

# Resettlement Programme Implementation: The Effect on Livelihoods of People in Mining Communities in the Tarkwa-Nsuaem Municipality, Ghana

Eric Doe Ackuayi<sup>1\*</sup> Kotoku Godsway<sup>2</sup> Dzeto George K<sup>3</sup>

1. Department of Planning, College of Architecture and Planning, Kwame Nkrumah University of Science and Technology, Kumasi, Ghana

2. Department of Planning, Tema Metropolitan Assembly

3. Centre for Development Research and Advocacy (CeDRA)

\* Email of corresponding author: [ericdoeackuayi@yahoo.com](mailto:ericdoeackuayi@yahoo.com)

## Abstract

Research affirms the assertion that mining-induced displacement and resettlement (MIDR) impoverishes livelihoods. Particular of such impoverishments include; landlessness, joblessness, and social disarticulation. This thus threatens the sustainable and human-centered development the world seeks to attain. However, policy documents and researchers such as the World Bank's Involuntary Resettlement Sourcebook (2004) and Sonnenberg and Münster (2001) propose the preparation of resettlement programmes as an intervention for the mitigation of the adverse effects of resettlement. Despite the introduction of resettlement programmes, relocation and resettlement continues to impoverish the livelihoods of affected population. This paper assesses the extent to which resettlement programmes have affected livelihoods of people in the Tarkwa-Nsuaem Municipality. The paper first identifies some models and theories that underpin the preparation of resettlement programmes. It then proceeds to assess the effect of resettlement programme on livelihoods of affected households. Thirdly, it identifies the effect on societal ties. Fourthly, the paper identifies the challenges of an effective resettlement programme implementation. Lastly, the study makes plausible recommendations and way forward for an effective resettlement programme implementation. The study thus concludes that for the extractive industry to be beneficial to both the national and local economies there should be commitment to implementation strategies of resettlement programmes. Control measures should be put in place to manage all participation challenges of resettlement programmes. In this way, the primary aim of resettlement programmes would be achieved without blemish.

**Keywords:** Mining-Induced Displacement and Resettlement (MIDR), Resettlement Programme, Impoverishment, Tarkwa-Nsuaem Municipality, Affected Households

## 1. Background to the Paper

People are continuously displaced and resettled as a result of the execution of development projects including the construction of dams, power lines, roads, and the proclamation of biospheres and reserves (Downing, 2002). Cernea (2004; .221) affirms Downing's assertion in his statement "development programmes, large and small, frequently cause population resettlement, voluntary or involuntary". Displacement and resettlement are common in countries such as India, Mali and Ghana. This phenomenon is attributed to the recent economic and infrastructure development which includes the construction of dams, roads and mining activities (open-cast mining). MIDR undoubtedly affects people in diverse ways; social, economic, environmental, cultural, etc. According to Downing (2002), MIDR pose major risks to societal sustainability. The severity of these risks is encapsulated in the opening lines of the World Bank Group's policy on involuntary resettlement (World Bank, 2004; 35):

*"Bank experience indicates that involuntary resettlement under development projects, if unmitigated, often gives rise to severe economic, social and environmental risks....."*

Cernea (2000) establishes that displacement involves not only the physical eviction from a dwelling, but also the expropriation of productive lands and other assets needed for other alternative use. In Africa for instance, most communities are constantly disturbed by displacement and resettlement due to the need for mineral exploration. Such form of displacement and resettlement consequently are accompanied by severe impoverishments such as landlessness, joblessness, homelessness, health risk, loss of access to common resources, marginalization among others (Asian Development Bank, 1998).

According to Cernea (2000), more than 10 million people are involuntarily displaced to make way for development projects each year. Interestingly, this phenomenon is greatly triggered by mining activities which are critical to the economies of most developing countries. The adverse impacts of MIDR has the propensity of worsening already existing problems such as food insecurity and poverty among others in developing nations

and to a large extent, developed nations. This is due to its associated effects such as; the risk of perpetuating poverty, landlessness, joblessness, homelessness, risk of marginalization, health risks, and last but not the least, disruption of formal educational activities. Displacement can be expected to increase as national mining policies are liberalized, as companies opt for open-cast mining, and as rural population density increases (Downing, 2002; FIAN, 2001).

Most communities in Ghana have been victims of displacement and resettlement resulting from projects like the construction of dams and roads (African Development Bank, 2003). Communities such as Obuase, Damang, Teberebe and New Atuabo in the Tarkwa-Nsuaem Municipality, have also been affected by MIDR. According to Coakley (1998), Ghana Tarkwa mine forcefully removed 20,000 to 30,000 people from their homes. Such displacement of people in these areas was accompanied with problems like inadequate compensation, joblessness, and loss of farmlands.

Estimates by Sonnenberg and Münster (2001) indicate that in Africa, about 42,258 persons have been displaced by mining. Resettlement in most cases is inevitable especially in mining communities. This is owed to the economic contributions it makes. For instance, in Ghana, mining is a major source of employment to the labour force; where it employed 22, 500 of the labour force in 1995 (Akabzaa and Darimani, 2001). It also plays a leading role in foreign exchange earnings where exports of gold in particular represented 45 per cent of the total export revenue (Akabzaa and Darimani, 2001).

Resettlement programmes which according to Downing (2002) is defined as a time-bound action plan with a budget which sets out resettlement strategy, objectives, entitlement, actions, responsibilities, and monitoring and evaluation framework have been adopted as the cutting-edge to mitigate the problems associated with displacement and resettlement.

The paper was aimed at identifying the effects of the resettlement programmes on livelihoods of people in mining communities in the Tarkwa-Nsuaem Municipality. The paper achieves this by analysing the issues that provide answers to the following questions:

- ✓ What models and theories underpin resettlement?
- ✓ What are the effects of resettlement on livelihoods of affected households?
- ✓ What are the effects of resettlement on societal ties?
- ✓ What are the challenges of effective resettlement programme implementation?
- ✓ What is the way forward towards effective resettlement programme implementation?

## **2. The Research District**

The Tarkwa-Nsuaem Municipal is located in the south-east of the Western Region of Ghana. The Municipality shares boundaries with Prestea Huni-Valley District to the north, Nzema East District to the West, Ahanta West District to the South and Mpohor Wassa East District to the East. It has a landmass of about 978.26 sq. km, which lies between latitudes 400'N and 500° 40'N and longitudes 10 45' W and 20 10'W (TNMA, 2010)

The Tarkwa-Nsuaem Municipality experiences one of the highest rainfall patterns in Ghana. It has a mean annual rainfall of 187.83 cm with a double maxima rainfall from March to September as the main rainfall season and October to February as the dry season. The high precipitation experienced in the Municipality supports plant growth without irrigation. These conditions coupled with availability of arable land would help boost farming activities of resettled affected households thus, ensuring a sustainable livelihood (TNMA, 2010).

## **3. Empirical Research Strategy**

A mixed method of research was used to collect, collate and interpret the necessary data needed to answer the research questions." Mixed methods" as defined by Alatinga and Fielmua (2011) is the combination of both quantitative and qualitative strategies to collect and analyse data. The strength of this strategy is that the weakness of one will be compensated for by using an alternative method (Bryman, 2008 cited in Alatinga and Fielmua (2011).

### *3.1 Sampling Procedure*

The target groups for the research were the affected households of the resettlement, the case company (the resettling company) and the Unit Committee. The researcher made use of both probability and non-probability sample techniques in carving out the household sample from which data would be collected. The cluster sample technique was also adopted to eliminate any possible biases in data collection. This was done by dividing the study area into four blocks using the major roads passing through the two communities (New Atuabo and

Bankyim). The sampled households were then collected from each block using the purposive sample based on the assumption that other people who were not affected by the resettlement have migrated into the resettlement area and may not matter for the purposes of the study. A control community (Bankyim) was also deployed to serve as a check on the extent of change in variables under consideration for the affected community using the same sampling procedures.

### 3.2 Sample Size Determination

The researcher adopted a mathematical model from Miller and Brewer (2003) to determine the sample sizes for each of the communities at 92% confidence level. The model is expressed below:

$$n = \frac{N}{[1 + N(e)^2]}$$

Where N is the sample frame; n is the sample size and e is the confidence interval.

With a household population of 1,870 for the affected community (New Atuabo) and 2,004 for the control community (Bankyim), and a significant level of 92%, the sample size for the research was 144 and 145 respectively for the affected community (New Atuabo) and the control community (Bankyim).

### 3.3 Sources and Methods of Data Collection

The researcher used information from both secondary and primary sources to assess the effects of the resettlement programme on the livelihoods of the people in the Tarkwa-Nsuaem Municipality, Ghana. The secondary sources provided the theoretical and conceptual arguments of the effects of resettlement programmes on livelihoods. These were collected through desk study of published and unpublished materials relevant for the study.

The primary data were collected from field surveys using semi-structured questionnaires, interview guides (which help in recording responses from key informants) and field observation. The type of questionnaire used for collecting the required data was a combination of the close-end and open-ended type for collecting both qualitative and quantitative data.

### 3.4 Data Analysis and Presentation

Quantitative and qualitative data were gathered from the units (resettlement affected households, the case company and the Unit Committee) through interviews using semi-structured questionnaires. The quantitative data were analysed using Statistical Package for Social Science (SPSS), version 16 and expressed in forms of arithmetic mean and range. Specifically, the monthly average incomes and expenditures were analysed using the arithmetic mean and range methods. Qualitative data were analysed using the content and interpretive approaches.

## 4. Model and Theoretical Underpinning of Resettlement Programmes

The researcher made a comparative study of three main models and theories surrounding the issue of resettlement. This was to pre-inform the researcher of the structure, requirement and possible outcome of resettlement programming. This thus provided the researcher with pre-supposed model of how resettlement should be done. These included;

### 4.1 Diffusion Theory of Resettlement

The diffusion theory has been of great interest to researchers in geography and sociology who are interested in the spread of phenomena over space and time. It seeks to interpret resettlement in terms of location thus, placing much focus on the interaction, spread, contact, change and growth of resettlement patterns and the physical distances separating the original settlements from the new resettlements, and the local economic resources of the new sites (Woube, 2005; Akpanudoedehe, 2010).

Three types of diffusion processes are identified by the theory. The first type reveals that first adopters of innovators who are majority are followed by the second adopters who are the late majority, and the third adopters are those who arrive last. It is however noted that, adoptive processes of affected population depend on a number of factors including geographical barriers such as mountains, rivers and deserts. Other factors are languages, cultures, ethnicity, income, and bureaucracy (Hagerstrand, 1965 cited in Woube, 2005).

According to Woube (2005), the theory highlights four stages in which resettlement manifest itself;

- i. Physical transfers of affected populations to a new site
- ii. Adoption process to the biophysical and human environments
- iii. Achievement of socio-economic development by the affected populations
- iv. Ability of affected populations to manage the biophysical and human environment

The contribution of the diffusion theory to resettlement cannot be over-estimated. It enables researchers and resettlement planners to understand the stages of resettlement. That is, the move of people and the adaptation strategy to the new environment. The theory also brings to light factors that may limit or fast track the resettlement processes.

#### *4.2 Chambers Participatory Development Model (CPDM)*

The model has its origin from the works of Ghandhi (1962 cited in Agba *et al.*, 2010). CPDM focused on small scale development that allows the poor to be adequately involved and participate effectively in the development process of their communities with external agents acting as facilitators and financier (Chambers, 1983 cited in Agba *et al.*, 2010). Citizen participation which is said to be the panacea for effective community development programme is the key focus of this model (Nkpoyen *et al.*, 2009).

CPDM put forward that, top-down development strategies, where decisions and programmes concerning community development are done without inputs from affected communities or affected populations are ineffective and disempowering. In this light, the model proposes that, development should not be centered only on material wellbeing of members affected communities or affected populations but should incorporate capacity building, political, economic and socio-cultural wellbeing of affected population (Chambers, 1983 cited in Agba *et al.*, 2010).

#### *4.3 Social Justice Theory*

Social justice, a theory by John Rawls is about fairness involving the ideas of original position, the veil of ignorance and the derivation of two principles of justice (John Rawls, 1971). He emphasise on egalitarianism and distributive justice. These concepts have their relevance to the concepts of involuntary resettlement particularly when we argue for distributive justice, land for land and evaluation of pre and post development projects conditions under involuntary resettlement (Bala, 2006).

Involuntary resettlement is more than a question of sheer number, but rather a human right issue involving accountability, governance, participation, capacity building, relevant legal and policy framework. In this respect, distributive justice in the light of allocation has remarkable relevance and provides productive ways to safeguard the rights of involuntarily resettled persons ousted by development initiatives (Bala, 2006). According to Bala, 2006, resettled persons with the exception of refugees are legitimate citizens and as such are entitled to the fundamental rights guaranteed to them by their respective country's constitution.

### **5. Brief History behind the Resettlement Programme**

In an interview with the case company, the researcher noted that the resettlement took place between the years 1996 and 1998 affecting 12 different communities. Out of these, one community (Old Atuabo now New Atuabo) with a total population of 4,400 plus a few indigenes of Akontasi and Mandakrom with populations of 300 and 500 respectively opted to be resettled to the new site. The rest of the affected communities opted for cash compensations. In all, 2,688 households were affected of which 611 of them were resettled.

Records show that, the case company's resettlement has so far been the largest in Ghana and West Africa. Led by the Regional Minister of the time, a Steering Committee was established to provide assistance and to see to the preparation and smooth implementation of the resettlement programme. The committee members comprised the following:

- i. The Western Regional Minister
- ii. The Western Regional Co-ordinating Director
- iii. Regional Officer of Environmental Protection Agency
- iv. Regional Officer of Town and Country Planning
- v. Regional Officer of Land Valuation Board
- vi. Representative of District Chief Executive of Wassa West District
- vii. Senior Inspector of Mines, Tarkwa
- viii. Representatives of Atuabo, Mandekrom, and Sofo Mensah
- ix. Representatives of GFG, Tarkwa Mine
- x. Assistant Secretary, Western Regional Co-ordination Council, Tarkwa

Aside the Steering Committee, other sub-committees were established within the affected communities to serve as mediators and negotiators between their respective communities and the case company. John Van Nostrand Associates (JVN Associates), a consultant was then involved for the preparation and implementation of the resettlement programme. The resettlement programme was then approved by the Wassa West District Assembly

now Tarkwa-Nsuaem Municipal Assembly.

## 6. Characteristics of the Affected Households

The study identified that persons of different age and sex group were affected by the resettlement programme. The males dominated with 51.1 per cent while the females constituted 48.9 per cent. The sex ratio for the affected community was identified to be 104 which is not so different from the regional sex ratio of 103. The labour force for the affected community is said to be high with the 15-64 age group constituting 77 per cent followed by those within the age groups 0-14 constituting 20.8 per cent and the aged, 2.2 per cent (see Table 1). The study again observed that the males dominated because of the mining activities which attracted more males from nearby towns and cities like Takoradi and Agona.

The researcher identified that 47.7 per cent of the affected households had completed the basic level education, while 20.3 per cent, secondary level education. The researcher again found out that 12.7 per cent had completed the tertiary level of education whereas 11.1 per cent of them had never been to school. Those who had completed the vocational and non-formal education constituted 4.1 per cent (see Table 2). Observations showed that the proportion of females dropped as the educational level increases (see Figure 1). It was identified that for those who had never been to school before, 81.8 per cent were females with 18.2 per cent being males. At the basic and vocational levels, the proportion of males and females were even. The SHS level recorded 72.5 per cent males and 27.5 per cent females likewise the tertiary level (64 per cent males and 36 per cent females). The non-formal education also recorded lower females (37.5 per cent) in relation to males (62.5 per cent). This clearly shows the con-mech in the educational system which does not favour the females in the developing part of the world.

## 7. Effects of the Resettlement Programmes on Livelihoods

The researchers examined the occupational engagement and the average incomes gained per month by the affected households before and after the resettlement. Their average expenditure level per month was also examined in relation to the control community (Bankyim).

### 7.1 Occupational Effect

Through a one-to-one interview with the affected households, the researcher probed to reveal their occupational characteristics before the resettlement. It was identified that the agriculture sector engaged the highest labour with 43.8 per cent. This iterates the fact that rural areas are mostly agrarian communities. The manufacturing sector accounted for 25 per cent of the affected households which is very likely of a community in the Tarkwa-Nsuaem Municipality where large and small scale mining as well as illegal mining (galamsey) is common. The commerce and service sector engaged 12.5 per cent and 18.7 per cent respectively. The case wasn't very different from the control community (Bankyim) which showed that between the years 1996 and 1998, 51.5 per cent of its labour force were engaged in agriculture, 19.5 per cent in the manufacturing sector with the commerce and service sector engaging 14 per cent and 15 per cent respectively.

Further interview with the affected households by the researcher disclosed that current situations have changed from the former. Engagement in agriculture by affected households had reduced from 43.5 per cent to about 15 per cent. The commerce and service sector increased to 21.2 and 21.2 per cent respectively. The manufacturing sector employed the highest with 40 per cent. The remaining 2.5 per cent of the affected households were unemployed (see Table 3).

Examination of the control community by the researcher however did not show any significant change in the occupational engagement of the households. The researcher identified that the agricultural sector engages 45 per cent of its labour force whereas the manufacturing sector, 15 per cent. The commerce and service sector employs 16 per cent and 24 per cent respectively. From the figures given of the resettled community (New Atuabo), there was a massive drift from the agricultural sector to the industrial sector. The shift in occupation could be attributed to the fact that arable lands for agriculture have now been transferred into the hands of the extractive industries (both small and large scale industries). This is made evident as one respondent said that *"There are no lands for farming in this area as compared to the old site. We had large farms at the old site to support ourselves but here, the lands are being developed into houses to shelter mine-workers, and for mining purposes."*

### 7.2 Effect on Income

Average income levels of the affected households before the resettlement was GH¢ 246.81 with some individuals (4.9 per cent) earning as high as GH¢ 600 to GH¢ 900. Using the UN poverty line standard of one

US dollar (US \$1) per day and an average household size of four (4), average income of the affected households per day before the resettlement was GH¢ 1.10. It could therefore be inferred that the affected households lived below the poverty line before the resettlement. Average income of people in Bankyim between the years 1997-1998 also stood at GH¢ 230.00 a little below that of New Atuabo. Using the UN poverty line standard and an average household size of four (4), average income per day for the control community was GH¢1.00.

Further studies of the income levels of affected households after the resettlement revealed an average monthly income of GH¢335.96. Using the UN poverty line standard of one US dollar (US \$1) per day and an average household size of four (4), the average income per day of the employed affected households stands at GH¢1.50 putting them below the poverty line. On the other hand, the control community (Bankyim) currently exhibits an average monthly income of GH¢440.00. Average income per day for the community is GH¢1.95 putting them above the poverty line (see Table 4).

Though the affected community experienced an increase in average daily income by 36 per cent, it still remained below the poverty line. It was deduced that the resettlement has had a negative income effect on the affected households. This stems from the very fact that the control community (Bankyim) which shares similar characteristics with the affected community experienced an increase in average daily income by 95 per cent putting them above the poverty line.

Despite the increases in income levels, some affected households expressed dissatisfaction about the resettlement on their income. Remarks from the survey showed that 26.2 per cent had no effect on their incomes, 18.8 per cent expressed positive effect of the resettlement on their income. These were mainly those who have been employed by the case company. The remaining 55 per cent who were mainly agricultural, commerce and manufacturing (galamsey; an illegal gold mining business) workers showed immense disgust of the resettlement on their income levels (see Figure 2). One affected household member said:

*“We were earning more at the old site from our farms. People would buy my goods as soon as they are harvested due to the presence of the “galamsey” activities. But now, we have no farms and no booming economic activity”.*

### 7.3 Effect on Expenditure

The researcher looked at the general expenditure levels of the affected households as well as expenditure on food after the resettlement.

#### 7.4 General Expenditure Levels of Affected Households after the Resettlement

Average monthly expenditure for the affected community stood at GH¢ 95.80, with Bankyim, the control community experiencing an average monthly expenditure of GH¢ 85.00. Further probe into the cause of the differences in expenditure levels revealed that average expenditure on items such as transportation and food were higher than that of the control community.

#### 7.5 Average Monthly Expenditure on Food after the Resettlement

The survey revealed that the average monthly expenditure on food incurred by the affected households after the resettlement is GH¢ 235.38 while the control community had an average monthly expenditure of GH¢ 150.40. Investigations disclosed that, the people of Bankyim (control community) has enough lands to farm on thus, are in the position to produce most of their food needs. However, the resettled community (New Atuabo) spent much on food boiling from the fact that lands for farming are scarce.

#### 7.6 Effect on Social Articulation

The assertion that resettlement gives birth to social disarticulation (Downing, 2002) was re-affirmed when the researcher identified from the study that, 55.3 per cent of the affected households had experience a decline in the number of people they lived with when compared to the period before the resettlement. Of the 55.3 per cent (i.e. 79 households), 61 per cent of them attributed the decline to the resettlement. A response from one affected household member reads:

*“The rooms are few and smaller in sizes as compared to what we had at the old site. There are no jobs for us. Where do they expect them to sleep and what do you expect them to eat. Definitely they would have to leave for other places”.*

#### 7.7 General Effects of the Resettlement Programme

From a one-to-one interview with the Unit Committee of the New Atuabo community (the resettlement community), the researcher identified that the resettlement programme has had both positive and negative effects

on them as shown in Table 5.

**Table 5: Effects and Recommendations of the Resettlement Programme**

Positive	Negative	Recommendations
Improvement in infrastructure development such as; ➤ Provision of Small Town Water System ➤ Provision of three KVIPs and six W/C toilet facilities ➤ Provision of street lights ➤ Tarred road Introduction to other sustainable means of livelihood. Examples include; ➤ Gari production ➤ Batik production	➤ Impoverishment of livelihoods due to the destruction of farmlands and “galamsey” operations	➤ Make available arable lands for farming not so far away from the community. With the limited size of land for farming, introduction of mechanized farming will yield much. ➤ Though other alternative livelihoods were provided, land for the operations of such activities should be made available.

Source: Field Survey, Unit Committee. March, 2012

## 8. Implementation Challenges of Resettlement Programmes

Plan or programme preparation and implementation should not be treated as two separate entities. A successful programme implementation requires a well-coordinated effort between all parties involved. Other factors may also inhibit the successful implementation of resettlement programme. The survey thus, sought to investigate into plausible factors that affect the implementation of resettlement programmes.

### 8.1 Occupational and Economic Influence

In affluent, politically powerful, highly populated and non-indigenous urban communities, resettlement is not plausibly likely to occur even when such areas are well endowed with valuable deposits. Examples are areas like Peoria and Arizona in the United States of America. On the other hand, politically weak and non-affluent are likely and easy to be affected by resettlement (Downing, 2002).

The situation wasn't different in the study case as responses from the case company revealed that, about 20 per cent of the affected labour force was engaged in “galamsey” operations which were very lucrative to them in terms of income earnings, thus becoming a great inhibiting factor. The “galamsey” operators challenged the authorities of the Steering Committee and even the Traditional Council. They confronted the Steering Committee and the Traditional Authority on several counts. The opposition by these “galamsey” operators slowed down the implementation processes.

### 8.2 Conservativeness of the Affected Population

It is an undeniable fact that people find it very difficult to change. As a result of this, the willingness of the affected population to accept the resettlement was very low. This led to several protests from the affected populations. Illiteracy herein defined as the ability to understand an issue of concern was a major contributor to the conservativeness of the affected population. It was made evident from the case company that, it was uneasy making the people understand issues pertaining to compensatory measures and the calculations involved. Indecisiveness of the affected population in choosing between options such as cash compensations and land-for-land compensations were also high. Other issues related to the ability to interpret information sent to the affected population thus, slowing the implementation processes.

#### Low Level of Participation by the Affected Population

Stakeholder participation is vital to successful programme implementation. Poor relationship between parties of plan or programme implementation stifles active participation. Low level of participation by the affected population was a great challenge during the resettlement programme implementation stages especially during public hearing sessions.

It is therefore encouraged that a conducive platform should be created to warmly embrace all stakeholders of programme implementation. As defined by Twyford and Baldwin (2007), stakeholder participation is the processes whereby all those with interest in the outcome of a program or project have the enabling environment to actively influence decisions on planning and management. The World Bank (1995) shares the similar opinion by viewing participation as the process through which people with an interest (stakeholders) influence and share control over development initiatives and the decisions and resources that affect them.

### 8.3 National Resettlement Policy Document

Resettlement programme, no matter how well prepared and coordinated could fail and be a travesty to the whole idea eradicating MIDR impoverishment if not regulated by any national resettlement Act or policy. In the words of FIAN (2001), countries with liberalized mining policies tend to suffer most from MIDR actions. It is thus expedient that government regulate resettlement by developing an Act that regulates all resettlement activities in the country. This will ensure accountability and commitment to responsibility.

## 9. Summary, Recommendations and Conclusion

The paper sought to examine the effects of resettlement programmes on the livelihoods of people in the Tarkwa-Nsuaem Municipality. The objective was to determine the extent to which the development intervention (resettlement programme) has helped in restoring or bettering the lives of affected persons of resettlement and to make recommendations. The researcher sampled and interviewed 144 households from the New Atuabo community (affected community) and 145 from Bankyim (the control community). The researcher further interviewed the case company to determine their implementation strategies, and the Unit Committee for their views about the resettlement.

The researcher identified that the occupational engagement of the affected households had shifted significantly from the agriculture sector to the manufacturing sector where employment in the former decreased from 44 per cent to 15 per cent with the latter increasing from 25 per cent to 40 per cent. The reduction in agricultural engagement was due to the scarcity of arable lands for farming at the new site. This threatens the food security of the community and to the nation to a large extent. This is seen where expenditure on food was high (GH¢ 235.38) as compared to that of the control community (GH¢ 150.40).

Social cohesion, a key ingredient for effective socio-economic development was also disturbed by the resettlement. Affected population migrated to other communities in search of arable land for farming which was the traditional occupation of the time. 53.3 per cent of the affected households confirmed that members of their households had migrated due to inabilities to adapt to their new environment.

Average monthly income levels however increased in both communities. However, the control community saw a significant increment in their average monthly income with the affected community increasing by 36 per cent and the control community increasing by 95 per cent putting the former below the poverty line and the latter above the poverty line.

Informed by the adverse economic effects of the resettlement programme on the affected households, the researcher recommend that resettlement programmes ensure continuity in the type occupation engaged in by the affected households after resettlement. This means that factors needed to ensure smooth continuity in their occupations should be made available. Again, special alternative livelihood approach policies should be put in place to help better the livelihoods of the affected households. The researcher again strongly recommended that, a comprehensive national policy document on MIDR be prepared to include all aspects of a resettlement programme as well as the implementation schedules. This will then be a blueprint for all MIDR programmes.

As part of the planning processes for resettlement, factors that could inhibit the ability to adapt to new changes should be identified and dealt with. Adequate provision should be made to allow for training sessions for affected households geared towards building their capacities towards physical, economic and environmental adaptation. Proper planning and implementation of this would aid in the completion of the stages described in the diffusion theory which would to a large extent contribute substantively in solving the problem of social disarticulation.

Detailed, technical, financial and economic analyses must be undertaken before their implementation commences to avert impoverishment due to resettlement. The study emphasizes that, until stringent measures are put in place to ensure an articulate implementation of the resettlement programme and possible implementation challenges identified and dealt with, MIDR shall continue to impoverish the livelihoods of affected people.

## References

- African Development Bank (2003). Involuntary Resettlement Policy. African Development Fund.
- Agba, A., Akpanudoedehe, J., and Ushie, E., (2010). Socio-Economic and Cultural Impacts of Resettlement on Bakassi People of Cross River State, Nigeria. *Studies in Sociology of Science* 1(2): 50-62
- Akabzaa, T. and Darimani, A. (2001). Impact of Mining Sector Investment in Ghana: A Study of the Tarkwa Mining Region. A Draft Report to Structural Adjustment Participatory Review Initiative (SAPRI).



Akpanudoedehe, J., (2010). Socio-economic and Cultural Impacts of Resettlement on Bakasi People of Cross River State, Nigeria. Seminar Paper Presented at the Department of Sociology University of Calabar, Calabar-Nigeria.

Alatinga, K. A., & Fielmua, N. (2011). The impact of mutual health insurance scheme on access and quality of health care in Northern Ghana: The case of Kassena-Nankana east scheme. *Journal of Sustainable Development*, 4 (5), 125-138. <http://dx.doi.org/10.5539/jsd.v4n5p125>

Asian Development Bank (1998). Handbook on Resettlement: A Guide to Good Practice. Asian Development Bank. Manila, Philippines

Bala, M., (2006). The Theory of Social Justice and Involuntary Resettlement. *Indian Journal of Human Development*, 2(2): 1-10

Cernea M. (2000). Impoverishment Risks, Risk Management, and Reconstruction: A Model of Population Displacement and Resettlement. George Washington University. Washington, DC

Cernea M. (2004). Development and Population Displacement, Collection of Global Course Syllabi Relating to Internally Displaced Persons. George Washington University. Washington, DC.

Coakley G.J. (1998). The Minerals Industry of Ghana. International Minerals Statistic and Information. US Geological Survey. <http://minerals.usgs.gov/minerals/pubs/country/>

Downing T., (2002). Avoiding New Poverty: Mining-Induced Displacement and Resettlement. World Business Council for sustainable development, and International institute for environment and development (iied). Mining, Minerals and sustainable development (MMSD).

FIAN (2001). Ghana: Hundreds of Villagers in Western Ghana Forcibly Evicted and Harassed by Gold Mining Corporations, FIAN Intervention 0106 HGHA, February <http://www.fian.org/english-version/e->

John Rawls (1971). A theory of Justice. The Belknap Press of Harvard University Press Cambridge, Massachusetts. United States of America

Miller R. L., & Brewer, J. D. (2003). A-Z of Social Research - Dictionary of Key Social Science, Sage Publications, London

Nkpoyen, F., Agba, A. M. O., Okoro, J. and Ushie, E. M., (2009). External Agent's Role in Participatory Rural Community Development in Cross River State, Nigeria.

Sonnenberg, D. and Münster, F. (2001). Mining Minerals Sustainable Development Southern Africa. Research Topic 3: Mining and Society Involuntary Resettlement. African Institute of Corporate Citizenship and MMSDSA Regional Research, Birnam Park.

Tarkwa-Nsuaem Municipal Assembly (2010). Medium Term Development Plan (2010-2013). Unpublished

Twyford, V & Baldwin, C (2007). Stakeholder Participation in Dams and Development: Report to UNEP Dams and Development Project. United Nations Environment Program, Nairobi

World Bank, (2004). Involuntary Resettlement Sourcebook. Planning and Implementation in Development Projects, Washington, D.C

Woube, M., (2005). Effect of Resettlement Schemes on the Biophysical and Human Environments: The Gambala Region, Ethiopia. Florida: Universal Publishers.

#### Notes

Note 1. Ghana Cedis most often expressed as GH¢ and Ghana Pesewas (Gp) are the official currencies used in Ghana. The New Atuabo and Bankyim community are found within the Tarkwa-Nsuaem Municipality.

Note 2. The average monthly income was divided by the days of the month (30 days) to get the average income per day. This was then divided by the US dollar Exchange Rate of GH¢1.87988 (as at 20<sup>th</sup> March, 2012) to get the dollar equivalence. To get the average income per household member, the income per day was divided by the average household size of four (4).

**Table 1: Broad Age Cohort of Sex-Age Structure of Affected Households**

Age group	Males		Females		Total
	Absolute	Percentage	Absolute	Percentage	
0-14	45	58.4	32	41.6	77
15-64	140	49.1	145	50.9	285
64+	4	50	4	50	8
<b>Total</b>	<b>189</b>	<b>51.1</b>	<b>181</b>	<b>48.9</b>	<b>370</b>

Source: Field Survey, March, 2012

**Table 2: Highest Level of Education Attained by Affected Households**

Educational Level	Males	Percentage	Females	Percentage	Total	Percentage
Never	3	18.2	13	81.8	16	11.1
Basic School	35	50	35	50	70	47.7
SHS	20	72.5	8	27.5	28	20.3
Tertiary	12	64	6	36	18	12.7
Vocational	3	50	3	50	6	4.1
Non-Formal	4	62.5	2	37.5	6	4.1
<b>Total</b>					<b>144</b>	<b>100</b>

Source: Field Survey, March, 2012

**Table 3: Occupational Characteristics of Affected and Control Community**

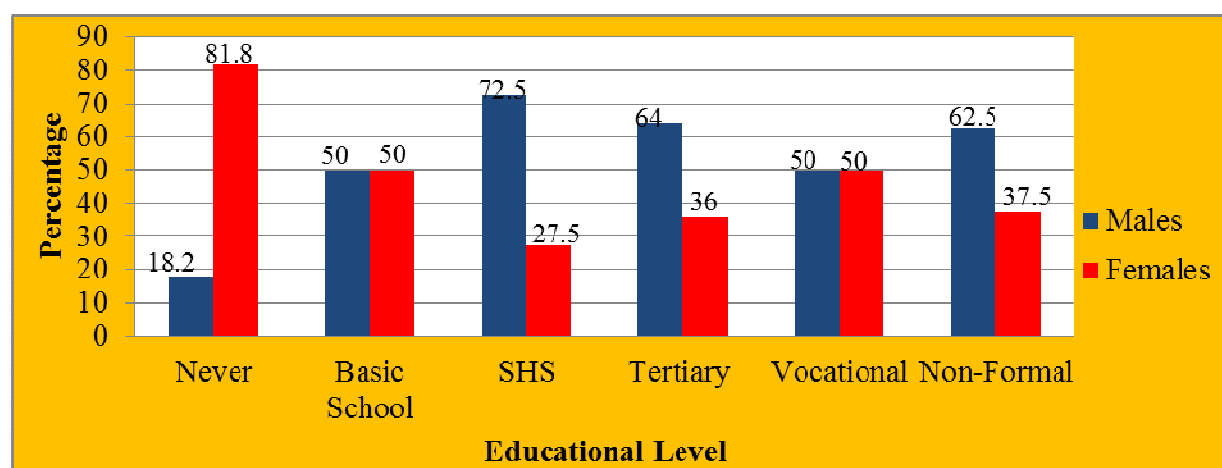
Occupational Sector	New Atuabo				Bankyim (Control Community)			
	Before Resettlement		After Resettlement		Before Resettlement		After Resettlement	
	Absolute	%	Absolute	%	Absolute	%	Absolute	%
Agriculture	63	43.8	22	15	74	51.5	65	45
Manufacturing	36	25	58	40	28	19.5	22	15
Commerce	18	12.5	30	21.2	20	14	23	16
Service	27	18.7	30	21.2	22	15	34	24
Unemployed	0	0	4	2.6	0	0	0	0
<b>Total</b>	<b>144</b>	<b>100</b>	<b>144</b>	<b>100</b>	<b>144</b>	<b>100</b>	<b>144</b>	<b>100</b>

Source: Field Survey, March, 2012

**Table 4: Income Levels of Affected Households and Bankyim**

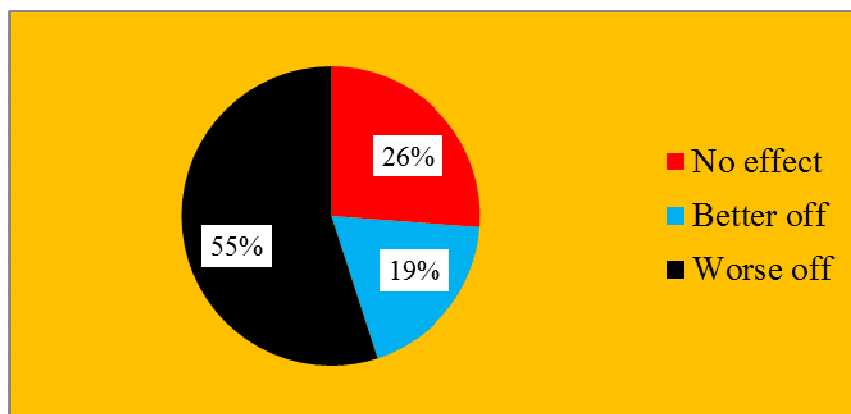
Income Level	New Atuabo		Bankyim (Control Community)	
	Before Resettlement	After Resettlement	Before Resettlement	After Resettlement
Average Income per Month (GH¢)	246.81	335.96	230	440
Average Income per Day (GH¢)	1.10	1.50	1.00	1.95

Source: Field Survey, March, 2012



**Figure 1: Highest Level of Education Attained by Affected Households**

Source: Field Survey, March, 2012



**Figure 2: Effect of Resettlement on Income Levels of Affected Households**  
*Source: Field Survey, March, 2012*

The IISTE is a pioneer in the Open-Access hosting service and academic event management. The aim of the firm is Accelerating Global Knowledge Sharing.

More information about the firm can be found on the homepage:  
<http://www.iiste.org>

## CALL FOR JOURNAL PAPERS

There are more than 30 peer-reviewed academic journals hosted under the hosting platform.

**Prospective authors of journals can find the submission instruction on the following page:** <http://www.iiste.org/journals/> All the journals articles are available online to the readers all over the world without financial, legal, or technical barriers other than those inseparable from gaining access to the internet itself. Paper version of the journals is also available upon request of readers and authors.

## MORE RESOURCES

Book publication information: <http://www.iiste.org/book/>

## IISTE Knowledge Sharing Partners

EBSCO, Index Copernicus, Ulrich's Periodicals Directory, JournalTOCS, PKP Open Archives Harvester, Bielefeld Academic Search Engine, Elektronische Zeitschriftenbibliothek EZB, Open J-Gate, OCLC WorldCat, Universe Digital Library, NewJour, Google Scholar

