

# **RESETTLEMENT ACTION PLAN**

## **TEBEREBIE SOUTH EAST WASTE ROCK DUMP**

**GHANAIAN AUSTRALIAN GOLDFIELDS LIMITED**  
**Iduapriem - Teberebie Operations, Tarkwa, Ghana**

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## EXECUTIVE SUMMARY

### Background

Resettlement, including physical and economic displacement, has been a feature of mining in the Wassa West District for many years. The on-going process of open pit mining in particular has resulted in displacement of local farmers in various local mining concessions. Ghanaian Australian Goldfields Limited (GAG) and other mining houses operating in the Tarkwa environs have historically followed Ghanaian legislation concerning compensation payments to affected households/farmers. Although this has been in keeping with the laws of Ghana and with other developments occurring throughout the country, the large-scale alienation of farmland amongst predominantly rural farming communities has led to discontent and social agitation.

The creation of the Teberebie waste rock dump at GAG's Iduapriem-Teberebie gold mining operations will displace a significant number of cultivated fields belonging to local households and a Christian NGO, and will also necessitate the physical relocation of one household. The mine is situated near the town of Tarkwa in the south west of Ghana, within the Wassa West District. International research has shown that the impacts of this type should be mitigated through the establishment of a time-bound and costed resettlement plan, in order to prevent socio-economic dislocation and associated impoverishment. In the light of recent concerns highlighted by households affected by the alienation of land within the footprint of the Teberebie waste rock dump, GAG and the IFC agreed to undertake a formal resettlement planning exercise according to international best practice. This Resettlement Action Plan (RAP) contains a set of principles and measures designed to ensure that the negative socio-economic impacts experienced by affected households are minimised.

Resettlement planning has been undertaken by an expatriate resettlement specialist, with support from an experienced sociologist from the University of Ghana, a senior representative of one of the main NGOs operating in the Tarkwa area (CARE), and the Senior Community Relations Officer at GAG's operations. In addition, a local interpreter and eight local enumerators were included in the team. Planning was initiated in February 2003, by means of a review of existing documentation followed by the undertaking of a socio-economic baseline survey of affected households. This survey was supplemented by the use of participatory rural appraisal techniques. Resettlement planning was a consultative process, involving a series of formal and informal meetings and semi-structured interviews with local community leaders and members, GAG staff, local NGO representatives and district authorities. A draft Resettlement Action Plan (RAP) was compiled and a second field visit held during April 2003, in order to disclose and discuss the key findings of the RAP, obtain the views of affected parties and update socio-economic data. Implementation of certain key measures outlined in the RAP was also initiated during this period. Follow-up enumeration surveys and an independent crop valuation were conducted during the period June-August 2003, following which this document was updated and finalised.

### Legal and administrative context

The legal and administrative context within which resettlement planning has been conducted is both complex and disputed, especially in light of the fact that land is involved. The prevailing state of legal pluralism in Ghana – i.e. the fact that common and statute law coexist with a variety of alternative systems of customary law – combined with the existence of a variety of institutions and procedures for regulating land disputes, has led to numerous and protracted land disputes in most parts of the country, often involving litigation. Indeterminate boundaries of stool, skin and family land resulting from a lack of reliable property maps has led to protracted litigation and the freezing of land for development. In addition to land tenure related issues, a number of specific laws exist which pertain to the rights of households affected by the operation of mining companies. For example, although households have a right to compensation for affected crops under mining law, no compensation is stipulated for the loss of the basis of production, i.e. arable land. Whilst national laws have been respected, every attempt has been made to ensure that this resettlement plan complies with relevant World Bank Group resettlement guidelines: in some instances, this has involved the promotion of mitigation measures which extend beyond national legal requirements in order to safeguard the rights of affected parties.

### Magnitude of displacement

The magnitude of displacement associated with the Teberebie waste rock dump is summarised in Table S1:

Table S1: Summary of displacement associated with the creation of Teberebie south east waste rock dump

Displaced item	Number or area	Description / comment
<b>Housing and other structures</b>		
Hamlet (farm homestead)	1	<ul style="list-style-type: none"> <li>- 3 original single room housing structures constructed of wood &amp; mud with iron roofing, both currently inhabited.</li> <li>- 3-4 new extended (multi-room) housing structures of wood &amp; mud construction, which were still being built during February 2003, representing a total of more than 20 rooms, none of which were inhabited at the time. These new structures appeared to be being constructed in speculative fashion by the household head's brother, who lived in Tarkwa.</li> </ul>
Mission farm belonging to Kristo Asafo (church group with a presence in Teberebie)	1	<ul style="list-style-type: none"> <li>- 3 original single room housing structures constructed of wood &amp; mud with iron roofing, neither of which appears to have been inhabited.</li> <li>- ~ 40 new housing and communal living structures of similar construction, mostly built (apparently in speculative fashion) between May 2002 - February 2003, none of which were inhabited during Feb - April 2003</li> </ul>
<b>Farmland</b>		
Affected households	173	- Many affected households have multiple fields within the affected area
Affected fields	248	<ul style="list-style-type: none"> <li>- 248 fields with a total area of 84.1 ha</li> <li>- Average field size = 0.35 ha, ranging between 0.1 and 4.7 ha</li> </ul>
<b>Public infrastructure</b>		
Public footpath	1	

Source: GAG enumeration surveys and field observations

**Potential impacts of displacement associated with the creation of Teberebie waste rock dump**

The majority of affected households reside in Teberebie Village. In addition, some households have been identified as being resident in nearby settlements such as Tarkwa, Bankyim, Dompim and Efuanta. Teberebie Village was previously relocated – in 1991/2 – by Teberebie Goldfields Limited (TGL). Although this process was disputed, many members of the affected households gained employment with TGL, lessening the associated impact on peoples' livelihoods. However, when TGL sold off its operations to Ashanti in 2000, most of these household members lost their jobs. As no specific measures had been taken by TGL to ensure that replacement land was provided for villagers near the new village site, many residents had begun to utilise the land currently affected by the Teberebie waste rock dump for cultivation purposes. Today this land comprises a significant proportion of the total land holdings of many Teberebie residents.

Some 80 % of the affected working-age population reported that subsistence farming was their principal source of livelihood; less than 10 % had been educated beyond primary school level. With an average household income of ~ US\$ 52 / month, household food security for most affected households is directly linked to agricultural production. The main crops cultivated within the affected area include cassava, plantain, pineapple, oil palm, yam, cocoyam, fruits, vegetables and maize. Most of the crops grown in the area may be classified as seasonal crops, i.e. those which are seasonally planted, harvested and then re-planted the following season. By contrast, cocoa and oil palm are perennial crops, which, once established, tend to produce for many years.

Alienation of the affected land is thus likely to have a profound impact on the livelihoods and food security of affected households, unless appropriate measures are put in place to replace this land and restore agricultural production. The impacts of physical and economic displacement can be predicted to impact severely upon vulnerable households, in particular, in the absence of appropriate mitigation and monitoring measures. In order to ensure that such persons are catered for in resettlement planning and monitoring, vulnerable persons were identified during the resettlement planning process and a list of their names is included in this report.

**Mitigation measures designed to counter the impacts of displacement**

A range of mitigation measures has been designed in order to counter the negative impacts associated with the creation of Teberebie waste rock dump. A summary of these mitigation measures is provided in Table S2. Key steps include: the replacement of affected cropland (i.e. land-for-land compensation); provision of access to the alternative cropland (already identified by affected parties); compensation for affected crops at full replacement value, based on a study specifically commissioned for this purpose; the revision of GAG's compensation procedures to ensure greater transparency; provision of resources to build the capacity of affected decision-making structures; the creation of a Resettlement Steering Committee to oversee implementation of the RAP; and acceptance of a process of regular independent monitoring and evaluation during the implementation process.

Table S2: Entitlement framework for Project Affected Parties (PAPs) affected by the creation of Teberebie waste rock dump

Loss of cultivated land and improvements to land	Loss of seasonal crops (e.g. cassava)	Loss of long-term cash crops (e.g. cocoa)	Loss of structures (physically displaced household)	Disturbance (physically displaced household)	Other measures
Land for land replacement. Adequate replacement land of a suitable quality has been identified by the affected parties.	Cash compensation at (revised) replacement rates	Cash compensation at (revised) replacement rates (incl. establishment costs)  OR  Cash compensation at a lower rate (excluding establishment costs) + bush clearing + inputs + seedlings	Option of EITHER compensation at replacement cost  OR  Replacement with structures of similar or better quality at Teberebie / in the vicinity	Lump sum cash payment (dislocation allowance) to cover transport and other 'hidden' costs of relocation	<ul style="list-style-type: none"> <li>- Establishment of a Resettlement Committee to promote equity in the implementation of RAP measures (est. in April 2003).</li> <li>- Est. of a formal GAG compensation procedure to improve community relations (completed)</li> <li>- CARE and GAG Community Relations Officer to develop the capacity of the Teberebie Community Consultative Forum, such that it can assist in implementation</li> <li>- Construction of a new road from Teberebie Village to replacement croplands identified</li> <li>- Establishment of a grievance procedure to allow for structured grievance redress</li> <li>- Provision of agricultural extension advice</li> <li>- External monitoring to ensure RAP compliance</li> <li>- Replacement of affected footpath</li> </ul>

An implementation schedule and budget for these actions are included in Chapter 9, as are a list of monitoring and evaluation parameters. The total budget allocated by GAG (excluding monitoring costs) for this purpose is 1.475 million cedis (US\$ 173 500). Implementation of the RAP has already been initiated, although certain key steps will only be taken upon receipt of this final RAP document.

### **The way forward**

Disclosure of this RAP report constitutes the final phase of resettlement planning. Copies are being supplied to representatives of the affected groups, via the Resettlement Steering Committee, and/or on request from other interested parties. The RAP will also be posted on IFC's web site, the Info Shop, for external review and comment (<http://www.ifc.org>). The consultation process begun during resettlement planning will be continued by GAG during implementation of the RAP via the Resettlement Committee, the Teberebie Community Consultative Forum, and the involvement of the Senior Community Relations Officer (CRO). The CRO will meet regularly with representatives of the affected households. Consultation with the affected households and their representatives will also form an important component of resettlement monitoring, which will be conducted by an appropriately qualified specialist appointed by GAG, in consultation with the IFC. Monitoring reports will be made available to interested and affected parties.

GAG will ensure that the principles contained in this RAP guide any future compensation and resettlement necessitated by its ongoing operations. GAG will notify the IFC well in advance of any need for further compensation or resettlement, in order to complete the resettlement planning process and consult with affected people in a timely and ordered fashion.

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## LIST OF ACRONYMS

AGC	Ashanti Goldfields Company
AIDS	Acquired Immune Deficiency Syndrome
CBO	Community Based Organisation
CIL	Carbon-In-Leach
CIP	Carbon-in-Pulp
DCE	District Chief Executive
EIA	Environmental Impact Assessment
GAG	Ghanaian Australian Goldfields Limited
GAGL	As above (GAG is the term used locally, for historical reasons)
GDP	Gross Domestic Product
GFG	Gold Fields Ghana
GMT	Greenwich Mean Time
IFC	International Finance Corporation
KVIP	Kumasi Ventilated Improved Pit-latrine
MLA	Mining Lease Area
NGO	Non Governmental Organisation
PAP	Project Affected Person
PCI	Project Concern International
PRA	Participatory Rural Appraisal
RAP	Resettlement Action Plan
Km <sup>2</sup>	square kilometres
SGMC	State Gold Mining Company (now defunct)
SIA	Social Impact Assessment
TGL	Teberebie Goldfields Limited (now defunct)
WACAM	Wassa Association of Communities Affected by Mining

## GLOSSARY

Compensation	Payment in cash or in kind for an asset or resource acquired or affected by a project.
Economic displacement	Loss of income streams or means of livelihood, resulting from land acquisition or obstructed access to resources (land, water, or forest) due to the construction or operation of a project or its associated facilities.
Eminent domain	The legally established power of a Government or its proxy allowing for the compulsory acquisition of land for the 'public good', usually subject to some form of compensation procedure.
Galamsey	Small-scale mining activity undertaken in Ghana. Galamsey was made illegal during the 1990s. Following widespread protests and confrontations between Galamsey operators and authorities / mining houses, this activity is now nominally regulated through the issuing of a limited number of small-scale mining licenses by the Minerals Commission.
Involuntary resettlement	The economic and/or physical displacement of people where they either don't have the power to refuse this displacement, or where it occurs without their consent.
Project affected person	Any person who, as a result of the implementation of a project, loses the right to own, use or otherwise benefit from a built structure, land, annual or perennial crops and trees, or any other fixed or moveable asset, either in full or in part, permanently or temporarily.
Physical displacement	Loss of shelter and assets resulting from the acquisition of land associated with the project that requires the affected person(s) to move to another location.
Replacement cost	<p>The market value of the assets plus transaction costs. With regard to land and structures, the World Bank guidelines defines replacement costs as follows:</p> <ul style="list-style-type: none"> <li>- Agricultural land: the market value of land of equal productive use or potential located in the vicinity of the affected area, plus the cost of preparation to levels similar or better than those of the affected land, plus the cost of any registration and transfer taxes.</li> <li>- Household structures: the cost of purchasing or building a new structure, with an area and quality similar to or better than those of the affected structure, or of repairing a partially affected structure, including labour and contractors' fees and any registration and transfer taxes</li> </ul> <p>In determining the replacement cost, depreciation of the asset and the value of salvage materials are not taken into account, nor is the value of benefits to be derived from the project deducted from the valuation of the affected asset.</p>

## 1 INTRODUCTION TO THE STUDY AREA

### 1.1 Location

Ghana is one of five West African nations bordering on the Gulf of Guinea, extending from 5 - 11° north of the equator and falling into the GMT time zone (refer to **Figure 1**). In addition to a 555 km long Atlantic coastline in the south, the country shares borders with Togo (east), Burkina Faso (north) and Ivory Coast (west). Ghana has ten administrative regions, each divided into administrative districts, which are in turn sub-divided into area and urban councils. The Iduapriem-Teberebie Gold Mining operation is situated in the south west of Ghana, falling into the administrative area of Wassa West District, one of eleven districts constituting the Western Region. Wassa West District is further sub-divided into eleven area councils and two urban councils (refer to **Figure 2**), one of which is Tarkwa, into which the Iduapriem-Teberebie operations fall. The operation is situated 10 km (17 km by road) south west of the District capital, Tarkwa, 85 km north west of the coastal city of Takoradi, 330 km west of the national capital, Accra, and less than 100 km east of the international border with Ivory Coast.

### 1.2 Climate

Situated 5° north of the equator, the study area falls into Ghana's south western equatorial zone. As such, it has a tropical climate with a wet season spanning March to October and a dry season lasting from November to February. The area experiences the heaviest and most frequent rains in the country, with a mean annual rainfall of 1500 - 1900mm. Rainfall follows a bimodal regime, falling mainly in April to June and from August to October. The district experiences relatively uniform mean monthly temperatures of 26 – 30 ° C throughout the year, which, combined with high rainfall, results in high relative humidity (70 – 90 %) all year round. This combination of high temperature and high rainfall creates certain negative conditions, e.g. stagnant water bodies, high rates of erosion of unpaved roads and the leaching of soil nutrients. However these same conditions also permit the widespread cultivation of a variety of food and cash crops in the area.

### 1.3 Geology & topography

Ghana is situated within the Guinea Precambrian Shield of West Africa, the main units of which are the folded Birman, Tarkwaian and Dahomeyan systems. The operations at Iduapriem-Teberebie are associated with conglomerates and other sedimentary units forming part of the Tarkwaian System which, along with the Birman System, hosts most of Wassa West District's abundant gold, manganese and bauxite deposits. The operations are being undertaken in the south western margin of the Tarkwa syncline, the quartzite units of which form a series of prominent ridges, five of which occur in the Iduapriem mining concession and two of which occur in the Teberebie concession. These forested ridges impart an undulating topography to the study area, although this

has been gradually modified by opencast mining operations which have replaced mineralised ridges with a combination of mined out depressions and elevated waste rock dumps. The district is drained by the Ankobra, Bonsa and Huni rivers and their tributaries, which follow a dendritic pattern. The mining concessions in question are drained by two perennial streams, namely the Bediabewu and Agonabeng.

#### **1.4 Soils, land capability, flora & fauna**

Soil profiles in the area are generally deep, open and acidic, as a result of intensive leaching due to the local combination of high temperatures and high rainfall. The soils are mainly forest oxysols developed over a range of highly weathered parent materials in the form of various sedimentary units of the Birman and Tarkwaian Systems. Although the acidic nature of many local soils reduces their potential fertility, the oxysol soil profiles are generally capable of supporting the cultivation of major carbohydrate and oil crops such as cassava, maize, plantain, rubber, oil palm and coconut trees. The undulating topography in the district lowers the potential of arable land for mechanised farming, although valley bottoms are regarded as being suitable for plantation agriculture.

The original vegetation cover in the area comprised wet or moist evergreen tropical forest. However, with the exception of part of the Neung Forest Reserve situated to the south of the concession and certain ridge tops where mining has not yet reached, very little undisturbed forest remains in the study area. A combination of activities including, among others, timber extraction, small- and large-scale mining operations, slash-and-burn agriculture, human settlement and the cutting of trees for fuel wood, charcoal and pole production have instead created a patchwork of secondary forest, tall shrubs, ferns and weeds. Human activities appear to have long-since eradicated any large mammal species in the area, and no rare and endangered species of fauna have been identified in the area to date. The area affected by the Teberebie waste rock dump comprises secondary forest interspersed with cleared areas created by local farmers (refer to **Plates 1-3**).

#### **1.5 Demography**

Based on the results of a census conducted in 2000, Ghana currently supports a total population of just under twenty million people, roughly ten percent of which reside in the Western Region. Life expectancy at birth in Ghana is currently 58.5 years for females and 55.7 years for males, according to the UNDP's latest Human Development Indices, and the total fertility rate is 3.7. The adult literacy rate in Ghana is 71.5 %; overall, Ghana was ranked 129<sup>th</sup> out of a possible 173 countries in 2002 on the basis of its human development indices.

**Figure 1:** Location map

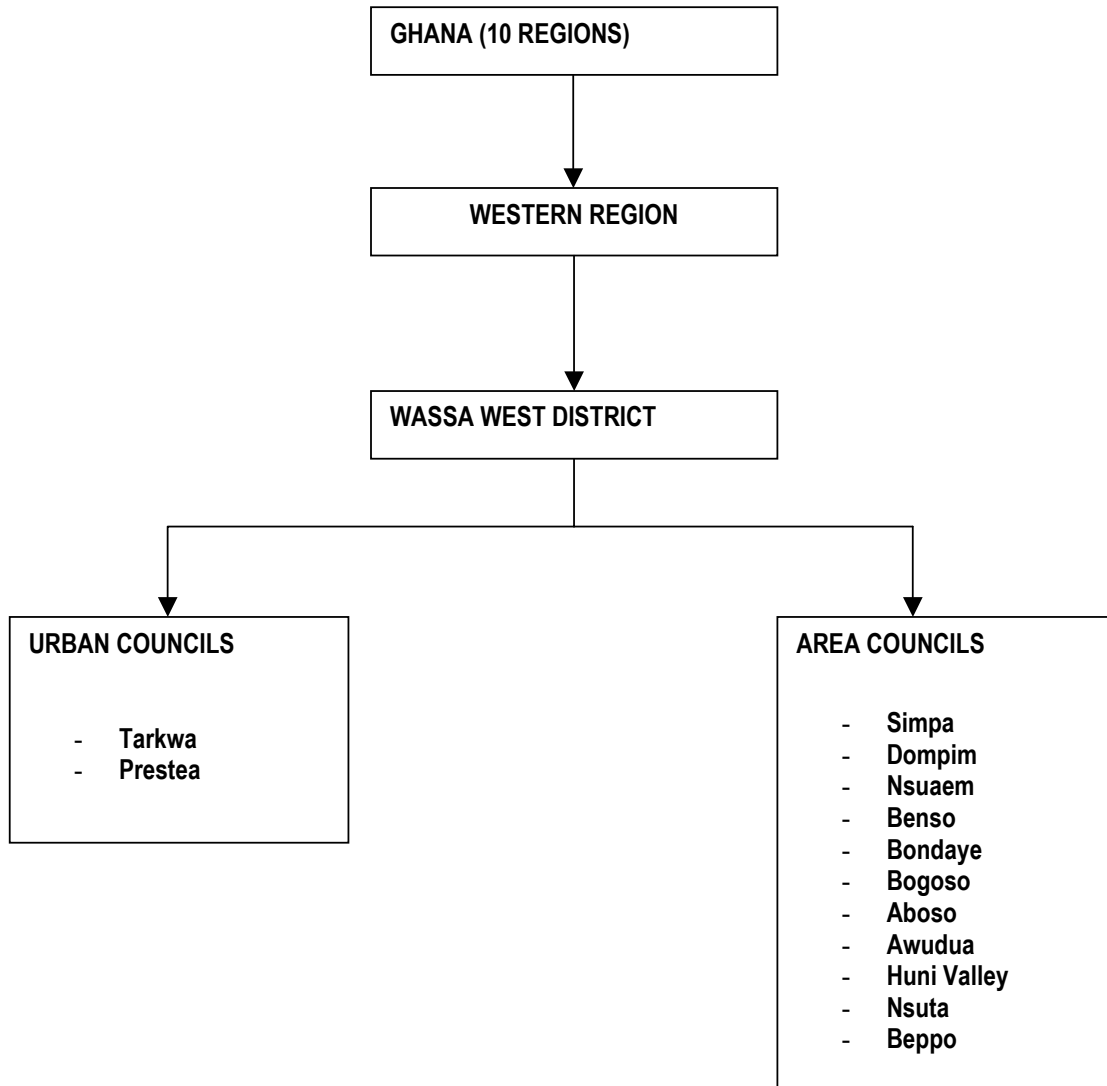


Figure 2: Administrative units of the study area

The Wassa West District had an estimated population of 243 000 in 2002, which is expected to rise to roughly 254 000 in 2004 (District Assembly, December 2002). The district has a growth rate of just under 3 % per annum, which is higher than the national growth rate of 2.5 %. The age structure of the district is unusual in that only a quarter of the population falls into the category 0-14 years, as opposed to national and regional figures of 45 %. As a result, the District labour force is comparatively high and that the dependency ratio is relatively low. These figures suggest that a substantial in-migration of job-seekers into Wassa West District has occurred.

Christianity is the dominant religion in Wassa West, accounting for 92 % of the district's population. This is followed by Islam (6.6 %) and traditional belief systems (1.4 %), although the latter often exist simultaneously with the world religions. The dominant ethnic group in the district is the indigenous Wassa people. However, the influx of people from other regions of Ghana seeking employment on the mines or in small-scale mining (Galamsey<sup>1</sup>) has meant that only 43 % of the district's population belong to this group today. The remainder consist of a mixture of Akan, Dagomba, Fanti, Ewe, Ga, Kokomba, Brong, Ashanti, Ahanta, Akwapim, Nzema, Wangara and others. English is the official language in Ghana. The main African language groupings prevalent in the country include Akan, Moshi-Dagomba, Ewe and Ga.

## **1.6 Economy**

Ghana's principal exports and foreign exchange earning commodities are gold, cocoa and lumber, although the domestic economy continues to revolve around subsistence agriculture. This accounts for 36 % of GDP and employs 60 % of the workforce, mainly on smallholdings. Although well-endowed with natural resources, Ghana is still heavily dependent upon international financial assistance. The economy was recently weakened prior to the 2000 elections by a spate of expansionary monetary and fiscal policy, which resulted in rising inflation into 2001. In the face of a depressed cocoa market and weak growth in non-traditional exports during the year, Ghana opted to join the Heavily Indebted Poor Country (HIPC) debt relief programme in 2002.

The Western Region has been identified as having significant economic potential and forms the core of the country's export-led growth strategy, accounting for roughly half of the country's foreign exchange earnings through the export of gold, cocoa, timber, rubber, manganese and bauxite. Mining activities are especially highly concentrated in this region, which produces much of Ghana's gold, currently making it the second largest gold producer in Africa after South Africa. Minerals exploited in the Wassa West District include Gold at Tarkwa,

Prestea, Iduapriem/Teberebie, Bogoso, and Aboso amongst others, manganese at Nsuta, kaolin at Nsuaem, silica at Kuran and diamonds at Huni Valley, Agona and Dompim. As a result, the economy of the district has been dominated by mining activities for more than a century, and it currently produces an estimated 35 % of Ghana's gold output and all of the country's manganese output. The Tarkwa Urban Council (an administrative sub-division within the District) reportedly has the highest concentration of mines in a single district on the African continent, with virtually all of these being surface mines (i.e. strip, or opencast mines). Several of the multinational mining houses operating in the area also have concessions in nearby West African states where similar geological units are mined.

Whilst mining activities, together with agriculture and forestry, represent major economic growth activities in the district, it remains one of the least developed in the country, with social and economic infrastructure widely regarded as being inadequate for meaningful development. The district has poor roads and communications, a majority of people who have no electricity supply, low technology employed in agricultural production (much of which is subsistence farming), low income levels and a built environment which is in poor condition. The most recent estimate produced by the District Assembly (December 2002) indicates that approximately 48 % of the district's population is employed in agricultural activities, whilst 23 % are involved in commerce, 16.5 % in services (mostly catering to commercial mining activities) and 12.5 % in some form of mining activity. Major crops grown in the district include cassava, maize, oil palm, plantain, rice, yam and coco yam, with most farming being on a small scale designed to meet local needs. Although unemployment statistics are unavailable in the District, it seems clear that formal unemployment levels are high, especially since the downsizing of numerous gold exploration companies and some mining operations in the area (e.g. Teberebie Goldfields). According to the SGS (2000) socio-economic assessment, it is commonplace amongst those who are nominally unemployed to take up activities such as subsistence farming, tree felling for charcoal, distillation of local gin, hunting and/or Galamsey.

### 1.7 Land use and settlement

No accurate land use figures have been identified for Wassa West District as a whole, although it is known that six forest reserves with a total area of 455 km<sup>2</sup> comprise 19.3 % of the total land area of 2354 km<sup>2</sup>, and that commercial mining concessions cover approximately 766 km<sup>2</sup>, or just under 33 % of available land within the district. As the Chamber of Mines has recently pointed out, however, roughly 230 km<sup>2</sup> (i.e. one third) of mining concession land are actually being utilised by mining houses, with much of the remaining land remaining available to local users for farming purposes. **Figure 3** illustrates the mining concessions in the vicinity of the

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<sup>1</sup> Galamsey has until recently been deemed an 'illegal' activity in Ghana. However, given its widespread occurrence and severe environmental impacts, the District Assembly and Minerals Commission has begun to issue small-scale mining licenses to syndicates of local people for the purpose of regulating and controlling such activities.

Iduapriem-Teberebie operations. In addition, there are a large number of registered and unregistered small scale mining concessions in the district. Agriculture is the predominant economic activity in the district amongst local people, employing roughly 43 % of the total labour force, although production is generally subsistence based with less than 10 % of households involved in commercial / plantation farming. Many farmers use slash-and-burn (shifting) cultivation, leaving fallow areas when sufficient land is available. Land use within the Iduapriem and Teberebie concession areas is a mix of active mining land, land set aside for future mining activities and land utilised by local people for subsistence agriculture. Of this, roughly a third (1800 ha) has either been used or earmarked for mining, whilst the remainder (4200 ha) remains for agricultural use and/or forest reserve. Galamsey operations are evident throughout the Tarkwa area, including within the main town limits and within the Iduapriem-Teberebie MLAs. The settlement pattern of Wassa West District remains predominantly rural, with only eight of a total of 476 settlements being urban in character, thus just over two percent of the district's settlements currently host 36 % of its population. The rural settlements are generally dispersed and have relatively low populations. Settlements within the combined Iduapriem-Teberebie Mine Lease Areas are presented below in **Table 1** and illustrated in **Figure 4**.

**Table 1:** Current settlements located within the combined Iduapriem-Teberebie Mine Lease Area

<b>Name</b>	<b>Brief description</b>	<b>Pop. Est.</b>
Acheampongkrom & Nkwantakrom	Acheampongkrom is a large homestead situated south of Pit 5. Several homesteads are located nearby, at the site of the evicted settlement of Nkwantakrom.	~ 60
Adieyie, including New Iduapriem (also referred to as 'Mile 8')	Largest settlement (township) within the Iduapriem Mine Lease Area (MLA). New Iduapriem, formerly located in the heart of the MLA forms was added in 1992. There are roughly 127 houses in this township, many of modern construction (constructed by the mine for relocated households). The community has access to 24 hour electricity supply provided by GAG, KVIPs, a market, schooling facilities, well and two boreholes. The inhabitants are mostly subsistence farmers, although there are several stores, two hair salons and several drinking spots. There is also a health centre provided by GAG, operated by a nurse/midwife.	~1530
Adisakrom	A small agricultural settlement located just north of Mile 7.	Not est.
Mile 7	Poor farming settlement founded in the mid-1970s. Consists of 77 houses, mostly of poor construction type and condition, as well as several churches. No KVIP, health facility, market or school.	~700
Techiman	A small agricultural settlement situated south of the mining area and unaffected by operations.	Not est.
Teberebie (New)	Resettlement township constructed by Teberebie Goldfields Limited (TGL) in 1990/91. A relatively modern settlement with good quality housing structures, six churches, sanitation (KVIPs) and clean drinking water. There is no health centre and inhabitants rely instead on facilities in Tarkwa for medical attention. Teberebie has a Primary School, a Junior Secondary School (JSS) and a nursery school, as well as a community centre.	~1140
Wangarakrom & Badukrom	Poor farming settlements founded in the early 1900s and situated just <i>outside</i> of the Teberebie MLA. Houses are poorly constructed and in dilapidated condition, mostly wattle and daub with earth floors and thatched or bamboo roofing. Has no electricity supply or modern amenities, and people rely on pit latrines and (more recently) a 4-seater Enviro-loo dry toilet facility provided by GAG. There is a dilapidated nursery school catering for 70 children.	~2500

**Figure 3:** Mine lease, prospecting and reconnaissance areas in the vicinity of Iduapriem-Teberbie operations

**Figure 4:** Locations of settlements within the Iduapriem and Teberobie concessions

## **2 MINING & RESETTLEMENT IN THE IDUAPRIEM AND TEBEREBIE MLAS**

### **2.1 Brief background of gold mining in the Tarkwa area**

Gold mining has occurred in Ghana for centuries. European involvement in the Tarkwa area began in 1878, when a mining concession was for the first time granted to a (French) foreigner. Since European occupation the country has experienced three gold booms: the first lasting from 1890 to 1914 and the second - involving a recapitalisation of mines developed during the first boom - from 1925 to *circa* 1938. Both booms were halted by the outbreak of successive World Wars. After being granted independence in 1957, Ghana nationalised its gold mining industry. A State Gold Mining Company (SGMC) was established in 1961 in order to acquire the Bibiani, Tarkwa, Prestea, Konongo and Dunkwa mines from British companies, and the industry remained under state control until 1986. Deregulation and privatisation of Ghana's mining sector occurred in 1986, starting the third gold mining boom. This was linked to macro-economic policy reforms, a revolution in exploration and processing methods available to the global gold mining industry, and a fiscal regime in which considerable incentives were offered to foreign investors in the minerals industry. As a result, foreign direct investment in gold mining soared during the 1980s and 1990s, and gold production rose accordingly. A significant number of mines were opened in the Wassa West District between 1986 and 1995, including Teberebie Goldfields (Tarkwa), Billiton Bogosu (Bogosu), Ghanaian Australian Goldfields (Idupriem), Abosso Goldfields (Damang), Sankofa Mining (Prestea), Barnex (Prestea) and Goldfields Ghana (Tarkwa). These are all under private foreign ownership.

### **2.2 Profile of Ghanaian Australian Goldfield's Iduapriem-Teberebie Operations**

Following feasibility studies conducted in 1989/90, construction work began on Iduapriem Gold Mine in 1991. Mining operations commenced in June, 1992, with the first gold being poured in September of that year. The mine was officially opened by the then President of Ghana, Flight-Lieutenant Jerry Rawlings, in February 1993. Iduapriem Gold Mine is 100 % owned by Ghanaian Australian Goldfields Limited (GAG). GAG was originally owned by Australia's Gold Shamrock (70 %), the International Finance Corporation (20 %) and the Ghanaian Government (10 %). GAG subsequently merged with the Ashanti Goldfields Company (AGC), which now owns both Golden Shamrock's 70 % share and the Government's former 10 % share, with the IFC holding the remaining 20 % share. AGC is a publicly listed Ghanaian company with listings on the London, New York, Toronto, Accra and Australian stock exchanges. Mining has been conducted by modern open pit methods involving blasting followed by excavation involving the recovery of ore and the disposal of waste rock in surface dumps. Gold extraction has been carried out using heap leach pads for low grade ore and a Carbon-in-Leach (CIL) and Carbon-in-Pulp (CIP) circuit for high grade ore. Ore was initially sourced from five open pits (Blocks 1-5) at Iduapriem mine, which have now been largely exhausted. Iduapriem Mine had been scheduled for closure in mid-2001, when the currently economic ore would have been mined out. However, in March 2000 the company

announced the acquisition of two adjacent pits from Teberebie Goldfields Limited (TGL). This acquisition has had the effect of extending Iduapriem Mine's life by roughly ten years, as the Iduapriem workforce and plant facilities have been retained to work the new Teberebie and Awunaben pits. A site plan for the combined mining operation is shown as **Figure 5**.

### **2.3 Profile of the now defunct Teberebie Goldfields Limited**

The TGL mine was situated at Teberebie, roughly 6 km from Tarkwa. Ghana's second largest gold mine during the 1990s, Teberebie Mine was considered to be the richest of the new generation of opencast gold mines. TGL was owned 90 % by the Pioneer Group of the US and 10 % by the Ghanaian Government. Operations began on a 48 km<sup>2</sup> concession in 1990, using open pit methods. Gold extraction was conducted from low grade oxide ores using CIL absorption and the zadra electronic method. The mine undertook a considerable expansion programme in 1994, and had a very large workforce (nearly 1000 workers) by 1996. Once the near-surface oxide ores had been exhausted, TGL opted to sell the mine in 1999. It was finally sold to a consortium of Ashanti (AGC) and Gold Fields Ghana (GFG) in 2000.

### **2.4 Historical incidence of resettlement within the MLAs**

The advent of large scale surface mining in the district over the past decade has had a major impact on local land use, resulting in the physical and economic displacement of a significant number of households. Mining activities undertaken by GAG and TGL within the two MLAs over the past decade have resulted both in extensive physical displacement of local people, necessitating the shifting of homesteads, as well as economic displacement, involving loss of incomes and livelihood resulting from land acquisition or obstructed access to land.

#### **2.4.1 Physical displacement (relocation)**

One village within each of the two mining lease areas was physically relocated in order to make way for the development of key infrastructure. Iduapriem, a small village comprising only fourteen households, was relocated by GAG from its original position in the heart of the MLA to become a part of Adieyie (Mile 8) Village. Teberebie Village, originally comprising roughly 168 households, was likewise relocated by TGL from its position on one of the mineralised ridges to its present location (refer to **Figure 4**). Although both of the new villages consist of greatly improved buildings and services, the relocation process involving Teberebie was problematic, creating a series of typical resettlement-related tensions both within the affected community, and between the community and Teberebie Goldfields Limited. This resulted in (unsuccessful) litigation surrounding the nature and value of compensation arrangements, and necessitated the involvement of the District Assembly in the role of mediating agency.

**Figure 5:** Site plan for combined Iduapriem-Teberebie mining operations

**Table 2:** Magnitude of historical physical displacement at Iduapriem and Teberebie

Name	Households (people)	Date & nature of resettlement arrangement	Source of data / comment
<b>Iduapriem MLA (GAG)</b>			
Scattered hamlets	110	1990-1999 Cash compensation	McFarlane (PhD study, 1999, based on mine compensation records no longer available)
Diwobrekrom	63	1997 Cash compensation Eviction of some households after compensation (refused to resettle elsewhere)	Vacated small settlement previously located within Iduapriem MLA at the Mile 6 junction. Diwobrekrom was situated adjacent to GAG's blast line. Following agitation for resettlement, inhabitants were compensated for their structures and most moved away from the site. Several stayed on and used their compensation money to build new structures: the District Assembly finally decided to evict these households with no further compensation. An outstanding issue remains concerning deductions to compensation paid to residents as a result of the alleged destruction of GAG property (a vehicle).
Iduapriem Village	14 (108)	1992 Relocation	'New' Iduapriem was created as an add-on township to Adieyie Village. A total of fourteen households (approximately 108 persons) were relocated in 1992.
Nkwantakrom	Unknown  ~ 45-50 structures demolished	1997 Eviction of 'settler' households	Nkwantakrom is an area situated close to the homestead of Acheampongkrom where a disputed eviction of settlers/structures occurred in 1997. The number of structures and people actually involved in the eviction is contested. In 1996, Iduapriem Mine (GAG) made known its Pit 5 blasting safety limits to local people living at Acheampongkrom / Nkwantakrom. It alleges that by 1997 a number of illegal houses had been built within the safety zone, in speculative fashion. Following a dispute over compensation for these new structures and a mine protest to the district assembly, the settlers and their structures were forcibly evicted by the Ghanaian Police Service (after several eviction notices had been served by the District Assembly). The matter has been subject to litigation for several years and remains <i>sub judice</i> .

Name	Households (people)	Date & nature of resettlement arrangement	Source of data / comment
<b>Teberebie MLA (TGL) – NB historical compensation issues associated with TGL fall outside of GAG's responsibility</b>			
Scattered hamlets	121 (439)	1992-1995 Cash compensation	TGL compensation records.
Nsuekyir Village	217 (795)	1992 / 93 Cash compensation	TGL compensation records. Controversy surrounded the compensation payments to many households in this village who claimed that they had been intimidated by TGL into accepting the compensation levels finally agreed, and that the amounts paid to them were lower than the value of their houses.
Pumpside Village	71 (141)	1992 Cash compensation Eviction of some households after compensation (refused to resettle elsewhere)	TGL compensation records. As above. A group of households at Pumpside objected so strongly to the compensation rates that they refused to move from the village until the company applied force with support from the Ghanaian Police Service. In addition, many villagers refused to vacate the concession and relocated instead to other villages on the TGL concession.
Teberebie Village	168	1990-92 Relocation	A relocation agreement between TGL and the Teberebie Village Committee & local Assemblyman was signed in December 1989, following which a new village was commissioned on the fringe of the TGL concession in 1991 at an estimated cost of \$1.2 million. The agreement stipulated that modern housing units would be constructed in the new village, along with a primary school, a nursery school and a junior secondary school. TGL also undertook to provide a chief's 'palace', a community centre, a hand pump and communal toilets. The community has at times expressed the view that TGL reneged on these undertakings, and/or promised other amenities (e.g. electricity supply). It is noted that all of the above-mentioned structures exist in Teberebie today, and that no mention was made of additional services in the agreement. Litigation was entered into concerning the actual number of 'original' inhabitants and those whom had acquired houses speculatively; as a result, the agreed number of houses (168 units in 148 houses) was not built; instead, 127 houses were constructed.

### **2.4.2 Physical displacement (cash compensation, or 'resettlement')**

With the exception of the ~180 households inhabiting Iduapriem and Teberebie Villages, scattered hamlets and 'non-original' villages were not relocated by the mines. These households (numbering at least 582, as detailed in **Table 2**), were instead paid out in cash for their farmhouses and thereafter left to their own devices. Although the assumption was made that many would leave the MLAs and return with their money to other parts of Ghana, in practice many of the affected 'settlers' simply moved on to other local settlements. Several of these settlements were in turn resettled later.

Resettlement of households in the area has proved controversial in the past, with several cases proving particularly problematic. A group of households at TGL's Pumpsid settlement refused to accept compensation and move out of the area in 1992. These households were eventually evicted by the company with the support of the Ghanaian Police Service, leading to protracted recriminations. One of the settlements affected by GAG operations, namely Diwobrekrom (63 households), was not deemed by GAG to require resettlement. However, the residents of Diwobrekrom agitated to be resettled, arguing that they were located too close to Pit 5, and as a result were suffering from noise, vibration, water pollution and other related problems. After a protracted period of occasionally violent protest, GAG eventually compensated these households in 1997. Although some moved out of the area, others allegedly remained and used their compensation to erect new structures. GAG consequently reported this matter to the District Assembly, which duly investigated and ordered the forcible eviction of remaining households by the Ghanaian Police Service. A similar situation was encountered by GAG in 1997 at Nkwantakrom, a disputed settlement involving what the Iduapriem Mine and District politicians adjudged to be speculative settlement within a demarcated mine safety zone. Approximately 45-50 newly constructed buildings within this zone were forcibly cleared by the Ghanaian Police Service, without recourse to compensation<sup>2</sup>.

### **2.4.3 Economic displacement**

No reliable records of economic displacement - especially with regard to the loss of land previously cleared and utilised for agricultural purposes - have been identified for the Teberebie MLA. An incomplete yet more comprehensive record of economic displacement associated with Iduapriem Gold Mine's operations is available. **Figure 6** illustrates the extent of land alienation within the Iduapriem MLA: from this it is evident that a significant proportion of the available land within the MLA was previously farmed has since been progressively alienated by mining operations.

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<sup>2</sup> According to GAG, many of the households resided in adjacent villages or in Tarkwa; several had allegedly paid a contractor to construct buildings for them on the affected land. Although this view has been supported by the District Assembly, some NGOs and local people insist that Nkwantakrom households were evicted because of complaints concerning mine sewage contaminating their water supplies, and that thugs hired by GAG were involved in the eviction process. As mentioned already legal proceedings are ongoing.

With the exception of Iduapriem Village (GAG concession), no arrangements have historically been made to replace the loss of access to arable land caused by GAG's mining activities. In the Iduapriem case, alternative land for the twelve affected households was negotiated via the Stool Chief, although this land is apparently situated relatively far away from the village relative to its former cropland. In the remaining cases, farmers have been compensated in cash for their standing crops and other improvements to their affected land only, according to Ghanaian law. Because local livelihoods are predominantly land-based<sup>3</sup>, and because of the extensive alienation of available arable land by surface mining operations in the area, there is reportedly a shortage of readily accessible arable land within the study area. This mode of compensation has also meant that farmers have been compensated for a season's production, but not for the basis of their productive system – i.e. land – which has been lost due to mining activity. It is not possible to estimate the true number of affected farmers from available data, given the fact that mining affected households comprise a complex mix of original inhabitants and settlers, some of whom have traditionally farmed and others of whom have practiced Galamsey (small scale mining, refer to **Plate 6**), worked for commercial mines or undertaken other available livelihood activities.

#### **2.4.4 Resettlement at Gold Fields Ghana**

Gold Fields Ghana (GFG) has recently undertaken a major resettlement programme on its Tarkwa concession, involving a total of approximately 3000 households, or 20 000 people. These households were concentrated in an around the major settlements of Atuabo, Akontanse and Mandekrom. Although sometimes referred to as a more progressive resettlement exercise, the GFG process was plagued by disputes over the nature and levels of compensation offered, eligibility for compensation, and a host of related issues, resulting in protracted negotiations and, finally, with the institution of a Regional Steering Committee to preside over contentious issues. Many of the affected households have entered into litigation against GFG, some of which continues to this day.

It should be noted that virtually all of the resettlement planning or implementation which has occurred in the Tarkwa area to date has involved physical displacement, rather than the predominantly economic displacement involved in the current Teberebie waste rock dump scenario.

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<sup>3</sup> With some notable exceptions, including 'outsiders' to the district who are involved in Galamsey.

**Figure 6:** Extent of former cropland at Iduapriem Mine

## **2.5 GAG's present resettlement requirement: Teberebie south east waste rock dump**

### **2.5.1 Background**

The present day location of Teberebie south east waste rock dump has a history dating back several years, and the history of agreements associated with the affected land dates back more than a decade, to December 1989. At that time, Teberebie Goldfields Limited (TGL) signed an agreement<sup>4</sup> with Teberebie Village to relocate it to its current location. Clause 12 of this agreement states that -

‘the residents of the new site will not build, engage in farming activities or carry out any other business within an area of 1000 m of the Teberebie Ridge, Awunben Ridge and Mantraim Ridge, mining plant and/or installations.’

Thus, the area now being developed as a waste rock dump should technically have been neither cultivated nor settled by Teberebie residents since 1990. However, as the land was clearly not being used by TGL - for more than a decade, and in fact until the conclusion of TGL operations – local people did utilise land to the south of (New) Teberebie Village. This was perhaps a logical reaction to the fact that most of Old Teberebie's land were effectively either lost or made less accessible as a result of the village relocation process. In addition, there is no record of TGL efforts to either demarcate or enforce this notional 1000 m ‘no development’ zone. Furthermore, several large tracts of the affected land are owned by landlords from Tarkwa, who would have had no knowledge of the Teberebie arrangement.

Unbeknown to these residents, TGL had submitted a Long Term Mine Plan in 1995 which specified the location of vital mine infrastructure required to complete a mine expansion, including a 74 ha area set aside as the South East Teberebie waste rock dump. This rock dump was to be sited on land south of New Teberebie Village. Five years passed and TGL wound up its operations without mining the southern most part of their concession, now referred to as Teberebie Pit. Thus, at the time Iduapriem Mine took operational control of the mine in 2000, the waste rock dump remained undeveloped. Later that year Iduapriem prepared and submitted a supplementary impact statement covering the mining of the Teberebie and Awunaben pits, which included the proposed position of the Teberebie south east waste rock dump.

### **2.5.2 Local reaction to the proposed alienation of farmland by the dump**

In February 2001 local farmers were made aware of the proposed waste rock dump, the footprint of which was by that stage – i.e. more than a decade after relocation – used by many residents and other local people for cropping

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<sup>4</sup> This agreement has attracted the attention of NGOs, who have claimed that Teberebie Goldfields negotiated the agreement solely with the village Chief, who was illiterate and thus not aware of its content. Inspection reveals that it was co-signed by four literate members of the Village Committee as well as the District Assemblyman, an educated official, and a representative of the local (Apinto) Stool.

purposes. As a result of their objections to the dumping of waste rock on their farmland, Iduapriem's engineers were requested to identify possible alternative dumping sites for the Teberebie Pit. However, the study found that the additional cost of relocating the dump to the nearest alternative site was prohibitive, in addition to which some valuable ore would have been lost due to the construction of a haul road: a combination which was deemed to threaten mine life.

Although this sentiment was conveyed to the community and seemingly accepted as the lesser of two evils (i.e. the second being mine closure), the commencement of physical dumping of waste rock at the Teberebie south east waste rock dump<sup>5</sup> sparked a community petition and the management of the joint Iduapriem-Teberebie operation were summoned to the Wassa West District Assembly in October 2001 to discuss the issue. Following a series of site visits and further meetings, Environmental Protection Agency (EPA) officials temporarily halted the use of this waste rock dump in early 2002. Upon lifting of the ban by EPA, dumping subsequently resumed and continues to this day (i.e. October 2003). **Figure 7** illustrates the dump footprint, the state of dump development and the location of farms enumerated in that footprint. It should be noted that the full dump footprint will take 4-5 years to be covered, and hence that many of the project affected persons will only actually be affected in years to come.

As per Ghanaian law, which is described in more detail in **Section 4.5**, GAG has thus been obliged to identify, notify and compensate all parties whose properties are affected by this activity. Given the fact that a relatively large area of land and a large number of farms are affected, GAG, together with the IFC, opted to commission an independent team to prepare a formal Resettlement Action Plan (RAP). The make-up, objectives and *modus operandi* of this team is described in the next section.

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<sup>5</sup> According to mine survey records, dumping of waste rock within the prescribed waste rock dump 'footprint' began in April 2002. However, dumping in areas adjacent to the pit had affected some cropland by early 2001.

**Figure 7:** Cropland enumerated within the Teberebie SE waste rock dump footprint

### 3 THE RESETTLEMENT PLANNING PROCESS

#### 3.1 Background

Resettlement, including physical and economic displacement, has been a feature of mining in the Wassa West District for many years. The on-going process of open pit mining in particular has resulted in displacement of local farmers in various local mining concessions. GAG and other mining houses operating in the Tarkwa environs have historically followed Ghanaian legislation concerning compensation payments to affected households/farmers. Although this has been in keeping with the laws of Ghana and with other developments occurring throughout the country, the large-scale alienation of farmland amongst predominantly rural farming communities has led to much publicised discontent and social agitation over the past decade or so.

Communities have become increasingly sensitised to the impacts of mining activities on their livelihoods, and there has been evidence of a growing groundswell of popular resistance to the process of land alienation. Resistance has been heightened where modern surface mining methods have meant that fewer affected parties have had access to mine-related employment. People affected by the new Teberebie waste rock dump have been relocated once before and lost convenient access to their customary land at that time. Many Teberebie residents previously worked for TGL, but now only a few are employed by GAG, which retained its Iduapriem workforce after the cessation of mining activities there. This combination of factors has understandably led to the perception amongst villagers that they have been dealt a double negative blow and have little to show for it. In the light of recent concerns highlighted by households being affected by the alienation of land within the footprint of the Teberebie dump, GAG and the IFC agreed to appoint an independent team to undertake a formal resettlement planning exercise. In this case, the IFC has asked that GAG follow IFC Operational Directive 4.30 which deals specifically with Involuntary Resettlement.

#### 3.2 Key objectives

The key objectives of this Resettlement Action Plan are as follows:

- To resettle any physically displaced households and to provide for the successful restoration of the much larger number of economically displaced households, with minimum disruption to existing livelihoods in the affected area.
- To comply with all relevant Ghanaian legislation, as well as with GAG policies.
- To prepare the RAP according to the principles and guidelines contained in IFC Operational Directive 4.30 (Involuntary Resettlement).
- To ensure meaningful participation of the project affected persons in the planning and implementation process.

### 3.3 Resettlement planning team

The Resettlement Consultant approached by GAG to lead the resettlement planning team has experience in undertaking resettlement planning in various parts of sub-Saharan Africa, including extensive work with mining-affected populations. This experience was combined with the requisite Ghanaian knowledge and skills base, including those of an experienced sociologist from the University of Ghana, a senior representative of one of the main NGOs operating in the Tarkwa area, and the newly appointed Senior Community Liaison Officer at GAG's operations. In addition to these team members, a local interpreter and eight local enumerators were appointed to assist in the team's activities. The composition of the resettlement planning team is shown in **Table 3**, below.

**Table 3:** Members of the resettlement planning team

NAME	ORGANISATION	ROLE
Justin Pooley	Independent	Resettlement & Social Dev. Consultant
Dr Agyemang-Mensah	University of Ghana	Sociologist
Albert Quansah	CARE, Tarkwa	NGO Representative
Joseph Sowah	National Youth Council, Tarkwa	Interpreter
Isaac Ankomah <sup>6</sup>	Ghanaian Australian Goldfields Ltd (GAG)	Senior Community Relations Officer
Enumerators (all contracted by CARE, Tarkwa)		
Abass Moro		Socio-economic household survey (all)
Ali Mohammed		
Beatrice Abrokwa		
Dan Venance		
Dorcas Dadson		
Felicia Acquah		
Gloria Dadson		
Samuel Mensah		

### 3.4 Approach and methodology

A socio-economic assessment compiled for GAGs Iduapriem and Teberebie operations by SGS Environment in 2002 contains an overview of the socio-economic circumstances of four communities situated within the two Mine Lease Areas, but does not contain sufficient household level detail to be used for resettlement planning purposes. As a result, intensive field investigations were conducted at the Iduapriem-Teberebie site over the period

<sup>6</sup> Mr Ankomah subsequently left GAG to take up a study opportunity overseas. He has been replaced by Mr Martin Dadzie.

February 18<sup>th</sup> – March 9<sup>th</sup>, 2003, in accordance with a Terms of Reference (TOR) prepared jointly by GAG and the IFC. The methodology involved may be summarised as follows:

- A review of previous relevant reports dealing with the Iduapriem-Teberebie operations as well as more general publications covering aspects of the District's economy and the impacts of mining.
- A review of GAG and TGL records pertaining to historical resettlement activities within the study area.
- Examination of GAG's existing enumeration records for affected households, which have been utilised as the basis for ongoing crop-related compensation payments.
- Field observation of the affected area, both in overview, i.e. from atop the waste rock dump itself, and on foot within the dump footprint area.
- A series of formal and informal meetings and semi-structured interviews with local community leaders and members, GAG staff, local NGO representatives and district authorities.
- A structured socio-economic questionnaire survey involving a 100 % sample of project affected parties identified to date<sup>7</sup>, including some who had not yet been formally enumerated. Interviews were undertaken by a team of eight young, well-educated Tarkwa residents, who were trained as enumerators and oriented in the week preceding the actual field exercise.
- The use of participatory rural appraisal techniques to derive useful information relating to issues such as seasonal cropping patterns and past use of compensation money.
- Fieldwork has been followed by an intensive period of data collation, analysis and report compilation.

A draft Resettlement Action Plan (RAP) was compiled and a second field visit held during the period April 10<sup>th</sup> – 18<sup>th</sup>, 2003, in order to disclose the key findings of the RAP, obtain the views of affected parties and update socio-economic data. Implementation of certain key measures outlined in the RAP was also initiated during this period.

Follow-up enumeration surveys and an independent crop valuation were conducted during the period June-August 2003, following which this RAP document was finalised.

### **3.5 Assumptions and limitations**

- This study was commissioned in 2003, whilst dumping of rock on the new site began in 2001. As a result, certain key issues which might under normal circumstances have been discussed and dealt with before development began have instead had to be tackled retrospectively, and within the framework of an existing system. This includes issues such as compensation arrangements, discussions with affected

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<sup>7</sup> Field enumeration had not been completed by the end of the field exercise, but > 90 % of affected households were successfully interviewed.

parties concerning preferences and alternatives, etc. This has affected the degree to which the IFC resettlement guidelines can be applied as originally intended.

- The planning process has necessarily occurred over a relatively short timeframe, as dumping is ongoing and is already affecting certain farmers.
- Consultation and socio-economic studies were limited in a number of cases during the initial fieldwork phase by the fact that GAG's enumeration process of affected land and households had not been completed, and due to an outstanding issue between GAG and the church organisation Kristo Asafo. Additional information has now been collected by GAG, and consultation with Kristo Asafo has been initiated.

### **3.6 Next steps**

Resettlement planning has been undertaken in four discrete yet inter-linked phases. Phase one involved a review of existing information as well as intensive fieldwork within the study area to collect relevant data. Phase two involved the processing and analysis of data collected, and the compilation of a draft RAP report. Phase three involved disclosure and consultation of this draft RAP in the affected area, involving both GAG and the key interested and affected parties. This also allowed for data to be cross-checked and mitigation measures to be elaborated (including the commissioning of an additional crop valuation survey). The RAP has now been finalised for submission to the IFC in Washington. Copies of the RAP report will be supplied to representatives of the affected groups, via the Resettlement Steering Committee and/or on request from other interested parties. The RAP will also be posted on IFC's web site, the Info Shop, for external review and comment (<http://www.ifc.org/>).

## **4 ADMINISTRATIVE, LEGAL & POLICY FRAMEWORK**

### **4.1 Government and administration**

Accra is the capital of Ghana. The country has ten administrative regions of which the Western Region is one. The capital of Western Region is Sekondi. This region is divided into eleven administrative districts (as illustrated in **Figure 2**), one of which is Wassa West District. The town of Tarkwa is the administrative and commercial capital of the Wassa West District, housing the district administration. The district is divided into two urban and eleven Area Councils, which are in turn sub-divided into 217 Unit Committees.

The highest administrative and political authority in the district is the Wassa West District Assembly. The District Assembly is headed by the District Chief Executive, a senior government official appointed by the President with the approval of two thirds of the district's assembly. In addition to the District Chief Executive, the assembly comprises 81 members, including two members of parliament, 54 elected members and 25 Government appointees. The assembly has an Executive Committee, headed by the District Chief Executive, and comprising five separate sub-committees. In addition, it has established a District Planning and Co-ordinating Unit to assist planning functions. Finally, administrative decentralisation has led to the existence of eleven District Departments, including Central Administration, Education, Health, Agriculture, Forestry etc. There are three elected assembly people responsible for different portions of GAG's operational area, one of whom represents the people of Teberebie, Adieyie (including Iduapriem) and Adisakrom.

### **4.2 Traditional authorities**

In Ghana, people of common descent owe allegiance to a symbol of collective authority, such as the 'stool' for the Akans of southern Ghana (including the study area) or the 'skin' for the northern peoples. Traditional authorities play a role in the administration of the area. People indigenous to the Tarkwa area fall within the Wassa tribal area, which encompasses Tarkwa, Abosso, Bogosu and Enchi. The Tarkwa District falls within what is known as the Wassa Fiase, one of the main territorial divisions of the Wassa tribal area. Wassa Fiase is headed by a paramount chief, and is further subdivided into a number of divisions, known as 'stools'. Most of the land falling within the GAG mining lease areas falls under the custodianship of the Apinto Stool, one of three important stools in the area. The Apinto Chief in turn exerts control over ten sub-Chiefs, who together form the Apinto Divisional Council. Beneath these sub-chiefs come the 'Odikros' or Village Chiefs, situated in Teberebie, Iduapriem and other villages. At the village level, family and land disputes and development issues are traditionally dealt with by the village chief and elders, of which there are normally seven.

In addition to providing an important leadership role, especially in the more rural areas, chiefs act as custodians of stool land, mobilise their people for developmental efforts and arbitrate in the resolution of local disputes. Although chiefs have no direct political authority, some have been appointed by Government to serve on District Assemblies. Ghana's growth had led to a dilution of the influence of traditional structures. The responsibility for people's welfare no longer rests solely in the hands of the chief and elders, and is instead shared or taken over by elected assemblymen, the police, courts, town planners, the Land Valuation Board, the Mineral Commission and other institutions, all of which serve to blur and diffuse historical power structures. It is worth noting that both the Wassa Fiase and Teberebie Village are currently experiencing chieftaincy problems.

### **4.3 Land tenure and administration in Ghana**

#### **4.3.1 Introduction**

Land tenure refers to the way in which rights to land are obtained and distributed among people. Land tenure in Ghana comprises a dual system, being governed both by a title registration system (i.e. a legislative framework) and by a customary system. As this report deals almost exclusively with economic displacement resulting from the compulsory acquisition of land by a mining company, a clear understanding of land tenure and administration issues is evidently crucial to successful resettlement planning. In Ghana, as in many other African countries practicing a blend of customary and legislated land tenure systems, these issues are generally both complex and contested. The following sections outline land tenure and administration systems and problems in some detail, in order to provide non-Ghanaian readers with at least a rudimentary grasp of the broader issues at stake, such that mining-related land alienation is contextualised. Information presented here has been derived from field observations, team inputs, Government agencies and a series of publications dealing with these matters, including *inter alia* publications by the IDS (2002), Kasanga (2000), Kuntu-Mensah (1997) and the World Bank (2003).

#### **4.3.2 Traditional forms of land tenure and administration in Ghana**

Land tenure in the rural areas of the country is mainly by communal land ownership, whereby land is collectively owned by an extended family, clan or community of ancestrally related people. Control over such land is generally vested in the leader or his appointee, who hold the land in trust for the community. In theory, such leaders do not however have absolute rights over communal land, with the customary 'title' to such land being vested in the whole community with leaders being trustees, or custodians of this title. Individual rights to land for farming or living are in turn acquired through the community leaders or by means of inheritance.

However, the advent of commercial agriculture, rapid population growth, urbanization and pressures from private investors seeking security of tenure has gradually eroded customary land tenure practice in Ghana. Colonial policies of indirect rule vested in chiefs more exclusive administrative power over their people, removing social restraint over their authority inherent in the indigenous system of authority, and allowing chiefs the 'right' to freely dispose of unallocated land. This has meant that some chiefs have pursued private gains at the expense of communal interest and progress. The advent of cash crop plantations and the exploitation of mineral resources in particular have given rise to a situation wherein chiefs have allocated concessions to prospectors and migrant farmers under long-term lease arrangements or even under outright sale. Situations have also arisen wherein some chiefs and heads of clan/family have given the rights to parcels of land to two or more parties, whilst in urban and peri-urban areas individual family members have sold or leased land without reference to their customary leaders. This has resulted in situations where land rights to a single parcel of land have been assigned to multiple parties, leading to lengthy litigation processes. The World Bank (2003) reports that in Greater Accra Region alone there are some 15 000 land disputes awaiting court adjudication.

#### **4.3.3 The power of eminent domain**

The colonial government in Ghana introduced various laws relating to land tenure and administration, many of which were in conflict with the customary system. One of the key notions introduced by the colonial government and retained to this day has been the legal instrument of *eminent domain*, which provides for the compulsory acquisition of stool, skin and family land for public needs. Although compensation was stipulated for fixed improvements to land (e.g. crops and buildings), this legislation neither provided for compensation for land itself, nor for associated inconvenience. Expropriation of land in such a manner involves the extinguishment of the rights of the original owner; once land has been allocated, new rights are created therein. This is in direct violation of the customary land tenure system in Ghana, which recognizes that land is the basis for economic production amongst rural people, and thus provides for inalienable rights to land. It is self-evident that cash compensation for improvements to land, i.e. for the crops presently on the land, cannot be interpreted as compensating farmers for the loss of their production system (i.e. the basis of their livelihoods).

Nonetheless, successive post-independence governments in Ghana have retained these legal powers of compulsory acquisition and have used them extensively to establish state farms, plantations, the Volta Lake, airfields, roads and other public amenities. Evidence compiled by the Land Valuation Board suggests that many compensation claims dating back to the 1960s and 1970s remain outstanding, and that such claims from seven out of Ghana's ten regions amounted to 540 billion cedis in 1999. In some instances these lands, acquired initially for specific purposes, have subsequently been used for other purposes, sub-divided and leased to non-indigenes,

gifted or sold outright (without consultation). The impact of this policy has been summarized by the World Bank (2003) as follows:

'This policy has left landowners almost landless, denied their source of livelihood and made them tenants on their own land, giving rise to poverty and disputes between the state and stools, as well as within the private land sector. Lack of consultation with land owners and chiefs in decision-making for land allocation, acquisition, management, utilization and development of state acquired land has generated intractable disputes between the state and the private land owning groups within communities.'

#### **4.3.4 The state of Ghana's legislative framework governing land issues**

Systematic land tenure research in Ghana has revealed several key weaknesses in linking the traditional system to the requirements of a modern economy. These include among others a lack of documentary proof that a person in occupation of land has rights to the land, a lack of accurate maps or plans indicating the true extent of property boundaries, and a lack of clear prescribed procedures to be followed in order to resolve land-related disputes. Successive governments have enacted 166 laws regulating land administration and establishing mandates for different land administration agencies in Ghana. However, these laws have generally been enacted to deal with specific problems in an *ad hoc* basis rather than as part of a comprehensive legal framework governing land acquisition and administration. As a result, many of these laws and regulations conflict with one another, and some are regarded as being outdated and/or irrelevant. Their continued existence in the statutes has however served to confuse issues, delaying implementation of reform programmes and prolonging litigation in the country's courts. A series of attempts have been made by governments to harmonize land policies and the legislative framework with customary law, the most recent of which is in the form of the National Land Policy (1999), although none have been fully implemented. A new five year Land Administration Project loan has just been approved by the World Bank. This project was launched in June 2003.

Part of the modernization process for land administration in Ghana has included a land titling process as well as the gradual establishment of a series of land administration institutions. These include the Land Commission, the Land Title Registry, the Survey Department, the Land Valuation Board, the Department of Town and Country Planning and the Office of the Administrator of Stool Land. However, with the exception of in the few urban centres which have benefited from previous urban renewal and development projects, there is no systematic cadastral mapping, registration and titling programme in Ghana. In addition, the different agencies and offices listed above do not have appropriate mechanisms for co-ordinating land-use policies, plans and programmes, and there is a general lack of land records being kept or maintained.

#### 4.3.5 Existing forms of land ownership in Ghana

Under the dual land tenure and administration systems which exist in Ghana, the following main categories of land ownership are recognised:

- *State, or public, land* are acquired by the state in the interest of the public and managed by the Land Commission, being leased out for a defined purpose (e.g. a hospital).
- *Stool/skin land*, including land vested in a community, clan or tribe. The chief or clan head is usually the custodian of this land, consulting local elders before providing any to families or outsiders. In theory, stool land is to be held in trust for future generations; in practice, it is often sold off or given away, leading to widespread litigation. Stool land is given to individuals and/or families to farm, after which it is often regarded as *private individual or family land* (see below).
- *Private and family/clan land* may be acquired through outright purchase or as a gift or through inheritance. An oft arising problem is that allodial or paramount title to stool land in Ghana may be acquired by individuals and/or families, and not just chiefs. Contradictory legislation exists which on one hand defines stool land to include family land, and on the other hand lists family land as private land. Thus multiple claimants often come forward as the holders of allodial interest, disputing the title of the head stool. In practice, powerful families sometimes claim stool land to be their own family land.

The laws of Ghana do not allow for the existence of freehold title to land. Non-Ghanaians may have access to residential, commercial, industrial or agricultural land on a leasehold basis up to 50 years subject to renewal from any of the categories listed above, whilst Ghanaians can legally have leaseholds for 99 years, subject to renewal from any of the landowners listed above.

#### 4.3.6 Methods of resolving land disputes

A recent study into land rights and legal institutions in Ghana (IDS, 2002) lists and describes at least four different ways in which land disputes in Ghana may be resolved, as follows:

- **Informal arbitration** involving elders, respected community leaders or individuals agreed to be the disputing parties, particularly for disputes involving sharecropping. The benefits of this method are its low cost, ease of use and the fact that the rules and procedures are generally understood by ordinary people. Disadvantages include a lack of enforcement mechanisms (e.g. in the case of one party renegeing on any agreement reached), problems where power differentials exist between disputants and a potential lack of agreement

concerning the ground rules for land tenure (e.g. where local land holders and strangers are involved, and hence two sets of customary law are involved).

- **Chiefs applying customary law**, a variant of the above situation. Disadvantages include the problem of accountability if a chief does not fulfil his duty to manage community land on behalf of his people, the lack of proper records, and the potential disadvantaging of various groupings by the principles of customary law (e.g. women and strangers).
- **The State Courts** (Tribunals, Circuit and High Courts), which administer the common and statute law of Ghana. Advantages of decisions made by the courts are that they are authoritative and legally enforceable by the state. Disadvantages include inaccessibility, high expense and slow pace, as well as the fact that court decisions are not always trusted by ordinary people to be fair and just.
- **The institutions of land administration** (under legislation introduced in 1986 and 1994), which in practice make quasi-judicial decisions concerning land and in some cases offer dispute settlement services. These institutions include the Land Commission, the Land Title Registry, the Land Valuation Board and the Office of the Administrator of Stool Land. There is a Land Title Adjudication Committee of the Land Title Registry which has first instance jurisdiction over title disputes. The main advantage of using this system is that there is a degree of informality, whereby officers of these agencies can be approached to deal with problems as they arise. Disadvantages include its complexity, lack of transparency, slow, expensive and cumbersome procedures, and a lack of certainty regarding certain decisions.

Conflict between these systems and institutions often results in uncertainty and a lack of authority behind decisions reached. As a result, it has been widely reported that disputants may seem to agree to a resolution but then re-open the matter in a different forum; in addition, there is often a lack of enforcement mechanisms for agreements which are reached.

#### **4.3.7 Key problems with existing land tenure arrangements**

As described above, land tenure arrangements involving the acquisition, holding, use and transfer of land vary between different traditional areas within Ghana, subject to customary practices there. In general, land tenure in Ghana is characterised by little documentation and a corresponding lack of formal title to land. The prevailing state of legal pluralism – i.e. the fact that common and statute law coexist with a variety of alternative systems of customary law – combined with the existence of a variety of institutions and procedures for regulating land disputes, has led to numerous and protracted land disputes in most parts of the country, often involving litigation.

Indeterminate boundaries of stool, skin and family land resulting from a lack of reliable property maps has led to protracted litigation and the freezing of land for development. Frequent encroachments on both public and private land, multiple sales of residential parcels, unapproved development schemes, and frequent violent confrontations between and among opposing claimants have arisen as a result. Finally, the power of eminent domain, as introduced by the colonial government, has been retained by successive post-independence governments and has resulted in widespread inequity amongst people whose land has been alienated for the 'public good' without adequate and timely compensation.

#### **4.4 Mineral law, surface rights and the power of eminent domain**

The complex land tenure arrangements described above are further complicated where subsurface minerals are involved. According to Ghana's Minerals and Mining Law (PNDCL 153 of 1986), all subsurface mineral rights, i.e. technically involving anything greater than one metre below the surface, are vested in the Government. Once a Mine Lease Area has been awarded to a mining company, the company leases this land from the Government and obtains the right to alienate the surface tenure rights of any landowner utilising it, subject to a compensation process. Thus, the power of eminent domain is passed on from the Government to the mining company, with all the attendant problems relating to equity already described.

The owner retains the right to 'graze livestock or cultivate the surface of such land in so far as such grazing or cultivation does not interfere with the mineral operations in the area' (Part IX, Section 70 (3) – Surface Rights). Landowners within mining areas 'shall not erect any building or structure thereon without the consent of the holder of the mining lease...' (Part IX, Section 70 (4) – Compensation for disturbance of owners surface rights, pg. 25).

#### **4.5 Ghana's legal compensation framework governing mining-induced resettlement**

The mineral rights holder is obliged to compensate the owner or occupier of any land disturbed by mining operations for the following (Part IX, Section 71 (1)):

- disturbance of the rights of the owner/occupier
- damage done to the land surface, buildings, works or improvements, or to livestock, crops or trees in the area of such mineral operations

Compensation for land itself is not provided for, in accordance with the Government's power of eminent domain. According to Ghana's Mining and Environmental Guidelines (MEG, 1994: p12), the company shall pay

compensation for items according to a schedule of compensation rates regularly furnished to it by the Ghana Chamber of Mines, using the Land Valuation Board's rates as a minimum. The actual negotiation of rates is left to the farmer and the company, with provision made for third party intervention only when disputes arise. Any pre-existing settlement located close to mining operations where the pre-existing inhabitant's public safety is at risk, or where the inhabitants are subjected to unreasonable nuisance, 'shall be resettled at a more distant site with at least an equal standard of accommodation and services at the cost of the company' (MEG, p13).

#### **4.6 Problems arising in practice from prevailing compensation arrangements**

##### **4.6.1 Uncompensated land loss as a result of the exercise of eminent domain**

The prevailing interpretation of these regulations in Ghana, as in many other African nations, is that the loss of land *per se* is not compensated for, albeit utilised for cropping or other purposes. In addition, if land is not being actively and visibly utilised at the time of mineral exploitation, it is alienated from its owner(s) without any form of compensation, albeit permanently damaged or removed from future utilisation as a result of mining operations. As land forms the basis of economic production for many rural people in Ghana, removal of access to land may alienate people from their production system. Thus existing legislation may serve to compromise existing livelihoods and social welfare and is widely regarded by social commentators and ordinary people as being iniquitous.

As Aubynn (1997) has pointed out, the land alienation process excludes the owner/occupier in the decision about the future of his/her resource and does not give him/her a choice over the willingness or not to part with it. Coupled with the existing lack of compensation payments for land, this creates the potential for social and political agitation, which is reported to have been experienced throughout Ghana (i.e. not just in relation to mining activities). Also, the fact that mining houses' rights supersede those of local land users within mineral lease areas has in practice resulted in situations wherein farmers have sometimes been limited to cultivating seasonal crops such as maize, vegetables, cassava and plantain. Mining houses on the basis of preventing substantial future compensation claims (in accordance with mining law), often ban the cultivation of perennial cash crops such as cocoa and oil palm. This is especially the case where such organisations are uncertain as to the full extent of their reserves and future operations, or where fluctuating minerals prices affect the viability of different parts of a given ore body. In such circumstances, it is not deemed prudent to allow the cultivation of crops which take up to five years to establish and several more years to recoup costs on.

Developers such as mining companies are freed up by the current system to provide once-off payments for the surface rights to land, often arguing that because land affected by mineral rights is vested in the government, it

represents the government's contribution to a given mining venture. This view is supported by the fact that GAG, for example, is required to pay annual ground rent and royalties of 3 % of revenue to the Government, some of which flows to the District Assembly, the Administrator of Stool land, the Traditional Council and the affected Stool<sup>8</sup>. Thus the economic rent associated with land leased by mining houses accrues to national and local government. Although many commentators have suggested that ways should be found to exploit the ground rent in such a way as to benefit the holders of allodial title and thereby minimise social tensions, this has not occurred in practice. In fact, the Chamber of Mines in Ghana has recently launched a campaign demanding a physical manifestation of the royalty payments received by District Assemblies.

#### **4.6.2 Non-availability of base compensation rates**

In practice, the Land Valuation Board's (LVBs) base rates, supposedly furnished to mining companies by the Chamber of Mines, are inaccessible. It appears that the LVB has a variable rates structure, which is often deliberately kept low for public projects in order to protect the government, the latter being the highest payer of compensation in Ghana. The LVB has argued that as conditions across the country vary considerably, it is not feasible to have a universal set of compensation rates. It is against publishing 'base rates' for crop compensation, as it derives much of its income from undertaking enumerations related to expropriation of land by government agencies (by charging a fee of 10 % of the total enumerated amount). In practice, private companies fear high rates will be arrived at (to maximise this fee), and communities would rather solve compensation rate disputes without its intervention for fear of losing a portion of their compensation. Where the LVB has announced substantial rises in compensation values, private companies (including mining houses) have protested that these have been based upon commercial farming assumptions. Historically, mines in the Wassa West District have sometimes paid higher compensation rates for crops than those used by the LVB, although this has often been the result of protest and subsequent negotiation between the affected parties and district/regional authorities. In other cases, farmers have agreed to compensation, used up this money, and then approached the mines again to protest the low rates paid out.

#### **4.6.3 Lack of transparent, universal compensation rates at District level**

In the absence of universal compensation rates for common farm products, even within a given district, the determination of appropriate compensation rates is left up to the mining house concerned, by means of negotiation with affected farmers. GAG and other companies have generally undertaken such negotiations on a

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<sup>8</sup> Most of this contribution goes into the Government's Consolidated Fund, whilst 10 % goes to the Minerals Commission and 10 % goes to the Administrator of Stool Land. Of this last 10 %, 10 % is in turn retained by the Administrator, 55 % accrues to the District Assembly, 20 % to the Traditional Council and 25 % to the Stool.

one-to-one basis, a bargaining strategy which has been attacked by NGOs on the basis that many of the affected farmers are neither literate nor accustomed to the workings of the market (i.e. cash-based) economy.

Farmers from both the Iduapriem and Teberebie MLAs have in the past complained that the mechanisms for effecting crop compensation have (in their view) been inconsistent and unfair. During the 1990s, this was reportedly exacerbated by sharp disparities between compensation values calculated by the Land Valuation Board and those calculated by the Agricultural Extension Service (Mcfarlane, 1999). In an attempt to resolve a previous stand-off arising from disputed compensation rates, the Wassa West District Assembly had to arbitrate, and numerous lengthy meetings took place between the parties over a six month period. Almost all the farmers within the GAG and TGL concessions finally accepted adjusted rates, and received compensation. Overall, the rate paid out was considered satisfactory, although the delay and protracted timeframe for negotiating these rates had clearly angered affected farmers. Complicating the issue further, compensation rates paid to the 3000 households affected on Gold Fields Ghana's adjacent concession were fixed at a level 50 % higher again than the inflation adjusted rates offered by GAG or TGL. This supplement was an arbitrary figure designed to incentivise resettlement.

Interestingly, since 2002 the Teberebie Farmers' Association (involving many of the currently affected households) has insisted that collective negotiation of compensation rates should apply, and a new schedule of rates was agreed in February 2003. However, in the face of inconsistent (i.e. variable) compensation rates which have not been established at a wider district level and which have until recently been differentially negotiated between different farmers or groups of farmers, it is possible that further disputes over compensation will arise.

#### **4.6.4 Livelihood restoration problems associated with cash compensation**

As noted above, the prevailing interpretation of compensation regulations is that cash compensation is an acceptable substitute for the loss of access to arable land in affected areas. This topic has been the subject of considerable international research and discussion. Suffice to say that where newcomers or settlers to an area are concerned, and where these persons do not depend mainly on farming as a basis of their livelihoods, cash compensation for lost farmland and buildings may be a socially acceptable option. However, when the original inhabitants of an area are resettled and a significant proportion of their available land is affected, and where their primary skills are farming-based, this option is generally regarded as being highly problematic.

Local research into this issue (Aubynn, 1997) has demonstrated that whilst the short-term alleviation provided by cash compensation for crops has been welcomed, the longer-term effects of these lump sum payments have been highly detrimental. The key factor in such a situation is the absence of a mechanism for reinvesting farmer

compensation to secure their future economic sustainability. According to Aubynn, who conducted interviews with farmers immediately after compensation payments at GAG and TGL in the late 1990s, less than a third had any fixed idea of how and where they could invest the money. Many local farmers are illiterate, unfamiliar with the cash economy, and lack alternative skills. In the absence of financial advice or an investment mechanism (few if any of the affected farmers have access to any form of bank, hence money is kept as cash), farmers tended to spend their compensation hastily. Accounts received at TGL, GAG and GFG suggest that farmers who received cash compensation for crops and structures have generally misapplied their payments, bowing to immediate wants and needs, pressures exerted by extended families in need, and other factors. Many end up landless, homeless, dependent and/or alcoholic.

#### **4.6.5 Issues arising as a result of customary tenure arrangements**

As noted already, land tenure arrangements in Ghana are complex and convoluted. Due to this complex structure, mineral rights holders have opted to compensate the *occupiers* of disturbed land rather than the *owners* (either option is permissible). Although this is a convenient and pragmatic way for the companies to avoid having to deal with complex land ownership issues, this process externalises these issues onto affected households and communities. To provide a practical example from the Teberebie area: GAG compensates sharecroppers for their crops, and not their landlord (i.e. the *de facto* landowner). Whether these sharecroppers actually pay the proportion of their compensation owed to the landowner is entirely a private matter; hence it is conceivable that major absentee landowners might lose all of their land without receiving any compensation. Complaints of this nature been reported by GAG in recent times.

## 5 PROFILE OF THE PROJECT AFFECTED PERSONS (PAPs)

### 5.1 Socio-economic context

An overview of the socio-economic context of Wassa West District has been provided in **Section 1.6**. The following sections outline key social and economic characteristics of the affected population. Key indicators have been chosen from this information in order to monitor the success of the implementation of this resettlement action plan. Information contained in these sections has been derived from a household socio-economic questionnaire survey (**Appendix 1**) involving 115 affected farmers, from focus group discussions conducted by the team's Ghanaian sociologist, and from recent secondary sources. Two important aspects pertaining to this data should be borne in mind:

- Firstly, because the majority of affected households are resident in Teberebie Village, much of the information presented below pertains to the characteristics of this settlement. However, it is not the Teberebie community as a whole which is being impacted, but rather a subset of its inhabitants, together with a few farmers and landlords residing in other local villages and towns.
- Secondly, some sections relate to buildings and infrastructure which will not be impacted by the mining operation. The intention of providing this information is to provide a better understanding of local socio-economic standards and livelihoods.

### 5.2 Population size and character

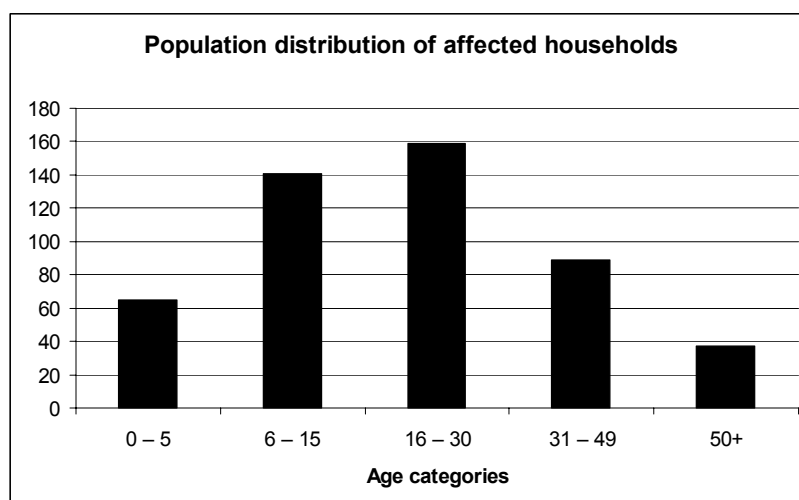
- The household socio-economic questionnaire survey covered 115 affected farmers representing households with a combined population of 491 persons. This represents a 100 % sample of those identified as PAPs by the end of the fieldwork exercise<sup>9</sup>. The population distribution within this sample is illustrated graphically below in **Figure 8**.
- Over 90 % of affected households reside in Teberebie Village. In addition, several households were identified as being resident in Tarkwa, and Bankyim, Dompim and Efuanta.

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<sup>9</sup> Some additional affected households were not yet identified by the end of the fieldwork interview phase. However, given that no physical displacement of households will occur (with one exception), the information summarised here is regarded as being sufficient for planning purposes, covering a significant proportion of affected households.

- People indigenous to the Tarkwa area are members of the Wassa Fiase, a large tribal area of Fanti speaking people incorporating Tarkwa, Bogosu, Abooso and Enchi. The household socio-economic survey found that the majority of affected people interviewed were of Wassa ethnicity, followed by Fantis & Nzemas.
- Although inheritance is often through the female line, i.e. matrilineal, amongst Wassa people, positions of traditional authority are almost solely occupied by males. The majority of people living in the area are Christian, with a minority of Muslims and also some people who practice (traditional) fetishism.
- In terms of gender distribution amongst the affected households, the proportion of males (53.6 %) was found to be higher than that of females (46.4 %), which may be due to the fact that young men have historically come to the village from elsewhere in search of employment with TGL and/or GAG.

**Figure 8:** Population distribution amongst households affected by the waste rock dump



Source: Household socio-economic questionnaire survey (Feb-March 2003).

### 5.3 Brief historical sketch of Teberebie Village

Teberebie Village was relocated by TGL in 1990/91 from its position on a mineralised ridge to its present location, following the signing of a relocation agreement between TGL and a village committee in December 1989. At that time, Teberebie reportedly comprised 168 households, with a total population of nearly 2000<sup>10</sup>. The new village, constructed at a cost of US\$ 1.2 million, consisted of greatly improved buildings and services. However, the

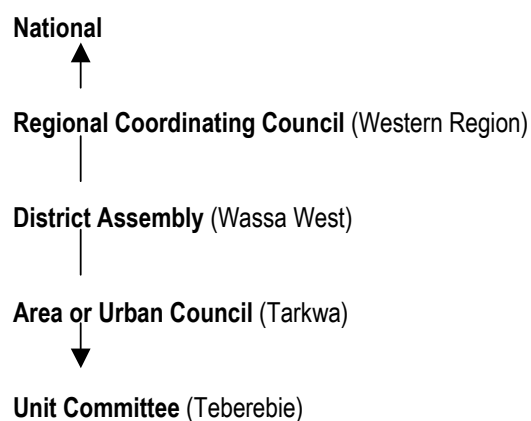
<sup>10</sup>According to an SGS Socio-economic assessment conducted in 2002, Teberebie Village has now has a population of approximately 1140 persons comprising mainly subsistence farmers engaged in the cultivation of food crops.

relocation process was fraught with a series of fairly typical resettlement-related tensions, both within the affected community and between Teberebie inhabitants and TGL. For example, although the thatched mud buildings of the old village were replaced by concrete houses with iron roofs in the new village, kitchen and bathroom facilities were provided separately in communal form. Residents constructed mud and thatch add-on structures to the new concrete housing units, complaining that their needs had not been fully catered for, whilst TGL management complained at the time that their brand new modern village was being turned into a slum through the construction of unauthorised bamboo and mud structures (Macfarlane, 1999). Other key disputes revolved around the actual number of structures re-built by TGL, the supply of electricity and a medical clinic to the new village, the inadequacy of water supplies at the new village, and promises of employment.

Importantly, no measures were taken to ensure that lost access to arable land situated near the old village was replaced at the new village. Under these circumstances, many residents began to utilise the land currently affected by the Teberebie waste rock dump for cultivation purposes, as it was available for use at that time. Some households continue to utilise old farmland, but these are located further away from the new village than the old, making farming activities more difficult and time consuming.

#### 5.4 Leadership structure

- As described already, the area falls within the Wassa Fiase, one of three territorial divisions within the Wassa tribal area. Wassa Fiase is further sub-divided into divisions or 'stools'. The Apinto Stool, one of the most important in the area, 'owns' most of the land falling within the GAG concession.
- Under the Local Government Act 462, the Unit Committee is the lowest unit at the base of the political structure, as illustrated by the following organogram.



- Teberebie Village has a mix of customary leaders and administrative leaders appointed via the District

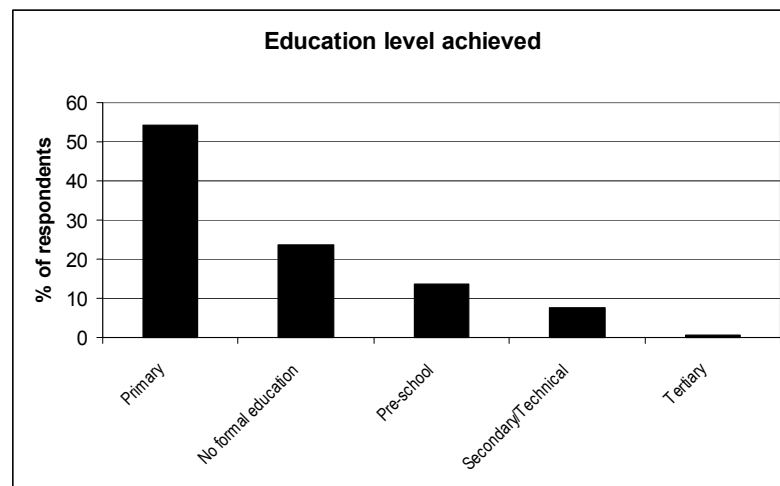
Assembly system. It is important to re-iterate that the affected farmers do not fall within one coherent community, and as such do not all recognise the same Unit Committee and/or customary leader. Some affected landowners are originally from Teberebie Village and have lived in the general area for a long time, others are 'outsiders', and several reside in other villages.

- In addition to customary and administrative leaders in Teberebie, there is also a Teberebie Farmers Association, which attempts to provide a united front in negotiating with GAG over compensation and related issues. However, at the beginning of resettlement planning, only a quarter of affected households were members of this organisation. Many more appear to have joined up by the end of the main fieldwork phase, sensing that the farmers association might have some real role in determining the shape of events to come.
- After Teberebie Village was relocated away from much of its customary land in the early 1990s, the acting Chief of Teberebie did not have custodianship over any land within the affected area. In addition, there appears to be somewhat of an organisational vacuum within Teberebie village as the acting chief is old and incapable of effective leadership, making it more difficult to resolve issues associated with the mining development.

## 5.5 Education and skills profile

- **Figure 9** shows the educational status of project affected persons. From this graph it should be evident that 9 out of 10 affected persons have had little or no formal education, with less than 9 % of respondents having benefited from education beyond primary school level.

**Figure 9:** Educational status of project affected persons.



Source: Household socio-economic questionnaire survey (Feb-March 2003)

- **Table 4** shows additional skills acquired by project affected persons. The predominant skill acquired by women is sewing, whilst those for men include driving, welding and carpentry. These latter skills were reportedly acquired under Teberebie Goldfields' apprenticeship programme.

**Table 4:** Skills profile of project affected persons.

Skills Acquired	Percentage
Sewing	32.1
Driving	20.8
Carpentry	10.4
Welding	4.7
Hair dressing	4.7
Teaching	2.8

Source: Household socio-economic questionnaire survey (Feb-March 2003)

## 5.6 Employment status

- As might be expected given the education and skills levels shown above, only 3.4 % of the affected population were found to be employed in salaried positions. This form of employment is generally associated with GAG's Environment Department, where casual labourers are employed to clean and weed. Roughly a third of respondents were found to be either children or the elderly.
- Primary occupations of respondents are also shown in **Table 5**, which indicates that the majority are farmers. Importantly, once the figures are adjusted to exclude children and the elderly, i.e. to cover people of employable age, the proportion of respondents falling within the 'farmer' category increases to 80 %.

**Table 5:** Employment and occupational status of project affected persons

Primary Occupation	% of affected pop.	% of workforce
Farmer	68.2	80
Student	14.9	not applicable
Seamstress/tailor	2.6	3
Carpentry	1.3	2
Trading	5.2	6
Teaching	1.3	2
Other (including Galamsey)	6.5	8

Source: Household socio-economic questionnaire survey (Feb-March 2003)

- Although charcoal making and the selling of firewood are common income generating activities in the area, only one charcoal producer was identified as having previously operated within the affected area. According to GAG, this person has been duly compensated for his loss of livelihood, and now operates elsewhere.

- It should also be noted that some Galamsey (i.e. small-scale mining) activities are undertaken by certain residents of Teberebie Village; however, as such activities are generally regarded as being illegal, this occupation has probably been hidden within the 'other' and 'self-employed' categories in the table above.

### 5.7 Income and expenditure profile

- Income levels reported by project affected households ranged from ₵150,000 (~ US\$17.45) per month to ₵1.2 million (~ US\$140) per month, reflecting a wide disparity in educational and technical levels amongst respondents. The average estimated monthly household income was ₵450,000 (~ US \$ 52) i.e. \$1.73 per day per household.
- Respondent's main sources of income are illustrated below in **Table 6**. As might have been anticipated given the dearth of education and technical skills amongst affected households, some 80 % claimed agriculture to be their main source of income, followed by non-farm employment (petty trading, sewing, etc).
- No income accruing from pensions or housing and land rental were reported. This is unusual given that certain respondents are known to have sharecropping arrangements whereby their land is cultivated by other households in return for a proportion of the proceeds. However it should be noted that the results of such income and expenditure surveys are renowned for being difficult to interpret and for providing only a partial snapshot of households' actual income streams.

**Table 6:** Main sources of income amongst project affected persons.

Source	Percentage
Agriculture	80
Employment (non farm)	9
Remittance	8
Galamsey	3
Pensions	-
Housing and Land rent	-
Other	-

Source: Household socio-economic questionnaire survey (Feb-March 2003)

- Teberebie residents - who form the bulk of affected households - have recently suffered from the demise of Teberebie Goldfields operations. TGL reportedly used to provide many men in Teberebie with jobs, which in turn created a significant income multiplier effect within the settlement. Although GAG has made an effort to

employ some Teberebie residents, this has not replaced lost income associated with the TGL mine closure. On the other hand, GAGs existence remains vital to Teberebie Village, as village leaders have stated.

- Less than 20 % of affected households reported having been able to save any money during the previous twelve months. Access to credit in times of difficulty is also problematic, with access to financial institutions effectively blocked by people's lack of savings, credit history or collateral. **Table 7** illustrates financial strategies followed by affected households in times of need.

**Table 7:** Sources of financial assistance available to affected households

Sources of assistance	Percentage
Relatives	30.8
Sell livestock	26.3
Neighbour	14.3
Formal lending/banks	5.3
Sell property	5.3
Do not ask for money	3
Informal lending	3
Other	12.0

Source: Household socio-economic questionnaire survey (Feb-March 2003)

- **Table 8** illustrates the main expenditure patterns reported by affected households during the household survey. Food, education, and healthcare comprise the three main expenditure requirements for most.

**Table 8:** Expenditure patterns amongst affected households

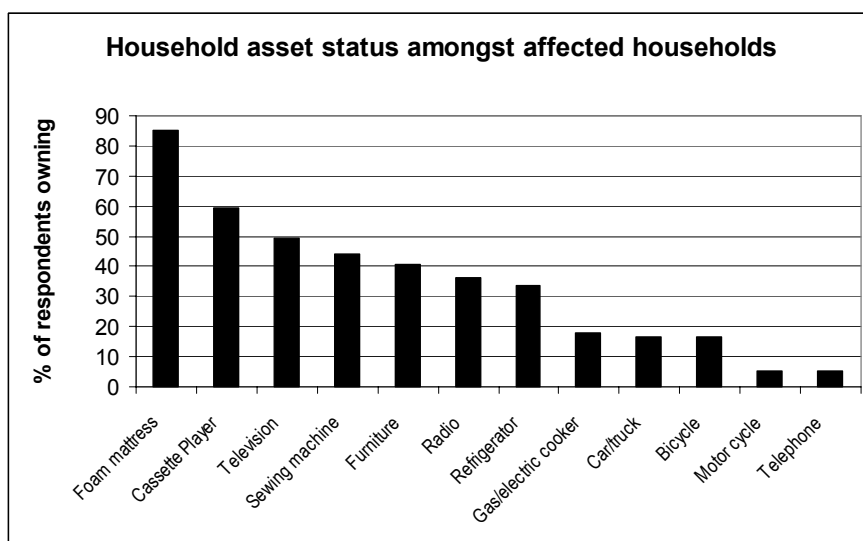
Item	Very strong effect	Strong effect	Minor effect
Food	53	23	16
Education	31	36	13
Health	4	14	34
Transport	1	5	6
Funeral(s)	-	< 1	4
Dowry	-	-	3
Clothes	3	8	9
Hire of labour	3	4	5
Agricultural inputs	4	4	4
Other	< 1	5	6

Source: Household socio-economic questionnaire survey (Feb-March 2003)

## 5.8 Assets inventory

- One of the key objectives of socio-economic assessment is to provide benchmark indicators to assess changes in socio-economic conditions after resettlement. **Figure 10** illustrates graphically the most significant assets owned by respondents, the commonest of which were foam mattresses, cassette players and television sets.
- **Table 9** shows the materials used in the construction of affected households' homes and kitchens. Most buildings in Teberebie are of modern construction, i.e. with walls constructed out of cement blocks and having iron roofs. These were built by Teberebie Goldfields. However, when relocation occurred no provision was made to construct kitchens. As a result, kitchens have been added on by Teberebie residents, generally using wattle and daub and thatch roofs.
- Housing structures not constructed by Teberebie Goldfields, i.e. those associated with the farming hamlet and the Kristo Asafo farm within the affected area, are generally constructed from mud and wood (i.e. wattle & daub), with roofs of either iron sheeting or bamboo and thatch (palm leaves or grass).
- Some 77 % of respondents made use of the four ventilated improved pit (VIP) latrines provided by Teberebie Goldfields during the relocation of Teberebie Village, whilst a further 11.5 % (in each case) reported using a pit latrine or an inside toilet, respectively.

**Figure 10:** Graphical representation of the household asset profile of project affected persons.



Source: Household socio-economic questionnaire survey (Feb-March 2003)

**Table 9:** Building materials used in the construction of affected household's homes and kitchens.

<b>Materials used in walls</b>	<b>House</b>	<b>Kitchen</b>
Cement blocks	64	13
Wood and mud ('wattle & daub')	22	61
Stones and mud	3	6
Stones and cement	7	3
Wood poles	1	7
Bricks	3	10
<b>Materials used for roof</b>		
Iron	85	40
Thatch	13	50
Poles	1	6
No roof	1	4

Source: Household socio-economic questionnaire survey (Feb-March 2003)

### 5.9 Health profile

- The main ailments reported within the past 12 months amongst respondents were respiratory complaints (i.e. cough/lung problems, 25 %), malaria (21 %), fever (21 %), diarrhoea (8 %), skin infections (8 %), and eye disease (4 %).
- The main medical facilities used by affected households were Tarkwa General Hospital (75 %) and private clinics (19 %). Private clinics are run by various organisations, including the mines.

### 5.10 Presence of local CBOs and NGOs

- Members of the affected households were asked whether they belonged to local Community Based Organisations (CBOs). The response to this question is illustrated in **Table 10**, below.
- It is evident that more than half the respondents were members of church groups. Teberebie has six churches, including Pentecost, Methodist, Assemblies of God, Roman Catholic, 12 Apostles and Baptist denominations. In addition, a religious NGO named Kristo Asafo operates a mission at Teberebie. Kristo Asafo (Christ Reformed Church) is a charitable NGO operating in many parts of Ghana. Its mission is based on the philosophy that Christ used food to cater for the needs of his followers. Kristo Asafo owns farms to produce food for its members and for distribution to the needy, including high profile annual donations to schools, hospitals, universities and institutions working with disabled or otherwise disadvantaged groups. Employment is also created for workers on these farms. It has a mission within Teberebie and a relatively

large farm within the affected area which provides food and employment opportunities to local people (many of which reside in Tarkwa).

- Although less than a quarter of respondents belonged to the Farmers' Association when the survey was undertaken, a substantial number of affected farmers subsequently registered as members in the belief that a strong and unified Farmers Association is necessary to ensure a good outcome in negotiations with GAG. As discussed in **Section 9**, effort will need to be expended to ensure that the Farmers Association is strengthened and that the sudden increase in membership is both sustained and translated into meaningful action and increased capacity. This will be especially important in terms of any special measures taken to protect the most vulnerable of the project affected persons.
- In addition to CBOs, a number of Non Governmental Organisations (NGOs) are active within the Tarkwa environs. The main NGOs identified by the Wassa West District Assembly are CARE (formerly CARE International), Wassa Association of Communities Affected by Mining (WACAM), and Project Concern International (PCI). Of these, only CARE appears to have been active in Teberebie in recent months.

**Table 10:** Membership of Community Based Organisations amongst affected households

Organisation	% membership amongst respondents
Church group	53
Farmer association	23
Youth group	11
Women's group	10
Development committee	3
Other	< 1

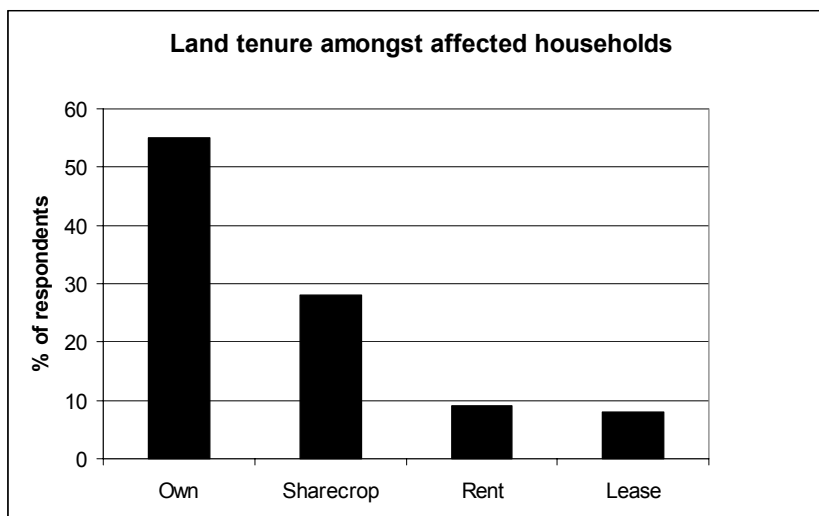
Source: Household socio-economic questionnaire survey (Feb-March 2003)

### 5.11 Land tenure and use

- Most of the land falling within the GAG mining lease areas falls under the custodianship of the Apinto Stool, one of three important stools in the area. Land tenure arrangements within the Iduapriem-Teberbie Mine Lease Area (MLA) have been complicated by resettlement activities over the past decade as well as by the in-migration of a large proportion of non-Wassa people, who sometimes adhere to different customary land use practices.
- Local land tenure categories may be classified as follows:
  - Family land, passed down by original inhabitants of the area to family members, who 'own' it.

- Sharecropping land, acquired through negotiation between a landlord and tenant. The proceeds of cultivation on such land are divided into either two (Abuna) or three (Abusa) predetermined parts.
  - Land leased or rented either from the stool chief or from a 'landlord' who has either inherited the land or acquired it via the stool chief
- The Waste Dump Operations have affected and will continue to affect certain categories of farmers who have been farming in the area for time periods ranging between six months and forty years.
- As illustrated graphically in **Figure 11**, more than half (55 %) of the affected farmers 'own' their plots within the affected area, whilst roughly a third (28 %) are share-cropping tenants on land belonging to other households. A further 8 % lease their land and 9 % rent it from landlords. These last two categories mostly comprise 'outsiders' to the area, who do not have automatic and rent-free rights to farmland in the area.
- Some of the largest and most viable farms within the affected dump area belong to absentee landlords residing in Tarkwa or surrounding towns. These landowners either hire labour to work their land for them, or allow sharecropping activities whereby portions of their land are given to farmers to cultivate in return for a share of the produce/profits.
- Little commercial agriculture has been or is undertaken within the Iduapriem-Teberebie MLAs, although one affected farm was identified within the affected area which has a commercial orientation. This operation produces tomatoes and other cash crops for sale as far afield as Kumasi, the capital of Ashanti Region.

**Figure 11:** Status of land tenure arrangements amongst project affected households



Source: Household socio-economic questionnaire survey (Feb-March 2003)

## 5.12 Agricultural activities

There are two main agricultural seasons in the study area: a major agricultural season lasting from January to August, and a minor agricultural season lasting from September to December. **Table 11** illustrates the basic elements of the seasonal agricultural calendar for the Teberebie area.

**Table 11:** Seasonal agricultural calendar for the Teberebie area

MONTH	FARMING ACTIVITIES	REMARKS
January	Bush clearing	Cool season
February	Bush clearing	Cool season
March	Felling of trees	
April	Setting fires and land preparation, planting maize, cassava, plantain, yam and vegetables	Onset of the busy farming period (lasting until August)
May	Picking mushroom, planting oil palm, orange, coconut	Rainy season, food scarcity period
June	Picking mushroom, planting oil palm, orange, coconut	Rainy season, food scarcity, reliance on bought rice, gari and stored maize
July	Apply fertilizer to maize and vegetables	Food scarcity up to mid-July, use bought rice & stored maize. Mild rains
August	Harvest maize	Food abundant End of busy farming period
September	Clear the land	Rainy season, food abundant
October	Felling trees, setting fire to the bush, planting maize, cassava	
November	Weeding of fields	
December	Harvesting	Food abundant

Source: Focus group discussions undertaken in Teberebie during RAP fieldwork (Feb-March 2003)

- The main crops cultivated within the affected area include cassava, plantain, pineapple, oil palm, yam, cocoyam, fruits, vegetables and maize. Cocoa is also grown by some farmers; however, although cocoa is Ghana's main export cash crop, it does not thrive in the study area, apparently due to a combination of high rainfall and acidic soils. According to the SGS (2002) socio-economic baseline study, many people came to the Tarkwa area in the 1970s with the aim of establishing cocoa plantations, only to lose most of their investments and turn to alternative crops.
- Most of the main crops grown in the area may be classified as seasonal crops, i.e. those which are seasonally planted, harvested and then re-planted the following season. By contrast, cocoa and oil palm are perennial crops, which, once established, tend to produce for many years. A description of common crops growing in the study area is provided in **Appendix 2**.

- Cassava and to some extent oil palm have effectively become the cash crops for the average Teberebie citizen. Oil palm is widely cultivated throughout the area. Oil palms take approximately five years to bring to production, after which they may continue producing for up to 25 years. Approximate timescales involved in the cultivation of key local crops currently grown within the affected area are provided in **Table 12**.
- In terms of food crops grown by affected households, cassava was reported by 45 % of respondents to be of most importance, followed by plantain (38 %) and maize (4 %). In terms of crops sold or bartered, the most important crop was (again) reported to be cassava (41 %), followed by plantain (28 %), oil palm (13 %) and pineapple (6 %). It is thus clear that cassava cultivation is of particular relevance both to income generation and food security amongst project affected persons.
- Cassava is normally sold in the main market at Tarkwa. Of the remaining crops, 45 % were sold in Tarkwa, 30 % in the Teberebie village market, 20 % to traders who visit Teberebie, and 5 % at the roadside.
- Rice is bought and used during the food scarcity period (May – early July).
- According to the socio-economic baseline assessment compiled by SGS (2002), very few if any local farmers have had any recent contact with district agricultural officials and extension officers. There have also been no NGOs assisting local communities with agricultural techniques and projects in recent times, although CARE is currently attempting to launch a project in Teberebie. The major agricultural problems facing local farmers include lack of access to credit, a scarcity of farmland, a lack of inputs, and labour supply shortages (i.e. where farmers do not have enough money to hire labour and have insufficient family members to cultivate significant areas of land).

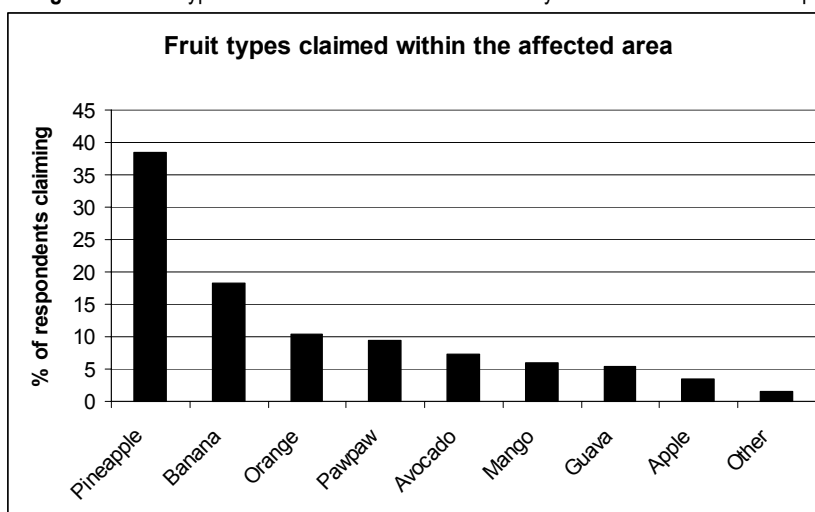
**Table 12:** Timescale involved in the cultivation of key local crops in the affected dump area

<b>Crop</b>	<b>Planting To Harvesting Time</b>
Vegetables	4 months
Maize	6 months
Cassava	12 months
Plantain	15 – 18 months
Cocoyam	12 months
Yam	12 months
Oil palm	5 years

Source: Focus group discussions undertaken in Teberebie during RAP fieldwork (Feb-March 2003)

- Various fruit types are cultivated and others grow wild in the area, contributing to food security in the community. Pineapple was identified as the most commonly cultivated fruit and the only fruit grown as a cash crop in the affected area. Fruit claimed in the affected area are listed below in **Figure 12**.
- Livestock play an important role in the poverty reduction strategies of local households. The sale of such livestock represents an effective coping strategy in times of need. Roughly half (48 %) of affected households owned poultry, a quarter (24 %) owned goats and roughly a fifth (19 %) owned sheep. None of these livestock types appear to rely significantly upon the affected waste rock dump area (for grazing etc).

**Figure 12:** Fruit types claimed within the area affected by Teberebie waste rock dump



Source: Household socio-economic questionnaire survey (Feb-March 2003)

### 5.13 Utilisation of natural resources

- Natural resource utilisation contributes to household food security at Teberebie. A range of natural resources were identified by affected people as being important to them, as described below.
- Four different species of edible mushrooms are found in the area, the local names of which are *mpenpenaa*, *nkankom*, *dommo* and *sibire*.
- A variety of wild and semi-domesticated fruits are also found in and around Teberebie. These include mangoes, oranges, guavas, pawpaws and various wild berries, known locally as *kontan*, *wawapuro*, *atoaa* and *adweaa*.

- A number of plants of medicinal value occur in the area, as shown below in **Table 13**.

**Table 13:** Plants of medicinal value used by local herbalists in the Teberebie area

Plant	Use
black pepper ( <i>awisa</i> , <i>hwenteaa</i> )	boils
<i>awedeaaba</i>	hernia
<i>akuama</i>	stomach ache
<i>prekese</i>	hypertension
bark of mahogany tree	blood tonic
<i>pampan</i>	waist pains
<i>ekoro</i>	toothache, waist pains
<i>Sese</i>	stomach ache, ulcer

Source: Focus group discussions undertaken in Teberebie during RAP fieldwork (Feb-March 2003)

- Bamboo is commonly used both for roofing kitchens (in Teberebie) and for roofing new wattle and daub houses elsewhere.
- As mentioned above already, charcoal burning is a well-established industry in the vicinity, although only one charcoal burner was identified as having been operating within the affected area. A single bag of charcoal was priced at ₵20,000 (~US\$ 2.40) at the time of the study, i.e. during February / March 2003.
- Hunting of mammals such as bush pig, antelope, porcupine and cane rats occurs on a very minor scale in the area as most of the local forest has been heavily degraded.
- The abundance of oil palm and raffia palm trees makes it possible to tap these and make both palm wine and raffia wine, termed *insafuo* and *doka*, respectively. Distillation of a local gin called *akpeteshie* from these palm and raffia trees represents a major activity for some Teberebie residents.

#### 5.14 Summary of basic village infrastructure in Teberebie

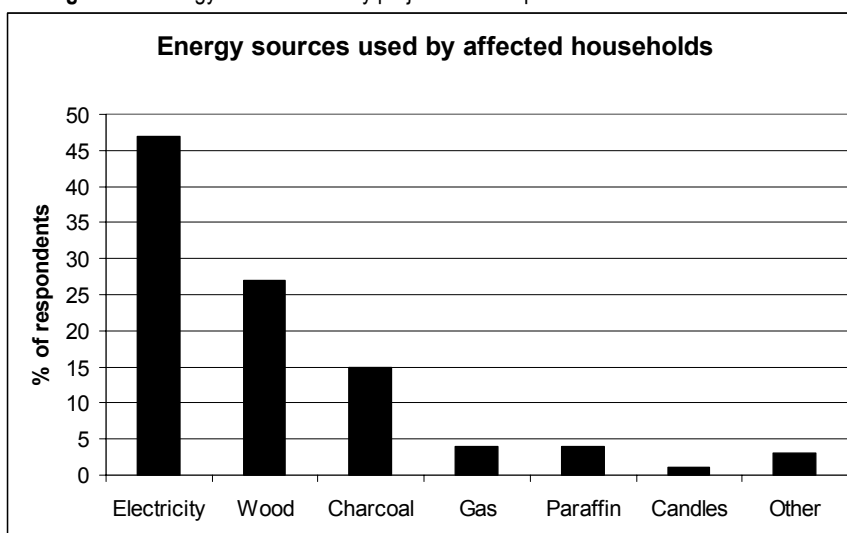
- As described already, the majority of affected households reside in Teberebie Village. Although the infrastructure in the village will not be displaced, a summary of the basic infrastructure is provided below in **Table 14** in order to provide a more comprehensive overview of socio-economic conditions.

**Table 14:** Description of basic infrastructure in Teberebie Village

ITEM	REMARK
House Construction	Modern
Access road leading to Settlement	Good
Electricity supply	Available
Environmental sanitation	Fairly Good
KVIP	4
Borehole	2
Stand pipe	1
Medical facility	Non existent
School – nursery	1
School – Junior Secondary	1
Community Centre	1
Market	Under construction
Chief's palace	1
Maize mill	1
Hair salon	6
General goods store	4
Chemical shop	2
Sewing shops	6
Drinking bars	2
Local gin spots	2

Source: Compiled by SGS originally for the 2002 socio-economic assessment; updated during RAP fieldwork (Mar 2003)

- As listed in the table above, Teberebie Village has a primary school, a junior secondary school (JSS), and a nursery school. Enrolment at each of these schools, as reported in GAGs recent socio-economic assessment (SGS, 2002) is as follows: Primary school – 382 pupils (212 boys, 170 girls); JSS – 196 pupils (104 boys, 92 girls); Nursery school – 70 pupils (32 boys, 38 girls).
- Many of these pupils travel to Teberebie from other settlements, e.g. Wangarakrom, as the village has some of the best educational facilities in the area (none of which will be affected by the waste rock dump).
- **Figure 13** provides a graphical illustration of energy sources used by the affected population. Teberebie residents have access to electricity, via the Electricity Company of Ghana's (ECG's) Self Help Electrification Project network. However, wood and charcoal still play a major role in energy needs of the residents, a situation leading to further degradation of the secondary forest in the area. For cooking, it is reasonable to assume that majority of the respondents use wood. The reported figure of 27 percent must therefore be treated with caution as perhaps people do not feel comfortable in being tagged as contributing to the degradation of the forest.

**Figure 13: Energy sources used by project affected persons**

Source: Household socio-economic questionnaire survey (Feb-March 2003)

- Water supplies in Teberebie are superior to many other local settlements but remain controversial. According to respondents, before active mine operations, many inhabitants of Teberebie Village relied on local streams. All these streams, they claim, can no longer be used as they have been contaminated<sup>11</sup>.
- Even though Teberebie Goldfields provided a communal stand pipe and 2 boreholes, the respondents claim that these sources are neither regular nor adequate for their domestic needs. As a result, many claim that they now have to buy water, as illustrated in **Table 15**.

**Table 15: Water sources used by affected households in Teberebie Village**

Source	Cooking & drinking	Washing & watering livestock
Borehole	28	25
Communal standpipe	24	16
Well/spring	2	22
River/stream	1	8
Water sold by other people	45	27

Source: Household socio-economic questionnaire survey (Feb-March 2003)

<sup>11</sup> It should be borne in mind that active mining operations have been ongoing since the early 1990s, and that Teberebie Village was relocated to the current site in 1991/92.

### 5.15 Strategies of households whose land has already been affected at Teberebie

- A focus group meeting was held on March 4<sup>th</sup> 2003 with 22 farmers whose land has already been covered by the Teberebie south east waste rock dump, in order to investigate their coping strategies and to obtain their views on the best way to proceed with resettlement planning.
- The group comprised 11 affected female farmers and 11 affected male farmers, and included both landowners and tenants. Background information pertaining to these persons is provided in **Table 16**, although their names have been deleted to protect their privacy. Crops cultivated by these farmers included cassava, pineapple, oil palm, cocoa, sugarcane, plantain, oranges, yam, coconut, maize, cocoyam and vegetables. The three main crops cultivated were cassava, oil palm and pineapple.
- It is the contention of these farmers that they are worse off today than when they had access to their farms in the waste dump area. They complained that compensation paid out did not adequately address land and crops lost due to mining activities. Critically, the final column in **Table 16** indicates that compensation money derived from crop compensation has not been used to restore affected people's livelihoods, but has instead been used predominantly for immediate needs such as purchase of food and the payment of school fees.
- Several problems with the compensation process were identified. It was contended that no prior warning or information was generally given to farmers before GAG moved machines into the area. Secondly, an objection was raised to the fact that no third party was present when crop counting and measurement were undertaken. Thirdly, because some crops (e.g. cassava) are valued based on area rather than number, it was felt that the process was open to abuse by GAG (acreages are calculated by the survey team, and affected farmers only find out how much they are owed once compensation schedules have to be signed). Finally, delays in the payment of compensation were reported, as illustrated in **Table 16**, below.
- Suggestions relating to possible compensation packages included the employment of affected farmers, release of unutilised land to these farmers, the provision of social amenities for the Teberebie community, skills development programmes for the youth (Teberebie Goldfields previously ran a programme to provide skills training for local youths, via a system of working as unpaid apprentices), alternative livelihood programmes involving elements such as beekeeping, snail rearing, batik making and oil processing facilities, and educational scheme for bright pupils and a revolving credit scheme.

**Table 16:** Background of focus group members already affected by dumping at Teberebie

Sex	Age	Acreage <sup>1</sup>	Amount Received (¢)	Year	Delay in payment	Main Claim On Compensation Received
M	37	4½	5 million	2002	3 weeks	School fees/food consumption
M	48	4½	1.6 million	2002	4 weeks	School fees
M	58	3	2.45 million	2002	1½ years	School fees/food consumption
M	42	5	1.46 million	2002	4 months	School fees/food consumption
M	29	5	1.34 million	2001	2 months	School fees/farm labour
M	32	5	1.158 million	2001	1 year	School fees/farm labour
M	37	1½	0.56 million	2002	3 months	Hospital fees
M	26	1½	1.4 million	2002	1 month	Hospital fees/Food consumption
M	37	3	0.60 million	2002	7 months	Food consumption
M	43	3½	2.9 million	2001	1 year	School fees/ hospital fees
F	37	30	2.9 million	2002	3 months	School fees/Food consumption/trading
M	18	½	0.28 million	2002	2 weeks	School fees
F	50	1	1.4 million	2002	3 weeks	Food consumption
F	35	2	1.6 million	2002	6 months	School fees/food consumption
F	70	2	0.84 million	2001	6 months	School fees
F	25	1	0.64 million	2002	5 months	Food consumption/ hospital fees
F	50	1	0.6 million	2001	6 months	School fees/food consumption
F	31	2½	2.4 million	2002	5 months	Hospital fees/school fees
F	35	2	0.86 million	2002	6 months	Food consumption/ domestic expenses
F	35	1	0.69 million	2001	1 year	School fees/ food consumption
F	40	1½	0.85 million	2002	1 year	School fees/ food consumption
F	42	¾	0.45 million	2002	1 year	School fees/food consumption

<sup>1</sup>Different crop types are valued differently, hence the lack of correlation between acreage and amount received.

\$1 = ~ 8500 cedis

## 6 EXTENT AND IMPACT OF RESETTLEMENT

### 6.1 Introduction

The ongoing development of the Teberebie south east waste rock dump requires that people cultivating and living within its 74 ha footprint will be displaced. This section examines the likely magnitude of the ongoing displacement required, the loss of material assets and natural resources involved, and the likely implications of this loss for affected households. Mitigation measures are included in **Section 9**.

### 6.2 Magnitude of displacement

One household's homestead and one set of buildings belonging to a church group called Kristo Asafo will be physically displaced by the waste rock dump, involving a loss of built structures. More significantly, a total of 248 fields belonging to 173 households and one Christian NGO (Kristo Asafo) will also be displaced. In terms of public infrastructure, the main footpath which currently traverses the affected dump footprint will be lost once the dump expands to its full extent. This information is summarised in **Table 17**.

**Table 17:** Magnitude of displacement associated with the Teberebie south east waste rock dump

Displaced item	Number or area	Description / comment
<b>Housing and other structures</b>		
Hamlet (farm homestead)	1	<ul style="list-style-type: none"> <li>- 3 original single room housing structures constructed of wood &amp; mud with iron roofing, both currently inhabited.</li> <li>- 3-4 new extended (multi-room) housing structures of wood &amp; mud construction, which were still being built during February 2003, representing a total of more than 20 rooms, none of which were inhabited at the time. These new structures appeared to be being constructed in speculative fashion by the household head's brother, who lived in Tarkwa.</li> </ul>
Mission farm belonging to Kristo Asafo (church group with a presence in Teberebie)	1	<ul style="list-style-type: none"> <li>- 3 original single room housing structures constructed of wood &amp; mud with iron roofing, neither of which appears to have been inhabited.</li> <li>- ~ 40 new housing and communal living structures of similar construction, mostly built (apparently in speculative fashion) between May 2002 - February 2003, none of which were inhabited during Feb - April 2003</li> </ul>
<b>Farmland</b>		
Affected households	173	- Many affected households have multiple fields within the affected area
Affected fields	248	<ul style="list-style-type: none"> <li>- 248 fields with a total area of 84.1 ha</li> <li>- Average field size = 0.35 ha, ranging between 0.1 and 4.7 ha</li> </ul>
<b>Public infrastructure</b>		
Public footpath	1	The location of this footpath is shown in <b>Figure 7</b> ; it is illustrated in <b>Plate 3</b> .

Source: GAG enumeration surveys and field observations

### 6.3 Impact of physical displacement

#### 6.3.1 Affected hamlet

As described in **Table 17**, physical displacement associated with the development of the waste rock dump will affect one farming hamlet currently situated amongst cultivated fields. Without adequate mitigation, the residents of this hamlet could face homelessness, impoverishment and social marginalisation. Fortunately, several factors mitigate against the likelihood of severe changes in the livelihood of this household arising from resettlement, *as long as appropriate measures are put in place*. Firstly, the homestead is situated a short distance away from Teberebie Village, and from the edge of the affected land, hence resettlement to either place would not entail significant geographical dislocation from a familiar environment. Secondly, the fact that only a single household is involved minimises the risk of major disruption to social networks, kin groups and traditional structures, and is unlikely to place any significant social pressure on the potential host community at Teberebie Village, should the household opt to settle there. Thirdly, given the proximity of the household to Teberebie and the fact that Teberebie farmers cultivate most of the surrounding fields, social ties already exist between the inhabitants of the hamlet and those of the village. A greater threat of social conflict arising from displacement of this household relates to the new structures which have been constructed at this site by the household head's brother in recent months, as illustrated in **Plate 5**. This issue is dealt with in more generally in **Section 8.8**.

#### 6.3.2 Affected mission farm

The religious NGO Kristo Asafo has been described in **Section 5.10**. This organisation has a mission within Teberebie Village, and a sizeable (11.3 ha, or 28 ha) plot of cultivated land within the affected area which features substantial oil palm groves. The farm is uninhabited as yet, but its development is overseen by a local pastor and farm infrastructure has been built up considerably over the past year. As listed in **Table 17** above, the organisation has been undertaking extensive construction of new buildings on site since being informed of GAG's intention to use the land for dumping.

The impact of physical displacement of Kristo Asafo's built structures will be significant in the sense of time and effort put into construction, rather than in the sense of social dislocation, given that these buildings are – currently at least - uninhabited. Operationally, a far more significant impact on the organisation is likely to be the loss of cultivated land. Without adequate compensation and restoration of lost land and buildings, the Kristo Asafo mission in Teberebie is likely to lose its *raison d'être*, i.e. farmland with which to feed needy persons and on which to employ local members. Fortunately, the mission farm is not due to be affected for several years, hence adequate time remains for compensation measures to be effected and a new mission farm established before the existing one is affected.

## **6.4 Impact of economic displacement**

### **6.4.1 Effect on cropping activities**

There is little doubt that the principal impact of the establishment of the Teberebie waste rock dump will be the loss of farmland falling within the dump footprint. Several aspects of this situation are worth highlighting:

- A large number of households (173) will lose access to their cultivated land. It is estimated that the affected land comprises 60 – 70 % of all land currently utilised by the approximately half of the affected households (mostly those in Teberebie), whilst in other cases (due to speculative development of lands) in comprises a far smaller proportion of available arable land.
- Whilst the majority of farms involved are generally small and used only for subsistence purposes, the production derived from them is undoubtedly a key component of household food security. As revealed in the socio-economic survey results, at least 80 % of these households' primary occupation and source of income is farming, with the remaining 20 % relying upon farming income to a lesser degree.
- More than 90 % of affected persons have not received education beyond primary school level, and few possess an adequate skills base with which to pursue alternative livelihoods.
- More than 90 % of affected households reside in Teberebie Village, and many have been relocated before. As a result, most have lost convenient access to their traditional land, and are hence already vulnerable from a land tenure and ownership perspective.

Alienation of the affected land is thus likely to have a profound impact on the livelihoods and food security of affected households, unless appropriate measures are put in place to replace this land and restore agricultural production.

### **6.4.2 Effect on the utilisation of natural resources**

Although the loss of secondary forest and scattered cropland within the affected area will reduce the availability of common property resources such as bamboo, wild fruits and medicinal plants, fieldwork revealed no particular concentration or special source of such products therein. As mentioned in the previous section, charcoal production within the dump footprint was only being conducted by one household, which has since been compensated for impending loss of livelihood. Given the fact that secondary forest still exists in the vicinity, it seems likely that local people will continue to extract fuelwood, charcoal, bamboo, mushrooms and other natural

products from unaffected areas once the rock dump has been created. Income derived from oil palm products such as wine and gin will be lowered unless provision is made for the affected trees to be replaced.

#### **6.4.3 Effect on public infrastructure**

The only access route to be affected by the waste rock dump is a footpath which stretches from near one of the main access roads to Iduapriem mine to Teberobie Village. This route is mostly used by farmers to access their fields within the project affected area, and is also used by Teberobie villagers to reach Iduapriem Mine and surrounding farming areas. This footpath will only be affected in 2004 or 2005; however, if it is not replaced by that time then local people will be forced to create a new footpath of their own or lose access to the mine area.

#### **6.5 Impact on vulnerable persons**

The impacts of physical and economic displacement described above can be predicted to impact severely upon vulnerable households, in the absence of appropriate mitigation and monitoring measures. In order to ensure that such persons are catered for in resettlement planning and mitigation, vulnerable persons were identified during the resettlement planning process. These included household heads who were identified as being elderly (> 60 years), as having physical and/or mental disabilities, as being unmarried or divorced women, as being particularly impoverished (a subjective assessment was conducted by village elders), or as being socially stigmatised. A list of such persons is provided in **Appendix 3**.

## 7 DISCLOSURE AND CONSULTATION

### 7.1 Introduction

One of the cornerstones of this resettlement planning process has been a series of meetings with local communities, district authorities and the main NGOs active in the vicinity. As part of the compilation of the resettlement plan, these groups and individuals have been, and will continue to be, provided with an opportunity to share their views with the study team. As noted already, planning has occurred over a relatively short period of time (roughly 8 weeks), hence this process has been relatively intensive. The purpose of this section is to summarise disclosure and consultation undertaken to date as well as to list key issues raised and responses given during this process.

### 7.2 Disclosure

- GAG disclosed plans for the creation of the Teberebie south east waste rock dump to the Environmental Protection Agency (EPA) in 2000.
- As described in **Section 2.5.2**, many farmers using land to be affected by the dump were first informed of its development in early 2001, via a community meeting at Teberebie and by mine survey teams working in the area.
- Various follow up meetings and site visits have been attended by GAG since that time, either in response to farmers' complaints about the impending loss of their land, or as part of GAG's efforts to highlight what the company regards to be illegal erection of new structures within the affected area. Several sets of photographs of such structures have been submitted to the District Assembly, and various District level authorities have been involved in site visits to the affected area since that time.
- Disclosure of details pertaining to resettlement planning occurred during the fieldwork phase, via a series of briefings to interested and affected parties.

### 7.3 Consultation

The IFC and certain NGOs have also been involved in discussions leading up to the appointment of the resettlement team. **Table 18** lists the key interested and affected parties consulted.

**Table 18:** List of stakeholders consulted

<b>ORGANISATION</b>	<b>REPRESENTATIVES</b>
<b>Wassa West District</b> District Assembly, Wassa West  Environmental Protection Agency, Tarkwa Mines Department, Tarkwa Ministry of Food and Agriculture, Tarkwa Town & Country Planning Office, Tarkwa Land Valuation Office	Mr Ayensu, District Chief Executive Mr Achulo, Deputy District Co-ordinating Director Mr Sandow Ali, District Programme Officer Mr Otu, Principal Inspector of Mines Mr Oppong, District Agricultural Director Mr Frans, Principal Technical Officer Peter Yeboah (Tarkwa Office) , Ama Aikens (Regional Valuer), Mr Sissi-Bynie (National Valuer), Mr Nuotuo (General Secretary) – all telephonic
<b>Farmers / Teberebie community leaders</b>	
Assemblyman Secretary to Assemblyman Unit Committee Chairman Kontihene Safohene Tumfohene Concerned Citizens Organising Secretary Farmers Association Chairman Unit Committee member Affected farmers and interested community members (> 100 households)	Ernest Amoateng Stephen B. Anyam James Amuaful Nana Kwabena Pan Nicholas Nkrumah Nana Koicrah John Nkrumah John K Kwesie Martin Gyimah James Cobbinah,
<b>NGOs</b>	
CARE	E.A. Fletcher, Project Manager Lillian Arthur Eden Ametewe
Kristo Asafo (Christ Reformed Church)  FACT PCI (Project Concern International) WACAM (Wassa Association of Communities Affected by Mining)  Mining GAG  Gold Fields Ghana Abosso Goldfields	Festus Owusu-Badu, General Secretary Robert Kojo Intseful, Deputy General Secretary, Southern Sector Yaw Aboagye, Executive Director Maud Ojori-Myang, IEC Technical Assistant Daniel Owusu-Koranteng, Executive Director Hannah Owusu-Koranteng, Director Training & Research Peter Yeboah, Director of Programme Kwesi Aduakwah  David Renner, Managing Director Joe Nkrumah-Boateng, Executive Technical Advisor to the MD Dr William Ahoror, Environmental Superintendent Mr William Addo, Environmental Officer Stephen Yirekyi, Manager Community Affairs, Tarkwa Mine Mark Thorpe, Environmental Department

#### 7.4 Key issues raised to date by interested and affected parties

Key issues raised by interested and affected parties are presented in **Table 19** (these have been derived from a set of minutes presented in **Appendix 4**).

**Table 19:** Comments and issues raised during the disclosure and consultation process

ISSUE	RESPONSE	ADDITIONAL NOTES / COMMENTS
<b>Compensation modalities – summary of comments made by district officials</b>		
<p>The district administration is not in favour of cash compensation where original inhabitants of the area are concerned. This is because historical cases of resettlement have shown that people tend to take their cash and simply move into other local settlements, putting increased pressure on these facilities. There is also the issue of what people do with cash compensation: most are farmers, and end up squandering compensation without establishing alternative forms of livelihood. In some cases, people have tended to take the cash, spend it, and then return to the company to complain that it was not enough and that they have lost their basis of livelihood. This problem then generates a range of new issues, all related to original dissatisfaction with what had been accepted in lieu of lost land and crops. There have been cases of people running away with the money, rather than splitting it up fairly, and there has also been speculative farming and housing with a view to exploiting alienation for material gain.</p>	<p>None. Comment made by district official.</p>	<p>Where original inhabitants of the area are concerned, the administration prefers 'relocation', i.e. for new structures and land to be put in place by the mine involved, rather than cash.</p>
<p>The Land Valuation Board has resisted giving out new compensation rates to mining houses. This may be because the Land Valuation Board receives 10 % of the total value of crops evaluated; thus in the past, when friction arose over rates, many communities resisted the introduction of the Board as a mediator, knowing that they would get less (and lose 10 %). Rates are usually negotiated with groups of affected people. Some mines revise the rates annually, in consultation with Farmers Associations. To date this is a voluntary process, occurring in only a few locations.</p>	<p>None. Comment made by district official.</p>	<p>Although there are several mining houses operating in the area and compensating people for crop losses, there is no existing forum for negotiating and applying standardised compensation rates. This issue has arisen several times over the past decade, but all attempts to deal with it effectively have to date been resisted by one or more of the parties concerned.</p>
<b>Compensation modalities – summary of questions and comments raised/made by interested and affected parties (farmers, Teberebie community, and NGOs)</b>		
<p>Will land owners receive compensation?</p>	<p>All cropland will be enumerated and compensation will be paid to the owners. In addition, issues relating to replacement land will be discussed with land owners and/or the chief.</p>	

ISSUE	RESPONSE	ADDITIONAL NOTES / COMMENTS
	Anyone denied access to replacement land will be provided with alternative options.	
How will people be dealt with who were either not around when cropland surveys were conducted, or had their land covered in waste rock before enumeration occurred?	The only information relating to what was on the ground is that contained in the GAG enumeration surveys, which should have been comprehensive. It will be difficult to deal with outstanding claims, obviously, given the lack of information, although the issue will of course be followed up with the GAG enumeration team	According to the GAG enumeration teams, the process occasionally breaks down and a tract of land is covered before formal enumeration takes place. This is almost invariably the case where land is not recognisably farmed, yet the landowners claim that it has been. Commonly, oil palms or pineapple plants remain within secondary forest or thicket and are claimed as farm produce. Where land has been covered up before enumeration, the mine team consults with the affected farmer as to the crop type and area, and pays compensation accordingly. It is reported that such events are usually accompanied by loud protestations, making it implausible that some have lost land without raising the issue with GAG.
What will happen to those who were not landowners, but use the land (i.e. tenant farmers)?	The purpose of this study is to ascertain who exactly uses the affected land and how their livelihoods can be effectively restored. According to the IFC guidelines, this includes landowners and tenants, as well as others using the land.	
When Iduapriem Mine was established in 1991, alternative land was given to people displaced by the mine. If the mine occupies the waste rock dump land now, will it give alternative land? This will also contribute to the idea of finding alternative livelihood for affected farmers. Questions were also asked by NGOs about access and quality (of replacement land), referring to existing problems at Wangarakrom (whose access has previously been restricted by TGL operations).	One of the main tasks of this study is to determine whether such an option, i.e. provision of land-for-land, is a) fair, and b) feasible, or whether the current process should be left as is. GAG had been requested to investigate land-for-land options actively, and to involve farmers' association leaders in the process. Clearly, the ideal would be to find land a similar distance away from Teberobie, and possessing a similar quality (for farming purposes); however, until such time as potential land had been identified, issues such as access could obviously not be incorporated into planning. This does not imply that they will not be dealt with. Any option involving very long distances and any form of transport for people to reach their fields is unlikely to be adopted, given the need to develop sustainable solutions which will not compromise	

ISSUE	RESPONSE	ADDITIONAL NOTES / COMMENTS
	farmers once GAG closes down.	
Why are those who have already been compensated being asked to take part in the exercise?	The RAP intends to cover all affected farmers, whether compensated or not. The RAP will not discriminate between those already compensated and those awaiting compensation. However, the exercise will not be extended to land previously expropriated by the defunct Teberebie Gold Mine.	
Will landowners with land bordering on the waste rock dump also be compensated, as such land might be unsafe to use? What will be the distance from the edge of the dump area where it will be safe to work?	Mining laws are in place to ensure that safety issues are catered for. In this case, the boundary of the waste rock dump includes a 100 m safety buffer zone. Thus people at or outside of the stated boundary should be in no danger from falling rock and will be able to continue farming as before.	
In compensation negotiations, 'all mines' tend to exploit local people's lack of knowledge of their rights and negotiation powers, and tend to use minimum Land Valuation Board (LVB) rates as a basis for compensation. These rates are very low, and are not a true reflection of the value of crops lost. People's lack of financial awareness has been a problem as money was squandered. It will thus be necessary to provide some form of training as to how people should use compensation payments if money is to be paid out for lost farmland. Some people from Teberebie have complained about the very low rates applied during their compensation.	Firstly, the notion of mines sticking to LVB rates is perhaps a simplification of the issue at hand. As a point of fact the LVB does not give out its rates to mining companies or the Chamber of Mines. The team has tried on several occasions to access current LVB rates but had been told that these are not available. What in fact happens is that the mines negotiate with local people as to the value of local crops. Until recently, GAG had negotiated on a one-to-one basis with farmers at Teberebie, which from an independent point of view is not an optimal solution; however, Teberebie Farmers Association have recently insisted on collective bargaining, and a new rates schedule was developed in February 2003.	The fundamental problem with existing compensation regimes is that compensation is paid for crops but not for land, hence the money obtained is clearly not enough to sustain people's livelihoods for any length of time. This has been a matter of concern to the team, which is recommending land-for-land solutions whereby compensation for crops will still occur, but be accompanied by a search for new land as well as assistance in the clearing/preparation of new land. Cash for land solutions will be avoided if possible when dealing with local farmers, as lessons have to be learned from previous episodes where this solution has evidently failed.
The current situation regarding cash crop compensation is unfair, as these crops could remain productive for many years, yet people are only being compensated for one year. There are economic means of working out what the true value of such crops is, and these should be used to ensure fair compensation.	This issue will certainly be looked into during the study, as it had already come to the attention of the team and is a valid question which deserves a firm answer. The team's role is to ensure that people's livelihoods are restored after resettlement.	
<b>Compensation issues relating to historical resettlement in the area</b>		
The study is focussing on the new dump site: what about previous	Although it is understandable that people are concerned	There appears to be no socio-economic baseline to

ISSUE	RESPONSE	ADDITIONAL NOTES / COMMENTS
resettlement problems ? Many people were affected in the past – why aren't they being dealt with? For example, people from Teberebie were not allowed to use their previous land after resettlement.	about past episodes, it has been agreed that the team will not be able to deal with these. For one, there is no substantive information upon which to base any compensation or land claims. Secondly, there are a great many claims by many communities in this area, so that if we started such a process it could go on for years and never be resolved. Thirdly, Teberebie Goldfields Limited were responsible for Teberebie's previous relocation, but they no longer operate the mine: it would be unfair to expect one company (GAG) to compensate people for the historical practices of another. Fourthly, one must remember that GAG, along with other mining houses, is currently compensating people according to Ghanaian law: thus, the fact that they are reviewing their practices with a view to possibly making them more equitable should be encouraged. This exercise is aimed at establishing a transparent and comprehensive set of planning principles to safeguard people's livelihoods, and establishing a baseline to inform this process.	inform historical compensation issues, making retrospective compensation all but impossible. As a result, GAG and the IFC have agreed that the issue of historical resettlement is going to be dealt with via the mechanism of a Community Development Plan, which will be initiated within the next few months, and which will aim to promote sustainable development within mining affected communities on GAG's concession (including Teberebie).
<b>Health and safety concerns</b>		
The dump site is near Teberebie settlement, thus when dumping occurs overnight one wakes up to find dust in one's room. What will be done about this during this planning process?	Although this is clearly an important issue and one which has been taken up with the EPA and others, it is not related to resettlement and as such will not be dealt with by this team (which has neither the scope nor the expertise to investigate such an issue appropriately). With limited time and an enormously complex task to deal with, and if we get side-tracked by the many points of conflict locally we are unlikely to achieve our objective, which is to assist those affected households to restore their livelihoods post-displacement.	GAG is in fact actively looking into whether the dump size and shape might be modified in any way to reduce its extent or at least its protrusion out towards Teberebie Village. This would limit the number and area of farms affected, as well as making life for Teberebie residents less problematic. This may of course not be possible, but the possibility will be investigated as it is directly related to the displacement under consideration. GAG has also committed to monitor noise and dust in their Environmental Action Plan and the IFC receives Annual Monitoring Reports including that information
What provision is being made for farmers whose sources of water will be polluted by the waste rock dump.	The resettlement planning exercise will look into such issues with a view to determining what action to take.	Local water sources appear to have been 'polluted' since the advent of surface mining in the area in the

ISSUE	RESPONSE	ADDITIONAL NOTES / COMMENTS
		early 1990s, and local people have for some considerable time relied upon water sourced in Teberbie rather than in local streams.
<b>Access</b>		
Apart from denying the affected farmers a source of livelihood, the waste rock dump will likely block access to farms which are not going to be affected by the dump. Can GAG create an alternative footpath to make life easier for affected farmers ?	A new footpath has already been cut at the base of the proposed waste rock dump boundary by the Environmental Department.	Community members were subsequently invited to walk the new path with GAG staff and comment on its usefulness.
What will happen if somebody's land are flooded by a stream which has been blocked by the waste rock dump?	Given the large size of the dump and the long timeframe involved, it is impossible to predict whether such an event might take place or not. Clearly, if this were to occur and someone was to lose access to their land as a result, GAG would be obliged to pay them full compensation for their losses, according to mutually agreed processes.	
<b>Other concerns raised by affected farmers</b>		
Community leaders appealed to GAG to offer their youth employment in the company. The community leaders also requested logistical support from GAG to enable the community clinic to start operation. They also further appealed to GAG to re-shape their road which is in a deplorable state.	These requests would be relayed to GAG. It was suggested that the Teberbie community form a Community Based Organisation (CBO) that will be a mouthpiece for issues bordering on mine land/activities. This would create effective communication links between the community and the mining companies.	GAG's community liaison officer noted that the company had recognised the importance of such organisations; consequently, efforts are being made to assist the community to form such an organisation.
<b>Additional concerns raised by NGOs</b>		
What will be the role of NGOs in this process?	NGOs are seen as an entry point into the affected community, working close to the people and well acquainted with their livelihoods and problems. As such, it is recognised that NGOs often represent local people's views in various forums, and voice their concerns, hence the team would like to hear those concerns. Also, as the team will be working in a local community, we will require assistance in organising the relevant people so that we can reach them (for meetings etc). Finally, once the RAP is drawn up and discussed, there may be a role for local NGOs to play in the implementation	

ISSUE	RESPONSE	ADDITIONAL NOTES / COMMENTS
NGOs do not all have the resettlement team's Terms of Reference (TOR), without which it is difficult to comment on the team's work. Copies requested.	process. Suggest that the TOR which the WACAM team has received be photocopied immediately and provided to the other NGOs present (subsequently done).	
There is a concern over the short timeframe for resettlement planning, given the complex issues involved and the fact that community concerns often take some time to be expressed and understood.	This is a valid point. The process of waste rock dumping is ongoing and planning has started very late, hence there is an urgent need to get plans in place. Over the course of the past weeks – involving a series of community, farmer and focus group meetings – it seems that the same key issues have been raised repeatedly and discussed with the team from various angles. At the final meeting held, a preliminary consensus seems to have been reached that plans were in place to address the farmers' key resettlement related grievances. Also, the process is far from over, with more than a month remaining of planning to come. Hence additional issues and concerns will almost certainly arise and be dealt with as planning progresses.	
Little attention is often paid to the cultural dimensions of land, water and other resources. These might have a bearing on how people's lives were affected by resettlement. How would this be dealt with? (no specific issues were mentioned)	The team's Ghanaian sociologist, having spent a considerable amount of time with the affected farmers both in this study and in previous mining-related studies in the area, is being relied upon to highlight such issues where relevant.	
Post-closure land use in GAGs mining lease area is an important issue. How will GAG rehabilitate the waste rock dump and other areas for use after mining activities have been completed?	Although this issue is clearly an important one, it does not fall within the team's brief and will not be addressed in detail in the report. The need for the mine to make as much land available for local farmers as possible will however be highlighted, as it had already been in several key reports in the past.	The issue of post-closure land use in GAG's mining lease areas is to be dealt in some detail in the forthcoming Community Development Plan. The terms of reference for this plan – available from the IFC – include the assessment of impacts associated with closure, the production of a land use zoning plan, and issues concerning re-use of rehabilitated areas. As part of the IFC's requirements, a draft Mine Closure Plan has been completed by GAG. Ashanti Corporate is to decide with the EPA how much the Fund for all their operations should be.

## 8 RESETTLEMENT ISSUES

### 8.1 Introduction

A series of land tenure and compensation related problem areas have already been described in **Section 4.6**, whilst others raised during consultation have been listed above in **Section 7**. This section contains a brief description of several additional overarching concerns arising out of the resettlement planning process to date.

### 8.2 Historical resettlement issues

- As described in **Section 2**, historical resettlement activities have had a major impact on local communities and individual farmers, creating a considerable number of problems which many local people perceive to be unresolved. This is no more evident than in the case of Teberebie Village, which is home to the majority of people affected by the waste rock dump. Although it has been made clear that the current planning exercise will not attempt to redress past compensation arrangements, it is anticipated that such issues will colour and complicate the planning process, as well as local peoples' view of it.
- From a practical perspective, the issue of historical resettlement activities in the immediately affected area may create problems relating to the availability of replacement land for affected households. There can be no doubt that mining activities conducted by GAG and (previously) by TGL have alienated large numbers of local farmers from their traditional land. Due to a lack of social assessment in the past, the fate of these farmers is unknown, and their strategies for dealing with these losses remain unrecorded. What is clear however is that pressure on remaining arable land in the vicinity has increased substantially over the past decade, a factor which could have a bearing on the final compensation / livelihood restoration strategies.

### 8.3 Lack of organisational capacity amongst affected households

- Disorganised communities and populations generally experience difficulty in any bargaining process and commonly receive less than they could have negotiated via a well-organised organisational structure with a cohesive standpoint. The present lack of organisational capacity amongst both affected farmers and within the Teberebie community could cause legitimacy problems with regard to any decisions reached in resettlement planning discussions. This issue is further complicated by the fact that the affected households are not all members of one cohesive community, and in fact live in several locations other than Teberebie.
- Experience elsewhere in the area associated with resettlement planning has shown that many communities have reservations about the finality of decisions taken by community leaders speaking on their behalf.

- Insofar as there is often little transparency and no widespread consultation, many decisions are held in doubt. This issue is complicated further by the degree of flexibility and the potential for renegotiation of agreements built into customary negotiation practices in Ghana, which conflict with those of multinational companies.
- Comparison of Teberebie Village's 1989 relocation agreement and subsequent complaints raised by community and advocacy groups is instructive in this regard. The fact that the relocation agreement makes no mention of the provision of electricity or a clinic in the new village, and does make mention of agreement on all village plans (which included communal toilets and kitchen facilities) has not stopped residents and advocacy groups from complaining bitterly that TGL has reneged on the agreement in these respects. The lesson to be learned is not that local people are duplicitous, but rather that the contents of any agreement were almost certainly not revealed to the broader population, for reasons of political expediency. Additionally, as mining companies are often expected to fill the vacuum in areas with poor Government capacity, lack of formal planning can lead to raised expectations and severe disappointment when those expectations are not met.

#### **8.4 Lack of adequate negotiation skills amongst affected leadership structures**

- Leaders of Teberebie Village and the Teberebie Farmers Association, whilst adept at dealing with problems on a community level, are relatively poorly educated and unaccustomed to negotiating with a powerful multinational company such as GAG. Consequently they lack a vision and knowledge of what is possible and what issues to negotiate for the long-term development of affected people.
- There is little support available to mine-affected populations to assist in negotiations with mining houses such as GAG. Disputes are sometimes referred to district level authorities, although the neutrality of government agencies appears to be regarded as suspect by local communities, who see the government as a net benefactor of mine activities.

#### **8.5 Historical lack of adequate community relations capacity**

- For various reasons, GAG has had no dedicated community relations officer for some years. In a situation where mining activities have impacted substantially upon local livelihoods, this has led to a current day context of polarised relations between the mine on one hand and local communities and advocacy groups on the other. In such an environment, GAG has tended to deal only with what it regards as being the most

pressing and legitimate demands of local communities, whilst communities have turned to outsiders for assistance.

- GAG has recognised that this area requires and has in fact recently appointed a Senior Community Liaison Officer, who formed part of the resettlement planning team to good effect. For reasons beyond the control of the mine, this staff member has subsequently left the company (to study overseas). A new Senior Community Liaison Officer has been appointed (Mr Martin Dadzie).

## **8.6 Equity, Ghanaian law and historical resettlement practice**

- This resettlement planning exercise has been conducted using the IFC's resettlement planning policy as a guideline, in order to ensure equity amongst affected parties. However, historical resettlement episodes have not been conducted using these policy guidelines, having been undertaken according to the provisions of Ghanaian laws alone.
- The upshot of this situation is that a) people who have been disadvantaged in the past by resettlement exercises want to know why only the 'newly affected' population should benefit from equitable treatment; and b) a precedent is being set which is contrary to the way in which compensation is being dealt with by most government agencies and mining houses in Ghana. This may lead to some considerable indignation amongst a wide range of people, including staff members of the mining houses themselves, who have lost land elsewhere in Ghana through government schemes without being adequately compensated. The response is not an objection to the fair treatment of affected households, but rather one of 'why these households, and nobody else in Ghana?'.

## **8.7 Economic development**

- As mentioned in **Section 4.6.1**, 3 % of GAG's revenue accrues to the Government of Ghana. Most of this contribution goes into the Government's Consolidated Fund, whilst 10 % goes to the Minerals Commission and 10 % goes to the Administrator of Stool Land. Of this last 10 %, 10 % is in turn retained by the Administrator, 55 % accrues to the District Assembly, 20 % to the Traditional Council and 25 % to the Stool. As most of this money accrues to central government agencies, and because local agencies are under-resourced, little attention – i.e. in the form of improved healthcare, education and infrastructure - seems to have been paid to the economic development of local communities in the Tarkwa area in relation to the potentially significant opportunities presented by mining operations. Auty (1998), notes that in such situations, more transparency in mineral rent flows, mineral rent allocation and the effectiveness of mineral

rent deployment is required in order to improve community relations. Both GAG and NGOs such as WACAM have a role to play in pressuring Government to increase the transparency of these flows, particularly to the Western Region. (The Chamber of Mines in Accra has been discussing the subject of revenue management with the Government recently.)

- As a result of the existing lack of State support for local development, the compensation strategies and meaningful resettlement options available to the planning team have been somewhat limited. Economic linkages and support structures appear to currently be weakly developed and under-funded.
- It is hoped that the forthcoming Community Development Plan to be commissioned by GAG will enable the broader planning process to occur and promote local capacity building. If this can be achieved, then the potential exists for the successful initiation of alternative livelihood projects before the window of opportunity presented by mining ceases to exist.

#### **8.8 Speculative development**

- Because enumeration often occurs months or years after a mining house informs users of an affected area of its intent to develop the area, a dynamic is often established whereby certain local people hastily erect and/or inhabit structures which they can then claim compensation for.
- Mining companies in the study area have typically treated such developments as illegal, as per existing mining laws, and have refused to compensate the developers. The prevailing view amongst many affected parties is that the mines are legally (if not morally) obliged to allow people to develop their own land freely until these are enumerated and properly compensated. Because this view is ill-informed in terms of mining legislation, the implications of which are known to very few ordinary people, virtually all speculative development court cases have historically been won by the mining houses concerned.
- This issue has led to fairly extensive social conflict within the Tarkwa area as a result of the demolition of structures by District authorities. Bitter long term animosities have arisen between some households and the respective mines as a result. This appears to be a clear and present danger at Teberobie, where new structures have been erected both at the Kristo Asafo farm and adjacent to the affected farming hamlet. In addition, many instances of speculative farming have been recorded once it became widely known that GAG would be compensating for land within the entire waste rock dump area (observed by the Resettlement Consultant whilst on site).

## 9 MITIGATION PLAN

### 9.1 Scope

The creation of Teberebie south east waste rock dump will displace 248 cultivated fields belonging to 173 households and one Christian NGO. In addition, one household will be physically displaced. International research has shown that the impacts of this type of displacement should be mitigated through the establishment of a time-bound and costed resettlement plan, in order to prevent socio-economic dislocation and associated impoverishment. The plan outlined below contains a set of principles and measures designed to ensure that the negative socio-economic impacts experienced by affected persons are minimised. This plan does not cater for households affected by historical resettlement episodes in the area.

### 9.2 Policy guidelines

In the absence of a detailed social protection policy governing the mitigation of involuntary resettlement in Ghana, policy guidelines have been derived from IFC Operational Policy 4.30 'Involuntary Resettlement'. The application of these guidelines has been shaped by the specific situation faced at the Iduapriem-Teberebie mining operation, i.e. where the predominant impact of mining will be the loss of arable land, as opposed to the physical displacement of households<sup>12</sup>, and where planning has been initiated part-way through dump development.

- Involuntary resettlement shall be avoided or minimised wherever feasible, by exploring all possible project designs. Where displacement is unavoidable, resettlement plans shall be developed.
- Farmers economically displaced by the mine shall have their livelihoods restored to pre-displacement levels. Where possible, compensation shall be in kind rather than in cash. The absence of legal title to land by such groups should not be a bar to compensation.
- Physically displaced households will be offered the option of either compensation or relocation. These persons will be financially assisted with the move. Displaced persons shall be resettled as close as is feasible to their original place of residence and under the same customary leadership structure as before displacement, should they not opt for cash compensation.

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<sup>12</sup> The full set of guidelines has been designed to cover the eight main impoverishment risks associated with involuntary resettlement activities in developing countries, i.e. joblessness, homelessness, marginalisation, increased morbidity / mortality, social disarticulation, loss of access to common property resources, food insecurity and landlessness (Cernea, 1997). In the Teberebie situation, where the nature of the displacement is primarily economic, mitigation measures are required to focus primarily on the last three of these risks, i.e. possible loss of access to common property resources, food insecurity and landlessness.

- Community participation in planning and implementing resettlement will be encouraged. Appropriate patterns of social organisation shall be established, where feasible, and existing social and cultural institutions of re-settlers shall be supported and used to the greatest extent possible. Particular attention shall be paid to the needs of the most vulnerable groups affected.

### **9.3 Organisational responsibilities and functions (formation of a Resettlement Committee)**

- GAG will be responsible for ensuring that the measures contained in this report are carried out, both financially and organisationally. Given the fact that many important tasks need to be achieved in order to implement the mitigation measures contained in this plan, a Resettlement Committee has been established, with the following members:
  - A member of the District Assembly (Mr Achulo, Deputy District Co-ordinating Director) - Chairperson
  - The elected Assemblyman for the Teberebie area
  - Two representatives of the Teberebie Farmers Association
  - A representative of the NGO Kristo Asafo<sup>13</sup>
  - A representative of the local traditional leadership
  - A representative of GAG management
  - GAG's Senior Community Relations Officer - Secretary
- Where necessary, additional persons will be co-opted into joining Resettlement Committee meetings (e.g. GAG's Environmental Officer responsible for enumerating crops, and the District Agricultural Director).
- This Committee will be jointly responsible for overseeing the implementation of key mitigation measures outlined in this RAP report. Issues requiring special attention were highlighted to Committee members by the Resettlement Consultant at the first Resettlement Committee meeting on Thursday April 17<sup>th</sup>, 2003.
- The frequency of Resettlement Committee meetings will be determined by the committee, but will occur at least monthly during implementation. Minutes from such meetings will be kept by GAG's Senior Community Relations Officer (who will act as Secretary) and will be distributed to Committee members. The IFC-appointed Social Development Consultant will also receive copies of the minutes of the Resettlement Committee meetings in order to monitor progress and to be aware of any issues which may be raised at such meetings and require guidance.

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<sup>13</sup> Not present at the opening meeting on April 17<sup>th</sup>, due to a delay in initiating discussions with Kristo Asafo.

- The Senior Community Relations Officer will provide a crucial link between GAG and the affected population.
- At the level of affected households, it is envisaged that the newly formed Teberebie Community Consultative Committee will be the primary vehicle for implementing key resettlement-related tasks spelled out in the RAP report and agreed to by the Resettlement Committee.

#### **9.4 Measures taken to avoid displacement**

As described already, the independent resettlement planning process began some time after the initiation of waste dump planning and in fact after dumping had begun. However, according to information provided to the team by GAG, mine engineers reacting to concerns voiced by affected farmers in early 2001 investigated alternative waste rock dumping sites at that time. This investigation reportedly found that the additional cost of relocating the dump to the nearest alternative site was prohibitively high, in addition to which some valuable ore would have been lost due to the construction of a haul road: a combination which was deemed to threaten mine life. Furthermore, it was found that the dumping at the most feasible alternative site would have in fact alienated even more arable land utilised by local farmers than will be the case for the Teberebie south east waste rock dump. As a result, displacement of farmers will be necessary in order for the mine to continue its operations. As it is in GAG's economic interest to avoid further disruption to farmers, dump design will be carefully reviewed to determine whether the current extent of physical and economic displacement could in fact be minimised. Where displacement cannot be avoided, mitigation measures as set out below will apply.

#### **9.5 Measures to mitigate the impact of economic displacement**

##### **9.5.1 Introduction**

All parties affected by the Teberebie waste rock dump will experience some degree of economic displacement. Economic displacement in the Teberebie context may be defined as the loss of income streams or means of livelihood resulting from land acquisition by GAG.

##### **9.5.2 Eligibility for compensation**

All farmers and households currently utilising or living within the affected area will be entitled to the compensation measures outlined below (a complete list of affected farmers is included in **Appendix 8**). Although most of these parties do not have formal title to the affected land, they do have customary rights to use it, which entitles them to equitable treatment under IFC policy. In order to avoid social disruption and double compensation scenarios,

existing land tenure arrangements will be replicated (i.e. tenants will not be provided with their 'own' land, but will continue to cultivate land belonging to their landlords). An eligibility framework summarising compensation measures described below is provided as **Table 20**.

### **9.5.3 Compensation measures**

As the socio-economic household survey has established, affected farmers residing within and around Teberebie generally have land-based livelihoods. International research into the impacts of involuntary resettlement and IFC policy both emphasizes 'land-for-land' compensation options for displaced rural farmers. This strategy of direct asset replacement is designed to return displaced households to familiar and productive livelihoods with minimum disruption and with as few as possible potential pitfalls. It is this guiding principle that underpins the proposed compensation measures described below.

- **Loss of seasonal crops:** Standing crops in fields that have been or will be destroyed as a result of the creation of the Teberebie waste rock dump are being identified, measured and compensated for as part of GAG's enumeration process. This process involves four basic steps, namely the identification of affected farmers, enumeration of standing crops in the presence of these individuals, preparation of compensation schedules and the payment of compensation. An agreed schedule of compensation rates has been negotiated between the Teberebie Farmers Association and GAG, in accordance with Ghanaian law.
- Based upon the recommendations of the resettlement team, GAG has agreed to review its existing compensation procedure so as to minimise conflict with PAPs and protect GAG from spurious claims after the process has been completed. Firstly, additional measures will be instituted to inform stakeholders in advance that enumeration will be taking place. Secondly, a mechanism will be instituted to provide feedback to people regarding both the expected timeframe and the specific timing of payments. The resettlement planning team has also encouraged the mine to involve a third party (preferably a member of the district authority structure) to act as a witness and co-signatory to the enumeration and compensation schedule signing steps. GAG's new compensation procedure is contained in **Appendix 5**. Finally, a study has been undertaken to revise the compensation rates paid out to affected farmers, in order to ensure that these represent replacement costs (as required by IFC Operational Directive 4.30; refer to discussion below).
- **Loss of cash crops:** Compensation for oil palm, cocoa and coconut trees will be dealt with in a similar fashion to compensation for seasonal crops. Recognising that compensation agreements which have been made between GAG and the affected farmers over several years may not have incorporated the full costs of re-establishing these cash crops, GAG was requested to commission a study to revise their compensation

rates for key crops. As a result, replacement costs for key crops have been revised upwards (refer to **Appendix 6**). The assessment of crop replacement values was conducted by Jowusa Consultants of Kumasi, and is included as **Appendix 7**.

- Farmers will be given the choice of either accepting the full replacement costs and re-establishing their cash crops, or accepting a compensation rate which excludes crop establishment. In the latter case, GAG would be responsible for clearing the new replacement land and providing seedlings and other agricultural inputs required for each crop. GAG has also agreed to commission the District Agricultural Director or his representative to provide agricultural extension advice to the affected farmers. A list containing all affected farms within the waste rock dump footprint, associated household heads and compensation amounts paid out by GAG to date is included as **Appendix 8**.
- **Loss of arable land:** The fundamental principle with respect to the loss of arable land will be land-for-land replacement. The Resettlement Committee established in April 2003 has undertaken a systematic process of identifying replacement land for affected households, with the aim of identifying an equivalent area of arable land. At a meeting held on September 1<sup>st</sup>, 2003, the affected parties identified a suitable area of replacement land situated between Block 7 and Badukrom. It appears that this land could adequately absorb the number of farmers displaced from the Teberebie waste rock dump footprint. However, given that the replacement land identified by the affected parties is situated on the other side of GAG pits, **GAG has agreed to construct an access road to the replacement land from Teberebie village.**
- **Loss of improvements to land:** As indicated above, the new replacement costs to be paid out to affected farmers include the cost of the clearing of replacement lands. However, GAG has budgeted a limited sum for assistance in clearing activities, in order to expedite this process and ensure that cultivation can begin as soon as possible within the replacement land identified.

**Table 20:** Entitlement framework for Project Affected Parties (PAPs) at Teberebie waste rock dump site

Loss of cultivated land and improvements to land	Loss of seasonal crops (e.g. cassava)	Loss of long-term cash crops (e.g. cocoa)	Loss of structures	Disturbance (physically displaced households)	Other measures
<p>Land for land replacement. Adequate replacement land of a suitable quality has been identified by the affected parties.</p> <p>Ownership of replacement land, where relevant, will accrue to landlords (as before), but plots will be assigned to tenants</p>	Cash compensation at replacement rates (refer to <b>Appendix 6</b> )	<p>Cash compensation at replacement rates (incl. establishment costs)</p> <p>OR</p> <p>Cash compensation at a lower rate (excluding establishment costs) + bush clearing + inputs + seedlings</p>	<p>Option of EITHER compensation at replacement cost</p> <p>OR</p> <p>replacement with structures of similar or better quality at Teberebie / in the vicinity</p>	Lump sum cash payment (dislocation allowance) to cover transport and other 'hidden' costs of relocation	<ul style="list-style-type: none"> <li>- Establishment of a Resettlement Committee to promote equity in the implementation of RAP measures (established in April 2003).</li> <li>- Establishment of a formal GAG compensation procedure to improve community relations (completed)</li> <li>- CARE and GAG Community Relations Officer to develop the capacity of the Teberebie Community Consultative Forum, such that it can assist in implementation</li> <li>- Construction of a new road from Teberebie Village to replacement croplands identified</li> <li>- Establishment of a grievance procedure to allow for structured grievance redress</li> <li>- Provision of agricultural extension advice</li> <li>- External monitoring to ensure RAP compliance</li> <li>- Replacement of affected footpath</li> </ul>

### 9.6 Measures to mitigate the impact of physical displacement & affected public infrastructure

As described in **Section 5**, a household and a church group currently have buildings within the dump footprint and will thus eventually be physically displaced. In both cases some of these buildings are deemed to be original, i.e. having existed before GAG informed the affected parties of the need to resettle, whilst others are deemed to be new, i.e. having been built since that time, in the anticipation of compensation payments<sup>14</sup>. Compensation options and measures for these two categories of buildings will be as follows:

- *Original structures* with a similar or better area and quality will EITHER be replaced by GAG at Teberebie or on the replacement land identified, OR compensated for at full replacement cost, i.e. the cost of building new structures, including labour, contractors' fees and any additional transfer costs.
- Owners will be given the choice of these options.
- GAG will provide all parties who are physically displaced with a once-off dislocation allowance to cover the costs of transporting their household assets to their new homes and to compensate for the disturbance and other 'hidden' costs of relocating to a new environment. The sum involved will be established by the Resettlement Committee, in consultation with the affected parties.

The public footpath to be covered by the waste rock dump will be replaced by GAG. The process of cutting a new footpath and obtaining the opinion of affected farmer and community stakeholders as to its acceptability has already been initiated. It should be borne in mind that this path will not effectively be required for several years, i.e. until the dump face has progressed sufficiently to cover up the existing footpath.

### 9.7 Measures to build the capacity of local leadership structures

GAG has an existing Public Consultation and Disclosure Plan (PCDP) governing consultation and disclosure of information involving mine-affected communities. The PCDP, which has very recently been operationalised, outlines a basic community liaison structure aimed at improving mutual trust, co-operation and good neighbourliness between the mine and surrounding communities. This structure comprises two main elements, namely the establishment of consultative committees in each affected community and the establishment of working modalities for such committees. Now that there is a Teberebie Community Consultative Forum, it will be necessary to build the capacity of this body in order to successfully implement key mitigation measures.

- GAG will use its new Community Relations function, assisted by the NGO CARE, to build the organisational capacity of the Teberebie Community Consultative Forum. It is imperative that the farmers association is both representative of affected households, including vulnerable groups, and trusted enough to undertake key activities such as the sub-division of replacement land and (depending on farmers' choices) the distribution of seedlings and other inputs to affected farmers.

### **9.8 Establishment of a grievance procedure**

Grievance procedures are widely recognised as being a valuable tool for allowing Project affected persons to voice concerns and misgivings about the relocation process as they arise and, if necessary, for prompting timely corrective action. The establishment of such a procedure is regarded as being fundamental to achieving transparency in the relocation process and avoiding unnecessary and costly delays. The proposed grievance procedure for the resettlement of affected households at Teberebie is as follows:

- In the first instance, affected households will be requested to raise issues with one of the resident members of the Resettlement Committee. This committee member will then in turn bring the issue to the attention of GAG's Senior Community Relations Officer (CRO).
- The CRO will investigate the issue and discuss it with GAG management (as required) and/or with the Farmers Association leadership, providing a response within a reasonable timeframe (14 working days).
- Where this does not resolve the issue, it will be raised at the monthly Resettlement Committee meeting, with follow-up activities being apportioned to appropriate members of this committee.
- If there are any issues which cannot be agreed upon at the Resettlement Committee level, then the District Chief Executive (DCE) of Wassa West District Assembly will have the final say.
- Records of all serious disputes/grievances dealt with during the resettlement process will be kept on file by the Community Relations Officer. These records will be examined and summarised during resettlement monitoring and the summary included in the monitoring reports.

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<sup>14</sup> The team witnessed the construction of new buildings at both sites although affected parties are clearly aware of the impending dumping of waste rock.

### 9.9 Measures to halt settlement in affected areas

The process of resettlement planning has re-emphasised to local people living near the affected dump area that no further settlement should occur within its confines. Several measures have been taken to cap the number of beneficiaries affected and thus to prevent spurious claims within the affected area. These are as follows:

- When GAG surveyors first entered the affected area, farmers were informed of GAG's intent to use the affected land and all affected household buildings were demarcated using red paint. Subsequently, photographs of new structures erected were taken and forwarded to the District Assembly by GAG in protest at what was perceived to be speculative construction. This action is supported by IFC good practice guidelines on resettlement, which stipulate that the purpose of completing a census of an area and making it public is to identify legitimate affected parties and to counter spurious claims from those moving in to an area solely in anticipation of benefits.
- Since the start of the formal resettlement planning process, more information concerning the proposed waste rock dump and its impact has been provided to affected households. Local community leaders and Farmers Association members were also requested to assist the team in identifying households who have a legitimate claim to affected land.
- A footpath / boundary line has been cut along the edge of the final waste rock dump footprint, providing a clear visual indication of where exactly it is situated. This fact was highlighted during resettlement planning, and key farmers association members were taken along this boundary line on foot.
- Finally, the team requested GAG to complete the farm enumeration and compensation process throughout the dump area, such that a final list of affected fields and beneficiaries could be established. This list is contained in **Appendix 8**, and will provide a basis for assessing any future compensation claims.

### 9.10 Implementation schedule

An implementation schedule for resettlement is provided below as **Table 21**. This outlines key measures required, allocates the main responsibilities for the implementation of each and sets clear milestones for the completion of the main tasks. The clearing of new land has been scheduled to be completed in time for the first planting season of 2004, in order to harmonise resettlement implementation with the local agricultural cycle (refer to **Table 11**).

**Table 21:** Proposed implementation schedule for the Teberebie RAP

ACTIVITY (completed actions in <i>italics</i> )		2003			2004					RESPONSIBILITY	
		O	N	D	J	F	M	A	M		J
1.	<i>Compile a formal GAG compensation procedure.</i>										<i>Resettlement Consultant &amp; GAG Environmental Dept</i>
2.	<i>Complete the enumeration of all farmland &amp; structures within the affected area. Compile a final list of affected properties, households and structures. Disclose the Draft RAP to affected parties.</i>										<i>GAG Environmental Dept Resettlement Team</i>
3.	<i>Establish a Resettlement Committee &amp; appoint a Senior Community Relations Officer (CRO)</i>										<i>GAG Management</i>
4..	<i>Identify replacement arable land, in consultation with representatives of the affected households.</i>										<i>Resettlement Committee</i>
5.	Assist Teberebie Farmers Association to expand its membership & and to develop a higher level of organisational capacity				→						GAG CRO <sup>1</sup> & CARE
6.	Construct access road to replacement arable land	←				→					
7.	Sub-divide the replacement land amongst affected parties, based (approximately) on farm sizes lost within the original area, or a mutually agreeable alternative scheme					→					Teberebie Comm. Cons. Forum, GAG
8.	Bush clearing on replacement land, in order that cultivation can proceed.						→				GAG Environmental Department and/or affected farmers (depending on compensation choices)
9.	Procure seedlings and inputs (cash crops) and identify an appropriate agency for distributing these						→				GAG Environmental Department and/or affected farmers (depending on compensation choices)
10.	First planting on replacement land <sup>2</sup>							→			
11.	Establish an appropriate relocation allowance and pay compensation to the household requiring physical relocation.								→		GAG Environmental Department & Resettlement Committee
12.	Monitor RAP implementation process <sup>3</sup>									▲	RAP Steering Committee, Social Development Specialist (▲, additional visits planned)

1 CRO = Community Relations Officer; 2 It is unlikely that all farmers will cultivate the replacement land immediately, as many will still have viable land at the dump site. 3 Please refer to Section 9.12.

### 9.11 Main budgetary items

The main budgetary items required in order that this RAP be implemented are shown in **Table 22**.

**Table 22:** Key budgetary items associated with implementation of the Teberebie resettlement plan

Item	Number / Area	Amount in million cedis (US \$)
Replacement / compensation of buildings		15.3 m (1 800)
Relocation allowance (physically displaced household)	1 household	1.7 m (~ 200)
Compensation of crops		850 m (100 000)
Fees associated with procuring replacement land	Once-off	8.5 m (1 000)
Clearing of replacement land	Once-off	4.25 m (500)
Appointment of CARE to assist with capacity building	3-4 weeks	8.5 m (1 000)
Procurement and distribution of palm oil & cocoa inputs		4.25 m (500)
Commissioning of agricultural extension for farmers		8.5 m (1 000)
Cost of clearing a new access road to replacement land	Once-off	552.5 m (65 000)
Independent monitoring	3 visits	(operational cost)
Contingencies & Alternative livelihood Project		21.25 m (2 500)
<b>Total</b>		<b>1,475 m cedis (US\$173 500)</b>

### 9.12 Monitoring and evaluation

Performance monitoring will be conducted by GAG internally, whereby progress against milestones established in this RAP is measured and reported on. In addition, independent monitoring visits will be conducted in order to ensure that all mitigation actions contained in the final RAP document are completed in a satisfactory and timely fashion. This will be conducted by a social development specialist appointed by GAG in consultation with the IFC.

A primary objective of this exercise will be to ensure that project affected households receive the compensation and assistance to which they are entitled, and that all measures designed to restore their livelihoods to pre-displacement levels are taken. It will also be important to highlight any substantial disputes concerning resettlement implementation, and to assist GAG to deal with such matters in an appropriate manner. The consultant will be required to provide an overall assessment of the efficacy of the measures implemented by GAG to meet the objectives set out in the RAP.

Specific indicators will also be assessed, including *inter alia* the average landholding per affected household (i.e. versus original landholding sizes), the proportion of households who have successfully re-established cash crops on new land, the land tenure status of affected households post-resettlement, the extent and impact of agricultural extension advice provided to affected households, the income and welfare status of vulnerable

persons identified in **Appendix 3**, the use of compensation monies generated as a result of resettlement, and the regularity of Resettlement Committee meetings held. Monitoring reports will be sent to the IFC's offices in Washington D.C. for review, and will be made available to other interested and affected parties (on request). Monitoring visits will be undertaken in April 2004, September 2004 and April 2006, with the final visit comprising a closure audit.

### **9.13 Ongoing disclosure and consultation**

- As described in **Section 3.6**, disclosure of this RAP report constitutes the fourth and final phase of resettlement planning. The RAP has been finalised and submitted to the IFC in Washington D.C., and is to be disclosed to representatives of interested and affected parties.
- The consultation process begun during resettlement planning will be continued by GAG during implementation of the RAP via the Resettlement Committee, the Teberebie Community Consultative Forum and the involvement of the Senior Community Relations Officer (CRO). The CRO will meet regularly with representatives of the affected households. Consultation with the affected households and their representatives will also form an important component of resettlement monitoring.

### **9.14 Note concerning broader social developmental initiatives**

- Where significant numbers of people face physical displacement, a range of broader development measures (i.e. over and above restoring lost livelihoods) may be put in place to assist project affected persons to re-establish a new life. As the Teberebie resettlement exercise involves almost solely economic displacement, involving little or no social dislocation, broader social development initiatives are not envisaged as part of the main compensation process. Instead, the focus of mitigation measures will be mainly on replacing lost resources and assisting households to re-establish their livelihoods.
- Once the challenge of livelihood restoration has been met, affected households are likely to be in a better position to take advantage of more risky opportunities such as non-farm income-generating schemes. It is envisaged that these opportunities will be provided to Teberebie residents through the development of GAG's Community Development Plan. However, an amount has been provided for in the RAP budget for alternative income generating activities, based on discussions between GAG and the affected farmers. It is envisaged that this would provide for training and support for several small pilot projects, for those who may decide not to cultivate land in the replacement block.

### **9.15 Further Compensation and Resettlement**

GAG will use this framework as a baseline for any future compensation and resettlement. GAG will notify the IFC in advance of any planning for further compensation or resettlement (at least 12-18 months prior), well before the construction work is to begin, in order to complete the resettlement planning process and consultation with affected people in a timely and ordered fashion on future phases.

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## BIBLIOGRAPHY

- Akabzaa, T. & Darimani, A. (2001): *Impact of mining sector investment in Ghana: A study of the Tarkwa mining region*, SAPRI
- Aubynn, A.K. (1997): 'Land based resource alienation and local responses under structural adjustment – Reflections from Western Ghana', *Scholarly Papers Series 2*, Institute of Development Studies, Helsinki
- Auty, R.M. (1998): 'Social sustainability in mineral-driven development', *Journal of International Development*, Volume 10, pp. 487-500
- Cernea, M. (1997): 'The risks and reconstruction model for resettling displaced populations', *World Development*, Vol. 25, No. 10, pp. 1569-1587
- Minerals Commission & EPC (1994): *Ghana's Mining and Environmental Guidelines*, Minerals Commission & Environmental Protection Council, Floent, Accra, Ghana
- Government of Ghana (1986): *Minerals and Mining Law (PNDC L 153 of 1986)*
- IDS (2002). 'Workshop: Land rights and legal institutions in Ghana', held at the Wood Industries Training Centre, Akyawkrom-Ejisu, Thursday 28<sup>th</sup> February 2002, *Introduction to the research project (Crook)*, available online at [www.ids.ac.uk/ids/govern/pdfs/purposeghana.pdf](http://www.ids.ac.uk/ids/govern/pdfs/purposeghana.pdf)
- IFC (2002): *Handbook for preparing a Resettlement Action Plan*, IFC Environment & Social Development Department, Washington
- Kasanga (2000): *Critical perspectives – Land policy and national development in Ghana*, Centre for Democracy and Development in Ghana, Accra, Ghana
- Kuntu-Mensah, P. (1997). *Land tenure and title registration in Ghana*, University of Maine, online publication: [www.spatial.maine.edu/~onsrud/Landtenure/CountryReport/Ghana.html](http://www.spatial.maine.edu/~onsrud/Landtenure/CountryReport/Ghana.html)
- Mcfarlane, M. (1999). *An evaluation of social impact assessment methodologies in the mining industry*, Unpublished PhD thesis, University of Bath, UK

SGS Environment (2002): Ghanaian Australian Goldfields Iduapriem & Teberebie operations – 2002 Socio-economic assessment, Final Report, SGS, June 2002

URS Australia (2002): Environmental audit of Iduapriem-Teberebie Gold Mine Operations, Final Report, URS, Brisbane, Australia

Wassa West District Assembly (2002): *Medium term development plan: 2002 – 2004*, WWDA, Tarkwa, December 2002

World Bank (2003): *Ghana land administration project – Project description and rationale*, available from the World Bank Infoshop since February 6<sup>th</sup>, 2003, available at the following web address: [www.worldbank.org/pics/pid/p071157.txt](http://www.worldbank.org/pics/pid/p071157.txt)

## PHOTOGRAPHIC PLATES