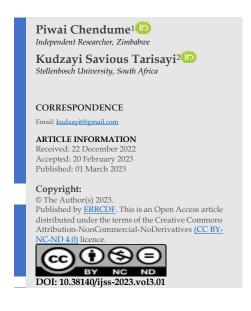
# Being Sacrificed in the Name of Development: A Case of Social Distress Caused by the Tokwe-Mukosi Dam



**Abstract:** The study investigated the impact of displacements on the rights of the people that were caused by a development project in Zimbabwe. A case study of people displaced by the construction of the Tokwe-Mukosi Dam was used to explore the challenges faced by displaced people. This study was a mixed-method design. Data was collected using questionnaires and a document. A purposive sample of 100 participants was used by the researchers. The sample comprises people displaced by the construction of the Tokwe-Mukosi dam. The researchers utilised thematic analysis and descriptive statistics to make sense of the data. It was noted from the findings that the livelihoods of the displaced people by the Tokwe-Mukosi changed due to the displacement. Market gardening, a major livelihood among the participants before displacement, was the most affected due to the lack of reliable water sources at the relocation site. Human rights violations were also noted in the study due to the failure of the government to prepare the relocation site adequately. Due to the noted human rights violation, the displaced people were subjected to social distress. Therefore, the study concludes that several communities were negatively

impacted by the construction of the Tokwe-Mukosi Dam, with a recommendation that suitable relocation sites with adequate social service should be identified before the finalisation of the construction of dams.

Keywords: Development, displacements, livelihoods, Tokwe-Mukosi, Zimbabwe.

### 1. Introduction

This paper draws from a study that investigated the impact of development-induced displacements on the rights of people. In particular, the study examined how displacement impacted displaced people's livelihoods. People inhabiting areas where development activities need to take place have to be relocated elsewhere as the prospective benefits of such undertakings seem to outweigh the justification for their continued stay. Projects involving population displacement invariably give rise to complex economic, social, cultural, and environmental problems, which need to be addressed with care and sensitivity. Displaced people are often resettled elsewhere as the original places of settlement become inhabitable. As noted in the World Commission on Dams (WCD) report (2000), people are often settled in resource-depleted and environmentally degraded areas, which rapidly lose their capacity to support the resettled population. This, in a way, is a violation of the fundamental human rights of displaced people.

After the Second World War, the dominant view of development was informed by the modernisation theory, which intended to transform traditional societies into westernised societies. The relocation of people affected by the developmental projects was deemed a necessary evil or even a justifiable action. Involuntary displacement of the vulnerable was cited as one of the greatest costs in project implementation. Massive industrial development, electrification, urban development processes, and an increase in demand for agricultural products are likely to increase the number of programmes causing involuntary population displacement. Most of the dams constructed before 1970 made little consideration for the social and environmental impacts of the dams (WCD, 2000). Ferris (2011) noted

that the scale of development-induced displacement is enormous, making it a global problem. In the last 20 years, about 280-300 million people have been displaced by development projects, particularly dams, and on average more than 15 million people are displaced annually (Tarisayi, 2018). Approximately 40 and 80 million people worldwide have been displaced because of the construction of large dams (Tarisayi, 2018).

According to Ferris (2011), by the late 1980s, about 10.2 million people had been officially displaced by dam projects in China, and the Three Gorges Dam displaced between 1.3 million and 1.4 million people over eight years. In India alone, where 3 300 dams have been built since 1947, and another 1 000 are under construction, it is estimated that between 21 million and 42 million people have been displaced by dams and reservoirs (Siddiqui, 2012). Most of the displaced suffer from greater impoverishment due to the loss of land, assets, livelihood, and social structure. The Sardar Sarovar Dam case is one of the best-known and most controversial cases of development-induced displacement in India, where the government exaggerated the benefits of the project and underestimated the number of displaced people (Terminski, 2013). Africa has not been spared by development-induced displacements. The creation of large dams in Africa has been responsible for the relocation of large numbers of people which are estimated to be over 400 000 (WCD, 2000). These dams include the Kossou Dam in the Ivory Coast, the Akosombo Dam, the Kariba Dam, the Kainji Dam, the Lagdo Dam, and the Aswan High Dam (Terminski, 2013).

In Zimbabwe, human displacement because of dam projects can be traced to the construction of Lake Kariba and Osborne Dams. About 57 000 Tonga people living along the Zambezi River were forcibly relocated to higher sandier areas instead of rich alluvial river soils to pave the way for the construction of Kariba Dam (Terminski, 2013). The compensation provided was minimal, and their way of life was disrupted. In the case of Osborne Dam in Manicaland Province, about 700 displaced families have relocated to Headlands, an area that is more than 100 km away from the dam site, with no prospects of benefiting from the Dam (Chiri, 2011; Nhodo, Basure, Rukuni & Mago, 2020). In Matebeleland North, the Gwayi-Shangani dam project, which has been under construction since 2003, has displaced people. The Gwayi-Shangani dam project is part of the Zambezi water project that is set to benefit people in the City of Bulawayo instead of the displaced people (Chiri, 2011).

Tokwe-Mukosi Dam was constructed by an Italian company called Salini-Impregillo in Masvingo Province at the boundary of Chivi and Masvingo rural districts. The two districts are in agroecological region 5, which is characterised by high temperatures and low rainfall. The dam was part of the Save Lowveld irrigation scheme that was planned for Lower Lundi Valley to irrigate 200 000 acres of land. This scheme included the construction of Kyle (Lake Mtirikwi) and Bangala Dams. The Tokwe-Mukosi scheme was designed to irrigate nearly 50 000 acres of land (Pollock, 1968). The dam wall is 89.2 metres and is expected to generate about 6 megawatts of electricity and hold more than one billion cubic litres of water, making it the largest inland Dam in Zimbabwe. The construction of the dam resulted in the relocation of more than 6 000 families (Tarisayi, 2014; Nhodo et al., 2020).

People earmarked for displacement to pave way for the construction of Tokwe-Mukosi were scheduled to be relocated in three phases. The first group comprised 1 247 families located in the danger zone, followed by a group of 1 878 families in the high flood zone, and the third group of 3 268 families in the buffer zone. Out of the 1 950 families whose property has been evaluated for compensation, only 896 families were compensated by mid-February 2014. Among 896 who received compensation, only 611 have been relocated (Parliament of Zimbabwe, 2014). Relocations were conducted during the rainy season, leaving the displaced with little or no time to prepare for the 2013-2014 farming season in the newly resettled areas. The flooding disaster struck in February 2014 affected families that had not been compensated and relocated. These were immediately evacuated to safer pick-up points and then to Chingwizi Transit camp (Tarisayi, 2014). Within a month, over 3 000 families had to be evacuated at short notice (Human Rights Watch, 2015).

Research on development-induced displacement was first undertaken by applied anthropologists who studied the social consequences of dam construction for displaced and affected communities (Siddiqui, 2012). As noted by Siddiqui (2012), original studies were primarily focused on the context of socially costly development projects in countries of the Global South. Over the years, a more general analysis has been made with a focus on political economy and development studies. As the states and project funders continue to adopt the Human Rights Based Approach, there has been a paradigm shift toward projects that reduces poverty, protects the environment, and promote social justice and human rights.

Hence, this study investigated the impact of development-induced displacements on the rights of people. In particular, the study examined how the state, as a duty bearer, failed to honour its obligation towards the displaced people to pave the way for the construction of the Tokwe-Mukosi Dam.

# 1.1 Research questions

The study sought to answer the following questions:

- What were the people's livelihoods before and after being displaced by the Tokwe-Mukosi Dam?
- How have the rights of the displaced people been violated?
- In what way did the dam construction project affect health lives of the Tokwe-Mukosi people?

#### 2. Theoretical Framework

This study was guided by the Impoverishment Risks and Reconstruction (IRR) Model as propounded by Cernea, one of the notable scholars in the field of development-induced displacement. The Impoverishment Risks and Reconstruction (IRR) model is a framework for development-induced displacement and resettlement. The IRR model aims to understand the impacts of displacement on households and communities, and the risks they face in terms of poverty and the ability to recover from the disruption caused by displacement. The IRR model was initially developed to document the effects of involuntary displacement due to major development projects (Kolo, 2015). It proposes that "the onset of impoverishment can be represented through a model of eight interlinked potential risks to displacement" (Robinson, 2003, p. 23). These risks are landlessness, homelessness, joblessness, marginalisation, social disintegration, food insecurity, increased morbidity and mortality, and loss of access to common property.

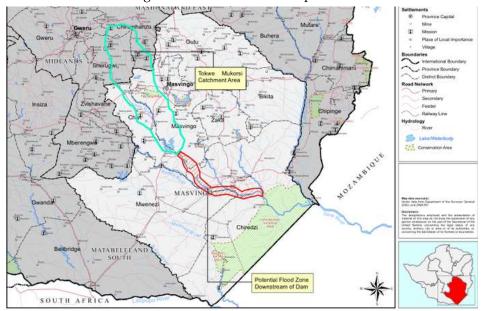
Cernea (1996) suggested a framework for classifying displacement, based on the causal factor, into four categories: namely natural disasters, wars/ political events, persecution, and development programmes and policies that result in changes in land and water usage. In addressing development-induced displacement as an area of research, this study focused on forced displacement and then further classified it according to displacement's impact on the people's rights (Cernea, 1996). That is, the model is based on the concept that displacement can have both positive and negative effects on the affected population and that the outcome depends on the context and timing of the displacement.

The IRR model is relevant to this study because it helps in understanding the potential impacts of displacement on various aspects of the affected people's lives, including their social, economic, cultural, and environmental well-being (Kolo, 2015). Due to the model's coverage of both the positive and negative effects of displacement, the theory resonates with this study to a greater extent. The IRR model has been applied in various development displacement contexts, including large dams, urban renewal, and mining (Palermo & Vos, 2016). The model has been used to understand the impacts of displacement on the lives of the affected people and to identify potential risk factors that may contribute to impoverishment. The model has also been used to guide the design of resettlement

programs, to ensure that the needs of the affected population are addressed and that the negative impacts of displacement are minimised.

# 3. Research Methodology

This study falls within the pragmatism paradigm. Pragmatism is a philosophical approach that emphasises the importance of practical problem-solving and emphasises the use of multiple methods and perspectives to achieve a comprehensive understanding of a phenomenon or research question. Pragmatism is particularly suited to mixed-method research as it recognises the value of both quantitative and qualitative methods and emphasises the importance of selecting the most appropriate method for the research question (Creswell & Plano Clark, 2018). Pragmatism also recognises that there are multiple ways of knowing and that different methods can provide complementary insights into a research question which necessitate the use of mixed-method for this study (Johnson & Christensen, 2014; De Vos et al., 2021). According to De Vos et al. (2021, p. 52), "a mixed-methods study is one where the researcher combines a quantitative method and a qualitative method to analyse data and integrates these to understand and interpret a particular problem based on the combined strengths of both datasets." This study principally utilised mixed methods which incorporate both qualitative and quantitative methods to offset the shortcomings of using each approach by itself. In this study, the researchers utilised questionnaires and documents. The study was conducted at Chingwizi resettlement site in Mwenezi District, where more than 90% of the people displaced by the Tokwe-Mukosi Dam were resettled. The study extended to Chivi and Masvingo Districts in areas under Chiefs Shindi, Nemauzhe, Shumba and Nyajena where Tokwe-Mukosi Dam was constructed. Figure 1 below shows the map of Tokwe-Mukosi.



**Figure 1:** *The map of Tokwe-Mukosi* 

Source: UN Office for the Coordination of Humanitarian Affairs (2014)

A purposive sample of 100 displaced people was considered. Questionnaires were administered on the displaced people. Questionnaires were used to elicit information from the respondents, this is appropriate because it "measures many different kinds of characteristics…" (Johnson & Christensen, 2014, p. 106). The documentary method was used to interrogate International Covenant on Economic Social and Cultural Rights (ICESCR) benchmark against the existing situation from the questionnaire.

The results were presented thematically to able the cross-examination of documentary analysis against the results from the questionnaire. The thematic analysis enables the researcher to present the findings in themes with reference to the research questions, which form the themes (Omodan, 2021). The analysis of findings in questionnaires is an important step in the research process. It involves examining the data collected from the questionnaires and interpreting the results (Lederer et al., 2022). Hence, the results from the questionnaire were described graphically.

Ethical issues are an important consideration in all areas of research, including the design, implementation, and analysis of studies. These issues can arise from treating human or animal subjects, using sensitive or confidential information, and the potential for harm or exploitation of participants. The researchers obtained informed consent from the participants to complement the argument that participants must be fully informed about the study's purpose, risks, and benefits and provide informed consent prior to participating in the research (National Research Council, 2013). Additionally, the researchers observed confidentiality in this study, since researchers must ensure that participant information is confidential and protected from unauthorised access or disclosure (National Research Council, 2013). Ethical clearance was granted by the National University of Science and Technology, and the Ministry of Local Government granted permission to carry out the study.

# 4. Findings

The findings in this study are presented using themes that emerged from the study. This paper only captures findings from the questionnaires and observations. Findings are presented and discussed with the aid of figures.

#### 4.1 Livelihoods before and after relocation

The researchers compared the livelihoods of the people displaced by the construction of the Tokwe-Mukosi Dam before and after relocation. This study revealed that there were livelihood changes due to the relocation of people. Among the livelihoods affected were marketing gardening, art and craft, petty trade, subsistence farming, casual labour, technical skills, and remittances at the resettlement site. The participants were asked questions about their sources of livelihood before and after relocation. Figure 2 below compares livelihoods before and after relocation.

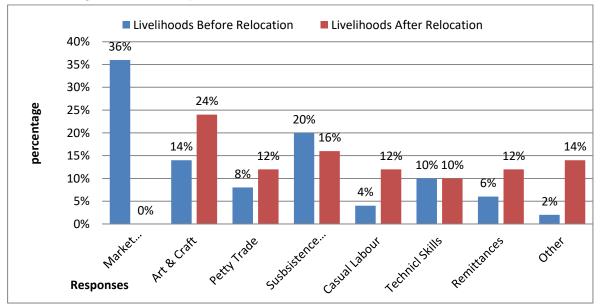


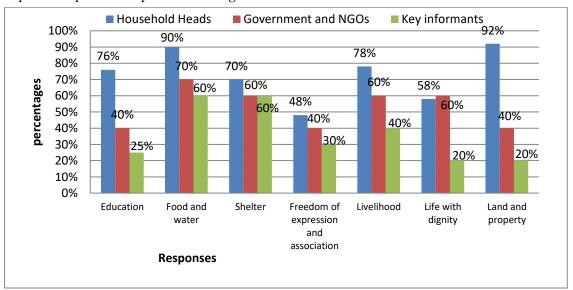
Figure 2: Comparison of livelihoods before and after relocation

It was noted from the participants that the households changed their livelihoods significantly due to relocation, as shown in Figure 2. Before relocation, it was revealed that market gardening was a means of livelihood for 36% of households. However, no household practised market gardening as a livelihood after relocation. These findings confirm earlier studies by Mutangi and Mutari (2014), Tarisayi (2014, 2018), and Rusvingo (2014). Thus, the findings of this study concur with Mutangi and Mutari (2014), who avers that the people of Tokwe-Mukosi grew vegetables as a cooperative in gardens and sold their produce for a profit. Thus, market gardening as a livelihood was adversely affected by displacement and relocation to a greater extent. It was interesting to note that the people were displaced to make way for a dam but were relocated to an area without water. In addition, the respondents revealed that subsistence farming had 20% and 16% before and after relocation, respectively. There was an increase in the reliance on remittance from 2% to 14%, while households dependent on technical skills maintained their frequency before and after the relocation at 10%. There was an increase in households that listed their livelihoods as casual labour from 4% to 12%. Additionally, there was a significant increase in art and crafts from 14% to 24% as livelihood owing to the relocation.

In addition, examining the document analysis on the impact of relocation using the International Covenant on Economic Social and Cultural Rights (ICESCR) benchmark, it can be argued that Article 6 was violated along the way when the affected households were deprived of the kind of agricultural work they had chosen and practised for years by the displaced. The displaced people mainly practised subsistence farming, market gardening as well as the rearing of livestock as means of livelihood. Item 1 of the ICESCR states, "The States Parties to the present Covenant recognise the right to work, which includes the right of everyone to the opportunity to gain his living by work which he freely chooses or accept and will take appropriate steps to safeguard this right". Thus, it can be argued from this study that the construction of the Tokwe-Mukosi Dam and the subsequent displacement of impoverished people due to changes in their livelihoods.

# 4.2 Violation of human rights

The researchers asked the participants about the human rights that were violated and the participants' responses are presented in Figure 4 below.

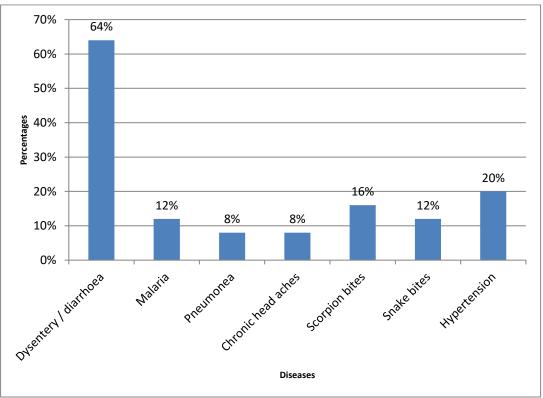


**Figure 4:** Human rights violations

Figure 4 above reveals the violation of human rights due to the construction of the Tokwe-Mukosi Dam. Findings show human rights were violated by the displacement and relocation of the respondents in this study. 76% of the participants revealed that the children's right to education was violated by the displacement. This further exacerbated the challenge of children dropping out of school due to displacement which the same respondents also revealed. In addition, 58% of participants indicated that their right to health was also violated by the displacement, while 70% also indicated that their right to shelter was violated. On the right to shelter, the study further established that the people's infrastructure was better at their previous places of residence. Thus, relocation removed the people from their well-established homesteads with better access to water and social amenities to an underserved area. Furthermore, the respondents 60% revealed obstruction in their right to food while 48% stated that the conditions violated their freedom of expression and association at the relocation site. The human rights ramifications of the relocation of people due to the construction of the Tokwe-Mukosi Dam established by this study concur with a study by Hove (2016). Mucherera and Spiegel (2022) and Hove (2016) established the people displaced by the Tokwe-Mukosi Dam became state victims instead of being protected by the state. The gross human rights violations revealed by this study show that the state failed in its obligations, as stated by the ICESCR.

# 4.3 Right to health

The participants further revealed that their right to health was also affected due to some of the human rights violations discussed above. Figure 4 below shows illnesses that the participants related to displacement.



**Figure 5:** Responses on illnesses suffered by the displaced

Figure 5 above shows illnesses that were linked by the participants to relocation. The majority of the people (64%) suffered from diarrheal diseases. According to these findings, the high prevalence of

diarrhoea was linked to the lack of clean and safe water drinking water at the relocation site. The absence of health services further compounded the diarrhoea challenge at the relocation. Hypertension had 20 %. Essentially, people suffered from chronic headaches due to extremely high temperatures whilst unfavourable living environment, worry, and anxiety resulted in some people being hypertensive. The participants further revealed that there were vulnerable to snakes and scorpions at the relocation site. The relocation site was previously not inhabited by any people. Thus, 16 % indicated scorpion bites, while 12 % indicated that they had been victims of snake bites. 12 % of the participants indicated Malaria. Pneumonia and chronic headaches affected 8% each. The study confirms Oucho's (2005) observations that displaced people are victims of unsafe water supply, increasing their vulnerability to waterborne disease. It also asserts Cernea and McDowell's (2000) observation on increased morbidity and mortality that 'displacement threatens some serious decline in health levels which is associated with trauma, stress, and the outbreak of relocation related illnesses.' Thus, it can be argued that the violation of human rights by the people displacement by the Tokwe-Mukosi had several implications on their health.

#### 5. Conclusion and recommendation

From the foregoing presentation and discussion of findings, it can be concluded that gross human rights violations ensued in the wake of the displacement of people by the Tokwe-Mukosi. The construction of dams is a notable development. However, the livelihoods of the people displaced by the Tokwe-Mukosi were severely impacted. Essentially, it can be argued that an initiative to bring development to the people had impoverished them through displacement. While developmental benefits are anticipated to be accrued at the regional and national level by the construction of the Tokwe-Mukosi, the displaced paid the price for the development. Additionally, several rights were sacrificed at the altar of development. Among the rights sacrificed was the right to health, among others, due to the displacements. From the study's findings, it is recommended that the state should ensure the availability of social services in areas demarcated for the resettlement of the displaced.

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