

**AN ASSESSMENT OF THE LEVEL OF THE ADEQUACY OF PAID  
COMPENSATION AND LOST LIVELIHOOD IN MINING COMMUNITIES**

**By**

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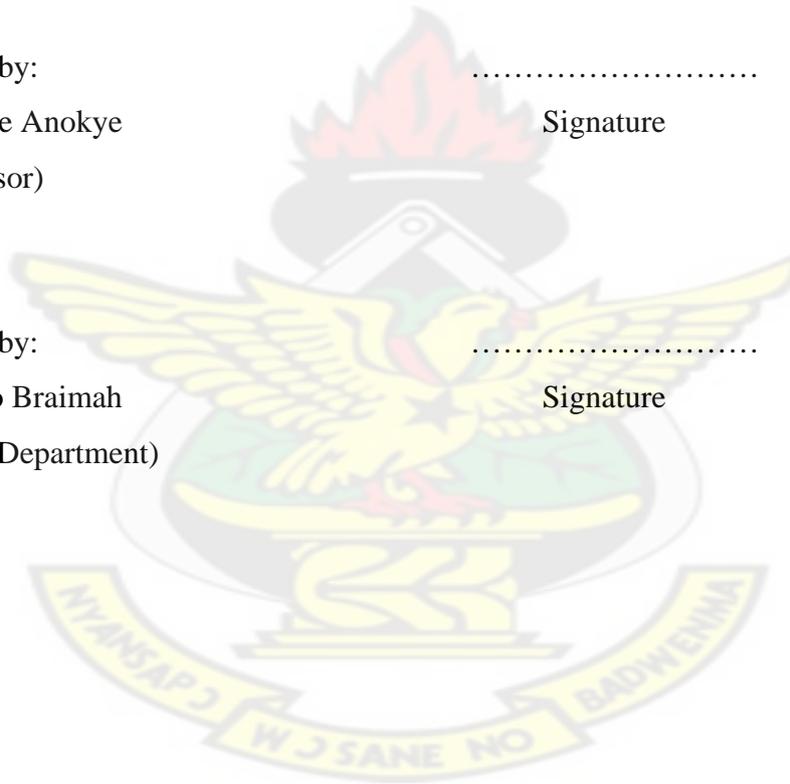
## CERTIFICATION

I, Ocran Louis Kwame, hereby declare that this submission is my own work towards the degree of Master of Science and that, to the best of my knowledge, it contains no material previously published by another person nor material which has been accepted for the award of any other degree of the University, except where due acknowledgement has been made in the text.

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## ABSTRACT

Compensation is very important to individuals and communities who through no fault of theirs are displaced to make way for development induced projects. It is the means by which the lost of assets and livelihoods may be replaced. Act 703 of the Mineral and Mining Act, 2006 of Ghana has provisions to guide the payment of compensation so as to ensure fair and adequate paid compensation. However, the provisions of Act 703 of the Mineral and Mining Act, 2006 has come under severe criticism due partly to shortfalls in the provisions of the Act. The affected persons of development induced displacements are no longer able to have access to their source of livelihoods and environmental services previously available to them such as farmlands, alluvial mine concessions and forest resources among others. This has resulted in agitation and protest from the affected persons. These protests often end up in violent demonstration and repression from government agencies that protect the richer claimants.

In an attempt to address the problems of paid compensation, a number of principles and compensation models have evolved. Examples include the principle of Pareto improvement, the Asian Development Bank (ADB) model of compensation, the Land Acquisition Act, 1894 and Act 703 of Mineral and Mining Act, 2006. The ADB policy model for example, advocates the payment of compensation for both land title holders and tenants. Though these models are meant to restore lost assets and livelihoods, they do not critically alleviate the incidents of impoverishment which often results from lost assets and livelihoods. Land which is extremely important to rural communities is most often not catered for by some of these compensation models.

The study was conducted at the catchments areas of four mining companies in the Tarkwa-Nsuaem Municipality and Prestea/Huni-Valley District namely: Abosso Goldfields, Golden Star Bogoso Mines, AngloGold (Iduapriem) Mines and Goldfields Ghana Mines. The study involved both the collection of primary and secondary sources of data. A case study approach was adopted to investigate the subject based on the set objectives.

The findings of the study were that, there is no universally accepted model on what could be accepted as adequate paid compensation. It also came out that the economic well being of individual and communities such as employment opportunities, incomes and savings have suffered significant losses after the projects. However, there has been improvement in access

to social and environmental services but an increased cost which threatens the coping mechanism of affected persons.

Based on the findings, the study recommends the involvement of affected persons in all levels of compensation negotiations so as to address their concerns. Others include an overhaul of the existing methods of valuation of compensation to take care of changing market prices as well as payment of compensation for lost Common Property Resources (CPRs) to ensure that affected persons receive fair compensations.

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## DEDICATION

I dedicate this thesis to all my course mates

# KNUST



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## **ABBREVIATIONS AND ACRONYMS**

ABD	ASIAN DEVELOPMENT BANK
AP	ASSOCIATED PRESS
APs	AFFECTED PERSONS
COIEL	CENTER FOR INTERNATIONAL ENVIRONMENTAL LAW
CEP	CORPORATE ENGAGEMENT PROJECT
CPRs	COMMON PROPERTY RESOURCES
CVM	CONTINGENCY VALUATION METHODS
ECOWAS	ECONOMIC COMMUNITY OF WEST AFRICAN STATES
FDI	FOREIGN DIRECT INVESTMENT
HIV	HUMAN IMMUNE VIRUS
IFC	INTERNATIONAL FINANCE CORPORATION
ILA	INTERNATIONAL LAW ASSOCIATION
ISSER	INSTITUTE OF STATISTICAL, SOCIAL AND ECONOMIC RESEARCH
LAA	LAND ACQUISITION ACT
LEEP	LIVELIHOOD ENHANCEMENT AND ENPOWERMENT PROGRAMME
MOFA	MINISTRY OF FOOD AND AGRICULTURE
NGO	NON GOVERNMENTAL ORGANISATION
ODI	OVERSEAS DEVELOPMENT INSTITUTE
OD	OPERATIONAL DIRECTIVES
OIC	OPPORTUNITY INDUSTRIALISATON CENTER
SEED	SUSTAINABLE EMPOWERMENT AND ECONOMIC DEVELOPMENT
UNIFEM	UNITED NATIONS DEVELOPMENT FUND FOR WOMEN
UNGA	UNITED NATIONS GENERAL ASSEMBLY
UNHCR	UNITED NATIONS COMMISSION ON HUMAN REFUGEES
WCD	WORLD COMMISSION ON DAMS
WFP	WITNESS FOR PEACE
UNDP	UNITED NATIONS DEVELOPMENT PROJEC

**CHAPTER ONE**  
**BACKGROUND TO THE STUDY ON THE ISSUES ADEQUACY OF PAID**  
**COMPENSATION AND LOST LIVELIHOOD IN MINING COMMUNITIES**

**1.0 Introduction**

People face impoverishment when their basic sources of livelihood are lost to bigger commercial interest or for the public good either forcibly or voluntarily. The challenges that such displaced people go through in their efforts to reorganize their lives have become a phenomenon which is acknowledged worldwide. Hence it has become generally accepted that, displaced people need to be recompensed for lost assets and livelihood, transfer and sometimes relocation.

Compensation therefore is conceived as the means by which impoverishment which usually arises out of lack of access to sources of livelihood as a result of dislocation or displacement from natural habitat could be addressed. People whose sources of livelihood have been lost are assisted to improve their livelihood and standard of living or to restore them in real terms so as to reduce poverty and the incident of poverty (World Bank Operational Manual 2000). Poverty results from a denial of choice and opportunities and implies living on marginal and vulnerable environment. Moreover, it is made worse by lack of access to sufficient productive resources as a result of certain exhaustive activities such as Mining and Lumbering (Labonne, et al, 1999) The question of restoring lost livelihood to reduce impoverishment has thus attracted universal consensus that requires governments and corporate bodies to behave ethically towards “affected people” who lose their assets, as a consequence of commercial or public projects.

In view of the above, most governments and corporate bodies have adopted policies, laws and principles that require compensation for people losing assets. For instance it is the policy of the Asian Development Bank to designate involuntary re-settlers as requiring compensation (Asian Development Bank, 2007). Also in Ghana the right to compensation and livelihood rehabilitation of people and parties affected by public and private projects has been legalised by the Mining Act 2006, Act 703 for the compensation of owner’s surface rights. Act 703 of the Mineral and Mining Act, 2006 subscribes to the generally anticipated impoverishments, which are likely to confront affected people and attempts to address the strain, and stresses due to lost livelihood, environmental degradation and

health hazards within the context of Ghana Poverty Reduction Strategy 1 and 2 and Involuntary Resettlement policies of the World Bank.

In spite of international consensus on the need to compensate victims whose assets and livelihood have been lost to commercial and public activities, the question of whether such paid compensations have been adequate and sustainable as regards the present and future consequences on both people and the environment remains a subject worth examining. This study therefore sought to assess the adequacy of paid compensation for affected people whose assets and livelihood have been lost to mining activities in the Tarkwa-Nsuaem Municipality and the Prestea/Huni-Valley District of Ghana.

## **1.1 Problem Statement**

Ghana's mineral resources make her Africa's second biggest producer of gold after South Africa. With the liberalisation of the Ghanaian economy and reforms in the mining sector coupled with the rise in gold prices, over 55 gold prospecting licenses were issued between 1986 and 1989 (Hutchful, 2002). These included Bogoso Resources and Goldfields Ghana. The result of these increased activities in the mining industry resulted in the gold industry recovering to a production level of 16,562 kg in 1990. In 1993 it rose to 38,600 kg and then to 51,330 kg in 1995 (ibid pp.84). By 1998, gold production in Ghana had reached 65,540 kg. It is said that earnings of gold exports climbed from US\$647 million in 1995 to US\$682 million in 1998.

It is also a fact that much of the annual growth rate of about 4.5% of Ghana's economy as at 1990 was led by the mining and quarrying sub-sector. Although, the growth and contribution of the mining industry to export earnings of Ghana is very significant it has not fully reflected on the living conditions of the communities in which mining activities takes place.

According to the Institute of Statistical and Social Report, (ISSER, 2006), the mining companies have adequately succeeded in extracting the minerals, exploited the communities, deprived individuals and communities of their sources of livelihood and repatriated their profits while leaving the residents to deal with the future consequences of mining activities. There is enough evidence to suggest that mining operations in recent times have resulted in environmental constraints on local communities as forest have been

degraded because they inhibit mineral deposits which had to be exploited. Ironically, governments allow the exploitation and degradation of the environment with the sole objective of helping to reduce poverty. This however is in contrast to the shared relationship between poverty and the environment.

There is no denial of the fact that there is a strong relationship between poverty and the environment. In that, impoverishment and environmental decline in many cases are, as a result of commercialisation and population growth. In the case of commercialisation, people are made poor as a result of displacement from their resources by richer claimants or by competition for existing lands which results in forced migration to other marginal areas (Mabogunje, cited in Environmental Annual Report, 2002). A vivid example of such richer claimants and their ability to make people poor can be found in the activities of Goldfields Ghana Limited, through whose action or inaction sent thousands of cubic meters of mine waste into the Asuman River and contaminated it with cyanide and other metals. The disaster virtually killed all life forms in the river as well as made the river undrinkable for five villages for which it was their main source of drinking water ([www.nodirtygold.org/wassa](http://www.nodirtygold.org/wassa), 2007).

Again, as a result of population growth, involuntary resettlement, or concentration of people into small space of land, the meagre natural resources are further divided to meet the exigencies of poverty which in turn results in indiscriminate destruction of the environment. The discussions made above suggest that involuntary resettlement of affected people as a result of development induced displacement, especially in the Ghanaian context results in impoverishment which could be mitigated by adequate paid compensation. It is believed however that, this is not the case in Ghana. In the Tarkwa-Nsuaem Municipality and Prestea/Huni-Valley district for an example, the situation of social and economic discomfort such as having to pay for drinking water, firewood, and foodstuff among others which hitherto was unknown to some people and communities, has culminated in an unending agitation for adequate compensation for lost assets and livelihoods. These agitations often result in violent confrontations between affected communities and the mining companies who despite the protests, insist on having made adequate paid compensations for acquired properties.

Given the accusations of inadequate compensation for lost livelihoods and denials by richer claimants, the study sought to find answers to the following questions:

- What constitutes adequate paid compensation?
- How would payment of compensation by itself be sufficient recompense?
- Is cash the only appropriate form of compensation?
- Who are the “affected persons” which should be compensated

## **1.2 Objectives**

In order to respond to the research questions raised above, the study undertook to examine the response of communities and individuals whose sources of livelihood has been lost to mining activities and have received compensations.

The specific objectives of the study did include the following:

- To find out the constituents of adequate paid compensations.
- To find out whether paid compensations have really been sufficient recompense.
- To find out whether cash is the only form of compensation for lost livelihoods.
- To find out whether all affected persons received compensations.
- To make suggestions and recommendations that would inform compensation policy formulation in Ghana.

## **1.3 Justification for the Study**

There are numerous companies in Ghana whose activities are continuously reducing the chances of communities to survive. These include Mining, Lumber, Quarry and Construction among others. These companies exploit the forest and mineral resources, pollute the water systems, destroy historic sites and repatriate their profit leaving only stipends as royalties and presumed compensations to affected people. However, there is a new sense of awakening among corporate bodies and governments who have recognised the need to promptly pay adequate and fair compensation to people whose sources of incomes and livelihoods have been taken over by them.

Although this is a constitutional provision, it has been down played over the years due partly to weak legal and institutional system to implement and enforce these provisions. There is also the problem of inadequate and or properly established procedure by which

adequate paid compensation could be determined for any lost livelihood. Hence displaced people continue to be at the mercy of their rich and powerful claimants. The absence of far reaching policy on compensation procedures for assessing the real values of properties especially, cash crops and farm produce in terms of their short and long term values demand that an acceptable procedure is found to help determine the real values of lost assets and livelihoods. This study therefore made an attempt to:

- Close the missing link between paid compensations and the procedure for determining what could be accepted as adequate paid compensation.
- Establish the basis for further enquiry into the ever changing dimensions of paid compensation in view of the changing market forces and emerging new trend of compensation.

#### **1.4 Scope and Limitations of Study**

The research examined the socio-economic and spatial implications of displacement as a result of Mine developments in the Tarkwa-Nsuaem Municipality and the Prestea-Huni Valley District of Ghana where a greater number of Gold Mining Companies are currently operating.

The nature of gold mining operations in Tarkwa-Nsuaem Municipality and the Prestea-Huni Valley District of Ghana is of the open cast type or surface mining. This type of mining is such that communities can not be allowed to exist closer to mining areas and would have to be relocated with the attendant lost of sources of livelihood.

The research found in the gold mining operations and displacement of people a huge potential for poverty generation as well as environmental degradation. It therefore relied on the various research findings of institutions such as the World Bank, Asian Development Bank. These institutions have been extensively involved in development projects and have displaced numerous peoples and communities directly or indirectly and for that matter have established compensation policies worth examining. The research did identify key stakeholders of the mining industry particularly AngloGold Ashanti ( Iduapriem Mine) Bogoso Golden Star, Goldfield Ghana Limited and Aboso Goldfields Limited. These companies have operated surface mining since the early 1990 to 2008 and have had extensive experience in compensating and resettling individuals and a number of communities in Tarkwa-Nsuaem Municipality and Prestea/Huni-Valley district. The scope

of the study therefore involved a unit sample of individuals and communities within the operational areas of the mining companies as well as the mining companies themselves.

The research was limited by the inability of the researcher to established the social cost incurred by individuals and communities with regards to displacement from ancestral shrines and grooves, burial grounds and disruption of their social integration, The study was also not able to establish the socio-economic implication of the migration of displaced individuals who opted out of resettlements to host communities.

### **1.5 Organisation of Study**

The study is organised into five chapters. Chapter One stated the background of the study, the definition of the research problem, the objectives, the scope and limitations of the study and organisation of the study. Chapter Two focused on the review of concepts in relationship to previous studies on the subject under study. Chapter Three informed on the research design and methodology including the general profile of the study area. Chapter Four dealt with the organisation of data, analysis and interpretation of data to inform on the tools for assessing the adequacy of paid compensation. Chapter Five highlighted the findings of the study, conclusion and recommendations of appropriate policies for acceptable paid compensation.

## CHAPTER TWO

### 2.0 THEORETICAL FRAMEWORK FOR THE ASSESSMENT OF PAID COMPENSATION FOR LOST LIVELIHOOD

#### 2.1 Introduction

Based on the background information, the research problems and objectives of the study, which was presented in the previous chapter, this chapter presents the theoretical framework for the study. An attempt was made to define some concepts underlying the study. It also dealt with the review of available literature which relates to the topic. The discussion centred on what constitute displacement, lost assets and livelihoods, 'affected persons' expropriation laws and practices as well as resettlement. The specific areas reviewed included paid compensation, lost livelihood and the various laws and principles that have been used in assessing paid compensations. The review was done in consideration of what pertains in Ghana and elsewhere.

#### 2.2 Definition of Concepts

##### 2.2.1 Displacement

Displacement as defined by the World Commission on Dams (WCD) refers to both 'physical displacement' and 'livelihood displacement or deprivation.' Physical displacement here means the removal of people from protected areas or habitats. Livelihood displacement means the removal of people from the source of activities, entitlements and assets by which people make a living (ODI, 1999).

##### 2.2.2 Causes of Displacement of Population

Available literatures confirm that there are many factors that contribute to the displacement of population; a few of them are climatic changes such as high tidal waves and torrential rainfalls in some parts of the world. A recent example is the evacuation of the people of New Orleans as result of the hurricane "Gustav".(AP News, 2008) Human activities such as ethnic conflicts, religious intolerance and warfare have also contributed to forced migration and population displacement all over the world. This is not to mention economic and political instability. In most cases however, it is likely that when the causes of these conflicts have been resolved, the affected persons returned to their original abode to reclaim their lost assets and livelihood. A case in point is the Bawku ethnic conflict in Upper East Region of Ghana. With the easing up

of the conflict, there is the possibility that affected people will return to their homes and their sources of livelihood.

Displacement of people can take place both within the borders of a country or beyond its borders. This study however, limited itself to displacement within the borders of a country, which is usually, termed “Internal Displacement” as well as the factors which contribute to such a phenomenon. Displacement can be classified into, conflict induced, political instability, religious intolerance, natural disasters and development induced displacements according to the character of its origin.

During a summit of grouping of West African States Meeting in Abuja, Nigeria, internally displaced persons were described as:

*“Persons or groups of persons who have been forced or obliged to leave their homes or places of habitual residence, in particular as a result of or in order to avoid the effects of armed conflict, situations of generalized violence, violation of human right or natural or human-made disaster, and who have not crossed an international border.”*  
(ECOWAS, Abuja, 2006) It is estimated that, 25 million people are displaced worldwide by conflicts.

Since 1990’s the West African sub-region has experienced an enormous conflict induced displacements basically as result of ethnic tensions and rivalries. A report on regional seminar on internal displacement in the Economic Community of West African States (ECOWAS) which took place in Abuja, Nigeria, in April, 2006 revealed that, the number of people displaced by conflicts in the West African sub region is difficult to estimate. Nevertheless, the enormity of displacement was to be seen in the light of 14 years of intermittent conflict in Liberia and 11 years of civil war in Sierra Leone. This is not to mention the civil war in Guinea Bissau, Cote d’Ivoire, the rebel activities in the province of Cassamance in Senegal and the Tuareg insurgency in Mali.

Ghana has also had its share of internal displacement mainly as a result of ethnic and political intolerance. The Nanumba –Kokomba war of the 1990’s was a case of ethnic problems. A Daily Graphic report of 1<sup>st</sup> September, 2008 mentioned Tamale and Gushiegu disturbances which is said to have led to the killing, burning of houses and fleeing of people

as a result of political intolerance. In most of these cases of displacement, women and children are the most affected.

According to the United Nations Development Fund for Women (UNIFEM), it is estimated that 80% of people which were displaced by the civil war in Cote d' Ivoire were women and children. Similarly, the Save the Children UK has estimated that 60% of the people displaced by the war in Sierra Leone were children. (ECOWAS Meeting, Abuja, 2006).

Displacement of people by conflict in West Africa is not an isolated case. For more than 20 years, conflicts in the countries of the Great Lake region have rendered millions of people homeless. Notable among them was the conflict in Angola, Zaire, Congo Brazzaville and Uganda among others.

A mention could also be made of natural disasters as a leading cause of massive displacement of people worldwide. According to Schwartz (2006), more and more people are being affected by natural disasters. These often happen in the developing world. It is estimated that 1.6 billion people have lost their homes and livelihoods or suffered other damages since the year 2000. Some of the horrifying events of natural disasters are the Asian tsunami which is reported to have killed 31,000 people, injured 23,100 people and displaced 500,000 people in north eastern and southern coast of Sri Lanka. (UNHCR, 2005).

Irrespective of the many factors that lead to displacement of individuals and communities, the concern of this study was to look at one factor that has persistently contributed to displacement of people. This is associated with infrastructural developments that aim at reducing poverty. These developments are in the form of industrial platforms or irrigation systems, or even the establishment of Parks and road networks.

In Ghana, gold mining activities have since the late 1980's been the major cause of displacement of people. These people are mainly farmers and artisanal miners who are politically weak in relation to mining companies who have the support of governments and politicians. (Mate, 2002) In all these circumstances, there are forced displacements of people which are often resisted.

In the case of Ghana, the response to community resistance to displacement by mining companies has included forced eviction by company security alone or in conjunction with state security agencies. According to Mate, (2002) the use of private security companies has led to concerns about the need for international regulations of what are effectively latter-day mercenary forces. In the opinion of Cernea, (2003) induced displacements are some of the most perverse social pathologies of development in that they so often cause impoverishment. The author further argues that displacement heightens the social exclusion of certain groups of people because of their removal from a geographic territory as well as the disintegration of their functioning social network (Cernea, 2003). The effects of displacement are that the affected people face a range of disadvantages that include landlessness, joblessness, homelessness, food insecurity, loss of common resources and community disintegration that result in loss of social and cultural cohesiveness.

Cernea's view is strongly shared by the World Commission on Dams (WDC) whose definition of physical displacement suggests that, people become automatically deprived. These definitions however, do not indicate whether the displaced persons were well off or not before displacement. In whatever perspective Cernea and WDC see it; deprivation is a phenomenon which can occur even if people are not displaced by physical development. In Ghana, the question of deprivation is not inimical to development induced displacement alone. It is more of economic stagnation which does not allow economic prosperity and access to basic human necessities hence people are naturally compelled to move out of the former habitats in search of these necessities.

It has also been established that development projects usually involve the direct control of the developer over land previously occupied by another group. Natural resource extraction, Urban renewal and infrastructure development such as highways, bridges irrigation canals and dams all require large tracts of land which may require the removal of people from their original habitats to make land available for such projects. In Abuja, Nigeria, for example, individuals have been uprooted as part of an urban plan for the city. However, the consequence of development-induced displacement in one case or the other depends largely on how resettlement is planned, negotiated and carried out.

While the consequences of development induced displacements have been elaborately enumerated there is no precise data that talks about the number of persons affected by

development-induced displacement throughout the world. Scholars and policy-makers thus rely only on World Bank records.

According to World Bank estimation, about 3.2 million people are facing displacement as result of active World Bank project. This is against the background of a 1994 review of the Bank supported projects which revealed that at least ten million people are displaced in the developing countries each year for dams and urban development and transportation projects alone (, COIELBRIEF, 2000).

While displacements resulting from individual urban projects are low, the rate at which it happens in some particular sectors such as dams and mines is very high (Cernea,1999). According to Mining Watch, 30,000 people have been displaced by mining activities in and around Tarkwa alone (<http://www.miningwatch.ca/2007>).

In recent times however, displacement of people have taken on a new meaning. In much of the development induced displacement literature, scholars have come to consider development displaced persons as not only those who are forced to vacate their homes and source of livelihood but also the host population that take in displaced people. Scudder (1996) suggests that, development displaced persons could be made up of the people living in the immediate vicinity of the project as well as project immigrants. Project immigrants are those involved in the planning, designing and implementation of the project. Others are those who later move to take advantage of the project related opportunities. These two groups are the beneficiaries of the project while those who are forced to move from their homes are the adversely affected group.

In overall terms, development induced displacement and resettlement, often affects the most vulnerable and marginalized groups of society in terms of their economic, political and social status. For example, a study by Colchester (2000) indicates that the impact of dam projects on indigenous population and ethnic minorities is very pronounced. According to him, the Adavasis tribal people who constitute only 8 percent of the India population are estimated to make up 40 – 50 percent of those displaced and hence those whose livelihoods are adversely affected by development projects. Colchester goes further to state that indigenous victims of dam projects are bedevilled with cultural alienation, dispossession of land and resources,

incomplete or lack of compensation as well as human right abuses. Their situation becomes even more painful when they are dislocated from the land and the environment, which they have known all their lives.

The problem of involuntary displacement has now assumed socio-economic and political dimensions in recent times (Cernea, 2000). The importance which the problem attracts now is explained by several factors such as displacement size, frequency, the effects of poverty vis a vis the resistance of those displaced. There are arguments that projects that has the potential to create displacement should be avoided and not allowed to precede. Some other commentators are also of the view that by optimizing project design certain project based displacements can be fully avoided. Still others are of the view that if all badly conceived projects were to be aborted population displacement and relocation will never cease. This is because population growth, urbanization and diminishing access to land will continue to dictate changes to land use patterns and water resources.

Changes to land use patterns and water resources have similarly become an environmental issue, which is of global concern. Environmental change and social disruptions resulting from large-scale development infrastructures can have significant adverse health outcomes for the local population. It has been reported by Mining Watch, a Non- Governmental Organization that, air pollution stemming from mining operations has spread malaria, tuberculosis, silicosis and skin diseases among other environmental and health hazards. These concerns notwithstanding, development can not be stopped.

The question of the environment and land use pattern becomes very important when considering communities who depend on land and natural resource base for their survival. This is because, if land is taken away from individuals and communities for development projects it results in the loss of access to traditional means of livelihood, including agriculture production, fuel wood gathering and collection of forest products among others. The displacement of people from such assets not only disrupts local economies but also effectively bars them from series of natural resources and environmental inputs, which enhances their livelihood. Thus, among the resettled individuals and communities, access to drinking water, health services and the ability to cope with new social and physical environment should be made possible and as part of any compensation package.

Displacement in the context of this study therefore means any phenomenon which has the potential to alienate people from their source of livelihood. This means that even if there is no development induced activities to cause displacement, ethnic conflicts, religious intolerance, and warfare among others have an equal potential to displace people and reduce their chances of having access to basic needs. However, the extent of extreme social upheaval associated with some processes of displacement as mentioned above has not been experienced in Ghana yet. But it is on record that projects like the Akosombo dam and mining has displaced many individuals and some communities in Ghana. Resistance to some of these projects from communities and the use of police and company security in quelling them has been experienced in areas where displacements have taken place.

### **2.2.3 Affected persons**

According to a definition given by the Asian Development Bank, “Affected Persons” are those who stand to lose all or a part of their physical and non-physical assets because of a development project (Asian Development Bank, 2007). As mentioned earlier, the physical and non-physical assets include homes, communities, productive lands, resources as well as social and cultural networks among others. The impact of one or two loses may be temporary or permanent and most often occur through land expropriation by the use of force or coercion.

Affected persons usually have no option but to relocate elsewhere. People can also be affected through exposure to health and safety hazards which often force them to relocate. The stress that affected persons undergo in every aspect of displacement must be cushioned by an adequate paid compensation. A typical example of ‘Affected persons’ scenario is Tarbela in Pakistan, where allotted agriculture land were of poor quality and basic social services such as schools, health and electricity were not provided thereby prompting migration from the settlement.

The social impact of development project is further emphasized by Boakye (2001).

According to this author, human migration within the resettlement communities of the Volta Basin was on the increase because of poverty and unfavourable resettlement conditions. The effect of that increased human migration is the prevalence of high rate of HIV cases within the Volta Basin. Some other studies on the effect of development suggest that indigenous people and ethnic minorities are the most adversely affected. Coming from politically marginalized

and disadvantaged strata of society, these groups of people often end up neglected and impoverished.

Scudder, cited by Stanley (1996), is also of the view that people affected by development projects could be made up of those living in the immediate vicinity of the project as well as project immigrants. Project immigrants are those involved in the planning, designing and implementation of the project. Others are those who later move to take advantage of the project related opportunities. These two groups are the beneficiaries of the project while those who are forced to move from their homes are the adversely group.

This study is of the view that, the definition given by the Asian Development Bank (ADB), is quite limited in scope while that of Scudder is quite acceptable. This is because physical development such as the establishment of a mine or a dam has the potential to pull people from other localities to the mine site in search of jobs. In the history of gold mining and dam construction in Ghana, there has been extensive migration of people from all over the country to mining and dam construction sites in search of job and trading opportunities. All these people are victims of development induced activities which can not be overlooked.

This study is therefore of the view that the term 'Affected Persons' can equally be applied to migrants who have been displaced from their homes as result of developments elsewhere. Affected persons in the context of this study could therefore mean all those who stand to lose part or all of their assets as well as all those who would have to relocate and settle at a development sites to enhance their livelihoods or to gain from projects.

#### **2.2.4 Resettlement**

Resettlement refers to the physical relocation of people (International Finance Corporation, IFC (2002). Resettlement could be voluntary or involuntary depending on the circumstances under which it is taking place. In some studies on resettlements, it was observed that, the resettlement of the displaced people under many circumstances have been involuntary. In the Operational Policies of the World Bank, 'involuntary' means action taken without the displaced persons explicit consent or the power of choice.

According to the International Finance Corporation Handbook (2002), resettlement is involuntary where it occurs without the informed consent of the displaced person. It is also

involuntary where people give their consent because they have no option or the power to refuse resettlement (World Bank Operational Manual, 2000). In Ghana, the urgency to attract foreign direct investment, (FDI) and boost the export of natural resource products has created a situation where protesting communities are often considered by governments to be obstructive and their concerns are deliberately overlooked (Mate, 2002). According to Mate, governments often resort to the use of police and military in response to community protest.

On the other hand there are situations, which suggest that resettlement of displaced people have been voluntary. Voluntary resettlers are self selected young people who are willing to explore new opportunities and therefore are prepared to migrate from urban to rural locations (ADB, 2007). Sometimes, rural-urban migrations are, organized by governments with the intent of stimulating growth and therefore incorporate the establishment of structures that could eliminate the incident of impoverishment.

The phenomena of involuntary resettlement have wider dimensions and involve people of all ages, and gender. In some cases, displaced people are evicted against their desires and many may be too traumatised to organize and re-establish in new locations and undertake new vocations (ADB, 1995). The result of such a situation is that some people may be more adversely affected by resettlement than others in respect of making use of resettlement assistance.

Studies carried out by the Asian Development Bank have also revealed that, the most vulnerable groups adversely affected by resettlement programmes, are women and households headed by women. This is because compensation is, often paid to the men as heads of households. Thus women are left with fragile economic status and limited access to support services. (ADB, 1995) Some other studies have revealed that involuntary resettlement have serious environmental implications, in terms of pressure on forest product and land degradation among others. For many communities affected by mining operations in Ghana, the land provides the basis for major livelihoods activities. Again it provides the basis for the major survival activities as well as resources such as medicinal plant and game for an example. There is therefore a direct link between the environment, and the socio-economic and culture of people and communities. Resettlement away from the land creates an adverse socio- economic consequence which includes the disruption of existing social structures and relations (Mate, 2002).

## **2.3 Lost Livelihood**

### **2.3.1 Introduction**

This section of the study reviewed what constitutes livelihoods. This was done in view of the various definitions given by development authorities and organizations. These definitions highlighted both the tangible and intangible forms of livelihoods.

A livelihood is defined as ‘the activities, the assets, and the access that jointly determine the standard of living gained by an individual or household (Overseas Development Institute, 1999). Livelihood also connotes the means, activities, entitlements and assets by which people make a living. Loss of livelihood connotes the denial of access to activities and assets that determine the standard of living. Loss of livelihood has two main effects. First, it has the risk of total alienation from sources of income such as arable land, common property resources such as forest, ground and surface water among others. Secondly, there is the tendency for food insecurity, leading to under nourishment, higher incidence of morbidity, mortality and other diseases associated with deteriorating water quality (Cernea, 2000).

According to Boakye (2001), the loss of land by the 80,000 people forcibly relocated for the construction of the Akosombo Dam meant, the loss of their primary source of fishing and agriculture, to the loss of grave sites and community stability. Loss of peoples’ livelihood, as defined above, means the deprivation of people’s means of production, and their dislocation from their social settings. Where there is absence of livelihood opportunities, people could abandon resettlement sites and migrate to where there are opportunities for accessing livelihood.

The definitions put forward by Boakye, (2001) and Cernea, (2000) for lost livelihoods do not establish the linkage between people and the degree of possession or control of such sources of livelihoods by which, their loss could be said to have adversely affected their them. The point is that livelihood should be determined by the activity, assets, access and, the interrelationship between them. In the eyes of this study, these determinants of livelihood are all missing in the definitions given above since; they do not establish the relationship between sources of livelihood and ownership.

### **2.3.2 Activity**

According to the Overseas Development Institute activity includes the various forms of work that are undertaken by individuals or communities to sustain their living standard. A few of these activities may include the cultivation of crops, hunting, the gathering of forest products such as firewood, fishing and animal husbanding in consideration of the unique spatial disposition. Therefore for people living in the areas under this study activities include farming, artisanal mining, salaried and wage earning jobs. The alienation from any of the sources of these activities could be said to constitute lost of livelihood.

### **2.3.3 Assets**

Traditionally, assets were viewed in terms of physical movable and immovable possessions such as plots of land, buildings and agriculture plantations among others. In recent times however, assets have come to include Human Capital that is, education, skills and health of household members; Physical Capital, for example, are farm equipments or sewing machine, while Social capital includes social networks and associations to which people belong ( ODI, 1999).

Assets also include Financial Capital and its substitute. This includes savings, credit, cattle and natural capital which are the natural resource base. Assets under this circumstances, are defined as not only natural, biological, that is land, water, common-property resources, flora, fauna, but also social, community, family, traditional social network, participation, empowerment, human (knowledge creation by skills), and physical, that is roads, markets, clinics, schools, among others (Labonne, et al, 1999). “Land” according the World Bank includes any thing growing or permanently attached to the land such as building and crop. The definitions given above, suggest that the loss of any of these market and non market items results in a temporary or permanent decline in standard of living of the affected persons. Thus, in establishing what asset has been lost to development induced displacement; the study adopted the above given definitions of assets as a tool of measurement.

### **2.3.4 Access**

In reference to the definitions given above, access to livelihood is determined by the extent of ownership. In Ghana, and as in most traditional settings, ownership may be claimed on both legal documented status or on the status of ancestral inheritance. For an example, the land tenure system in Ghana does not allow any individual to own an ancestral land. Land is

entrusted to the care of elderly clansmen or chiefs in trust of the people. Access to any land in Ghana for the purpose of building or farming or any other developments are therefore considered on the terms of one's peculiar claim whether by blood relationship or by tenancy. The level of access to some opportunities and facilities such as schools and health care, water supply, sources of income among others may be determined by the availability of institutions, the distance between the point of service, the quality of service and affordability. This means that access will not just have to be in name but how they impact on the lives of individuals and communities. This also means that one's ability to access livelihood depends on the disposition and ability of the individual to avail him or herself of the facility. In determining what constituted access, the study looked at not only the disposition of individuals and communities but their ability in terms of the strength of their claims in relationship to the various aspects of livelihood.

#### **2.4 Historical Antecedents of Compensation**

Compensation is the usual operational remedy applied world wide to replace what have been lost either to a private or public good. Prior to contemporary international law principles, compensation and restitution for displaced people have featured regularly in international treaties and state protocols as early as the 17<sup>th</sup> century. An example of early European and international treaty that recognized the right to claims of compensation and restitution for displaced people was the 1648 Treaty of Westphalia that ended the thirty year war (Schwerin, 1972). Another example is the 'Jay Treaty' of 1794 between Britain and the United State. This treaty stipulated the claims to either restitution of properties or compensation for properties or commercial loses of loyalist of the British Empire during the American War of independence.

Recently, states and international practices have produced exemplary compensation and restitution laws for the violations of property and human right abuses. It should also be noted that modern day treaties and agreement that ended international and national conflicts included compensation principles in their final agreement of settlements of conflicts. These examples of the right to compensation have continued to transcend down to the prevailing International Law Principle that have become the yard stick by which refugees and victims of human right abuses have stacked their claims to restitution and compensation for lost assets and livelihood.

Even though earlier compensation claims centred mainly on displacement as a result of political conflicts and instability, modern day problems of displacement and compensation

have come about as a result of many development interventions to transform natural resources. The focus of this study was thus to investigate how compensation payment has been practiced in contemporary Ghana.

## **2.5 Paid Compensation**

The question of compensation has featured prominently in development induced displacements all over the world. In Ghana, the adequacy or not of paid compensation has become a major issue both to developers and social commentators. In an attempt to unravel the problems of paid compensation, this chapter of the study reviewed available studies which have been carried out on the concept of compensation. The review included the definitions of compensation, laws and principles that underpin compensation payments. It also included the review of expropriation laws as practiced by governments and institutions, the various types of compensation, the mode and options and the valuation methods used in the payments of compensation elsewhere and in Ghana to establish their strength and weaknesses.

### **2.5.1 Definition of Paid Compensation**

According to the policy of the Asian Development Bank, what is offered as compensation is the replacement rate of what was pertaining before the project. This is also termed as the 'without' project situation. Affected persons should be at least well off after the resettlement as they were before. Compensation therefore is conceived as the means by which impoverishment which usually arises out of lack of access to sources of livelihood as a result of dislocation or displacement from natural habitat could be addressed. Compensation is also understood to refer to specific measures intended to make good losses suffered by people affected by development projects such as dams, mining projects, or any establishment that can not contain people or communities within the confines of its premises.

According to Cernea (2000), compensation if operational is a remedy employed universally as a means to assuage the problems of asset dispossession and income loss. It usually takes the form of a one-off payment either in cash or in kind for land, housing, and other assets. However, in the view of Asian Development Bank, for it to sufficiently restore livelihood and living standards, people losing assets needs to be compensated for lost asset and incomes, transfer and relocation assistance as well as help to rehabilitate and restore their lives. According to the Bank's policy, compensation at replacement rates would not suffice if livelihood and housing are threatened. However it is believed that when displaced people are

adequately resettled, it could assuage some of their suffering especially the problem of housing.

In view of the stated definitions of compensation by the Asian Development Bank and Cernea, compensation is any payment that is supposed to replace any loss, assets and incomes. These definitions however, fall short of mentioning the specific loss that compensation should cover as well as what constitutes assets and livelihood with regards to the definitions by Labonne and others (1999). With reference to the definitions of livelihoods given by Labonne and others, this study defined compensation as the payment for the loss of any item which promote livelihoods and which is possessed individually or collectively. It may include land, housing, incomes, forest and forest product, water bodies and the environment.

### **2.5.2 Classification and Types of Compensation**

Compensation is not a new investment. It a function of damage substitution which, only returns to the displaced person, something that has been taken away from him. More often, it provides people with less than what was taken from them. There are many categories of loses for which compensation could be claimed as well as the diverse rights to compensation. The right to these compensations has been discussed under numerous laws and principles some of which has been reviewed in this study. The categories of loses include: personal injuries, damage to property, liability and displacement from source of livelihoods.

A claim for compensation may be laid for personal injuries or death caused wilfully or accidentally. Such injuries may include burns, electrocution as result of malfunctioning electrical gadget, fire outbreak or as result of ones own carelessness. Wilfully, personal injuries or death may be caused by the activities of human beings such as thieves, rapist and mentally deranged people among others. Personal injuries and deaths could be as a result of civil strife and warfare either in defence of oneself or of a nation. The claim for compensation under any of these circumstances is to replace whatever has been lost as may be determine by the arbitrator with regard to the value of the said loss. For the purpose of this study however, the emphasis was on paid compensation for lost assets and livelihoods.

### **2.5.3 Laws and Principles of Compensation**

The United Nations General Assemble (UNGA) Resolution 194 Paragraph 11 specifically stipulates the payment of adequate compensation for the expropriation of any Arab land by the

Jewish state (UNGA, Resolution 194, 1948). This resolution has been referred to in many cases of mass displacement for redress.

The United Nations General Assembly Resolution 194 has distinct political undertones. However, it is the basis of international recognition for the payment of compensation for displaced people of all categories. It has evolved into the status of a right that obliges governments and private entities to pay compensation for people whose properties are expropriated for the benefit of the state or individuals. For example the fifth amendment of the American constitution states that the authority of the richer claimant can be exercised only by giving the party whose property is taken or whose enjoyment of such property is interfered with, full and adequate compensation.

In order to deter government from indiscriminate appropriation of land, the Fifth Amendment of the American constitution also guarantees that private property is not taken for public use without just compensation. This is to ensure that some people are not made to bear the public burden which should be borne by the public as a whole.

In Ghana the payment of compensation was given a boost with the enactment of the 1992 constitution which guaranteed the payment of compensation for lost assets and livelihoods. In the practice of administering fair and adequate compensation however, numerous questions have been raised about what constitutes a fair and adequate compensation in relation to the right value of losses over time and space. In an attempt to find answers to the above question, economic scholars have for a long time struggled with problem of measuring the gains and losses and for that matter compensation when changes are being effected. Notably among these economist is Vilfredo Pareto, an Italian economist. He established the only principle that is, grudgingly accepted by economists. The principles called the 'Pareto improvement'. Under this principle no individual is made better off and no individual is made worse off as a result of the project. At the core of this economic thinking is the concept of protecting those who would lose from a project (Cernea et al, 2002).

Several doubts have been raised by social and economic commentators as to whether it is possible to make a change without making someone slightly worse off. In response to this dilemma, economic scholars have developed a compromising rule called the 'Compensation Principle'. According to the compensation principle, a change can be justified if the gains to

those who benefit are large enough to compensate the losers and still have something left over. For an example if the development of Gold Mine should create an income of about GH¢100,000 for people employed by the mine and losses of GH¢3,000 to people whose land have been taken over, the change is deemed to be justified. Moreover, under the compensation principle, it is also possible to derive enough income through taxes impact fees and other charges from the winners to compensate losers and still leave enough with the winners in benefits.

#### **2.5.4 Critique of the Compensation Laws and Principles**

Compensation principle in spite of it's supposedly acceptability as the middle way for both losers and winners has attracted some criticisms. According to Cernea and other social commentators, compensation by its very nature can not solve the task of restoring incomes and livelihood to their pre-project levels. They are however of the view that compensation as a means could only be assigned an economic policy and theoretical role in restoring and improving pre-project livelihood.

The debate about the ability of compensation to restore incomes and livelihood becomes even more intense when, the policy objective in involuntary displacement and resettlement adopted by governments and agencies such as the World Bank, the Asian Development Bank among others comes under scrutiny. The policies adopted by governments and agencies mentioned above is to “Resettle with improving or at least restoring the income and livelihood levels of those displaced”. The underlying tone of these policies is that, compensation at replacement cost for assets lost would be adequate to restore lost incomes and livelihood. These policy positions of governments and agencies have been rejected by some schools of thought as connoting that compensation is a panacea for lost assets and incomes.

According to these schools of thought, massive body of empirical evidence gathered over the years defies the assumption that compensation is the panacea for lost incomes and livelihood. One of these schools is of the opinion that there is the need to shift from the current compensation-centered economics of resettlement to development oriented tools which are necessary to help lift displaced people above their ‘before project’ levels. An investment financing tool in the view of this school could be used as a supplement to top up resettlement resources (Cernea, 2003).

There is yet another crop of empirical evidence that challenges the compensation principle in the case of mass displacement. A review of early resettlement studies by Guggenheim (1994), Lin and Gill (2003), show that compensation for both intrinsic and extrinsic reasons is not genuinely able to restore the productive capacity of displaced people. According to these studies, a vast number of displaced people in especially developing countries have ended up worse off and much poorer than before displacement. Ironically, some researches have reported compensation as a universally applied 'remedy' but also as universally insufficient and, subject to distortion. These two assertions are some of the difficult knots of paid compensations which are yet to be untied.

In an attempt to resolve some of the knots of paid compensation, Kanbur suggests that redistribution mechanisms and safety nets which are politically feasible and practicable should be put in place to enable resettlers to overcome the risk of impoverishment especially in cases where compensation is not paid (Kanbur, 2003). Safety nets according to Kanbur should be economic evaluations that are supposed to accompany specific compensation mechanism for projects under consideration. The suggestion from Kanbur has in turn attracted some attention from other social and development commentators. Their concern is about how such safety nets could be designed, and included in resettlement policies. There is also the question of how it can automatically prevent inequality and ensure equitable distribution of gains and losses from a given project.

A study of the claims by proponents of the principles of compensation and the critique levelled against the claims suggest that a new approach that would ensure that, nobody loses out in the exchange would have to be found. This is necessary because development will take place irrespective of the difficulties it brings to the affected persons. Against this background, the study set out to investigate the kind of safety nets as envisaged by Kanbur that can be feasible enough to overcome the risk of impoverishment with regards to the compensation practices being pursued by some mining companies in Ghana.

### **2.5.5 Expropriation Laws and Practices**

A review of some studies have revealed that development-induced displacement in some countries have been effected or made possible by the existence of expropriation laws. These laws vary from one country to another. As such, the nature of a particular country's expropriation laws determine the extent and method by which people's assets such as land

could be taken over by richer claimants. The nature of an expropriation law could also determine the extent to which people could be forced to relocate as well as the type of compensation they could be paid for being displaced.

In consideration of the differences in expropriation laws, the study compared what pertains in countries such as India and Ghana. It was done as a way ascertaining the similarities and differences of set standards in comparison to the standards of the World Bank and the Asian Development Bank.



### **2.5.6 Expropriation laws in India**

The main policy and legal instruments, which govern development induced-displacement in India are based on land expropriation or acquisition. These measures were introduced under what is termed the Land Acquisition Act (LAA) of 1894. The land acquisition legislation provides the primary legal entitlement for Affected Persons' in India (Pandy, 1998). In the dispensation of the Land Acquisition Act, land may be acquired by the need of it for public purpose. By definition, "public purpose" includes to mention a few, the provision of land for village sites, residential purposes to the poor, landless and people displaced by natural calamities and government schemes. It also includes land for a corporation owned or controlled by the state as well as any other development scheme sponsored by the government. The definition of "public purpose" has since 1984 been expanded to include even the acquisition of land by private companies in limited circumstances (Ghosh, 2005).

The Land Acquisition Act also stipulates that, the government has the right to acquire "land" for public purposes and must notify and compensate "persons" interested. In the context of the LAA, "land" includes any asset permanently attached to the land as well as legally recognized rights on the land. "Persons interested" connote one who has or claims a legally recognized interest in the land which is being acquired. Such interest may be the real owner or a tenant, a licensee, or leaseholder (Vaswami, et al, 1990). "Persons interested" have a claim to compensation for lost assets and may resort to court action to stake their claims under section 18 of the LAA. However, landless labourers, artisans, and forestland cultivators are typically not entitled to receive compensation on the grounds of loss of earnings because of the acquisition of the land. Such tenants are rarely treated as interested persons in India.

### **2.5.7 Expropriation laws in Ghana**

Land and all the resources inherent in it are susceptible to exhaustion if not controlled and preserved in its use. To ensure the judicial appropriation of land, a provision has been made in the 1992 Constitution of the Republic of Ghana that vests the ownership of all the land within the territorial boundaries of Ghana in the President on behalf and in trust for, the people of Ghana (Constitution of Ghana, 1992). Typically, the President delegates the power of acquisition to the Minister of Lands and Forestry. There is the need to manage public lands. There is also the need to advise the Government, local and traditional authorities on a national policy with respect to land use in such a way as to avoid flagrant appropriation of land and

destruction of the environment. The body that is charged with the responsibility of supervising the implementation of these policies is the Lands Commission.

Additionally, the 1992 Constitution of the Republic of Ghana provides citizens the Right to Livelihood and protection from the Deprivation of Property. In this regard, Article 20 of the constitution of the Republic of Ghana stipulates that:

*‘No property of any description, or interest in or right over any property shall be compulsorily taken possession of or acquired by the state unless the acquisition or possession is in the interest of the state, provide justification for the inconvenience or hardship caused to the person whose interest over a property is being denied’ (ibid)*

The review of the expropriations laws in the countries mentioned above show similar concern for the protection of people who may be losing assets as a result of public or private development hence the enactment of legal institutions to oversee and offer redress for affected persons. On the question of who qualifies to be paid compensation or not for the loss of assets, the legal arrangements of Ghana do not draw any distinctions between beneficiaries. The Land Acquisition Act (LAA) of 1894 of India however, states categorically that, only people with land titles are eligible for payment of compensation. The relatively narrow definition of “persons interested” in the LAA in practice means that many people who fall under ADB definition of “Affected Persons” are not legally entitled to compensation in India.

## **2.6 Compensation Options by Governments and Institutions**

### **2.6.1 Introduction**

While there is nothing new about development induced displacement, there is a general believe that project sponsors be they government, multi-lateral or bilateral development agencies have no definite policies or guidelines on involuntary resettlement. Countries have commonly dealt solely with the legal process of expropriation which outline compensation mechanisms, but certainly not the process of resettlement in a way that will prevent impoverishment. This section of the study highlighted the different policy options which inform on compensations payment between countries and institutions like the World Bank to bring out the similarities and the difference in set standards.

### **2.6.2 Compensation Options of the World Bank**

A review of the existing World Bank policy on resettlement has shown that the Bank's policy is based on a number of options. These are land for land, cash for land and avoidance of the project if possible. Another option is compensation based on market valuation. The need for avoidance as an option is however under consideration.

The Operational Directives (OD) of the World Bank clearly indicates that, in resettling displaced people of agriculture orientation, preference should be given to land which have a production potential and location advantage equivalent or close to that of their old site. The stress of the World Bank on cash rather than on land compensation has been found to be generally not sufficient to buy replacement land for assets which are prone to upward increases over time. The land for land compensation and the inadequacy of cash compensation have been confirmed in all World Bank reviews on resettlements (OD 4.30). In fact, the issue of land for land is recognized by the World Bank as the most difficult requirement for project planners.

It is therefore the objective of the World Bank and project planners to compensate displaced people at a replacement cost based on market valuation. However, the definition of replacement in the context of lost homes, business, cultural resources and community network has been made extremely difficult with respect to the monetary quantification of these assets. An example is how the value of a palm tree or a cocoa tree could be calculated over a twenty year period or more let alone the opportunities that could accrue from the cultivation and maintenance of these crops. According to Cernea, the standard cost- benefit approach is not capable of answering the economic and ethical questions involved in forced displacement.

An attempt aimed at addressing the shortfalls of replacement cost have been outlined lately by the World Bank. In their new Operational Policy documents, replacement cost has been redefined to mean the pre-project or pre-displacement market value of land in the case of agricultural land. Replacement cost should also take into consideration the potential productivity of the new land and the cost of preparing it for production as well the cost of registration and transfer taxes (COEIL, 2000)

This new operational policy has come under attack. Some schools of thought argue that:

*“Giving an individual or community money for land without taking into account the upward increases in price of land is a kind of fraud that can lead to conflict between project authorities and displaced people”.*

This claim is supported by the American Anthropological Association. According to them, market based valuation on pre-project estimates do not reflect the actual replacement cost. Replacement cost definition should therefore reflect nothing short of actual full cost based on post project estimates and should be flexible enough to include compensation for damages to community structures, cultural recourses and networks that support them.

### **2.6.3 Compensation Options of the Asian Development Bank (ADB)**

Under the eligibility policy of the Asian Development Bank, all persons affected (AP) by development induced displacement are legally entitled to compensation (ADB, 1998). All “Affected Persons” according to the Bank’s policy include persons with formal land titles, tenant farmers, share croppers and seasonal migrants among others.

A review of the Asian Development Bank policy also recommends compensation that would allow for the replacement of assets that have been lost so that the affected people could at least become well off after resettlement. In this vein, the policy stipulates that, the amount and level of compensation and other benefits should depend on the nature of losses incurred by individual households. It should be noted however, that compensation at replacement rate would be sufficient only if livelihood or housing is not threatened. Again the Asian Development Bank accepts the land for land arrangement but rejects the option of compensation in the form of cash only. It however gives room for the consideration of both options as a way of offering the best option. A careful thought through the dual options of compensation offered by the Asian Development Bank is misleading for, it does not clearly show its preferred policy option.

### **2.6.4 Compensation Options of the Developing Countries**

In comparison to the policy of the Asian Development Bank (ADB), compensation standards for involuntary resettlement in most developing countries lack far behind the Bank’s policy. For example the statutory compensation standard in India recognizes only persons with formal

or legal rights or titles to particular assets. This practice often eliminates indigenous people who have been living on land for years and generations but without formal title documents.

India's compensation law does allow for but do not require the option of land for land compensation. Also, as a preferred statutory compensation law, India uses the "market value" rather than methods that result in less than market value. It also makes provision for a 30% movement and other miscellaneous allowances which include moving expenses plus interest.

In contrast however, compensation provisions in India do not recognize the claim of people's rights such as access to forest and forest products as well as water bodies which are lost as a result of displacement (Mahapatra, 1999). In the statement of the Indian expropriation law, the right to these provisions, are customary and are not formally legal so as to attract statutory compensation.

The compensation options of Ghana defers a bit from that of India but quite similar to that of the ADB in that, the payment of compensation is not discriminated between who owns a legal land title or not. Again the question of land tax and some components of the Indian system are not practiced in Ghana.

## **2.7 Valuation Procedures and Components of Paid Compensation**

### **2.7.1 Introduction**

In an attempt to conclude on methods and policies that could ensure adequate paid compensation or otherwise for lost livelihood, the study reviewed the valuation procedures and components of compensation adopted by governments and institutions. The reviews were specifically on the policies, components of compensation, and the valuation procedures applied. This was done as a basis for comparison among countries and institutions such as the ADB, India and Ghana to bring out their strength and weaknesses.

### **2.7.2 Components of Compensation and Valuation Procedures of the ADB**

Until recently, resettlement programmes as a result of economic and social dispossession was compensated for by a limited monetary compensation for land and other assets acquired as specified in the relevant expropriation laws. To break away from this practice, ADB adopted a policy that cover a range of issues including but limited to compensation for loss of assets,

resettlement of Affected Persons and budgetary planning for resettlement and compensation. The design of the policy is on the following principles:

- **Replacement value**

This bottom line principle determines that compensation for lost assets should be based on replacement value. According to the ADB, replacement value should be equal to market cost plus transaction cost such as preparation, transfer and registration fees and taxes, provided that information about market prices is reliable (ABD, 2007).

- **Compensation for all “Affected Persons”**

The absence of formal title to land of affected persons (APs) should not be a bar to compensation. The policy therefore incorporates tenant farmers, customary users and squatters who have no formal legal titles to the land to be expropriated. The ABD policy states that all “persons affected” are eligible for compensation irrespective of legal or ownership titles.

- **Participation**

“Affected persons” should be fully consulted about what is involved in compensation package and should have basic access to mechanisms for enforcing their entitlement. This means that “affected persons” should be given full participation in the expropriation process. The direction of the policy is to neutralize the power imbalance of governments or private developers that exist in their favour.

- **“Fair Market Value”**

The policy also includes the adoption of the “fair market value” for the determination of compensation for state expropriations. The fair market value according to the ADB is the amount that the land might be expected to realize if sold on the open market by a willing seller to a willing buyer.

In determining what constitutes fair market value, the ABD for example has typical methods that are used to value the following: land, structures, common property resources (CPRs) and crops. In the context of the ABD’s methods, the valuation of land could be achieved through one or two basic approaches namely, the comparable sales approach and the capitalization or income approach.

- **Comparable Sales Approach**

By the comparable sales method, the subject property under valuation is compared with similar property that have recently been sold or being offered for sale. The underlining concept of this approach is that one would hardly pay any thing more for something of a similar nature to one seller than it is being offered for sale by another seller. On the other hand, a seller in the same situation will not accept any thing less for the same property. The method means that if two similar properties were to be sold in the same market at the same time, they would attract approximately the same prize.

The comparable sales method requires the collection of market data to be used in analyzing and developing a group of properties for comparisons, selection of attributes for adjustment, application of the approach to adjust the sales prices of comparable properties to the subject property and analysis of the adjusted sales prices to estimate the value of the subject property. (Ibid)

- **Income or Capitalization Approach**

This approach is used where the market is relatively inactive to warrant the use of the comparative approach. This approach is most applicable to agricultural land and investment properties and is based on the principle that, the value of an investment property reflects the quality of the quantity of the income it is expected to generate, over the life of the property at issue. By this approach the value of the land is derived from the estimated presented value of future benefits, including accruing incomes during the lifetime of the property and proceeds from the sale of the property.

The method can be expressed as follows: Land Value=Net Income/Capitalisation Rate

$$\text{or } V = I/R$$

Where:

V = Land value

I = Net Income

R = Capitalisation Rate.

To arrive at the actual value of the property through this method, there is the need to know the gross earnings from the land and related cost, the farming cost including direct agriculture inputs such as seeds, fertilizers, and labour cost among others. There is also the need to

determine an appropriate multiplier or a discount rate which represents the annual amount needed to provide a return on the investment over a period the investment is held.

- **Structures**

In the valuation of structures, consideration is given to the loss of the structure on the land in addition to the land itself. This is underscored by the use of the income approach, if the structure is for investment purposes. Sometimes the replacement cost is used based on the theory that, the market value of an improved parcel can be estimated as the sum of the land value and the depreciated value of the improvement. The replacement requires an estimate of the land value, accrued depreciation and the current cost of constructing the structure.

- **Common Property Resources (CPRs)**

In view of the bottom line standard of preventing the livelihoods of “Affected Persons” from worsening, the ABD recognises the need to pay compensation for CPR losses. The valuation of such intangibles is done by the use of the contingency valuation method (CVM). This study used this method to arrive at the cost of common property resources that has been lost to displacement of communities

- **Valuation of Crops**

Compensation for crops in the context of the ADB method is decided according to the gross market value of the lost crop and the average annual yield. The gross market value makes full provisions for the owner or user inputs already expended namely: labour, seed, fertilizer among others. The gross market value is determined by the market rate of the crop and the average annual yield of the crop. The price used to calculate the compensation is the highest market price of the locality of the year, which will give full benefit to the farmer who is normally assumed to transport the harvest to get the most attractive price. The average annual yield is calculated through data collection and analysis with regards to average yield per hectare over a period of time. This exercise is usually done by government agencies.

- **The Contingency Valuation Method**

The contingency valuation method (CVM) is used to estimate economic values for all kinds of ecosystems and environmental services. It is called contingency valuation because people are asked to state how much they would be willing to pay for specific

environmental services in a well designed survey (Ecosystem Valuation, 2008).The system is said to be flexible in that it allows valuation of a wider variety of non –market goods and services than is possible with any other non–market valuation technique. It is used to assign monetary values to products that do not involve market purchases and may not involve direct participation.

### **2.7.3 Components of Compensation and Valuation Procedures in India**

In the view of most scholars, India although a developing country, has one of the well designed expropriation and compensation policies and guidelines. The Land Acquisition Act of India provides that compensation should comprised five components. These are; Market value +30% (Solatium) +Damages from the taking +Moving expense +Interest.

- **30% “Solatium”**

The Land Acquisition Act provides that in addition to the market value of the land, each “interested person” meaning the legal owner of the property is entitled to a sum of thirty percent of the consummate market value in consideration of the compulsory nature of the acquisition. The “solatium” therefore is a reparation fees for the involuntary nature of the acquisition. (LAA Amendment Act, 1984).

- **Damages**

In addition to the market value and solatium the LAA provides compensation for five types of damages namely:

- (i) taking of any standing crop or tree on the land;
- (ii) Severing the acquisitioned land from the owner other land;
- (iii) Injuries to other personal or real property due to the take over;
- (iv) Loss of earning due to the acquisition;

Any decrease in profit of the land between the time of the issue of authority of acquisition and taking of possession.

- **Moving Expenses**

A moving expense is paid to “interested persons” for compulsory acquisition that may have compelled a change in residence or place of business. Although the payment of moving

expenses is not regarded as compensation, it is paid nonetheless as expenses incurred which may be incidental to displacement.

- **Interest**

Although not always paid, a twelve percent (12%) interest is calculated on the market value from the time of the issue of preliminary notification to the date of award of right of acquisition.

The other approaches which aim at arriving at acceptable compensation are, the valuation methods. These are designed on what pertains in the Asian Development Bank. They are:

- **Market Value**

The dispensation of the LAA makes market value the core of compensation award in India. The market value is calculated from the time of the preliminary notification of expropriation. The LAA does not define the parameters of market or the specific mechanisms for determining “market value” but the principle may be applied according to the urgency of the demand for the property. The market value focuses on what it takes to replace a lost asset. In application, there differing valuation approaches that result in different valuation approaches. These differing approaches are, the Comparable Sales Method, Capitalisation of Income Method, and Expert Opinion. In comparison to the approach of the ABD, the approaches prescribed by the LAA cannot be described to be entirely different from that of the ABD. The only difference between them is the employment of the Expert Opinion. In both cases professional valuers are employed.

#### **2.7.4 Components of compensation and Valuation procedures in Ghana**

The main legal instrument that could be invoked in any issue of compensation is Article 20 of the 1992 constitution of the republic of Ghana. This section of the constitution makes the prompt payment of fair and adequate compensation and resettlement on alternative land a condition on compulsory acquisition of land. The main actors who are responsible for ensuring compliance with the constitutional provisions are the Land Valuation Board and the Environmental Protection Agency who are mandated to protect the people’s right in their negotiations with richer claimant.

Another area of reference in the case of land acquisition and compensation is the ACT 703 of Mineral and Mining Act, 2006, which deals with surface rights and compensation. This Act stipulates that,

*“The owner or lawful occupier of any land subject to mineral right is entitled to and may claim from the holder of the mineral right compensation for the disturbance of the of the owner or occupier, deprivation of the use or particular use of the natural surface of the land or part of the land, or loss of or damage to immovable properties or loss of earnings or food in the case of land under cultivation which the owner may have suffered”.*

The components of compensation in Ghana include the following:

- Compensation for crops and loss of expected income.
- Compensation for disturbance of the owner of land or property
- Compensation for deprivation of the use of the natural surface or part of the land
- Compensation for loss of or damage to immovable property
- Cost of resettlement

Act 706 of the Mineral and Mining Act, 2006 also stipulates that the amount of compensation payable to the owner of the land should be determined by agreement between the parties and where there is a disagreement; the matter could be referred to the Minister to decide in consultation with the Land Valuation Board. The provisions of the constitution and ACT 704, of Mineral and Mining Law Act, 2006 in particular spells out the eligibility of the owner to claims of compensation. The policy on compensation is underlined by laid down valuation methods for immovable property and crops. Some of the valuation methods for immovable property are:

- **Depreciated Replacement Cost Method**

This method is used in the valuation of structures such as buildings. It is based on the value of a function of its cost when new, that is the gross current replacement cost which is defined as the cost of providing an identical or substantially similar one. By this method the cost of constructing a similar building using present day indicators is estimated and due depreciation is made to take care of such factors as age and spatial disposition. The method

is based on the premise that no prudent buyer would pay more for a property than it would cost him to build a similar one (Nana Kumi and Associates, 2007).

- **Open Market Value.**

The open Market value is defined as the best price estimate of a property at which a willing buyer would be prepared to buy from a willing seller in consideration of the conditions of the market and time. This method is mostly applied to land valuation.

- **Valuation of Crop**

Compensation for crops in Ghana follows a similar method of the ABD which is decided according to the gross market value of the lost crop and the average annual yield. The average annual yield is calculated through data collection and analysis with regards to average yield per hectare over a period of time. This exercise is usually done by government agencies. In the case of tree crops such as palm and cocoa, it is calculated by acreage.



### 2.7.5 Comparison of Components of compensation and Valuation methods

**Table: 2.1** Similarities and differences in components of compensation and valuation methodologies.

<b>Countries and Institutions</b>	<b>Components of compensation</b>	<b>Methods of Valuation</b>	<b>Compensations Options/preference</b>
ADB	<ol style="list-style-type: none"> <li>1. Compensation for replacement cost</li> <li>2. Compensation for all affected persons</li> <li>3. Full participation of affected people</li> <li>4. Compensation for Structures</li> <li>5. Compensation for loss of crop</li> <li>6. Compensation for Common Property Resources (CPR)</li> </ol>	<ol style="list-style-type: none"> <li>1. Comparable sales</li> <li>2. Income capitalization</li> <li>3. Use of contingency valuation</li> <li>4. Use of gross market value</li> <li>5. Use of average annual yield</li> </ol>	<ol style="list-style-type: none"> <li>1. Cash for land</li> <li>2. Land for land</li> <li>3. Preference for land based resettlement</li> </ol>
Ghana	<ol style="list-style-type: none"> <li>1. Loss of expected income</li> <li>2. Cost of resettlement</li> <li>3. Disturbances of the owner</li> <li>4. Deprivation of the use of the natural surface of or part of the land</li> <li>5. Loss of or damage to immovable Property</li> <li>6. Loss of income or food</li> </ol>	<ol style="list-style-type: none"> <li>1. Depreciated replacement Cost</li> <li>2. Open market value</li> <li>3. Use of annual yield and acreage under cultivation</li> </ol>	Cash compensation Resettlement and Relocation
India	<ol style="list-style-type: none"> <li>1. Solatium</li> <li>2. Damages</li> <li>3. Moving Expenses</li> <li>4. Interest</li> </ol>	<ol style="list-style-type: none"> <li>1. Market value</li> <li>2. Comparative sales</li> <li>3. Capitalization of income</li> <li>4. Expert opinion</li> </ol>	Cash Land for land

The Table 2.1 above pitched the components and valuation methods of some institutions and countries against each other. According to the table and what has been said above, it stands out clearly that the compensation policy of the Asian Development Bank is unique. It is unique in the sense that it recognizes the importance of common property resources and the role it plays in matters of livelihoods of individuals and communities hence the payment of compensation for their loss.

Judging by what pertains in Ghana as against the component of compensation as practiced in India, It could be said that India as a developing country has an elaborate compensation policy which can not be too far from being adequate. The only shortfall in India's policy is the eligibility criteria of beneficiaries of compensation as against that of the ADB and that makes Ghana's policy as acceptable as that of ADB in so far as eligibility of claims is concerned.

In the view of this study, the basis for measuring the adequacy or not of paid compensation in Ghana could be done in comparison to the components and methodologies of compensation practices in both India and the ADB since they employ components and valuation procedures that can be said to take in consideration the loss of market and non-market assets.

#### **2.7.6 Administration of Compensation**

The administration of compensation and resettlement has been hampered by man made obstacles and natural circumstances. In the views of Parasuraman (1999) and Mahapatra (1999) the effective administration of paid compensation is usually hampered by undercounting of assets earmarked for compensation. Konig and Diarra, (2000) and Pandey (1998) are also of the view that, non recognition of intangible loses which are difficult to measure has attracted less or no value at all for people and communities who lose them. Non recognition of some tangible and intangible loses is exactly the case in Ghana where compensation is paid only for crops but not for land on which the crop is cultivated. Thus, anything tangible or intangible which has not been cultivated but grows naturally does not attract compensation under the laws of Ghana.

#### **2.7.7 Compensation Administration by Mining companies in Ghana**

In Ghana, the operations of mining companies have established a known negative legacy of destruction of livelihood and compensation packages which leaves much to be desired. The irony of the matter is that mining companies do not operate in isolation but are directed by established laws of the host country and operate in conjunction with statutory bodies such as the Land Valuation Board, The Ministry of Food and Agriculture, Community leaders and Advocacy groups. These organizations and groups have through their actions or inactions perpetuated the tradition of cash compensation in Ghana in spite of the fact that it has drawn a lot of criticisms from development scholars who are of the view that it worsens the plight of displaced or affected persons.

In recent times, these concerns seem to have caught the attention of some mining companies in Ghana who seem to be shifting a bit away from the existing tradition and are evolving an innovation to mitigate the plight of displaced people especially through the provision of houses where displacement involved the loss of houses. There is enough evidence to suggest that AngloGold Ashanti (Iduapriem Mine) at Tarkwa provided both cash and housing options for the farming communities of “Miles 6, 7, and Adieye who were displaced by mining activities of the company. Similarly, Goldfields Ghana limited is also known to have resettled a much bigger population of displaced people involving the communities of Old Atuabo, Mandekrom, Akontase among others.

The company also offered the options of cash and housing as compensations. Earlier on Terberebe Gold Mines provided housing units to relocate families although, not as a compensation package. However, in all these exercises, there have been complaints of inadequate compensation for crops and reduction in size of replaced buildings. Crops and buildings notwithstanding, the lost of Common Property Resources (CPRs) have never attracted any compensation hence displaced people would have to look for new burial grounds and start a new social network all over again. There is therefore the need for a radical shift from the traditional way of compensation practice in Ghana. This is what Newmont Gold Ghana is attempting to do.

### **2.7.8 Emerging Trend of Compensation Payments among Ghanaian Mining Companies.**

A new trend of compensation practice is noted to be emerging in Ghana. This is as a result of the vacuum left by the existing compensation processes promulgated in the statutory books of Ghana which leaves much to be desired. It is against this background that the Newmont Gold Ghana limited for example is re-defining its approach to compensation payment and administration.

According to the Corporate Engagement Project (CEP, 2005), the compensation policy of Newmont Goldfields Ghana Limited has come to include:

- The provision of a financial management by a specialized NGO to all recipient of compensation money;
- Resettlement houses come in space by space and not house by house as was the case of Goldfields Ghana and others;

- The maintenance of social cohesion, is made possible by allowing people to opt to live as a community in the new resettlement village
- The design of resettlement houses are such that people can easily expand their homes through their own efforts
- The provision of Livelihood Enhancement and Empowerment Programme (LEEP) to all affected families under the training of Opportunities Industrialisation Center International (OICI) a Non Governmental Organisation.
- Payment of full compensation to share croppers who are not land owners.
- Payment of cash compensation plus building to settler farmers who were living within the vicinity of the Mine.

According to the Corporate Engagement Project, there are indications of relocated people who are not worse and may be even “better off” as a result of prudent investment of their compensation money. This is because there is an on-going provision of financial management by a specialized NGO to all recipient of compensation money. This is an entirely new innovation which is being practiced by Newmont Goldfield.

According to the proponents of the innovation, it was instituted in view of fact that people, overwhelmed by the quantity of money paid to them as compensation for lost assets spend them on frivolous items and are left poor the next moment. This innovation in the view of this study could secure the continuous livelihood processes of the affected people and may well be conceived as a safety net as envisaged by Kanbur, even if, it may not be adequate.

## **2.8 Theoretical Framework**

The examination of the theory of lost livelihoods and paid compensation has brought up a number of fundamental issues that must be confronted if the alleged inadequacy of paid compensation for lost livelihoods is to be resolved. These issues include the existing compensation laws and principles in Ghana, valuation methods of market and non-market assets as practiced in Ghana, participation, environmental preservation, livelihoods sustainability and poverty reduction. It is to these that the study can dwell on.

### **2.8.1 Compensation laws and principles**

The concept of compensation has always been practised under acceptable governmental and international conventions which aim at adopting the best practices of compensation. To ensure

amicable settlement of conflicts that happens because of unequal power leverage among contestants, compensation laws and principles are underpinned by codes, conduct, regulatory mechanisms and processes that ensure compliance. Some of the laws are of International nature. For example, the United Nations General Assembly Resolution 194, paragraph 11 stipulates the payment of adequate compensation for expropriation of property. Hence, there is an international recognition for the payment of compensation for displaced people of all categories.

Despite the international recognition, the practice of compensation in individual countries has been under the dictates of that country's particular laws and policies which govern the mechanism and administration of compensation. It must be said that the payment of compensation is less evident in most developing countries. However, the 1992 constitution and Act 706, Mining and Mineral Act, 2006 of Ghana and the Land Acquisition Act, 1894 of India are some of the governmental provisions under which compensation is enforced in these countries. In Ghana, as in India the design of the mechanism of compensation is constructed along the principles of the 'Pareto improvement'. Under this principle no individual is made better off and no individual is made worse off as a result of the change. The intended meaning of this principle is that equity prevails and no one loses out of the exchange. Whether there is equity or inequity depends to a large extent on the methods used in valuation. This is an issue that the study tried to bring to light in the discussions below.

### **2.8.2 Valuation methods**

The mechanisms that governments and institutions use in arriving at valuation methods, rates and parameters under which compensation are paid, raises a number of concerns. One of such concerns is the appropriateness of those mechanisms used in addressing the adverse socio-economic impact of large scale development project such as mining which involves massive displacements of persons, lost of livelihood and culture and increases in the cost of living. These issues are prevalent in Ghana as in other developing countries and must be addressed by appropriate methods that will make a generous provision whereby an owner or a lawful occupier would be entitled to compensation not just for lost crops but for the deprivation of the land including all that is attached to it. Hence, here is the need for a review of the statutory books for a better commitment on the part of mining companies for example to be responsible for the change in ownership and pay the appropriate compensation that will be commensurate with such changes. A wider commitment from the mining companies will in the opinion of the

study reduce agitation and protest over paid compensations and maintain good relations between affected persons or communities and developers. The study is also of the view that in order to obtain the desired cooperation of communities, communities should be allowed to participate directly in deliberations of compensation packages and other welfare provision, other than people outside the communities as they may seem indifferent to their plight.

### **2.8.3 Participation**

Considering the integral relationship that rural communities share with land and other resources of the local environment, their participation in matters concerning the exploitation of their resources is crucial. This is because communities have a better understanding of their environment and the extent of their dependence on it than any external person. In recent times, many development funding institutions consider popular participation of 'affected persons' to be a prerequisite for ensuring the sustainability and the sharing of cost and benefits which accrue from development projects particularly those with socio-economic impacts. This is because participation is not just a means for ensuring project survival; it is a process that ensures the exercise of human rights of individuals and communities with reference to the overall significance of a project vis-à-vis their survival and livelihoods. The parameters of participation in the view of this study should, include the 'affected persons' and government apparatus such the District Assemblies to monitor and evaluate decisions to ensure that projects do not erode the livelihoods of people but are sustained.

### **2.8.4 Livelihood sustainability**

To contain the possibility of impoverishment, the avenues for livelihoods sustainability should be encouraged among project designers. It is significant therefore to note that a number of mining companies in Ghana have undertaken initiatives which according to them could sustain individual and collective livelihoods within their operational areas. These initiatives have been taken in collaboration with decentralized government agencies, Non Governmental Organizations and community-company partnerships. The collaborations are geared towards the provision of infrastructure resources and training of local service providers such community pipe borne water attendants. There is also training for alternative livelihood which vary in specification from one mining company to another. These initiatives in the view of this study should not be conceived as a benevolent gesture from whomever. It should be seen as a compelling demonstration of certain behaviour on the part of richer claimants towards commitment to behave ethically and contribute to the

improvement in the standard of living of affected persons as well as a strategy for poverty reduction.

### **2.8.5 Poverty reduction**

Poverty results from the denial of choice and opportunities and implies living on marginal and vulnerable environment as well as further exhausting the environment. Poverty is exacerbated by lack of access to sufficient productive resources of good quality. In the context of this study, lack of access to productive resources such as fertile land could be attributed to activities which cause people to be displaced or relocated from their original habitat. There should be an effort therefore to reverse this situation. An attempt to reduce poverty requires that poverty reduction policies of government and corporate bodies are translated into measurable activities and practices that could raise and improve the quality of life of affected people. However, this study is of the view that the poverty reduction policies would only be sustainable if the environment is preserved since it is a paramount prerequisite for the very survival of those whose livelihood, these programmes aim at improving.

### **2.8.6 Environmental preservation**

Poverty has always been the concern of all governments in Ghana and the key to poverty reduction is ensuring that the natural resources base that the poor use is maintained and even improved. A sustainable economy respects the sustainable yield of the ecosystems on which it depends such as forest, rangeland and cropland among others. Above a certain demand on the resources in question, the stock will begin to shrink but if the demand does not exceed the sustainable yield, the resources can be sustained in perpetuity. This is because nature relies on balance, the balance between soil erosion and new soil formation, the balance between carbon emission and carbon fixation and the balance between trees dying and tree regenerating. Despite the knowledge of ecological inter-relationship, national governments and corporate bodies have expanded economic activity with little regard for sustainable yields or the fragile balance in nature. In Ghana, certain activities like the lumber industry, farming, mining and population increases have added their toll on the fast depletion of forest resource of the country. There is therefore the need to reforest depleted forest which is most prone to lumber and mining activities through tree planting by the mining and lumber companies whose activities is said to greatly contribute to the degradation of the ecosystem.

The adequacy of paid compensation in the view of this study can only be achieved if; the laws and principles of compensation, valuation methods, participation, livelihood sustainability, poverty reduction and preservation of the environment is seen to be linked to each other and holistically maintained. This is because there is the need to preserve the environment to sustain the richness of the land and good yield. This will attract good compensation, in an exchange in which nobody loses out according to the Pareto improvement principle. But, whether or not the “Pareto improvement” principle works depends on the rate of compensation and the method of valuation used calculating compensation payments. Moreover, if people are made to participate to arrive at a common understanding as to the method of evaluating their lost assets and livelihoods then nobody would lose out of the exchange and the principle of “Pareto improvement” would have been justified.

## **2.9. Conclusion**

This chapter has defined some of the major concepts used in the study with the view of establishing the context under which each terminology has been used. Concepts that were used in the study are those thought to be relevant for the purpose of achieving the objectives set out in the previous chapter. It is hoped that the background information when addressed would provide the basis for an effective discussion of the issues associated with the adequacy of paid compensation for lost assets and livelihoods

## **CHAPTER THREE**

### **RESEARCH DESIGN AND METHODOLOGY**

#### **3.0 Introduction**

This research was intended to investigate the question of the adequacy of paid compensation for people and communities who have been affected by development induced displacements. It tried to combine what others have written about the subject with qualitative and quantitative data on the Laws, Principles and the Administration of compensation for lost assets and livelihood with particular reference to communities affected by mining operations in Ghana.

#### **3.1 Research Design**

A research design is a detailed and logical outline that serves as a guide to the researcher in the collection, analyses and interpretation of the data on observed phenomenon (Nachmias et al, 1996). This study did a survey to collect information on individuals, communities and the ecosystem in the light of the subject studied.

#### **3.2 A Survey Approach**

##### **3.2.1 Definition**

A survey is any systematic collection of facts about individuals, group or community which is not necessarily synonymous with questionnaire administration. It is aimed at identifying a problem or an issue that exists with an individual, a group, or community and suggest solutions (Marshall 1998).

##### **3.2.2 Rationale behind the Survey Approach**

The survey approach was selected to assist in the application of the Contingency Valuation Method (CVM). The Contingency Valuation Method is a tool that is employed to value the ecosystem especially in the context of non-markets products in the environment which are useful to sustaining livelihood. A Survey employs both written questionnaires, interviews and sampling to produce quantitative data sets and the method is transparent, accountable and procedures can be made visible and accessible to other parties.

##### **Limitations:**

The efficiency of a survey is however limited by the fact that it normally uses structured questionnaires which constrain an enquiry to paths fixed at the start of field work. The adequacy of paid compensation is a highly contested issue. Due to its complexity, a survey

approach was found to be more appropriate to elicit information from a broad representation of the population especially in matters relating to land which involves anything natural or grown on it.

### 3.4 Choice of the Study Area

The area under study used to be known as the Wassa West District before the recent political re-alignment which split the district into the Tarkwa Nsueam Municipality and the Prestea – Huni Valley District in the Western region. These two areas are endowed with the same ecological systems and have been the operational site of major mining companies notably AngloGold Ashanti, (Iduapriem Mine,) Golden Star Bogoso Limited, Goldfield Ghana Limited and Aboso Goldfields Ltd. These companies have operated surface mining since the early 1990’s to date and have had extensive experience in the practice of compensation and resettlement of individuals and communities in the now Wassa West Municipality and the Prestea- Huni Valley District of Ghana.

**Table 3. Showing mining companies and communities relocated.**

Mining Companies	Communities Relocated		
Anglogold Ashanti Iduapriem Mine	Teberebie	Miles 5, 6,7 Adieye	
GoldFields Ghana Ltd.	Old Atuabo	Mandekrom	Akontase
Golden Star Bogoso Mine	Akyempim	Prestea-Hemang	
Goldfields Abosso Mine	Damang	Kyekyewere	

Source: Field Survey, 2008

### 3.5 Profile of the Area

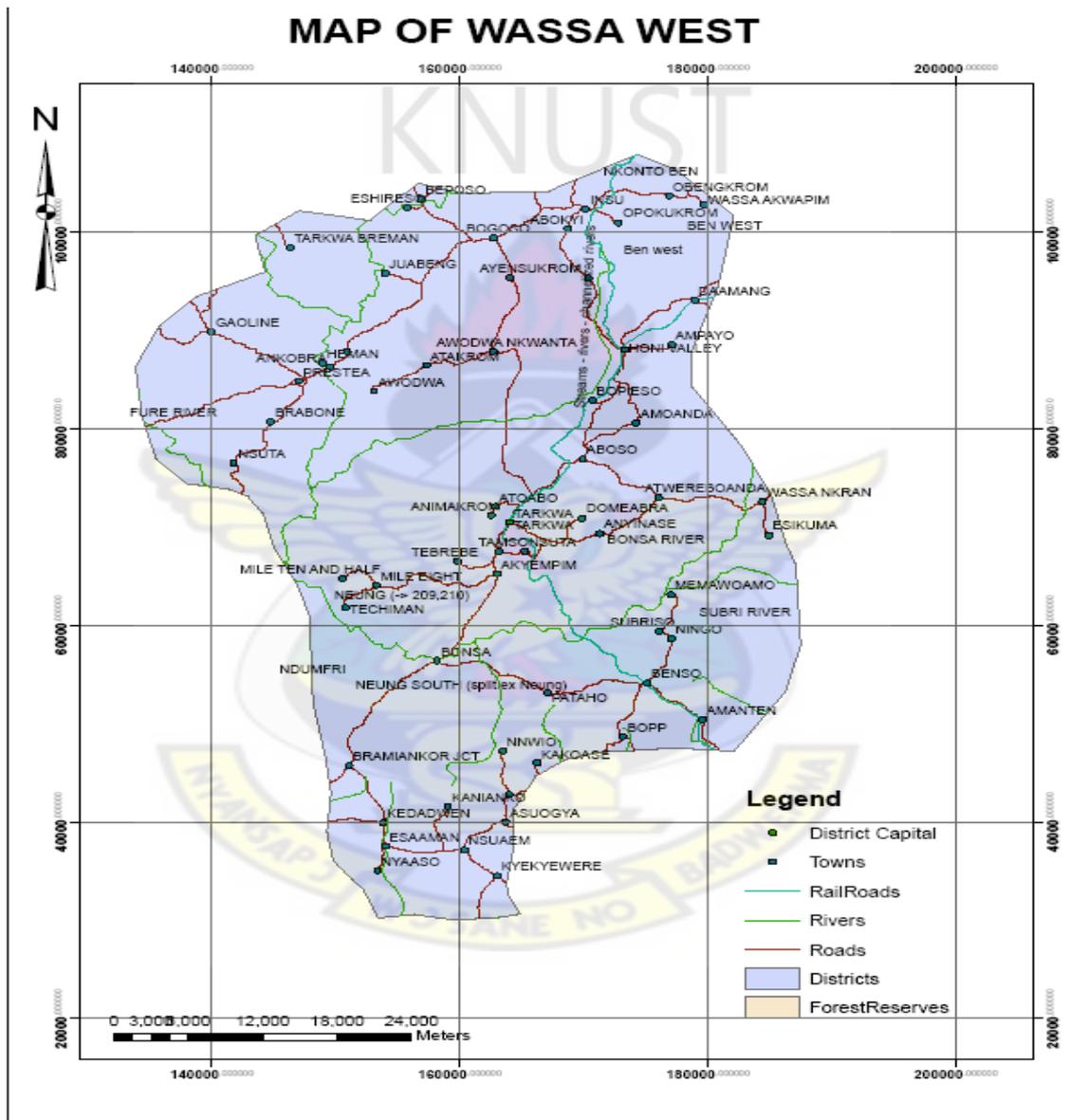
The Tarkwa- Nsuaem Municipality and Prestea/Huni Valley district as one entity is located between Latitude 40<sup>0</sup> N and 50<sup>0</sup> and Longitude 1<sup>0</sup> 45’ and 2<sup>0</sup> 10’ W. It is bonded to the north by the Wassa Amenfi District and the south by the Ahanta West District. The area has a totland area of 2354 sq.km. It lies within the South-Western Equatorial Zone and has a fairly uniform temperature, ranging between 26<sup>0</sup>C in August and 30<sup>0</sup>C in March.

#### 3.5.1 Drainage and Vegetation

The area falls within the forest dissected plateau physiographic region. The rock structure is made up of Precambrian rocks of Birimian and Tarkwain formations. These underline the

forest dissected plateau. The land rises from about 240 meters to 300 metres above sea level with undulating scarps ranging between 150 meters to 300 meters above sea level. As forest areas, they have huge agricultural potentials and extensive mineral deposits.

Figure 3.1: Wassa West District before its re-alignment into Tarkwa/Nsuaem Municipality and Prestea/Hini-Valley District



### **3.6 The concept of Population and Sample**

The population can be said to be the total number of all units of the phenomenon to be studied that exists in the area under study. For example the population of farmers who have been displaced by a certain activity. A sample of the population therefore consists of the proportion of the number of units selected for study. Sampling thus involves the study of a carefully selected proportion of the units of a phenomenon with a view of extending the knowledge gained from the study to the whole of the unit selected for the study. This means that units of a sample must be representative of the units of the population.

### **3.7 Sampling Design**

In selecting a unit population for sample, three sampling techniques were used. These included the purposive sampling technique, the stratified sampling technique and the accidental sampling technique.

- The purposive sampling method was used to solicit information from particularly, the mining companies in the study areas who have had experiences in compensating people for lost livelihoods. This sampling technique was also applied in the choice of the study area, the selection of communities as well as in the selection of individual households.
- Stratified sampling technique was used to obtain information from particular groups of people in view of the heterogeneous nature of households and individuals affected by mining activities with respect to their different tribal affiliation as well as their occupations.
- To reduce biased information, an accidental sampling method was used to obtain information from individuals who have received compensations for lost livelihoods. These sampling methods gave room for equal representation of the total population.

### **3.8 Sampling Units**

A population is made up of individual units or aggregates which for the purposes of sampling are called sampling units. Among the sampling units interviewed for the study were:

- Institutions that have been involved in valuation and compensation practices
- Tenant farmers without land titles
- Land owners with titles and, are farmers

- Tenants who are not farmers
- Squatters

The interview questions were structured around the general disposition of the people affected by mining activities such as those who have been displaced, possibly resettled or compensated in cash or kind. Officials were also asked about the valuation methods used to arrive at the rate of compensations, how compensations were administered, challenges and constraints of the exercise of compensation payments.

### **3.9 Sources of Data and Instrument for Data collection**

Both quantitative and qualitative methods were used to collect data for the study. There has been a differing opinion on the use of quantitative and qualitative in data gathering. While one school of thought argues that the world is composed of deductible and empirical facts, another school is of the view that the real world is socially carved, complex and ever changing (Inkoom, 1999). In an attempt to have an unbiased result, the study appropriately combined both the quantitative and qualitative approaches in the exercise of data collection.

#### **3.9.1 Collection of Primary Data**

The primary data was collected through a combination of structured questionnaire and interviews to gather primary data from government officials such as the, The Ministry of Food and Agriculture, the Lands Valuation Board, The Mining Company officials, Traditional authorities, Advocacy groups. Member of communities, individuals and households who have lost their sources of incomes and assets to mining activities were likewise interviewed. A total of 250 questionnaires were administered to the sampling units and a quantitative tool was used to determine the degree of involvement of the various units mentioned above.

#### **3.9.2 Collection of Secondary Data**

A review of official documents from Community Relations Offices of the various mining companies, The Ministry of Agriculture, the Land Valuation Board as well as published books, Journals and the Electronic libraries formed the basis of secondary data.

### **3.10 Data Analysis and Presentation**

Data analysis comprised the examination, and tabulation as well as the interpretation of the data to make it meaningful in accordance with the objectives of the study.

#### **3.10.1 Quantitative Analysis**

The research made use of analytical tools such as the bar charts, and tables to explain the percentage of people whose social and physical well being has improved or not improved before and after displacement and payment of compensation. The use of qualitative analysis explained some aspects of environmental issues which have impacted negatively or positively on people before the take over of their land and after compensation has been paid for their loss. Certain issues like access to forest products, water bodies, and congestion were also explained through this analytical tool. The variables that were measured included:

#### **3.10.2 Indicator of Economic Well being:-**

Economic well being according to the Ghana Human Development Report, (2007) revolves around access to economic resources such as credit, land, technological inputs and extension services as well as to physical markets and skills, favourable socio-economic and political environment among others all of which are vital productive assets. The study however, limited its scope in the measurement of economic well being to the following:

- Incomes levels in terms of household incomes from agriculture production, and savings per year.
- Employment opportunities in relations to mining activities in areas under study

#### **3.10.3 Indicators of Social Wellbeing:**

The ‘Cocoyoc Declaration’ of 1974 says that “*Human beings have basic needs which are; food, shelter, clothing, health, and education. Any process of growth that does not lead to their fulfilment or, even worse, disrupts them is a travesty of the idea of development*”. In view of this declaration, the study measured the degree to which some of these facilities has been made available to persons affected by development induced displacements in the study areas. The study took to measure the following:

- Percentage of beneficiaries with access to education, water, sanitation, health care and energy.

#### **3.10.4 Indicators of Environmental and Habitation Well being:**

Changes in habitation come with their peculiar environmental problems such as water shortages, soil erosion, atmospheric pollution, forest diebacks and tropical deforestation among others. The study however, had a particular interest in investigating the environment of the displaced persons with respect to:

- Types of homes and houses in terms of availability of space and comfort
- Availability of water and the sources of water
- Availability of forest resources i.e. firewood

These indicators were measured in the context of without or with the projects. Other indices such as rate of payment for access to some social facilities were used to determine the cost of access to these facilities.

#### **3.11 Application of Cost Benefit Analysis Tool.**

The research made use of Cost Benefit Analysis as an analytical tool to explain the principles of compensation. First, the analysis looked at the cost of livelihood that have been incurred and may continue to be incurred as a result of the expropriation of land and other sources of livelihood by gold mining companies over time. It also looked at benefits that have accrued to individuals and communities as a form of compensation for lost livelihood.

Given that asset include the land, the environment, the ecosystem, some of which are non marketable and yet support livelihood, the study did a monetary quantification of the Common Property Resources (CPRs) to establish the cost of the loss of these assets. The monetary quantification of CPRs was done through the application of the Contingency Valuation Method (CVM).

#### **3.12 Application of Contingency Valuation Method (CVM)**

The Contingency Valuation is a method of estimating the value that a person places on a good. (FAO, 2008) The method involves directly asking people, in a survey, how much they would be willing to pay for specific environmental services. In some cases, people are asked

for the amount of compensation they would be willing to accept to give up specific environmental services.

The contingent valuation technique has great flexibility in that it allows for valuation of a wider variety of non-market goods and services than is possible with any of the indirect techniques (Khalid, 2008) and could eliminate biases if the survey is carefully design and implemented. In this study, respondents were asked to state their willingness to pay, contingent on the loss of certain environmental services provided by or obtained from forest resources and water bodies among others.

The assessment was done in the light of prevailing economic, social and environmental conditions with or without mining activities as a means to establish whether the whole business of expropriation and compensation had actually made people better off than they were with the projects or not. The result of the analysis was to inform on the need for any possible policy intervention.

#### **3.12.1 Limitation of CVM Application**

The assessment of non-market goods was however limited by the difficulty of validating the estimates of non-use values externally. Another limitation is the fact that the stated intentions of the willingness to pay may have exceeded the true feelings of respondents (Khalid, 2008)

#### **3.12 Conclusion**

The research methodology is a guide for understanding how the research was carried out. It is based on defined rules and procedures against which knowledge is evaluated. The following chapter of the study did the analysis of data gathered on the issue of the adequacy of paid compensation for lost assets and livelihood.

**CHAPTER FOUR**  
**SITUATIONAL ANALYSIS OF DISPLACED COMMUNITIES IN THE TARKWA-  
 NSUAEM MUNICIPALITY AND PRESTEA/HUNI-VALLEY DISTRICT.**

**4.0 Introduction**

The Chapter four of the study involved the presentation and discussion of the data collected. Data was made up of two main parts namely: the characteristics and the socio-economic and environmental wellbeing of respondents who have been involved in compensation dispensation in one way or the other. Basically, the analysis centred on the with and without scenarios of the social, economic and environmental wellbeing of people who have received compensations for displacement. . Some components of these variables were measured and analysed to determine the situations on the ground before and after the implementation of the projects and the effect on respondents particularly the displaced individuals and households.

**Table 4.1: Ages of Respondents**

Mining Companies	Ages of Respondents										
	0-14		15-29		30-44		45-59		60 and above		% Total
Abosso Gold Mine	3	6%	5	10%	20	40%	14	28%	8	16%	100
AngloGold Iduapriem	3	6%	12	24%	23	46%	7	14%	5	10%	100
Golden Star Bogoso	2	4%	8	16%	30	60%	4	8%	6	12%	100
Goldfields Ghana	1	2%	10	20%	25	50%	10	20%	4	8 %	100

Source: Field Survey, 2008

The ages of respondents were studied to inform on the number of years they will be deprived of their sources of livelihoods with respect to their active service life of sixty (60) years. Using the baseline of Ghana's population structure which is 0-14 years, the study established that a total of 98 respondents representing 49 percent of the population were

aged between 30 and 44 years in all the catchments areas of the mining companies. A total of 35 of respondents representing about 18 percent of population were found to be in the age bracket of 45 and 59 while only 23 respondents representing 11 percent had attained the age of at 60 years and above. A total of 35 respondents representing another 18 percent of the population were found in the age bracket of 15-29 years. The age distribution imply that the 71 percent of respondents within the age bracket of 30 and 44 are likely to be deprived of their sources of livelihood for a duration of between 14 and 29 years at the close of their 59<sup>th</sup> birthday while these ages between 15 years and 29 years would have lost their source of livelihood at their 59<sup>th</sup> birthday.

Given that the mean age of respondents in all the study areas was established at 38.4 years and that, the active service life in Ghana ends at 60 years, respondents could be deprived of their livelihoods for not less than 21.6 years. This situation could have serious implications on the economic, social and environmental wellbeing of the respondents as a result of displacement from sources of livelihood.

**Table 4.2: Sizes of households of Respondents under each catchments area**

Mining Companies	Family Size								% Total
	1 - 3		4 - 6		7- 9		10-12		
Abosso Gold Mine	15	30%	20	40%	10	20%	5	10%	100
AngloGold	5	10%	25	50%	10	20%	10	20%	100
Golden Star Bogoso	8	16%	35	70%	3	6%	4	8%	100
Goldfields Ghana	25	50%	10	20%	5	10%	10	20%	100

Source: Field Survey, 2008

The presentation in Table 4.2 Shows that, a total of 26.5 percent of households in the catchments areas of all the mining companies have an average household size of between one and three (1- 3) persons. This represents only 53 respondents while 45 percent of respondents have a household size of 4 and 6 persons. The study observed that a greater percentage of the size of households of 4-6 persons is very ideal in the Ghanaian context since the size of a household is mostly seen to signify the wealth of a household.

### Educational Levels of Respondents

The study investigated the levels of academic attainment of respondents as a means of having an insight into how well they could have participated in the various stages of their negotiations with their richer claimants in matters affecting their economic and social wellbeing prior to their displacement from their habitats. This was necessary because of the fact that displacement and relocation are primarily documentary issues with numerous legal implications. Understanding the issues therefore needed people with reasonable educational background to avoid interference from outside their own. The result of the study is shown Table 4.3 below.

**Table 4.3 Educational levels of Respondents**

Mining Companies	Number of Respondents in percentages							
	Non Formal		Primary		Secondary		Tertiary	
Abosso Gold Mine	27	54%	14	28%	8	16%	1	2%
AngloGold Iduapriem	32	64%	10	20%	7	14%	1	2%
Golden Star Bogoso	18	36%	19	38%	13	26%	0	0%
Goldfields Ghana Ltd	12	24%	25	50%	10	20%	3	6%

Source: Field Survey, 2008

The result of the study revealed that majority of the respondents did not have a strong educational background which could have aided them in any meaningful negotiation with their richer claimants. Given their educational background, it is apparent that, outside interference may have creep into their negotiation with their richer claimants. There is also the possibility that, outside interference did not allow the affected persons to state the appropriate and adequate claims for their lost assets and livelihoods with respect to their natural environment and may have been manipulated by knowledgeable outsiders or their own.

#### 4.1 Variables Investigated and the Observations made.

As mentioned in the previous chapter, the study investigated the under-mentioned variables which were pertinent in establishing the changes which have occurred without and with the projects.

##### 4.1.1 Indicators of Economic Wellbeing

The economic wellbeing of displaced respondents was looked at in the light of the degree of employment opportunities offered by the companies, incomes from agriculture production and degree of household savings. These variables were treated on a company to company basis to ascertain the benefit derived or otherwise by respondents in the different catchment areas under study before and after implementation.

**Table 4.4: Educational level of respondent and Percentage of employed respondent with or without project against educational levels**

Mining Companies	Educational levels against Percentage of employed respondent with or without project				% total with project
	Non Formal	Primary	Secondary	Tertiary	% total without project
Abosso Gold Mines	45%	23%	13.3%	1.7%	83 %
	49.5%	25.7%	14.7%	1.8%	91.7 %
Anglogold	37 %	12 %	8.1 %	1.2 %	58.8 %
Iduapriem	45.2%	14 %	10 %	1.4 %	70.6%
Golden Star	4.8 %	5.1 %	3.5 %	0 %	13.3 %
Bogoso	33.6%	35.5 %	24.3 %	0 %	93.3%
Goldfields	3.4 %	7.2 %	2.9 %	0.8 %	14.3 %
Ghana Ltd.	18.3%	38.1 %	15.2 %	4.6 %	76.2 %

Source: Field Survey, 2008

Responses from Table 4.3 indicate that Non- Formal education was very high among all the respondents in all the catchment areas of the various mining companies in comparison to formal education at all levels. Relating employment opportunities to

standard of education, the study established that there were greater employment opportunities opened to respondents in the all the areas studied. The employment opportunities were basically found to be evolving around agricultural production, artisanal mining and trading. This is because peasant agriculture did not require any academic expertise and therefore did employ just the 'brawn' or the human strength. In terms of agriculture and artisanal mining therefore, there was abundant land to cultivate and mine without the projects. However, employment opportunities were found to have dropped from a high of 91.7 percent in the Abosso Gold Mine to 83.3 percent while it reduced from 76.2 percent to 14.3 percent in the catchment area of Goldfields Ghana Limited. In the Abosso Gold Mine area, the drop in employment opportunities was only 8.4 percent. The minimal drop in employment could be attributed to the fact that artisanal mining or 'Galamsey' which is seriously operated in this area, continued to employ almost all the non-formal, and primary educated respondents with the project.

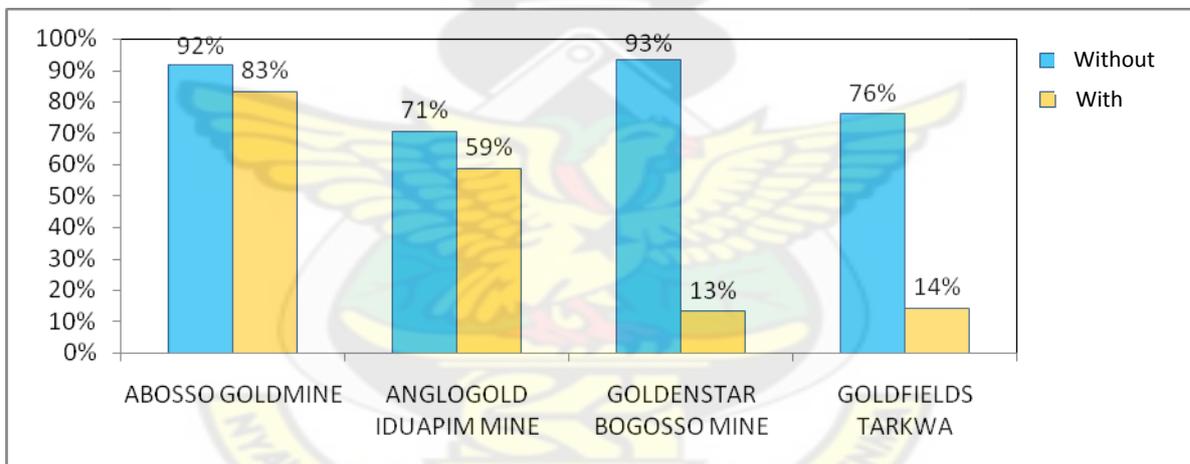
On the contrary, the employment opportunities such as farming and artisanal mining that were available on the Goldfields Ghana concession without the project and which employed a greater percentage of the non-formal, and primary school graduates were found to have been greatly hindered by restrictions with the project in place hence, the drop in employment from 76.2 percent to 14.3 percent with the project.

With the exception of Abosso Gold Mine therefore, the high rate of non formal and First circle education graduates in the other study areas may have accounted for the low percentages of employment opportunities in that whereas respondents did not have the requisite skills required by the mines for employment, the basis of their existing employment avenues without the project which was the land has been eroded due to the takeover by their richer claimants. This is to say that although employment opportunities in the mines can not be said to be limited with the projects, they could not have been accessible to majority of the respondents probably because of the low standard of education among respondents. Mining is a technical industry which employs high calibre workforce. This, according to Table 4.3 is limited among the respondents. On the other hand, the areas under study before the start of the projects were basically rural economies with agriculture and artisanal mining as the main sources of employment and livelihood. Natives were therefore either into agricultural production or artisanal mining with some others trading in manufactured goods. These industries are easily accessible

irrespective of the level of education and training. The study also revealed that agriculture, artisanal mining, and trading began to decline possibly because of the prevention from access to farmlands and artisanal mining concessions with the projects. This may have further accounted for the low employment opportunities with the projects. Three main reasons were established for the decline in employment opportunities. These are namely:

- Unavailability of farm land for those engaged in agricultural production
- Lost of artisanal mining sites to large scale mining operators
- Decline in trading activities as result of decline in artisanal mining and farming activities which hitherto put money into people's pockets.

**Figure 4.1:** Percentage of employment with and without the projects in the catchments areas of mining companies.



Source: Field Survey, 2008

### **Household Incomes from Agriculture Production and others**

To be able to ascertain the level of incomes of respondents in the areas operated by the mining companies, the study found it appropriate to look into how much was derived from especially agricultural production without and with the projects in place.

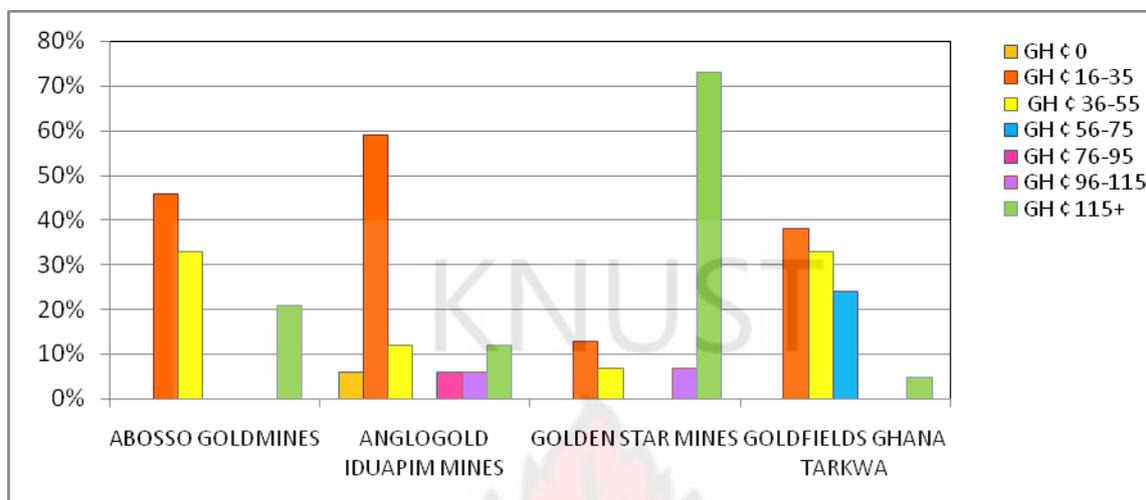
**Table 4.5: Levels of Employment Opportunities and Income Levels**

Mining Companies	Percentage of Employment Opportunities		Average Income Levels/Month			
	Without Project	With Project	Without Project		With Project	
			Amount GH¢	%	Amount GH¢	%
Abosso Gold Mine	91.7%	83.3%	55.67-68.67	100	55.67-68.67	70
AngloGold (Iduapriem)	70.6%	58.8%	57.84-69.34	95	57.84-69.34	40
Golden Star Bogoso	96.3%	13.3%	65.75-80.25	100	65.75-80.25	65
Goldfields Ghana Ltd.	76.2%	14.3%	56.25-70.25	100	56.25-70.25	35

Source: Field Survey, 2008

The drainage, vegetation and rock formation of the study areas are synonymous with the cultivation of palm oil trees, cassava and cocoa. A scoop of a sizable quantity of soil can yield an amount of gold worth a day's work. The study established that agriculture and artisanal mining were the main avenues of employment to individuals and communities within the study areas. Table 4.5 revealed that these two industries provided jobs for between 70 percent and 93 percent of respondents who were gainfully employed without the projects. Consequently, between 95 percent and 100 percent of respondents were earning incomes of between GH¢57.84 and GH¢69.34 monthly from especially agricultural production before the projects. The remaining 5% were noticed to be earning between GH¢36 and GH¢115 a month. The levels of both employment and income were noticed to have dropped from 93 percent to 13 percent with a corresponding decrease in the percentage of people who earn incomes of between GH¢65.75 and GH¢80.25. The level of employment and income suggests that respondents were doing fairly well economically and had secured livelihood without the projects. It is also likely that respondents were able to put some of their earnings away as savings before project implementation.

**Figure 4:2 Household Income from Agricultural Production**



Source: Field Survey, 2008

#### 4.1.2 Percentage of Household Savings

To illustrate the relations that existed between the levels of earned incomes and respondents' propensity to save, the study compared the without and with the project scenarios of variables to measure the behaviour of affected persons in each situation.

**Table 4.6 Showing Income and Savings Levels without and with projects**

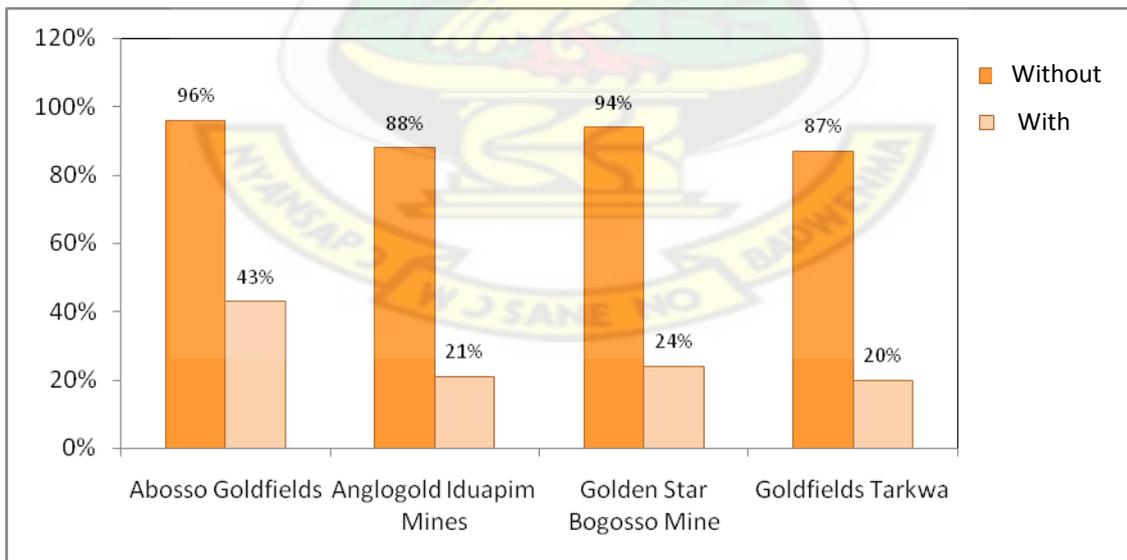
Mining Companies	Income Levels/Percentage of Earners (GH¢)				Savings Levels (%)	
	Without Project		With Project		without Project	With Project
Abosso Gold Mine	55.67-68.67	100	55.67-68.67	70	96	43
AngloGold(Iduapriem)	57.84-69.34	95	57.84-69.34	40	88	21
Golden Star Bogoso	65.75-80.25	100	65.75-80.25	65	94	24
Goldfields Ghana Ltd.	56.25-70.25	100	56.25-70.25	35	87	20

Source: Field Survey, 2008

The measurement of income levels among respondents and their ability to save without the projects and with the projects revealed that the drop in earned incomes subsequently affected their propensity to save. From a high of between 88% and 96%, savings dropped to between 20% and 43%. The high percentages of respondents who were saving without the

projects indicate that, they were financially secured as they had enough to spend and some to put away against their future needs. Respondents could therefore be said to be having coping mechanisms which allowed them to maintain their children at schools and have access to facilities such as health and communication. The drop in savings with the project implies that most of their financial base has been eroded and that they no longer have enough incomes to put some away. Several factors may have contributed to the drop in savings. Some of these could be attributed to non availability of land either to farm, or mine, seasonality of livelihood opportunities which do not allow for regular savings. The consequences of the drop in incomes and savings of the affected persons with the project are that personal incomes as well as per unit access to national resources such as health, education, water and sanitation have fallen below acceptable levels. Again there has been a reduction in the coping mechanism of these people such that some children may have been withdrawn from school to provide help on artisan mine sites or sell on the street. The study observed that as a result of the drop in both the levels of income and savings among displaced persons, commercial businesses in the host communities were also adversely affected due to lack of patronage.

**Figure 4.3: The percentage of household savings without and with the projects of the Mining Companies.**



Source: Field Survey, 2008

## 4.2 Indicators of Social Wellbeing

The social wellbeing of displaced respondents was studied with respect to the percentage of beneficiaries with access to education, water and sanitation. Other components of the indicators of social wellbeing included health care and access to electricity. These variables were looked at in terms of percentage of accessibility on an area to area basis. Accessibility was looked at with regards to the levels of incomes without and with the project.

**Table 4.7 Income Levels and Rate of Access to Social Services**

Mining Companies	Income Levels GH ¢/Annum				Access to Social Amenities (%)		
	Without Projects		With projects		Amenities	Without	With
	GH¢	%	GH¢	%		%	%
Abosso Gold Mine	55.67-68.67	100	55.67-68.67	70	Education	100	83
					Health Care	8	4
					Sanitation	4	38
					Electricity	8	96
					Water	100	100
					Water	100	100
AngloGold (Iduapriem)	57.84-69.34	95	57.84-69.34	40	Education	77	88
					Health Care	44	25
					Sanitation	56	44
					Electricity	19	81
					Water	94	100
					Water	94	100
Golden Star Bogoso	65.75-80.25	100	65.75-80.25	65	Education	13	40
					Health Care	13	40
					Sanitation	13	47
					Electricity	13	7
					Water	93	93
					Water	100	100
Goldfields Ghana Limited	56.25-70.25	100	56.25-70.25	35	Education	100	95
					Health Care	52	81
					Sanitation	81	62
					Electricity	95	91
					Water	100	100
					Water	100	100

Source: Field Survey, 2008

The study revealed that some communities and individuals had difficulties in accessing social amenities without the projects. Communities in the catchments areas of Abooso Gold Mines and Golden Star Bogoso Mines especially had low percentage of access to education, health care and sanitation among others without the projects. In the Golden Star Bogoso area for example, the rate of access to education, sanitation, healthcare and electricity were very minimal. This was against the backdrop that between 95 percent and 100 percent respectively were earning incomes of between GH¢65.75 and GH¢80.25. Given their levels of income it could be said that one of the main reasons for the difficulties in accessing social amenities could be affordability in terms of cost among others. In the case of access to education, the study observed that school attendance was very poor in these areas. Poor educational provisions such as lack of teachers, teaching aids, and classrooms were noted to be some of the reasons for poor school attendance. Another reason for this situation could be geographical access such as the long distances pupils and students had to cover from homes to school. The educational situation in the Bogosso area is not an exceptional case as it pertains to the whole of Ghana. Ghana as a nation had not attained the 100 percent gross enrolment rate envisaged from the fCUBE by 2005 (GSS, 2005). However, access to social amenities such as health care in same area was noted to have improved significantly with the projects but at a time when the level of earned incomes has reduced and affordability or financial access could be said to have been limited. This could be attributed to improved housing and sanitation and health care facilities such as National Health Insurance Scheme (NHIS) among others.

It was also observed that communities in the catchment areas of AngloGold, Iduapriem Mines and GoldFields Ghana Limited were enjoying considerably high rate of access to social amenities without the project and remained the same with the projects. The study noted that the area operated by Goldfields Ghana alone had 100 percent access to improved water without and with the project. This figure is well over the national percentage of 68.0 in 2002 (GSS, 2005). The overall picture of the areas studied showed that an average of 96.75 percent had access to water without the projects. School attendance in all the areas both without and with the projects was within the gross national primary school enrolment range of 78.7 percent in 2002 (Rural Poverty Portal, 2007). However, an assessment of the accessibility of any facility can not be complete if it is not done in conjunction with the degree of availability, quality and cost of access. The study therefore investigated how much it cost respondents in the various catchments areas in accessing education, health care, sanitation, electricity and the

environment. Below are the graphical representations of the cost of the facilities without and with the projects.

**Table 4.8 The relationship between Cost of Social Services and Savings.**

Mining Companies	Access to Social Amenities	Cost (GH¢/Annum)		Savings (%) Level for the areas	
		Without project	With project	Without Project	With Project
Abosso Gold Mine	Education	21.00	63.02	96	43
	Health Care	12.00	50.09		
	Sanitation	0.83	4.17		
	Electricity	0.93	17.00		
	Water	0.00	1.88		
AngloGold (Iduapriem)	Education	28.4	117.00	88	21
	Health Care	20.9	38.90		
	Sanitation	0.00	11.70		
	Electricity	1.00	37.11		
	Water	10.00	4.30		
Golden Star Bogoso	Education	117.00	158.00	94	24
	Health Care	113.90	80.90		
	Sanitation	8.00	0.10		
	Electricity	0.20	0.60		
	Water	0.00	13.60		
Goldfields Ghana Limited	Education	24.40	43.40	87	20
	Health Care	16.20	35.00		
	Sanitation	16.50	13.00		
	Electricity	3.90	13.50		
	Water	2.30	73.30		

Source: Field Survey, 2008

### 4.3. Accessibility of Social Services, Forest Products and Cost.

#### Education

The study discovered that there has been a general increase in the cost of most social services. For example, the average cost of accessing education in the Abosso Goldfields area without the project was GH¢ 21.25 annually. It was established that the cost of access to education with the project is GH¢ 63.20 annually. In the AngloGold (Iduapriem) area, the increase in cost is quite tremendous as it has risen from GH¢28.40 annually to GH¢ 117 with the project. In the Golden Star area however, the cost remained the same without and with the project. It

could be said that the increases in the cost of education to parents are possibly as result of enrolment of children of relocated communities into expensive school in trying to

accommodate the affluent taste of their host communities. It could also be said that increases in the cost of education might have also contributed significantly to the reduction in savings than was the case without the projects.

### **Health Care**

The study established that there have been general hikes in the cost of accessing health care in most of the areas studied. While the increase in the cost of health care could be attributed partly to high cost of health delivery inputs, it was discovered that most of the respondents had not registered with a facility like the National Health Insurance Scheme (NHIS). The NHIS scheme is still facing implementation problems with nearly 2 million people yet to benefit from the scheme (ISSER, 2006).

It is therefore probable that, the low access to healthcare in this area could be as a result of lack of access to NHIS facility. The reduction in the cost of health delivery in the Golden Star area on the other hand is an indication that the respondents may be enjoying the National Health Insurance Scheme now or, are living in healthy environment with improved sanitation than before hence the burden of the cost of healthcare has not affected their levels of savings as found in AngloGold and Goldfields Ghana areas.

### **Sanitation**

Sanitation covers facilities for safe excreta disposal, solid waste disposal and wastewater disposal. In looking at cost of these activities, the study revealed that there have been severe increases in the cost of sanitation in the catchments areas of Abosso and AngloGold with the project whereas there have been drastic cuts in cost in the Golden Star and Goldfields Ghana areas respectively with the project.

It was noted that without the projects, toilets in most of these communities had been private or public pit latrines which did not attract any fee. The increases in the cost of sanitation in some of the areas with the projects could have come about as a result of increases in say, cost of using the public KVIP toilets and usage of pan latrines which attracted fees. The cost of emptying septic tanks, and levies charged for disposal or collection of refuse has become unaffordable for many people in these communities.

## **Electricity**

An assessment of the cost of the usage of electricity showed that the cost of accessing electricity increased throughout the areas with the projects. From a low of GH¢0.20 in some areas, it shot up to a high of GH¢37.11 annually after the projects. The study established that the areas under the operation of Goldfields Ghana for example were enjoying fixed electricity charges which were subsidized by the company hence, the low cost of accessing electricity. But the practice ceased with the project and is accountable for the increases in the cost of accessing electricity in these areas. The elimination of subsidy and cuts in incomes imply that although the communities in the operational area of Goldfields Ghana could be said to be enjoying the supply of electric power, the monetary burden of that service has simply become unbearable and could contribute seriously to a break up of their coping mechanisms.

## **Water**

Like most of the social services, it was noted that the cost of access to water has also seen some increases. The study revealed that the average cost of water in the study areas was GH¢3.075 without the projects but increased to an average of GH¢23.27 with the projects.

In the Abosso and Golden Star areas for an example the cost of water increased from GH¢0.00 to GH¢1.88 and from GH¢0.00 to GH¢13.60, representing 100% increase with the projects. The reason for the increases in the cost of accessing water in the Abosso and Golden Star areas from virtually no cost without the project were that most communities were using natural sources of water but these have changed to either pipe borne water or bore-hole systems due to pollution from the activities of the mining companies. Although some of the new water systems were provided by mining companies, some of them have off-loaded the cost of maintenance to the communities thereby increasing the cost of access to water.

## **4.4 Indicators of Environmental and Habitation Wellbeing**

### **4.4.1 Habitation Wellbeing**

While asset denotes market and non market possessions, the quality of an asset determines to some extent the standard of living of one person from another. The study therefore found it necessary to investigate the quality of houses or structures owned by respondents with respect to the type, space and comfort to arrive at the extent of the respondents environmental and habitation wellbeing without and with the projects.

**Table 4.9: Type of Houses in the Study Areas**

MINING COMPANIES	Swish		Mud		Sand-crate	
	Without	With	Without	With	Without	With
Abosso Goldfields	83%	0%	4%	0%	13%	100%
Anglogold Iduapim Mines	41%	17%	53%	18%	6%	65%
Golden Star Bogosso Mine	68%	0%	26%	0%	6%	100%
Goldfields, Ghana	0%	0%	43%	5%	57%	95%

Source: Field Survey, 2008

The study revealed that the predominant types of houses without the projects in some of the areas under study were swish and mud houses. Whereas swish houses accounted for 83 percent, 41 percent and 68 percent in the Abosso, Anglogold and Golden Star areas respectively, there were only 25 percent of sandcrate houses in the areas mentioned. In the operational area of Goldfields Ghana however, 57 percent and 43 percent of the housing units were made of sandcrate and mud. The area did not have swish houses without the project. This is because the area is not as remote as the other areas studied. The types of housing units were noted to have changed extensively to sandcrate in all the areas under study with the projects.

The change from swish and mud to sand crate houses with the project is attributed mostly to the mining companies who provided them either as part of the compensation package or to get rid of affected persons from areas they intended to exploit. The provision of sand crate houses notwithstanding, the study investigated further to establish the spatial comfort of respondents by looking at the rate of occupancy. It was established that the average size of families ranged from 3 to a maximum of 7 persons. However, the average rooms provided were a maximum of two. Thus the maximum two bedrooms provided by the mining companies with the projects for the existing three or four bedrooms without the projects, were seriously inadequate for the comfort of the respondents.

Table 4.9.1 Average household size and occupancy ratio Without and after project

Mining Companies	Average Family Size	No. of Rooms/Occupancy Ratio	
		Before	After
Abosso Goldfields	7	4:1.75	2:3.50
Anglogold Iduapim Mines	6	2:3.00	2:3.00
Golden Star Bogosso Mine	3	4:0.75	2:1.50
Goldfields Tarkwa	6	4:1.50	2:2.00

Source: Field Results, 2008

The study noted that, there has been a significant increase in mud and Swish houses in the catchments areas of AngloGold and Goldfields Ghana Limited in the new settlements. The study revealed that these were as result of respondents' efforts to augment their accommodation requirements to avoid overcrowding. It could be deduced that the mining companies did simply overlook the family sizes of the affected persons and tailored their provision to fit into their budget. For example the room occupancy rate of 0.75 in the Golden Star Bogosso areas increased to 1.5 after the project while it increased from 1.5 in the Goldfields Ghana area to 2 after the project.

This implies that 2 people instead of 1.5 were to a room with the project. The situation in the Abosso Goldfields was not different as the occupancy rate without the project was noted to have increased from 1.75 to 3.5. The texture of their former houses notwithstanding, it could be said that respondents were enjoying much space and comfort without the projects and had occupancy ratio comparable to United Nations standard of about 1.7. It could therefore be concluded that the exchange between the mining companies and affected persons with respect to the exchange of housing units was seriously to the disadvantage of respondents.

#### 4.5 Environmental Wellbeing

Assets as mentioned earlier include both market goods such as timber and non market such as natural water bodies and natural air. The lost of any of these could have a remarkable effect on livelihoods. But it is not just the endowment of these products which matter but how much it cost to have access to their usage as well as their possible preservation. The study therefore made an attempt to know the degree of supply and access to forest product without and with the project and how much it

cost respondents to have access forest products such as fire wood before and after the projects

**Table 4.10 Availability of Forest Resources and Cost of Access**

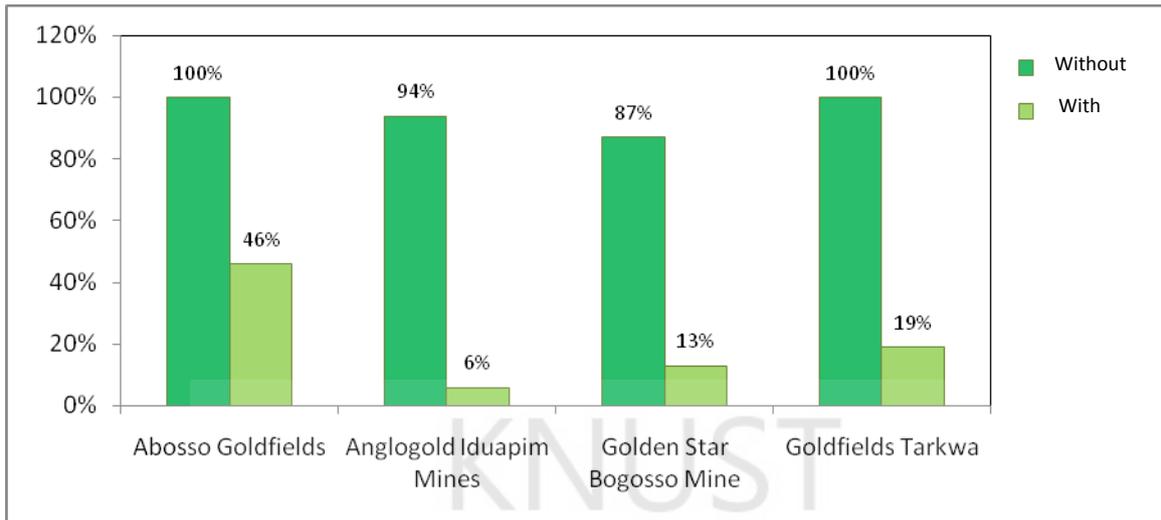
Mining Companies	Availability of Forest Resources (%) ( Firewood)		Cost of Access to Forest Resources GH¢ ( Firewood )	
	without Project	with Project	without Project	with Project
Abosso Goldfields	100%	46%	1.40	8.00
AngloGold	94%	6%	0.00	33.00
Golden Star	87%	13%	34.00	44.00
GoldFields, Ghana.	100%	19%	0.50	7.50

Source: Field Survey, 2008

Results from the study showed that there has been a marked decline in the supply and access to forest products especially firewood in all the areas under study with the projects. The almost 100 percent supply and access to forest products without the projects reduced to an average of 21 percent in all the areas. Since about 59 percent of Ghana's energy consumption is from biomass in the form of firewood and charcoal, it implies that affected persons had to contend with the problems of looking for one most important source of energy that have come handy all their lives. It came out during the studies that respondents were not allowed to enter forest which fall under the concession of the mining companies as access road to the forest are under constant security guard.

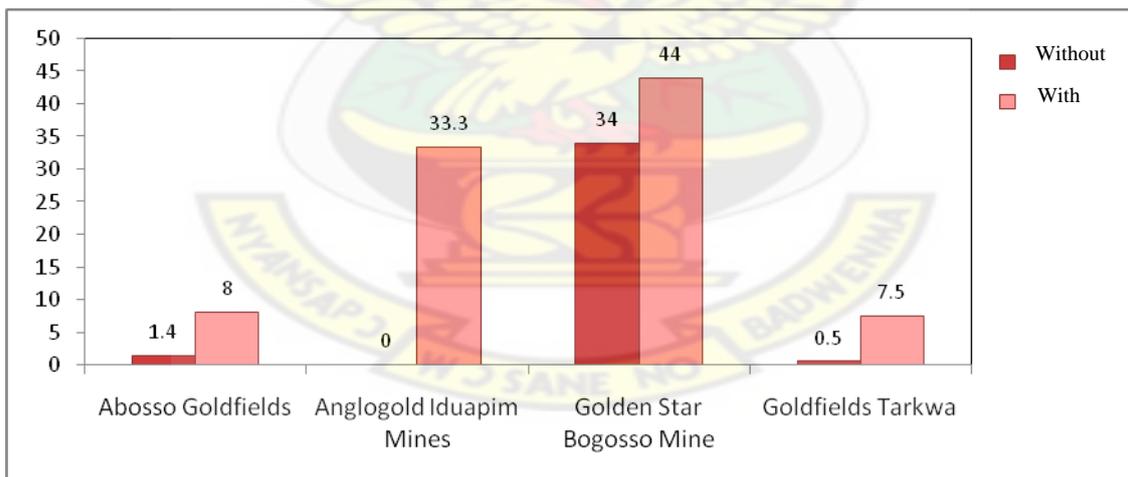
Hence, firewood gathering is currently beyond the reach of respondents in all the areas studied. Respondents are therefore forced to pay more for small quantities which are brought from other sources to the markets for sale. Thus, the cost of firewood has increased from virtually at no cost in some areas to as high as GH¢ 33.00 and GH¢44.00 annually in some areas to meet their daily fuel requirements. This implies that, the already difficult financial situation of affected persons in view of the loss of their sources of income especially agriculture is continuously being eroded through the cost of access to energy.

**Figure 4.3** Availability of Forest Resources in the various mining areas without and with projects.



Source: Field Results, 2008

**Figure 4.4:** A Grouped Bar Graph showing the cost of Forest Resources (timber, firewood, etc) before and after projects by the Mining Companies



Source: Field Survey, 2008

**Table 4.11 Surrogate prices of CPRs**

Computed surrogate prices for firewood. Game, root and bark medicines:  
Golden Star Bogoso & Abooso Goldfields

GHC/Annum	Frequency	GHC/Annum	Frequency
00	1	00	8
50.00	1	50.00	1
200.00	1	200.00	1
1,000.00	3	1,000.00	2
1,500.00	3	1,500.00	12
2,000.00	20	2,000.00	3
3,000.00	12	3,000.00	16
4,000.00	3	4,000.00	4
5,000.00	3	5,000.00	1
10,000.00	2	10,000.00	1
30,000.00	1	30,000.00	1
<b>Total</b>	<b>50</b>	<b>Total</b>	<b>50</b>

Source: Field Survey, 2008

**Table 4.11.1 Showing surrogate prices of CPRs**

Computed surrogate prices for firewood. Game, root and bark medicines. AngloGold Ashanti (Iduapriem) & Goldfields Ghana Limited

GHC/Annum	Frequency	GHC/Annum	Frequency
00	2	00	7
50.00	1	50.00	1
200.00	2	200.00	1
1,000.00	1	1,000.00	1
1,500.00	14	1,500.00	10
2,000.00	15	2,000.00	20
3,000.00	9	3,000.00	5
4,000.00	1	4,000.00	1
5,000.00	2	5,000.00	1
10,000.00	2	10,000.00	1
30,000.00	1	30,000.00	2
<b>Total</b>	<b>50</b>	<b>Total</b>	<b>50</b>

Source: Field Survey, 2008

A contingency valuation method (CVM) was used to ascertain the importance of forest products to the livelihood of individuals and communities. This was done in relations to the educational background of respondents as presented in Table 4 12. According to Tables 4.10 and 4.11, 58 and 39 respondents were prepared to pay GHC2,000.00 and GHC1,500.00 respectively a year to whoever demanded it so as to be able to retain the resources which provided them with their root and bark These responses could be said

to have come from respondents who either had no-formal education or only primary education and as such could not see the long term value of their natural resources. Six (6) respondents representing 10 percent of the sample population who had acquired tertiary education were however of the view they would have offered to pay GH¢30,000.00 a year for the same products to retain them. The responses from the 10 percent population show their awareness of the long term value of their resources and its implications on their future livelihood. It was noted that 18 respondents in all of the study areas could not see the need to pay for the loss of these products.

These respondents could be said to be also part of the non –formal or primary educated people. To them, availability of these products have been through providence and can not attract any cost either for their loss or retention. A total of 38 respondents who had attained secondary education offered to pay the other sums of money as represented on Tables 4.10 and 4.11 respectively. The extremely low prices offered by respondents in the above tables illustrate the level of importance they attach to their natural endowment as a result of their low level of education. However, the implication of these offers meant that respondents expected any richer claimant to their assets to offer something for their release.

#### **4.6 Cost-Benefit Analysis**

The study did a cost-benefit analysis of how much was lost to and gain in agricultural production, and utilities like electricity, water as well as services such as education, health, sanitation and common property resources of 200 respondents in the study area and with the projects. The analysis did take into consideration the fact that all other things being equal;

- Some project has been in existence for nearly 20 years.
- The Ghana inflation rate (consumer price) with 1990 as the base year was fluctuating between 37.26 and 8.9 with the interest rate hovering between 17 percent and 18 percent in 2008. The consumer price indices for the various years were used as discount factors in calculating the net present value (NPV) of the Economic Viability Analysis of the projects as presented in Appendix F.

The cost-benefit analysis also took cognisance of the fact that majority of the respondents would be deprived of their sources of livelihood for a period of not less than 21.6 years. Given that the mean age of respondents was established to be 38.4 years and the retiring

age in Ghana as between 55 and 60 years. The standard cost of various crops per acre per yield annually and the surrogate cost of Common Property Resources (CPRs) were computed to give a fair idea of the total cost of losses with project.

Conversely, the cost of various development projects provided by mining companies as part of compensation packages were also computed to derive the benefit that has accrued to affected persons and communities.

The application of the cost –benefit approach was to ascertain the economic and social benefits received as well as the cost incurred by the respondents using the Net Present Value (NPV) model. It is thought that the net present value model will help determine whether the projects were economically justifiable.

The net present value (NPV) is based on the following model:

$$NPV = \sum_{t=1}^T \frac{(B_t - C_t)}{(1+r)^t}$$

Where: B= Project benefit

C= Project Cost

r = The appropriate discount rate

T= The life of the project

Source: (Hayman, 1999)

The test of economic justification of the project requires that  $NPV > 0$ .

If the test is met, resource use for the project will increase the economic well- being of the beneficiaries of the project. The cost-benefit approach has however been criticised by development authorities like Cernea.

#### **4.6.1 Critique of Cost- Benefit Approach**

The application of cost-benefit approach in calculating the effects of the without and with scenarios of development induced displacements has serious limitations.

According to Cernea (2003) the standard cost- benefit approach is not capable of answering the economic and ethical questions involved in forced displacement,

#### 4.6.2 Enumeration and Evaluation of Benefits and Cost

The study used the current rates of paid compensation for appropriated crops to estimate the several sums of money paid to the affected sample population in the various catchment areas of mining companies. The study considered only the predominant crops grown in the study areas.

**Table 4.12 showing the observed rate of paid compensation for appropriated crops.**

<b>Mining Company</b>	<b>Crops</b>	<b>Price/acre GH¢</b>	<b>No. of respondents</b>	<b>Paid compensation</b>
Abosso Goldfields Ltd.	Cocoa	3,200	50	160,000.00
	Plantain	300		15,000.00
	Cassava	400		20,000.00
AngloGold Ashanti	Cassava	400	50	20,000.00
	Cocoa	3,200		160,000.00
	Plantain	300		15,000.00
	Palm-oil; Tree	900		45,000.00
	Pineapple	400		20,000.00
Golden Star Bogoso	Cassava	400	50	20,000.00
	Cocoa	3,200		160,000.00
	Plantain	300		15,000.00
	Palm-oil; Tree	900		45,000.00
	Pineapples	400		20,000.00
Goldfields Ghana Ltd.	Cassava	400	50	20,000.00
	Plantain	300		15,000.00
	Pineapple	400		20,000.00
	Palm-oil; Tree	900		45,000.00
<b>Total</b>			<b>200</b>	<b>GH¢ 815,000</b>

Source: Land Valuation Board/Goldfields Ghana Limited, 2007

Given that an acre of the specified crops were cultivated by a respondent. An estimated total amount of GH¢815,000 was observed to have been paid as compensation to a sample population of 200 affected persons.

#### **COST**

The study did calculate the expected payable compensation for cocoa, palm oil tree, and pineapple at approved rates for sample population for 21.6 years. It also calculated the cost of accommodation for 15% of respondents who migrated or opted out of resettlement homes.

Loss of Agricultural Output at GH¢ 815,000 X 21.6 years = GH¢17,604.000

Where, 21.6 years is the number of years respondents were likely to be deprived of their agricultural products given that a one off payment was made to them.

Loss of Electricity subsidy for 21.6 years = GH¢ 3,611.00 x 21.6 = GH¢77, 997.6

Loss of Recreation due to destruction of and access to Wilderness / 21.6 years

= GH¢116,000.00 x 21.6 = GH¢2,505.600.00

Loss of Natural Water bodies = GH¢67,480.00 x 21.6 = GH¢1,457,568.00

Loss of Health Care facilities = GH¢ 42, 700.00

Loss of Homes at GH¢1,000,000 /room for 30 persons for  
an average of 4 rooms per person = GH¢1,000,000 x30 x 4 = GH¢120,000,000

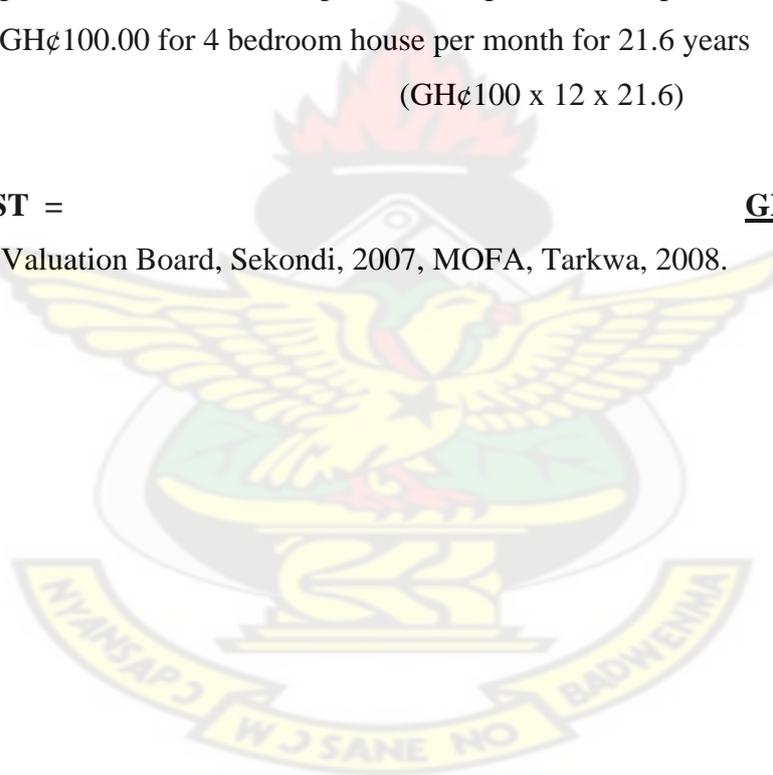
Cost of renting accommodation for 30 persons being 15% of sample

Population at GH¢100.00 for 4 bedroom house per month for 21.6 years

(GH¢100 x 12 x 21.6) = GH¢25,920.00

**TOTAL COST = GH¢141,713,785.6**

Source: Land Valuation Board, Sekondi, 2007, MOFA, Tarkwa, 2008.



## **BENEFITS**

Education (5 units 6 Class room blocks) at GH¢1,500,000.00 = GH¢7, 500,000.00

Construction of Water (5 units Borehole) at GH¢ 4, 500.00 = GH¢ 22,500.000.00

Construction of (5 units KVIP) sanitation facilities at GH¢5,400 = GH¢ 2,700,000.00

Source: Office of the STMC Regional Engineer, 2008

Paid compensation for appropriated crops = GH¢ 815,000.00

Paid compensation for one unit sand crete house at GH¢1,000,000x4

for 30 person being 15% of sample respondents = GH¢120,000,000.00

**TOTAL BENEFITS**

**GH¢153,515,000.00**

### **4.6.2 Calculation of Net Present Value**

$$\begin{aligned} NPV &= \sum_{t=1}^T \frac{(B_t - C_t)}{(1+r)^t} \\ &= \frac{GH¢153,515,000 - GH¢141,713,785.6}{(1+17)^{21.6}} \\ &= \frac{GH¢11,801,214.4}{(1+17)^{21.6}} \\ NPV &= \underline{GH¢ 9.08^{-21}} \end{aligned}$$

According to Hayman (1999) the test of economic justification of a project requires that Net Present Value (NPV) > 0. If the test is met, resource use for the project will increase the economic well- being of the beneficiaries of the project. The Net present Value of **GH¢ 9.08<sup>-21</sup>** in the above calculation shows that, the benefits derived is greater than the cost of lost livelihood with the project.

### **4.6.3 Conclusion**

Since the test for economic justification for the project is greater than zero, the project to relocate or resettle displaced persons as a form of compensation has been beneficial to the study population.

The result of the test notwithstanding, the assertion by Cernea (2003) that ‘The standard cost-benefit approach is not capable of answering the economic and ethical questions involved in forced displacement’ is worth noting. The cost-benefit approach in reality cannot be used to adequately measure the cost of disruption of social cohesion, cultural and religious beliefs and other externalities. The loss of agricultural land and produce particularly to those who depend on the land for their livelihood will continue to be a huge cost to them.

The introduction of Alternative Livelihood Projects such as the SEED programme of Goldfields Ghana Limited (Tarkwa Mine) and poverty reduction initiatives of some gold mining companies could be said to be a confirmation of the assertion of the study and that of Cernea that, compensation has not been adequate in real terms hence the introduction of the above-mentioned interventions. There is no doubt that these projects are intended to serve as supplements to the limited sources of livelihood available to people affected by mining activities in the areas that were studied. The alternative livelihood programme are probably also meant to address the question of sustainability of livelihood with the projects.

## **CHAPTER FIVE**

### **KEY FINDINGS, RECOMMENDATIONS AND CONCLUSION**

#### **5.0 Introduction**

The adequacy of paid compensation and lost livelihoods in the mining communities of the Tarkwa-Nsuaem municipality and Prestea/Huni-Valley district has been assessed in relationship to the economic and social situations of individuals and communities before and after receiving compensation for their lost assets and livelihood. This chapter established the linkages and results of the data collected on the adequacy of paid compensation and the research questions, objectives and of the study.

An attempt has been made to find answers to the research question, of what constitutes adequacy paid compensation? With the research objective of exploring what constitutes adequate paid compensation. Secondly, to answer the question, “how would paid compensation by itself be sufficient recompense? Bearing in mind the research objective of finding out whether paid compensation has really been sufficient recompense.

Thirdly, to answer the question, “Is cash the only appropriate form of compensation? With the objective of finding out whether, cash has been the only form of compensation.

Finally to answer the question, who are the affected persons who should be compensated? The objective of the study in respect of this question was to find out the categories of affected persons who received compensations in the mining communities of Tarkwa-Nsuaem municipality and Prestea/Huni-Valley district of Ghana.

#### **5.1 Key Findings on the Adequacy of Paid Compensation**

A review of earlier studies on the question of what constitutes adequate paid compensation has revealed that there is no universally accepted model on what could be accepted as adequate paid compensation. The definition of what constitutes adequate paid compensation does not go beyond what a recipient would want to gain for his loss and what one would want give for his gains. In Ghana, the whole question of compensation is guided only by Article 20 of the constitution of the Republic of Ghana which does not specify the constituent or what could be regarded as constituting adequate paid compensation. Thus there is no specific baseline to serve as the reference point for the

payment of compensation for lost livelihood. Hence, compensation is paid along what could be term as 'pay as it is deem fit' by richer claimants who happened to undertake the exercise of compensation payments in the study areas. Irrespective of the absence of spelt out constituents of adequate paid compensation, this study found out that, the adequacy of paid compensation could be assessed in the light of prevailing conditions of affected persons with respect to the status of their livelihood before and after the project, and whether there has been improvement in the economic, social and environmental situation of affected persons. The sustainability of the compensation package in relationship to their after project situation could also be a measure of the adequacy of paid compensation.

### **Economic Well-being**

#### **Employment:**

Taking economic well-being as a prerequisite of adequate paid compensation, the study measured the degree of employment opportunities offered by mining companies or individuals after relocation since employment has the potential to widen the sources of livelihoods of individuals. The study found that the level of employment in all the areas under study has reduced from a high of 93 percent to a low of 14 percent in some places. Meaning that, the sources of peoples' livelihood have greatly been reduced and there were the possibilities of mass impoverishment among individuals and communities after the projects.

The study found also that the main reason for the reduction in employment opportunities was the lack of access to farmlands, artisanal mining sites which hitherto offered the bulk of employment to a majority of individuals and communities in the study areas. This implies that the incidence of poverty could be on ascendancy in the study areas.

#### **Income:**

Since income is a product of engagement in economic production such as agriculture and manufacturing, reduction in such activity invariably impacts negatively on income generation and levels of income. Thus, the study found that incomes have fallen across the length and breath of the study areas as a result of lack of income generating activities. Hitherto, about 98.7 percent of inhabitants were earning monthly average of between GH¢55.67.00 and GH¢70.25.00 in the study areas. The level of earnings from basically agricultural production was observed to have fallen to the barest minimum with the projects as access to farmlands and farming activities virtually ceased. Naturally, the

industry which replaced agriculture should have provided jobs for the people. However, the established levels of education needed for gainful employment was found to be woefully inadequate. Such that respondents could not access employment opportunities offered by the mining companies in the areas studied. The lack of income generation activities presupposes that affected persons have sunk deeper into impoverishment.

### **Savings:**

As a result of decline in employment and income generating activities, the study noticed a sharp reduction in savings among individuals and household. The degree of individual savings was found to have dropped from 96 percent to 20 percent in some areas with the projects. This obviously, was as a result of dislocations, or displacement from locations where income generation activities were unimpeded. The consequences of people's inability to save are that their very livelihood cannot be sustained.

### **Social Well-being**

#### **Education:**

Investigations conducted into the social well-being of persons who have lost their sources of livelihood to mining activities revealed that on the average there have been increases in access to education in all the areas of study. The increases were as a result of the provision of school building and other educational facilities by the mining companies as part of the compensation packages to communities which have been relocated from their original habitats.

For an example, some mining companies have instituted bus services at their expense to convey children to schools outside their communities to enable them access higher grade schools. The bus facility has thus succeeded in encouraging school attendance and promoting access to higher education. It was established however that, the increases in access to education has come at an increased cost to families than without the projects thereby widening the gap between the rich and poor in having access to education.

#### **Water and Sanitation:**

The research found that there has been substantial improvement in access to water and sanitation in the areas operated by especially Abosso Goldfields and Golden Star Mines. This has been possible through the provision of sanitation facilities such as KVIP toilets, drainage systems and bore-hole systems in the new settlements by the companies. It has

been established that the natural source of water in the areas operated by AngloGold Ashanti has been polluted by mining activities. However, for some communities who depend on these water systems, they have been compensated with bore-hole water systems which are maintained by the company.

The study also found out that in some places access to water has come at an increased cost with the projects. A case in point is found in New Atuabo in Tarkwa. Whereas it cost just about GH¢2.30p to access pipe-borne water in old Atuabo, annually per a household, it now cost an average of GH¢73.30p annually to access water in New Atuabo. This is because Goldfields Ghana Limited has waived the subsidy on water which, hitherto was being enjoyed by the people of old Atuabo.

The waiving of subsidy is certainly the cause for the hikes in water bills in new Atuabo. It could be concluded that the sustainability of individuals' and the community's access to good drinking water could not be guaranteed especially when it comes to affordability.

Government policy on involuntary resettlement should include provisions which would impress upon on developers to ensure that peoples' access to water is sustained both as a binding social responsibility and as a component of their compensation packages for lost source of water.

### **Health Delivery:**

Access to health care in 'Teberebe which is an area operated by AngloGold Ashanti for example, has declined because the mobile health delivery system that was being operated by the Church of Pentecost was disrupted when the community was relocated from their former abode. However, no alternative health delivery facility was put in place by the company in new Teberebe hence; health care after the project can only be accessed from Tarkwa Government Hospital at a cost that includes transportation. On the contrary Mile 8' (Adieyie ) which is also in the operational area of AnglGold Ashanti has a clinic with permanent staff. Nevertheless, most cases are referred to the government hospital at Tarkwa because of limited facilities thereby increasing the cost of access to health care. It is even ridiculous to note that the people of Adieyie and surrounding villages are denied access to the Mines' own hospital which has all that it takes to render better medical services to affected persons by their activities persons.

**Electricity:**

Without exception, all the resettled communities visited were found to be enjoying electricity which has been provided by the various mining companies. However, the full utilization of electric power supply can not be said to have been met as it is limited to domestic consumption only. There is no doubt however that, it has improved the lives of the people as they can now access events that are happening nationwide via television and radio sets. On the negative side, the absence of gainful employment and shortfalls in income are likely to minimize the gains of electricity power

**Environmental and Habitation Well-being****Habitation:**

The materials that are used for buildings in the study areas are those found locally and provided by nature. They include forest products such as timber, clay, and raffia palm fronds. The researches found out that these materials were used extensively in the construction of houses such that, for some units of houses there were no imported materials which was obtained at hard cash. The use of local materials made possible the putting up many units of houses at an affordable cost such that there were no overcrowded rooms and restricted compounds. The situation was found to have changed with the projects. For instances affected persons who choose to be resettled by the companies were provided with brick houses. The study noticed that unlike AngloGold Ashanti which provided houses on a one to one basis, all the other companies notably Goldfields Ghana Limited applied a method that created a situation where an average family of six was forced possibly into a single room given that they had only two rooms without the project.

For those who lost four rooms, only two were provided. Two lost rooms were replaced with one room house without any amenity such as kitchen, bathroom or toilet. Although the mud and swish houses were replaced with sand crete houses, the ratio of replacement of lost houses has created congestion and overcrowdings such that there is a spill over into host communities thereby raising the cost of accommodation in these communities.

The rate of exchange as described above does not ensure fairness as postulated by the theory of the 'Pareto Improvement.' The exchange does not make affected persons better off than they were without the project. Government policy on compensation should ensure fairness such that richer claimant should be made to ensure equity. Developers should be

made aware that the comfort of persons whose assets are being taken over cannot be overlooked just because their houses are made of materials presumed to be of inferior quality.

### **Forest Resources:**

A clandestine study tour of the forest cover of mining concessions revealed that on most mines there is the posting of security guards in and around forest areas. Additionally, there are numerous sign posts prohibiting people from trespassing to conduct any activity related to harvesting forest products in areas demarcated for mining activities. For those who depend largely on the forest for most of their domestic energy supply, this practice of prohibition has affected them badly. Prohibition of peoples' access to forest resources has resulted in hikes in the cost of forest product such as firewood which is a major source of energy used for cooking in most Ghanaian homes. Ironically not a single item of expropriated Common Property Resources (CPRs) was paid for by any mining company.

Given the low income levels of individuals in the study areas, it is evident that very few people can afford other forms of energy other than those found in the forest. The suggestion by some scholars that there is a strong relation between poverty and the environment has therefore become a reality as every space of available shrub in the study areas are under intense pressure with the possibility of environmental decline and resultant impoverishment among relocated communities.

### **Adequacy of paid Compensation**

An analysis of the economic viability of the resettlement and other compensation packages of the affected persons of the projects revealed that in theory, the benefits derived by the various individuals and communities who were relocated outweighed the cost at which the benefits were obtained. The benefits were found to be composed of mainly monetary and physical infrastructures such as educational facilities, health and water facilities among others. Although a semblance of some of the facilities existed without the projects, the new provisions were of better quality and the amount of money that was spent in providing them is certainly beyond the reach of individuals and the communities.

The monetary and physical infrastructures notwithstanding, the study found out that individuals and communities have and will continue to be deprived of their greatest source of livelihood which is their farmlands and agricultural produce and for that matter their

source of income without which their very existence is threatened. The stark reality of the situation has prompted the introduction of alternative livelihood projects which is intended to augment the shortfalls of paid compensation to individuals and communities. The introduction of alternative livelihood projects by the various mining companies in the study areas is a testimony to the fact that, compensation for lost livelihood has not been adequate to sustain the survival of individuals and communities. Moreover, the take over of farmlands without the provision of alternative land for agricultural production has been a huge cost to individuals and communities.

### **The mode of Compensation:**

For the right to acquire individual and community assets, the study found out that in most cases cash was paid to individuals for the loss of their farm produce. It also came out that with the exception of few communities like Abekoase where the entire community has not been resettled; most communities like Old Atuabo, Teberebe and 'Mile 8' or Adieyie among others have been resettled. In the case of 'Mile 8' or Adieyie and Atuabo, the affected persons had the option to choose from cash and housing offers for lost buildings and structures. They were also offered cash for lost crops. In the Atuabo scenario for example, those who had structures such buildings and wanted their houses to be replaced were given houses although not on the same ratio. For some others who choose cash payment for their buildings, their demands were acceded to although not on the prevailing market rate.

The study established that, compensation for lost livelihood took the form of cash payments, replacement of house for house but certainly not land for land which is regarded as the most important source of livelihood for those who solely depend on it. It was also established that the exercise of options of paid compensation was not available to some individuals and communities. In Teberebe for example, the whole community was resettled with no option of cash payment for lost buildings and structures. Whereas the housing units provided for Teberebe and 'Mile 8' communities can be said to be adequate in terms of rate of occupancy, the same can not be said of New Atuabo, Kyekyewere, Damang and Akyempim communities. One form of compensation which was clearly missing was the option of land for land in the resettlement blueprint of the mining companies. The exclusion of this option of compensation in the view of this study is very unfortunate since the basis of livelihood for these communities is the land.

### **Category of Affected Persons:**

In the practice of compensation in some countries such as India, payment of compensation for lost of assets to development projects were made only to claimants with legal titles to those assets. Unlike India however, the study found out that the payment of compensation in Ghana and particularly the Tarkwa/Nsuaem Municipality and Huni-Valley District, compensation was paid for lost crops and structures of all affected persons with or without legal land titles. The problem of sorting out who is the legal claimant to any compensation where, there may be two or more contestants was done among the contestants themselves. Compensation was therefore paid to all affected persons namely; tenant farmers, customary users and squatters who had no formal legal titles to the land intended for expropriation. The payment of compensation without reference to legal land titles by the mining companies thus allowed the intrusion of speculators which inflated compensation budgets and minimised the full benefits of genuine claimants to compensations.

## **5.2 RECOMMENDATIONS FOR POLICY FORMULATION**

### **5.2.1 Institution of Policy Guidelines on Adequate Paid Compensation**

The supposed inadequacy of paid compensation has had several negative effects on persons affected by development induced displacements in Ghana and particularly communities endowed with mineral resources. The basis of the negative effects has been the lack of clear cut legal provisions and policy which could be binding on richer claimant to land titles such as mining concessions. The goals and objectives of the recommendation on providing clear-cut policy on compensation include:

- Involving the affected persons who are best placed to select the strategies which would often bring dramatic change into their lives in all levels of negotiations with respect to compensation package and payment.
- Stream-lining prices of crops and methodologies of valuation that would be acceptable in the face of changing inflation and consumer market prices
- Instituting provisions that would make affected persons better than the without project situation.
- Provision of resources and opportunities to re-establish the homes and livelihood of affected persons so as to prevent impoverishment.

Some strategies in achieving the above goals and objectives in the view of this study should include the following:

- (a) Providing options of compensation whereby affected persons have the power of choosing between cash for land and land for land. The legal provisions on compensation payment should support affected persons who may have a much better sense than an outsider of what will work for them in negotiations for the sustainability of their livelihood.
- (b) Government policy should be mindful that, social preparations are an important process of reducing tension and obtaining cooperation where development induced displacement is likely to cause individual and communal resistance.
- (c) Government policy on compensation should insist on the involvement of affected persons themselves in their choice of compensation. Participation should also include government apparatus such as the District Assemblies to monitor and evaluate decisions to ensure that projects do not erode the livelihood of peoples but to sustain them.
- (d) Provision of standard prices for agriculture crops as basis of negotiation by persons losing their crops. That is, the bodies charged with the valuation of crops should be empowered to exercise their mandate as enforcers of acceptable prices for lost crops and not as middle men who, intervene only when there is an impasse between affected persons and the richer claimants as to what is acceptable or not.

### **5.2.2 Expanding the mandate of the Land Valuation Board and MOFA**

The Land Valuation Board and the Ministry of Food and Agriculture (MOFA) should be given the sole prerogative of determining what constitutes a fair payable price for lost crops and structures. This should be binding on mining companies as well as any richer claimant. Government policy on compensation payment should encourage the Land Valuation Board and MOFA to take into consideration the payment for the following:

- i.) Common Property Resources (CPRs):

This could be made possible through the employment of the contingency valuation method.

ii.) Solotium:

Owners of properties should be entitled to the payment of some percentage of the consummate market value in consideration of the compulsory nature of the acquisition of their properties.

iii.) Damages: for the loss of earnings due to the acquisition

iv.) Valuation of Crops

The valuation of crops should be based on the gross market value where labour, Seed, fertilizers and the life span of a crop is taken into consideration.

### **5.2.3 Support of Host Communities**

The existing social and cultural institutions of resettled persons and their host communities should be supported to integrate economically and socially. The recognition of the necessity of social and cultural integration of both resettlers and host communities into resettlement plans of richer claimant would reduce some of the adverse impact of resettled persons on host communities. Government policy should make it binding on richer claimants to provide development projects that would benefit resttlers as a way of ensuring that resettlers are not impoverished. Such development projects should be extended to host communities so that their existing resources could adequately service both host and resettled communities.

### **5.2.4 Establishing a Regulatory Framework for Paid Compensation**

Resettlement of individuals and communities should be seen and implemented as part of a development project and, should be incorporated in the budget of developers. Government guidelines for adequate compensation for affected persons and communities should be based on the provision of sufficient resources and opportunities to affected persons to re-establish their homes and livelihood. Such provisions should make available:

- Alternative cultivable land where farmland and access to common property resources have been lost or reduced. The new alternative farmland productive potential should, at least be equivalent to those of the appropriated site.

Alternative cultivable land is very necessary than cash compensation in that, loss of land will invariable leave households worse off.

- Housing that would take into cognizance existing family sizes, and allied facilities such as kitchen, toilets facilities among others.
- Infrastructure such as roads, electricity, good drinking water, health care facilities among others. These would optimize the living standard of affected persons and reduce incidence of poverty and disease among resettlers.
- Alternative Livelihood programmes such as the Livelihood Enhancement and Empowerment Programme (LEEP) of Newmont Gold Ghana and Sustainable Empowerment and Economic Development (SEED) of Goldfields among others.
- Other viable livelihood options such as micro-finance assistance operated along cooperative models.

### **5.3 Conclusions**

This study established that the question of paid compensation although crucial in development induced displacements has not attracted the desired response from the Government of Ghana or any of its organs charged with the administration of compensation. The administration of compensation has been operated far from the participation of the very people it is intended to make well off before the project situation. Nonetheless, some compensation package since the promulgation of 1992 constitution of Ghana has turned the fortunes and standard of living of some individuals and communities around for the better. These packages has also granted resettled communities basic infrastructures which has enhanced their capacity to access basic necessities of life such as good drinking water, health care and education.

Secondly, it has been established that, paid compensation could be adequate through the participation of the affected persons themselves in determining what will ensure their livelihood and sustainability on one hand and government agencies such as the Lands Valuation Board and MOFA. These organs must be encouraged to institute valuation mechanisms that will guarantee the appropriate values of both tangible and intangibles assets of individuals and communities in matters of appropriation by richer claimants.

It must be noted that whereas there are no strong expropriation laws in Ghana, the expropriation laws of India and the Asian Development Bank for example have explicit models to facilitate the payment of compensation where necessary. These expropriation

models could be borrowed into the ones operational in Ghana to ensure fair and adequate paid compensation.

Beside being the only medium by which conflicts arising from involuntary displacement and resettlement could be resolved, the research showed that adequate paid compensation could enhance the opportunities of individuals and communities to improve their standard of living by increasing their degree of access to social infrastructures such as quality education, health care, water and sanitation among others and thereby reduce the incidence of disease and poverty in Ghana.



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## Appendix A- Economic Viability Analysis

Year	Total Cost (GH¢)	Total Benefit (GH¢)	Net Benefit (GH¢)	D.F @ interest of corresponding year	NPV
1990	138,947,211	153,515,000	14,567,789	0.026	378,762.514
1991	138,947,211	153,515,000	14,567,789	0.718	10,459,672.5
1992	138,947,211	153,515,000	14,567,789	0.751	10,940,409.54
1993	138,947,211	153,515,000	14,567,789	0.410	5,972,793.49
1994	138,947,211	153,515,000	14,567,789	0.328	4,778,234.792
1995	138,947,211	153,515,000	14,567,789	0.061	888,635.129
1996	138,947,211	153,515,000	14,567,789	0.078	1,136,287.542
1997	138,947,211	153,515,000	14,567,789	0.179	2,607,634.231
1998	138,947,211	153,515,000	14,567,789	0.208	3,030,100.112
1999	138,947,211	153,515,000	14,567,789	0.322	4,690,828.058
2000	138,947,211	153,515,000	14,567,789	0.086	1,252,829.854
2001	138,947,211	153,515,000	14,567,789	0.032	466,169.248
2002	138,947,211	153,515,000	14,567,789	0.163	2,374,549.607
2003	138,947,211	153,515,000	14,567,789	0.035	509,872.615
2004	138,947,211	153,515,000	14,567,789	0.159	2,316,278.451
2005	138,947,211	153,515,000	14,567,789	0.107	1,558,753.423
2006	138,947,211	153,515,000	14,567,789	0.169	2,461,956.341
2007	138,947,211	153,515,000	14,567,789	0.180	2,622,202.02
2008	138,947,211	153,515,000	14,567,789	0.001	14,567,789
<b>Total</b>					<b>960,760,252.3</b>

Source: Field Survey, 2008

## APPENDIX B-Ghana's Inflation Rate (Consumer Prices)

Year	Inflation rate (Consumer prices)	Percentage Change (%)
1990	37.259	47.71
1991	18.031	-51.61
1992	10.056	-44.23
1993	24.96	148.21
1994	24.87	-0.36
1995	59.462	139.09
1996	44.357	-25.40
1997	24.838	-44.00
1998	19.215	-22.64
1999	12.446	-35.23
2000	25.151	102.08

2001	32.906	30.83
2002	14.815	-54.98
2003	26.677	80.07
2004	12.629	-52.66
2005	15.113	19.67
2006	10.913	-27.79
2007	9.583	-12.19
2008	8.9	-7.13

Source: CIA World Fact book, 2008.

**APPENDIX C- QUESTIONNAIRE FOR DISPLACED HOUSEHOLD**

**Displaced individual / Households Questionnaire**

*“An Assessment of the adequacy of paid compensation and lost livelihoods in mining communities.”*

Thank you very much. My name is Louis Kwame Ocran. I am a Senior Administrative Assistant at University of Science and Technology – Tarkwa and an MSc. Development Policy and Planning Student of Kwame Nkrumah University of Science and Technology, Department of Planning in Kumasi.

I am undertaking a study to establish whether paid compensation for lost livelihoods in mining communities are adequate or not. The study if successful, could inform on the shortfalls or otherwise of paid compensation and recommend the way forward for both industry and affected person for development.

I would like to ask you some few questions related to the subject and would be grateful if you could answer them from your point of view. It is hoped that our mutual cooperation in the discussion would enable us a grater understanding of the issue under discussion.

You are assured that this is an academic exercise and every thing you say would kept in the academic domain.

Interviewer’s code.....

Date.....Time Started..... Time ended.....

Name of Respondent .....Name of area of resident.....

Name of Mining company operating in the area .....

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- |                      |         |           |
|----------------------|---------|-----------|
| 1. Age of Respondent | Below   | 18 -25    |
| 24 – 43              | 43 – 50 |           |
| 51 – 58              | 56 – 66 | and below |

Name of Respondent .....

House Number of Respondent .....Name of area of resident.....

Name of Mining company operating in the area .....

- |                       |         |           |
|-----------------------|---------|-----------|
| 1. Age of Respondents | Below   | 18 – 25   |
| 26 – 43               | 43 – 50 |           |
| 51 – 58               | 59 – 66 | and above |

2. Sex of respondent Male Female

3. Education level attained

No formal education	Primary
Secondary / vocational	Tertiary

4. Marital status:

Married	Single
Divorced	Widowed

5. How large is your family? 2  4  6  8  10

6. What is your occupation? Mine worker  Farmer  Public servant   
Others
7. How long have you lived here? Less than a year  1 – 5 years  over 10 years
8. Where were you living before here?  
Specify.....
9. What was the cause of your relocation here?.....
10. Did the Mining Company negotiate with you about your new disposition? Yes  No
11. If yes, did you voluntarily agree to relocate or you were coerced? Voluntarily  Coerced
12. Did the Mining Company offer you any compensation? Yes  No
13. What were some of the compensation package? Land only  Cash only   
Land and Cash only  optional
14. Is your new community part of the compensation package? Yes  No
15. Are you a Land lord or a tenant? Land Lord  Tenant  Free Occupier  care taker
16. How many units of rooms did you have in the former house as a Land lord? I  
2 – 3  More than 3
17. What was the classification of the house? Swiss  Mud  Brick
18. How many units of rooms make up your new house? 1-2  3-4  5 and above
19. What is the classification of your new house? Swiss  Mud  Brick
20. How did you come by this house? Built it.  As a compensation for my lost house
21. What categories of people were paid compensation by the company when they took over old habitat? Farmers and non- farmers with land the title  only   
Farmers and non framers with or without nd tithes only  Famers and non farmers with or wi ut land titles  speculative farmers and  farmers
22. How much did it cost you to build a unit of your former house? GH ¢100.00   
GH¢ 200 – 300 above  GH¢ 400

23. Paid compensation aside, have you enjoyed any form of assistance from the mining company?  Yes  No if yes,

specify .....

24. Did you make enough income to put some away as savings before your relation?

Yes No if yes,

Specify.....

25. If yes, do you still make enough income to put some aside as savings? Yes  No

No

26. If no, has your inability to save got something to do with having to pay for every thing like water, food, firewood, and excreta?  Yes  No

27. Did you cultivate any crops mentioned below? (Tick)

Cassava

Plantain

Palm Oil

Cocoa

Pineapple

Others (specify).....

28. How much did the mining companies pay as compensation for an acre of:

(a) Cassava Gh ¢ .....

(b) Plantain Gh ¢ .....

(c) palm Oil Gh ¢ .....

(d) Cocoa Gh ¢ .....

(e) Pineapple Gh ¢ .....

(f) Rice farm Gh ¢ .....

(g) One unit swish house Gh ¢ .....

(i) One unit brick house Gh ¢ .....

Other (specify) .....

29. Did the mining company negotiate the rates with you or you had no option?

Rates were negotiated  No option

30. How much were you earning from the sale your crop at each harvest?

Gh ¢ 15 – 35  Gh ¢ 35 – 55  Gh ¢ 55 – 75  Gh ¢ 75 – 95

Gh ¢ 95 – 115 above 115

31. How many times did you harvest each year ? Once  Twice  Thrice more than  Thrice
32. Did the mining company pay for your loss of any of the assets mentioned below as a  
a  
Result of your relocation?  
**Environmental:**  
Forest and forest products such as timber, fire wood, herbal medicines, wild fruits, water  
Bodies.
- Social:**  
Cultural or historic sites such spiritual grooves etc.  
Yes  No
34. If yes how much was paid for any of the assets mentioned?  
Specify the item and the amount paid for it .....
35. How much would you have paid for the loss of any of the items mentioned?  
You were the one to pay for it?  
Specify the item and amount .....
36. Were any of the amenities mentioned below available to you before and after your  
Re-location ? Yes  N

Fig 2. Table showing assets and cost of accessibility

Assets and cost of accessibility	Before Displacement			After Displacement		Cost
	Available	Not available	Cost	Available	Not available	
<b>Economic</b>						
Cultivable land and Food supply						
Sources of income offer of employment by mining companies						

<b>Social</b>						
School						
Health care						
Sanitation						
Electric Power						
Social cohesion						
<b>Environment</b>						
Forest and forest products (Fire wood, humbler, others						
Water bodies						
Sources of water						

If yes, how did you pay to access it before relocation?

Specify the item and the cost per unit .....

37. Do you feel cheated by the process of compensation and the modalities for valuation of

Assets ? Yes  No

If yes or no, why?

.....

.....

.....

.....

38. How will you assess adequate compensation?

.....

.....

.....

39. What package will constitute adequate compensation?

.....

.....

.....

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## **APPENDIX D – QUESTIONNAIRE FOR COMMUNITY RELATION OFFICERS OF MINING COMPANIES**

**Questionnaire for officials of Community Relations Officers of Mining Companies**

*‘ An Assessment of the adequacy of paid compensation and lost livelihoods in mining  
communities*



5. How many communities so far been resettled by your company as part of your compensation packages? 1 – 3  3 – 5  above 5
6. Are there standard compensation procedure for mining companies and property valuation on land in mining areas ? Yes  No
7. If yes, do the procedures take into consideration any of the following?
- |                         |     |                          |    |                          |
|-------------------------|-----|--------------------------|----|--------------------------|
| Percentage of Solatium, | Yes | <input type="checkbox"/> | No | <input type="checkbox"/> |
| Damages from the taking | Yes | <input type="checkbox"/> | No | <input type="checkbox"/> |
| Moving expenses         | Yes | <input type="checkbox"/> | No | <input type="checkbox"/> |
| Interest                | Yes | <input type="checkbox"/> | No | <input type="checkbox"/> |
| Market value            | Yes | <input type="checkbox"/> | No | <input type="checkbox"/> |
8. Has your company ever paid compensation based on replacement value?  
Yes  No
9. If yes, what were the types of lost assets that were replaced? House  Farm lands
10. Did you replace say, house with a house or with cash? House with a house   
House with cash
11. Did the cost of replacement reflect the market value of the asset(s) being taken over? Yes No
12. If no, was the replacement more than, below, or about the same cost of the asset(s)  
below the cost  about the same cost  more than the cost
13. What criteria do mining companies employ in arriving at the rate of compensation?  
Specify  
.....  
.....  
.....  
.....  
.....
14. Did you negotiate the rate of compensation with the ‘Affected Persons’ such that they had access to mechanisms for enforcing the entitlement for just compensation?  Yes  No
15. Did the Affected persons participate in the expropriation process? Yes  No

16. Did they have the ability to enforce their rights the their expected compensation?

Yes  No

17. Some compensation packages advocate interest on land to their former owners.

Did your company include such a package in your compensation?  Yes

No

18. Did your company award moving compensation for displaced persons?  Yes

No

19. Apart from valuation and compensation for market items, did your company award compensation for the lost of any of the non market items such as indicated in fig. 1

**Fig. 1. Shows non market assets**

Non Market Assets
<b>Environmental</b>
*Forest
*Water bodies
*Clean Air
*Game and Wildlife

Non Market Assets
<b>Social</b>
*Cultural sites
*Social networks

Yes  No

20. If no, is it because there is no law in Ghana that requires compensation for the loss for such items?  Yes  No

21. Will you appreciate the inclusion of a law that makes it mandatory for the payment of compensation for the loss of none market assets in the statute books of Ghana

22. In your candid opinion how much surrogate price would you have demanded as compensation for the loss, and how much would have paid for the preservation of any of the assets mentioned in fig. 2 ?

Pleas indicate the price per unit against the item on the table above

Fig. 2 Showing non market assets

Non Market Assets	Expected compensation for their loss Gh¢	Possible payment for their preservation Gh ¢
<b><i>Environmental</i></b>		
*Forest	.....	.....
*Water bodies	.....	.....
*Clean Air	.....	.....
*Game and Wildlife	.....	.....
<b><i>Social</i></b>		
*Cultural sites	.....	.....
*Social networks	.....	.....

23. How would you assess adequate compensation?

.....  
 .....  
 .....  
 .....

24. What package will constitute adequate compensation?

.....  
 .....  
 .....

25. With regards to the principles of compensation, can you say that your compensation packages has made people who have lost their assets and livelihoods to development induced project better off than they were ore? Yes

No

**APPENDIX E- QUESTIONNAIRE FOR OFFICIALS OF MINISTRY OF FOOD AND AGRICULTURE**

**Questionnaire for officials of Ministry of food and Agriculture**

*‘An Assessment of the adequacy of paid compensation and lost livelihoods in mining communities’*

Thank you very much. My name is Louis Kwame Ocran. I am a Senior Administrative Assistant at the University of Mines and Technology – Tarkwa and an MSc. Development Policy and Planning Student of Kwame Nkrumah University of Science and Technology, Department of Planning in Kumasi.

I am undertaking a study to establish whether paid compensation for lost livelihoods in mining communities are adequate or not. The study if successful, could inform on the shortfalls or otherwise of paid compensation and recommend the way forward for both industry and affected persons for development.

I would like to ask you some few questions related to the subject and would be grateful if you could answer them your point of view. It is hoped that our mutual cooperation in the discussion would enable us a grater understanding of the issue under discussion.

You are assured that this is an academic exercise and every thing you say would be kept in the academic domain.

Interviewer’s code .....

date : ..... Time Started : ..... Time Ended  
:.....

Name of Respondent  
:.....

Designation/Post  
:.....

Name of Employer  
:.....



13. Do you think that the ministry should be empowered to protect farmers in determining the appropriate rate of compensation that should be paid for the lost of their crops? Yes  No

14. If yes,  
Specify

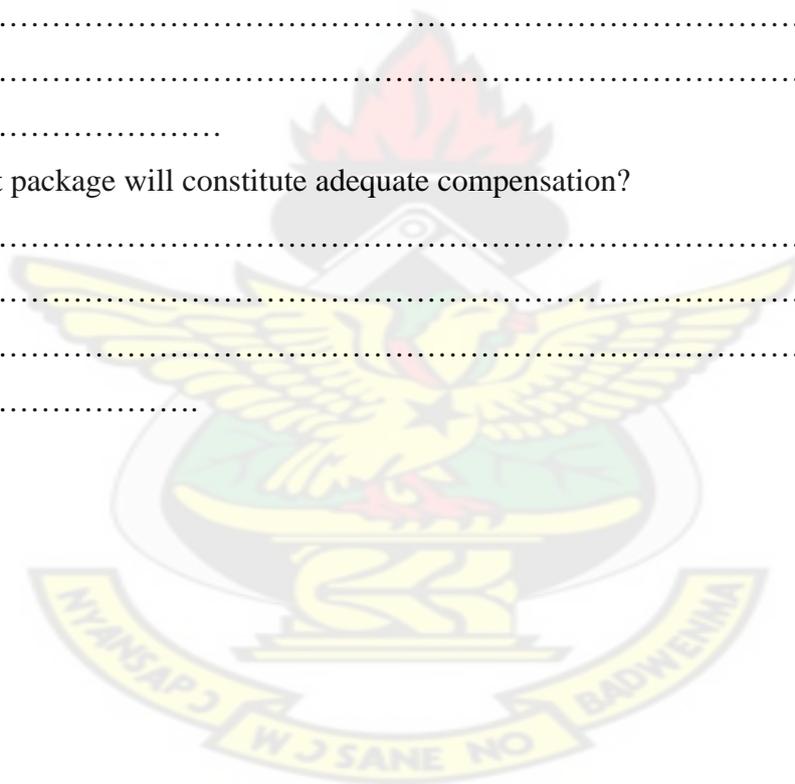
.....  
.....  
.....  
.....

15. How would you assess adequate compensation?

.....  
.....  
.....  
.....

16. What package will constitute adequate compensation?

.....  
.....  
.....  
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# KNUST

## APPENDIX F – QUESTIONNAIRE FOR LAND VALUATION OFFICERS

### Questionnaire for officials of Lands Valuation Board.

*“An Assessment of the adequacy of paid compensation and lost livelihoods in mining communities”*

Thank you very much. My name is Louis Kwame Ocran. I am a Senior Administrative Assistant at the University of Mines and Technology – Tarkwa and an MSc. Development Policy and Planning Student of Kwame Nkrumah University of Science and Technology, Department of Planning in Kumasi.

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Interviewer’s code .....





17. Is it within the powers of the Lands Valuation Board to encourage the payment of compensation for the lost of non markets assets as mention below as mentioned in Fig. 1 ?      Yes       No

18. If yes has there ever been such payment before?      Yes       No

19. If you were to demand compensation for the loss of some of the non – market assists such as mentioned in Fig. 1 and pay for their preservation how much surrogate price would have demanded or paid?

Please complete the table in fig. 3

20. If you were to pay for some of the non market assets that have mentioned above so that they could be preserved for posterity, how much surrogate price would you have paid for a unit of any of them? Gh ¢.....

21. How would you assess adequate compensation?  
.....  
.....  
.....  
.....

22. What package will constitute adequate compensation  
.....  
.....  
.....

23. With reference to your valuation methods can you conclude that your compensation packages has made people who have lost their assets and livelihoods to development induced project better off than they were before?       Yes   
No

24. In your candid opinion has there been a method that could ensure a fair and adequate compensation for displace people other than the existing one?      Yes   
No

25. If yes,  
Specify .....

**APPENDIX G- QUESTIONNAIRE FOR CHIEFS AND ASSEMBLY MEMBERS**

**Questionnaire for Chiefs/Assembly members / opinion leaders**

*‘An Assessment of the adequacy of paid compensation and lost livelihoods in mining communities’*

Thank you very much. My name is Louis Kwame Ocran. I am a Senior Administrative Assistant at the University of Mines and Technology – Tarkwa and an MSc. Development Policy and Planning Student of Kwame Nkrumah University of Science and Technology, Department of Planning in Kumasi.

I am undertaking a study to establish whether paid compensation for lost livelihoods in mining communities are adequate or not. The study if successful, could inform on the shortfalls or otherwise of paid compensation and recommend the way forward for both industry and affected persons for development.

I would like to ask you some few questions related to the subject and would be grateful if you could answer them your point of view. It is hoped that our mutual cooperation in the discussion would enable us a greater understanding of the issue under discussion.

You are assured that this is an academic exercise and everything you say would be kept in the academic domain.

Name: .....

Age: .....

Status: .....

Name of Village/ Settlement: .....

Educational background: Primary  Secondary  Tertiary  No formal education

Occupation: .....

Name of Employer: .....

Designation / Post: .....

1. How many individual / families do you estimate to be living here?  
400 – 600  600 – 800  800 – 1000  above 1000
2. How long have you lived here? 5 – 10 years  10 – 15 years   
above 15 years
3. Have you been living here as an indigenous community or resettled community?  
Indigenous community  Resettled community
4. If it is a resettled community, was there any consultation between your community and official of the company about issues regarding your removal form your former homes and farmlands? Yes  No

5. Was there any agreement on the terms of compensation for your removal / lost of properties and welfare?      Yes       No
6. Did you think about possible problems that you could be facing as individuals and as a community at your new settlement?      Yes       No
7. If \_\_\_\_\_, yes, \_\_\_\_\_ Specify  
.....  
.....
8. Did the company offer to find solution to your anticipated problems should they arise? Yes       No
9. What has been some of the cost of your displacement and relocation?  
Specify  
.....  
.....
10. What do you think has been some of the benefits of your displacement and relocation?  
Specify  
.....  
.....
11. Are you in agreement with the methods with which your properties were valued?  
Yes       No
12. Were you as individuals and group allowed to bargain how much you were going to accept as a unit price for lost properties? Yes       No
13. Are you aware of non – citizens of your community, who sneaked in to acquire properties for the purpose of being paid compensations? Yes       No
14. If yes, don't you think the behavior of these speculators frustrated the valuation the mining company and valuation officers such that they could not offer you good compensations?      Yes       No
15. Do you have a new burial site for your dead? Yes       No
16. If no, were you as community compensated for losing your burial site? Yes       No
17. Can you suggest any intervention from the government to make compensation more meaningful?      Yes       No
18. If \_\_\_\_\_, yes, \_\_\_\_\_ specify  
.....  
.....