begins and ends in 2013.
15. Since 2001 to 2013, AGA paid for the cleaning of principal streets of Obuasi.
16. 2002 – Provision of a flush toilet with a bio-digester facility to PTP Police post.
17. 2002 – First de-silting of Nyam River.
18. 2003 – Rehabilitation of Obuasi final waste disposal site.
19. 2004 – Second de-silting and construction of Anwiam&Hasonyewodea drain.
20. 2004 – Provision of 2 No. Ayanfuri community toilets with bio-digester facilities.

21. 2005 – Desilting of Anyinam community drain.
22. 2005 – Re-engineering of Akrokerri final waste dump site.
23. 2005 – Donation of diagnostic equipment to Braindt Mission Eye Clinic in Obuasi.
24. 2006 – Obuasi Integrated Malaria Control residual spraying programme began full scale.
25. 2006 – Provision of material for the construction of Anwiam toilet facility.
26. 2006 – Donation of working tools to support Obuasi Clean-up Campaign.
27. 2007 – Provision of material for rehabilitation of 2 No. Anyinam public bathhouses.
28. 2008/2009 – Second de-silting of Nyam and Kwabrafo Rivers.
29. 2010 – Provision of Urinal facility to Padmore School in Obuasi.
30. 2011/2012 - 20- seater flush toilet with a bio-digester facility provided to New Bediem community
31. AGA (Edwin Cade Memorial) Hospital is patronized by the general public and receives referral cases from other hospitals and clinics in Obuasi and from beyond.
32. Construction of Central Mosque for Obuasi Muslim community
33. Construction of Len Clay Sports Stadium for sports development in Obuasi
34. Construction of Ofori Stadium
35. Football Academy to further enhance sports development in Obuasi area

### **Sponsorship Projects are undertaken by AGA for the year 2006**

The company according to its CSR document also undertook the following CSR activities in the year 2006 (AGA Report, 2007).

1. Abedwum community library spelling Bee Contest for primary and JHS schools within Kwapia Circuit
2. Sponsored Educational quiz for Primary and JHS within Obuasi municipality.
3. Donation of supplementary reading books to selected basic schools within the municipality

4. Career guidance and counselling programme for final year Senior High School students
5. Three-month apprenticeship program for Twenty (20) youth selected from five (5) of the host communities (Anyinam, New Dokyiwaa, New Bediem, Binsere, Sanso)
6. Sponsoring of Women's health talk and free breast screening program within Obuasi Municipality