# MINING INDUCED DISPLACEMENT AND RESETTLEMENT (MIDR): A CASE OF MUZABULA COMPOUND IN SOLWEZI MINING DISTRICT ZAMBIA

Kumwenda, M. and \*Chileshe, P.R.K.

Copperbelt University, P.O. Box 21692 Kitwe, Zambia.

\*Email: prkchileshe@gmail.com

#### **ABSTRACT**

Liberalisation of the economy in the early 2000s by the Zambian government led to the privatisation of the State owned mining assets. Kansanshi Mine in Solwezi, North-western province of Zambia was sold to First Quantum. When the company started mining in 2004, some families in Muzabula compound that where in proposed mining area were displaced. Mining induced displacement and resettlement (MIDR) led to loss of socio-cultural, economic and environmental aspects of the displaced families thereby affecting their livelihood. Included was loss of land, common property resources, and disruption of social networks, loss of traditional authority and identity and destruction of forests and loss of access to the river. The objective of the research was to evaluate the impact of MIDR on the livelihood of the displaced community of Muzabula Compound. The conceptual and theoretical framework was based on the 'Impoverishment Risks and Reconstruction model' that looks at impoverishment risk assessment of socio-cultural, economic and environmental aspect in its analysis that arise from displacement. Qualitative research methods were used to collect data through semi structured interviews with the community, mine representative and government officials. A total number of forty-seven participants took part in the interviews. Grounded theory was used for data analysis and interpretation. Displacement took place in two phases, in 2004 at the beginning of mining and in 2015 during the construction of the smelter road. During the first phase, people were compensated in form of money at \$3190 (US Dollars) per 50 x 50 metres of land. The amount included houses, fruit trees, fields and whatever was on the land. The second phase, compensation was in form of good concrete houses better than the mad houses demolished and help in farming inputs and skills. The displaced families who were subsistence farmers improved their produce. The first displacement resulted in increased risks of impoverishment for the displaced due to loss of livelihood as the displaced families were not involved in the planning. The second displacement was properly planned and improved the displaced families' livelihood. Planning must include all stakeholders who are the community, the government, Civil Society like the Church, Non-Governmental Organisations working in the community and the Mining Company officials. The

interests of the community to be displaced must be considered as a first priority. The paper concludes that Government must adhere to policies that govern mining displacement and resettlement to reduce on loss of livelihood for the displaced. In the first displacement this was not considered as the displaced families were not engaged in any planning meetings and were just informed by the government officials and traditional leadership that they will be displaced and compensated.

**Keywords**: Impoverishment Risks and Reconstruction, Mining Induced Displacement and Resettlement, Liberalisation, Stakeholders.

## INTRODUCTION

Mining plays a major developmental role both economically and socio-politically in many countries that are blessed with mineral resource and Zambia is not an exception (Kumar, 2016). Thus, the mining sector in Zambia is a major revenue contributor towards the economy of the country (Kumar, 2016). It is an extractive industry and thus it needs huge land of mineral deposits for it to be successful (Ranangen, 2013). Where mineral deposits are found usually there will be people living on such land who depend on it for their livelihood. In such situations therefore, the inhabitants of that land would have to be involuntarily moved away to pave way for mining (Downing, 2002; Jennifer, 2000). The inhabitants have to be resettled in another place and the movement of these people to another place is known as Mining Induced Displacement and Resettlement – MIDR (Terminski, 2013).

In order for resettlement to be successful planning must be done by involving all stakeholders who are the mining company, the government and the local people with their representative like the civil society (Cernea, 1998; Owen and Kemp, 2014; Downing, 2002). The idea is that the displaced people must be protected and live better lives than before in their new place (Lillywhite et al., 2015). The displacement must be done after consultation with the inhabitants were compensation and resettlement costs are passed over to the investor and then the government's role is to provide the policy framework that would guide the displacement and resettlement process. In this way there would be mutual benefits to all stakeholders (Rew et al., 2000).

Despite the negative effects of mining induced displacement and resettlement, the mining industry also comes with a lot of benefits such as jobs, business and education or training opportunities for local people besides the economic gains by the country (Cramer, 2006; Mayondi, 2014). Local people also benefit through corporate social responsibility offered by mining investors such as improvement of health care by building hospitals and clinics, building of schools, agriculture and entrepreneurship training. The other benefits include building of new roads and repairing of old roads (Haalboom, 2012). However, in most cases, government would be so much interested in the investments that come with mining and pay little attention to the people occupying the land in question. This is common in developing countries, Zambia

included, were a lot of profits are realised from mining and very little is passed over to the local people and the country at large thus becoming a huge concern to many citizens in Zambia (Mayondi, 2014). The ideal situation is that the displaced people need to be resettled well and compensated adequately in order to live a better life and that the benefits from mining should benefit the local people just like the government and the investors (Rew et al., 2000; Downing, 2002).

Mining Induced Displacement and Resettlement (MIDR) impacts the displaced negatively by causing socio-economic, environmental and cultural problems resulting in impoverishment and social set up disturbance if not properly planned. As long as a community is displaced, there is disturbance to its socioeconomic and cultural set up mostly resulting in impoverishment as there is disturbance to the people's livelihood. The main objective of the study was to evaluate the impact of MIDR on the livelihood of the displaced community of Muzabula Compound. The displaced families lost agriculture land, forests, vegetable and sugarcane gardens and fruit trees in the first phase of displacement. Therefore, the socio-economical, cultural and environmental aspects of their lives were affected. The people of Muzabula Compound were displaced in two phases. In Phase I, at the beginning of mining in 2004, over 300 families were displaced resulting in loss of vegetable gardens (no access to the river); loss of land for cultivation; loss of common property resources; disturbance of community and the way of life and loss of traditional leadership. The displacement resulted into food insecurity for the displaced families that depended on land for farming, collecting wild fruits, mushroom and many other wild foods as well as herbal medicine from the forest was also affected. The community's life style shifted to depending mainly on money which was not the case in the past as a result of loss of land. Phase II took place in 2015 and 114 people were displaced to pave way for the construction of the new Smelter Road (over 9Km) from the mines to Solwezi Mutanda main road (First Quantum Minerals, 2018). The families were properly compensated and received new concrete houses and farming inputs for their subsistence farming from the mining company.

The solution to the problems faced by the victims of the first displacement lies in the good displacement and resettlement policy framework and its implementation by the government which will govern all would be investors and the protection of the local people (Scudder, 1996). The families to be displaced must be part of the planning meetings for their displacement and contribute freely without being intimidated. They should also be represented and or accompanied by civil society such as the church and non-governmental organisations. Despite the fact that there are international guide lines on how to effectively embark on development induced displacement such as mining, people in developing countries are left with a lot of challenges so far as displacement is concerned. The people are left homeless, loss of land and their traditional way of life and unfairly compensated in most cases (Cernea, 1999;

Downing, 2002). However, the challenges were taken care of in the second phase of displacement because meetings for the planning included families to be displaced and after displacement everyone was happy with the outcome as was observed during this research.

## The Research Area - Solwezi

The research was conducted in Muzabula Compound in Solwezi District of North Western Province of Zambia. The compound is located one kilometre to the western side of Kansanshi Copper and Gold Mine with a population of 8,500 (Central Statistics Office, 2010). The community was displaced to pave way for mining activities in 2004 and later in 2015 during the construction of the smelter road. The study was conducted from December, 2017 to June 2018.

## MATERIAL AND METHODS

As earlier stated, the main objective of the study was to evaluate the impact of MIDR on the livelihood of the displaced community of Muzabula Compound. This was achieved by looking at the displaced families' socioeconomic, cultural and environmental aspects in their new resettlement area. Hence Muzabula compound was ideal for evaluating MIDR so as to appreciate the effects it had on the families displaced on two different occasions. Given the nature of the data involved, the study employed qualitative methods which describes life situations and experiences thereby giving them a meaning thus providing an in-depth understanding of the people's social world (Burns and Grove, 2003; Creswell, 2009; Ritchie and Lewis, 2003).

Primary and secondary data was collected for this research. Primary data was collected via semi-structured interviews which had the advantage of collecting in-depth data and it also allowed respondents to answer in their own words (Cohen and Crabtree, 2006; Bryman, 2014). Semi-structured interviews were conducted with members of Muzabula community (including community leadership), representative from Chief Kapijimpanga, government officials from Ministry of Agriculture, Ministry of Mines and Minerals Development, Solwezi Council, Zambia Environmental Management Agency (ZEMA), Solwezi Central Statistics, Kansanshi Mine Officials and Civil Societies (the Church). A total number of forty-seven participants took part in the interviews. Secondary data was collected from the Ministry of Agriculture, Ministry of Mines and Minerals Development in Solwezi and Solwezi Central Statistics office for the population of Muzabula Compound. More data was collected from different internet sources such as the Journal articles and other electronic materials that have been published on Mining Induced Displacement and Resettlement.

# **Sampling Technique**

In order to achieve the aim and answer the research questions formulated, purposive sampling method was used to pick participants. The general rule in qualitative samples

involving individual interviews is that it should be at least under 50 participants (Ritchie and Lewis, 2003). The study involved 47 participants and the number was thus adequate to use the sampling technique chosen (Marshal, 2004; Anastas, 2004).

## Impoverishment Risks and Reconstruction (IRR) Model: A Conceptual Overview

The model includes impoverishment risk assessment for those displaced or to be displaced for the purpose of reconstruction of their livelihood. It also encompasses the socio-cultural, economic and environmental aspects in its evaluation. It emphasises that unless it is clearly stipulated and addressed in form of framework, displacement will cause impoverishment for the displaced people (Cernea, 1999). This is because it causes landlessness, joblessness, homelessness, marginalisation, food insecurity, loss of access to common property resources, increased morbidity, mortality and disruption of educational activities and community disarticulation (Cernea, 1999; Downing, 2002; Robinson, 2003). Therefore, the theory encourages participation of would be displaced people in planning for their displacement and resettlement so that they are aware of their resettlement and compensation plans. It has, therefore, the advantage of predicting the outcome of the displacement and resettlement programme before it begins (Koenig, 2002).

## RESULTS AND DISCUSSION

## Socio-economic, cultural aspect

It was found that displacement of the Muzabula compound families by the mining company in the first phase led to the loss of housing and farm land, lack of access to natural resources such as the river, forest and common property resources as well as destruction of community support structures resulting in social fragmentation and culturally causing lost traditional authority and identity, disruption of kin system; loss of traditional values and beliefs.

Compensation was calculated at \$3190 (US Dollars) per 50 x 50 meters of land. The amount included everything that was on the land such as house structures, fruit trees like bananas, mangoes, lemons and many others. Transport costs were included for moving to the new place and it was the same money that was used to construct new houses at their new place of resettlement. Before displacement took place, the community was led by headman Mushitala who was a representative of Chief Kapijimpanga under customary leadership. The displacement resulted in the loss of traditional leadership power as the people had to move to another place under a Headman Muteba leaving behind land which was then converted to statutory land. Headman Muteba was directed by Chief Kapijimpanga to accommodate the new people resulting in increased population causing shortage of land hence increased tension among the people. Similar scenario is observed by Bennett and MacDowell (2012) who had received testimonies about the effects of physical displacement from

coal mining in India, showing the impact it has on the culture, land and livelihood of the displaced families. In the second phase of displacement, the families lost houses, farm land, vegetable and sugarcane gardens. However, the families were compensated with modern concrete houses and farming inputs for their subsistence farming.

## **Environmental aspect**

The displaced families in Muzabula Compound were resettled within the same compound across Solwezi River which demarcated the villages under Mushitala (displaced) and those under Muteba (new resettlement). Thus the environmental effects of mining affected both the displaced families and those not as placed since they all lived near the mine. Mining comes with destruction of land and in this case the community of Muzabula did not only loss land but also farming land as a result of degradation. Another environmental impact on the community was associated with health. For example, the community was affected by the gases that emanated from the mines which were chocking and resulted in health problems. The community complained of fumes that were released by the mines and resulted in coughing. The site researcher discovered, at the local clinic, that there were numerous cases of coughing and respiratory infections as a result of gases released from the mines. The other effect of gases from the mines discovered was the small rashes on the body of many people especially the children and the elderly which was attributed to air pollution. The clinic also confirmed that this was very common in rainy season and this could be as a result of gases mixing with rains forming toxic chemicals. The other challenge was that the community used shallow wells for drinking water and with polluted air the water in rainy season was polluted with acidic rains thereby posing health challenges to the community. The forests that the community depended on had been destroyed and the one that remained was mostly in the mine area hence the products from the forest the community used to enjoy had reduced.

Figure 1. Views of the twenty-six Displaced Community Members Interviewed

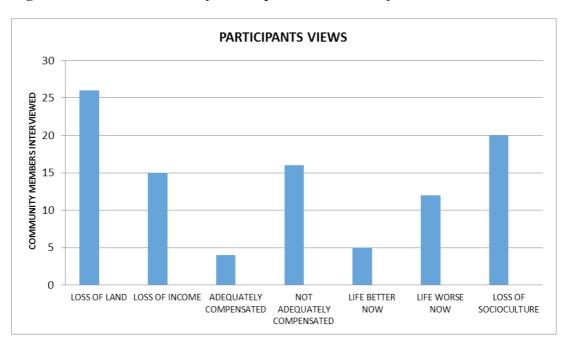


Figure 1 shows the results of the interviews for the twenty-six displaced members of Muzabula community as a result of mining activities. All the twenty-six people interviewed confirmed loss of land, while fifteen of the twenty-six lost their income as they depended on the lost land to generate money. From those interviewed, four people felt they were adequately compensated and the site researcher discovered that these people were not engaged in farming but trading. Hence the money they received as compensation boosted their capital and one in particular increased his dried fish stocks which he was buying from Western province to sell in Solwezi. These are the people who confirmed that their lives got better than before displacement. However, the majority complained that their lives got worse as they and other 3 did not see any difference because life had not changed. Loss of socio-cultural way of life was confirmed by twenty people who could not engage in their old way of life like traditional dancing and other traditional practices. This was because they had resettled in different places.

Figure 2. Employment Percentages of interviewed displaced families that have been offered work by the Mine

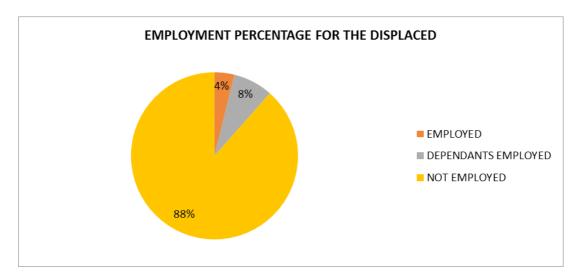


Figure 2 shows the interview results of the employment opportunities that have been given to the displaced people of Muzabula compound by Kansanshi Mine. Note that the percentages are a reflection of only those who were interviewed and displaced that is the parents and or dependants employment opportunities. The promise by government that the displaced families would have some members of the families employed was not fulfilled.

## Socio-economic-cultural aspect

Displacement of the families of Muzabula Compound led to increased risks of impoverishment due to the loss of housing and farm land, lack of access to natural resources such as the river, forest and common property resources, destruction of community support structures resulting in social fragmentation and culturally resulting in loss of traditional authority and identity, disruption of kin system, and loss of traditional values and beliefs.

## Loss of Farm Land

The community depended heavily on land for their survival being a rural and subsistence farming community. The lost land was used for farming activities such as cultivating, poultry, grazing, building of houses and social gatherings thereby affecting their livelihood and their way of life. The displacement from their land meant changing their life styles to depending on money as they lost their farm land and could not cultivate food. There was food insecurity among the displaced families as the following seasons they could not cultivate due to lack of land. Normally, each family would have unlimited access to land which was passed on from one generation

to another were a couple with nine children for example would reserve land for each child (virgin land). Such land was not considered for compensation as there was no evidence to show that it had been used despite the fact that there was traditional knowledge as the community knew that the land belonged to a particular family.

## **Inadequate Compensation**

Land compensation was calculated at \$3,190 per 50 x 50 meters of land. The community was not happy with this calculation and the researcher agreed with them in that it did not include what was on the land such as fruit trees like bananas, mangoes, lemons and many other fruit trees. Most of the families depended on these fruit trees as they would collect the fruits and sell them at Solwezi main town centre and use the money to pay for school fees for their children and buy groceries for their up keep. Similarly, compensation on houses was included in the \$3,190 as well as transport fee costs for moving to the new place. The same money was used to construct new houses at their new place of resettlement. Those interviewed felt that the money was not enough to cater for the total expenses and the site researcher conquered with them.

# **Loss of Common Property Resources**

Lack of access to natural resources such as the river and the forest was another loss the community of Muzabula compound had to face. Before mining activities, the community had access to the river and the forest where they could catch fish for consumption and selling, the forest for various products for use such as firewood, traditional medicines, and wild fruit collection for eating as well as selling and ancestral worshipping. All these activities were stopped as a result of lack of access to the area as it had become a mining area and a danger to the community in terms of safety. The loss of common property resources is difficult to compensate due to the fact that it belongs to the community, compensation can be passed on to the community through effective corporate social responsibility and government development.

## **Destruction of Community Structures and Loss of Tradition Authority**

The displacement also resulted in disruption of community structures as the Muzabula community was a typical village set up and families relied on traditional community structures for their survival. The community was led by Headman Mushitala who was a representative of Chief Kapijimpanga under customary leadership. The displacement resulted in the loss of traditional leadership power as the people had to move to another place under a Headman Muteba living behind land which was then converted to statutoryland. What has remained now is just the title as the area under Headman Mushitala is under statutory land.

Economically, most of the displaced families became poorer as the money they received as compensation got finished. Socially, most of the families went through difficulties including family breakdown and financial problems, as people could

not manage resettlement funds well. Some divorced their wives and married young women while others went to rent houses and misused the money. All this was as a result of lack of financial education before the money was given to the people as most of them had not owned such amounts before. Of course a few people managed to improve their lives but majority have found themselves in a worse position than before displacement as shown in Figure 1. The displaced families also felt that they should have been given the opportunity to get jobs in the mines. For example, they said that one does not need qualification to do certain works like cleaning. From the people interviewed, the researcher discovered that very few displaced families or their dependants were employed despite the fact that government negotiated for unskilled jobs for them as shown in Figure 2.

Kansanshi Mine provides some help to Muzabula Compound under corporate social responsibility such as health awareness programmes like Malaria, HIV and AIDS, family planning and many more The Company also helps in periodic gravel road maintenance, teaching conservation farming and the concept of village banking. However, more needs to be done as the community has no piped or borehole water and rely on shallow wells.

All these challenges took place during the first phase of displacement that took place in 2004 at the beginning of mining. However, the picture different during the second phase as the displaced families were adequately compensated by providing them with modern concrete houses and gave them farming inputs for their subsistence farming. May be the government and the Company leant on the mistakes they had made during the first phase displacement or it could be that the number of displaced people which was smaller in the second phase made it easier for the adequate compensation. During the second phase, the families to be displaced took part in all the planning meetings and contributed effectively unlike in the first phase were the families were not part of the team.

#### **Environmental**

Mining comes with destruction of land and in this case the community of Muzabula did not only loss land but also farming land as a result of degradation. Other environmental impact on the community is associated with health issues, for example the community is affected by the gases that come out of the mines which are chocking and results in health problems. The community complained of fumes that are released by the mines and resulted in respiratory problems. The researcher discovered at the local clinic there were more cases of coughing and respiratory infections as a result of gases emanating from the mines. However, the clinic officials could not avail the numbers. The displaced families were affected by pollution in that they resettled across Solwezi River less than a kilometre from the mine.

## **CONCLUSION**

Mining induced displacement and resettlement has the potential to significantly plunge the displaced families into severe poverty if not properly planned. Through the Impoverishment Risks and Reconstruction (IRR) model, the research has shown that were there is a well-co-ordinated and planned programme, the risks associated with displacement can be mitigated. This is possible when all the stakeholders in the case of Phase II of Muzabula Compound, the community, government, the Civil Society such as the church, the Non-Governmental Organisation (NGOs) and the mining company come together to plan. Emphasis should not just be directed at the economic benefit that come with the mining investment but also the effects mining will have on the indigenous people. The research has established that due to lack of inclusiveness during the first phase of displacement, the displaced families were left in a poorer state than before displacement. On the other hand, the second phase of displacement was properly organised and the interest of the families were taken care of and the result was successful.

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