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## Gender Implications of Involuntary Resettlement on Displaced Families: The Case of Karimenu II Dam, Kiambu County, Kenya

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### **Abstract:**

*This paper investigated the gender implications of involuntary resettlement at Karimenu II Dam. The study employed the Impoverishment, Risks, and Reconstruction (IRR) model developed in the late 1990s by the World Bank and coined by Michael Cernea (2002). It provides a conceptual tool for identifying the inherent risks that may cause impoverishment through involuntary displacement and resettlement. He identified 8 risks of Involuntary Resettlement (IR) namely: landlessness, joblessness, homelessness, marginalization, food insecurity, social disarticulation, increased morbidity & mortality, and loss of common access to common property and services. Andnet Gizachew refined it in 2015 to include other risks of IR that Cernea did not capture in his model, which are:*

- *Cattlelessness*
- *Constrained community mobility,*
- *Loss of resilience,*
- *Constrained access to education, and*
- *Loss of aspects of human rights*

*This paper attempted to answer the following question:*

*What were the gender-specific outcomes of the IR at Karimenu II dam on the lives and livelihoods of the PAPs?*

**Keywords:** Gender, project affected persons, compensation, and involuntary resettlement

### **1. Introduction**

Governments have a mandate to cater to the prosperity of their citizens through their policies and programs. In order to achieve this, they often have to initiate big and long-term development projects that benefit large populations. Dams, roads, rail lines, industries, and ports are among such mega projects. Such projects often lead to mass displacement of populations as the governments acquire land required to accommodate the project. This can either be through willing buyer-willing seller negotiations, called voluntary resettlement, or, as is often the case, by use of the government's power of Eminent Domain to obtain land involuntarily from the original owners or the Project Affected Persons (PAPs). The latter is called involuntary resettlement (IR). It disrupts the Pap's usual way of life, and when a Resettlement Action Plan (RAP) is missing or not well-executed, it may lead to loss of lives and livelihoods. The gender dimensions of such a plan should be considered for effective IR and sustainable livelihood restoration.

Where the government has repossessed such land for the development of infrastructure, compensations follow at the market value of the land and other assets attached to it with a 15% disturbance allowance (*Athi Water Services Board, 2009*). (The World Bank, 2001)

Operational Policy (OP 4.12) manual is the guiding framework adopted by Kenya where there is involuntary land acquisition for compensation and resettlement. This is complemented by the Involuntary Resettlement Policy-IRP of the African Development Bank (African Development Bank, 2003). These policies have in common three important guidelines:

- Avoid involuntary displacement as much as possible,
- Reduce involuntary resettlement where it is inevitable and
- Ensure adequate assistance to at least restore the displaced persons to their status before the project commences (The World Bank, 2001)

The policies also indicate that special consideration should be given to the vulnerable, non-title holders, women and children.

### 1.1. Statement of the Problem

Involuntary resettlement is disruptive to the lives of people in various ways. Karimenu II Dam construction in Kiambu County had displaced 300 families by the time this study was conducted. Due to the cultural, social, emotional, and economic attachment to land in rural areas with its corresponding gender differentiation in its utilization, there were specific gender implications of the experiences of the resettled women and men. The resettlement strategies employed by the government on the people of the Karimenu II Dam area determined the success of the IR or its failure and the gender implications thereof.

### 1.2. Objective of the Study

The main objective of the study is to assess the gender implications on the lives and livelihoods of displaced families through the government's development project at Karimenu II.

### 1.3. Research Question

What were the gender-specific outcomes of the IR at Karimenu II dam on the lives and livelihoods of the PAPs?

### 1.4. Justification and Significance

This study was significant in advancing the understanding of the gender dimensions of involuntary resettlement of populations. It brought out gender-disaggregated data on the effects of involuntary displacement of families through government-initiated projects like the one at Karimenu II. It is hoped that the findings, conclusions, and recommendations from this study will be useful for government agencies and donors to plan, fund, and successfully execute in a gender-sensitive way the projects that involve involuntary resettlement in the future. The study may also serve as an additional literature for scholars while forming a strong base for research in related fields.

### 1.5. Scope and Limitations

The study was conducted in Kiambu County, Kenya. It targeted the men and women involuntarily resettled from the Karimenu II dam construction area. This study focused on the gender implications on men and women displaced by the Karimenu II Dam project. It established the gender-specific outcomes after the execution of the project. This means the study did not consider other factors of involuntary resettlement, such as the social and economic outcomes. The research encountered several limitations.

The status of a community is impacted by many factors, which might not be all related to involuntary resettlement. However, under such circumstances, the PAPs tended to link all their issues to their involuntary resettlement from the Karimenu II area to construct the dam. The researcher sought to identify only those factors directly related to Involuntary Resettlement and established the extent of their influence on the final status of the resettled men and women. Further, the topic was sensitive since involuntary resettlement was still ongoing for the other phases of the project. Therefore, not all the respondents were willing to provide the researcher with the relevant information. The researcher assured them with the relevant documents that the research was purely academic and that their identities would not be revealed. Finally, some of the families had relocated to areas outside Kiambu County and were therefore not accessible to the researcher. However, the researcher found out that such was not a large number and, therefore, could reach as many representative families as possible within the research area.

Another notable limitation relates to non-probability sampling designs, which are prone to biases, and the selection process is pre-determined and constrained. In addition, since the study was done in Kiambu County, most of the findings, conclusions, and recommendations may be very specific to the study locale. However, the findings may be applied to cases of involuntary resettlement in other areas with similar socio-economic characteristics.

## 2. Research Methodology

The study employed an analytical cross-sectional study design. Out of the target population of 600 families, the researcher found out that only 300 families had been resettled during the first phase, and the sample size of 169 respondents was selected using Krejcie & Morgan sampling table (1970). It also included 6 key informants. Data were collected using questionnaires, direct observation, and structured and semi-structured interviews. The quantitative data were analyzed using the Statistical Package for the Social Sciences (SPSS) and presented in the form of tables and graphs, while qualitative data were analyzed thematically.

### 2.1. Study Area

The study was conducted in Kiambu County, Kenya. Kiambu County borders six counties:

- Machakos to the East,
- Nakuru and Kajiado to the West,
- Murang'a and Nyandarua to the North, and
- Nairobi to the South

It lies within the GPS coordinates 1.0314° S and 36.8681° E. It covers an area of 2,543.42 square kilometers and has a total population of 2,417,735 and a population density of 990/km<sup>2</sup> according to the Kenya National Bureau of Statistics census (Kenya National Bureau of Statistics, 2019).

## 2.2. Targeted Population

This study targeted the 300 households involuntarily displaced by the Karimenu II dam site during the first phase. These families were given cash compensation for their alienated land, structures, assets, vegetation, exhumation, and reburial of the remains of their loved ones, according to the available documents (NEMA, 2016). They resettled in other locations of their choice. The majority resettled within Kiambu County, where the researcher located them.

## 2.3. Sample and Sampling Technique

Out of the target population of 300 families, using the following Krejcie and Morgan (1970) sampling formula for small populations:

$$(s = \frac{X^2 * N * P (1 - P)}{d^2 (N - 1) + X^2 P (1 - P)}).$$

Where:

- s = required sample size
- X<sup>2</sup> = the table value of chi-square for 1 degree of freedom at the desired confidence level (0.05)
- N = the population size
- P = the population proportion (assumed to be .50 since this would provide the maximum sample size)
- d = the degree of accuracy expressed as a proportion (.05)

$$(s = \frac{1.645^2 * 300 * 0.5 (1 - 0.5)}{(0.05)^2 (300 - 1) + (1.645^2) * 0.5 * (1 - 0.5)}).$$

A sample size of 169 respondents was generated. The researcher ensured that no gender constituted less than 40% of the total respondents.

## 2.4. Involuntary Resettlement

It is estimated that involuntary resettlement, also called Development Induced Displacement and Resettlement (DIDR), had displaced some 90 million people worldwide by 2009 (Wilmsen & Webber, 2002). Dams appear to be the leading cause of mass population displacements in the world, with China at the top, having displaced over 45 million people between 1950 and 2000 (Satioglu & Choi, 2015). They are constructed for a number of reasons, including water supply, irrigation, hydro-power production, and flood control. The resettlement process is expected to restore or even raise the economic status of its affected population with special regard for the landless, female-headed households, children, elderly, ethnic minorities, and religious and linguistic groups (African Development Bank, 2003). Economic benefits and costs of the target population to be displaced should be applied to determine project viability with regard to resettlement. This paper looked at the IR that was caused by the Karimenu II dam with gender lenses.

Globally, involuntary resettlement is prevalent, as seen in several dam projects. The Sardar Sarovar Dam Project in India (1985) displaced more than 100,000 people into submerged land and more than 140,000 people in the building of the canal and irrigation system (Rao, 2017). The Three Gorges Dam reservoir in China has displaced over 1,000,000 people, with some of the relocated families being forced to move a second time due to the landslides and tremors at their relocation sites (Reynolds, 2011). It has been named the most notorious dam in the world for:

- Having the highest human displacement at 1.2 million people,
- Having inundated 13 cities, 140 towns, and 1350 villages, and
- Being the largest at 600 kilometers in length (Reynolds, 2011)

In Africa, Ghana's Akosombo Hydroelectric Project (also known as Volta Dam) displaced 80,000 people between 1961 and 1965 (Miescher et al., 2010). The Aswan High Dam, started in 1960 and completed in 1970 in Egypt, is Africa's largest dam at 3830 meters long and 1000 meters wide which displaced over 120,000 Nubians and four famous archeological sites (Scudder, 2016). The Grand Ethiopian Renaissance Dam (GERD), previously named the Millennium Dam, is reported to have displaced 20,000 people (Sanyanga, 2018). A major crisis looms large since its construction has violated the two Anglo-Egyptian Treaties (one made in 1929 and the other in 1959) that gave Egypt and Sudan a near-exclusive use of the waters of the Nile River, with Egypt having veto power over any development project undertaken on the river as the country heavily relies on it to feed its population (Mbaku, 2015).

## 2.5. The Case of Karimenu II Dam

Kenya has not been left behind in the development of dams both for single and multipurpose use. According to the government, there were a total of 59 proposed or ongoing dams by the year 2013 (Ministry of Environment Water and Natural Resources, 2013). The Karimenu II Dam was proposed in the Water Master Plan for Developing New Water Sources for Ruiru and Juja towns (NEMA, 2016). The dam is located in Kiambu County, Central Kenya, which borders six counties:

- Machakos to the East,
- Nakuru and Kajiado to the West,
- Murang'a and Nyandarua to the North, and
- Nairobi to the South

It lies within the GPS coordinates 1.0314° S and 36.8681° E. It covers an area of 2,543.42 square kilometers and has a total population of 2,417,735 and a population density of 990/km<sup>2</sup> (KNBS, 2019). The dam location is a rural residential area characterized by ridges with relatively steep cliffs where 90% of the land is agriculturally productive, with cash crops of tea, coffee, and pineapple plantations under private ownership (NEMA, 2016). The dam construction and its reservoir displaced 300 families. This paper worked on the assumption that there was significant social and economic disruption of the PAPs' lives affecting each gender differently, including:

- Loss of kinship ties,
- Loss of infrastructure and other communal amenities,
- Closure of roads, schools, churches, tea collection centers, and coffee factories

Although there is currently a better social understanding of resettlement, in recent times, it is disturbing that, in practice, so many resettlement programs still go wrong in many places – to the disadvantage of such large numbers of people (Cernea, 1999).

## 2.6. Gender-specific Outcomes of the IR at Karimenu II Dam

	Total		Male		Female	
A section of men was alcoholic and unproductive	57%	51	45%	16	65%	35
All properties/resources owned and controlled by men	51%	45	48%	17	52%	28
Women overburdened taking over men's duties	48%	43	48%	17	48%	26
Women were more socially and economically empowered by welfare groups	34%	30	26%	9	39%	21
Men as undisputed heads of the households and sole decision-makers	29%	26	39%	14	22%	12
	Total		Male		Female	
Cases of domestic violence	16%	14	10%	3	20%	10
Some women agitated for equal consideration during compensation	10%	9	10%	3	11%	6
There were several widows in the area	5%	5	3%	1	7%	3

Table 1: Gender Inequality Variables before Construction of Karimenu II Dam

According to the respondents, the Karimenu II community was grappling with several gender inequalities that threatened the stability of the families and their livelihoods. About half of the respondents opined that women were overworked, having had to carry out household chores, farming, and in some situations taking over the management of their families where men failed, especially due to alcoholism. 57% of the respondents cited there was rampant alcoholism affecting the male gender rendering them unproductive hence forcing women to take up men's responsibilities to fend for the families. Alcoholism as a major problem was confirmed by documents from the PAPs' Trust obtained by the researcher, where they had even cautioned against giving cash compensation to such title holders.

*'Alcoholism has taken root in this area and has affected most of the families, and if given money to buy alternative land for their families, they will squander the monies rendering them internally displaced persons.'* (Karimenu II Dam PAPs Trust Executive Brief, July 2018.)

20% of women, compared to only 10% of men, reported there were cases of domestic violence in the area, mostly related to alcoholism. The society also emerged to be a conservative one, where 39% of male PAPs interviewed in this study acknowledged that men were the undisputed heads of the households, the main decision-makers, and controlled almost all household resources.

To respond to this inequality in resource distribution and control, women in the area formed SHGs and Welfare Associations to be able to save and start joint income-generating ventures to be able to provide for their own needs and the needs of their families. 39% of female and 26% of male respondents opined that women were more empowered economically and socially by these groups than their male counterparts because they were better managers of their finances. Women whose husbands were alcoholics admitted to having been paying school fees for their children and providing daily bread.

The Karimenu II PAPs Trust requirement of having couples open a joint bank account where compensation money would be deposited exposed the soft underbelly of sensitive gender relations. 11% of women and 10% of men reported having been aware of friction between couples emanating from control and utilization of the compensation money.

*'My husband started taking soft loans from the many agencies that had come to this area. He would use the coming compensation money as security to get quick money for drinking. This stopped when we were made to open a joint account into which compensation money would be paid.'* (PAPs Female Respondent, Ituru Area.)

On a positive note, however, in most cases, the requirement brought about improved consultations and teamwork and strengthened family bonds.

This was evident through couples reporting improved joint decision-making on how to utilize compensation money and where to resettle. Asked who decided where to relocate, 68% reported it was a joint decision-making process where family members, especially wives, husbands, and children (where applicable), were involved. This is a significant gender milestone for the resettled families of Karimenu II. PAPs were interrogated further on whether the exercise improved shared decision-making. 63% answered in the affirmative, while 30% were skeptical. A slightly higher number of men (65%) believed it had improved gender equality compared to females at 63%. 72% of men felt IR had brought

about better consultations, teamwork, and cooperation compared to 67% of women. This is a significant positive change toward gender equality among the PAPs of Karimenu II.

68% of PAPs opined that women, the aged, children, and other vulnerable persons were the most adversely affected by the involuntary resettlement exercise. Probed how these groups of people were affected, half of the respondents reported that:

- The aged were especially affected psychologically due to unpreparedness (50% of men and 48% of women),
- Attachment to their ancestral land (23% of men and 10% of women),
- The prospect of losing a livelihood and lifetime worth of agricultural investments and facing an uncertain future (10% of men and 18% of women)

This indicates gaps in gender-sensitive resettlement strategies, information dissemination, involvement and consultations, and ineffective resettlement training.

Further, 9 out of 10 respondents reported that no special considerations were given to this category of people during the resettlement exercise, meaning that the implementers did not assist the elderly, the sickly, and other vulnerable groups. This was acknowledged by the Key Informants:

*'Valuation and compensation were done without any other considerations of categories of the PAPs. Everyone was supposed to find ways to relocate within 3 months after receiving compensation.'* (Key Informant, Camp 1 of Karimenu II Dam Site.)

82% of the respondents reported that relatives came in to assist this category of PAPs in relocating, showing significant family ties among residents of the Karimenu II area. The PAPs acknowledged that the implementers provided excavators to assist exhumate bodies of deceased relatives and some extra cash for relocation. They, however, cited that the real aim was to hasten the relocation exercise to allow the project to continue without further delays since the contractor was already on site. This violates the Involuntary Resettlement Policy that requires the construction of such projects to only commence after all the PAPs have been fully compensated and resettled (The World Bank, 2004). It brought about unnecessary anxiety to the PAPs of Karimenu II.

	Male		Female		Total	
	count	%	count	%	count	%
Total	21	100%	40	100%	62	100%
Yes	16	78%	9	23%	26	42%
No	5	22%	31	77%	36	58%

Table 2: Acquisition of Land Title per Gender after Resettlement

The resettlement exercise enabled 42% of the households who did not have land title deeds before relocation to acquire land in their name, with men being the greatest beneficiaries at 78% compared to women at only 22%. This confirms the finding by Agarwal (1994) that women who previously had no land rights are likely to remain so during involuntary resettlement unless particular policies were put in place to bridge the gender gap in land ownership rights. Unfortunately, women who were interviewed indicated they were okay with the decision to register the new land under their husbands' names alone.

Variable	Answers	Male	Female
Did the implementers carry out any public involuntary resettlement awareness initiatives?	Yes	81%	60%
	No	19%	40%
Were you involved in any compensation negotiations?	Yes	60%	52%
	No	40%	48%
Have you received any form of resettlement training or assistance sponsored by the implementers of the Karimenu II dam?	Yes	44%	36%
	No	56%	64%

Table 3: Gender-specific Project Implementation and Public Participation Variables

There were some significant gaps on the part of the implementers to intentionally or unintentionally overlook gender considerations during the project implementation. This was most evident when about 2 out of every 5 women reported not being aware or having not been involved in any involuntary resettlement awareness initiatives, contrasting significantly with only 1 in 5 men reporting the same. It appeared during the interviews that when women answered questions on the size and value of land, they were answering on conjecture or insufficient understanding of land issues owing to their previous non-ownership of land and their being left out during the negotiations exercise.

*'We owned a smaller land with cash crops and subsistence crops. Although this new land is bigger, we have to begin almost from nothing. The amount paid was not enough to resettle well.'* (PAPs Female Respondent, Ituuru Area.)

Variable	Answers	Male	Female
Q1. Were you a land title holder before relocation from Karimenu II Dam?	Yes	58%	25%
	No	42%	72%
Q12. After compensation, did you acquire any land title in your name?	Yes	78%	23%
	No	22%	77%
Q12. In terms of size, how can you compare the land you acquired to the one you previously had?	Bigger	44%	34%
	Same	15%	30%
	Smaller	42%	36%
Q13: In terms of value, how can you compare the previous land with the one on which you have now settled in?	Higher	62%	52%
	Same	19%	13%
	Lower	19%	34%

Table 4: Land Acquisition after Resettlement by Gender

While overall, both male and female gender reported to have acquired bigger land and of higher value, a bigger proportion of women reported to have moved to a land of the same size as the one they owned previously at 30%, compared to men at 15% which was statistically significant. Similarly, a bigger proportion of women reported having acquired land of lower value than they previously owned at 34% compared to men at 19%. This points to the gaps in the understanding of land value on the part of the female gender. Another reason was that women were more likely to value land in terms of subsistence farming than men, who valued land in terms of land itself and cash crops.

Although the majority of PAPs reported that the relocation exercise was a growth opportunity, a bigger proportion of women (21%) felt they were impoverished by the relocation compared to men (2%). Women were also more likely to feel dissatisfied with the current relocation site at 19% compared to men at 6%. More women suffered ill health that they attributed directly to the resettlement exercise at 42% compared to men at 25%. A bigger proportion of women believed their personal security was affected negatively by the exercise at 22% compared to men at 10%. In conclusion, women were generally disenfranchised by the exercise owing to cultural barriers regarding decision-making, land and assets ownership, and control. This led to a bigger proportion of women feeling the exercise left them in a worse place than they previously were in compared to the men.

### 3. Conclusion

This paper found out that contrary to many cases of Involuntary Resettlement throughout the world reviewed in this study, Karimenu II Dam IR was a successful one. Many of the impoverishment risks listed by M. Cernea and added upon by Andnet were not experienced by the PAPs of Karimenu II. The majority saw the IR as an opportunity for growth rather than impoverishment. Therefore, the requirement by the World Bank and the African Development bank policies for a land-for-land compensation to avoid impoverishment is challenged in the case of the Karimenu II dam. The improved gender equality, notably in the small number of women with land titles in their name for the first time, spouses' operating new joint bank accounts, and joint decision-making at the domestic level, can be celebrated as gender-specific positive outcomes of the Involuntary Resettlement for the PAPs of Karimenu II.

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### 4. References

- African Development Bank. (2003). Involuntary Resettlement Policy. Policy, November.
- Agarwal, B. (1994). A field of one's own: gender and land rights in South Asia. Cambridge University Press. <http://hdl.handle.net/2027/heh.09210.0001.001>
- Athi Water Services Board. (2009). 254(0).
- Bonaya, A. G. (2018). Compulsory Acquisition and the Right to Property: the Gaps in the Legal Framework, Practices and. 2018(February).
- Cernea, M. M. (1999). The Economics of Involuntary Resettlement: Questions and Challenges. World Bank.
- KNBS. (2019). 2019 Kenya Population and Housing Census Volume 1: Population by County and Sub-County. In 2019 Kenya Population and Housing Census: Vol. I (Issue November). <https://www.knbs.or.ke/?wpdmpo=2019-kenya-population-and-housing-census-volume-i-population-by-county-and-sub-county>
- Mbaku, M. S. K. and J. M. (2015). The Limits of the new 'Nile Agreement.' [www.brookings.edu](http://www.brookings.edu)
- Miescher, S. F., Barbara, S., & Tsikata, D. (2010). Hydro-power and the promise of modernity and development in Ghana: comparing the akosombo and bui dam projects. 13, 15–53.
- Ministry of Environment Water and Natural Resources. (2013). The Project on the Development of the National Water Master Plan (NWMP) 2030 - Final Report Volume -I Executive Summary. October, 1–281.

- x. NEMA. (2016). Environmental Impact Assessment (ESIA) (including Cumulative Impact Assessment) and Resettlement Action Plan (RAP) for Proposed Construction of Karimnu II Dam (Kiambu County). In Mining and the Environment (Issue June). <https://doi.org/10.1201/9781351183666-2>.
- xi. Rao, K. (2017). The Sardar Sarovar Project- A failure of two bottom lines, uncertainty looms over the third. Stanford University, May.
- xii. Reynolds, I. (2011). Impact of the Three Gorges Dam. Johnson County Community College, 2(2).
- xiii. Sanyanga, R. A. (2018). Right Priorities for Africa's Power Sector: An Evaluation of Dams under the Programme of Infrastructure Development for Africa (PIDA). International Rivers Network.
- xiv. Satiroglu, I., & Choi, N. (2015). Development-induced displacement and resettlement: New perspectives on persisting problems. In Development-Induced Displacement and Resettlement: New Perspectives on Persisting Problems. <https://doi.org/10.4324/9781315760520>
- xv. Scudder, T. (2016). Aswan High Dam Resettlement of Egyptian Nubians (A. K. B. and C. Tortajada (Ed.)). Springer.
- xvi. The World Bank. (2001). Operational Manual OP 4.12 - Involuntary Resettlement. I, 7. <https://policies.worldbank.org/sites/ppf3/PPFDocuments/090224b0822f89db.pdf>
- xvii. The World Bank. (2004). Involuntary Resettlement Sourcebook - Planning and Implementation in Development Projects.
- xviii. Wilmsen, B., & Webber, M. (2002). Involuntary resettlement in China : a model of good practice ? University of Melbourne, July.