

UNIVERSITY OF CAPE COAST

**ALTERNATIVE LIVELIHOOD PROGRAMME FOR MINING
COMMUNITIES: A STUDY OF OBUASI MUNICIPALITY**

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COMMUNITIES: A STUDY OF OBUASI MUNICIPALITY

BY

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DECLARATION

Candidate's Declaration

I hereby declare that this dissertation is the result of my own original work and that no part of it has been presented for another degree in this university or elsewhere.

Candidate's Signature: Date:

Name: Charles Kusi Boamah

Supervisor's Declaration

I hereby declare that the preparation and presentation of the dissertation were supervised in accordance with the guidelines on supervision of dissertation laid down by the University of Cape Coast.

Supervisor's Signature: Date:

Name: Dr. P. K. Agbesinyale

ABSTRACT

Alternative livelihoods programmes (ALPs) have been adopted as an alternative form of livelihoods for people whose original means of livelihood have been taken for other purposes. ALPs have been seen as viable option for people of the under privileged class. However, despite the increasing importance of ALPs in Ghanaian mining communities especially in the Obuasi Municipality, little studies have been conducted to assess the real impacts of the ALPs on the livelihood of the inhabitants. The study employed interview schedule to collect data from all beneficiaries of the ALPs in the Obuasi Municipality whereas in-depth interview guide was employed for key stakeholders.

The main findings indicate that most of the beneficiaries were generally satisfied with the ALPs. Also, the beneficiaries indicated that jobs under the ALPs are preferred to their previous jobs. There was collaboration between the Obuasi Municipal Assembly and AngloGold Ashanti in the implementation of the ALPs. The main challenge encountered by AngloGold Ashanti in implementing the ALP was minimal cooperation from chiefs.

Based on these findings, it was recommended that AngloGold Ashanti should broaden the base of the projects under the ALPs to other communities within the Municipality. Also, both the Municipal Assembly and AngloGold Ashanti should continue to consolidate the current collaboration to sustain the ALPs.

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DEDICATION

To my wife Mrs Felicia Boamah and my children.

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LIST OF ACRONYMS

AGA	AngloGold Ashanti
ALP	Alternative Livelihood Programme
IDI	In-depth Interview
IDS	Institute for Development Studies
ILO	International Labour Organisation
IMF	International Monetary Fund
MCE	Municipal Chief Executive
MOFA	Ministry of Food and Agriculture
OMA	Obuasi Municipal Assembly
SAP	Structural Adjustment Programme
SLA	Sustainable livelihood Approach
SPSS	Statistical Product and Service Solutions
UN	United Nations

CHAPTER ONE

INTRODUCTION

Background to the study

Ghana is gifted with large mineral wealth such as gold, manganese, diamond, bauxite, limestone, silica salt and salt which are being exploited in commercial quantities, with gold representing by far the most important mineral mined. There is also growing potential for commercial gas and oil exploitation, bolstered by the announcement of significant discoveries in June 2007 (Akabzaa, 2007). There have been numerous efforts to harness mineral resources for national development through the promotion of foreign investment. The World Bank and the International Monetary Fund (IMF) indicates that the sector has grown most remarkably since Ghana signed on to the Structural Adjustment Programme (SAP).

Since Ghana's mining sector reforms under the SAP, there has been a significant upsurge in mining activities in the country (Akabzaa, 2000). From the inception of the reforms in 1983 to date, the sector has witnessed a considerable investment boom and an increased number of new mines and mineral properties at mine development, particularly in the gold sector (Akabzaa, 2000). In addition, the sector has attracted a significant number of mining support companies such as

catering, transport and security, explosive manufacturers and mineral assay laboratories (Akabzaa, 2000).

Historically, the mining industry in Ghana has taken a 'devil may care' attitude to the impacts of its activities; operating in areas without social legitimacy, causing major devastation, and then leaving when the area has been exhausted of all economically valuable resources (Jenkins, 2004).. Cost benefit language has often been used to excuse the damage caused because it is outweighed by the overall financial benefits (Jenkins, 2004).

The appropriation of the land of local communities for mining has often engendered social upheavals and adversely impacted on the routine livelihood activities of these communities. Such social upheavals are commonplace in communities affected by mining projects in Ghana. The growing incidence of conflict between mining communities and their chiefs on one hand, and the mining companies on the other hand, echoes the growing concerns about the effects of the mining-sector-led SAP on the population (Akabzaa, 2000).

Negative livelihood impacts resulting from mining activities are more pervasive among the most vulnerable segments of the society (Akabzaa, 2000). Women have often borne the brunt of negative impacts of mining activities. They are usually unfairly treated when it comes to compensation for people to be resettled or relocated. Traditionally, family heads are men, and most compensation for farm crops and houses usually goes to these men, who exercise a discretionary use of the money. Women, who are often dependent on petty trading for their livelihood, commonly lose such livelihood sources during

relocation or resettlement. This is because many of the new settlements are often quite far removed from the clientele of these women traders, so they find it difficult to make sales substantial enough to support themselves and their families. Artisanal mining is a regular livelihood activity in areas with mineral resources, and often caters for a significant number of the community, particularly the youth. However when a land becomes the subject of a mining lease, these miners are evicted without compensation. The resultant community insecurity and discontent have often occasioned cyclical violence, involving the state and mining companies on one side and disaffected communities on the other.

To respond to these impacts of mining on the lives of the residents living in mining communities, various approaches have been adopted. Some of the mining concessions and companies have invested in the provision of social infrastructure as well as aiding human resource development of the residents. Others have also instituted scholarship schemes for residents of such mining communities so as to contribute to the overall development of such communities. Yet such approaches have yielded little desired benefits in terms of improving the standard of living of residents in mining communities.

To ensure a more integrated approach to improving the livelihoods of residents of mining communities, the concept of alternative livelihood has been adopted by many mining concessions (Akabzaa, 2000). This approach has been widely used as a substitute to improving the standard of living of residents of mining communities. However, this approach is not new and prerogative of the mining sector only. It has been applied in sectors such as fishing, agricultural, and

many other areas where the displacement of residents from their original sources of livelihood has been take away.

Alternative livelihood programmes are designed to provide alternative livelihoods to residents whose sources of income has basically been taken away from them due to some external development (Akabzaa, 2000). This is usually done to compensate for the lands which the external development initiatives take from the residents. This alternative livelihood programmes may come in the form economic empowerment of the residents so as to ensure their long term economic sustenance (Guerra, 2002).

In Ghana, this approach has been followed by AngloGold Ashanti. In the Obuasi Municipality where the mining concession is based, alternative livelihood programmes have been introduced by the company. These have been in the forms of various economic activities such as pig farming, aquaculture and provisions of farming capital to farmers.

Statement of the problem

Most of the mining centres in Ghana are bedeviled with various mining induced problems. The daily environmental hazards induced by the mining activities results in both short term and long term health risks. The residents are also left to wallow in abject poverty after the mining companies have claimed all that there is for them to rely on for daily survival (Temeng & Abew, 2009). This, the mining consortiums normally claim are taken care of by royalties paid to chiefs, which in turn does not get to the residents.

Amidst pressure from international organizations and national governments, the mining companies have begun to show commitment to the well-being of residents in their catchment areas (Temeng & Abew, 2009). In view of this, different programmes are designed by the mining companies to improve on the livelihoods of the residents of such areas. These normally take the form of infrastructural development, donations to charities and implementation of livelihood programmes (such as introducing residents to fish farming, pig farming, provision of farming gear and equipments among others) that will ensure well-being of the residents.

In the Obuasi Municipality where there exists one of the oldest gold mines in Ghana, the main mining consortium is the AngloGold Ashanti (AGA). In line with the company's policy of reaching out to communities, it has introduced a Business Development Department to cater for the residents. It therefore introduced alternative livelihood programmes to develop and give the most vulnerable in the Municipality a means of livelihood.

However, despite these efforts by AngloGold Ashanti, it is still widely speculated that unemployment and poverty levels in some of the communities in the Municipality are among the highest in the country (Temeng & Abew, 2009). Also, it is not clear how much has been achieved since the inception of the programme and the impact it has had on the residents of its catchment area. This study therefore seeks to assess the Alternative Livelihood Programmes (ALPs) that have been introduced by Anglo-Gold Ashanti in the Obuasi Municipality.

Research questions

Based on the problem identified above, the following research questions were formulated to solve the problem.

- What economic activities were in place before the introduction of ALPs?
- What are the ALPs that have been initiated by Anglo-gold Ashanti?
- What are the impacts of ALPs in terms of enhancing the livelihoods of the inhabitants?
- What challenges do AngloGold Ashanti face in implementing their ALPs?
- What collaborations exist between the Municipal Assembly and AngloGold Ashanti in implementing the ALPs?

Objectives of the study

The main objective of the study was to assess the impact of the Alternative Livelihood Programmes initiated by Anglo-Gold Ashanti on the livelihoods of inhabitants in the Obuasi Municipal.

Specifically the objectives are to;

- examine economic activities that were in place before these ALPs;
- analyse the dimensions of ALPs that have been initiated by Anglo-Gold in the Obuasi Municipality;
- analyse the impact of ALPs on the livelihoods of inhabitants in the Obuasi Municipality;
- explore the challenges encountered by AngloGold Ashanti in the implementation of the ALPs

- explore the kind of collaboration that exists between the Municipal Assembly and AngloGold Ashanti in implementing the ALPs.

Significance of the study

Given the fact that literature on ALPs is limited in Ghana, the importance of this study is that it will add to the literature, and can also provide a basis for future research. As such this study will contribute to recent debates on the roles of ALPs in the economic well-being of inhabitants in mining communities.

Mining companies offer projects to the mining communities, and they differ in terms of the methodology they use to provide such projects. The discussions and results from the study may serve as a guide to the AngloGold Ashanti on how the beneficiaries perceive the programmes. This could help the company adopt measures so as to help deliver a positive impact on the lives of inhabitants of mining communities.

In connection with the above, the findings of the study will assist the AngloGold Ashanti to improve on the current ALP programme. With these areas that the project is doing well, it can be sustained to enhance the benefits while at the same time improving on the shortfalls of the programme. Lastly, the recommendations from these findings can be used to improve on similar projects elsewhere in the country.

Scope of the study

The geographical scope of the study was limited to Obuasi Municipality in the Ashanti Region, Ghana. Since this is the main operational area and also the one of the oldest mining centres in the country, the alternative livelihood programme was implemented first and for that matter will give in-depth insights into ALPs in the country. The contextual scopes of the study will however, focus on beneficiaries of Alternative Livelihood Programmes implemented by the AngloGold Ashanti as well as implementers of the Alternative Livelihood Programmes. The beneficiaries will be people who are either involved in the Garment factory at Obuasi, Piggery Farms at Mampamhwe, Jimiso, Adaase and Ahansonyewodea, and the Prago aquaculture at Adubirem.

Organisation of the study

The study is structured into five chapters. Chapter One contains the background to the study, research problem, research questions and objectives, the significance of the study, definition of key terms and chapter organisation. Chapter Two will contain review of literature on relevant topics on alternative livelihood programmes implemented elsewhere in the world, models and theories that underpin such study. The conceptual framework will also be included in this chapter. The methodology that will be used in this study will become the subject of Chapter Three. This will include description of the study area, research design and methods as well as data analysis plan. The fourth chapter (Chapter Four) will contain the analysis, presentation and discussion of the data gathered from field.

The final chapter (Chapter Five) will have the summary, conclusions and recommendations as per the study results.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

Introduction

This chapter contains the review of related literature and concepts on alternative livelihood programmes as well as the conceptual framework for the study. Issues such as effects of mining activities on the residents' livelihoods, different approaches to alternative livelihood programmes and sustainability of alternative livelihood programmes are captured in the opening parts of this chapter. The other part looks at the theoretical constructs of alternative livelihood and concludes with the conceptual framework for the study.

Effects of mining on the livelihood of residents

The adverse environmental and social impacts of mining in sub-Saharan Africa are well documented (Davidson, 1993; United Nations (UN), 1996; International Labour Organisation (ILO), 1999; Kitula, 2006; Fisher, 2007). In Ghana in particular, the industry has experienced unprecedented growth in recent years, bringing with it many problems that the authorities have struggled to address (Amankwah & Anim-Sackey, 2003; Hilson & Porter, 2005).

Mining has generally been noted to account for changes in both the physical landscape and natural resources hence affecting the daily lives of people living in mining areas (Aryee, 2001). In fact, the argument of whether mining is indeed a panacea to economic problems on most mining communities have been deeply questioned (Aryee, 2001). In most cases, the benefits of mining often largely accrue to the national economy and to the development of most urban infrastructure to the detriment of the more remote rural and peri-urban mining towns. Problems that emanate from such situations are compounded by wrong signals eternal wealth which is sent to the populations of other settlements who troop to the mining centres in search of the non-existing wealth (Hilson & Yakovleva, 2007). This increases the population of the mining centres substantially without any improvement in the means of livelihoods but instead, deterioration.

Mining takes a large share of the land area of the inhabitants of the mining areas. These lands are usually the fertile ones relied on by the residents (Aryee, 2001). In Ghana, for instance, by 2006, 13.1% of the country's land area was under concession to mining and mining explorations companies (Ghana Chamber of Mines, 2006). In areas such as Tarkwa, as much as 70% of the total land area is under concession mining and two thirds of the entire Wassai West District (Ghana Chamber of Mines, 2006). This result in community dislocations and the taking away of arable lands as most of these mining centres in Ghana have their traditional economic activities as farming. In 2007 for instance, there were nine large scale mines in the country, the construction and expansion of which had

been responsible for widespread community dislocations (Banchirigah, 2008). An account is also given between 1990 and 1998 where mining investment in Tarkwa resulted in the displacement of 14 farming communities with a combined population of over 30,000 while a recent one in Ahafo South displaced 9500 subsistence farmers (Planning Alliance, 2005). In Tanzania, 400,000 people were evicted in one community alone to allow for the development of a large-scale gold mine project (Curtis & Lissu, 2008). All these culminate in depriving the residents of mining communities of their means of livelihoods.

A further deprivation of the residents of their livelihoods is the pollution of water bodies, the felling of trees as well as the infiltration of the community with dust and other mining chemicals that have long term health implications for them. The aggregated effects of these are that the residents are indeed worse off with mining than before (Aryee, 2005) by making them very vulnerable. However, people like Hilson and Pardie (2006) tend to disagree with this assertion by indicating mining can sometimes provide the impetus for the conservation of the environment through the provision of funding. Whatever the situation is, it is clear that mining substantially deprives the residents of mining communities of their livelihoods and that the benefits cannot make for the mass losses hence such mining companies need to provide an integrated means of alternative livelihood to the residents.

Approaches to alternative livelihoods

The various effects of mining on the lives of residents in mining centres, have led to a unified voice calling for a more responsible approach on the part of the mining companies and their national governments to provide the residents with dignified means of sustaining themselves (Banchirigah, 2008). In view of this, many mining corporations around the world as well as national governments began to design alternative livelihood programmes for the residents of their mining areas.

Apparently, this idea of alternative livelihood is not only limited to the mining sector. Many other industries such as forestry, fishing, oil drilling, and construction are all in the business of practicing alternative livelihood programmes (Bush, 2009). This measure is often adopted as a stop gap measure by the industry giants in order to evade criticisms of neglecting the inhabitants and abandoning their corporate social responsibilities. It must however, be mentioned that it has been successfully planned and implemented in some cases where impacts on the well-being of the residents have been substantially positive (Aryee, 2001).

In implementing such programmes, different approaches have been adopted depending on the available resources, the residents' needs and capacity as well as the overall goal of the implementing agency. The main goal of alternative livelihood programmes has remained to ensure the improvement of standard of living of residents through providing them with alternative income sources.

Most of the alternative livelihood programmes have adopted approaches that are economic in outlook. This approach is by far the most followed and manifest it in different forms. It ranges from the legalisation of artisanal mining (galamsey), training in traditional crafts, and alternative farming methods.

With all these approaches, examples drawn from different parts of the world indicate mix results.

In Bolivia, an approach that has been very much mentioned is the economic (Banchirigah, 2008). With this approach, residents of mining communities have been trained in alternative economic activities such as new and improved farming methods (Banchirigah, 2008). This was often complemented by provision of start-up incomes as well as fertilizers and insecticides for their farms. Markets to their farm outputs are catered for by various marketing organizations formed by mining companies and provided with capital to purchase such produce and transport them to nearby market centres. Storage facilities were also provided to help salvage situations where there was excess supply of farm products.

Similar approach has been adopted in Tanzania where residents are trained in animal (sheep, goats, grass cutter etc) rearing as alternative means of livelihoods (Curtis and Lissu, 2008). Offices were created to separately cater for such investment issues. Advice is first given to the residents before training them and subsequently offered them monetary assistance to invest into such ventures.

The approach in Uganda, which is an emerging gold mining country in Africa, has not been different. The promotion of local traditional crafts and the training of the residents to take advantage of the emerging tourism trade in such

communities have been the agenda of such alternative livelihood approach in Bolivia.

Alternative livelihood programmes have mostly been economic in outlook (Kitula, 2006). This has been attributed to the nature of the perceived needs created by mining and also because mining itself is an economic activity. It is assumed that the only thing the residents will be expecting from mining should be economic in outlook.

One interesting dimension that has emerged over the years regarding such ALP approach is the issue of artisanal mining or popularly called 'galamsey' in Ghana. The issue of artisanal mining has confronted both governments and mining companies for years. Various approaches have been taken to curb artisanal mining to no avail (Hilson, 2009). Hilson (2009), Bush (2009), and Aubynn (2009) have all observed that instead of governments and mining companies concentrating their efforts to find alternative means of livelihood for residents, such efforts should rather be geared towards training the local residents to pursue artisanal mining as an alternative livelihood approach. In a study conducted by Tschakert (2009) in Noyem in Ghana, he observed that about 90% of the residents involved in 'galamsey' were not willing to abandon it for any other alternative source of livelihood. This he observed was due to the fact that most of the livelihood projects implemented for the residents are assumed rather than what the residents really want to engage in. Also, the residents view the other sources of income generating activities as being second to 'galamsey' and for that matter will eventually return to it no matter the ALP implemented.

Reasons accounting for the failure of ALPs

Even though ALPs have been welcomed by various governments and organizations as a panacea to at least the economic woes of residents of mining communities due to the mining activities, the key question that has bedevilled all ALPs has been associated with their sustainability. Most ALPs have been wonderfully planned and implemented and have benefitted residents only to fumble in later years. In view of this Tschakert (2009) therefore argued that ALPs are nothing but approaches by mining companies and host governments to get their people to 'shut up' and assimilate the consequences of mining without alarming the outside world.

The failures of ALPs have been attributed to various reasons. However, certain key approaches have been found to be on the basis that may have contributed to the un-sustainability of ALPs.

One of the reasons that has been discussed in the literature is the imposition of ALPs on the residents without a measure of what the residents needs are (Tschakert 2009). Once mining has taken away the means of livelihood from the residents, it is assumed that residents would engage in one economic activity or the other in order to survive. Without much hesitation, the mining companies based on their capabilities and what they deem fit introduce economic activities without consulting the would be beneficiaries. However, it has been argued that economic activities are functions of cultural and social make-ups of societies (Aryee, 2004) and transition from one traditional economic activity has to be internally driven without external force. Subsequently, the residents do not

feel the bound that existed between their traditional economic activities which mining has squashed and that being imposed on them by the mining concessions hence their failure to succeed.

Another, reason that can be cited is lack of participatory approach adopted by the mining companies in introducing ALPs. To be successful with the introduction of interventions, a local participatory approach has been deemed ideal (Fraser, 2000). By involving the intended targets of the ALP, the targets get to make choices on the alternative livelihoods according to community attachment and resources. This ensures that the residents patronize the alternative economic activities that are introduced under the ALP. However, in the case of some mining companies, ALPs are designed and introduced without involving the residents, which does not sustain the ALP. For instance, a study conducted in Noyem in Ghana by Tschakert (2009) indicated that only two of the alternative livelihood projects mentioned by the residents were part of the ALPs that have been introduced with eight (8) projects mentioned by the residents which were not included in the ALP. Obviously, such ALP projects are likely to last a while.

The last among the most acknowledged reasons for the failure of ALPs has to do with the fact that most ALP projects do not take into account the local resources available (Tschakert, 2009). These resources may include the skill level of the residents as compared to the skill requirements of the intended ALP, the natural resources as well as the support systems available that may enhance the ALP. All these may account for the success or failure of the projects. Implementers of ALPs must therefore acknowledge that alternative livelihood

programmes are not just function of the economic system but integrated sets of human life encompassing the social, economic, cultural and traditional capacities.

Theoretical model

In this part, the theoretical approach of the study will be explained. The theoretical base of the research is the Sustainable Livelihood Approach, with the Livelihood Model giving the study the framework for analysis.

Applied Livelihood Model

A number of Livelihood studies have used the livelihood framework particularly the Sustainable Livelihood Approach (SLA) giving it prominence in development thinking (Shankland, 2000). Consequently, a number of different SLAs have emerged (Ashley & Carney, 1999). However, most rely on analytical frameworks which owe its roots to the version developed by Institute for Development Studies (IDS) sustainable Livelihoods Programme (Scoones, 1998) and subsequently adapted by the United Kingdom Department of International Development.

This study requires an analysis to provide a basis from which external factors such as those provided by Mining Companies can be assessed as to whether or not they enable the reinforcement or changing of such interactions. Therefore a better analytical tool for doing so is the Sustainable livelihood Approach (SLA). SLA provides a framework through which people can be recursively studied from their own livelihood practices. It is an approach that

builds on people-centeredness taking into account what they have and do as agents for, rather than victims of, their own change. This is because, as Long (1997, p.23) stress:

“Livelihood best expresses.....”individuals and groups struggle to make a living, attempting to meet their various consumptions and economic necessities, coping with uncertainties, responding to new opportunities, and choosing between different value possibilities”

From Long’s assertion, livelihood as a struggle is about social relations where people struggle to make a living. In this process, first, people (as actors) interact with rules of their society (structures) to either reinforce or challenge it. Second, in the process of making a living, resources are accessed, used, and transformed. Finally, a given livelihood practice has micro, meso and macro interactions. This multi-dimensionality that de Han and Zoomers (2005) refer to as ‘Pandora’s box provides a basis for evaluating how external factors as programmes intervention enables or constrains change within a given people’s livelihood practices.

Hilson and Porter (2005) summarizes this by noting that the central objective of SLA was ‘to search for more effective methods to support people and communities in ways that are more meaningful to their daily lives and needs, as opposed to ready-made interventionist instruments’. By implication, this analytical tool provides better basis for understanding what the people are and what they desire.

However, the full details of the SLA will be discussed herein. For instance, Banchirigah (2008) noted some key weaknesses of the SLA as related to: the limitedness of vulnerability context, reliance on multiplier effects and unresolved question of sustainability. Beall (2002) argued that the focus of household strategies excludes the middle level groups (Village, community, compound, family or inter-household confederation) that people use in order to organise a living.

In addition, Kitula (2006) echo the fact that the livelihood approach is trapped in an actor-structure dilemma given that its people-centredness inclined on the narrow instrumental *homo economicus* principle. They conclude that the SLA framework needs revisiting because of the complex dynamics of livelihood systems. They call for a processual perspective that puts people and their actions at the centre of analysis but at the same time considers these actions as the result and the constituent of broader and longer-term processes. They thus advocate for livelihood research to capture and make visible both the synchronic and dynamics at play in the interaction between people and their environment on the one hand, and the accompanying change over time on the other.

Similarly, de Han and Zoomers (2003) have pointed at the fact that although the livelihood approach has transcended the 'man-land' relations, its micro-orientation shuns the role of globalization in local development. They then call for a deep rooted and dispersed livelihood approach if its principles of people-centredness, holisticity and multi-dimensionality are to have meaning in local development.

Concretizing these criticisms and pointing at a breakthrough in using the SLA, de Han and Zoomers (2005) elaborate on livelihood as multi-goal driven, diversified in context and multi-located. Yet, they note that the approach differs from apolitical orientation typically stemming from the narrow conceptualization of livelihoods as the fundamental questions of access are downplayed. Such multi-dimensionality, they argue, is characterized by structural differentiation. Who has what (assets) and how (access), does what (strategies), and gains what (outcomes) remain fundamental question that cannot be devoid in people's livelihood.

The livelihood approach

.....livelihood comprises the capabilities, assets (stores, resources, claims and access) and activities required for a means of living. A livelihood is sustainable when it copes with and recover from stress and shocks, maintain or enhance its capabilities, and assets, and provide sustainable livelihoods opportunities for the next generation: and when it contributes net benefits to other livelihoods at the local and global levels and in the short and long terms (Chambers & Conway, 1992, p.7).

While the above definition refers to livelihood as the way people *make* a living and derive meaning out of it, major refinements have been added to it by Blaikie, Cannon, Davis and Wisner (1994) who stress ‘actors’ command over resources, Sherraden’s (1991) concern for resource use or exchange to satisfy needs, Ellis (2000) qualification of the ‘role of organisations, institutions, and social relations in resource access’ and Bebbington’s (1999) notice of ‘access to public services’. Therefore, livelihood means: actors’ behaviour with respect to holding, using and transforming assets into productive activities for a valued life-livelihood outcomes. Thus while assets are factors of production, representing the capacity of the holder to engage in activities and derive meaning from it, activities are *ex ante* production flows of assets, and capabilities are outcomes that is the *ex post* flows of assets and activities (Sherraden, 1991).

From the above brief introduction, three things feature prominently, livelihood assets, livelihood strategies and livelihood outcomes. These are explained below.

Livelihood assets

Foremost, it should be noted that the term ‘asset’ is used synonymously with capital and resources in the livelihood debate. While different people use different asset classifications, this study likes the broader classification of de Han (2000) and Ellis (2000) of assets (private and communal) into human, natural, physical, financial, and social assets.

Importantly, assets are the basis for production, consumption and investment. They represent the stock of wealth of an actor (Sherraden, 1991). Equally, actors' asset portfolio reflect their capacity for maximizing well-being, present and in the future (Corbett, 1988), to respond to shocks and stresses. Moser's asset vulnerability framework that models household vulnerability as a function of 'the number, diversity and value of assets it owns (and have access to) exemplify this fact (Moser, 1998).

Assets are presented as a starting point for analysis because they are'..... what the poor have, rather than what they do not have.....' (Moser, 1998); a fundamental shift in looking at actors beyond being poor, vulnerability, and passive victims but as active agents whose actions determine their livelihood activities and status. Bebbington (1999) argues that assets transcend use value per se since they are not merely means through which actors make a living; they also give meaning to actors' world. He points out that, assets are not simply resources that people use in building livelihoods: they give people capability to be and to act. Therefore, assets are not only things that allow survival, adaptation and poverty alleviation: they are also the basis for people to change the rule that govern the control, use and transformation of resources.

Inevitably, assets are scarce, have spatial differences, and accessing them are bound by rights that create access limitations and inequalities. The end resource is choice differentiation and conflict (Leach, 1999). Bebbington (1999) reiterates the importance of access to assets as a determinant of livelihood strategies, and a mechanism through which resources are distributed and claimed,

and through which the broader social, political, and market logistics governing the control, use and transformation of resources are either reproduced or changed. In view of this, Beall (2002: 72) notes that ‘proximity to resources means very little when access to them is denied’.

Livelihood strategies

While assets are the engine for action, livelihood strategy refers to the ways and means with which actors put assets to use. Actors adopt a given strategy (consciously or unconsciously) depending on their asset-portfolio, needs, experiences and opportunities (Ellis, 2000).

Within the SLA, three broad clusters of livelihood strategies are identified. These are: agricultural intensification/extensification, livelihood diversification sequencing to meet normal, coping, adaptive, or enhancing strategies (Ellis, 2000; Chen & Dunn, 1996). Broadly, these are seen to cover the range of options open to people. Either you gain more of your livelihood from agriculture (including aquaculture) through processes of intensification (more output per unit area through capital investment or increases in labour inputs) or extensification (more land under cultivation), or you diversify to a range of off-farm income earning activities, or you move away and seek a livelihood, either temporarily or permanently, elsewhere. Or, more commonly, you pursue a combination of strategies together or in sequence.

Identifying what livelihood resources (or combinations of ‘capital’) are required for different livelihood strategy combinations is a key step in the process

of analysis. For example, successful agricultural intensification may combine, in some circumstances, access to natural capital (example, land, water) with economical capital (example, technology, credit), while in other situations, social capital (example, social networks associated with drought or labour sharing arrangement) may be more significant. Understanding in a dynamic and historical context, how different livelihood resources are sequenced and combined in the pursuit of different livelihood strategies is therefore critical.

Unravelling the connections between such complex and dynamic processes and the outcomes of different strategy combinations is therefore a key part of any investigation of sustainable livelihoods. One step in any such analysis requires an unpacking of each of the three core strategies to distinguish different dynamics and outcomes (Scoones, 1999). Drawing on reviews of wider literature, the following distinctions (or, more accurately, continua) can be seen:

- Agricultural intensification/extensification- between capital-led (supported often by external inputs and policy-led) and labour-led (based on own labour and social resources and a more autonomous process) intensification (Carswell, 1997).
- Livelihood diversification- between an active choice to invest in diversification for accumulation and reinvestment, and diversification aimed at coping with temporary adversity or more permanent adaptation of livelihood activities, when other options are failing to provide a livelihood (Hussein & Nelson, 1998). Diversification therefore may involve developing a wide income

earning portfolio to cover all types of shocks or stress jointly or the strategy may involve focusing on developing responses to handle a particular type of common shock or stress through well-developed coping mechanisms (Scoones, 1998).

- Migration- between different migration causes (example, voluntary and involuntary movement), effects (example, reinvestment in agriculture, enterprise or consumption at the home or migration site) and movement patterns (example, to or from different places).

A key issue in the analysis of livelihood strategies is the scale at which an assessment takes place (Scoones, 1998). Livelihood strategies, for example, can be described at an individual, household and village level, as well as at regional or even national levels. But there are differences evident between scale levels in terms of the net livelihood effect (Hussein & Nelson, 1998). For an individual it may be best to pursue a particular set of livelihood strategies in combination, but these may have either positive or negative impacts on other household members or the broader community (Scoones, 1998).

For instance, a successful agricultural intensification strategy pursued by one person may provide an opportunity for another person's agricultural processing or petty trading livelihood diversification strategy. By contrast, another type of agricultural intensification may undercut others' strategies by diverting such factors as land, labour, credit or markets (Carswell, 1997). Similarly, in relation to livelihood diversification, it may make sense for individuals to specialize, while households diversify, or whole villages may

specialize in a particular activity, in context of highly diversified regional economy (Carswell, 1997). When assessing livelihood sustainability, therefore, an appreciation of scale issues must lead to a critical examination of such questions across hierarchical levels.

The combination of activities that are pursued can be seen as a ‘livelihood portfolio’ (Shankland, 2000). Some of the portfolios may be highly specialized with a concentration on one or limited range of activities; others may be quite diverse (Shankland, 2000). Different livelihood pathways are evident over different time-scales (Hussein & Nelson, 1998). The authors assert that a livelihood pathway can be seen as the result of a series of livelihood choices that have emerged over time. They further argue that this may have been the consequence of a set of conscious and planned choices or the result of the unintended consequences of other actions.

Over seasons and between years, variations in option emerge (Chambers, 1989). Scoones (1998) asserts that equally, within domestic cycles different combinations of strategies may be pursued sequentially, depending on changes in dependency ratios, health conditions and other factors. According to Lipton (2001), over longer periods-over several generations, for example-more substantial shifts in combinations may occur, as local and external conditions change. They further note that it is this dynamic element, evident in the composition and recomposition of livelihood strategies, which is important to examine, especially in the context of assessing the sustainability of different options.

Hussein and Nelson (1998) note that degree of specialisation or diversification may relate to the resource endowments available and the level of risk associated with alternative options. To Scoones (1998), five alternatives can be identified: Livelihood resources may be accumulated so that reserves and buffers are created for times when stresses and shocks are felt; activities associated with different livelihood strategies may be spread over space or over time, such that a particular risk, such as drought event, does not affect all livelihood activities; the mix of activities may be changed to reduce the covariance among different sources of stress or shock; risk pooling options may be employed through various forms of insurance or consumption smoothing, so the effects of shock or stress are ameliorated; and , finally the overall resilience of the system may be enhanced such that the impacts of stresses and shocks are less dramatically felt.

Whether such livelihood pathways and portfolio combinations result in positive or negative change in relation to the range of sustainable livelihood outcome indicators is a critical issue (Davies, 2006). Several issues are important here. It is not only the total number of sustainable livelihoods created that is important, but also the level of livelihood intensity (Chambers, 1989). Chambers (1989) further notes that livelihood resources may be combined creatively and innovatively, often in complex ways, to create more livelihoods in a particular area. For example, degraded land may be transformed with the investment of labour and skill, resulting in the accumulation of natural capital, offering the potential for more livelihood opportunities (Chambers, 1989). Equally, through

the creation of local economic linkages and the recirculation of knowledge, skills and resources, livelihood intensity may be increased (Solesbury, 2003). Thus investigating the multiplier effects (both positive and negative) of particular options is an important issue in assessing sustainable livelihood outcomes (Solesbury, 2003). The impacts of one person's livelihood activities on others, both now and in the future is thus important. The net effects of investing in one set of livelihood strategies therefore need to be assessed, with future impacts discounted appropriately (Chambers & Conway, 1992).

Livelihood strategies are often heavily reliant on the natural resource base (Scoones, 1998). He additionally noted that studies have examined livelihood strategy choices along gradients running from relatively high to low natural resource endowment. Such a gradient is also related to the level of risk and uncertainty experienced by resource users, with low natural endowment areas being frequently subject to drought or natural disasters (Chambers & Conway, 1992). According to the authors although such areas may have higher levels of risk relative to income than high resource endowment sites, the absolute income loss is also an important factor differentiating sites along such resource endowment gradients. Livelihood portfolios can therefore be expected to differ along such natural resource endowment gradients (Scoones, 1998).

Socio-economic differences, of course, exist within any site, and these also have a major impact on the composition of livelihood portfolios (Solesbury, 2003). A wide number of axes of difference are relevant, including contrasts of asset ownership, income levels, gender age, religious affiliation, caste, social or

political status and so on (Scoones, 1998). These may refer to differences in basic livelihood resources (for access to different forms of ‘capital’) or to broader contextual factors.

Livelihood outcomes

Establishing indicators of outcomes requires a precise answer to the question: what is sustainable livelihood? The now burgeoning literature on this subject is not particularly clear on this question. As with the now well-established term ‘sustainable development’, there are often uneasy compromises between different objectives embedded in the same definition (Scoones, 1998). The term ‘sustainable livelihoods’ relates to a wide set of issues which encompass much of the broader debate about the relationships between poverty and environment.

Three key elements of the definition can be recognised, each relating to a wider literature with, in some cases, established way of assessing outcomes (Chambers & Conway, 1992). The livelihood outcomes focuses on, linking concerns over work and employment with poverty reduction with broader issues of adequacy, security, well-being and capability (Solesbury, 2003).

- i) Creation of working days: This relates to the ability of a particular combination of livelihood strategies to create gainful employment. Solesbury (2003) notes three aspects of employment; income (a wage for the employed), production (employment providing a consumable output) and recognition (where employment provides recognition for being engaged in something worthwhile). Overall, the number of

livelihoods created will be dependent on the proportion of the population available for work.

- ii) Well-being and capabilities: The notions of ‘well-being’ (Chambers, 1989) and ‘capability’ (Sen, 2000) provide a wider definitional scope for livelihoods concept. Sen sees capabilities as ‘what people can do or be with their entitlements’, a concept which encompasses far more than the material concerns of food intake or income. Such ideas represent more than the human capital which allows people to do things, but also the intrinsically valued elements of ‘capability’ or ‘well-being’. Chambers (1989) argues that such a well-being approach to poverty and livelihood analysis may allow people themselves to define the criteria which are important. This may result in a range of sustainable livelihood outcome criteria, including diverse factors such as self-esteem, security, happiness, stress, vulnerability, power, exclusion, as well as more conventionally measured material concerns (Solesbury, 2003).
- iii) Livelihood adaptation, vulnerability and resilience: The ability of a livelihood to be able to cope with and recover from stresses and shocks is central to the definition of sustainable livelihoods. Such resilience in the face of stresses and shocks is key to both livelihood adaptation and coping (Davies, 2006). Those who are unable to cope (temporary adjustments in the face of change) or adapt (longer term shifts in livelihood strategies) are inevitably vulnerable and unlikely to achieve

sustainable livelihoods (Scoones, 1998). Assessing resilience and the ability to positively adapt or successfully cope requires an analysis of a range of factors, including an evaluation of historical experiences of responses to various shocks and stresses. Different types of shock or stress, in turn, may result in different responses, including avoidance, repartitioning, resistance or tolerance mechanisms (Lipton, 2001).

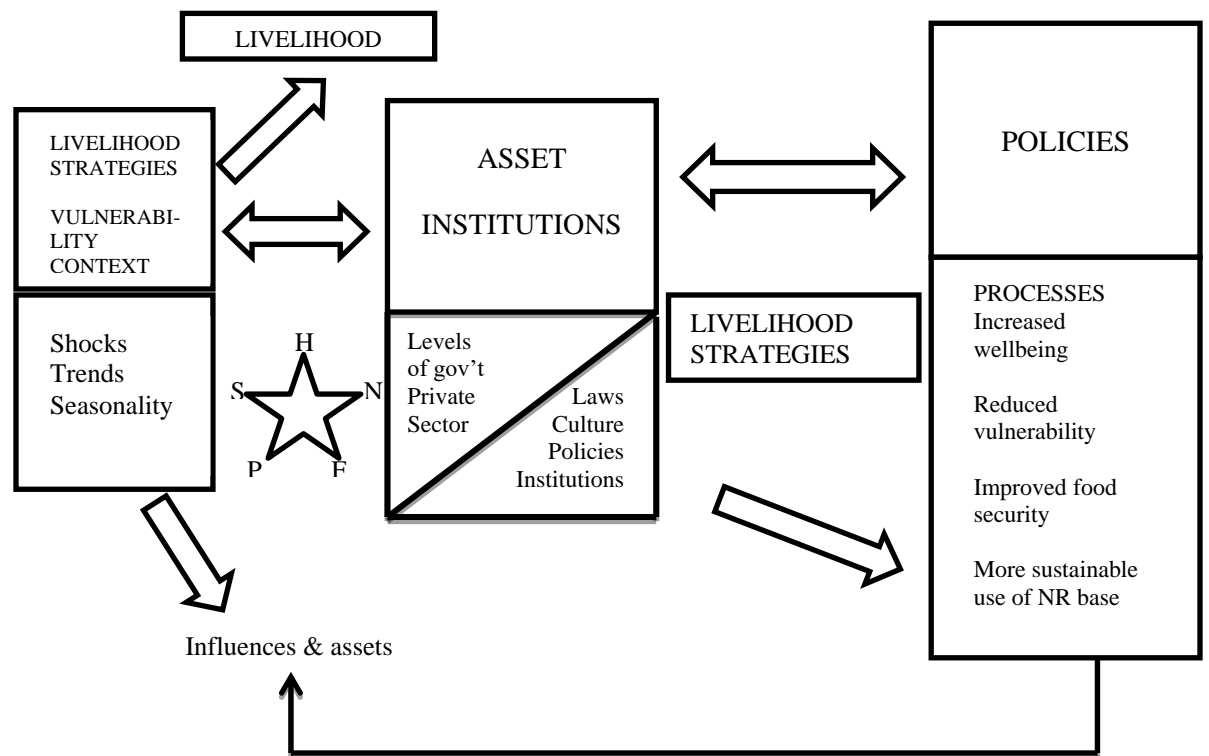


Figure 1: The Traditional Livelihood Framework

Source: Scoones (1998)

The point of departure is that SLA dichotomizes livelihood assets and livelihood outcomes given the different constituent parts of assets and outcomes as explained above. This disconnection is typical of traditional development approach where inputs are seen as distinctly different from the outcomes that result from them. The asset-outcome dichotomy fit development agencies' log frame linear approach of input=output=outcome=impact. In this view, the following citation applies:

“.....assets are vehicles for instrumental actions (making living), hermeneutic action (making living meaningful) and emancipator action (challenging the structures under which one makes a living)” (Bebbington, 1999: 2022)

There is nothing inherent in particular.... Good or service that makes at a priori either an endowment or an entitlement. Instead the distinction between them depends on empirical context and on time, within a cyclical process. What are entitlements at one time may, in turn, represent endowment at another time from which a new set of entitlements may be derived (Leach, 1999).

What this dichotomy questions is the holistic nature of the approach because actors do not live their lives as an either/or option whereby on the one

hand, it is classified in terms of assets, and on the other time-sensitive livelihood assessment.

Given that the dichotomy of assets and outcomes is not black and white, and that assets have intra-cluster and inter-cluster synergy, then it is prudent to allocate livelihood assets and livelihood outcomes a single position in SLA. Such a real conceptualization recognizes the fact that assets are both means to and an end from livelihood strategy. As key variables in livelihood practices, assets therefore cannot be dissociated from the resulting livelihood outcomes; they are consumed, produced and invested only for better portfolio status.

From the above discussions a revised framework is shown below. Here the vulnerability concept as is used in the framework is also excluded because of its inclination to poverty analysis given that vulnerability is seen as both a condition and process of being poor and hence is mainly used in reference to livelihood shocks and stresses. Thus, in line with Banchirigah's (2008) accession that, 'poverty and the reasons for poverty have to be understood through a detailed analysis of social relations in a particular context', the vulnerability context is substituted with livelihood practices that exemplifies how the making of, and the

meanings.



Where FA= financial asset, SA=social asset, HA=human asset, PA=Practical asset and PHA=Physical asset

Figure 2: Conceptual Framework

Source: Adapted from Scoones (1998)

Figure 2 depicts the key dimensions of Sustainable Livelihoods adopted for this study. A livelihood is sustainable when it can cope with and recover from stresses and shocks and maintain or enhance its capabilities and assets both now and in the future thus making assets the building blocks of a sustainable livelihood. By building assets, individuals and households are able to develop and build their capacity to cope with the challenges they encounter and to meet their needs on a sustained basis. This framework thus draws attention to the variety of assets that contribute to making a sustainable livelihood and to ways in which they are interdependent. It identifies five broad categories of assets: Financial, Social, Physical, Human and Personal.

Financial assets for the purpose of this framework encompasses, income from productive activities such as employment (self/ institutional), available finance/savings, regular inflow of money from: credit rating and access to credit. Social assets cover cooperation, networks, interconnectedness, family support, friendships, relationships of trust/exchanges, partnerships and collaboration. Human assets include skills (including technical and interpersonal), knowledge, ability, employability and earning power, good health and leadership. Physical assets looks at child/elder care, secured shelter, clean affordable energy, information, banking and access to related services, basic consumer goods, affordable transportation, tools and equipment, natural resources while personal assets consist of motivation, self-esteem, self-confidence, self-perception, emotional well-being, and assertiveness.

Asset or capacity building models focus attention on developing the underlying resources and capacities needed to escape poverty on a sustainable basis. They depict the critical mass of assets needed to cope with stresses and shocks, and to maintain and enhance capabilities now and in the future. They recognize that everyone has assets on which to build and support individuals and families to acquire assets needed for long-term well-being. The framework identifies two basic types of intervention: Strategic and Practical Interventions. Practical interventions facilitate the efforts of low-income households to build their livelihood assets. They include such things as education, employment training, economic literacy and savings programs, and support for small business

development. Strategic interventions on the other hand are directed toward the goal of social and economic change at the systemic level.

The state of individuals before the introduction of the livelihood programmes is represented in the diagram. As everyone has some level of assets, here the individuals before the programmes are identified with few financial, social, human, personal and physical assets. The after effect of the programmes is represented in the diagram. As there are improvements in the standard of living in the lives of individuals, this diagram indicates the enhancement in the assets of the beneficiaries of the livelihood programmes.

CHAPTER THREE

METHODOLOGY

Introduction

This chapter discusses the research design, the study area, target population, sampling technique and sample size, data collection instrument, data processing and analysis and the sources of data are also included in this chapter.

Study area

The study setting was the Obuasi Municipality. The Obuasi Municipality lies in the southern part of the Ashanti Region of Ghana between latitudes $5^{\circ} 35'N$ and $5^{\circ}35'N$ and longitudes $6^{\circ}35'W$ and $6^{\circ}90'W$. It is the capital of the Adansi North District in the Ashanti Region.

The terrain of the Municipality is undulating with hills rising above 500 meters above sea level. The hills are intersected with rivers which the residents rely on for fishing but have been polluted by mining and hence making the residents vulnerable according to the concept of alternative livelihood.

The underlying rocks are Tarkwaian (Pre-Cambrian) and Upper Birimian formation, which are rich in minerals thereby making it one of the oldest and largest mining communities in Ghana. At the moment, the largest gold mining

company in the world (AngloGold Ashanti) is the main company engaged in mining activities in the Municipality.

The increasing in-migration to the municipality due to the presence of gold mining activities, coupled with the destruction of the farmlands as well as rivers which are the main sources of livelihoods for the inhabitants has rendered some of the residents vulnerable and poor.

To address this, AngloGold Ashanti Obuasi Mine has introduced an alternative livelihood programme in the Municipality. This is to improve on the standard of living and well-being of vulnerable and poor residents. The choice of the study area was informed by the availability of such interventions.

Research design

This study adopted a cross sectional research design. In this type of study design, either the entire population or a subset of the population is selected, and from these individuals, data is collected to help answer research questions of interest. In cross-sectional studies, data are collected from the research participants at a defined point in time or relatively brief time period. The data are typically collected from multiple groups (Olsen & George, 2004). According to Mann (2003), cross-sectional design helps to enrich a study because it helps to study a large number of people within a short period and determine the causes and prevalence of a phenomenon which other study design cannot do. Cross-sectional design was used in the study because data will be collected from the study population once, within a specific period. It will also help assess the impacts of

alternative livelihood programmes implemented by AngloGold Ashanti on the lives of residents of the Obuasi Municipality without any manipulation of the study population.

Study population

The study involved key informants and beneficiaries of Alternative Livelihood Programmes within selected communities in the Municipality. These communities are Obuasi, Mampamhwe, Jimiso, Ahansonyewodea and Adubirem. These communities were selected because they were the first batch of communities in the Municipality to benefit from the alternative livelihood programmes (ALPs) introduced by AngloGold Ashanti. As result, the impacts of such ALPs can better be assessed in these communities.

The Key informants involved officials of the Municipal Assembly and AngloGold Ashanti. The Key Informants from the Municipal Assembly included were the Municipal Chief Executive, Municipal Planning Officer, Municipal Co-operative Officer and Municipal Director of National Board for Small Scale Industry. The Officials of AngloGold also consisted of the Business Manager and Enterprise Superintendent. The beneficiaries of the alternative livelihood projects implemented by AngloGold Ashanti in the five communities were included in the study.

Sample size for the study

The total sample size for the study was 53. This comprised two officials from the business development division of AGA namely the Business Manager and Enterprise Superintendent, four (4) officials from the Obuasi Municipal Assembly, 47 beneficiaries of the various ALPs introduced by AGA in the five (5) communities.

In terms of the beneficiaries, a census was conducted. This is because the total number of beneficiaries of the various ALPs in the five communities is considered to be few (47) and for any meaningful statistical inferences to be made, a sample size for at least 30 is recommended (Sarantakos, 1998). Three main ALPs are in operation in the five (5) communities. These are piggery project, aquaculture and garment project. The piggery project has 12 beneficiaries; aquaculture has 10 beneficiaries while the garment project 25 beneficiaries. Table 1 shows the distribution of the sample size for the study

Table 1: Distribution of sample size for the study

Target population	Sample
AGA officials	2
Obuasi Municipal Assembly	4
ALP beneficiaries	47
Total	53

Sampling technique

In accordance with the mixed method approach, the study employed both a probability and non-probability sampling technique. In terms of the non-probability sampling, the purposive sampling technique was applied to select the key informants. Purposive or judgement sampling procedure is based on the assumption that the researcher is able to select elements which are relevant representative of the appropriate target group (Ross, 2001; Sarantakos, 1998). This sampling technique was chosen because in the researcher's opinion is thought to be relevant to the topic under study. In the case of the topic under study, not all implementers of the ALPs will have in-depth insights into issues regarding the implementation process.

In view of this scenario, the researcher purposely selected the few officers in charge of the implementation namely the Business Manager and Enterprise Superintendent. Again, the purposive sampling was used to select the key informants from the Municipal Assembly comprising the Municipal Chief Executive, Municipal Planning Officer, Municipal Co-operative Officer and Municipal Director of National Board for Small Scale Industry. This is because these target respondents are those who may have exclusive knowledge on any collaboration that may exist between the assembly and AngloGold Ashanti in terms of implementing the ALPs.

Sources of data

Primary and secondary data sources were used in the study. Primary data was being gathered from the key informants and the beneficiaries through observations and interviews. An interview guide during meetings guided all interviews.

Secondary data from the Business Development Department of the AngloGold Ashanti on list of projects on alternatives livelihoods as well as beneficiaries of such projects was used. This was used to identify the projects and the beneficiaries so as to form the sampling. Also, additional information that may help ascertain the prior livelihood conditions of residents in the Municipality from the Municipal Assembly was used.

Data collection instruments

In consonance with the mixed method approach, three main research instruments were used for this study. These were interview guide, observation checklist and interview schedule.

Interviews are very important in qualitative research, especially in case studies. They help the researcher capture direct quotations about people's perspectives and experiences. An interview guide is unstructured (Fontana & Frey 2005), series of questions as pertained to the objective of a study. The interview guide was used on the key informants comprising the AGA officials and the officials of the Obuasi Municipal Assembly. Other data on respondents on their

demographics such as age, marital status, number of children, and educational level.

The interview schedule was used for the beneficiaries of the ALPs in the five (5) communities in the municipality. The interview schedule was structured into four (4) sections and will contain both open ended and close ended questions. The first section focused on the previous economic activities that were in place before the introduction of the ALPs. Here, the beneficiaries were asked the kind of economic activities they were engaged in before the introduction of the ALPs. The second section of the interview schedule centred on the nature of ALPs that have been introduced by AGA. The third section of the interview schedule was on the impacts of the ALPs on the livelihoods of the beneficiaries. The last section of the interview schedule focused on the socio-demographics of the beneficiaries.

Questions were structured in the English language. The interview guide was administered in English language while the interview schedule was administered in a local language (Asante Twi). This was to enable the respondents to express themselves well without any language barrier and to feel at home with the interviewer.

In order to cross check some of the information provided in the interview, observation was used. The observation was used only on the beneficiaries. The observation was done after the interview.

Among other things that were observed included the beneficiaries' living conditions. At this point, it was possible to observe socio-economic status of the beneficiaries under study by looking at the nature and state of their houses,

whether permanent or not. In addition, their household conditions were checked. This approach is most likely to assist in collecting data in a “naturally” or “situational” or at least in a contextual setting (Mason 2002) to augment the data from the interviews.

Data processing and analysis

Patton (2002) for instance, mentions different forms of analysis, which include unique case orientation, holistic perspectives, context sensitivity, voice perspectives and reflexivity, and inductive analysis and creative synthesis. With this, emerging themes from the data were coded and put into themes. Data from the interview schedule was edited, coded, and keyed into the Statistical Package for Service Solutions (SPSS) version 17 for further analysis. Both descriptive and inferential statistics were used to analyse that data from the interview schedule.

CHAPTER FOUR

RESULTS AND DISCUSSION

Introduction

This chapter presents the analysis, results, and discussion of the study. Issues covered include the economic activities that were in place before the introduction of ALPs in the Municipality, as well as the nature of the ALPs introduced by AngloGold Ashanti. Others include the impacts of the ALPs on the livelihood of beneficiaries, the challenges encountered by AngloGold Ashanti in implementing the ALPs and the kind of collaboration between AGA and the Obuasi Municipal Assembly in implementing the ALPs.

Nature of previous economic activities

The success of ALPs has been found to correlate with the nature of the economic activities that were originally in place (Banchirigah, 2008). Thus, the success or otherwise of the ALP to be introduced will largely depend on the extent to which the beneficiaries relied on it and also the competitiveness of the ALP in relation to the previous economic activity. If the situation is such that the nature of the previous economic activities is more appealing in terms of its ability to make them their livelihoods than the ALP, then the sustainability of the ALP

will be in doubt. It is therefore important for a study of this nature to explore the previous economic activities in place in comparison to the ALP.

With regard to this, respondents who are mainly beneficiaries of the ALPs were asked to indicate the previous economic activity they were engaged in prior to the introduction of the ALP. Table 2 shows the various economic activities engaged prior to the introduction of the ALPs as well as beneficiaries level of satisfaction with those economic activities.

Table 2: Beneficiaries level of satisfaction with previous economic activities.

Economic activity	N	Level of satisfaction	
		Satisfied	Not satisfied
Farming	18	32.5	71.4
Tailoring	21	50.0	14.3
Galamsey	5	12.5	0.00
Other	3	5.0	14.3
Total	47	100	100

Source: Fieldwork, 2011

The various economic activities engaged in by the beneficiaries prior to the introduction of the ALPs included farming, tailoring, galamsey and others such as trading and carpentry (Table 2). Evidence from Table 2 indicates that the majority of the beneficiaries of the ALPs were initially into tailoring (21) while farming constituted the second highest employment and employed 18 of the

beneficiaries. This finding is consistent with the observation made by (Banchirigah, 2008) that most of the inhabitants of the mining communities in Ghana have their original occupation they depend on for their livelihoods and such economic activities are usually imbibed in local technologies. Thus, given the study setting, which lies in the forest belt of Ghana, it is not surprising that a significant number of the beneficiaries were previously engaged in farming. Also, most mining communities in Ghana tend to attract a significant number of inhabitants into other secondary occupations as a means of livelihood (Aryee, 2001).

Galamsey (a popular form of illegal mining in Ghana) employed five (5) of the beneficiaries. Similarly, a small number of the beneficiaries (3) identified their previous economic activities as other which mainly comprised of petty trading and carpentry. In order to assess the real sustainability potential of ALPs, the study deemed it fit to measure the beneficiaries' level of satisfaction with their previous economic activities so as to enable a comparison with the current ALPs. Kitula (2006) indicated that it is important for any study that intends to measure the sustainability of ALPs not to only determine the previous economic activities, but also to ascertain the extent to which the beneficiaries were satisfied with such activities as compared to the alternatives offered by the ALPs. Table 2 shows the level of satisfaction of the beneficiaries with their previous economic activities.

According to Table 1, most of the beneficiaries who were initially engaged in tailoring indicated that they were not satisfied (71.4%) with it as an economic activity. This finding may be attributed to the fact that the study area is mainly a

gold mining community which has a lot of average to wealthy inhabitants who usually require the services of tailors and hence offered them regular incomes. However, this finding is interesting given the background that this occupation employed most of the beneficiaries and thus, it is expected that the ALP should have been rated better in terms of meeting needs (Shankland, 2000).

However, 12.5% of those engaged in galamsey indicated they were satisfied while none of them said they were dissatisfied (0.00%). Perhaps, the high incomes earned from the galamsey activities which the ALP might not be able to meet might have contributed to all of them indicating they were satisfied with their previous job. Interestingly, most of the beneficiaries who were previously engaged in other jobs such as carpentry and petty trading indicated they were dissatisfied. The lower incomes that may have accrued from such jobs as compared to the alternatives offered by the ALP might have contributed to the high levels of dissatisfaction.

Nature of ALPs for the beneficiaries

Alternative livelihood programmes introduced are usually meant to provide an alternative to the target because their previous means of livelihood has been lost. To be sustainable however, the ALP has to be carved in close association with the local economic environment and should emanate from within the community (Amankwah and Anim-Sackey, 2003; Hilson and Porter, 2005). It has therefore been argued that the success or failure of such ALPs to a large

extent depends on the nature of the ALPs themselves and how far they are able to improve on the well-being of the beneficiaries (Tschakert, 2009).

The specific ALPs introduced by AGA to compensate the inhabitants for their resources being used for Gold mining were gauged against the beneficiaries' level of satisfaction with each ALP. Respondents were asked to indicate the kind of ALP they were engaged in and their level of satisfaction with the ALP. However, to enable easy analysis of the level of satisfaction with the ALPs, the three satisfaction levels (very satisfied, satisfied and not satisfied) used to gauge the level of satisfaction was collapsed into two (satisfied and not satisfied). The result of the analysis is presented in Table 3.

Table 3: Types and level of satisfaction with ALPs

Type of ALP	N	Level of satisfaction	
		Satisfied	Not satisfied
Pig farming	12	20.0	57.1
Aquaculture	10	20.0	28.6
Garment production	25	60.0	14.3
Total	47	100	100

Source: Fieldwork, 2011

Three main ALPs were identified to have been introduced by AGA in the study area. They included pig farming, aquaculture and garment production. Table 3 suggests that there were more people involved in garment (25) production

as an ALP than aquaculture (11) and pig farming (12). Perhaps expertise in garment production was readily available to AGA and more marketable in the study hence accounting for the most sought after ALP. Also, since most of the beneficiaries were previously engaged in tailoring as a profession, then it was wise to train them in garment production which would be easier and less costly.

In terms of satisfaction levels, Table 3 shows that majority (60%) of the beneficiaries engaged in garment production indicated that they were satisfied with the ALP. This is naturally expected as most of the beneficiaries opted for it to other ALPs. Again, the consistent income that might accrue from the garment production as opposed to the aquaculture and pig farming which is seasonal might have resulted in the high level of satisfaction. However, most (57.1%) of the beneficiaries involved in pig farming were dissatisfied with the ALP. Perhaps the seasonal nature of the pig farming might have resulted in the farmers not earning consistent income and hence the low levels of satisfaction with the pig farming. Aquaculture yielded lower levels of satisfaction among the current beneficiaries with 20.0% of people involved in pig farming showing satisfaction while 28.6% of those in aquaculture also being satisfied (Table 3).

Further, previous economic activities of the beneficiaries were compared with the current ALPs in order to assess which of the two the beneficiaries will prefer. This is to give an indication of the beneficiaries' assessment of their previous economic activities as compared to the ALP they were engaged in. In this regard, respondents were asked to indicate whether they preferred their

pervious economic activities to the alternative offered by the ALP as well as their reasons. The result is shown in Table 3.

Evidence from Table 4 suggests that as much as 64.3% of the respondents indicated that they did not prefer their previous jobs to the alternatives offered by the ALP because their previous jobs did not provide them with relatively higher income as compared to the ALP. This finding is consistent with the assertion made by Ashley and Carney (1999) that alternative livelihoods provided by ALPs tend to offer the beneficiaries higher incomes than their previous occupations.

Table 4: Reasons for preferring of previous economic activity to ALP

Reason	N	Preference for previous economic over ALP	
		Yes	No
High income	24	31.6	64.3
Tedious	8	31.6	7.1
Low income	8	26.3	10.7
Consistent income	3	10.5	3.6
Lower risk	4	0.00	14.3
Total	47	100	100

Source: Fieldwork, 2011

Also, another 31.6% of the beneficiaries indicated that they preferred their previous jobs to those offered by the ALP because the current jobs under the ALP are more tedious. Thus, the current jobs namely the pig farming, garment

production and the aquaculture are more tedious than their previous jobs. Perhaps this is understandable in the context that since it provides higher income than the previous jobs then one may expect it to be more tedious. Interestingly, 26.3% of the beneficiaries also indicated that they preferred their previous jobs to the current ALP because the later provided lower income. Perhaps those beneficiaries who were previously involved in gamamsey operations might have higher income than any current job under the ALP.

Also, it has also been argued that even though it is generally expected that the alternative livelihoods may provide higher incomes, some of the ALPs actually result in lower incomes and as such become poor alternatives (de Han and Zoomers, 2005). Also, 10.5% of the beneficiaries indicated that they preferred their previous jobs to the current ALP due to its ability to provide consistent income while 14.3% of them said they did not prefer the previous job to the current one due to its lower risk. This implies that they actually preferred the ALP to their previous jobs because the ALP has lower risks. The beneficiaries who were initially engaged in gamamsey operations might have chosen the ALP due to its relatively lower risks and hence accounted for that finding.

Dimensions of the nature of the ALPs

The dimensions of the nature of every ALP tend to provide an insight into the perceptions and the extent to which such ALPs are likely to be sustainable in the long term (Banchirigah, 2008). In fact various success levels have been observed in ALPs based on the dimensions of the ALP in different parts of the

world (Aubynn, 2009) hence bringing to the fore the need to measure the beneficiaries' assessment of the dimensions of ALPs. Beneficiaries' assessment of the various dimensions of ALPs can therefore be used as a strong predictor of their support for the ALP (Tschakert, 2009). Beneficiaries' assessment of the dimensions of the nature of the ALP was therefore gauged on a five point Likert scale ranging from strongly agree to strongly disagree.

However, to aid easy understanding and interpretation of the results, the five point Likert scale (ranging from 1 = strongly agree, 2 = agree, 3 = neither agree nor disagree, 4 = disagree and 5 = strongly disagree) which was originally used to capture the data was collapsed into three (agree, neither agree nor disagree and disagree). This decision was informed by the fact that the data transformation exercise will not lead to any loss in the quality of the data. However, it will facilitate the data presentation format as well as enhance the interpretation of the results. Table 5 shows the various dimensions of the nature of the ALP captured in the study.

Evidence from Table 5 suggests that the beneficiaries of the various ALPs were almost unanimous (85.1%) in agreeing that the ALPs they are engaged in is more tedious than their previous jobs. This finding is consistent with the observation made by Ellis (2000) that based on the periodic meetings, and training programmes that beneficiaries of ALPs have to engage themselves in that were hitherto not associated with their previous jobs, the ALPs are perceived as tedious and hence very stressful. Again, the flexibility offered by the previous jobs of the beneficiaries may be lacking in the current jobs offered by the ALPs

since everything is formalised and this might have led to them perceiving the ALPs being more stressful.

The mean ratings of other dimensions of the nature of the ALPs from Table 5 indicates that most of the beneficiaries agreed (2.468) that the jobs offered by the ALPs are more time consuming than those they were previously engaged in. This is as expected since most of them already indicated that the ALPs are more tedious than their previous jobs. Meanwhile, the beneficiaries disagreed (2.808) that the jobs offered by the current ALP is more lucrative than their previous jobs. This therefore implies that the beneficiaries believed their previous jobs were more lucrative than the alternatives offered by the ALP. This is however inconsistent with the findings of Banchirigah (2008) that beneficiaries tend to rate the alternative livelihoods provided by ALPs as being more lucrative than their previous jobs. Perhaps the seasonal nature of the three ALPs may be responsible for the ALPs being less lucrative in the eyes of the beneficiaries in the Obuasi Municipality.

Further, the beneficiaries disagreed (2.872) that they are able to meet their household needs better than before due to the introduction of the ALPs. This indicates that the current jobs offered by the ALPs are not able to help the beneficiaries meet their household needs better. Thus, their previous jobs were able to help them meet their household needs better than the current alternatives under the ALPs. However, authors like Kitula (2006) have argued that some of the ALPs are introduced without adequate feasibility studies and hence often result in the deterioration of the livelihoods of the intended beneficiaries instead

of improving on it and this might have accounted for the ALPs not making the beneficiaries able to adequately meet their household needs as noted above.

Table 5: Dimensions of the nature of ALPs introduced by AGA in the Obuasi Municipality.

Statement	N	%	in Agreement	Mean	Std Error Mean
The nature of ALP i am engaged in is tedious than my previous occupation	47	85.1		2.298	0.105
The ALP i am engaged in is more time consuming than my previous job	47	70.2		2.468	0.113
This current job is more lucrative than my previous job	47	46.8		2.808	0.124
With this current job able to meet my household needs than before	47	44.7		2.872	0.128
This current job is less hazardous to the environment than my previous job	47	63.8		2.426	0.090
This current ALP project does not conflict with my cultural beliefs	47	85.1		2.170	0.063
This current ALP project does not conflict with my religious beliefs	47	89.4		2.149	0.068
This current ALP project does not conflict with the community's cultural beliefs	47	89.4		2.149	0.068
<i>Overall Score</i>	<i>47</i>	<i>83.1</i>		<i>2.418</i>	<i>0.302</i>

Scale: 1-1.49 = Agree, 1.50-2.49 = Neutral, 2.50-3 = Disagree

Source: Fieldwork, 2011

In terms of the negative impacts of the ALPs, the beneficiaries agreed that the ALPs are less hazardous (2.426) to the environment than their previous jobs (Table 4). This finding might be accounted for by the fact that the beneficiaries who were initially engaged in farming were using crude farming methods as opposed to a more modern method under the ALPs. Additionally, the beneficiaries agreed (2.170) that the jobs under the ALP do not conflict with their cultural beliefs. In this sense, the projects are not likely to suffer termination due to cultural reasons. Again, the beneficiaries agreed (2.149) that the ALPs do not conflict with their religious beliefs (Table 5), also implying that the projects may not suffer within the religious context. In terms of the communities' cultural beliefs, it is believed (2.149) by the respondents that the ALPs do not conflict with it. Thus, as far as the cultural beliefs and values of the residents of the various communities are concerned, the projects fit well in it.

Effects of the ALPs on the Livelihood of the beneficiaries

The impacts of ALPs on the livelihoods of beneficiaries tend to vary considerably (Moser, 1998). The extent to which these impacts vary largely depends on the beneficiaries' expectations of the ALP as well as the assets they have sacrificed for the ALPs (Bebbington, 1999). Meanwhile, the assessment of the impacts on the beneficiaries has long term implications for the sustainability of the ALPs such that if the impacts are perceived to be positive, there is the likelihood of the beneficiaries continual engagement in it whiles they are likely to

back out if the impacts are negative. The impacts of the ALPs in the Obuasi Municipality were measured and the results are presented in Table 6.

Table 6: Effects of ALP on beneficiaries

Statement	N	%	in	Mean	Std Error
		Agreement			Mean
The ALP has helped me improved my standard of living	47	66.0		1.389	0.109
The ALP has increased my income level	47	61.7		1.444	0.116
The ALP has helped me acquire more properties	47	40.4		2.851	0.118
The ALP has helped me improve my social status	47	68.1		1.323	0.117
The ALP has helped me improve the environment in this community	47	53.2		1.453	0.095
Overall Score	47	70.1		1.236	0.464

Scale: 1-1.49 = Agree, 1.50-2.49 = Neutral, 2.50-3 = Disagree

Source: Fieldwork, 2011

Evidence from Table 6 indicates that majority of the beneficiaries (1.389) are of the view that the ALP they were engaged in has helped them improve on their standard of living. This is to say that, on the average, the beneficiaries are

happy with the impact of the ALPs on their general standard of living. This is consistent with the findings of (Beall, 2002) in southern Bangladesh that irrespective of the individual assessment of ALPs, the beneficiaries are likely to be averagely happy with ALPs due to other freedom and security it offers them.

Further, most of the beneficiaries also agreed (1.444) that the ALPs have impacted positively on their income levels. This finding is not surprising since it is usually expected ALPs should offer better alternatives than previously existing economic activities otherwise beneficiaries are likely to drop out. With regard to the ability of the ALPs to help the beneficiaries to acquire more properties, the beneficiaries disagreed (2.851) that the ALPs have actually helped them acquire more properties. This therefore gives an indication that the increase in income as a result of the ALPs is not substantial enough to result in acquisition of capital goods but rather just to sustain the beneficiaries in their daily household expenses.

However, most of the beneficiaries agreed (1.323) that the ALPs have helped improved their social status in their communities. This finding may have resulted from the fact that most of the beneficiaries are able to meet their daily household needs and perhaps do not go out to buy foodstuff and other commodities on credit and hence accounting for the improved social image or status. In terms of environmental quality, the beneficiaries agreed (1.453) that the ALP has helped to improve the general environmental quality as compared to their previous economic activities. Perhaps the switch of more beneficiaries from other occupations such as farming and galamsey to more environmental friendly occupations such as garment production and aquaculture has resulted in the

respondents' perception of improvement in the general environmental quality. On the overall, the beneficiaries agreed that the introduction of the ALPs by AGA has impacted positively on their livelihoods mainly in the areas of standard of living, income levels, acquisition of capital goods (properties), improvement in social status and the communities' environment.

Background of the ALPs

The implementation of alternative livelihood programmes like other social interventions, are not without challenges. These challenges may arise from other stakeholders, laws and regulations governing the implementation of such programmes, resource constraints and the target beneficiaries themselves (Fraser, 2000; Tschakert, 2009). The nature or kind of challenge encountered particularly will depend on the kind of ALP being introduced and the resources being exchanged for such ALPs. Meanwhile, different challenges have been reported in various research works in the area of alternative livelihood provisions.

To therefore ascertain the kinds of challenges encountered by the main implementing agency of the ALPs in the Obuasi Municipality, two main respondents from AGA who are in charge of the implementation of the ALPs were involved in the study. These were the Business Development Manager and the Enterprise Superintendent all of the Business Development Department of AGA. This Department is responsible for the implementation of all ALPs by AGA. In-depth Interviews (IDI) was used to gather data from these respondents.

When these two respondents were asked to comment of the nature of ALPs introduced by AGA in the five (5) selected communities in the Municipality, they both indicated that there were three main ALPs in place and that they were designed to provide the residents of these communities with alternative forms of livelihoods. For instance, the Business Development Manager who is the head of the Department stated that:

“We have three main projects under our ALP initiative in this Municipality. These projects are spread in five communities where our mining activities are concentrated. These projects are in the areas of pig farming, aquaculture, and garment production”

This indicates that AGA did not just involve itself in the whole of the Municipality. Thus, even though it is generally thought that AGA’s activities span the whole of the Municipality, the ALPs were introduced in communities in which AGA thought much of its resources have been taken for mining activities.

Further investigation through observation in the selected communities revealed that there were indeed three main projects. Individuals who wanted their own projects were assisted to start up whereas those who wanted to start up in groups were also given the chance. The garment production involved AGA and the Obuasi Tailors Association and seems to be doing fairly well. Samples of cloth lines produced by the garment project are shown in Figure 3.



Figure 3: Garment project, Obuasi
Source: Fieldwork, 2011

Also the nature of the aquaculture is similar to that of the garment project. However, the project involved farmers whose lands have been released for mining and after mining; AGA thought of not backfilling the site but used it for aquaculture project. Figure 4 shows some of aquaculture sites under the ALP.

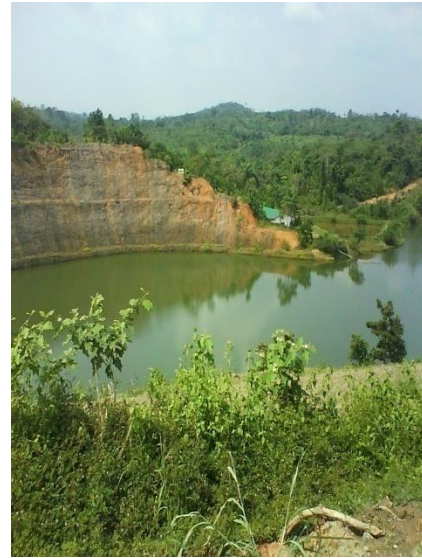


Figure 4: Prago Aquaculture Project, Adubirem

Source: Fieldwork, 2011

Lastly, the nature of the piggery project also involved AGA and selected residents from the communities. Figure 3 shows the state of the piggery project.



Figure 5: Piggery project, Ahasonyawodia

Source: Fieldwork, 2011

Challenges faced by AGA in the implementation of the ALPs

In terms of the challenges faced in the implementation of these projects, the two respondents agreed that they initially had problems deciding on which projects to introduce in which community. This was because it was difficult to decide on the core jobs in each community so as not to spend a lot of money on training and not to bring jobs that are alien to the communities. The Enterprise Superintendent had this to say:

One of the main challenges encountered was which project to implement in which of the five communities. This was mostly because we needed to choose a project carefully for each community. This was to ensure that the members of each of the communities were already familiar with the project. This also enabled us to meet our budget by not spending more to train and manages the projects after establishment.

This implies that one challenge was interlinked with other challenges as can be observed from the statement. Whiles the type of project to introduce in each of the communities was a problem; this problem was also in itself limited by the need to operate within the limited budget as allocated for the ALPs. Therefore, there was the need to choose what will not only please the residents but also

projects that will allow shorter periods of training and hence keep within the operating budget.

In addition, the Business Development Manager also identified other challenges as lack of cooperation from stakeholders such as the Municipal Assembly, chiefs and how to select the beneficiaries for the project. He had this to say:

With regard to challenges we faced in implementing this project, we had problems of lack of cooperation from some of the stakeholders such as the chiefs, and even the municipal assembly. Since we could not operate without these people, we needed to obtain their cooperation because they were not really committed to this course and they wanted some sought of monetary compensation instead.

Indeed, this revelation corroborates with the assertion made by Solesbury, (2003) that some of the mining concessions decide to introduce alternative livelihoods for residents whose means of livelihoods are lost due to mining, the efforts are sometimes thwarted by people in authority who will benefit in direct payment of royalties and compensations.

AGA's collaboration with Obuasi Municipal Assembly (OMA)

Collaboration with institutional stakeholders is key in determining the success of ALPs in communities where these stakeholders hold majority share in the resource base (Hilson and Yakovleva, 2007). It has been established that in situations where the power structure in the community is particularly skewed to one of these stakeholders, there need to be an established relationship between the implementing agency and such a stakeholder to ensure a better implementation process (Aryee, 2001). In this regard, the OMA which is the major formal power holder in terms of governance in the study area was involved in the study. This was necessary to ascertain the kind of collaborations that exists between them and AGA with regard to the implementation of the ALPs.

Four main officials from the OMA were therefore involved in the study namely the Municipal Chief Executive, Municipal Planning Officer, Municipal Co-operative Officer and Municipal Director of National Board for Small Scale Industry. Generally, they were asked to comment on how the Assembly have cooperated with AGA in implementing the ALPs.

The results from the IDIs indicated that there is a good relationship between the OMA and AGA in terms of implementing the ALPs. Indeed, it was revealed that as part of the collaboration in implementing the ALPs, AGA and OMA agreed such that in some communities the beneficiaries were not selected by only the chiefs or AGA officials but also assembly men and women who are associated with OMA. For instance, the Municipal Chief Executive (MCE) had this to say about the existing collaboration with regard to the ALPs:

The Assembly has a strong link with AGA in general and specifically the Business Development Department as far as the implementation and Management of the ALPs are concerned. They (AGA) consult us every time they want to take any major decision with regards to the projects under the ALP. They have even allowed us to sometimes make our assembly men or women to choose some of the beneficiaries since they live with the inhabitants and know them better.

Also, the National Board for Small Scale Industry (NBSS) office in the municipality has a good collaboration with AGA such that NBSS advises AGA on certain business decisions with regard to the ALPs in the municipality. The head of the NBSS at the Municipal Assembly had this to say about AGA's collaboration with the Assembly:

“We virtually advise them on most of their process in maintaining the projects. They (AGA) involved us in the planning and implementation of these projects. What we usually offer is technical expertise in business.”

Lastly, another area of collaboration with AGA is in terms of providing technical services by the district veterinary officers of MOFA. These personnel

are associated with the OMA since the OMA is the political administrative authority in the Municipality, MOFA offices at the district level is associated with the Municipal Assembly. All the four key informants agreed that the district veterinary officers attend to AGA projects when needed. The MCE said:

Also, the collaboration that exists between us and AGA is such that veterinary officers usually go and offer them advice on how to take care of their pigs and also offer medical services to their pig farmers. Sometimes the extension officers also offer them advice.

CHAPTER FIVE

SUMMARY CONCLUSIONS AND RECOMMENDATIONS

Introduction

This chapter reflects on the entire study. The chapter focuses on the summary of the research process, major findings, conclusions drawn, and recommendations to improve practice.

Summary

The purpose of this study was to assess the impact of the alternative livelihood programmes initiated by AGA in the Obuasi Municipality. Specifically, the study sought to:

- The economic activities that were in place before the introduction of the ALPs
- Explore specific ALPs that have been initiated by AGA in the Obuasi Municipality
- Ascertain the impact of the ALPs on the livelihoods of the inhabitants in the municipality
- Explore the challenges encountered by AGA in the implementation of the ALPS

- Determine the kind of collaborations that exist between the Municipal Assembly and AGA in implementing the ALPs

Two main instruments were used in this study namely the interview schedule and in-depth interview guide (IDI). Both the quantitative and qualitative data collection was done simultaneously and lasted from 4th to 25th April 2011. The quantitative data was processed with the Statistical Package for Service Solutions (SPSS) version 13. Tables, percentages and mean scores were used in presenting and describing the findings. The qualitative data was however, manually transcribed and presented under the appropriate themes.

Main findings

- The main economic activities engaged in by beneficiaries of the ALPS were farming, tailoring, galamsey operations and others such as petty trading and carpentry. Tailoring previously employed most of the beneficiaries followed by farming, galamsey and others such as petty trading and carpentry.
- Most of the ALP beneficiaries who were previously engaged in tailoring (71.4%) indicated that they were dissatisfied with the tailoring job whereas those who were initially engaged in galamsey (12.5%) indicated they were satisfied with the galamsey work as well as those who were in farming (50.0%)

- In terms of the beneficiaries' level of satisfaction with various ALPs they are engaged in, majority (57.1%) of those in pig farming said they were dissatisfied with it. Also, 28.6% of those in aquaculture were similarly dissatisfied with ALP. However, 60.0% of those engaged in garment production were satisfied with the ALP
- Most (64.3%) of the beneficiaries of the ALPs indicated that they prefer the current ALP to their previous economic activities because of the high income offered by the ALP. Again, 31.6% of the beneficiaries preferred their previous economic activities to the alternatives by the ALP because of the tedious nature of the ALP. Another 26.3% said they preferred their previous economic activities to the current ones because of the low income offered by the ALPs. 10.5% also preferred previous economic activities to ALP because of consistent income provided by the previous job. Interestingly, 14.3% liked the ALP because of its lower risk compared to the previous job.
- The nature of the ALPs borders on the environmental, economic, and social aspects of the beneficiaries
- With regard to the impacts of the ALPs, the beneficiaries agreed that it has impacted on their economic, social and environmental aspects of life.
- Challenges faced by AGA in implementing the ALP had to do with the difficulty in deciding on which projects will be sustainable in each of the communities and little corporation shown by chiefs.

- AGA's collaboration with the OMA in implementing the ALPs was very strong and AGA received various support from the OMA

Conclusions

Based on the objectives of the study and the corresponding findings presented above, the following conclusions could be drawn:

- There were three main economic activities engaged in by the beneficiaries before the introduction of the ALPs by AGA. These were farming, tailoring and galamsey operations. These activities were in close association with the cultural and environmental resources of the study area.
- There were three main projects under the ALPs implemented by the AGA in the Obuasi Municipality. The projects are aquaculture, pig farming and garment production. These projects are spread within five selected communities by AGA based on their operational activities.
- The ALPs impacted on the beneficiaries positively. Specifically, it impacted on five spheres of their lives namely their standard of living, income levels, acquisition of properties, social status and the general environmental quality.
- There were two main challenges encountered by AGA in their implementation of the ALPS. These were indecision as to which project to introduce in a community and also little corporation on the part of the

chiefs of the communities who wanted monetary compensations paid to them.

- AGA had strong collaboration with the Obuasi Municipal Assembly on the implantation of the ALPs. This was evident in the various supports they received from the Assembly in such areas as technical expertise by the district MOFA offices and the National Board for Small Scale Industry (NBSSI).

Recommendations

In line with the main findings of this study and the conclusions drawn, the following recommendations are made for improving practice and for further research.

- AGA should diversify the aspect of the ALP on the agriculture that focuses on only aquaculture to include other projects as crop farming since that was the major agricultural activity before the introduction of the ALPs. To ensure the sustainability of the ALPs, it is important for the projects to be developed around local expertise. Since the second most engaged economic activity before the introduction of the ALP was crop farming, crop farming should also be considered by AGA.
- AGA should broaden the base of the projects under the ALPs in the municipality. Once most of the beneficiaries perceive the impacts of the ALPS to be positive on all spheres of their lives, the projects now have to

be expanded to include other populace of the communities as well as municipality.

- Since, the ALPs have benefited from the Obuasi Municipal Assembly and continue to benefit, AGA should continue to pursue a stronger collaboration with the Obuasi Municipal Assembly so as to continue to benefit from it. This will have a long term impact on the success and the sustainability of the ALPs.
- The study has added to the ongoing academic discourse in the area of alternative livelihoods. However, future studies can go further to explore beneficiaries' future intentions to continue with the ALPs or not. This will serve as an important measure of the future sustainability of the ALPs and the overall satisfaction of the projects.

REFERENCES

- Akabzaa, T. M. (2007). *Open cast mining and environmental degradation cost in Ghana*. Accra: University of Ghana.
- Akabzaa, T. M. (2000). *Boom and dislocation: The environmental and social impact of mining in Wassa West District of Ghana*. New York: Third World Network.
- Amankwah, R.K., & Anim-Sackey, C. (2003). Strategies for sustainable development of the small-scale gold and diamond mining industry in Ghana. *Resources Policy*, 29, 131–138.
- Aryee, B.N.A. (2001). Ghana's mining sector: its contribution to the national economy. *Resources Policy*, 27(2), 61–75.
- Aryee, B.N.A. (2003). Small-scale mining in Ghana as a sustainable development activity: its development and a review of the contemporary issues and challenges. In: Hilson, G.M. (Ed.), *The Socio-Economic Impacts of Artisanal and Small-Scale Mining in Developing Countries*. The Netherlands: Balkema Publishers, pp. 379–418.
- Aryee, B.N.A. (2004). Mining and sustainable development. In: *Minerals Commission and Chamber of Mines. Corporate Social Responsibility in Ghana: Extending the Frontiers of Sustainable Development. Conference Proceedings*: Western University College Tarkwa, Ghana, September 2–4, 2004.
- Aryee, J. (2005). *Introduction: The mines corporate social responsibility towards sustainable alternative livelihood to affected communities in the Ghana*

mines sector. Meeting of mining stakeholders in Kumasi, Ghana. August 2, 2005.

Ashley, C., & Carney, D. (1999). Sustainable Livelihoods Approach: General Report of the Sustainable Livelihoods project 1995-1997. In Shankland, A. (2000). *Analysing Policy for Sustainable Livelihoods*. IDS report # 49, P. 22. Brighton: Institute for Development Studies.

Aubynn, A. (2009). “Live and let’s live:” the relationship between artisanal/small- scale and large scale mining operations in Ghana. The Abosso Goldfields experience. In: Hilson, Gavin (Ed.), *Small-Scale Mining, Rural Subsistence and Poverty in West Africa*. London: Intermediate Technology and Development Group (ITDG) Publications.

Banchirigah, S.M. (2008). Challenges with eradicating illegal mining in Ghana: a perspective from the grassroots. *Resources Policy*, 33(1), 28–37.

Beall, T. (2002). Comparison of the impact of the fiscal regime on gold projects in Tanzania and Burkina Faso. *Transactions of the Institution of Mining and Metallurgy*, 111, 195-199.

Bebbington A. (1999). Capitals and capabilities: a framework for analysing peasant viability, rural livelihoods and poverty. *World Development*, 27(12), 21–44.

Blaikie, P. M., Cannon, T., Davis, I., & Wisner, B. (1994). *At Risk: Natural Hazards, People's Vulnerability and Disasters*. London: Routledge.

Bush, R. (2009). *Poverty and neoliberalism: persistence and reproduction in the Global South*. London: Pluto Press.

- Carswell, T. R. (1997). *Microfinance and poverty reduction*. UK: Oxford Press.
- Chambers, R. (1989). Editorial introduction: vulnerability, coping and policy. *IDS Bulletin*, 20(2), 1-7.
- Chambers, R., & Conway, G. (1992). *Sustainable Rural Livelihoods: Practical Concepts for the 21st Century*. IDS Discussion Paper 296. Brighton: Institute for Development Studies.
- Chen, V., & Dunn, G. M. (1996). Local economic structure and off-farm labour earnings of farm operators and spouses. *Journal of Agricultural Economy*, 47(1), 2836.
- Corbett, J. (1988). Famine and household coping Strategies. *World Development*, 16(9), 1099-1112.
- Curtis, M., & Lissu, T. (2008). *A golden opportunity? How Tanzania is failing to benefit from gold mining*. Dar es Salaam: Christian Council of Tanzania.
- Davidson, J. (1993). The transformation and successful development of small-scale mining enterprises in developing countries. *Natural Resources Forum*, 17(4), 315–326.
- Davies, S. (2006). *Adaptable livelihoods coping with food insecurity in the Malian Sahel*. London: Macmillan Press.
- de Han, A., & Zoomers, S. (2003). Factoring in governance is not enough: Mining codes in Africa, policy reform and corporate responsibility. *Minerals and Energy*, 18(3), 2-13.

- de Han, A., & Zoomers, S. (2005). Mapping the bonanza: geographies of mining investment in an era of neoliberal reform. *The Professional Geographer*, 56(3), 406-421.
- de Han, A. (2000). Livelihoods and poverty: The role of migration – A critical review of the migration literature. *Journal of Development Studies*, 36(2), 1-47.
- Ellis, F. (2000). *Rural Livelihoods and Diversity in Developing Countries*. Oxford: Oxford University Press.
- Fisher, E. (2007). Occupying the margins: labour integration and social exclusion in artisanal mining in Tanzania. *Development and Change*, 38 (4), 735–760.
- Fontana, A., & Frey, J. H. (2005). The Interview: from neutral stance to political involvement. In Denzin, N.K. & Lincoln, Y. S. *The Sage handbook of qualitative research* (3rd ed). pp. 695-727. CA: Thousand Oaks.
- Fraser, N. (2000). Rethinking recognition. *New Left Review May/June*, 107–120.
- Ghana Chamber of Mines (2006). *Ghana chamber of mines factoid 2006*. Accra: Chamber of Mines.
- Guerra, M.C.G. (2002). Community relations in mineral development projects. *The CEPMLP Internet Journal*, 11, 1-31.
- Hilson, G. (2009). Are alternative livelihood projects alleviating poverty in mining communities? Experiences from Ghana. *Journal of Development Studies*, 45(2), 172–196.

- Hilson, G., & Pardie, S. (2006). Mercury: an agent of poverty in Ghana's small-scale gold mining industry? *Resources Policy*, 31(2), 106–116.
- Hilson, G., & Porter, C. (2005). Why is illegal mining activity so ubiquitous throughout rural Ghana? *African Development Review*, 15 (2), 237–270.
- Hilson, G., & Yakovleva, N. (2007). To move or not to move': reflections on the resettlement of artisanal miners in the Western Region of Ghana. *African Affairs*, 106 (424), 413–436.
- Hussein, K., & Nelson, J. (1998). *Sustainable livelihoods and livelihood diversification. IDS Working Paper 69*. Sussex: Institute for Development Studies.
- International Labour Organisation [ILO]. (1999). Employment generation and poverty reduction in Uganda. *Report of the Multidisciplinary Employment Advisory Mission: ILO Project UGA/93/031*.
- Jenkins, H.M. (2004). Corporate social responsibility and the mining industry: Conflicts and Constructs. *Environmental Management*, 11, 23-34.
- Kitula, A. G. N. (2006). The environmental and socio-economic impacts of mining on local livelihoods in Tanzania: a case study of Geita District. *Journal of Cleaner Production*, 14 (3–4), 405–414.
- Leach, M. (1999). Challenges to community-based sustainable development: dynamics, entitlements, institutions. *IDS Bulletin*, 28(4), 4–14.
- Lipton, M. (2001). Reviving global poverty reduction: What role for genetically modified plants. *Journal of International Development*, 13(7), 823-846.

- Long, T. (1997). Using evidence of household income diversification to inform study of Rural Nonfarm Labour Market in Africa. *World Development*, 25(5), 735-747.
- Mann, C. J. (2003). Observational research methods, research design II: Cohort, cross sectional and case-control studies. *Emerg Med J*, 20, 54-60.
- Mason, J. (2002). *Researching your own practices: The discipline of noticing*. London: Routledge Falmer.
- Moser, C. O. N. (1998). The asset vulnerability framework: reassessing urban poverty reduction strategies. *World Development*, 26(1), 1–19.
- Olsen, C., & George, D. M. (2004). *Cross-sectional study design and data analysis*. Retrieved May 16, 2010 from www.collegeboard.com/prod_downloads/yes/4297_MODULE_05.pdf
- Patton, M. (2002). *Qualitative research and evaluation methods* (3rd ed.) Oxford: Oxford University Press.
- Planning Alliance (2005). *Resettlement action plan in Ahafo South Project*. Accra: Newmont Ghana.
- Ross, M. (2001). *Extractive sectors and the poor*. Washington: Oxfam America.
- Sarantakos, S. (1998). *Social research* (2nded). London: Macmillan Press.
- Scoones, I. (1998). *Sustainable rural livelihood: A framework for analysis*. Working Paper No. 72. Brighton: Institute for Development Studies.
- Sen, A, (2000). *Social exclusion: concept, application, and scrutiny*. Social development papers no. 1. Manila, Philippines: Office of Environment and Social Development, Asian Development Bank; June 2000.

- Shankland, A. (2000). *Analysing policy for sustainable livelihoods*. IDS report No. 49, P. 22. Brighton: Institute for Development Studies.
- Sherraden, K. M. (1991). Rural-Urban Relations, Household Income Diversification and Agricultural Productivity. *Development and Change*, 22, 519-545.
- Solesbury, P. (2003). Indigenous peoples and non-ferrous metals mining in the Philippines. *The Pacific Review*, 18(3), 417-438.
- Temeng, V. A., & Abew, J. K. (2009). A review of alternative livelihood *The CEPMLP Internet Journal*, 11, 1-31.
- Tschakert, P. (2009). Contaminated identities: mercury and marginalisation in Ghana's artisanal mining sector. *Geoforum*, 38(6), 1304–1321.
- United Nations [UN] (1996). *Recent developments in Small-Scale mining*. New York: United Nations.

APPENDICES

APPENDIX I

INTERVIEW SCHEDULE FOR BENEFICIARIES

Dear Sir/Madam

This study is being conducted by a master student in Democracy, Governance, Law and Development at the Institute for Development Studies of the University of Cape Coast. The study is carried out in partial fulfilment of the requirements for the award of the degree. It is purely for academic purposes and any information herein provided shall be used for only such purposes. The anonymity and confidentiality of the respondent is fully assured. Thank you for agreeing to take part in this study.

Section 1: Previous economic activities of beneficiaries

1. What was your previous occupation?
 1. Farming
 2. Fishing
 3. Quarrying
 4. Galamsey
 5. Other, please specify.....
2. Were you satisfied with this job
 1. Yes
 2. No
3. What job are you currently engaged in
 1. Pig farming
 2. Garment production
 3. Aquaculture
4. How satisfied are you with your current job?
 1. Very satisfied
 2. Satisfied
 3. Not satisfied
5. Do you prefer your previous job to your current job?
 1. Yes
 2. No

- 6 Please explain your answer?
- (i)
 - (ii)
 - (iii)
 - (iv)

Section 2: Nature of ALPs

- 7 Why were you chosen to participate in this project?
- (i)
 - (ii)

- 8 Did you exchange some of assets or money for participating in this project?
- 1. Yes
 - 2. No

- 9 Where you trained for the current project?
- 1. Yes
 - 2. No

- 10 What kind of training were you given?
- (i)
 - (ii)
 - (iii)

Please indicate the extent to which you agree or disagree with the following statements about the nature of the current ALP you are involved in. The responses range from SA = strongly agree, A = agree, N = neutral, D = disagree and SD = strongly disagree.

Statement	SA	A	N	D	SD
The nature of the ALP I am engaged in is tedious than my previous occupation					
The ALP I am engaged in is more time consuming than my previous job					
This current job is more lucrative than my previous job					
With this current job I am able to meet my household needs than before					

This current job is less hazardous to the environment than my previous job					
This current ALP project does not conflict with my cultural beliefs					
This current ALP does not conflict with my religious beliefs					
This current ALP does not conflict with this community's cultural values					

Section three: Impacts of ALPs on the livelihoods of beneficiaries

11 Please indicate the extent to which the ALP you are involved has impacted on your livelihood in the following ways. The responses ranges from SA = strongly agree, A = agree, N = neutral, D = disagree, and SD = strongly disagree.

Statement	SA	A	N	D	SD
The ALP has helped improve my standard of living					
The ALP has increased my income level					
The ALP has helped me meet my household needs					
The ALP has helped me acquire more properties					
The ALP has helped improved my social status					
The ALP has helped improved the environment in this community					

Section four: Socio-demographics of beneficiaries

12 Sex

1. Male

2. Female

13 Age.....

14 How many years have you lived in this community.....

15 Are you a native of this community?

1. Yes

2. No

16 How many people are in your household?

.....

17 How long have you been involved in this ALP?

.....

18 What is the name of this community?

.....

APPENDIX II

INTERVIEW GUIDE FOR KEY INFORMANTS

Dear Sir/Madam

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Respondents' Demographics

1. How old are you?
2. In what capacity are you serving now?
3. How long have you served in this capacity?
4. How will you assess your overall performance in terms of implementing the ALPs in the Municipality?

Issues on ALPs in the Municipality

5. When did AGA initiate the Alternative Livelihood Programmes in the Municipality?
6. How many communities have you implemented such programmes?
7. How many projects do you have under the programmes?
8. What kind of projects have they implemented?
9. What necessitated the introduction of the programme?
10. Does each community's programme depend on its specific needs? Probe
11. Did you consider the resource available in each community before introducing the programme?
12. What impacts do you think the ALPs have had on the residents of the communities you have introduced them? Probe for both positive and negative impacts
13. Do you think the ALPs have been successful? Why?
14. What collaborations exist between the Municipal Assembly and AGA in implementing the ALPS?
15. How have you benefitted from these collaborations?
16. What do you think can be done to enhance the ALPs and the success achieved?

17. What are some of the challenges you encounter in the implementation of the ALPs?
18. What do you think can be done to improve on the ALPs implemented by AGA?

Thank You