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Gold Rush in Ghana.

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My thanks go to the Teberebie community.

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1 Abbreviations and Acronyms

AGA	AngloGold Ashanti
AGC	Ashanti Goldfields Company
ALP	Alternative Livelihood Project
CEPIL	Centre for Public Interest Litigation
CFA	Concerned Farmers Association
CHRAJ	Commission on Human Rights and Administrative Justice
CSO	Civil Society Organisation
DFDR	Development-Forced Displacement and Resettlement
DIDR	Development-Induced Displacement and Resettlement
ECM	Extended-Case Method
EIR	Extractive Industries Review
EPA	Environmental Protection Agency
FA	Farmers Association
FDI	Foreign Direct Investment
FIAN	FoodFirst Information- & Action- Network
GAG	Ghanaian Australian Goldfields Limited
GDP	Gross Domestic Product
GHS	Ghanaian cedi (Currency from 2007 onwards)
HDI	Human Development Index
IFC	International Finance Corporation
IFI	International Financial Institution
IRR	Impoverishment Risks and Reconstruction
IRS	Internal Revenue Service
LAP	Land Administration Project
MIDR	Mining-Induced Displacement and Resettlement
NGO	Non Governmental Organisation
NPP	New Patriotic Party
OASL	Office of the Administrator of Stool Lands
OICI	Opportunities Industrialization Center International

RAP	Resettlement Action Plan
SGMC	State Gold Mining Corporation
STD	Sexually Transmitted Disease
UN	United Nations
WACAM	An Association of Communities Affected by Mining (formerly: Wassa Association of Communities Affected by Mining)
WBG	World Bank Group
WHO	World Health Organisation

2 Introduction

Worldwide perhaps no other industry has caused more land use disputes than mining. The land demands made by large-scale mining companies cause growing scarcity of land, particularly in developing countries. Mines are mostly situated in rural areas, in locations that were previously forest or agricultural land used for subsistence purposes. The industry's interest is how to gain access to the minerals beneath the soil. Ghana's mining industry occupies 31,237 km² of land, representing about 13.1% of Ghana's total land area of 238,608km² (The Ghana Chamber of Mines 2008: 24).

Mining projects ought to aim at economic growth and improvement of general welfare. But too often poorly planned projects leave local people permanently displaced and disempowered. Development-Forced Displacement and Resettlement (DFDR)¹ expresses the tension between local and national development needs. The costs borne by the displaced people are measured against the benefits for the entire society (Oliver-Smith 2009: 4). Mining projects justify themselves by the belief of the greater good. For the communities, living on top of land holding ores that are attractive for commercial exploitation, a 'gold curse' begins.

The country is the second largest gold producer on the African continent and ranks around tenth worldwide (Akabzaa 2009). My particular interest lies with the Teberebie community in the Wassa West District in Ghana. For many years tension in the district is high due to the competition on land between mining activities and local agricultural communities. Just between 1990 and 1998 mining investment in the district led to the displacement of a total of 14 communities with a population of over 30,000 people. Teberebie was one of the displaced communities (Britwum, Jonah and Tay 2001: 37).

The Teberebie community won notoriety and is a symptomatic case for Mining-Induced Displacement and Resettlement (MIDR)². Jean Ziegler, former Special Rapporteur on the Right to Food, also took up the case of the Teberebie community in a report presented to

¹ For details on DFDR see 5.1.1.

² For details on MIDR see 5.4.2

the Human Rights Council on February 29th 2008. It states that the people of Teberebie *“have had limited access to their farms which they have cultivated for many generations and to their only source of income and means to procure sufficient and adequate food as a result of the location of a number of waste rock dumps in the area.”* (U.N. Human Rights Council 2008: 40) Ziegler further stresses that: *“waste rock dumps of this particular mine, which have grown steadily in size and height, have been taking over land previously used for farming including traditional and subsistence agriculture. It was alleged that for most villagers access to their farm land has become difficult since almost all the routes to their farms have been blocked by tons of waste rock dumped in the area.”* (U.N. Human Rights Council 2008: 40)

The community of Teberebie is a prime example for competition on land between large-scale mining companies and subsistence agriculture purposes. In 1990/91 the community was resettled by the mining company Teberebie Goldfields Limited (TGL) to its present location. The community is still affected by the major disruptions caused by this initial MIDR. Additionally they are now affected by economic displacement caused by the waste rock dump.

Risks that are often overlooked by mining companies, governments or international agencies and organizations are the social and also cultural risks of mining activities to local communities. Displacement and resettlement causes severe societal disruption and is a major threat to a community's sustainability. This thesis takes a special socio-anthropological focus.

During my work for the international human rights organization FIAN (FoodFirst Information- & ActionNetwork) I first came in touch with the impacts of large-scale gold mining in Ghana. My interest intensified as I got to know the Ghanaian activist Mike Anane in October 2008. He is an advocate for communities affected by mining for years. He helped me establish knowledge and supported me with contacts in this field. Mr. Anane and other local activists and advocates made it clear that there is still lack of in depth studies of mining related impacts to local communities. Also Hilson (2004: 72) points out: *“More research is needed to help evaluate the impact that mining has had on Ghana's indigenous communities.”*

2.1 Definition of the Research Problem

This thesis deals with the societal disruption and impacts on sustainability caused by large-scale gold mining in the Wassa West District of Ghana. The particular focus lies on the Teberebie community on the Iduapriem mining concession that has been physically displaced and resettled to its present location in 1990/91. Starting in 2001 the community was confronted with a second wave of displacement. Economic displacement started to kick back in when a waste rock dump was constructed on community farmland.

Displacements are not only the physical geographic removal, but also the imposed loss of assets and income. Due to these two waves of displacement and the still growing scarcity of land the community faces a set of economic, social and cultural impacts.

My impact analysis was guided by the Impoverishment Risks and Reconstruction Model (IRR)³ by Michael M. Cernea and the concept of Mining-Induced Displacement and Resettlement (MIDR) by Theodore E. Downing. The IRR model works with eight basic risks communities may face before, while and after they have been displaced and resettled. The MIDR-model rests upon this model and is further specialized in potential risks due to mining activities in particular.

The main research questions are: How is the physical and economic displacement caused by the Iduapriem gold mine affecting the community of Teberebie? In particular, in what way do the following potential development-forced displacement and resettlement risks prove to have an impact on the Teberebie community?

- a) Landlessness
- b) Joblessness
- c) Homelessness
- d) Marginalization
- e) Disruption of formal educational activities
- f) Food insecurity
- g) Increased morbidity
- h) Loss of access to common property resources and services

³ For details on the IRR-model see 5.4.1.

i) Social disarticulation⁴

The hypothesis guiding the research was that the dislocation related to the mining activities has its impact on all eight risks, although in different intensities. Some negative impacts have already been partly documented by other researchers, for example the problems of landlessness, joblessness and food insecurity Teberebie faces in connection with the Iduapriem mine. Other risks, like marginalization or societal disarticulation have hardly been investigated at all. It is expected that also these rather social risks are negatively influenced by the dislocation caused by the gold mining activities.

2.2 Structure of the Thesis

The following thesis starts off with chapter 3. *Gold Mining in Ghana* by giving an overview of the Ghanaian history in gold mining, from its beginnings with artisanal mining long before the first European encounter, the influence of structural adjustments to the minerals and mining policy in the 1980s, up to the present structure of the Ghanaian gold mining sector. It gives insight in the recent minerals policy framework and discusses the contribution of the mining sector to national development and poverty reduction.

Chapter 4: *Ghanaian Land Tenure* briefly introduces the dual Ghanaian land tenure system.

In chapter 5: *Anthropology and Displacement and Resettlement Research* focuses on the contribution of Anthropology to displacement and resettlement research and discusses the Impoverishment Risks and Reconstruction (IRR) Model by Michael M. Cernea in connection with the Mining Induced Displacement and Resettlement (MIDR) Model by Theodore E. Downing.

Chapter 6: *Research Design and Methodology* describes the underlying approach and methodology of the research and discusses the process of field work in Ghana.

⁴ These risks are described in 5.5.3.

In chapter 7: *The Study Area: Wassa West District* the focus is on the larger research area as well as specifically on the history of the Iduapriem mine and the displacement processes of the Teberebie community.

Chapter 8: *Risk Impact Analysis of the Gold Rush in Teberebie* discusses the impact of all eight displacement and resettlement risks on basis of the results of the field research in Ghana.

Chapter 9: *Conclusio and Ways Forward* sums up the research findings, puts them into a larger context and tries to formulate suggestions for the prevention of negative impacts on mining communities and ways to support their empowerment instead.

3 Gold Mining in Ghana

The mining of gold is deeply rooted in Ghanaian history. The following pages give an overview of the historic development of the gold mining sector in Ghana from the early days of artisanal mining in the 5th and 6th centuries B.C. until large scale open-pit mining in recent times.

3.1 First Traces of Gold

There is evidence that suggests that Ghanaian working of gold dates back to the 5th and 6th centuries B.C. when the Phoenicians and the Carthaginians most likely reached the Gold Coast. In the 9th and 10th centuries the Trans-Saharan caravan trade between West Africa, the Mediterranean coast in North Africa and Europe also involved trade in gold, with much of it coming from the Gold Coast. The Moors of Northern Morocco were active trading partners with the Ghanaian Akans. The latter traded in gold, slaves, ivory and spices. This means that gold mining in the forest regions of Ghana, mostly occupied by Akan groups, probably dates back several centuries. Much of the gold carried across the Sahara found its final destination in Arab or Islamic countries in the Middle East, for example in form of dinars minted by the Almoravids of Morocco (Agbesinyale 2003: 104).

3.1.1 Ghanaian Domination of Gold Mining and First European Contact

In search of gold, ivory and spices the Portuguese Juan de Santarem and Pedro de Escobar reached the Gold Coast in 1482. After discovering alluvial gold in the region between the river Volta and the river Ankobra they named the region *Mina de Ouro* (Agbesinyale 2003: 105). This was the time, when Ghana got its former name: “*The whole region between Cape Three Points and Cape Coast was so rich in gold that the coast received the name 'the Gold Coast'.*” (Ward 1966: 66) When the Portuguese first got into contact with the indigenous people they described their “primitive” way of life, but also reported about chiefs being covered in plates of gold and wearing gold chains. They realized that the people readily parted with the gold they had, for goods like brass,

lead, pewter basins, red shells, copper bangles, pots of coarse tin, simple weapons, tools and cloth, all things with comparably little value to the Europeans (Agbesinyale 2003: 106).

The discovery of gold triggered a gold rush not only in Portugal but in much of Western Europe, consequently several voyagers followed. In 1482 Portuguese merchants under the command of Diego d'Azambuja arrived close to present-day Elmina Castle⁵. Only seven years later they built a castle for the purpose of trading and as a defense post (Agbesinyale 2003: 105). Nevertheless, trading soon was not enough anymore, the Europeans wanted to gain control over at least some of the mining centers. It is reported that the Europeans were hardly successful in actual mining. There were arising conflicts between European mining ventures and African natives who owned the land. It was simply not in the indigenous interest that Europeans set up independent ventures. The Europeans succumbed tropical diseases such as malaria and did not have the manpower to run independent mines (Ayensu 1997: 65f).

The Europeans assumed the indigenous gold mining methods were too primitive and ineffective and could be enhanced. But according to Ayensu (1997: 66ff) the local methods were highly effective. The indigenous evolved their gold-winning techniques, controlled the gold bearing land and had the necessary manpower to exploit it. Early observers realized how women and children worked along riverbanks and coastal shorelines and were panning for gold. *"Some would plunge beneath the surface of rivers and streams to scoop up gold-bearing material from the river beds, others would dig pits in the sands and gravels that were exposed as the river level dropped."* (Ayensu 1997: 68) The experts in panning gold were certainly the Ashanti. The most common way to extract gold from below the immediate surface was shallow mining. Simple tools were used to dig holes, shafts and tunnels to get to the gold just under the surface. It was done individually or by small family groups. But given the rich deposits even thousands could be involved at one site (Ayensu 1997: 68ff).

How the indigenous located the gold bearing areas is uncertain. It seems they were aware that certain vegetation was found on gold bearing soil (Ayensu 1997: 68f). But they also

⁵ The name derives from El-Mine (the Mine)

had additional sources of knowledge as Ayensu (1997: 70) elaborates: “[S]ome claim that they could detect gold in mystical ways, such as in dreams, or by seeing a mist or glow over the place where it lay. However they did it, they were masters at finding gold.” Gold mining was entirely dominated by the local people who kept the locations of their mines secret. The European attempts to collect information often failed. If by chance a European discovered a gold deposit it was quickly declared sacred by the indigenous to prevent foreign mining activities (Dickson 1969: 88). Common collapses of mines strengthened the warnings of the chiefs and priests from mining on holy grounds. The only people who were allowed to work in the mines were slaves and authorized free men. Southern Ghana and Ashanti-Brong Ahafo produced the largest part of the country’s gold (Dickson 1969: 88). When it came to Ghanaian control over gold production the situation was much different from recent times: “Where gold mines were not directly owned by the state, the owners were obliged to pay heavy taxes, often amounting to as much as half the total production, to the chiefs.” (Dickson 1969: 88)

The Gold Coast became more and more famous for its valuables and tradable goods, from the late 16th century onwards the competing European imperial powers scrambled for control. The Portuguese had main control over trading and brought large quantities of gold to Europe. During this period the Gold Coast was the world’s largest gold producer (Agbesinyale 2003: 107), between 1493 and 1600 Ghana accounted for 36% of the world gold output (Akabzaa/Darimani 2001: 7). By 1559 the Dutch arrived at the Gold Coast, by 1637 they have fought the Portuguese and captured Elmina from them and took over all Portuguese possessions by 1642. During this time the British and the Danes also entered the battle for control in the region and became fairly active in the trade of gold and slaves. Within the early parts of the 18th century the British, the Dutch and the Danes had built several settlements, trading posts, castles and forts on the shores of the Gold Coast for the trade of gold, ivory and slaves (Agbesinyale 2003: 107).

3.1.2 The Ashanti Kingdom

By the last quarter of the 17th century the British gained the upper hand and managed to supplant all other competing powers from the Gold Coast. By the early 1820s the British Government went in to gain direct control over the essential British settlements and by 1825 they formed the Gold Coast Mining and Trading Company. The company did not

engage itself in mining but rather focused in trading. The trading relations between the powerful Ashanti Kingdom and the British reached staggering heights (Agbesinyale 2003: 107). As Ayensu (1997: 65) puts it: *“The story of gold in Ghana, at least up until the final decade of the 19th century, was largely the story of the rise and fall of the kingdom of Ashanti.”* The power and richness of the Ashanti Kingdom was mainly built upon the gold that lay beneath its soil. Gold was the crucial source of the kingdom’s development from the mid-16th century onwards (Ayensu 1997: 65). The huge amounts of gold the Ashanti produced is even more impressive if you consider that they did not use heavy machinery or explosives but only their own strength, skills and bravery (Ayensu 1997: 72).

The Ghanaian dominance in the mining sector went downwards when troubles for the Ashanti began in the last third of the 19th century. The British and the Ashanti went to war several times. The British takeover of Kumasi in 1874 was a disaster for the Ashanti Kingdom and led to a period of disputes and uncertainty. The Ashanti kingdom collapsed in 1896 and was incorporated into the British Colonial system. After a bitter battle over the Golden Stool, the symbol of political sovereignty of the Ashanti, the kingdom was eventually annexed to the British Crown in 1901 (Ayensu 1997: 66). The defeat of the Ashanti kingdom marked a major turning point and opened the way for European mining enterprises.

3.1.3 First European Large-Scale Mining

Towards the end of the 19th century an increasing number of educated people from the coast acquired mining concessions. They started to act as middlemen between the Europeans on the coast and the gold miners in the interior. They tried to organize the gold production along fairly modern lines of large-scale production (Dickson 1969: 181). The first European to obtain a mining concession in Ghana was the French trader and explorer Marie Joseph Bonnat. In 1877 he acquired a concession in Tarkwa in the Wassa West District (Ayensu 1997: 66). He gave an enthusiastic report in France telling about his prospects which led to the formation of the African Gold Coast Company. Three other companies, namely Messrs Swanzy and Co., Effuenta Gold Mining Co., and the Gold Coast Mining Company, quickly followed. Their first successes and the exaggerated

newspaper reports in Britain started off a gold rush leading many hasty misinformed fortune seekers into the country (Dickson 1969: 182f).

During the next five years after Bonnat's start concessions were granted all over the Wassa West District. In this early stage there was little attention on keeping different concessions from conflicting (Ward 1966: 395). Significant amount of European capital was invested in several mining companies, but only relatively small amounts of gold could be obtained despite the richness of the ore. It was due to the lack of adequate machinery and equipment that could not be sent to the interior that easily (Agbesinyale 2003: 109). There was no railway or road and the necessary equipment had to be taken over bush paths in pieces (Ward 1966: 395).

The gold mining industry developed slowly until the end of the 19th century. Annual production did not exceed 18,000 fine ounces (Ward 1966: 396). Dickson (1969: 185) points out two major problems of the gold mining industry towards the end of the 19th century. One is, as Agbesinyale and Ward also mention, the inadequate transportation routes between the mines and the coastal areas. The second big problem Dickson sees is the seasonality of labor supply. Many individual prospectors were overtaken by misfortune as well as the majority of the new mining companies. By 1882 not more than six companies showed any signs of durability (Dickson 1969: 183).

3.2 The “First Jungle Boom”

3.2.1 Triggers of the First Boom

By the late 1880s the British Administration started intentions to solve the transportation problem and built several good roads as well as a railway from Sekondi-Takoradi to Tarkwa (Dickson 1969: 186). With the railway the cost for transport on this distance of 39 miles was brought down from £ 25 a ton to about £ 2 (Ward 1966: 396). This and the final conquest of the Ashanti Kingdom by the British marked the start of the great gold boom in the Gold Coast, described as the “First Jungle Boom” starting in 1892 and reaching its peak in 1901. “Jungle Boom” because most of the Ghanaian gold deposits were found in the country's rain forests (Agbesinyale 2003: 109f). From about 1895 the taking of concessions became more frequent and more overseas capital flew into the

industry. A concessions ordinance was passed in 1897 to regularize the acquisition of concessions and define the British Administration's attitude towards ownership of land. This ordinance unleashed a wide protest from the chiefs and people of Southern Ghana. This led the Administration to later modify the ordinance but did not reverse the right of the Administration to award concessions on tribal land (Dickson 1969: 186).

By 1901 as much as 3,500 concessions have been taken up in the territory (Boahen 1975: 94). The heightened interest in gold mining at the beginning of the 20th century was not only reflected by the amount of mining concessions but also in the *"tremendous leaps of gold exports from about 6,000 oz. in 1901 to over four times as much in 1902, to about 71,000 oz. in 1903, and to about 104,000 oz. in 1904."* (Dickson 1969: 189) The temporary stagnation of the gold production in South Africa made the British invest in the development of the Ghanaian mining industry. The steady stream of extraordinary newspaper reports of the richness of the gold reefs in the country did the rest and created the boom that lasted for two years from 1900 to 1901 inclusive (Dickson 1969: 187f).

3.2.2 First Disruptions of the Boom

In 1901 the boom was then started to be disrupted by the Yaa Asantewaa War between the Ashanti resistance rebelling against the British and their domination. National gold output fell significantly (Agbesinyale 2003: 110). By 1904 the majority of the vast amount of mining concessions that were awarded during 1901 and the following year were discarded. Within one or two years, only 114 concessions with Certificates of Validity were left with only about 40 of them being truly successful and earning profits. Some of them were located in Ashanti but over 30 were in Southern Ghana, where 18 of them were grouped on the Tarkwa banket reef (Dickson 1969: 188). The neglect of many of the concessions was due to the way in which they were acquired. The overeagerness of many companies resulted in the chiefs granting overlapping concessions in recognized tribal lands. Also the concessions were sometimes so large that it was difficult to properly prospect to locate gold reefs (Dickson 1969: 189).

Nevertheless, from 1902 gold production increased steadily and reached its next peak by 1914 (Agbesinyale 2003: 110). By 1910 annually over £ 1 million worth of gold was exported overseas (Buah 1980: 122). In 1913 the first Geological Survey Department was

formed and organized extended tours throughout the country to investigate the variety of mineral wealth. The Administration's goal was a resource inventory of the country (Dickman 1969: 190).

3.2.3 World War I Ends First Boom

The beginning of the First World War put an abrupt end to the first boom. The war ended gold prospecting and mine development. The First World War fuelled a huge international demand for base metals and other commodities to continue the war. Additionally, the Ghanaian gold mines lacked in labor because of the booms in the cocoa and the construction industry. Furthermore, laborers were pulled away by the growing manganese and diamond mines in other parts of the British colony. This negative condition stayed like that until 1928 when the situation in the gold mines improved due to adequate supply of labor and the implementation of labor-saving devices (Agbesinyale 2003: 111). The whole industry was negatively affected much beyond the First World War but also through the depression years that followed. “[E]xports decreased from over 400,000 oz. in 1914 to less than half that quantity in 1928.” (Dickson 1969: 190f)

3.3 The “Second Jungle Boom”

The “Second Jungle Boom” started around 1925 when several gold mines that were abandoned during the First World War underwent re-capitalization. New mines were opened and European money slowly streamed back into the colony's gold sector. Several inactive mines, one of them being Iduapriem, were re-opened (Agbesinyale 2003: 111).

3.3.1 Re-capitalization of the Mining Sector

Different factors caused the new boom:

- Huge investments in physical infrastructure like roads, railways and bridges but also social amenities like hospitals and schools. The modern harbor in Takoradi, about 800 km of railways and over 10,000 km of motorable roads that were constructed by 1930 made it much more convenient for the mining industry to transport heavy equipment from the coast to the interior mining areas.
- The mining costs decreased due to improved mining technologies.

- The new infrastructure also opened the country for extensive geological survey, prospecting and mapping. This provided important reliable information for gold mining investors.
- Due to Great Britain's departure from the Gold Standard in 1931 the world market value of gold rose. This was a major stimulus to gold mining in Ghana that further fortified when it became reasonable that Great Britain would not return to the Gold Standard for a significant time (Agbesinyale 2003: 111f).

The industry recovered and exports soared to the record figure of over 600,000 oz. in 1938 (Dickson 1969: 191).

3.3.2 World War II Ends Second Boom

The “Second Jungle Boom” was put to an end just like the “First Jungle Boom” – through the advent of a war. In 1938 the Second World War led to the closure and abandonment of several mines in the Gold Coast. The British Government ordered their closure, further explorations and developments came to a standstill and were only resumed after the war (Agbesinyale 2003: 112; Huq 1989: 154). The global financial and market instabilities created by the Second World War also had its effects on the Ghanaian gold mines. A lot of investors pulled out their money. But the decline also had internal reasons. In the years after the Second World War the struggle for self-government and the political uncertainty that came along with it, hardly made the Gold Coast Colony a safe place for foreign investments (Agbesinyale 2003: 113).

3.4 After Independence in 1957 until 1983

In 1957 Ghana attained political independence from Britain. The new government under Kwame Nkrumah pursued a socialist path of development and followed an anti-colonial political agenda (Agbesinyale 2003: 113). The mining sector underwent structural changes during that time.

3.4.1 Structural Changes of the Mining Sector under Independence

The Government under the Convention People's Party (CPP) embarked policies considered hostile towards foreign private capital and multinational involvement in the extractive sector. Key sectors of the Ghanaian economy, such as the extractive sector, became state-owned and state-controlled (Agbesinyale 2003: 113; Tsikata 1997: 9).

With the Minerals Act of 1962 (Act 126) (Government of Ghana 1962b) the ownership of minerals was vested in "*the President in behalf of the Republic and in trust for the People of Ghana*" and gave the President the power to demand the sale of minerals to a state agency. When it comes to the issue of land use, the Minerals Act and the Administration of Land Act 1962 (Act 123) (Government of Ghana 1962a) "*gave the executive substantial powers to decide upon the use and management of land, in particular such as is owned by a community presided over by a chief, known as 'stool land'*" (Tsikata 1997: 10). Compensation payments did not go directly to the land owning communities. Compensation payments in respect of stool land were required and had to be made to the minister who would then distribute parts of the monetary compensation to local government bodies, to projects that were supposed to benefit people in the affected area and some parts were used for "*the maintenance of the [...] traditional authority.*" (Tsikata 1997: 10)

3.4.2 State Gold Mining Corporation (SGMC) Takes over Control

After independence the country's economy faced several problems. The most obvious was that the Ghanaian economy was under the complete control of foreign firms. All the seven gold mines were owned by expatriate companies and there was basically no control over the transfers of the profits abroad. In March 1961 the State Gold Mining Corporation (SGMC) was formed and took over six out of the seven mines. By 1965 only one expatriate gold mining company, Ashanti Goldfields, was left operating in the country (Boahen 1975: 213).

In 1966 (21) Ward describes the state of gold mining in Ghana as follows: "*Today nearly all the gold produced comes from inland. The great recent developments in the production have been made possible by the use of modern machinery for the extraction of*

gold from deep lodes; though river gravels still yield enough gold not merely to repay the small scale African prospector for his efforts, but to pay a dividend to London mining companies.”

By 1972 a decree empowered the state to re-organize all mining companies operating in Ghana as Ghanaian companies with head offices in Ghana. The decree also ensured the state was able to take 55% equity shares in all mining ventures in the country. The country's mineral wealth was considered key and should predominantly benefit the country itself (Agbesinyale 2003: 113).

3.4.3 The State-Controlled Mining Sector Struggles

In the early 1970s the state-controlled mining sector struggled with the lack of state sponsored capitalization for the mines, potential foreign investors were kept out by government policies. The lack of investment caused dependence on old technology and machinery. All in all the total gold output until the mid-1980 sharply declined. By the beginning of the 1980s almost all gold mines were operating at a loss, with the exception of Ashanti Goldfields Company (AGC) at Obuasi. Only four companies were actively operating, three of them state-owned and run by SGMCO, namely the Tarkwa Mine, Prestea Mine and Dunkwa Mine. All of them were struggling to survive as they had extensive debts owed to the banks (Agbesinyale 2003: 113ff).

Agbesinyale (2003: 115) considers the policy in the 1970s until the mid-1980s, heavily ideologically loaded with a focus on “*reinforcing state sovereignty over the country's natural resource endowments*” rather than for purposes that would increase production, efficiency and economic expediency. Gold production reached a peak in 1959-60 with 915,317 oz. but production continuously dropped over the years to 402,000 oz. in 1978 and to 330,000 in 1982 (Huq 1989: 155).

3.5 Towards the “New Gold Rush” or “Third Gold Boom”

By the early 1980s the Ghanaian economy was in a state of crisis, including the extracting sector. Radical changes were to come along not alone in the mining sector. The newly instituted Economic Recovery Programme (ERP) supported by the World Bank Group

(WBG) and International Monetary Fund (IMF) pushed forward several different economic policy changes (Tsikata 1997: 11).

3.5.1 Economic Recovery Programme (ERP)

Several internal as well as external reasons pushed the Ghanaian Government to opt for the ERP in the first place. In the period of 1972-1982 *“GDP per capita, real export earnings, cocoa exports, import volumes and domestic savings and investment declined steeply whilst inflation rose sharply averaging over 50 % per annum.”* (Agbesinyale 2003: 116) Black marketeering and corruption were widespread. The social and economic infrastructure was on the verge of collapsing and external shocks such as the global oil price hike of 1979 and the forced repatriation of about one million Ghanaians from Nigeria in 1983 and severe drought did the rest and brought the country to its knees (Agbesinyale 2003: 116).

The key targets of the reform were the cocoa, mining and timber industries, as they were the major export sectors of the country. The reforms were mainly aimed at improving competitiveness and attractiveness for foreign direct investment (FDI) (Akabzaa 2009). The mining sector was identified as a strategic sector with the potential to create much needed revenues (Agbesinyale 2003: 117). A 1984 World Bank report identified the reasons why the extractive industry failed to play a leading role in the country's foreign exchange earnings. The main causes among the abundance of factors according to them were: lack of investment in mining- development and new explorations; lack of capital to maintain and rehabilitate existing mines; faults in mining- management and inadequate skills; lack of needed infrastructure such as railway capacity. Other factors mentioned were the declining grade of gold ore; high inflation and an overvalued currency that caused ruthless fiscal regimes in the extractive industry; as well as illegal mining and smuggling of diamonds and gold. However, two factors were singled out as being responsible for the decline of the gold industry from the mid-1970s to the early 1980s: the key provisions of the Ghanaian minerals and mining laws together with the ruthless fiscal climate that presented no incentive in any form of foreign investment in the extractive industry (Agbesinyale 2003: 118).

Following the advice of the IMF and the WBG Ghana was the first Sub-Saharan country to undergo Structural Adjustment (SA) and improve the investment climate within all sectors of the economy and attract foreign investment (Hilson 2004: 53). Locally dubbed Economic Recovery Programme (ERP) it was essentially a WBG/IMF packaged Structural Adjustment Programme (SAP). It contained reforms in the fiscal, monetary and trade sector of the country's economy (Agbesinyale 2003: 116).

The adoption of a new minerals and mining law was a key strategy under the ERP. In 1986 the Minerals and Mining Law (PNDCL 153) (Government of Ghana 1986) was put in power. It was the radically reformed mining code that considerably eased the way for foreign investment in the sector (Agbesinyale 2003: 118). The code evolved with the help of the WBG and was in line with the organization's continent-wide strategy on mining (Akabzaa 2009). Under this newly established law, rates for mining operations have decreased and the royalty regime changed significantly. In the areas of taxes, incentives and benefits, the 6% royalty charged on the gross value of minerals obtained has been lowered to between 3 to 12% (Agbesinyale 2003: 119). Since the implementation of the mining sector policy reforms in 1986, the ownership structure of the industry has dramatically changed. Foreign investors took in a leading role and controlled an average of 70% of shares in all mining operations in the country (Akabzaa/Darimani 2001: 25).

Several other fiscal incentives have been introduced by the new law, such as: the removal of the minimum mineral duty; import duty and foreign exchange tax were reduced or waived; corporate tax which was ranging between 50% and 55% was lowered to 45%. In 1994 the corporate tax was further reduced by 10% in the Minerals and Mining Amendment Act (Agbesinyale 2003: 120f). The initial intention was to keep capital costs low and by this attract investments into the mining sector. At the same time former state-owned mining enterprises have undergone privatization, but with the state retaining minority shares between 10 to 20% (Tsikata 1997: 11f). By the late 1980s the government had started to divest its interest in the SGMC with the Tarkwa, Prestea, Konongo and Dunkwa mines. They have been taken over by foreign mining companies (Agbesinyale 2003: 118).

Under this period of time the way of prospecting changed drastically as well. Traditional underground mining was banned in favor of surface mining with all its negative implications on environment and local communities (Akabzaa/Darimani 2001: 13).

3.5.2 Arguable Effects of Structural Adjustment

In the mid-1990s after two decades of pursuing economic reforms, Ghana was described as “*the most successful of the African adjusters.*” (Agbesinyale 2003: 116) Gold production went up by more than 500% under the process of structural adjustment (Hilson 2004: 64). The mining sector reforms have seen a significant investment boom, in exploration as well as mine development, particularly in gold mining (Akabzaa 2009). All the legislative and fiscal reforms have helped to create significant resurgence within the Ghanaian mining industry since the late 1980s. Several foreign and local mining interests and massive upsurge in artisanal gold mining have created what is now referred to as the “Third Gold Boom” or “New Gold Rush” (Agbesinyale 2003: 121).

Nevertheless, whether the structural adjustment has had the desired positive effect on the Ghanaian economy is still an issue for debate. Agbesinyale (2003: 117) argues that: “*Nonetheless, the fact that Ghana in 2001 opted for the Highly Indebted Poor Countries Initiative (HIPIC) of the World Bank/IMF after these long years of painful economic adjustment, should lend some credence to the notion that Ghana’s SAP has and is indeed far from being a success story as was previously touted.*” Hilson (2002: 54) as well sees the effects of structural adjustment (SA) rather negative, he states that “[i]t is now recognized that the increased mineral output that has occurred in the country under SA has mainly benefited multinational mining corporations.” In a later work Hilson (2004: 61) points out the fact that the SA process “*delivers few benefits to the poor, and in many cases, further marginalizes impoverished groups.*”

The reforms came along with disadvantageous impacts upon the local communities. The expansion of mining and exploration activities caused displacement of numerous subsistence groups and destruction of cultural resources along with severe environmental impacts like pollution and land degradation (Hilson 2004: 54). The growth in the mining sector that was triggered by the SA has brought along considerable environmental and

social costs. Some civil society organizations argue that these costs have eroded the economic benefits that this boom brought along (Agbesinyale 2003: 121).

3.6 Present State of the Ghanaian Mining Sector

3.6.1 Large-Scale Mining Companies

At present state there are 16 operating mines, six mining development projects and more than 150 companies with exploration licenses, mainly in the gold sub-sector, active in Ghana (Akabzaa 2009). Foreigners-such as Australia, Canada, South Africa, the UK and the US own the major mining companies. In 2009 there was no entirely Ghanaian owned big mining company. The Ghanaian government only has shares in the projects, mostly just free carried interest of 10% (Nantogmah, personal interview 24 February 2009). Some of the mining companies have their investments promoted, guaranteed and protected by the WBG. For example the International Finance Corporation (IFC) has been among the funding sources for large-scale mining.

About 15 years ago the trend shifted from the comparably invisible underground mining towards open-pit mining (Andoh, personal interview 25 February 2009). Open-pit mining is comparably in-expensive and much less labor intensive than underground mining. Today all major mines operating in Ghana are open-pit mines. An open-pit mine is *"an excavation or cut made at the surface of the ground for the purpose of extracting ore and which is open to the surface for the duration of the mine's life."* (Engineer-Mining.com n.d. b). For exposing and mining the ore, it is necessary to excavate large quantities of waste rock. Open-pit mining consumes vast tracks of land, so problems occurred right from the beginning as Nana Anthony Andoh of the Ghanaian Environmental Protection Agency (personal interview on 25 February 2009) also states.

The evolution in mining technology made it profitable to process also rather low-grade ores. The most common methods nowadays are heap leaching and carbon in leach processes involving the highly toxic cyanide. In heap leaching the previously crushed ore is mixed with cement and heaped on a leach pad covered with polythene sheets. The heap is then constantly sprayed with a cyanide solution. This has the effect of the gold dissolving as the cyanide solution trickles through the heap. Finally the gold-cyanide

solution drains into a collection pond and is then pumped into a gold recovery plant where the solids are removed from the solution.

The second main method used besides heap leaching is the carbon in leach method. The crushed ore is fed into tanks filled with cyanide solution. The gold is dissolved in the cyanide and the solution is then transferred through several tanks, where carbon is added. The gold attaches to the carbon which is then removed by screening. After the gold bearing carbon is then introduced into a heated sodium hydroxide-cyanide-water solution where the gold is dissolved, the concentrated solution is passed through electro-winning cells, where the gold plates onto steel cathodes. Finally the gold is washed from the cathodes, dried and melted and at the end poured into molds for gold bricks (Engineer-Mining.com n.d. a). The further refinery of Ghanaian gold is mostly done in the South African Rand Refinery.

The large-scale gold mining industry is mainly centered in rural areas in the Western Region, with exception of Newmont Mining being active in the Brong Ahafo Region. One of the main large-scale operating mining companies in Ghana is the US-based Newmont Mining with active operations in the Brong Ahafo Region and new activities in the Eastern Region in Akyem. The developing mine in Akyem is highly controversial as it is to a part situated in a forest reserve.

The Canadian Golden Star Resources is actively open-pit mining gold at its sites in the Western Region in Wassa and Prestea/Bogoso. The South African mining company Goldfields is mining gold in the Western Region as well, particularly in Tarkwa and Damang.

The South African based AngloGold Ashanti is operating two large-scale mines in Ghana: the Obuasi mine and the Iduapriem mine.

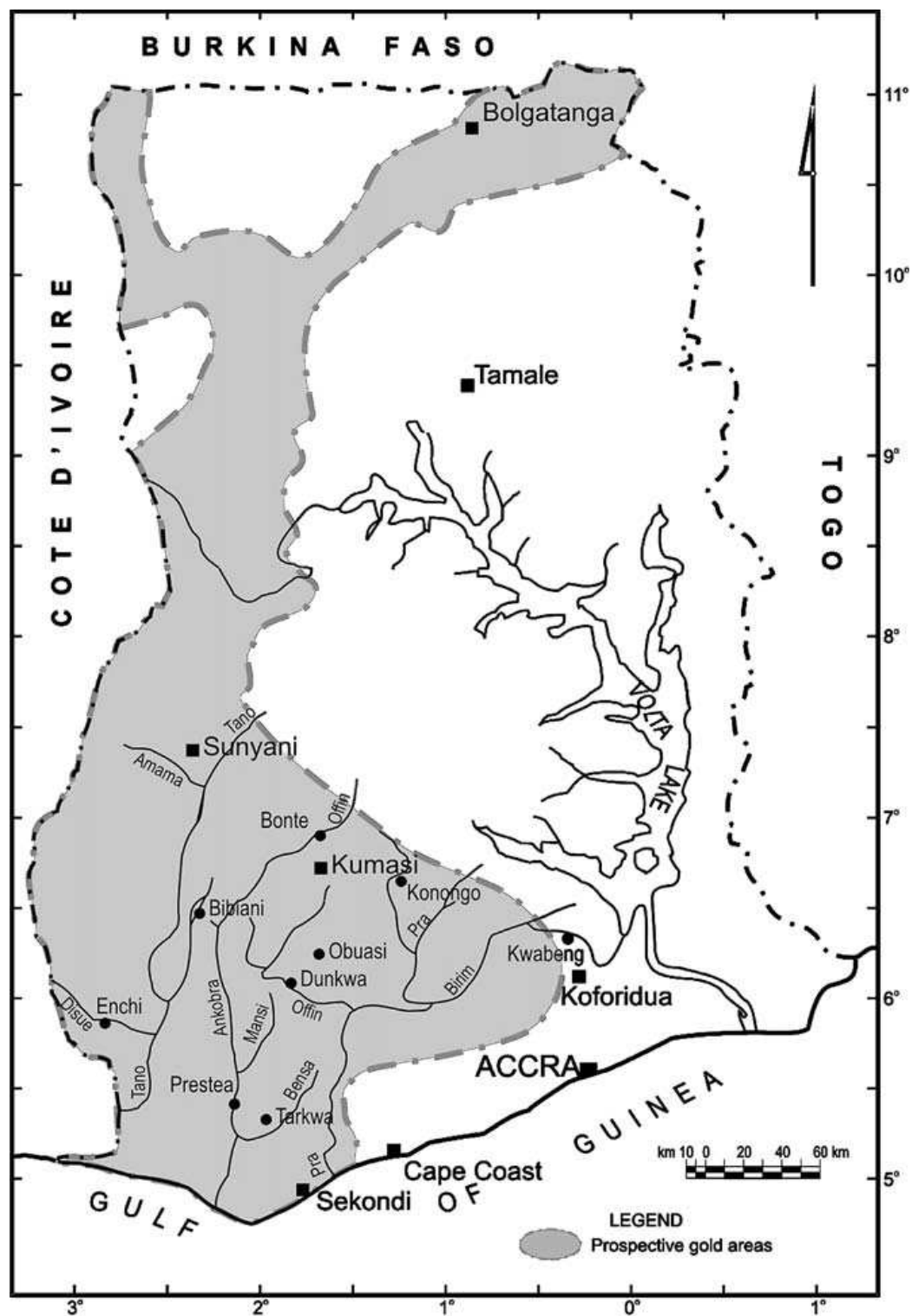


Fig. 1. Prospective Gold Regions in Ghana.

3.6.2 Small Scale Mining Sector and “Galamsey”

Artisanal mining is a part of Ghanaian history, it has been practiced for centuries and has a long tradition. It is still a vital part of Ghanaian life and economy. Artisanal mining is a significant subsector of the mining industry in Ghana, accounting for about 10% of the annual gold output (Akabzaa 2009). In Ghana, small-scale mining is defined as “*mining (gold) by any method not involving substantial expenditure by an individual or group of persons not exceeding nine in number or by a co-operative society made up of ten or more persons.*” (Government of Ghana 1989)

The numbers of small-scale miners and galamsey operators vary. Aryee (2003: 132) believes about 80,000 locals are currently involved in small-scale mining. Akabzaa (2000: 14; 2009) and Aubynn (2009: 64) roughly estimate 100,000 – 200,000 informal gold miners scattered throughout the country, approximately 30% of them being women. Small-scale mining is very labor intensive, mostly people work in small groups, the men usually prospect the ore while women carry the ore out of the mine for further milling, grinding, sluicing and further processing.

Small-scale miners usually have a rather poor financial basis, so most of them rely on traditional and manual methods of mining, which are largely artisanal. They feature simple equipment like shovels, pick-axes, pans, chisels and hammers. The methods used can be categorized into shallow alluvial mining, deep alluvial mining and hard rock (lode) mining. With free milling ores small-scale miners use sluicing as the main method for processing. Alluvial ores involve sluicing of mined material as well. When processing hard rock ores they use crushing and milling equipment to facilitate the process if they can afford it, otherwise they use traditional manual equipment. In almost all cases finally mercury is added to the concentrate, mixed to form a gold amalgam, which is then heated to separate the gold (Aryee 2003: 133f).

Those methods create environmental damage, health and safety risks. Deadly accidents occur frequently. In November 2009, 15 people were killed during a mine collapse in Dompooase in the Western Region (BBC News 2009). In terms of health risks miners are in danger of mercury contamination. The environmental problems associated with small-

scale mining are land degradation and pollution of water bodies with toxins and chemicals.

In Ghana small-scale miners who do not own a license are popularly called “galamsey”. The name derives from “gather and sell”. In the past galamsey often were the first to discover extensive gold deposits ahead of the mining company’s exploration teams. Galamsey workers usually were local farmers who worked in the mines during their off-season. In recent years more and more farmers lost their land and income source to large-scale mining operations. From the even poorer North of Ghana galamsey workers come to the Southern parts of Ghana to seek fortune, but galamsey mining only provides them with a meager income.

Galamsey do not have an official license for mining on the land they are working on. This leads to numerous confrontations with both state law enforcement agencies and the security personnel of large-scale mining companies on whose concessions galamsey often mine. Frequently they also mine in areas prohibited for mining such as forest reserves. Large-scale mining firms, small-scale miners and galamsey are constantly competing for plots of gold bearing land. The industry is progressing and so its need of vast amounts of land (Hilson 2002c; Aryee 2003: 133). The environmental degradation caused by galamsey activities especially worries the Environmental Protection Agency’s (EPA) mining director Nana Anthony Andoh (personal interview 25 February 2009). The fact that they are working illegally leaves the EPA with little forms of pressure. There is no permit they can withhold if environmental minimum standards are not met.

Up until 1989 all artisanal mining activities were illegal. Under the Small Scale Mining Law (PNDC Law 218) of 1989 the government tried to register artisanal miners and supervise them. The government also established the Precious Minerals Marketing Corporation (PMMC) for purchasing the products of artisanal miners. Despite the possibility to legislate their operations most artisanal miners still operate without licenses also because of frustrations they meet in the process of registration (Akabzaa 2009). Legal mines operate under a license granted by the Government of Ghana on concessions registered in their names with the Minerals Commission (Aryee 2003: 133). Those who register are usually referred to as small-scale miners rather than galamsey.

The government established nine small-scale mining district centers to facilitate the provision of technical extension services. Those centers aim to help the small-scale miners to improve techniques, improve recoveries and protect the environment by limiting the use of mercury (Aryee, personal interview on 4 March 2009).

Small-scale mining operations are now regulated by the Minerals and Mining Act of 2006 (Government of Ghana 2006) that includes limitations and curtails the property rights of artisanal miners (Akabzaa 2009).

3.6.3 Policy Framework

By the Constitution of Ghana the ownership of every mineral is vested in the hands of the Government of Ghana for and in behalf of the people of Ghana. The government retains the rights to subsurface minerals and reserves the right to take possession of any land, even if it is legally owned by another group (Hilson 2002a: 68). The Ghanaian Constitution states:

“Every mineral in its natural state in, under or upon any land in Ghana, rivers, streams, water courses throughout Ghana, the exclusive economic zone and any area covered by the territorial sea or continental shelf is the property of the Republic of Ghana and shall be vested in the President on behalf of, and in trust for the people of Ghana.”

(The Constitution of the Republic of Ghana of 1992: Article 257-6)

Almost all so called modern states have policies which allow them to appropriate land for the greater common good, the “*power of eminent domain*” (Shihata 1993).

Once a concession has been granted by the government to a mining company communities living on the concession are only compensated for structures such as houses, crops and economic trees that are or will be affected by the mining operation. Persons are allowed to graze animals within the concession, but only if it does not interfere with mining ventures. Brought to point: Communities are liable to eviction by mining companies once the government has granted the mining concession to them (Sarpong 2006: 13).

According to the Minerals and Mining Law of 1986 (PNDCL 153), once a mining lease was awarded to a company, the company leased the land from the government and obtained the right to alienate the surface tenure rights of any person using it. The government passed compensation on to the mining company as well. The mineral rights owner was only obliged to compensate the owner or occupier for the disturbance of use of land by mining and the damage done to land surface, buildings, works or improvements, or to livestock, crops or trees in the area (Government of Ghana 1986). The land itself is not object of compensation.

The Minerals and Mining Law 2006 is still full of gaps when it comes to access to land and local communities. The law is currently under review also because of compensation and acquisition of land issues.

In 2001 the WBG obliged Ghana to make amendments on their minerals and mining policy. The uncompetitive Mining Code of 1986 was blamed for the stagnation of the sector (Akabzaa 2009). A new framework was laid down in the 2006 Minerals and Mining Act (Act 703) (Government of Ghana 2006). The major fiscal changes from the Minerals and Mining Law of 1986 to the revised law of 2006 is that the corporate income tax was further decreased to 25%. The Additional Profit Tax was brought down from 25% to 0%. Royalty payments were as well decreased from 3% to 12% to oscillating between 3 to 6% (Government of Ghana 2006). According to Daniel Owusu-Koranteng (personal interview 28 February 2009) in reality no company pays more than 3% royalties although the law would allow up to 6%. In November 2009 Finance Minister Kwabena Duffuor, presenting the nation's 2010 budget to parliament, said the government plans to double minerals royalties to 6% in the future (Reuters 2009). By May 2010 the new royalty rate was set at 5% (Joy Business 2010).

Royalty payments are currently distributed as follows: 80% remains with the government, the remaining 20% is given to a Mineral Development Fund set up by the government. One half of the fund is to promote the development of the mining industry, the other half (representing 10% of the annual royalties) is disbursed among district assemblies, stools and traditional authorities with jurisdiction over a mining project location. Of this remaining 50%, 10% stays with the Office of the Administration of Stool Lands, 25%

goes to stools and 20% goes to traditional authorities (Akabzaa 2009). Actually only very little of the royalty payments reaches the affected communities.

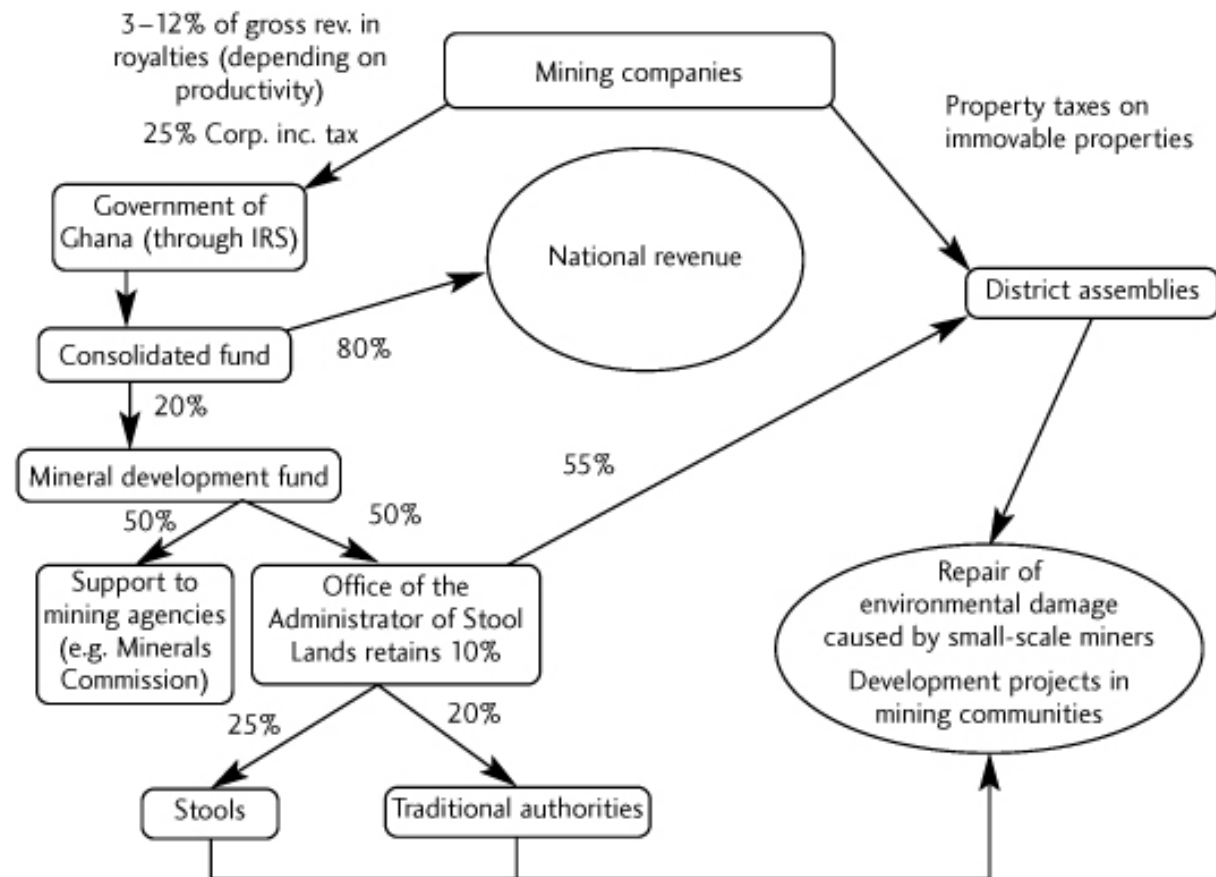


Fig. 2. Distribution of mining royalty among stakeholders

Through equity participation the government obtains dividends. The 2006 Minerals and Mining Act reduced the government equity share to 10%, this reduced the income from this source as the share previously ranged from 10% to 30% (Akabzaa 2009).

The Minerals and Mining Act of 2006 provides the ability for companies to negotiate about stability agreements that ensure new legislative enactments or changes to an enactment do and will not adversely affect their operations for a period of 15 years (Government of Ghana 2006: 22). Different representatives of mining companies referred to this clause when the finance minister announced a planned raise in royalty payments in

2009 and when the royalty rate actually went up in May 2010. Which mining operations will be affected by the new royalty rate will still be a topic of future discussion.

3.6.4 Institutional Framework

Several public sector organizations were established to provide support for the mining industry and form a regulatory framework to ensure optimal exploitation of the country's mineral wealth. The role of the institutions, described below, is seen rather critical as Agbesinyale (2003: 122) states: “[A]s to whether these public organizations in practice, effectively deliver their support and regulatory roles remains another question.”

The key organizations are:

The Ministry of Lands, Forestry and Mines: The ministry is responsible for all aspects of the mineral sector within the Ghanaian economy. A license for exercising a mineral right can only be granted by the Minister of Mines, no matter who owns the surface land. The power referred to the minister must be exercised contingent upon the advice of the Minerals Commission (Akabzaa/Darimani 2001: 27, Sarpong 2006: 11).

The Minerals Commission: It was set up in 1986 to be a one-stop service for investors. The Commission has the authority to coordinate policies relating to minerals and to control and manage the exploitation of mineral resources (Sarpong 2006: 11). Its key tasks are formulating regulations, amending existing legislation, recommending on minerals policy, advising the government in mineral matters and much more. Their main goal is promoting the minerals sector (Akabzaa/Darimani 2001: 22).

The Lands Commission: The Commission maintains legal records of exploration and mining licenses. It also initiates policies in relation to stool and state lands. Its valuation board provides the rates for valuation of property affected by mining operations (Akabzaa/Darimani 2001: 27).

The Chamber of Mines: The Chamber exists for nine years and is a private sector organization of mining companies. It is an advocacy and lobby group interested in

promoting mining interests. The activities are funded by members including all the big companies active in Ghana (Nantogmah, personal interview 24 February 2009).

Environmental Protection Agency (EPA): The agency has the task to strike the balance between growing mining operations and economic development and the protection of the country's natural resources and maintaining a sustainable environment. The law requires an Environmental Impact Assessment (EIA) for every mining project that has to be approved by the EPA before mining can start (Andoh, personal interview on 25 February 2009).

Akabzaa and Darimani (2001: 28) argue that there is lack of cross-sectoral effective collaboration between these institutions that contributes to some extent to the problems resulting from mining.

3.6.5 Contribution of the Mining Sector to National Development and Poverty Reduction

3.6.5.1 Production Trend and Government Revenues

The production trend of gold is pointing up as the diagram below illustrates:

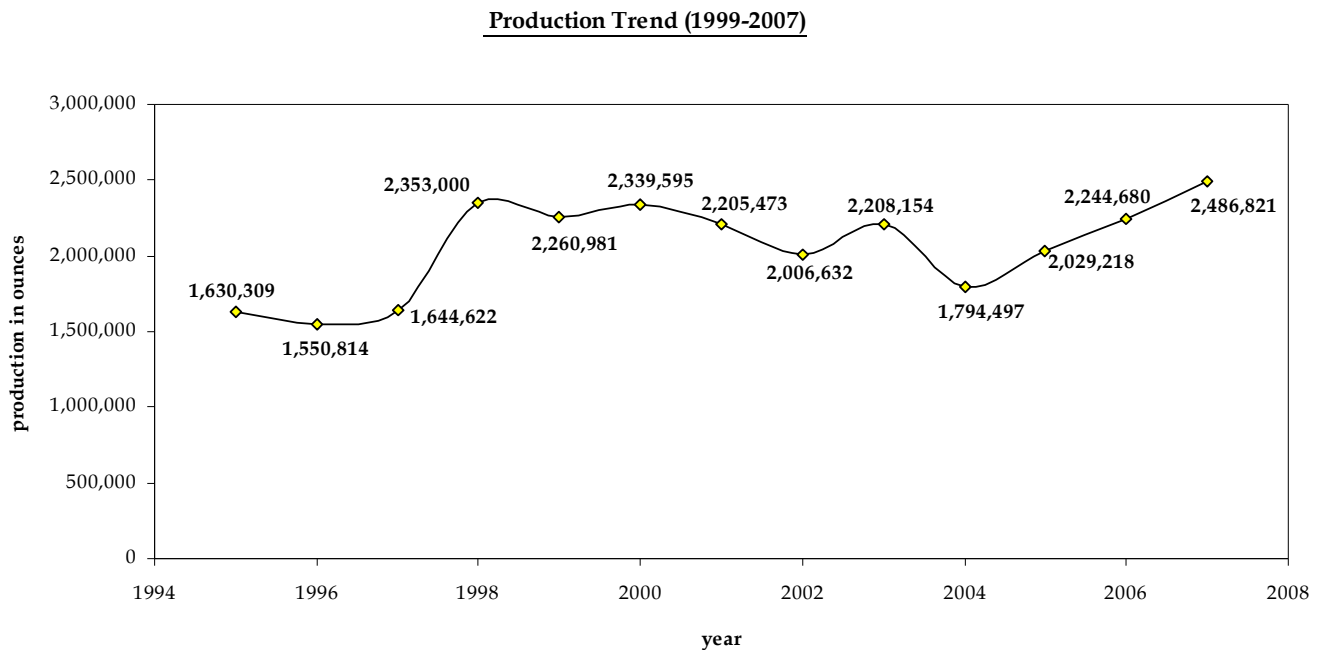


Fig. 3. Production Trend (1999-2007)

In 2008 the gold output rose again by 4% from 2,486,821 oz. in 2007 to 2,585,913 oz. in 2008 (Kunateh 2009). Gold is the most important sub-sector accounting to more than 90% of total value of mineral exports (Akabzaa 2009). In the last ten years Ghana consistently ranked around 10th in terms of world gold output. After South Africa Ghana is the second largest gold producer on the African continent (Ghana Chamber of Mines 2008: 3).

According to the Ghana Chamber of Mines (2008: 10) the mineral sector “*continues to be one of the highest contributors to the Internal Revenue Service through the payment of mineral royalties, employee income taxes, corporate taxes and ancillary levies.*” In 2007, the mining industry contributed about GHS 123 million to the IRS collection, representing 13.65% of IRS’ total collection (Ghana Chamber of Mines 2008: 10).

The numbers of the mining industry’s contribution to GDP increased from 1.3% in 1991 to 6.16% in 2007. In 2007 minerals’ contribution to gross export earnings was about 41% (The Ghana Chamber of Mines 2008: 10). In a personal interview in March 2009 Benjamin Aryee, Chief Executive of the Minerals Commission, states that the mining sector is currently contributing about 40% to total export earnings, in terms of government revenues it contributes about 11 to 12%, in terms of GDP mining contributes about 6% (Aryee, personal interview on 4 March 2009).

3.6.5.2 Paradox of the Plenty

Despite all these figures and statements by mining advocates there is growing criticisms of the praised contribution of mining to national development and poverty reduction. One school of thought argues that the mining sector is the star performer of the Ghanaian economy. The other one refers to the gold paradox: It is described as paradox of the plenty or resource curse, no matter what you want to call it, it is a fact that despite Ghana’s mineral wealth it remains a poor country. In 2008 it ranked 142 out of 179 on the Human Development Index (HDI) (UNDP 2008).

Many people such as Akabzaa (2009) do not trust the bloated figures and do not see a significant positive impact on the country’s development: “[T]he current state of the Ghanaian economy does not suggest that there has been a significant positive impact

from the sector despite the touted flamboyant statistics. The line of argument suggests that the sector could have performed better in terms of its contribution to government revenue, employment, improvement in the livelihoods of the communities in mining project areas and contribution to the overall GDP of the country.”

For many critics besides Akabzaa (2009) the question still remains whether all the policy changes and the increasing FDI into the sector, enhanced mining output and the value of gross mineral exports really translates into national development and poverty reduction. Akabzaa (2009) generally sees only little contribution of the mining sector to national revenue. The outcomes are minor, also due to the fact that it is a major challenge for developing countries in general to negotiate effectively with foreign mining companies and achieve acceptable outcomes.

3.6.5.3 Low Capacity for Labor Absorption

Akabzaa (2009) delivers more damning indictment of the mining sector's role in national development and poverty reduction. The mining sector has shown a low capacity for labor absorption. In 2000 the sector's share of total employment of the working age population was only 0.7%, compared to agriculture which held around 55%. This is also due to the shift from comparably labor intensive underground mining to much less labor intensive surface mining. Deployment in the sector was very intense. From 1983 to 2003 over 15,000 mine workers have lost their jobs.

The Ghana Chamber of Mines (2008: 23) indicates direct employment by producing members of the Chamber as at December 31, 2007 at 12,658 out of which 2% were expatriates. Ahmed Nantogmah states in February 2009 that there are about 14,000 persons directly employed with the large-scale mining industry (Nantogmah, personal interview 24 February 2009).

Officials like Nantogmah (personal interview 24 February 2009) of the Chamber of Mines often praise the positive effects of the mining sector to other sectors of the Ghanaian economy. But others like Akabzaa (2009) argue that the mining sector remains an economic enclave with little linkages to other sectors of the Ghanaian economy.

Since the mid-1990s the number of workers employed by large-scale mining dropped as the figures below illustrate:

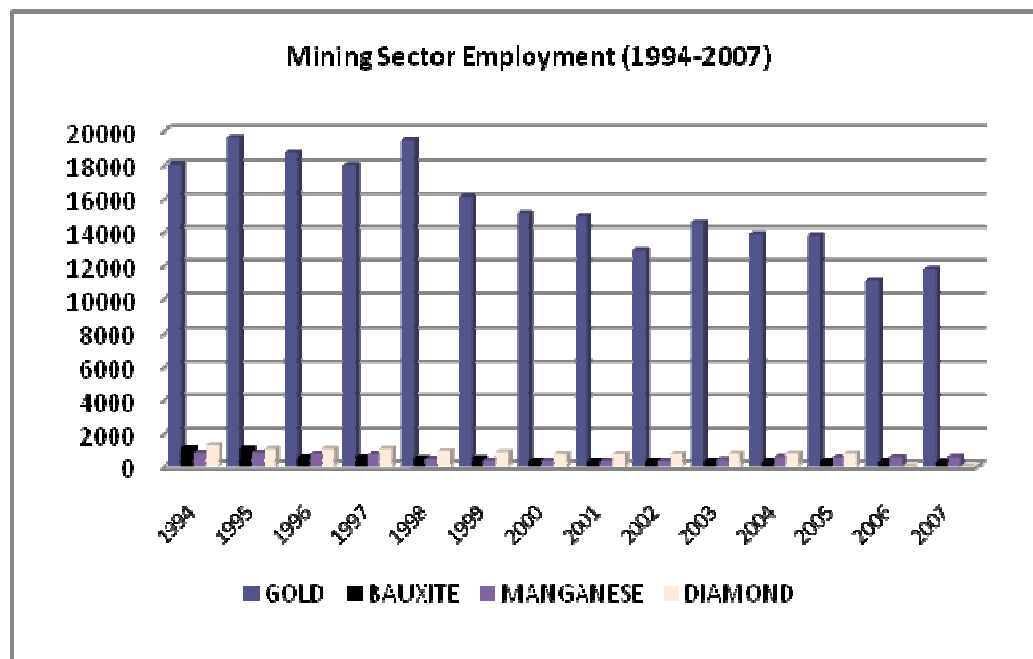


Fig. 4: Mining Sector Employment (1994-2007)

3.6.5.4 Local Communities Bear the Brunt

When you look at the one's that bear the brunt of the gold mining boom it is the local communities. Most of the major stakeholders agree on that. Although the Ghana Chamber of Mines (2008: 10) attests its members a very positive attitude in terms of community relations: *"The responsiveness of mining companies to their social responsibilities motivates them to contribute both in cash and kind to the development of their host communities. Indeed mining companies' interest in their host communities have in recent times been expanded to include social investments projects where they collaborate with the communities to fund projects that yield both social and economic returns to the communities."* They even go further: *"The mining industry contributes to social multipliers which arise from the role of mining companies in the development of human resources and infrastructure such as schools, colleges, clinics, roads, and housing."* (Ghana Chamber of Mines 2008: 23)

In a personal interview, Benjamin Aryee (4 March 2009), Chief Executive of the Minerals Commission, clearly says: *“Where the brunt is felt the most doesn’t get the most of the benefit.”* He goes even further and states that *“the local community have not benefited as much as one would wish.”* He sees the responsibility with the Government of Ghana: *“The companies are not here as philanthropical institutions, they have to do business, so we as the government, people of Ghana, should ensure that the benefit sharing is as optimal as possible.”* Owusu-Koranteng (personal interview 28 February 2009) argues that the people of Ghana substitute international mining companies with the low extraction costs, low compensation payments and low mining royalties. He puts the blame on the government as well but also on international financial institutions such as the WBG or the IMF that have major influence on the way mining policy in Ghana looks like.

3.6.5.5 Question of Benefit-Sharing

On the ground level benefit-sharing only occurs when the displacees actually get their share of the projects benefits. Often project owners, governments or financiers tend to call relocation and rehabilitation measure benefits. Whereas only assets like shares in project equity, benefit sharing arrangements, educational investments, development of micro enterprises, or grants can be called benefits (Downing 2002: 14). Projects sponsored by mining companies like alternative livelihood projects (ALP) are also to be seen critical. According to Aryee (personal interview 4 March 2009) they are not necessarily development-oriented, mostly those projects exist to get communities of the company’s back, so that they are satisfied. In reality it is not about sustainable development but about promoting the company’s needs.

Usual cost-benefit analysis is mostly incomplete. The displaced people are seldom under the beneficiaries of such projects and the real costs and losses of displacement are usually not properly measured and valued. A large part of the socio-economic costs are externalized out of the project’s budget and are left with those who suffer from displacement. Only parts of these costs are covered by meager compensation. An “equity compass” requires that costs and benefits are calculated for each sub-group that is affected by the project and not for the society or the project as a whole. Differential impacts must be recognized (Cernea 2000: 47ff).

4 Ghanaian Land Tenure

One of the major risks of DFDR, especially in the Teberebie case, is landlessness. The risk of losing access to land is deeply connected to other risks, also because land often means so much to the local people as Kuntu-Mensah (1997) points out: *“The land is more than a physical entity; it is the most important ingredient in the economic life of the people; it is religion to others and also has political connotations.”* Ghana is an agricultural country, over 60% of the countries jobs are found in that sector. Ghana is highly dependent on land as its basis of economic development. At the same time the state is struggling with mounting land related problems (Blocher 2006: 168f).

To be able to analyze the impacts of landlessness it is significant to know the basic principles of Ghanaian systems of land tenure. Kuntu-Mensah (1997) defines land tenure as follows: *“Land tenure refers to the way in which rights to land is obtained and distributed among people.”*

4.1 Dual Tenure System

Land tenure and land law in Ghana is a complex mix and result of coexisting regulations of rights. Simplified, two broad arrangements exist: customary tenure and public land tenure. The customary system dates far back and exists on the side of the state title system (Kuntu-Mensah 1997; Sarpong 2006).

Blocher argues that it is of necessity to incorporate customary land tenure systems into formal state land law to promote efficient and equitable economic growth. Currently a lot of African countries are struggling to find a way to create land policies that merge customary property rights and modern state law (Blocher 2006: 168). The Ghanaian constitution recognizes customary land tenure systems but it is the state’s right to forcibly obtain lands for purposes deemed to be in the public interest. Any land title can be lost to the Ghanaian state on basis of acquisition as all minerals and all lands harboring minerals are vested in the president in trust for the Ghanaian people (Sarpong 2006: 17). This is a very important point, basically no matter what kind of title or ownership of land a person

or group has, the state has the power of eminent domain and can obtain the land in the name of public interest. This power of eminent domain and compensation mechanisms are discussed into more detail at chapter 3.6.3.

4.1.1 Customary Land Tenure Systems

Most of the land in Ghana is “owned”⁶ by customary authorities such as clans, skins, stools and families. They own about 78% of all lands, 2% are owned in a partnership of the state and customary authorities and 20% are owned by the state (Larbi 2008: 2).

Ollennu and Woodman (1985: 8) describe the close connection between customary authorities and land tenure as follows: *“As the stool or skin is the shrine containing the soul and spirit of the family, the tribe or nation and is therefore the embodiment of the collective authority of all the members of the community, the tribe or the family, the ‘stool’ or the ‘skin’, of a particular village, town or tribe, is said to be the paramount or absolute owner of the land of the village, town or tribe. The occupant of the stool or skin, the head of the tribe or family, is a trustee holding the land for and on behalf of the community, tribe or family.”*

Customary lands *“occur where the right to use or to dispose of use-rights over land rest neither on the exercise of brute force, nor on the evidence of rights guaranteed by government statute, but on the fact that they are recognized as legitimate by the community, the rules governing the acquisition and transmission of these rights being usually explicitly and generally known, but normally not recorded in writing.”* (Larbi 2008: 2)

The ownership of such land may date back from discovery or continuous settlement on the land, a conquest through war and following settlement thereafter. It may have been purchased from another traditional leader or been a gift from another land-owning community. Customary land tenure systems are not static, they have undergone changes

⁶ The term “own” is put into quotation marks as in customary land tenure, land is not owned in a capitalistic sense but rather been hold by a trustee for a larger group of people.

through the course of time and adapted to new challenges. The customary systems throughout Ghana are quite differentiated but share their strong, dynamic and evolutionary characteristics (Larbi 2008: 2f). Inheritance and succession to property are determined by the patrilineal systems in the Northern part of the country, most of the Volta and some of the Ga communities and by matrilineal systems in the Akan areas (Kasanga/Kotey 2001: 13) as in the case of the research area in the Western Region in Teberebie.

There are basically four categories of titles to land, namely: allodial title, freehold title, leasehold title and lesser interests in land.

The allodial title is the highest interest known in customary law. In some areas of Ghana this title is held or vested in traditional stools or skins. In other areas this title is also held by subgroups such as substools, clans, families or even individual people. The stool/skin which holds an allodial title has complete freedom in dealing with the land. Stool ownership means corporate ownership and not personal ownership of an individual ruler (Sarpong 2006: 2). Although officially mostly chiefs hold this title they do so only in the capacity of something like a trusteeship, administering it for the benefit of their subjects – living, dead and still to be born (Blocher 2006: 179).

The freehold title can be held both in customary and common law forms. It is superior to all other interests in land except the allodial title. The customary freehold, also called usufruct, is held by individuals or groups to land that is held allodially by a chief, clan, or other owner. The holder of a freehold title has almost unlimited rights to do whatever he⁷ wants on the property and can just be restricted by the allodial title owner. The customary law freehold is continuing as long as its holder continues to acknowledge the higher title of the allodial owner. The title is inheritable but cannot be alienated to another person or group by the allodial owner without the consent of the holder of the freehold title (Blocher 2006: 180).

Leasehold is granted to a person to occupy specified land for a specified time period. Leaseholds derive from common law, not from customary law. But a lease may be granted by a customary freeholder or an allodial title holder. Usually under a leasehold,

⁷ Land titles in Ghana are mostly held by men.

the lessee pays an annual rent for occupying the land and has arrangements on how the land will be used (Sarpong 2006: 3).

The category of all lesser interests in land includes several rights to land that can be created by allodial and customary freehold owners. Most common are sharecropping arrangements. The two major types of sharecropping agreements are *abunu*, under which returns are split in half between landowner and tenant, and *abusa*, under which the landowner gets one third of the returns from the tenant. Whether a tenancy is *abusa* or *abunu* depends on various factors, like availability of land, the kinship or social connection between the involved parties, the intensity of labor required for cultivation or the reputation of the tenant. Sharecropping agreements are increasingly common in Ghanaian agricultural economy although the concept of sharecropping tends to inspire fears of exploitation (Blocher 2006: 180f).

Ghanaian customary land law remains deeply connected to social and cultural systems like clans, skins and stools. Traditional leaders like chiefs have exceptional power when it comes to land issues (Blocher 2006: 182f).

4.1.2 State Land Administration

Across Africa the attempts to draft property rights have been top-down approaches driven by the state. In practice they tried to replace customary land tenure systems with western forms of property ownership often coming along with formal land title registration (Blocher 2006: 167). So it is also the case in Ghana.

According to customs most land transactions happen without written documentation, boundaries are not defined by surveyed maps but rather by physical landmarks. There have been several attempts for registration systems of oral transactions of land, the first one was the 1962 Land Registry Act (Act 122) (Hacibeyoglu 2008: 40). The act was designed to deal with uncertainty of title but proved to be ineffective and insufficient in solving these problems (Kuntu-Mensah 1997).

In 1986 the government enacted the Land Title Registration Law (PNDC Law 152) with the aim to promote title security through an official title registration system. It started

recording property in greater Accra and Kumasi. Implementation proved to be slow. 15 years later less than 5% of the land in these districts had been registered. The customary practices remained and the law was mostly ignored (Hacibeyoglu 2008: 41f). The public lacked confidence in state land registration.

There are two institutions, the Lands Commission and the Office of the Administration of Stool Lands (OASL), which have been established to administer public and customary lands (Sarpong 2006). In 1999 the National Land Policy was introduced and the Land Administration Programm was the tool to implement it. The program was supported by international donors and the first phase, named Land Administration Project (LAP), started in 2003. The LAP's aim is to establish a clear and consistent set of land administration policies and laws including an administration system that enhances land tenure security (Sarpong 2006: 5). It remains to be seen what the outcomes of the LAP will be as the project runs over a 15-year period.

5 Anthropology and Displacement and Resettlement Research

5.1 The Beginnings of Anthropologists in Displacement and Resettlement Research

The first research on displacement and resettlement emerged in the 1950s in the concern for the refugees and displaced after World War II (Oliver-Smith 2009: 6). The pioneer document was Alexander Leighton's *The Governing of Men: General Principles and Recommendations Based on Experiences at a Japanese Refugee Camp* (1945). The early focus was on displacement of refugees of war or natural disasters.

Anthropologists were among the first during the mid-twentieth century to recognize and document the impoverishment risks and violations of human rights faced by people displaced by so-called development projects. So it is fair to say that Anthropology can claim to be the foundational discipline in the field of displacement and resettlement research. Anthropology's holistic approach was very applicable to the complexity of the resettlement process and the impact it has on basically all domains of community life (Oliver-Smith 2009: 6).

5.1.1 Characteristics of Development-Forced Displacement and Resettlement (DFDR)

Later on social scientists engaged in research of Development-Induced Displacement and Resettlement (DIDR) or as I prefer Development-Forced Displacement and Resettlement (DFDR)⁸.

⁸ The term DFDR seems more appropriate than DIDR. "Induced" is not appropriate for something that is determined, decided and planned in advance. It also suggests that people may be convinced by the rewards of being resettled. The term "induced" makes involuntary displacement and resettlement seem voluntary (Oliver-Smith 2009: 23).

DFDR is permanent, in contrast to other forms of displacement. Once the land is submerged there is no point of return (Oliver-Smith 2009: 4). DFDR is a political phenomenon, it involves the power of one party to relocate another party. Scudder (2009: 26ff) sums up four especially relevant characteristics of DFDR: It accelerates the rate of social change, it is mostly involuntary, it is a by-product of a development initiative and it is an extremely complex phenomenon.

Usually displacement begins long before physical relocation. People often feel the economic effects in advance. An important question to ask is: When does displacement end? To determine when displacement ends derives from the policy that defines the objective of DFDR. Therefore displacement would end when the policy objective is met – when the displaced achieve a living standard equal or above pre-displacement levels. Confusing the end of displacement with the end of physical transfer is a serious mistake. If people have not been rehabilitated their displacement has not ended. They remain displaced and impoverished (Cernea 2003b: 24f).

As the projects and programs that caused displacement multiplied all over the world, social scientists began to show interest in DFDR. Some of the studies published in the 1960s and 1970s have become classic work of social science literature. Herbert Gans (1959, 1968) worked on urban displacement or Roy Burman (1961) carried out field work in India. Burman's research model on strip mining, dams and road construction was later followed by other sociologists and anthropologists (Cernea 1995: 96f).

The first real in-depth analyses of cultural, economic but also psychological effects caused by forced relocation in the south was the Akosombo reservoir displacement in Ghana by Robert Chambers (1970) as well as Elizabeth Colson's and Thayer Scudder's long-term research on the displacement of the Gwembe Tonga due to the construction of the Kariba dam (Colson 1971).

5.1.2 Four Stages Model by Thayer Scudder

Thayer Scudder, an anthropologist that devoted most of his work to resettlement studies, has analyzed cross-cultural reactions to forced displacement and resettlement in Asia and Africa and compared them with voluntary settlement (Cernea 1995: 97). There was very

little theoretical work done concerning DFDR until Colson and Scudder developed a model based on the four stages to describe and analyze the process of forced displacement and resettlement in the early 1980s. Usually it is known as the stress model: There are three forms of stress resulting from involuntary relocation and resettlement, namely: physiological, psychological and socio-cultural stress - “multidimensional stress”. For Scudder (2009: 29ff) himself the strength of the model lies much more in the four stage framework. It emphasizes how a majority of resettlers are expected to behave during the four stages. The model deals with the first and second generation of resettlers. The stages must be completed through the second generation if resettlement outcomes are considered a success (Scudder 2009: 29). The four stages for achieving successful resettlement are:

“Stage 1: Planning for resettlement before physical removal

Stage 2: Coping with the initial drop in living standards that tends to follow removal

Stage 3: Initiating economic development and community-formation activities necessary for improving the living standards of first-generation resettlers

Stage 4: Handing over a sustainable resettlement process to the second generation of resettlers and to nonproject authority institutions.” (Scudder 2009: 30)

The development stage is often never reached in many projects because of lacking policy and implementation (Scudder 2009).

During the end of the 1980s and while he was working for the World Bank Micheal Cernea began to develop his approach, the by now well known Impoverishment Risks and Reconstruction (IRR) model. The approach linked the ideas of vulnerability and risks. The concept rests on eight potential risks of poverty resulting from displacement and is described into more detail in 5.4.1. as the carried out case study mainly rests upon his approach.

The two main theoretical frameworks on DFDR have many similarities. Both frameworks deal with processes over an extended period of time and operate on high levels of generalization and try to simplify the complex phenomena of DFDR. Because of the variability and complexity involved one needs to be careful when deriving hypothesis from the frameworks - although it is of course possible. Both frameworks are based on hypothesis that can be tested. Both frameworks focus much more on rural than in urban resettlement. They both lack in taking into account a gender impacts and impacts on children (Scudder 2009: 32ff). They also to a large extent lack cultural implications.

As the pace of DFDR accelerated in the 1980s the displacement and resettlement studies also expanded, focusing more on environmental and social impacts, particularly of dam-projects (Oliver-Smith: 2009: 7). Researchers during that period of time produced a significant amount of “gray literature” of studies, project reviews and evaluations. Anthropologists increased cooperation with NGOs to record the negative impacts of development projects in Mexico, India or Brazil (Oliver-Smith 2009: 8). NGOs, independent commissions and other institutions contributed in theorizing the challenges of DFDR. The World Commission on Dams (WCD) is one such organization. It linked the concept of risks with the concept of rights (Oliver-Smith 2009: 13). Besides the WCD also the Extractive Industries Review (EIR) has produced important steps towards policy change and socially and environmentally responsible development (Oliver-Smith 2009: 15).

5.2 Anthropological Research Implementation in Policy Frameworks

However, despite the growing amount of research and literature and the recognition of the findings by the scientific community most governments stayed oblivious to the new findings (Cernea 1995: 97). This had different possible reasons. On the one hand there was the focus of social scientists such as anthropologists and case studies with no wide reaching policy recommendations and on the other hand policy and decision makers that preferred the policy vacuum and did not enquire critical input.

5.2.1 Limits and Significance of Case Studies

There were few attempts by social scientists to translate their research findings into concrete systematic policy proposals. Cernea (1995: 97) explains it like this: “*The 'research monograph' was designed as a vehicle for conveying knowledge, but was not intended or used as a vehicle for translating knowledge into operational or normative policy recommendations.*”

But Cernea also stresses the utter importance of social research on a case-by-case basis. Empirical case studies are an important prerequisite to policy reforms, but necessarily do not make policy recommendations. They usually do not make recommendations beyond the case at hand. This was also the case with social scientists working in project

evaluation: *“Impact evaluators usually carry out studies whose goal is to mitigate the impacts of a particular project. They seldom formulate broader, forward-looking policies.”* (Cernea 1995: 94) Social scientists and impact analysts must set their sights much higher: *“Time and location-specific studies that do not look beyond their own ‘nose’, and which discuss only individual instances, can hardly trickle-up messages for broader purposes. Somebody needs to aggregate the case-by-case work in order to distil broader policy and strategy lessons”* (Cernea 1995: 94)

5.2.2 Preferred Policy Vacuum

For years social science studies on forced displacement have been ignored by policy makers, engineers, planners and economists, so of course the reverse question arises: Why did government agencies and donors not demand research findings when they had to deal with displacement? For decades neither policy makers, decision-makers, project-planners nor managers demanded social expertise. Major adverse effects were belittled as tolerable side effects for decades (Cernea 1995: 97, 1993: 19). Cernea (1995: 95) puts it like this: *“On the one side is a long odyssey of disastrous displacement operations that recur as virtual carbon copies of one another; on the other side there is a growing, but largely uninfluential body of social science knowledge about resettlement, that demonstrates the mistaken assumptions and inadequate procedures used by displacement planners oblivious to lessons from previous disasters.”*

Some agencies or governments preferred and still prefer to maintain a policy vacuum and avoid policy commitments. This leaves them more flexibility in short time, but often at the expense of long-term cost, externalized to others (Cernea 1995: 94f). A policy vacuum brings many dangers: *“A vacuum in public policy allows detrimental practices to happen without checks or penalties. In fact, such a policy vacuum amplifies existing risks of adverse consequences since legal safeguards for preventing adverse are not institutionalized.”* (Cernea 1995: 95)

Human rights of people being affected are not considered and the complexity and gravity of DFDR is ignored. Oliver-Smith (2009: 8) characterizes this as the *“arrogance of authorities in many countries of both the developed and the developing worlds.”*

It is essential that policy formulation is open to the results of evaluation and research. Over the course of time the WBG took a leading role in this matter and incorporated the results of social research into its displacement and resettlement policies. It is far from being perfect, but at least it is a start.

5.2.3 Influence of Anthropological Research on the World Bank Policy on Displacement and Resettlement

The World Bank policy is significant because the Iduapriem mine was partly financed by the World Bank, by the IFC to be specific, from 1990 to 2007. The resettlement of the Teberebie village occurred early during this period of time.

How the World Bank incorporated findings of social research into its policy is particularly important as they set an example, being the first ones to do so. In 1989 (8) Cernea admitted that there is still a long way to go but he emphasized the leading role of the World Bank. He observed a chain reaction to the World Bank's use of social scientists in their projects and their policy design. According to him several government agencies in developing countries started to consult local sociologists and anthropologists.

At first the existing knowledge was kept on a shelf but not incorporated. In 1989 (2) Cernea stated that: *“until recently the availability of sociological ‘knowledge on the shelf’ about involuntary resettlement hardly, if at all, exercised any influence on the governments and agencies engaged in the practice of involuntary resettlement.”* The socio-anthropological concepts and research findings kept accumulating but had little effect on relevant programs or policy design (Cernea 1989; 1995). But Cernea already emphasized the major role of anthropologists in displacement and resettlement research in 1989 (9) when he praised their *“exceptional contribution to project improvement and implementation.”*

The study of development related displacement by social sciences, especially sociology and anthropology started to have particularly strong influence during the 1980s and 1990s. Only after those concepts were incorporated by the World Bank they became politically influential and were put into practice (Cernea 1995: 92).

1979-1980 was a significant turning point when the World Bank adopted a catalogue of criteria regarding to social implications involved in involuntary relocation, the internal policy document *Social Issues Associated with Involuntary Resettlement in Bank-Financed Projects* (World Bank 1980). It laid down minimal principles for resettlement operations involving World Bank funds. Cernea (1995: 99) working for the World Bank himself reports that there was good institutional support but some remained unconvinced that the so-called “side effects” should play such an important role, there was insufficient social knowledge within the Bank.

Despite those articulated doubts the process started. The initial feeling for the need of a new policy document was a result of trouble-some feedback from forced relocation processes and progress made in-house using social science knowledge. During the following years the 1980 paper went through several rounds of improvement within the work domain of the Bank’s sociologists and anthropologists (Cernea 1993: 20; 1995: 98f).

In the mid-1980s a policy analysis of resettlement in World Bank-financed projects started. The in-house application of the 1980 guideline should be investigated. The study covered agriculture and hydropower projects approved between 1979 and 1985 in 27 countries (World Bank 1986). According to Cernea (1995: 100), who was part of the process, concluded: “[T]he introduction of the initial 1980 policy of the Bank’s resettlement policy had led to substantial improvement in the treatment of resettlement components of projects.” But at the same time the study found out that the Bank-staff was not applying the policy consistently.

The key findings of the study that was published in 1986 (World Bank 1986) were: Preparation and planning need radical improvement; there is mismanagement of options to rebuild productive capacities of displaced persons; the Bank is insufficient in supervising the resettlement implementation. Furthermore the study concluded that the impact on the host population and the physical environmental costs needed to be factored into the project (Cernea 1995: 100). The new policy note was issued with a strengthened focus on the socioeconomic basis of the people affected by the project. In 1988, the 1980 and the 1986 paper were integrated into one single paper and the World Bank’s resettlement policy was published and made widely available (Cernea 1988).

The World Bank Operational Directive on Involuntary Resettlement 4.30 was published in 1990 and was a directive for World Bank projects. It was mainly written by anthropologist Michael Cernea as well (World Bank 1990). Those guidelines were an important step for the limitation of negative project effects involving resettlement, but their implementation proved to be consistently problematic (Oliver-Smith 2009: 10).

In 1994 another World Bank study led to new strategic measures on operations that demanded corrective action (World Bank 1994). According to Cernea (1995: 101) among the strategy measures were: *“making agreement on policy with borrowing governments explicit and requiring the adoption of national policy and legal frameworks for projects with large-scale resettlement operations; increasing local capacities for carrying out resettlement operations adequately; improving project design by reducing displacement and incorporating production-based relocation strategies; providing increased allocation of financial resources; and promoting greater consultation and participation of affected people in designing and implementing resettlement.”*

According to Cernea (1995: 103f) among the most important changes was that the Bank was no longer to appraise or improve financing for a project that would cause displacement without a proper Resettlement Action Plan (RAP). The most fundamental demand of the policy framework was its *raison d'être*: *“to counteract the poverty risks involved in forced displacement, prevent impoverishment of those displaced, and ensure that their income and livelihood are restored through adequate resettlement.”* (Cernea 1995: 103)

The most recent World Bank policy on involuntary resettlement was issued in 2001. In 1999, in an act of increased transparency, the World Bank requested comments from an array of stakeholders including national governments, NGOs and academics (Thomas 2002: 342). During this preliminary stage NGOs and anthropologists articulated their concerns with the new policy. For Bliss (2001) the draft was not reaching far enough in considering the people involved. He suggested, the displacement criteria should be tightened and further specified. If there would be no alternative, relocation should aim at improving the situation of people affected. The World Bank Operational Policy on Involuntary Resettlement (OP 4.12) was published in 2001 and states that *“[i]nvoluntary resettlement may cause severe long-term hardship, impoverishment, and environmental*

damage unless appropriate measures are carefully planned and carried out.” (World Bank 2001) The policy and its measures got mixed reviews. According to Oliver-Smith (2009: 10) the 2001 World Bank policy guidelines was weakened, making it easier to carry out resettlements. Indigenous peoples were less protected as well as other people lacking formal land titles. Overall the new World Bank policy tried to reduce their responsibility when it came to displacement and resettlement impacts.

In 2000 the World Bank announced an independent review of its engagement in the extractive sector, partly due to the repeated external critique of the Bank’s role in oil, mining or gas projects. Some recommendations of the Extractive Industries Review (EIR) were: a more explicit focus on poverty reduction associated with its projects; the principle of free, prior, informed consent for giving the local communities more power in the decision making process; benefit sharing for local communities should be ensured; the negative legacy of extractive projects should be tackled; more transparency of revenue management and project documents (Extractive Industries Review 2003). Many of those recommendations were already been brought to the World Bank by the civil society and resettlement experts for years.

The International Finance Corporation (IFC), the private sector arm of the World Bank, financing many mining operations, including the Iduapriem mine, revamped its approach on environmental and social safeguard policies and unfortunately distanced itself from lessons of past experience (Clark 2009: 187). In 2006 they issued a Sustainability Policy with the Performance Standard 5, covering land acquisition and involuntary resettlement. The most important problem is that this new standard reversed the World Bank policy with respect to recognizing the vulnerability of landless people (International Finance Corporation 2006). Until the IFC had their own Sustainability Policy and Performance Standard 5 they were still following the World Bank Operational Directive on Involuntary Resettlement (OD 4.30) (World Bank 1990) even though the rest of the bank group was already following the Operational Manual on Involuntary Resettlement (OP 4.12) (World Bank 2001). Both OD 4.30 and OP 4.12 forbid discrimination against landless people and emphasize the improvement of affected people, whereas the IFCs Performance Standard 5 only requires compensation for loss of land with recognized legal title. The overall message that the Performance Standard 5 sends to private sector clients is clear: It is

acceptable to externalize the negative impacts of their projects to the surrounding communities and environment (Clark 2009: 191).

It is important to point out that all these mentioned policy frameworks were and are only relevant to projects (co)funded by the World Bank, outside relatively unregulated patterns continue. And also within projects (co)funded by the World Bank it is important to keep in mind that those policy guidelines and frameworks were and are not universally enforced in practice for many different reasons. According to Clark (2009: 181ff) it is not a blindness of problems related to DFDR that has proven the policy objectives of restoring or improving the displaced standard of living elusive. There are varying reasons ranging from lack of proper planning, institutional weakness, to lack of political will of enforcing policies. At the end it is a question of power imbalance. International players like the World Bank Group or/and multinational corporations compete against local communities. To be displaced is the ultimate expression of powerlessness.

5.3 Anthropological Knowledge of Displacement and Resettlement in NGOs and Advocacy Work

Anthropologists have not just engaged in policy development and production of research studies. Theorizing DFDR has been inseparably woven into applied concerns for developing approaches and needs of affected people and their legal rights. Anthropologists have been active in advocacy activities on behalf of affected communities. They often take leadership in many NGOs that work with those communities affected by DFDR (Oliver-Smith 2009: 11).

5.4 Applied Anthropological Displacement and Resettlement Models

I applied two theoretical displacement and resettlement models during my research in Teberebie.

One is the most important work in resettlement studies in recent years. The work of Michael M. Cernea⁹ and his Impoverishment Risks and Reconstruction (IRR) model for resettling displaced populations that was developed during the 1990s. The origin of the model is both theoretical and empirical. It was first applied in a resettlement review of almost 200 projects carried out by the World Bank in 1993-94 (World Bank 1994).

The second concept I applied was the Mining Induced Displacement and Resettlement (MIDR) model by Theodore E. Downing. It is focusing especially on displacements caused by mining, bases on Cernea's IRR model and takes it further.

These two models operated as guidelines for the research in the Teberebie community, as a theorizing framework, for guiding the specific research and for analyzing the results. The following chapter gives an overview of these two concepts. Naturally with it comes insight in the major societal sustainability risks for displaced communities in mining areas.

5.4.1 Impoverishment Risks and Reconstruction (IRR) Model by Michael M. Cernea

Next to Downing's MIDR model the IRR model by Cernea proved to be applicable as a theorizing framework, for guiding the specific research and for analyzing the results.

5.4.1.1 Main Functions

According to Cernea (2000: 22) the IRR model provides a conceptual framework for conducting and organizing fieldwork and facilitates the exploration of possible linkages between related risks. The ability to guide data collection along the model's key variables makes it possible to compare responses to risks across different projects and within time.

The model has four basic functions:

- ”1. *A predictive (warning and planning) function*
2. *A diagnostic (explanatory and assessment) function*

⁹ Michael Cernea is both an academic researcher and an applied anthropologist whose work has focused on development policies, specifically social, environmental, and agricultural policies, from the perspectives of anthropology and sociology. He has held several senior positions at the World Bank and introduced sociology and anthropology into the World Bank (George Washington University 2010).

3. *A problem-resolution function, in guiding and measuring resettlers' reestablishment*
4. *A research function, in formulating hypotheses and conducting theory-led field investigations.”* (Cernea 2000: 21)

Oliver-Smith (2009: 9) calls Cernea's IRR model “*a significant tool for the prediction, diagnosis, and resolution of problems associated with DFDR.*” The IRR model is a theoretical model for involuntary resettlement that highlights the risks that cause impoverishment through displacement. It also offers ways to eliminate or at least mitigate these risks. It helps to create a compass for complex resettlement situations and adds tools of explaining, diagnosing, predicting, and planning. The model tries to explain what happens during massive forced displacements itself and to create a theoretical and safeguarding tool. It should counteract adverse effects and be able to guide policy, planning and development programs (Cernea 2000: 14).

5.4.1.2 Involuntary Displacement and Resettlement

Involuntary resettlement is different from most voluntary movements as there are nearly all “push” and no “pull” factors. Involuntary resettlement programs are mostly indiscriminate. The social insurance mechanisms present in most peasant societies around the world are overwhelmed and disrupted, few indigenous coping strategies manage the pressures caused by resettlement (Cernea 1993: 3). Involuntary resettlement is often accompanied by material and cultural losses and political tension. It is a concept of exclusion. It is a combination of physical exclusion from a certain territory and social exclusion of functioning social networks (Cernea 2000: 12). During displacement the affected people risk losing capital in all its forms: natural capital, man-made capital, human and social capital (Cernea 2000: 32). Conventional planning approaches do not protect adequately against risks. In most cases they do not prevent impoverishment, de-capitalization and victimization of the affected people (Cernea 2000: 13).

5.4.1.3 Eight Basic Risks

The IRR model consists of three fundamental concepts: risk, impoverishment and reconstruction that are further split into sets of specific notions. These variables are interlinked, influence each other and play varying roles (Cernea 2000: 19).

The main eight displacement risks are:

“

- a. *Landlessness*
- b. *Joblessness*
- c. *Homelessness*
- d. *Marginalization*
- e. *Food insecurity*
- f. *Increased morbidity*
- g. *Loss of access to common property resources*
- h. *Community disarticulation.*“ (Cernea 2000: 20)

5.4.1.4 Guide for Action

The model has a dual applicability: if you turn it upside down it shows the strategies that should be taken to prevent and overcome patterns of impoverishment. It is basically a guide for action:

“

- a. *From landlessness to land-based resettlement*
- b. *From joblessness to reemployment*
- c. *From homelessness to house reconstruction*
- d. *From marginalization to social inclusion*
- e. *From increased morbidity to improved health care*
- f. *From food insecurity to adequate nutrition*
- g. *From loss of access to restoration of community assets and services*
- h. *From social disarticulation to networks and community rebuilding.*” (Cernea 2000: 20)

The model is not just a predictor of inescapable impoverishment but is supposed to be a self-destroying prophecy. “*Read in reverse*” it is a guide toward counteracting risks and resolving problems. The risk identification is not just an exercise carried out for academic purposes but should be used to “*design for action*” (Cernea 2000: 33f).

5.4.2 Mining Induced Displacement and Resettlement (MIDR) Model by Theodore E. Downing

Mining activities are one major cause of DFDR. The concept of Mining-Induced Displacement and Resettlement (MIDR) model by Theodore E. Downing analyses the major risks to societal sustainability by mining activities, in particular effects caused by displacement and resettlement. This concept looks beyond the simple loss of land and opens up issues beyond economics and environment.

Sustainable communities have difficulties in rehabilitating after displacement by mining activities. Downing (2002: 3) sums up MIDR and the resettlement effect like this: *“MIDR is accompanied by what displacement specialists call the resettlement effect, defined as the loss of physical and non-physical assets, including homes, communities, productive land, income-earning assets and sources, subsistence, resources, cultural sites, social structures, networks and ties, cultural identity and mutual help mechanisms. The effect introduces well-documented risks over and above the loss of land.”*

Many mining communities already suffer before they are affected by large-scale mining operations and are resettled. Often MIDR causes “new poverty” and poor people do become even poorer. Already the loss of a little bit of resource can be devastating (Downing 2002: 8).

5.4.2.1 Vulnerable Groups

Downing’s model turns attention to especially vulnerable groups: *“Certain groups—especially indigenous peoples, the elderly and women—have been found to be more vulnerable to displacement-induced impoverishment risks.”* (Downing 2002: 3)

Vulnerable groups highly depend on their surrounding environment. Alterations in their surrounding ecology are much likely to overwhelm community adaptive responses.

Especially when it comes to indigenous people Downing (2002: 11) sees high risk for them to slip into new poverty: *“When evicted from their land – the foundation of their culture – without appropriate compensation or rehabilitation, the damage to indigenous people is extreme.”*

5.4.2.2 The Resettlement Effect

The most visual risk of MIDR is the loss of land, but there are also other potential risks that threaten the sustainability of a community. According to Downing (2002: 8) these include: joblessness, homelessness, marginalization, food insecurity, loss of common lands and resources, increased health risks, social disarticulation, loss of civil and human rights, disruption of formal educational activities and loss of access to basic public services.

This set of risks is more or less based on Michael M. Cernea's IRR model described above.

5.4.3 Interconnection of Potential Risks Models

5.4.3.1 Risk of Landlessness

According to Cernea (2000: 23f) the expropriation of land removes the main foundation of people's productive systems, commercial activities and livelihoods. Loss of land is the principal form of de-capitalization and pauperization of displaced persons. The affected families are sent into poverty unless the land basis of their productive systems is reconstructed elsewhere, or replaced with other steady income generating employment. Anthropological field studies show that the loss of land has far more severe consequences for affected families than the loss of housing.

MIDR raises the risk of landlessness as well. The loss of land means the loss of the essentials of productive systems, commercial activities and livelihoods. It is a form of de-capitalization. According to Downing (2002: 9) landlessness in relation to MIDR has four forms: *"1) the initial loss of land to mining, 2) damages to the land's productive potential in the surrounding, non-appropriated area, 3) subsequent losses in the productive value of land on account of environmental problems, and 4) loss of land occurring because landless people are unable to gain access to alternative lands."*

5.4.3.2 Risk of Joblessness

Cernea (2000: 24) states that the risk of losing wage employment due to displacement is very high both in rural as well as in urban areas. Unemployment and underemployment in resettlement communities often endures long after the initial physical relocation. Creating new jobs is a difficult task that requires extensive investments. In rural areas, landless

laborers lose the access to land of others (lease or sharecropped) and assets of common property. With displacement self employed producers, like craftsmen or shopkeepers lose their businesses. The sometimes offered vocational training may provide additional skills to resettlers but does not have to end up in regular employment. The joblessness often sets in with time delay. In the beginning of projects resettlers may receive employment, but these project-related jobs are mostly of short life and not sustainable.

Also the MIDR model mentions potential economic impacts not directly linked to ownership of land. Effects of MIDR can also be the loss of wage employment, loss of access to leaseholds and share cropping opportunities. Underemployment and unemployment is often chronic after the loss of income-generating resource base. Mining activities only increase employment for some. To seek employment in the mining sector is increasingly difficult as the industry is moving to less labor-intensive methods of production. So it is difficult to argue that mining brings employment to unskilled local workers. In this sense the argument that mining jobs may substitute lost local income opportunities does not hold, especially not if the lifespan of a job in the mining sector is much shorter than the job it dismantles (Downing 2002: 10).

5.4.3.3 Risk of Homelessness

Loss of shelter tends to be only temporarily for many resettlers but for some homelessness or worsening of their housing standards remains a permanent condition. The risk of worsening housing standards is much higher when the compensation for demolished shelter is paid according to market value rather than replacement value. Frequently resettlers can not accomplish to quickly rebuild their house so they are forced to move into temporarily shelters, sometimes displaced families live in these semi-permanent houses for years. In a broader cultural sense the loss of a family's home or the loss of a group's cultural space can lead to status deprivation and estrangement (Cernea 2000: 25).

According to Downing the potential risk of homelessness also follows the "new poverty" pattern. Most of the time this will just be temporarily but in cases where the resettlement was executed poorly it remains a chronic condition. It goes beyond the simple loss of a structure. Homelessness itself or the replacement of a house with a structure that the occupants don't consider "a home" is often connected with "*a profound loss of identity*

and cultural impoverishment as the symbolic importance of place, in terms of family cohesion and a remembered location for mutual support, not only from the household but neighboring households is disturbed.” (Downing 2002: 10)

5.4.3.4 Risk of Marginalization

Marginalization occurs when families lose their economic power. A downward spiral starts, highly productive farmers are moved to less productive soils, middle-class land owners become small landholders, small landholders become landless tenants, small shopkeepers or craftsmen downsize and slip into poverty. Human capital is lost when individuals cannot use their acquired skills in the new environment (Cernea 2000: 26).

This economic marginalization is most of the time accompanied by social and psychological marginalization as Cernea (2000: 26) further elaborates: “*[Social and psychological marginalization is] expressed in a drop in social status, in resettlers’ loss of confidence in society and in themselves, a feeling of injustice, and deepened vulnerability.*” Although anxiety, decline in self-esteem and cultural and behavioral derogations have been reported over years, especially psychological marginalization is typically overlooked in resettlement planning. The victimization of the resettlers tends to degrade their self-image and also lower their status compared to surrounding communities or the host community (Cernea 2000: 26).

Downing also sees the problem of marginalization in communities affected by mining. According to him there is especially a risk of marginalization as displaced individuals and communities slip into lower socioeconomic status relative to the surrounding area. Research has shown that such marginalization leads to loss of self-esteem (Downing 2002: 11).

5.4.3.5 Risk of Food Insecurity

According to Cernea (2000: 27) forced resettlement increases the risk of temporarily or permanent undernourishment and food insecurity. During physical relocation sudden drops in food crops availability are predictable. The rebuilding of functioning regular food production may take years and hunger and undernourishment become long-term effects.

Downing (2002: 11) mentions increased risk of food insecurity in his MIDR model as well.

5.4.3.6 Risk of Increased Morbidity

Massive relocations cause serious declines in health levels. The social stress and psychological stress is sometimes accompanied by location-related illnesses such as parasitic and vector-borne diseases such as malaria. Unsafe water supply and inadequate sewage systems cause vulnerability to epidemics, chronic diarrhea and so on. Children and the elderly are especially affected (Cernea 2000: 27f).

Mining related health risks are especially mentioned in Downing's MIDR model. Health risks faced by communities affected by mining are well documented. The initial act of moving can cause stress and traumas to the displacees. There is also a long list with much reported recurring difficulties once the communities are resettled such as gaining access to safe potable water and safe sewage; increase in diarrhea, dysentery and epidemic infections (Downing 2002: 11). Increased mortality rates are reported in connection with accidents associated with new water reservoirs or epidemic outbreaks around new water bodies (Cernea 2000: 29).

5.4.3.7 Risk of Disruption of Formal Educational Activities

In association with MIDR there is the risk of disruption in education and routine socialization. Children often do not attend school during relocation. A number of children do not return to school and instead join the labor force at an early age. The chaos of relocation distracts the parents from focusing on their children's education (Downing 2002: 11).

5.4.3.8 Risk of Loss of Access to Common Property and Services

Especially for already poor people the loss of access to common property (forest, lands, water bodies, burial grounds and so on) that belong to the relocated community lead to decrease in income and livelihood. When the access to common property resources is not protected the pressure on common property of other surrounding communities or reserved forests increases and causes social conflict and environmental degradation (Cernea 2000: 29).

Downing (2002: 11) also states the risk of loss of access to common property in the MIDR model.

5.4.3.9 Risk of Social Disarticulation

Population relocation goes much beyond simple financial costs, according to historians of migration among the heaviest costs are the severing of personal ties in family surroundings. Forced displacement dismantles social networks that used to mobilize people to act around common interests. Forced resettlement fragments and disperses communities and dismantles patterns of social organization and kinship groups. Informal networks of mutual help or voluntary associations are disrupted. The loss of reciprocity networks directly worsens powerlessness, dependency, and vulnerability. Cernea (2000: 30) further describes this as a net loss of valuable “*social capital*” apart from the already broadly discussed economic capital. This loss of social capital is typically not compensated by the programs or projects that caused it, although the loss has long-term consequences.

Downing (2002: 11) also points out the risk of social disarticulation in the MIDR model.

5.4.4 Differential Risk Intensities

The described risks must be seen as a pattern of variables linked to one another. Those risks are forced upon the affected people that have to deal with them simultaneously which often results in a crisis. According to Cernea (2000: 31) the intensity of these risks varies from site to site and risks are differently experienced by sub-groups. Site-specific risks may emerge, some risks may not be experienced. Individual situations are always richer than the pattern but the general model is present in all situations despite the variations. There is a gender-oriented variance. Especially women suffer more severe impacts like discrimination against in compensation criteria.

6 Research Design and Methodology

6.1 Case Study Approach

This research on the impacts of gold mining in the Teberebie community is basically a case study. A case study is something in-between an actual survey technique and a methodological paradigm – it is an approach and summarizes multilayered methods of data collection. The case study approach includes various methods like participant observation, interviews, group discussions, and content analyses of different documents (Lamnek 2005: 298ff). In my research in Teberebie I used different methods that shall be discussed further below.

For case studies particularly interesting cases are chosen and are studied and analyzed in various dimensions and over a long period of time. The study subjects are single persons or much larger social entities like social groups, families, companies but also treatments or realizations of interventions. The chosen case is either seen as particularly typical, concise or meaningful in a larger phenomenon (Lamnek 2005: 299).

6.2 Extended Case Method

The extended case method (ECM) was applicable for the research on the Teberebie case because using the ECM is suggestive in areas of social and political processes or legal problems, anywhere actions take in a primary role. The ECM is mainly used to analyze social processes in situations of crisis and conflict (Rössler 2003: 147ff).

There was a critical debate on the paradigm of structural functionalism within British Social Anthropology starting in the 1930s. In the course of the 20th century it became more and more clear that these models, based on stable social structures, were not that suitable for current phenomena at that time. One methodic answer was the development of the ECM, especially pushed forward by Max Gluckman and in strong connection with the so-called Manchester School of British Anthropology (Halbmayer n.d.).

The central new orientation was the shift of attention from allegedly stable social structures to the “*competition of individual actors for resources and status in the frame of contradictory, inconsistent norms and rules.*” (Rössler 2003: 144; authors own translation). The center of attention were the actions of persons in social practice and the development of social conflicts rather than abstracted structures. Change, variance and different interests were no longer seen as dysfunctional variance from harmonic structures but rather as central part of social life (Halbmayer n.d.). The ECM was developed out of the analysis of law cases and is oriented on actors, actions and processes (Rössler 2003: 144). The Teberebie case was notorious for this method, as the community is in constant state of conflict because of the displacement and the mining activities. That triggered social conflicts within the community and the competition for resources has lead to tension in the social fabric of the community as a whole.

Using the ECM it is necessary to document the pre-story of the specific case and to be well aware of existing norms and institutions in the field. This makes ECM a rather time-consuming method. The dependence on selected informants for the knowledge of the pre-story problematic, so is the question of the representativity and selection of the cases. The selection of the case underlies some kind of arbitrariness of the anthropologist. The role of the anthropologist is problematic as well, as she or he necessarily is a confidant in times of crisis and conflict (Rössler 2003: 148ff). Gathering information on the pre-story of the Teberebie displacement and resettlement was quite time consuming as there is not all too much written information available. Luckily I found respondents in Teberebie that could give precise information on the history that got the community to the situation they are in by now. While doing research in Teberebie I found myself in a situation of crisis, tension within the community and various sometimes conflicting interests. I tried to talk to all parties concerned which made it problematic at times as well. I had to deliberately distance myself in these situations and tried to remain unbiased when conflicts within the community were discussed.

6.3 Selection of the Teberebie Case

The Teberebie case is probably one of the worst hit mining communities in Ghana. Most of the various impacts of mining are compressed in this village. Therefore the Teberebie

case is particularly significant because it uncovers a larger syndrome. The list of Ghanaian and communities worldwide affected by large-scale gold mining is long and all of them face similar issues like the people of Teberebie.

I had the chance to visit Ghana and various mining communities in February and March 2009 together with Austrian journalist Thomas Seifert of “Die Presse” to do investigations on the gold mining sector in Ghana in context of the project “Reporter’09”. This gave me the great chance to get an overview of the whole mining sector and visit close to ten mining communities, among them also Teberebie. This way it was easier to assess the significance of the Teberebie case. NGO representatives confirmed my estimation. They also helped to establish contact to the community, laid down my research enquiry to them and priorly asked permission to do the research.

6.4 Methods of Data Collection and Process of Field Work

Prior to the main research in Teberebie in May and June 2009 I had the possibility to conduct interviews with leading officials of the Ghanaian mining sector in Accra in February and March 2009. Namely interviews with: Benjamin Aryee, Chief Executive for the Minerals Commission; Ahmed Nantogmah, Director of Public Affairs and Environment for the Ghana Chamber of Mines; Nana Anthony Andoh, Director for Mining for the Environmental Protection Agency and John Owusu, General Manager, Corporate Affairs of AngloGold Ashanti. Those interviews conducted prior to the research in Teberebie were of great importance for getting insight in the mechanisms of the Ghanaian mining sector. The information out of these interviews is part of the greater framework of my Teberebie case study and significantly helped to prepare the research in Teberebie itself.

Another significant part at the beginning of the research on the ground was the analyses of documents like the Resettlement Action Plan (RAP) with detailed information on the demographic structure of the Teberebie community and the resettlement process. Rather important were also multiple different maps that were handed to me, according to which the rather complex history of the whole concession, the mining site and the resettlement became much clearer.

A next step was participant observation during my research. I took part in meetings of community, government, NGO and company representatives, in particular a Monitoring Advisory Group (MAG) - meeting at the Iduapriem mine that helped to get a better grasp on the different roles the stakeholders play in this conflicting situation.

The main part of the research was the large amount of semi-structured interviews I conducted with 33 persons over a period of four weeks in May and June 2009.

I did expert interviews with members of advocacy groups such as WACAM and FIAN. These interviews were of particular importance as they gave the outside perspective of the situation in Teberebie. They helped to better adjust and focus my research during the process of interviewing in Teberebie, as both groups know the situation in Teberebie very well. Namely I conducted expert interviews with Mike Anane, Chief Executive of FIAN-Ghana and Daniel Owusu-Koranteng, Chief Executive of WACAM.

The expert interviews and informal talks with them took place during all stages of my field work. Informal talks were already held in the preparation phase while working on the research questions and during the process of establishing interview guidelines. In the later process of analyzing and first interpretation of my research material, their expertise was extremely helpful to reflect on my findings and compare with their experience in a topic they have been following for many years.

The core of my research was semi-structured interviews with 31 Teberebie residents. The interviews were conducted mostly in the Teberebie village at the person's homes or in public places such as the community center, some interviews were done at various galamsey sites on the Iduapriem concession. All interviews were digitally recorded. The interviews had lengths between 20 minutes to almost two hours, the average interview was about 40 minutes.

19 interview partners were male, twelve interview partners were female. It proved to be much harder to get into contact with women. They were more reluctant to participate in interviews and in average they needed more assistance from the interpreter. A local of Teberebie functioned as my interpreter. His full assistance was needed with 39% of the persons and only partly with 22% of the persons. The communication with the remaining

39% persons was in English and without any outside interpretation. It was tried to avoid a bias on either the side of the non-English speakers or the English speaking population of Teberebie. Of course it would have been of great advantage to speak local languages like Wassa.

With five community members who emerged as being very well-informed and outspoken I conducted multiple interviews over the course of my research and followed up issues of their particular expertise: two women (age 34 and 53) and three men (age 25, 59 and 72). With the exception of the 53-year old women I was able to communicate with them without an interpreter.

The comfort level of the community rose with time. At some points originally planned single interviews emerged into group discussions between up to three participants, when interested community members came closer and wanted to share their information and point of view. This was very helpful to observe how the dynamics of the community worked and to gain results out of the discussions. On the other hand this was not initially planned and could have been much better prepared in advance.

Most of the interview partners asked to remain anonymous, for different reasons. Some articulated some fear of possible frictions in the community or with the mining company. Of course I respect those wishes and therefore almost all names, with few exceptions, have been anonymized.

6.5 Disturbances, Problems and Improvement Suggestions

Apart from the already mentioned disturbances, problems and improvement suggestions in the description of the process of field work, there are some additional points important to mention in this context.

Some people were reluctant to talk to me for different reasons: They feared consequences by the mining company; they thought I was employed with the mining company and doing research for them; they were frustrated with talking to one more researcher and were unsure about the outcome of the research altogether.

Although I am a woman it was much harder to get into touch with female Teberebie residents. Perhaps this was caused by the fact that the interpreter was male and many women needed his assistance. During the course of my stay I built up a relationship with a female opinion leader and she softly convinced other women to participate. I believe having a female interpreter would have been of advantage. Of course not needing an interpreter at all and knowing at least one of the local languages like Wassa would have been even better.

My contact with the NGO FIAN was advantage and disadvantage at the same time. I was doing this research as a private entity and not for FIAN, but the connection helped me to gain access to the Teberebie community and to additional interview partners. This way I gained peoples trust. On the other hand it was also a disadvantage as I continuously had to set the record straight and disassociate myself from the organization and establish myself as an independent researcher.

The research was done in a situation of crisis in Teberebie and people put much hope in the power of “outsiders”. It was necessary to repeatedly explain my mission in Teberebie and to not give false hope of drastic change in their situation that could be provoked through my research findings.

6.6 Process of Interview Analyses

I oriented my interview content analyses on the qualitative text analyses according to Mayring(2008) with particular focus on structuralizing content analyses.

At first all interviews conducted were transcribed. The structure of analyses derived from the nine impact risks of the IRR- and MIDR-models and my main research question resting upon them. This led to deductive application of the basic categories. I filtered out all text passages that were addressed by one or more of the categories. I systematically extracted the material and summarized it to get a manageable amount of text. Some categories were further differentiated during the course of the analyses. I also filtered out very significant examples for a specific category that included particular representative statements for a category.

7 The Study Area: Wassa West District

The Wassa West District is the most heavily mineralized geological zone in the country, has a century of mining history and is currently the most heavily mined district in Ghana (Agbesinyale 2003: 171). Some sources go even further and state that the Wassa West District is the district within the African continent with the largest concentration of mines (Akabzaa/Darimani 2001: 29). The district has rich mineral deposits including gold, bauxite, manganese and diamonds. The mineral wealth of the district attracted a huge number of foreign mining companies. This has various impacts and on almost all facets of the district. It has led to frequent clashes between local communities and mining companies over environmental and social issues. This also resulted in the emerging of environmental and social movements among the district's population. One example is WACAM, an association of communities affected by mining with its roots in the district's capital Tarkwa.

Despite its resource wealth the district faces major problems as outlined in a Five-Year-Development Plan (1996-2000) by the Wassa West District Assembly (1996): Limited road networks and poor quality of roads; inadequate and low access to potable water, close to 40% of the district's population lacks access to clean water and depends on streams and ponds for water; limited access to health facilities and services; high illiteracy levels, poor access to educational facilities, low quality of education, high school drop-out rate, over 40% of the population can neither read nor write; poor housing conditions and overcrowding especially in urban mining centers; environmental degradation and pollution as the result of aggressive and ecologically damaging resource extraction; Although this plan was developed in 1996 the problems are still very much the same.

7.1 Location and Physical Characteristics

The Wassa West District is part of the Western Region of Ghana which is the most Western part of Southern Ghana. The Wassa West District is one of the sixteen administrative districts of that region. In the North the district is bordered by the Wassa Amenfi District, to the South by Mpophor-Wassa East and Ahanta West, in the East by Mpophor-Wassa East and to the West by Nzema East District. The Wassa West district lies between latitudes 4° N and 5° 40' N and longitudes 1° 45' W and 2° 10' W. It covers a total area of 2,578 km². The district's capital is Tarkwa, which is home to several big mining companies. In Ghana, the district and its capital are almost a synonym for gold.

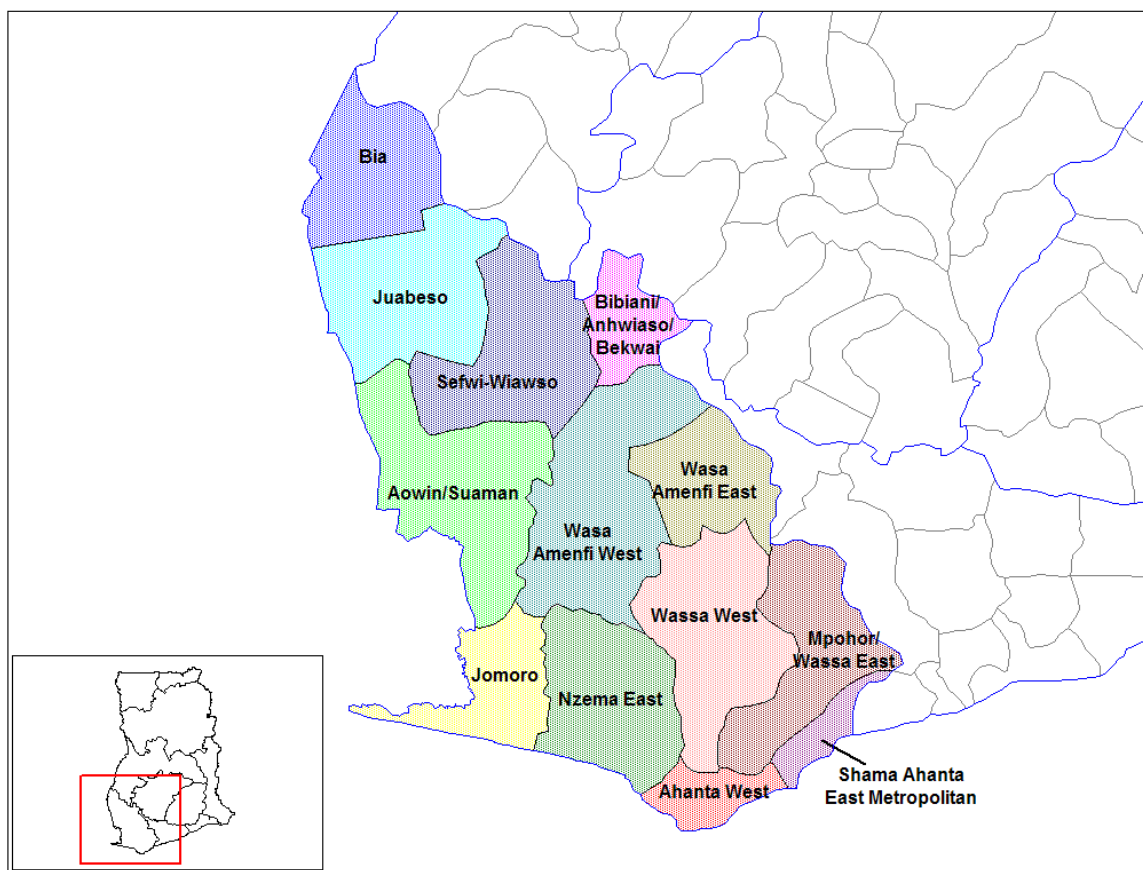


Fig. 5. Districts of Ghana's Western Region

The area contains a significant amount of the country's tropical rainforest. The vegetation is characterized by rich undergrowth of climbers and shrubs of differing heights. The trees can reach heights between 15 to 45 meters. Due to the mining activities the density

of the vegetation is decreasing. In areas that have been mined out the vegetation consists of ferns and other shrubs (Akabzaa/Darimani 2001: 30). Wassa West District falls within the equatorial climatic zone. The region experiences the heaviest rains in Ghana, the annual rainfall ranges between 1500mm and 1933mm with the most rain occurring between April to June and from October to November. Humidity in the area is ranging from 70 to 90%. Mean temperature ranges from 24 celcius to 30 celcius (Akabzaa/Darimani 2001: 29f).

The evergreen mountain ranges within the district constitute a source of water for the rivers and streams of the region. The Tarkwa area lies in the Ankobra Basin, an extensive drainage basin. The rivers of the area are the Ankobra, Essumang, Angonabeng, Ahumabru and the Bonsa (Akabzaa/Darimani 2001: 30). The soil in the Wassa West District is generally not very fertile, which is characteristically for tropical rainforest soils. Once the vegetation cover is removed and the soil is exposed to tropical rainfalls there is severe erosion and degradation. Nonetheless the soils support the cultivation of several tree and food crops such as cocoa, oil palm, rubber, citrus, plantain, cassava, rice and maize (Agbesinyale 2003: 175).

7.2 Demography, Ethnicity, Religion

In 2008 the entire population of Ghana was estimated to be 23.8 million (UN - Department of Economic and Social Affairs Population Division 2009: 2). Ghana ranks 142nd of 179 listed countries in the 2008 Human Development Index (HDI) (UNDP 2008). Life expectancy at birth was 59.4 years in 2008, adult literacy rate (ages 15 and above) was 64.2% (UNDP 2008). GDP per capita stood at 1,247 US-dollar (UNDP 2008).

In 2000 the census enumeration gave the Wassa West District a total population of 232,699 at a growth rate of almost 3% (Ghana Districts 2006b). The 2009 estimation for the Wassa West District was a population of 295,753 (Ghana Districts, n. d.). In 2005 the male – female ratio for the district was 103:100. A rather probable explanation for the male dominance in the district could be the high level of male in-migration in search of employment in the mining sector. The ages up to 14 years constitute about 25% of the population, however it is much lower than the national and regional figures of 44.8% and

45%. On the other hand the labor force in the district comprising age groups 15 plus to less than 64 constitutes 70.1%, which is extremely high compared to the regional and national figures of 53.1 and 52.2% respectively (Ghana Districts 2006b).

The Wassa people, who belong to the Akan group, are natives of the area and constitute about 43% of the population (Ghana Districts 2006a). There is heavy ethnic variation in the area also caused by the mining activities. A growing number of people from outside migrate in the Wassa West District in search for employment in the large-scale mining industry or in small-scale or galamsey mining. This drift of unemployed (especially male) youth from other regions of the country into the district are major contributory factors to the growing population in the district (Akabzaa 2000: 33f). The other main ethnic groups in the Wassa West District are Ahanta, Fanti, Brong, Ewe, Ga, Kokomba and others that make up 57% of the population (Ghana Districts 2006a).

The dominant religion in the district is Christianity, accounting for 92% of the population. The Moslem population forms 6.6% and traditional religion only 1.4% (Ghana Districts 2006a) although it is not uncommon to find traditional believe systems still governing social life in some of the rural communities (Agbesinyale 2003: 203f).

7.3 Economy

The district is by no doubt rich in resources. Nevertheless, more than 40% of the district's population lives on far less than one US-dollar per day. Income distribution is skewed in favor of those who work in the urban mining centers and those who are directly engaged in the mining industry (Agbesinyale 2003: 194). Figures from 2002 cited by Pooley (2003: 6) indicate that 48% of the district's population is employed in agricultural activities, 23% in commerce, 16.5% in services and 12.5% in some form of mining activity.

7.3.1 Agriculture

Agricultural land use in the district forms 46% of the total land area. In 2008 46.9% of the total labor force is engaged in subsistence farming and about 10% in forms of plantation farming. The food crops that are grown are maize, yams, cocoyam, rice and other staple

crops. The cash crops that are grown are cocoa, rubber, oil palm and others in smaller scales (Kusimi 2008: 255). The average farm size is estimated at 5.3 acres. About 93% of the district's farmers employ the bush fallow system or shifting cultivation in their farming activities (Agbesinyale 2003: 180). The agricultural sector in the Wassa West District is dominated by women. During the years 2002 and 2004 about 70% of the farmers were female (Kusimi 2008: 255).

Just less than 33% of the available land in the district is under commercial mining concessions. However the Chamber of Mines pointed out that only around one third of the concession land are actually being utilized by the mining companies and much of the remaining land can be used for farming purposes (Pooley 2003: 6).

7.3.2 Mining Industry

There are more than 30 companies known to be actively exploring or prospecting minerals in the district (Agbesinyale 2003: 182). The main mining companies active in the Wassa West District are: Golden Star Resources with its Wassa and Bogoso/Prestea Mines, Goldfields with its Tarkwa and Damang Mines and AngloGold Ashanti with its Iduapriem Mine. Basically all large-scale mines are working with surface mining, heap leaching and carbon in leach processing. Labor force employed by large-scale mining is modest. In addition small-scale mining and galamsey employ large amounts of labor force.

Besides the big companies there are over 200 registered small-scale miners and an estimated number of over 50,000 galamsey operators active in the district (Agbesinyale 2003: 181). In the year 2000 the district's gold production accounted for nearly 40% of the national output (Akabzaa/Darimani 2001). In 2003 it is estimated at 35% (Pooley 2003: 6). Besides gold mining, the district also gives home to a large commercial manganese mine located in Nsuta and several smaller diamond mines.

7.3.3 Other Economic Activities

Besides mining, other industrial activities in the district are not very well developed, despite the rich resource base of the district.

The Western Region and within it the Wassa West District is one of the country's richest in terms of natural resource endowment: rainforest, agriculture, rivers, well-watered soils and mineral wealth. The Western Region accounts for nearly 45% of Ghana's foreign exchange earnings through the export of timber, cocoa, rubber and of course minerals (Agbesinyale 2003: 171). The mining industry had the effect of attracting some commerce and trade and other key services to the district. They are mostly concentrated in the major mining towns such as Tarkwa, Prestea and Bogosu. Retailing and petty trading in agricultural products and food items are major components of commerce. The district depends on food imports from outside and is not self-sufficient in food production due to many difficulties in agriculture (Agbesinyale 2003: 184f).

7.4 Iduapriem Mine and the Displacements of the Teberebie Community

7.4.1 Iduapriem Mining Operation

The Iduapriem mining operation is situated 10 km southwest of the district capital Tarkwa. It is 85 km northwest of the coastal city Takoradi. American-Ghanaian mining company Teberebie Goldfields Limited (TGL) obtained a mining concession in the Teberebie area in 1990. In the 1990s it was Ghana's second largest mine and was considered the richest of the new generation of open-pit mines. TGL was owned 90% by the USA-based Pioneer Group and 10% by the Ghanaian government (Pooley 2003: 12).

Construction work of the mine started in 1991 after feasibility studies were conducted in 1989/90. The mining operations commenced in June 1992 and the first gold was poured in September that year. The official opening of the mine was done by the then president of Ghana, Jerry Rawlings, in February 1993. The gold extraction was conducted from low-grade ore using carbon in leach absorption and zadra electronic method. In 1994 a considerable expansion process started resulting in a workforce of about 1000 workers by 1996. In 1999 TGL opted to sell the Teberebie mine and in March 2000 Ashanti Goldfields Company (AGC) announced to acquire two pits from TGL, the Teberebie and Awuaben pit (Pooley 2003: 11f). After 2000 the mine changed hands several times and had a variety of investors. The private lending arm of the World Bank, the International

Finance Corporation (IFC) and European state financial institutions have co-financed the Iduapriem mine for many years.

Ghanaian Australian Goldfields (GAG) was initially owned by Australia's Gold Shamrock (70%), the IFC (20%) and the Ghanaian Government (10%). Over time GAG then merged with AGC which in 2003 owned 80% of the mine while the IFC held 20%. Mining was done by open-pit operations involving blasting, excavation of ore and the disposal of waste rock in surface dumps. The gold extraction was carried out using heap leaching for low ore and carbon in leach and carbon in pulp circuit for high grade ore (Pooley 2003: 11f).

In April 2004 the Iduapriem Mine and with it the Teberebie property was taken over by AngloGold Ashanti (AGA) when the business combination of Ashanti and South African-based AngloGold came into effect (AngloGold Ashanti 2008). AGA is one of the leading producers of gold worldwide. Its headquarters are in Johannesburg, South Africa. The AngloGold Ashanti Group has over 20 operations and a number of exploration programs in gold-producing regions of the world (AngloGold Ashanti 2008: 4).



Fig. 6. Location of the Iduapriem Mine

During the year 2007 AGA acquired the 15% minority shareholding of the Ghanaian government and the IFC, so since September 2007, the Iduapriem mine is 100%-owned by AGA (AngloGold Ashanti 2008: 1). Today, the Iduapriem Mine comprises two properties, Iduapriem and Teberebie (AngloGold Ashanti 2008: 7). In 2008 the operation had 732 employees and 1,048 contractors, in total 1,780 people working at the mining site (AngloGold Ashanti 2009: 18). Eight communities are affected by the Iduapriem mining activities: Adisakrom, Adieyie (Mile 8), Mile 7, Techiman, Nkwantakrom, Wangarakrom, Teberebie and Abompuniso (AngloGold Ashanti 2009: 29).

7.4.2 Teberebie Village Physical Displacement

The first bigger settlement named Teberebie started in 1912/13. It was a small village, surrounded by forests. The name of the river close to the settlement was Teberebie that is where the name of the community derives from. The term Teberebie means as much as “*shaking head*” (Minnah II, personal interview 11 June 2009). Teberebie was to be the first resettlement village in the Wassa area to make way for mining activities.

The land, which the mine was constructed on, was stool land particularly that of the Apinto stool. The Apinto chief at that time was named Fabil II. He was informed about the construction of the mine and the planned resettlement of the Teberebie community (Minnah II, personal interview 11 June 2009).

The Teberebie village originally comprised about 168 households and 2000 people. It was located to its present location by TGL in 1990/91 (Pooley 2003: 12, 38). The resettlement cost approximately one million US-dollars and the resettlement process took about 13 months (People’s Daily Graphic, 4 May 1991). The relocation agreement between TGL and the Teberebie Village Committee and a local Assemblyman was signed in December 1989. 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 agreed to provide a chief’s palace, a community centre, a hand pump and communal toilets. All the mentioned structures exist in Teberebie today (Pooley 2003: 15). In the Resettlement Action Plan (RAP), prepared in 2003, the resettlement site is described as following: “*A relatively modern settlement with good quality housing structures, six churches, sanitation [...] 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.” (Pooley 2003: 8) In 2003 Teberebie’s estimated population was around 1140 (Pooley 2003: 8).

7.4.3 (New) Teberebie Village Economic Displacement

Most displacement of mining communities in the Tarkwa area involved physical displacement. In Teberebie in recent years additionally economic displacement occurred caused by the waste rock dump scenario started by GAG. For several years now waste rock of mining activities is being dumped on land, which used to be cultivated by Teberebie farmers. The waste rock dumping started in 2001 and was still ongoing in June 2009. The process shall be discussed much further in 8.1.1.

7.4.4 Traditional Authorities

The traditional authorities in Teberebie itself, especially the chief, play an important role in the community and their dealing with the mining activities. Although in terms of allocation of land to third parties the Teberebie chief has not much authority. He is a divisional caretaker. The main custodian of the land is the Apinto stool. The Teberebie chief is related to the Apinto stool in family ways.

The Teberebie chief is also referred to as *odikro*, meaning “*the owner of the town or the community*”. He is representing the Apinto chief. During the research the overall majority of respondents confirmed the importance of a chief in terms of decision making and dispute settling within the community. He is also responsible for family and development issues. Additionally a chief has a strong leadership role and should represent the interests of the community to the outside.

The kingmakers, who are also part of the royal family, decide on the next chief and appoint the person to the general public. Only males of the royal family can be chosen as chief. The system of inheritance and kinship in Teberebie is matrilineal (Minnah II, personal interview 11 June 2009).

During the 1980s and during the time of the resettlement agreement the Teberebie chief was Nana Asare. The one following him was Nana Awuah. His leadership was contested and he was forcibly removed in 1999. That created a vacuum as he was not replaced for several years. The kingmakers were undecided on who should be the next chief. It became a vacant stool until 2004 (N. J., personal interview 8 June 2009). The present Teberebie chief, by the name of Nana Kojo Minnah II., was en-stooled on September 17, 2004 (Minnah II, personal interview 11 June 2009).

Beside the chief there are also other important authorities like: the queen mothers, the Tufuhene – the chief’s advisor, the chief linguist, the chief announcer, the Mbrantieahene - the chief for the youth and the chief priest.

7.4.5 Land Allocation

Land around Teberebie in the Iduapriem mining concession is a mixture between: Land actually being used by the mining company, land set aside for future mining activities and land being used for subsistence farming by local communities.

A representative part of the Teberebie community was interviewed for the RAP in 2003 (Pooley: 47). About 55% of them “owned” their plots, 28% were share cropping tenants, 8% leased their land and 9% rented it from landlords. The main crops cultivated in Teberebie included cassava and plantain as the most important ones, followed by pineapple, oil palm, yam, cocoyam, maize, cocoa and other fruits and vegetables. Many of them are seasonally planted, others like cocoa and oil palm can produce for years.

The land of the Teberebie community is Apinto stool land. The Apinto stool is the main custodian of the land and allocated it to the Teberebie community. The Apinto chief is a divisional chief, in hierarchy he is below the paramount chief and the Wassa Fiase Traditional Council. Before the resettlement village was built and the whole community was moved there, people from other villages, who owned the land for plantation farming were compensated. Much of the land was also secondary forest (N. J., personal interview 25 May 2009).

If there is need of land in the community it is the duty of the royal family to go to the Apinto chief and ask for land for the community, not just anybody can request land from the Apinto stool (Minnah II, personal interview 12 June 2009). The land in Teberebie was initially communally owned. The local chief and other traditional authorities, who had the mandate of the Apinto chief to allocate land, had the authority to share it equally within the community (N. J., personal interview 25 May 2009). In practice it worked something like this: *“They were portioning the land to the ones who needed it. It was on leasehold. You worked on the land, you went to see the people, who had the mandate and they demarcated the land for you. So you just worked on it, took your food and everything you want. When the time was up they took it again from you or you sat down and saw through it again and saw if you could continue to work on the land.”* (N. J., personal interview 25 May 2009).

Not all people in Teberebie “owned” their land. Some also acquired sharecropping land from a landlord who already “owned” land. The prospects were then either divided abuna (split in half) or abusa (in three parts, two belong to the tenant).

The land within Teberebie was also mostly passed down matrilineal within the family - to male family members. In the Akan matrilineal system land is bequeathed to nephews or other male members of the family, in accordance to the head of family. Initially wives and children were left with no rights to the man’s property if he died, but in recent times land is increasingly inherited directly by wives and children. The increasing scarcity of land has led to the development of land transactions through markets (Kasanga/Kotey 2001: 15).

8 Risk Impact Analysis of the Gold Rush in Teberebie

According to company statements the Iduapriem mine should have many positive effects on the surrounding communities such as Teberebie as John Owusu (personal interview 24 February 2009) of AGA states: *“Mining communities are in remote areas. There are no schools there, [...] no good drinking water, they depend on streams. When the mining companies go there they bring new life. They bring technology the people there haven’t seen yet. The expatriates bring a new way of life to the people. The mining companies have the responsibility to do something to improve their social and economic life.”*

8.1 Landlessness

After the initial physical displacement and resettlement during the early 1990s the Teberebie community had access to farmland, it was already somehow limited, but they still had access to it. They used farmland close to the new resettlement site or continued to walk to their former farmland to cultivate crops.

The people of Teberebie were mostly no commercial farmers, very few of them had plantations. Most of them were subsistence farmers, just selling some of their goods on a nearby market to gain some cash to buy additional food, clothes and school supplies for their children. The extended families were farming mostly on one plot of land that was partitioned between the family members.

The land mostly was held by men but cultivated by men and women together. Usually the “owners” of the land were men, although changes have been observed and also some few women were given land to - mostly from their husbands.

The situation after the initial physical displacement and resettlement was described as fairly passable by the respondents. Most farmers still had access to land and were cultivating it. The Teberebie farmers, almost everybody was a farmer at that time, describe their live then as follows: *“Life was quite okay with it [the farmland]. The amount of income was alright.”* (G. A., personal interview 26 May 2009); *“Life was quite*

okay when I was doing farming. It was very good compared to today.” (A. A. personal interview 11 June 2009); *“It was good. I was able to support my family, but then I lost my land to the waste rock.”* (K. E., personal interview 2 June 2009)

People have a deep connection to their land and are well aware of the importance of land for their livelihood: *“Land was like life. In the absence of land I don’t know how to live my life.”* (K. Y., personal interview 13 June 2009); *“It makes you feel proud if you have land you can cultivate anything on that you want to. You don’t have to lean on anybody, to provide you something.”* (Q. J., personal interview 7 June 2009) The Teberebie people associated independence and dignity with the livelihood their land provided for them.

8.1.1 Teberebie South East Waste Rock Dump

In February 2001 the local farmers were informed by GAG of a proposed waste rock dump south of their village where a major part of the Teberebie community was cultivating land. A decade after their physical relocation this land was used by many locals for farming, mainly subsistence farming.

According to the RAP, technically the area that by now has been used as a waste rock dump should not have been cultivated or settled by Teberebie residents since 1990. However, the land was not used by TGL for years, in fact until the conclusion of the TGL operations, so local people utilized the land south of the new village. For them it was a logical reaction as their old land was either lost or made less accessible due to the relocation process. Additionally, there is no record that TGL put any efforts in demarcating the land or enforce the 1000 meters “no development - zone” (Pooley 2003: 19). This predominance of the mining company over land use on the concession was backed up by Ghanaian mining law¹⁰ and is an issue of larger debate.

¹⁰ Further information on the Ghanaian minerals and mining policies at 3.6.3.

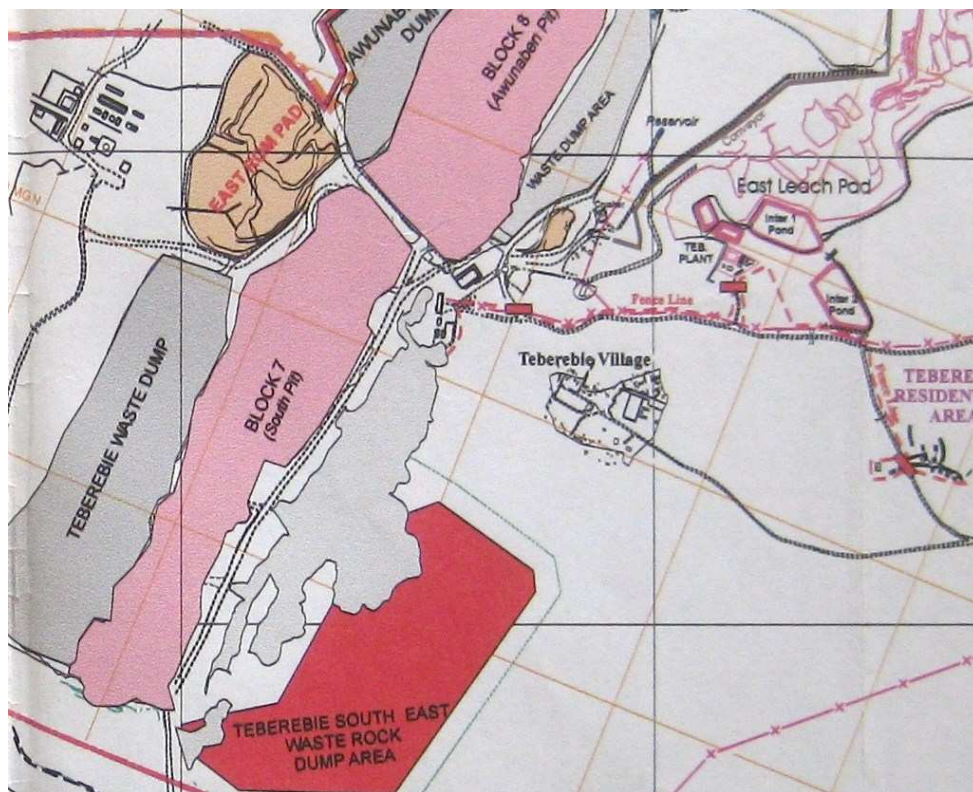


Fig. 7. Map of Teberebie and Waste Rock Dump



Fig. 8. Waste Rock Dump close to Teberebie

In the 1989 agreement between the Teberebie community and at that time TGL, Clause 12 exactly stated 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 in plant and/or installations.”* (cited in Pooley 2003: 19)

Most Teberebie farmers had no knowledge of this agreement. For them it was logical to cultivate the land around their village, which remained untouched by mining activities until 2000/2001. The people now affected by the waste rock dump have already been physically displaced once and many lost their initial land at that time, so today they are doubly affected. The dumping site was still growing in June 2009 and probably will in future.

From the start the community uttered their severe objections against the waste rock dumping on their farmlands. The Teberebie south east waste rock dump sparked a community petition and the mine management was summoned to the Wassa West District Assembly in October 2001 to discuss the issue. In early 2002 the EPA even halted the dumping of waste rock for a period of time. Later the EPA lifted the ban and the dumping continued (Pooley 2003: 19f). The dump grew and more and more people have been affected by it over the years. According to the RAP of 2003 (Pooley 2003: 3) a total of 84.1 ha consisting of 248 fields belonging to 173 households and one NGO called Kristo Asafo was destroyed by the waste rock dump. The average field size was 0.35 ha, ranging between 0.1 and 4.7 ha.

The farmers being affected by the waste dump operations have been farming in the area for time periods ranging between six month and forty years (Pooley 2003: 47).

The Teberebie people see the big shift towards negative when the construction of the waste rock dump started. Like long-time farmer O. C. (personal interview 25 May 2009) describes her changing situation: *“During TGL-times I still had land around here. The farm was around 7-8 acres and we grew palmtrees, plantain, cassava, pineapple. It was a big farm. I have 7 children, the farm fed everybody, I was fine. [...] They took it totally from me. All at once, about 6 years ago. When I was farming, things were very good to*

me. Life was quite okay, but these days it's not like that. I lost my land and now everything is spoilt. I see that land is one of the most precious things in my life."

Not all farmers lost their land all at once. There was a first big patch and after that it has been a gradual process. But nevertheless O. C.'s statement is typical for Teberebie farmers. I came across many almost identical stories. Most were cultivating their farms themselves, some had tenants they shared the income with. Usually the abusa-way, meaning two thirds of the farming income stayed with the tenant. U. C. (personal interview 26 May 2009) is one of those farmers who had given land to tenants. She and her husband had a big patch of land with ten tenants working on it, some even had palm plantations. She was satisfied with her income. The whole farmland was taken over by the waste dump in the early 2000s. After that she had to go elsewhere to farm. It was fairly difficult to find land for her, she just found farmland near the village of Adisakrom four years ago. Gaining enough income has become more difficult as she is only a tenant farmer on 0.5 acres of land now and has to give one third of the farming income to her landlord. The waste rock dumping started a spiral where once landlords became tenants themselves.

People in Teberebie who still have farmland that has remained untouched by mining have become a rare commodity to find. During my research I only came across one such person. The farmer in her mid-40s stated that she is the only one she knows who still has the land as of before the waste rock activities. The lucky ones still have a small patch of land left which has not been affected by mining or were able to snatch a piece of land in one of the surrounding villages like Adisakrom, Mile 6, Mile 7 or Mile 8. For those who are tenant farmers now in other parts of the concession a new problem has arisen. It is very difficult for them to gather the money they need for transportation to their farms. Depending on where their farm is located it is between five to ten kilometers one way. Because of the long distance most farmers can only afford to go there once or twice a week and join a taxi-car for this purpose. The transport of the farm products becomes another problem they are facing.

8.1.2 Compensation Process

There was much litigation surrounding the nature and value of compensation arrangements and made it necessary for the District Assembly to get involved as a mediating agency (Pooley 2003: 12). The mode of compensation during that time was oriented on the Minerals and Mining Act of 1986 (Government of Ghana 1986). This meant that farmers were compensated for the season's production, not on basis of their productive system that would include i.e. land that has been lost. By Ghanaian law the mining company was obliged to identify, notify and compensate all parties whose properties were affected by the rock dumping. The affected area is rather large, so GAG together with the then still involved IFC commissioned a team to prepare a RAP in 2003. The IFC asked GAG to follow the World Bank Operational Directive on Involuntary Resettlement 4.30 (World Bank 1990). Under normal circumstances RAPs are prepared in advance. When the Teberebie RAP was commissioned in 2003 the waste rock dumping was already going on since 2001 and already affecting many farmers. So issues like compensation arrangements were only dealt with retrospectively (Pooley 2003: 24).

The whole process of compensation was a new field for the Teberebie people they had no experience in. Many of them were overwhelmed and complained about the lack of transparency of the process of evaluation of their crops, like K. M. (personal interview 28 May 2009) who now is a tenant on a farm close to Mile 7, explains her thoughts on the compensation process: *"They cheated us. They capitalized on us. We, the indigenous, hadn't seen a mine before. We knew nothing about evaluation."*

The whole process of evaluation and the lack of transparency created frustration. People told about repeated "computer mistakes" reported to them that minimized their amount of compensation. Some people signed papers with unclear compensation amounts or were not particularly aware of the consequences of their signature. All in all, it was a rather semi-transparent process and therefore not easy to reconstruct in the course of this research.

Not all farmers were compensated at once, it was in steps. The first people were compensated in a head-count-system. All their crops were counted one by one to calculate the final compensation amount. Different crops had different values. Every crop was

compensated. After two or three rounds of compensation the system was changed to what the people refer to as the acreage-system. The Teberebie people saw this as a disadvantage to them as the crops were not head-counted anymore. Estimations per acre were used from then on, the main crop on the field was taken into account. Many meetings were organized to discuss those issues, many still wanted to be compensated in the head-count-system. The change from one compensation scheme to another created much misunderstanding between AGA and the community, also with this farmer: *“The community relations officer came and explained to us why they are doing it that way, but initially they were doing it with the head-count system. They had money, were making profits, so why do they tell me that they have to go with the acre-system? That brought a lot of confrontation.”* (E. A., personal interview 25 May 2009)

Compensation money was almost exclusively paid to men. Most women were not integrated in the process. Almost no women even had a clue on the amount of compensation money their husbands received. The compensation paid out to the farmers I interviewed ranged from 150 to 1200 GHS. All of them were very unsatisfied with the amount and felt it was not representing their losses. In almost every interview, when the topic of compensation came up, phrases like this were mentioned: *“They cheated us.”*; *“The compensation I got was inadequate.”*; *“The compensation was meager.”*

They spent the compensation money on various things like food, school supplies for their children, household utensils. None of the interviewed was able to secure replacement land with the compensation he or she got because the amount was not enough for that at all.

8.1.3 Formation of Associations

To be stronger in the compensation process the affected farmers formed the Teberebie Farmers Association (FA). Before the compensation issue came up there were no associations of that kind. It was something new community members thought they need to defend their interests. Also because during this period of time there was a gap in the chieftaincy system, so they were not able to rely on those traditional structures. So they formed a registered organization: *“Now you have to speak with one voice and have some kind of registered organization or group. If a group is not registered they will not listen to you.”* (N. J., personal interview 1 June 2009)

Gathered in an organization they felt they will gain power in negotiations about compensation. The FA had leaders and the executives that were the front of people who were talking to the company on compensation procedures. Initially, before the formation of the FA farmers were negotiating with the company individually. At the beginning it can be roughly estimated about 180 farmers were in the FA.

Later on, part of the FA split off and formed the Teberebie Concerned Farmers Association (CFA). The ones that formed the new organization were not willing to accept the new acreage-system for compensation. They wanted to be compensated in the head-count-system like the farmers before them. But most of the farmers stayed with the FA and went with the acre-system. The FA was not relevant any more after the compensation process with the member farmers was concluded.

As of June 2009 the members of the CFA were still waiting for their compensation process to finish. At the beginning it was about 60-80 farmers. They wanted to fight for more compensation and were not satisfied with the way the FA and the chief were handling things. Later WACAM pitched in and with their support the CFA was able to take the case to court. The court case was filed in 2004. The CFA are fighting for fair and adequate compensation. The lawyers representing the members of the CFA are supported by WACAM. The case was still pending in 2009 and the CFA-members accused AGA of delaying the proceedings, for example with witnesses not showing up for court dates.

Several members of the FA initially wanted to join the CFA and take their case to court as well but due to economic constraints they were not able to wait any longer for compensation money. It was not the costs for the lawyers, those were covered by WACAM, but they have already lost their land and were basically without income. The negotiations beforehand and the case at court are time consuming. For many farmers it is too time consuming and they agree to accept the compensation offered to them, also if they are not at all satisfied with it. The case was pending in June 2009 for about five years. Farmers continue to drop out and go in for the money. As of June 2009 there are about 35 farmers left in the CFA who challenged AGA at court.

8.1.4 Replacement Land

People are still waiting and hoping for replacement land. Many have not given up the idea yet. But it is going to prove very difficult as the land in the region has become scarce. The Teberebie chief and AGA-officials enquired at the Apinto stool for land but the land that they at one point considered was already allocated to another community (Minnah II, personal interview 12 June 2009).

The RAP stipulates land-for-land replacement in addition to monetary compensation (Pooley 2003) but in fact up until now community members who lost their farmlands to the waste rock dump have not received alternative land. The topic of replacement land has been going on for years and there is no solution in sight. At a Monitory Advisory Group (MAG) – meeting, held on June 4, 2009 at the Iduapriem mine offices, one of the company's officials Mr. Kwamena Sekyi-Yorke, Community Relations Officer of AngloGold Ashanti, stated again that they have been unsuccessful in securing alternative farming land and it continues to be a challenge.

NGO representatives of WACAM and FIAN, working on this topic for many years, see the hopes for adequate replacement land diminishing. Like WACAM's Owusu-Koranteng is saying: *"The company can't get land anywhere, but they tried to give hope and discussed. Later they said that they can't get land and that the community should look for land. Those are major issue and I don't have a clue how it should be resolved, we have to come up with some innovations."* (Owusu-Koranteng, personal interview 18 June 2009) Mike Anane (Anane, personal interview 18 June 2009) of FIAN is not too optimistic as well, but stresses that there is an obligation to provide alternative land to the Teberebie community: *"It is an obligation, according to RAP they need to be given land, but it's almost as if this would never happen. Now they have to walk several kilometers in search of land and in search of food."*

Summing things up, the expropriation of the major part of the farmland by the waste rock dump led to economic displacement of the Teberebie community and basically removed the main foundation of their productive systems, commercial activities and livelihood. Because the land, being their basis of life, was not replaced and the compensation was inadequate, the loss was basically a form of de-capitalization and pauperization of the

Teberebie community. The impact of landlessness in Teberebie is by far the most severe of all MIDR-impacts and has further implications on so many other areas of life that will be discussed in detail in the following chapters. The different impacts are hard to separate from each other as they are deeply linked, but what it boils down to is mostly the lost access to land.

The mining industry has major control over the access to land in the district in general as Agbesinyale (2003: 173) explains: “[M]ore than a third of the district’s land surface area has already been leased out to several mining companies either for extensive mineral exploration or for active mining.”

Teberebie is not a single case. Sarpong (2006: 14) sees landlessness caused by mining activities all over the country. After being evicted and paid compensation communities may end up landless, especially if monetary compensation was too low to purchase alternative land. The ability of adequate compensation, monetary or in form of replacement land is highly dependent on the negotiation capacity of the affected community. If there is no legal expertise, chances of adequate compensation diminish.

8.2 Joblessness

The overwhelming majority of Teberebie community members were farmers. Their main occupation was subsistence farming. Very few were farming commercially although most farmers sold some of their products at the market to gain cash for other products.

As stated in a Community Development Plan of 2004, one of the priority problems of the communities on the Iduapriem concession was unemployment (Royal Haskoning 2004: 22). The unemployment levels of the youth in the area were as high as 70-90% while the national unemployment average of the population in the age group 15-24 was 30%.

After people have lost almost all or at least a significant part of their farmland, their source of income has been taken away from them. There are some other ways people have developed to gain at least some income – with different results, but mostly not at all satisfying their needs and not sustainable in the long run like farming used to be.

8.2.1 Occupation at the Iduapriem Mining Site

Jobs, or better, the lack of jobs at the Iduapriem mining site are a hot topic of discussion in the community. There are very little indigenous Teberebie community members, who have lost land to the construction of the waste rock dump, that have been employed by the mine on a permanent basis.

The widespread unemployment in Teberebie and the complaints of locals for not being employed by AGA is also stipulated in the CHRAJ-report (Commission on Human Rights and Administrative Justice 2008: 103). There is little understanding in the community for this and much frustration that has built up. A rather typical statement during the interviews was: *“The mining company is employing outsiders, instead of employing those whose land has been taken.”* (N. E., personal interview 7 June 2009) The people working permanent jobs in the mine are mostly Ghanaians from bigger mining towns or urban centers like Takoradi, Kumasi or Accra.

The company’s encounter that the locals are missing the necessary skills, is not popular amongst the Teberebie people: *“Men can’t get jobs at the mine, because our men don’t know how to use the machines they are using.”* (A. E., personal interview 8 June 2009) Many locals say they would be willing to get technical training in order to obtain a permanent job at the site, like this man: *“I myself don’t have skills. How can I get a job at the mine? But why do they refuse to train us? They could. We can learn.”* (M. S., personal interview 13 June 2009) The desire for in-house training at the Iduapriem mine for locals was mention several times. Especially the youth would be eager to acquire skills to work in the mining industry. A research conducted in 2004 (Royal Haskoning: 23) states that the unemployed youth in Teberebie would like to learn following skills or work in following jobs: Machine operator, electrician, mechanics (car/fridge/fitting), computer skills, tie and dye; Technical skills were high in the ranking. Although one has to take into account the persons taking part in the research were probably mainly male.

People demand permanent employment at the mining site. They are not at all satisfied with what they are offered. It is almost exclusively short term casual labor jobs or work at one of the external security companies. The offered work is not sustainable as A. J. (personal interview 7 June 2009) points out: *“They employ you for casual labor and [...]*

you can work with them for about two or three weeks. [...] They don't employ people from here as permanent workers."

The distribution of the limited amount of short-time jobs they are offering is causing additional stir-up in the community. The offered jobs are shared between the interested community members according to the random principle, usually using pieces of paper with a written "yes" or "no" on it, stating whether one got the job or not. The limited amount of jobs and its distribution in the community brings tension and conflicts. The already very limited job market is highly competitive. Especially the youth is expecting the chief to do more about the gloomy job situation. There are many rumors and accusations floating around. Some say you have to pay bribes to company employees to get a job (A. B., personal interview 16 June 2009). Others accuse that by far not all casual labor jobs are distributed by a random principle and some handpicking is taking place: *"Suddenly you see people working and you don't know how they were employed."* (N. J., personal interview 1 June 2009)

8.2.2 Galamsey

The lack of land for farming and wage employment that would absorb this loss brings the community members to turn to activities they do not favor themselves but see as necessary for their survival. One of those activities is galamsey¹¹ mining. The loss of farm land and the economical displacement caused by it is very much connected to the rise in galamsey activities: *"After I stopped schooling I was doing small scale mining, there was no farm land for me. I was then the family man, I had to get money for the family. That is why I got myself into that. When there is no land for us to farm. It is a problem for us, there is no work. So we turn to galamsey."* (A. S. personal interview 6 June 2009)

¹¹ For details about galamsey mining see 3.6.2.



Fig. 9. Galamsey site at Iduapriem mining concession

Galamsey was already practiced before the mine was developed and before the waste rock dump covered much of the community's land. In the early 70s there was not much galamsey but in the early 80s when the people realized they were sitting on gold people started mining (N. J., personal interview 1 June 2009). Some galamsey during off-season of farming was usual but the amount of Teberebie people that do galamsey mining now has reached a new scale. There are several galamsey sites on the Iduapriem concession where groups of Teberebie community members do small scale mining. They are organized in groups of seven to twelve. It is mostly young men, but also some women who carry and wash load, others go and cook for the men. Also the Commission on Human Rights and Administrative Justice (2008: 103) state in their report that galamsey activities are very widespread in the Teberebie community, especially among young men.

The sites are hidden deep in the concession, galamsey would not start their operations near the road side. It is important for them to hide from the security personnel. There is a lot of tension between the mine and the galamsey, sometimes AGA brings in security and police. After all, galamsey mining on the AGA concession is illegal.

In November 2006, the police and military in Ghana started the so-called “Operation Flush Out”, during which hundreds of galamsey miners were forced from the land they were mining on. Equipment was destroyed, people were beaten up and seriously injured, some were even shot. In many cases private security personnel of the mining companies was highly involved if not taking the lead in this operation (FIAN International 2008: 3).

Talking with people in Teberebie about galamsey was not easy at first. People were very reluctant to talk about this activity. Many men first rather said that they are not working at all. Galamsey is not a much respected job. Only after a while some people opened up, like this young man: *“They [the galamsey] think it’s not good work, but because of the unemployment situation here they have to do it! You will not get rich, you will die early. People don’t respect you. They think: you have not been to school, you have no skills.”* (M. S., personal interview 13 June 2009)

Galamsey is spread very much, particularly in the male population of Teberebie, some even go so far and say galamsey has taken over farming as the major form of occupation: *“The major occupation here is galamsey, it used to be farming! [...] In the morning around six there are a lot of people going for galamsey, but it is illegal! But they have taken their land! And now they chase them of the galamsey site!”* (M. S., personal interview 13 June 2009)

Almost all galamsey I interviewed at their mining sites on the concession or after their return back home to Teberebie village, said their occupation before becoming a full-time galamsey was farming. N. J. (personal interview 12 June 2009) stated: *“When I was a farmer, we ate the things I got from the farm. As a galamsey, I go there for the whole day, if I am not lucky I will not get anything. And I have wasted a whole day. At my farm I had cassava, plantain, all those items we used to eat and sell some to buy clothes for the family. Farming is better than galamsey. If I had land I would leave galamsey.”*

Galamsey is not a sustainable source of income and carries many risks compared to farming.

8.2.3 Petty Trading

Petty trading has become a typical women's source of income to catch up for lost income from their families' farms or by now also for misfortune at galamsey mining.

The mostly young women go to the near towns like Tarkwa and buy foot wear, jewels, earrings and all sorts of household utensils to later sell in Teberebie, also to absorb the men's unemployment. G. A.'s (personal interview 10 June 2009) statement is typical among young women in Teberebie: *"The man is not working so I have to do the trading to support the family. I go to town and buy it and then sell it here."* It is once again the women that carry much of the burden.

Like A. A., she used to be farming on 20 acres of land together with her husband to support their six children. After they have lost the land to the waste rock dump the man is jobless and the family is living of A.'s income alone: *"I am trading, but it's just for food, this work cannot take the children to school. We only survive with this. I always put something down. When it is enough the children will go to school with it."* (A. A., personal interview 9 June 2009)

Trading is not paying well considering the economic situation in Teberebie as young trader O. N. (personal interview 4 June 2009) explains: *"The money from trading is not much considering that the majority of the community members are jobless. The business is not going well, many buy on credit until they can pay back, it sometimes takes a long time."*

The income from trading is not adequate to substitute the lost income from farming activities.

8.2.4 Casual Sex and/or Prostitution

For young women there are even less income earning opportunities than for young men. Due to joblessness, lack of farming opportunities and missing prospects, young women also turn to prostitution or as people in Teberebie refer to it: casual sex.

Generally both mobile sex workers and resident prostitution are increasing in the whole district. Most mobile prostitutes come from Takoradi, Cape Coast, Kumasi, Accra or Obuasi and target expatriate mine workers and rich small-scale miners. The resident sex workers service mostly local mine workers and galamsey (Agbesinyale 2003: 292; Akabzaa/Darimani 2001: 44f).

Prostitution has already existed in Teberebie before the present mine was constructed but today it reached a new scale: *“It’s a new thing that happened. It was always there, but not commercialized like that. It was not that popular.”* This man, who is living in Teberebie even before the resettlement, further explains: *“In the olden days you found prostitution in certain places, but now it is all over. It has generalized to everywhere. We don’t call it prostitution, because that is on a special place. Here we call it casual sex.”* (N. J., personal interview 1 June 2009) The men, the young women are engaging in sex with, are: mine workers, small-scale miners and galamsey, taxi drivers, security workers – all men who have some sort of monetary income.

People estimate the problem of female prostitution really arose some five years ago. A 34-year-old woman (A. E., personal interview 8 June 2009) is talking about casual sex: *“It is happening here, also small girls, it’s happening. This is a new problem [...] but nobody in the community is talking against those people. If you don’t have land and don’t have a job, you go for the men.”* The link to the loss of land and the lack of other income earning activities is made by many respondents. As already mentioned in the statement above, women, who engage in casual sex, are accepted in the community and not stigmatized, although it is not seen as proper behavior. Q. J. (personal interview 7 June 2009), a mother of six children mentions: *“Prostitution is a problem, some do it, not all of them. We see it’s not good, but we can’t do anything about it, there are no jobs, there is nothing else. But they are still part of the community, that’s what they do to support their living.”*

There is also a growing number of cases of teenage pregnancies that have been reported in Teberebie as well as single teen mothers with no or only little support from the baby's father. This especially triggers the fear of many respondents of the disruption of social values and the family unit.

Prostitution is a poverty-driven activity and not an adequate replacement for farming activities. It is also dangerous for people's health as discussed at 8.7.4.

8.2.5 Alternative Livelihood Projects

There have been attempts by GAG and also AGA to introduce alternative livelihood projects (ALP) in Teberebie. AGA has contracted Opportunities Industrialization Center International (OICI) an American NGO that is a regular partner for mining companies to develop ALPs for communities affected by mining activities. As of 2009 OICI is no longer engaged in the ALP at Iduapriem mine.

The "Hand-in-Hand" program was first established in Teberebie at the beginning of 2005 and was supposed to aim at building capacity and promoting economic activity: *"The capacity-building component includes training in entrepreneurial skills; micro-credit management; animal husbandry and livestock; food processing and value-adding technologies; water, sanitation and personal hygiene; participatory decision-making and problemsolving; and teacher-training for Early Childhood Development Centres (ECDs)." (Temeng/Abew 2009: 224).*

ALPs in mining communities across Ghana are implemented by almost all mining companies. The effectiveness and their abilities to meet their intended goals and the communities' needs are difficult to ascertain. There is near uniformity among the projects nationwide across various different areas - which raises serious questions. Some appreciate the programs and criticize the lack of offer and others see them as mere public relations gimmick that make little impact in the community as a whole (Commission on Human Rights and Administrative Justice 2008: 190). Teberebie is no exception in this point. Anane (personal interview 18 June 2009) criticized that neither the company nor

OICI have conducted market surveys to find out whether anybody would buy products they were producing in the ALPs.

Overall ALPs did not seem to have made a large impact in Teberebie, the projects did not come up in many conversations. E. A. (personal interview 25 May 2009) says the ALPs were started because AGA wanted to help the community, but it rather started to create problems. The animal farming like piggery, which was newly brought in, was not anticipated very much. The Teberebie residents were used to agrofarming. According to the CHRAJ-report (Commission on Human Rights and Administrative Justice 2008: 103) some members of the Teberebie community were trained in animal breeding and were provided with goats, sheep and fowls. Others were given small loans for businesses.

Really the only ALP somewhat working that was mentioned by some respondents was a palm oil press AGA constructed at the entry of the village. I found one woman who was using the press. The woman, who used to be a farmer, has lost the majority of the family's land. She is a single mother of six children after her husband left the community. She is saying: *"I for myself try and make oil at the alternative livelihood project but it's hard. I go from village to village and buy oil palm fruit and then I process it and then I sell the oil. I can manage my income from that. Only very few people are using the alternative livelihood project and the machine, they don't like to use it."* (Q. J., personal interview 8 June 2009) Others call the palm oil press a "white elephant". AGA has brought the machine but due to scarcity of land the raw materials are missing to a large extent (E. A., personal interview 25 May 2009).

To generally sum things up concerning joblessness, it was the loss of land that made people dependent on other forms of income instead of their farm products. The unemployment rate is extremely high after the loss of the people's income-generating resource base.

Long-term employment at the mining company is far out of sight for the Teberebie community. The only jobs that are occasionally offered to them are of short life and not sustainable. This competition for rare jobs is creating additional social tension in the community. Permanent employment at the mining company is only available to a very limited group of people and becoming even more difficult as the industry generally has

moved to less labor-intensive methods of production that require skills the locals of Teberebie mostly do not have.

The alternative sources of income besides farming Teberebie people have to seek look rather grim. People turn to poverty-driven activities such as galamsey mining. This is not sustainable at all, neither for nature nor for the galamsey miners, and is connected to a lot of danger and health impacts. Petty trading can only supplement a family income but cannot fully support a family. The general lack of income has many implications on other areas like the families' food security and their children's education opportunities. The competition for jobs additionally causes tension in the community and social disarticulation.

8.3 Homelessness

The MIDR permanently impacted the housing conditions of the Teberebie community also almost two decades after their initial resettlement. The initially agreed number of houses (168 units in 148 houses) was never built, instead 127 houses were constructed. When litigation was entered TGL argued that the number of original inhabitants was lower because some had acquired houses speculatively (Pooley 2003: 15). People who were not owners of houses in the old village, for example only rented a house, were not eligible for a resettlement house at the new village. This affected a number of people such as persons who just have moved to old Teberebie shortly before the resettlement.

Also not all households inhabiting the old Teberebie village were relocated by the mining company. These households were paid out in cash and afterwards left on their own devices. Those people mostly moved to other local settlements in the area. Some of them were resettled later on as well (Pooley 2003: 16).

Many people were partly frustrated with the way the resettlement houses were constructed and expressed the feeling that their housing standards worsened although their mud-houses have been replaced with solid brick houses. The new houses were containing fewer rooms than their old ones and lacked kitchen and washing facilities, like an older man (N. K. personal interview 25 May 2009) among many others states: *“There were some lapses in the agreement that was negotiated between the then District*

Assembly and the mining company. They built the houses without kitchen and toilet facilities. They provided a public toilet but the manner the houses were built has so many lapses.”

This dissatisfaction of the community with the provided facilities in the Teberebie resettlement process is also expressed in the CHRAJ report (Commission on Human Rights and Administrative Justice 2008: 102).



Fig. 10. Resettlement House in Teberebie

Several families extended the resettlement houses TGL built for them. Many were not satisfied with the number of rooms the new houses were having. They complained they used to have more rooms in their former mud-houses. A. A. (personal interview 9 June 2009), a former farmer of 20 acres land and mother of six children says: *“We got a resettlement house here. It is not good. I had six rooms and now I have two rooms. It’s a cheat. We added additional rooms, we extended it.”*

For many the limited amount of rooms was a problem within the family as it was usually common the parents and children slept in separate rooms. M. Q. (personal interview, 4 June 2009) mother of several children says: *“The old house was better, it had two rooms, the children were in one and we were in one, this house just has one room.”* The limited space had its social impacts on family life.

Walking through Teberebie it is a common sight to see resettlement houses with additional constructions to win living space. Usually the additional constructions or houses are out of wood and mud. Although some of the Teberebie residents would prefer brick extensions, most cannot afford it. Officially, the Teberebie residents would have to file permission at the mining company, to construct further structures on the concession. In reality this mechanism was largely ignored by the Teberebie community.

The children of the almost 80-years-old M. C. (personal interview 11 June 2009) built the extension of her house. She brings it to the point: *“If you had two rooms you got one, if you had three you got two. So I got one room here, that was it. So the kids made the extension for me.”* She also explains that neighborhoods changed in the new settlement: *“They gave the houses numbers, but when we came here, they mixed everything together. It never stayed like it was in the old place. We would have loved to stay with the people that we used to stay.”* This circumstance was not mentioned often in the interviews, probably because by now, so many years after the resettlement, the initial neighborhoods and relationships have faded into obscurity. M. C. also mentions that they nevertheless met and chatted, they *“wouldn’t let the distance be a barrier.”*

According to Agbesinyale (2003: 294f) many communities that have been resettled in the Wassa West District faced similar problems concerning housing facilities. The previously owned mud and thatch roofed houses were replaced with sandcrete and corrugated iron-sheet roofed houses. On the surface the people were provided with a better quality of houses than previously owned by them. But most communities were very dissatisfied with the new housing units because of the inadequate space the new homes were providing compared to their old settlements. The mining companies provided more expensive houses but neglected the family sizes and number of rooms in the old structures. This led to reduced number of rooms and space and tended to disrupt family life leading to social tension. Teberebie is a prime example for this general phenomenon.

Summed up, the resettlement and planning of housing units was executed poorly and the dissatisfaction with the built structures remains a chronic condition. The Teberebie people partly helped themselves with constructing missing additional structures to their resettlement houses to gain additional space.

8.4 Marginalization

8.4.1 Economic Marginalization

The economic downward spiral that developed due to the loss of access to land and the lack of alternative sustainable income sources is discussed in detail at 8.1. and 8.2.

8.4.2 Social and Psychological Marginalization

In Teberebie the economic marginalization experienced through the effects of vanishing land through the waste rock dump is accompanied by severe social and psychological marginalization.

8.4.2.1 Feeling of Injustice and Loss of Confidence

The way the MIDR was handled over the years has left marks on the social and psychological wellbeing of the Teberebie people – on the community as a whole as well as on an individual level.

Respondents have articulated a general feeling of injustice that has been committed on them. Being in the economically marginalized situation they are in, they feel cheated by the mining company and government officials. Phrases like “*It was a cheat.*” or “*We have all been cheated.*” arose in almost every interview, mostly in connection with compensation payments but also in a larger context. Many see great injustice in the fact that the community only bears the brunt of mining activities whereas others receive the profits.

The Teberebie chief criticized this as well but also the fact that according to him local traditional leaders are not consulted enough in the decision making process when their community is affected by mining activities. He articulated discontent with important

decisions only being made somewhere in Accra by the central government, without enough consultation of the affected communities (Minnah II, personal interview 11 June 2009).

People articulated their anger about their feeling of not being taken seriously by government officials and mining company representatives. This resulted in a feeling of growing powerlessness and diminishing self-esteem. After years and years of struggle many in the community have resigned to fight against the company and for their rights, like N. J. (personal interview 25 May 2009): *“These companies, they have got their lawyers. You can’t defeat them. How can a person like me fight with an organization like AngloGold? [...] They will never recognize you.”*

A. B. (personal interview 16 June 2009), a 20-year-old male resident of Teberebie is expressing his feelings of injustice and the feeling of powerlessness: *“The shareholders, the managers and their children are not living here, so they don’t bother. We don’t have any money. They will come and destroy your land and come with their machines, you don’t have anything to say. You can’t fight with them, because they are mining people.”*

Nevertheless, there is also a group called Concerned Farmers Association (CFA) that has taken their compensation cases at court. As of June 2009 the court case against AGA is pending. People of this group feel strong support from WACAM and the lawyers they hired. Their self-esteem was much higher compared to other citizens of Teberebie. Non-members of the CFA have articulated some kind of admiration for the members of the CFA and the fight for their rights they are putting on, as *“they have not lost their dignity”*.

Once independent farmers many have the feeling of being robbed their dignity. They are not used being dependent on others for income. Anane (personal interview 18 June 2009) has a similar sight on things: *“It’s a culture of dependence for the people of Teberebie now. [...] [T]hey are not free, not even in their own community!”*

The Iduapriem mine has a Community Relations Unit to manage community and social issues. There are different levels the company engages with the communities. Each village, also Teberebie, has a Community Consultative Committee (CCC) with which the

mine meets monthly. This committee consists of the chief, a youth leader, a religious leader, a women's representative, a CBO representative and a leader from the farmers in the village (AngloGold Ashanti 2009: 29). The community knows about the meetings but do not see any great outcomes. They see them rather skeptical and miss real commitment of the mining company to not only hear what the community has to say but also to act. A great majority feels powerless and caught in a situation, they have the feeling they cannot change anything anymore, as if Teberebie is caught in a deadlock, like this man is articulating: *"Teberebie as for now, we are in a mess. The harm is already been done. The situation we are in now, we don't know how to get out."* (N. J., personal interview 25 May 2009)

Overall it must be said that frustration has set in after many years of struggling. People are still hoping for alternative land but as of today it does not seem this will happen anytime soon. Anane (personal interview 18 June 2009) also connects the built up frustration with the fact that the community was promised replacement land which has so far not been given to them.

These feelings of powerlessness and ongoing frustration about their situation and the lack of improvements also made them reluctant to talk to journalists, researchers, company representatives, NGO-staff or government people. They have done so in the past – without the results they were hoping for. A lot are frustrated about answering questions without knowing what the outcome will be, like B. E. (personal interview 8 June): *"A lot of people come here, but what is the outcome? What do they do to help us?"* Or as N. J. (personal interview 12 June), a very active spokesperson in the past, puts it: *"We are tired of talking to people. Nothing changes at the end of the day."*

MIDR not only has led to social and psychological marginalization of the group but also pressed on the moral of individuals. S. J., (personal interview 9 June 2009) is one of them. He is an old time Teberebie resident, who has lost his farming land after a yearlong intense battle with AGA. He says explaining his situation: *"It was very lively here. But today, look at it? It has changed me. It is a destitute, it has changed my moral. It has changed everything. When I look back and compare it to today, I feel like I am taken away to a foreign land."*

Many still feel proud to be from Teberebie but about half of the respondents have mixed feelings when it comes to their community. G. A. (personal interview 10 June 2009) is one of the half of the respondents that feel ashamed for being a Teberebie resident: *“I feel pity for myself, if somebody is asking me where I come from, I feel reluctant to tell him I come from Teberebie.”*

8.4.2.2 Intimidation and Harassment

AGA has established permanent posts on their concession for private security personnel but also for military and police to protect their concession and property from encroachers and trespassers (Commission on Human Rights and Administrative Justice 2008: 180). There has been much report about indiscriminate harassment of innocent community members and growing mistrust and skepticism about the security agencies, police and military. Quite a number of respondents mentioned their fear of being harassed by the company, security personal and police forces, especially while walking to the farmland some of them cultivate near other villages like Mile 8.

In connection with their fear they recall an incident that happened in 2006 when community members used foot paths AGA did not want them to use anymore. The company blocked the path and brought in armed forces. In a confrontation on February 2nd 2006 one Teberebie farmer was even shot by the military. It took close to two hours to get him to a clinic. This incident is deeply etched into the memory of the Teberebie people.

NGOs like FIAN and WACAM are very concerned about the growing militarization in the Ghanaian mining areas in general and submitted a report as part of the UN Council for Human Rights’ universal periodic review on Ghana in 2008. The submission addresses the increasing deployment of military and police personnel in the country’s mining districts and human rights violations in mining areas and reports from mining communities who indicate a high degree of complicity of multinational mining companies in these human rights violations (FIAN International 2008: 3).

The harassment of community members at security gates on concession roads is still going on at some of these gates. Farmers trespass them when they go to their farmland near other communities on the concession. Respondents reported of security personal and

police stopping and searching them before they can continue walking. They feel intimidated and treated undignified. This form of harassment is something particular Teberebie people are affected by, as Anane (personal interview, 18 June 2009) points out: *“When you have the presence of private security on the roads leading to farms and when you are searched before and after you can go to your farm - that never happens in any other communities, to the extent that you are searched, I have never come across that.”*

People also feel intimidated to talk to strangers about the effects of the mining activities on them. People who speak up and talk to outsiders like researchers or journalists will most likely not have any chance of being employed by the mining company.

8.4.2.3 Degradation of Self-Image

Teberebie people see themselves as a community that has been to a large part neglected by AGA and government officials, especially in contrast to other communities. Other communities like Mile 8 have been resettled by AGA whereas Teberebie was resettled by TGL. Teberebie people feel as if more attention is given to the needs of those communities compared to themselves that have been resettled by a previous company. The competition between the mining communities is growing. O. C. (personal interview 4 June 2009), an older women living in Teberebie for decades, says: *“Everything AGA does goes to Mile 8. It looks as if they can put pressure on the company much better than our leaders here can do. Other communities seem more important, maybe because they have been resettled by AGA.”*

Outsiders, even people of surrounding villages and towns, often believe Teberebie must be a rich community, because they are situated so close to the mine. This fact causes some amusement with the Teberebie people but also a feeling of misconception. A 27-years-old women (O. N. personal interview 4 June 2009), who is trading and therefore often in contact with other people of other towns and villages, puts it like this: *“Outside people think we have money because we live in a mining area, others think we are even walking on gold. They should come here and see what is happening.”*

8.4.2.4 Nostalgia for Former Times

The discontent with the present state of their lives in Teberebie makes many of their minds wander in the past. A lot of the Teberebie people like to look back into the old days and reminiscent of their lives in the community when TGL was running the mine and

they still had their farmland. O. C. (personal interview 4 June 2009) said: *“It used to be a very nice community, especially when TGL was around, people saw us as very peaceful until all that land and compensation issues came into sight.”*

People were caught relatively unaware when TGL left and the creation of the waste rock dump started shortly after. They tend to lapse into nostalgia when talking about former times and their relationship with TGL. Mike Anane (personal interview 18 June 2009) confirms my findings: *“People always had nostalgia for what I would call the golden days when GAG and TGL were around. They would always cite these moments. When you compare those days to now, it is a totally different story. It is a community that has been abandoned to its own fate.”*

The social and psychological impacts MIDR has had on the Teberebie community and on other mining communities as well, has been greatly overlooked in past research and resettlement planning, although economic marginalization is most often accompanied by social and psychological marginalization as the Teberebie example shows as well. Dwindling down an economic downward spiral leaves its marks on people psyche and the social fabric of a community. The loss of power and confidence in society and in themselves, after many years of constant struggle, are only replicable. Hopes for improvement of their situation, including hopes for alternative farmland, have been scattered multiple times. Intimidation and harassment by security, police and military guarding the interests of a mining company tend to not have positive effect on the self-confidence of Teberebie people either.

8.5 Disruption of Formal Educational Activities

There is a basic school in Teberebie with a Nursery, Primary and Junior Secondary School. There are about 520 children enrolled in school mostly from the close surrounding villages. When Araba Bentum, the Head Mistress of the Teberebie school, took over the job in 2008, enrollment was down to about 400. Enrollment increased due to a school feeding project (Bentum, personal interview 1 June 2009). In 2004 about 70% of the Teberebie children were attending primary school (Royal Haskoning 2004: 16).

The economic displacement caused by the waste rock dump has caused disruption in children's education. There is no school fee in Ghanaian public schools, but parents must provide for school uniform, sandals, pencils and writing materials. Sometimes Teberebie parents can't afford the uniform for their kids and it takes them 6-8 months to collect the money for it. A school uniform costs approximately 10 GHS. Bentum sees the reasons for the lack of finances of Teberebie parents among others connected to the mining activities: *"For some this is a lot of money. [...] Some of them are also not working, some have been farming and because of the mining activities the land has been taken from them, so they don't have anything else to do. You see the men sitting in town playing crafts and the women doing nothing. One meal a day is even a problem for them. It is very difficult for them to take care of their children."* (Bentum, personal interview 1 June 2009) When money is rare children are also taken out of school temporarily. Respondents indicated their money is often just enough to provide food for the family, school supplies is something they can cut back for a certain time.

Anane confirms the connection of lack of income in Teberebie and the implication on children's enrollment in school. He further stresses implications on their learning abilities: *"Attending school is free, but not so school uniform, shoes, bags, books. The people simply cannot afford this because they have no jobs and no income. They rather leave kids at home than send them to school with tattered clothes. This has a lot of implications even for the education of children. Gold mining is taking a toll on the children's education and also learning abilities. How can you learn in such an environment? Where there is blasting, where parents don't have money? This has implications on learning abilities as well, not just enrollment."* (Mike Anane, personal interview 18 June 2009)

The pupils who make it to school often lack role models that would encourage them to study hard and attend school regularly as Bentum (personal interview 1 June 2009) sees this, as well as others: *"The pupils do not learn, they don't have role models. Their parents, their older siblings are in the house, so they think it is unnecessary to waste their time and learn."*

Many respondents were complaining about changes concerning the school after 1999/2000. The school used to be more vibrant and attract more pupils when TGL was

providing a school bus for surrounding villages and towns to carry children to the Teberebie school. The present company decided not to link the school to other towns like Tarkwa, so numbers of pupils dropped. The school's performance has been going down and many parents from surrounding areas took their children out of the Teberebie school.

Most parents that can provide their children with at least some years of primary school, further education becomes more difficult for them to finance. AGA gives scholarships for further education. Respondents welcomed this opportunity but also criticized that it is very difficult for them to pre-finance until the company refunds. This keeps many pupils away from the already considered very few scholarships.

8.5.1 School Feeding Program

The school feeding program is limiting the negative effects of the mining activities on school attendance and education, as it is attracting more children to school.

The school feeding program is a nationwide program with pilot projects in various schools, Teberebie school is one of them. The NPP government started the program: The goal is that every child should have at least one hot meal a day, also children whose parents cannot afford it. The program should attract pupils that have abandoned school to return to school. At Teberebie it started in January 2009. The enrollment numbers have increased and Bentum clearly connects this to the feeding program: *"The enrollment has increased and the pupils are more happy. They are now smiling. Most of them are given 20 Pesawas for breakfast and lunch which is inadequate! Now they get an additional hot meal. Some even don't want to go home after school because they are not hungry. They want to stay on the compound. People are enjoying the program."* (Bentum, personal interview 1 June 2009)

The MIDR and the mining activities in general have indirectly taken its toll on the children's education in various ways. Some parents who have lost their land simply cannot afford to continuously send their children to school, in some cases they have to juggle between food and education for their children. The situation the children are in is not beneficial for learning abilities and motivation.

8.6 Food Insecurity

The school feeding program described above was much needed in Teberebie as the community is largely affected by food insecurity. The uncertainty of food supply is very deeply connected to the loss of land and the lack of other meaningful, sustainable alternative sources of income. During the research I often came across statements like: *“They took the land and we don’t have anything to eat now.”* (G. A., personal interview 10 June 2009); *“If I would have land, I would have already eaten today.”* (A. A., personal interview 9 June 2009)

According to the respondents people are having one to two meals a day although they would very much prefer more and also know about the implications malnutrition has on themselves and their children. Especially women report about major difficulties to feed their children. The loss of land has increased food insecurity. Also the Teberebie chief is concerned: *“How to get food? For years we were dependent on this land for our livelihood. When you put your waste here, you are gradually telling us that the people must starve to death. Because no land – no food.”* (Minnah II, personal interview 11 June 2009)

In connection to food insecurity the case of the Teberebie community has come to sad prominence when Jean Ziegler, former Special Rapporteur on the Right to Food, took up the case in a report presented to the Human Rights Council on February 29, 2008 stating that the people of Teberebie *“have had limited access to their farms which they have cultivated for many generations and to their only source of income and means to procure sufficient and adequate food as a result of the location of a number of waste rock dumps in the area.”* (U.N. Human Rights Council 2008: 40)

Food insecurity in Teberebie also becomes visible concerning catering for visitors in the community. Like E. A. (personal interview 26 May 2009) is explaining: *“When we had visitors everybody would bring food, that’s how we behaved. Everybody needed to be well fed and catered for. Everything is harder now. [...] I find it difficult to feed myself, so I can’t give it away to others. Things were on a silver platter compared to today.”*

After the lost access to land the Teberebie community became dependent on cash economy to get food. They have to go to surrounding towns and villages to buy food at markets or from farmers of other communities. The price levels in the Tarkwa region are much higher compared to the rest of the Western region. For once the decline of food production in an area accounts for high food prices. Also the disbalance between the income of locals and the income of employees of the mining industry whose wages are indexed to the US-dollar and are internationally competitive (Akabzaa/Darimani 2001: 46). This drives the prices in the district up, to the harm of the local communities such as Teberebie that have become dependent on cash economy for their alimentation.

The daily struggle for food is also taking its toll on the psyche of the people. They were used to independently cater for themselves and not constantly have to worry about the acquisition of food, as E. A. (personal interview 26 May 2009) says: *“Food was always in abundance, food was nothing we were thinking about, it was life.”* Or as S. J. (personal interview 9 June 2009), who has been a farmer in Teberebie for decades, compares former days to today: *“Formerly we just entered the bush: cattlers, jams, cassava, everything was fresh here. I only needed firewood and my food was ready.”* For the Teberebie people it is still hard to grasp that they are the ones that buy food at a market, when they believe it should rather be vice versa - as they have been a farming community forever.

The availability of food crops dropped significantly in the years since the development of the waste rock dump. The Teberebie farmers lost their land which had a direct effect on their food security as there were no significant alternatives for them to seek livelihood. They became dependent on cash economy and have to deal with the relatively high prices of food in the Tarkwa region.

8.7 Increased Morbidity

The new location and therefore the closeness to the mining activities expose the Teberebie community to location-related diseases. There are various negative health affects in the community of Teberebie caused by MIDR and the mining activities that are reported by the respondents.

According to a study conducted by Agbesinyale (2003: 288f) the most frequently occurring diseases in the district included: Malaria, respiratory tract diseases, diarrheal diseases, skin diseases, urinary tract infections, gynecological disorders, hypertension, sexually transmitted diseases, injuries from mine/industrial accidents and anemia. Personal conversation with the people of Teberebie confirm these findings. Especially Malaria, respiratory tract diseases, diarrheal diseases and skin diseases were frequently mentioned.

The community complained that there is no health post in Teberebie and the closest clinic available to them is the government hospital in Tarkwa, about 8 kilometers away. The clinic on the concession supposedly is for AGA workers and their families only.

8.7.1 Sickness Related to Unsafe Water Supply

Water quality data from the CHRAJ-report of 2008 showed that some of the Teberebie water sources are a threat to people's health. The concentration of silica in the Teberebie borehole water was higher than allowed World Health Organisation (WHO) levels. The Teberebie river had increased parameters in iron and nickel (Commission on Human Rights and Administrative Justice 2008: 175). People are very concerned about the water quality in Teberebie and do not trust the sanitary safety of the water. Like A. B. (personal interview 16 June 2009) is articulating his concerns: *"The water has chemicals in it. It brings sickness in our bodies. We don't know what to do."*

Respondents were connecting chronic diarrhea and headaches to the consumption of water of the dwells and the borehole. Children and the elderly are especially affected.

8.7.2 Respiratory Tract Diseases

Excavating rocks through mine blasting causes noise and vibration along with dust development. The Teberebie community is very much concerned about the dust dissemination in their community caused by the mining activities, like A. B. (personal interview 16 June 2009) said: *"The chemicals and the dust. It's too much. The dust just explodes here. The dust will just spoil everything. "*

The dust levels were reported to be higher in the dry season, but also during my stay in Teberebie in the wet season the dust problem became evident and people were also then very conscious about the effects of the “toxic dust”. People in Teberebie relate respiratory tract diseases that they experience to the dust in the community. Many report coughing, chest pains and headaches they relate to the dust dissemination. The dust is bothering them very much: *“The pollution is bringing diseases. [...] The air will bring the dust, when you inhale it will bring cough and chest pain.”* (O. N., personal interview 4 June 2009)

Teberebie people have already filed complaint about the dust development several times: *“The environment, it is very, very bad. [...] They built another crusher plant and they started working on it. Whilst they are working the dust comes straight to this town and causes problems. We have cautioned them but they refused to do something about it.”* (A. J., personal interview 7 June 2009) After several complaints AGA is spraying water on the roads leading through Teberebie to somehow limit further dust dissemination. According to the respondents this is not happening on a regular basis.

Dust pollution and respiratory diseases, especially among children in Teberebie, were also reported by the Commission on Human Rights and Administrative Justice (CHRAJ) in 2008 (99). According to district wide health data published from Agbesinyale (2003: 290) there is an increasing trend in upper respiratory tract infections and chest diseases between 1990 and 2000. This coincides with the district’s gold boom. The rate is relatively high compared to other parts of the country. According to the 2003 Agbesinyale research the average incidence of pulmonary tuberculosis in the district was 0.5/1000 compared to a national average of 0.003/1000.

8.7.3 Vector Borne Diseases

During the mining processes many water bodies have been diverted or dammed. This has caused many stagnant water bodies on the concession. One of them is very close to the community, just behind the waste rock dump. Locally this body of water is called “mosquito headquarters”. These waters have become major breeding grounds for malarial mosquitoes.



Fig. 11. “Mosquito Headquarters”, stagnant water at Iduapriem Mine

Several interview partners mentioned the very high number of malaria cases. People have become used to the fact that many of them suffer malaria attacks two to three times a year. According to them people who work close to the stagnant water bodies, like locals that are hired as short time security personal or for casual labor, are especially threatened.

According to a report of the District Medical Office, cited by Akabzaa (2000: 42) the Wassa West District has the highest incidence of malaria in the country. Agbesinyale (2003: 289) confirms this and states that the Wassa West District malaria incidence rate is ranging between 165/1000 to 200/1000 per year, compared to a national average from 40/1000. So the district overtook other southern regions, where the disease is known to be highly prevalent. In the Wassa West District malaria tops all clinical cases.

Malaria in the region is not new, it is a tropical wet region and ideal for mass breeding of malaria vectors. But the upsurge in cases can be linked to the mining activities and the stagnant water bodies they provide to mosquitoes.

8.7.4 Sexual Transmitted Diseases

It can be expected that the HIV/AIDS rate has already increased in Teberebie. Anane (personal interview 18 June 2009) suspects this as well: *“It is no secret that a lot of the young women sleep with people from the mining company, just to earn a living. Ladies in particular go to Tarkwa to do prostitution. This will obviously increase HIV/AIDS in these villages.”*

Prostitution and “casual sex” is in upsurge in Teberebie and very much connected to MIDR and the mining activities. It is a poverty driven activity and an alternative form of income for farmers deprived of land due to mining activities. This connection is discussed into more detail at 8.2.4.

Studies in the area have already measured increased cases of syphilis and HIV caused by rapid migration in the area and growing prostitution (Akabzaa 2000: 44f). Health authorities in the district report an upsurge in STDs including gonorrhea, syphilis and HIV/AIDS. From six recorded HIV/AIDS cases in 1992 it increased to close to 300 in 2002. The high rate of migration on account of the gold rush is blamed for this trend as well (Agbesinyale 2003: 292). The extreme income incline between mine workers and local communities has to be taken into account as well, as Agbesinyale (2003: 292) points out: *“The gold industry [...] is particularly susceptible to the AIDS scourge on account of the relatively high incomes of mineworkers in otherwise deprived communities. Historically, the sex industry has tended to thrive in and around most mining communities.”*

All in all, health levels declined due to the mining activities. Apart from the initial stress of moving, there are many health problems that are caused by the mining activities now. Access to safe potable water is a big problem in the community and can be related to increase in diarrhea diseases. The dust creation by the mining activities is likely to trigger respiratory tract diseases. Vector borne diseases such as malaria are supported by new stagnant water bodies created by the mining activities. Additionally, poverty-driven prostitution increases the spread of STDs.

8.8 Loss of Access to Common Property Resources and Services

The access to common property like forest, land and water bodies decreased seriously due to MIDR and environmental degradation caused by the mining activities.

What the community of Teberebie did not lose was the access to their former burial grounds. They still access the same cemetery than before the resettlement and it has not been affected by the waste rock dump. Except from that much of their common property has been lost.

8.8.1 Access to Land

Almost all access to land has been lost. Some already because of the initial resettlement and the larger part because of the creation of the waste rock dump. Land in Teberebie is communally owned by the people and only distributed for useage over a certain time period. The issues concerning lost access to land is discussed in full detail at 8.2.

8.8.2 Access to Forest

Mineral exploration and mining activities have contributed substantially to deforestation particularly around the areas of Tarkwa, Bogosu, Prestea, Damang and Teberebie (Agbesinyale 2003: 176). In the Wassa West District there are three major forest reserves, namely the Bonsa Reserve, Ekumfi Reserve and the Neung Reserve that are already threatened by large and small-scale mining and logging. The extensive land clearance caused by open pit mining resulted in the destruction of forest vegetation and loss of biodiversity. It destroyed the habitant of wildlife in the area (Akabzaa 2000: 67). Generally the natural land cover in the district changed dramatically starting in 1986. The human induced land use was increasing, the primary forest (closed canopy) has reduced from 88% to 69% from 1986 to 2002. This comes to a reduction of 76.6% in 16 years (Kusimi 2008: 255). The primary forest changed into secondary forest due to many factors. One major cause are the mining activities. Although mining companies try to reclaim the land by reforestation the changes in the natural ecosystem are severe. Other causes for deforestation are traditional modes of farming, fuel wood extraction, logging of timber for export and illegal lumbering. Urbanization is another cause. Urban centers like

Tarkwa, Damang and Bogoso have expanded. The impact of the mining industry has been direct as well as indirect. The direct impact is caused by the land consumed by open pit mining. But there are indirect impacts as well. The mining industry attracts migrants in search for jobs in the mines. They cause the urban centers to grow, many of them engage in small-scale mining or galamsey as well, another cause for deforestation (Kusimi 2008: 250ff). Agbesinyale (2003: 173) sees the dramatic change of the natural and physical environment of the district in the last two decades mainly caused by large-scale surface mining. He argues that in the past underground mining was practiced in the district which left the surface of the region almost untouched compared to nowadays surface mining activities.

Particularly Teberebie women are affected by the diminishing forests. They are the ones that are mainly responsible for gathering firewood and increasingly face the problem of finding it close to their village. The burden is on them to walk farther and farther to gather wood, often with the children on their backs. Firewood is not the only thing the Teberebie community picks up from the forest, also food like wild animals, mushrooms, fruits, herbs and so on. Especially the amount of larger animals the Teberebie people can hunt in the forest has gone down drastically according to them. Now they are just able to find cattlers.

Deforestation remains a major problem in the whole district. Other causes next to large-scale mining are subsistence agriculture with their slash and burn and bush fallow systems, small-scale mining, commercial logging and commercial fuel wood harvesting (Agbesinyale 2003: 175).

8.8.3 Access to Water

In the whole Wassa West District the increased surface mining has negative impacts on ground water resources. Dewatering has rendered a number of boreholes, streams and hand-dug wells in being unproductive or with reduced yield. Open pit mining, characterized by excavation of large tracts of land, ultimately also reverses ground water flow direction and causes dewatering, especially in the dry season (Akabzaa 2000: 66). Already in 2000 only one of the two boreholes in Teberebie was working while the one working gave extremely low yield (Akabzaa 2000: 66).

Prior to the mining activities the people's main source of water was the river Angonabeng and the Bonsa stream. There have been contaminations of the water bodies surrounding Teberebie in the past. One of the worst cases of cyanide spillage happened on June 18th 1996. An estimated 36,000 m³ of gold-laced cyanide solution with a cyanide concentration of 8-100 parts per million spilled from one of TGLs tailings ponds into the Angonabeng stream, a main tributary to the Bonsa river. In total nine villages were affected downstream. TGL cleaned up the physical evidence of the pollution rather than warning the communities and notifying authorities. The result was considerable illnesses and losses of crops, fishponds, and wildlife (Armstrong 2008: 29).

By now there is no river left around the village the Teberebie people trust to go for potable water. They are dependent on the water supply TGL has provided to them for all the water they need for drinking, preparing food and washing. There is only one functioning borehole and three wells serving the community. The community sees the amount of water connections as not adequate to the population of whole Teberebie. Some people also complained that the borehole is too remote from the households in the community. The borehole is indeed not in the center of the community but rather at the outside skirt.

During the dry season from January to March the water of the borehole is very limited. One has to stand in line for several hours and get up early in the morning to get water. This is usually a chore women and children take care of. Sometimes there is not enough water for everybody and some have to buy drinking water in packs ("pure water").

To get water from the borehole people have to pay five Pesawas for two buckets of water - after the chief and other community elders decided to outsource the maintenance work of the borehole and the dwells. Somebody from outside the community has a contract for this work and the community members now have to pay for the water. Many in the community believe it would have been better to leave the maintenance work with the community itself, instead of giving the main source of drinking water to somebody else to manage. There have been enquiries by individual community members to the company to manage the maintenance themselves and keep the water free of charge. The water from the borehole is only available at certain times of the day, usually in the morning. At other

times of the day the hand gear is chained down and the borehole is not accessible to the community.



Fig. 12. Borehole with chained hand gear in Teberebie

The chief is satisfied with the decision to outsource the maintenance of the water supply and make the community independent from the mining company: *“I thought of it because we were always dependent on the mine to come and repair it. What when the mine is not there, what do we do? So we gave it to private people for them to manage it and control it. At the end of the month we are going to pay an amount. [...] That is what we did about the water. The contractor takes care of the borehole and the wells.”* (Minnah II, personal interview 12 June 2009)

There are three toilet facilities in Teberebie that were built by TGL. Sometimes they are maintained but not regularly. In June 2009 they were full and could not be used. One well is just next to a toilet facility. Because of this some people are reluctant to drink water of this well because they fear getting sick from the water. They are not sure whether it is safe to drink the water from the borehole and the dwells in general.

All in all, the environmental degradation around Teberebie caused by large-scale mining has severely decreased forests and farmland. Things like firewood or food that used to be

sourced from the forest are not available to the extent of the past before the mining activities started. At the new resettlement the community already had less amount of land compared to their old settlement, but the increasing mining activities and the development of the waste rock dump made the land even scarcer.

The access to water in Teberebie is inadequate. Their initial sources of water, the streams and rivers nearby, have either ceased to exist due to the construction of the mine or have been polluted. The water supplied to the community with wells and boreholes is not a sufficient replacement.

8.9 Social Disarticulation

The gold mining activities have not only led to economic disruptions in the community but also to social dislocation and social destabilization in the community that has been largely neglected by past research.

8.9.1 Disruption of Family Unit

The MIDR has changed personal ties in the families and has put the relationship and roles of men and women in the families to a tough test.

Men are seen as the breadwinners and heads of the family. After the waste rock dumping many men lost their land and therefore their main source of income. This forced some men to migrate and leave their family so seek a job somewhere else. It is mainly men that leave the community due to economic hardship. In the absence of the men the whole burden of supporting themselves and the children is put on the women who were left behind. Women, who once were farming, had to seek other income opportunities like trading, *galamsey* or even prostitution as described in 8.3. There was a shift in many families making the women the main providers of the family. It is the women, who have to catch up for the men.

A woman, whose husband found work far away after they lost their land, says: *“A lot of the time the men leave for work somewhere else. The families are not the same. If you*

don't have a good husband, they don't send money and they don't come back! This happened to some women here." (B. E., personal interview 8 June 2009)

It was the men who were given the compensation for the crops, women mostly did not even know how much it was and if so, only given a small amount of money from the husband. Most women were not taking part in the compensation process. Once some men had the compensation money they left their families and left their wives to take care of the children and themselves. The family unit was disintegrated. Also a majority of men state that the main part of the burden to support the family has been transferred to the women, as this statement of an older man confirms: *"Women suffer a lot. Most of the time it is the man who is the breadwinner of the house, so if the man is not working, the land is taken from the man's hand, the man is doing nothing, so the whole burden goes to the women."* (S. J., personal interview 9 June 2009)

8.9.2 Dismantlement of Social Organization and Mutual Help Mechanisms

At the beginning of the compensation process for the waste rock dump the affected farmers formed the Farmers Association (FA). They wanted to represent their interests themselves and did not have the impression traditional leaders would do so. Some of the members of the FA accepted the compensation that was offered to them, other declined and took the case to court with the help of WACAM. They decided to fight for better compensation. They formed another association called the Concerned Farmers Association (CFA) to represent their interests. At the time of the split this created unrest in the whole community. There were many misunderstandings, mistrust and mutual allegations between the two groups. This conflict is still very much in the minds of people although it has cooled off in recent time.

Also the way how the compensation worked did trigger conflicts in the community. Some farmers were compensated in the head-count system, others were compensated in the acre-system. This created conflict as people were treated differently. The waste rock dump and the compensation process created tension in the community, as community members tell: *"When they took the land it nearly split the community. I call it divide and rule diplomacy. They capitalized on it and divided the people. [...] Gradually it was eroding the relationships between the community members. Because of the compensation*

money, they gave one more, one less. People started arguing.” (N. J., personal interview 1 June 2009)

Segregation processes in the community mainly started when the waste rock dump started to cover more and more land, as this statement highlights: *“Before AGA came the people were still together. When AGA came and started the waste rock that was when the segregation started coming up. People started struggling for land. The tranquility that existed got lost. Because everybody was now scratching for land. [...] Even when you were a friend of mine because of land we had to be like enemies. [...] It brought conflict to people.”* (M. C., personal interview 11 June 2009)

Individualization in Teberebie was then pushing forward. Community members say there is still cordiality but it is not like it used to be. The competition for land, compensation money and rare jobs is too severe. In the conversations people tended to say phrases like: *“You have to fight for your own”; “It is about the survival of the fittest”; “You cry your own cry.”*

An older woman, close to 70, tells: *“At first we fought a lot, but now it’s not like that, the fight has been lost. It used to be that one’s problem is everybody’s problem. [...] But today it’s not like that anymore: if it affects you, it affects you alone.”*

Teberebie is not a single case where mining and resettlement has caused segregation in the community. Owusu-Koranteng (personal interview, 18 June 2009) sees a pattern: *“Mining always divides communities, you will never have the community be one again.”*

8.9.3 Disruption in the Chieftaincy System

Chieftaincy in general is held very high in Teberebie and seen as important within the social fabric of the community. After TGL left, the new companies were asking for a chief to negotiate and debate the further development of the mine. But during the very significant time from 1999/2000 to 2004 there was no chief en-stooled in Teberebie. There was a gap in the chieftaincy system. There were caretakers, but no chief. Many see this fact as a huge disadvantage in this interim period.

Many Teberebie people do not feel the chief is representing the whole community but rather his immediate family, like N. J. (personal interview 25 May 2009) is saying: *“The chief is expected to speak on our behalf but the man who is supposed to speak on your behalf is speaking for him or herself, leaving the grassroots. This is the problem here. The power is invested in the chief. But the chief will speak on behalf of his or her household, leaving the rest behind.”*

He is losing the respect of the community members because of his engagement with the company, which in a lot of situations does not help the community. A lot of mistrust and allegations are circulating in the community about the chief and other traditional leaders. Statements like: *“They don’t help us, they are all receiving something”*; *“The chief is receiving money from them, so he will not say anything against them.”*; *“He loves the mine, every secret he is telling the company”* were common on conversations with various community members. There is no evidence any of these facts are true, but it is sure that people are suspecting it and rumors are going around. All this is harming community relations.

Many people lost their trust in the chief and do not feel represented by him anymore. This is also caused by lacks in communication, they are unsure what position the chief is taking in meetings with the company. As a result of the mistrust towards the chief part of the youth¹² started to boycott communal labor. Some stopped doing communal labor, like cleaning the environment or helping with the community center, for several months after they were dissatisfied with the way the chief was performing his duty. Some still refuse to participate permanently.

The chief himself is very aware of the allegations towards him and the general sentiment in the community. He is saying: *“You can’t satisfy all people, but you must try and satisfy a percentage. [...] I am not a magician that can give out money. You cannot always listen to all of them, it will turn you crazy. But you must try and do something for them. You must try. Not all people will appreciate it, but some will.”* (Minnah II, personal interview 12 June 2009) At one point a few months ago he also took some of the youth to join him at a MAG-meeting to show them how those meetings with the company function and

¹² In Teberebie people from 18 to 45 are called youth.

verify he is not receiving bribes or anything of that kind (Minnah II, personal interview 12 June 2009).

Nevertheless, some see the power of the chief further diminishing and him losing credibility, also with the company. Some community members do not see much the chief and other traditional authorities can do for the benefit of the community. They doubt the chief is even powerful enough to put pressure on the company after he lost much of the support by his community. Owusu-Koranteng (personal interview 18 June 2009) says that *“the chieftaincy institution in the town is losing its respect. A chief becomes chief because he enjoys popular support of his people, but [...] usually [...] if the companies see that the chief is no longer in the power to convince its people they can also abandon him, so the chiefs can lose with the company and the people too.”*

Putting these chieftaincy issues in a larger perspective, Teberebie is not an exemption. There has been a divide and rule attitude that has been adopted by many mining companies, not just AGA. The usual tactic is to go to the chief first, give him a contract to supply something to the company and once the chief agrees on this, there is no way that he can ever champion the company anymore and articulate the concerns, the problems of the community members to the mining company. It is “divide and rule” - diplomacy, they pick the chief and some other favorites among the community and keep them close by giving them contracts (Anane, personal interview 18 June 2009).

Chieftaincy disruptions in mining communities are not a rare reality. During Agbesinyale's (2003: 293) research in the Wassa West District he found out that some local chiefs in the district were forcibly de-stooled, also through rebellious actions of the youth over actions mainly pertaining resource allocation. Chiefs were accused of crimes that were later found to be mere allegations that were never thoroughly investigated. Tension among social groups is common in mining communities. Often one finds the youth pitched against traditional authorities and chiefs. These developments pose serious threats to communal and social stability.

To sum it up, the relocation, the ongoing loss of land and the mining activities as a whole took their toll on the social stability of the Teberebie community. The growing

competition for land, jobs and income is dismantling social networks. The poverty-driven migration of a part of the male population of the community is a threat to social stability in the community as a whole and in the families. The “divide and rule” approach by the company is dispersing the patterns of social organization. Informal networks of mutual help or voluntary associations, like the communal labor performed by the youth, are disrupted. Reciprocity runs out and people feel they have to struggle on their own. This social disarticulation makes the community much more vulnerable.

9 Conclusion and Ways Forward

9.1 Summary of Research Findings

“I have been to almost all these mining communities, but looking at the extent of degradation and deprivation when it comes to land, water and other rights; I would say that Teberebie is one of the worst.” (Anane, personal interview 18 June 2009)

As Anane states, the Teberebie community is one of the most negatively affected mining communities in the Wassa West District. Teberebie was severely affected by two waves of displacement: Physical removal and economic displacement. But Teberebie is not an isolated case, the large-scale mining activities in the whole district have drastically intensified.

My research was guided by the Impoverishment Risks and Reconstruction Model (IRR) by Michael M. Cernea and the concept of Mining-Induced Displacement and Resettlement (MIDR) by Theodore E. Downing. The impact analysis consisted of nine main indicators, namely:

- a) Landlessness
- b) Joblessness
- c) Homelessness
- d) Marginalization
- e) Disruption of formal educational activities
- f) Food insecurity
- g) Increased morbidity
- h) Loss of access to common property resources and services
- i) Social disarticulation

The hypothesis that the nine potential DFDR-risks impacted the Teberebie community was largely confirmed. The risks became reality in different intensities and different connections to one another and cannot be separated from each other. Summing up my

research findings, the Teberebie community is negatively affected by all nine displacement risks, most of them deeply linked to landlessness.

The expropriation of the major part of the Teberebie farmland by the waste rock dump led to economic displacement of the community. It removed the main foundation of their productive systems, commercial activities and livelihood. Because the land, being their basis of life, was not replaced and the compensation was inadequate, the loss was basically a form of de-capitalization and pauperization of the Teberebie community. The impact of landlessness in Teberebie is by far the most severe of all DFDR-impacts and has further implications on many other areas of life. The Teberebie people associated independence and dignity with the livelihood their land provided for them. Hopes for alternative farmland have been scattered multiple times.

The main occupation in Teberebie was subsistence farming. After people have lost almost or at least a significant part of their farmland, their source of livelihood has been taken away from them. Jobs in the Iduapriem gold mine are mostly not accessible for Teberebie people, also due to the lack of their technical skills. People developed ways to support their lives, mostly not as sustainable as farming used to be. They turned to poverty-driven activities such as galamsey mining, which is not sustainable and connected to environmental degradation and health impacts to the miners. Activities that were mainly picked up by women were petty trading, which can only supplement a family income but cannot fully support a family. Other clearly poverty-driven activity that picked up is female prostitution. The lack of farmland and the lack of income had many implications on other areas like the families' food security and their children's education opportunities. On the social level the competition for rare jobs caused tension in the community and social disarticulation.

In terms of the risk of homelessness, the resettlement and planning of housing units was executed poorly and the dissatisfaction with the built structures remains a chronic condition. The culturally common form of housing and especially the number of rooms was not taken into account. The limited number of rooms and space tended to disrupt family life and to lead to social tension.

The economic marginalization experienced in Teberebie through the effects of vanishing land through the waste rock dump is accompanied by severe social and psychological marginalization. The Teberebie people are feeling injustice that has been committed on them and growing powerlessness to continue to fight for their rights. Intimidation and harassment by the mining company, military and security personnel has led to social and psychological marginalization of the group but also pressed on the moral of individuals. The economic losses left its marks on people's psyche and the social fabric of the community, it led to the loss of confidence in their community, their leaders and in themselves.

Formal educational activities have been impacted by the mining activities and have indirectly taken its toll on the children's education in various ways. Some parents who have lost their land simply cannot afford to continuously send their children to school. Powerful role models are missing. The situation the children are in is not beneficial for learning abilities and motivation.

Food insecurity in Teberebie is deeply connected to the loss of land and the lack of other meaningful, sustainable alternative sources of income. The availability of food crops dropped significantly in the years since the development of the waste rock dump. After the loss of their land they became dependent on cash economy. The daily struggle for food is also taking its toll on the psyche of the people. They were used to independently cater for themselves and not constantly have to worry about the acquisition of food.

The new location and therefore the closeness to the mining activities expose the Teberebie community to location-related diseases and add to the risk of increased morbidity. Sickesses like chronic diarrhea and headaches are related to unsafe water supply. The Teberebie community is very much concerned with respiratory tract diseases they connect to dust dissemination in their community caused by the mining activities. Vector borne diseases such as malaria are supported by new stagnant water bodies created by the mining activities. Additionally, poverty-driven prostitution increases the spread of STDs.

The loss of access to common property, like forest, land and water bodies in Teberebie due to MIDR and environmental degradation caused by the mining activities is severe.

Almost all access to land, which is communally owned by the people and only distributed for useage over a certain time period, has been lost. Some already because of the initial resettlement and the larger part because of the creation of the waste rock dump.

Deforestation and dewatering caused by mining activities remain major problems in the whole district. Particularly Teberebie women are affected by this as they are traditionally responsible for gathering fire wood and taking care of the family's water supply.

Dewatering has rendered a number of boreholes, streams and hand-dug wells in being unproductive or with reduced yield. Streams and rivers nearby have either seized to exist due the construction of the mine or have been polluted.

The social destabilization in the Teberebie community is caused by growing competition for land, jobs and income. Segregation processes in the community mainly started when the waste rock dump started to cover more and more land. These developments posed serious threats to communal and social stability. All this dismantled social networks and made the community more vulnerable. The poverty-driven migration of a part of the male population of the community is a threat to social stability in the community as a whole and in the families. The family unit was disintegrated. The majority of men state that the main part of the burden to support the family has been transferred to the women. The MIDR has changed personal ties in the families and has put the relationship and roles of men and women in the families to a though test.

The “divide and rule” approach by the company is dispersing the patterns of social organization. This created conflicts as people were treated differently, especially in the compensation process. Subgroups formed and for example, most women were not even part of the compensation process. Individualization in Teberebie was pushed forward by all this.

Chieftaincy in general is held very high in Teberebie and is seen as important within the social fabric of the community, but the displacement and the “divide and rule” approach by the company took a severe toll on the respect the community members have for their traditional leaders. They have lost a big part of trust into the chieftaincy system. Informal networks of mutual help or voluntary associations, like the communal labor performed by the youth, were disrupted. Big parts of the youth oppose traditional authorities and the

chief. Like in other mining communities, tension among social groups is common in Teberebie.

9.2 Towards Rights-Respecting Policy and Practice

9.2.1 Rights-based Approach

Like many NGOs and CSOs I want to link the impacts faced by mining communities like Teberebie to an approach based on the recognition of rights, particularly rights that are at risk of not being respected.

Several fundamental rights of the Teberebie community have been compromised for the development of the Iduapriem gold mine. Like the 2008 (172) report on the state of human rights in mining communities in Ghana by the Commission on Human Rights and Administrative Justice concludes: “[T]here is evidence of widespread violations of human rights of individual members of communities and communities’ collective rightsinsome [sic] mining areas in the country.”

Several articles of the United Nations Universal Declaration of Human Rights can be connected to the Teberebie case and show how the people’s basic rights are withheld from them. Starting with Article 22 (United Nations 1948) that states: „*Everyone, as a member of society, has the right to social security and is entitled to realization, through national effort and international co-operation and in accordance with the organization and resources of each State, of the economic, social and cultural rights indispensable for his dignity and the free development of his personality.*“

The ownership of land, communal as well as individual, of the Teberebie community is not respected. The way the community was deprived from its property comes into conflict with Article 17: „*(1) Everyone has the right to own property alone as well as in association with others. (2) No one shall be arbitrarily deprived of his property.*“

People are dependent on their land to fulfil Article 25 on their right to an adequate standard of living which touches the risks of food insecurity, homelessness, increased morbidity and joblessness. Article 25 (United Nations 1948) states „ *(1) Everyone has the*

right to a standard of living adequate for the health and well-being of himself and of his family, including food, clothing, housing and medical care [...]“

The reported harassment and intimidation by the mining company that creates discomfort and reluctance among community members to speak freely are forms of human rights violations related to the rights to personal liberty and human dignity. Article 19 (United Nations 1948) deals with „*the right to freedom of opinion and expression*“.

DFDR-risks cannot only be connected to the Universal Declaration of Human Rights. For example, the African Charter on Human and Peoples' Rights states in Article 24: “*All peoples shall have the right to a general satisfactory environment favourable to their development.*” This right is clearly not being respected or fulfilled in the Teberebie community.

Many more MIDR-impacts on the Teberebie community can be connected to violations of basic rights.

There are many incentives in the Ghanaian mining regulations for prospective investors and mining companies. The regulatory mechanisms are in their favor and deliberately relaxed to attract foreign mining investors. On the other hand they trample on the rights of the people that are directly affected with their actions. The research of the various impacts of DFDR and mining activities in Teberebie shows the whole extent to which their rights have been disrespected.

The way gold mining operations, like the one in Teberebie, are granted licenses in the first place and are extracting and working later on, are not coherent with international laws, legal principles and human rights. Policy and also practice must respect and not violate the mining community's human rights. This also includes their economic, social and cultural rights.

9.2.2 National vs. Local Needs

Gold mining is aimed at generating economic growth and the projects are justified by the belief of the greater value for the Ghanaian society. Here national and local

development needs clash. The DFDR-costs borne by local communities, such as Teberebie, cannot be outweighed by the benefits for other parts of the society enjoying the profits of the implementation of a gold mine.

The national government of Ghana, as many governments in similar positions, finds itself in a conflict of interest: The government is responsible to respect, protect and fulfill the affected community's human rights but is also interested in the revenues from a gold mine – for the so called “greater good”. The importance for governments, like Ghana, must shift towards the affected people's human rights. Clark (2009: 186) brings to the point why: *“Development benefits that come at the expense of other people's human rights are antithetical to sustainable development. Rather, they represent exploitative and inequitable development.”*

9.2.3 Recoupment of Selfdetermination

Taking the case of Teberebie in larger perspective, it is symptomatic for the structural failures in policies and practice. The Teberebie community, like so many others, was not allowed to self-determine their fate when it came to mine development and displacement. They lost control over fundamental features of their lives and lacked information on their future after the displacement process began. I agree with Oliver-Smith (2009: 12) who believes that when understanding and control in displacement and resettlement processes are diminished, this process will be characterized by tension, conflicts, and maybe active resistance.

Participation and consultation are not enough. Affected people must be given back the decision-making power over their future. A truly free, prior and informed consent constitutes a crucial element in elevating the bargaining power and negotiating strength of the affected communities. The power differences in the decision making process and the differences in access to information must be addressed during the decisions over projects involving displacement. A fair process of negotiation must include: *“reliable mechanisms to ensure that all terms agreed to as a result of such negotiations are fully implemented, that all applicable laws and policies are complied with, that the process results in equitable benefit sharing that tangibly improves the quality of life of affected people,*

including full restoration of lost livelihoods, and the end result reflects the development priorities of the affected communities.” (Clark 2009: 193)

9.2.4 Rehabilitation before Displacement

A true paradox is that many mining projects, especially in the past, move forward and are funded although affected people are not truly involved in the decision making process and the project impacts on the ecosystem and the people are only dealt with after the project has already started. The fact that displacement mostly occurs before disbursement creates enormous problems. Clark (2009: 194) puts it like this: *“rehabilitate up front, not in the face of impending disaster.”* This shift in the general approach is not such a fundamental recommendation, there are already existing laws that recognize this, but there is still a severe gap between policy and practice. A resettlement plan, like the one for the Iduapriem mine, which only exists on paper, is not sufficient enough.

If the true costs for the displacement and resettlement of affected communities would not be externalized but included in the project up front, many mining projects would never be realized.

9.3 The Future of Anthropological Displacement and Resettlement Research

There is no question that DFDR has become an important subfield of anthropological research. Decades of sociological and socio-anthropological research on resettlement have cumulated a substantial body of social knowledge and extensive literature. This knowledge has been integrated in policy and operational descriptions and has helped to improve resettlement operations (Cernea 1999: 6; Scudder 2009: 25). Cernea (1999: 5) calls for *“a constructive ‘alliance’ between economic and sociological knowledge on resettlement”*. I agree with Cernea that neither social sciences nor economics should monopolize research on resettlement (Cernea 1999:6).

In retrospect of this application of the IRR-model on the Teberebie case some things need to be pointed out. The power and advantage of the IRR-model is its holistic approach as the process of displacement affects virtually all aspects of life. Basically all the DFDR-

risks are connected to each other and influence each other. Nevertheless this broad approach also creates difficulties at the same time, as one needs great research capacity to cover all risks in detail.

I believe much more research of social and especially cultural impacts on mining community is needed. I agree with Downing and Downing-Garcia (2009) who argue that insufficient attention is given to psycho-socio-cultural risks and impoverishment in involuntary displacements and resettlements. The IRR-model includes social risks, but still lacks specific cultural risks and should be further developed in this direction. Social aspects like the risk of marginalization or societal disarticulation in Teberebie have hardly been investigated at all and this thesis is a first step into this direction and looked beyond the economic and environmental impacts on mining communities and also included socio-anthropologic analysis.

Scudder (2009: 26) calls for “*carrying out [...] systematic and comparative long-term research [...] for improving policy-relevant theory.*” In this way anthropology and other social sciences truly lack behind, for example, environmental sciences. I also agree with Oliver-Smith (2009: 6ff) who believes anthropology has a responsibility to expand the array of approaches and methods addressing the growing challenges in DFDR. There is also a considerable need for research on the growing number of solely private funded projects. The significance of this research will grow as the privatization of previously publicly owned services continues. For a long time international concern was largely on internationally financed projects, but they make up only a small proportion of projects (Guggenheim/Cernea 1993: 2). This is also the case with mining projects. Government shares of formerly state-owned mines diminish and International Financial Institutions (IFIs) pull out of projects and often leave behind a disastrous legacy, as it is the case in Teberebie.

For a long time anthropology has already been playing a central role in documenting the problems of displaced people and framing the debate in displacement and resettlement studies. The present context calls for more involvement of anthropologists in the research of DFDR to support the strategies of affected peoples (and NGOs and CSOs) defending themselves by referring to their human rights.

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10.2 Personal Interviews

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ANDOH, Nana Anthony: Director for Mining for the Environmental Protection Agency (25 February 2009 in Accra, Ghana)

ARYEE, Benjamin: Chief Executive for the Minerals Commission (4 March 2009 in Accra, Ghana)

BENTUM, Araba: Head Mistress of Teberebie Basic School (1 June 2009 in Teberebie, Ghana)

MINNAH II, Nana Kojo: Chief/Odinkru of Teberebie (11 June 2009 in Teberebie, Ghana)

MINNAH II, Nana Kojo: Chief/Odinkru of Teberebie (12 June 2009 in Teberebie, Ghana)

NANTOGMAH, Ahmed: Director of Public Affairs and Environment for the Ghana Chamber of Mines (24 February 2009 in Accra, Ghana)

OWUSU, John: General Manager, Corporate Affairs of AngloGold Ashanti (24 February 2009 in Accra, Ghana)

OWUSU-KORANTENG, Daniel: Chief Executive of WACAM, an Association of Communities Affected by Mining (28 February 2009 in Tarkwa, Ghana)

OWUSU-KORANTENG, Daniel: Chief Executive of WACAM, an Association of Communities Affected by Mining (18 June 2009 in Accra, Ghana)

...and various more. Interviews with most Teberebie community members are only cited with abbreviations and remain anonymous.

10.3 Images

Fig. 1. Prospective Gold Regions in Ghana.

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Fig. 2. Distribution of mining royalty among stakeholders

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Fig. 3. Production Trend (1999-2007)

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Fig. 4: Mining Sector Employment (1994-2007)

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Fig. 5. Districts of Ghana's Western Region

http://ghana-net.com/Documents/776px-Western_Ghana_districts.bmp [23 July 2009]

Fig. 6. Location of the Iduapriem Mine

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Fig. 7. Map of Teberebie and Waste Rock Dump

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Fig. 8. Waste Rock Dump close to Teberebie

(picture taken by Brigitte Reisenberger in May/June 2009)

Fig. 9. Galamsey site at Iduapriem mining concession

(picture taken by Brigitte Reisenberger in May/June 2009)

Fig. 10. Resettlement House in Teberebie

(picture taken by Brigitte Reisenberger in May/June 2009)

Fig. 11. “Mosquito Headquarters”, stagnant water at Iduapriem Mine

(picture taken by Brigitte Reisenberger in May/June 2009)

Fig. 12. Borehole with chained hand gear in Teberebie

(picture taken by Brigitte Reisenberger in May/June 2009)

11 Annex

11.1 Zusammenfassung (Abstract)

Weltweit hat wahrscheinlich fast keine andere Industrie mehr Landkonflikte verursacht als Bergbau. Das Dorf Teberebie in Westghana ist ein Beispiel für den Kampf um die Ressource Land zwischen Minenunternehmen und lokaler Bevölkerung. Teberebie wurde 1990/91 umgesiedelt, um Platz für die Expansion der Iduapriem Goldmine zu machen. Seit 2001 ist die Teberebie-Community durch Abraumhalden der Mine, die auf ihren Feldern abgeladen wurden, zusätzlicher ökonomischer Vertreibung ausgesetzt.

Die Auswirkungen der Vertreibung und Umsiedlung verursacht durch die Iduapriem Goldmine auf das Dorf Teberebie wurden anhand von neun Indikatoren untersucht: Landlosigkeit, Obdachlosigkeit, Arbeitslosigkeit, Marginalisierung, Störung der formalen Bildungsaktivitäten, Ernährungsunsicherheit, erhöhte Sterblichkeit, Verlust von Zugang zu gemeinschaftlichem Eigentum, Verlust des sozialen Zusammenhalts;

Die Analyse stützte sich auf das “Impoverishment Risks and Reconstruction Model (IRR)” von Michael M. Cernea und das Konzept von “Mining-Induced Displacement and Resettlement” (MIDR) von Theodore E. Downing.

Negative Effekte konnten bei allen neun Indikatoren bestätigt werden, besonders gravierende Auswirkungen hatte der Verlust von Zugang zu Land. Landlosigkeit in Teberebie hatte starke ökonomische Auswirkungen und steht in enger Verbindung zu den meisten anderen Indikatoren. Zusätzlich ist die Teberebie Community durch die Vertreibungs- und Umsiedlungsprozesse von sozialer und kultureller Destabilisierung und sozialer und psychologischer Marginalisierung betroffen.

Die Kultur- und Sozialanthropologie spielt eine zentrale Rolle in der Untersuchung von Vertreibungs- und Umsiedlungsprozessen. Besonders soziale und kulturelle Auswirkungen auf von Minenprojekten betroffene Gruppen wurden noch viel zu wenig untersucht und dokumentiert.

11.2 Curriculum Vitae

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