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The Effectiveness of Community Involvement in Developing Policies and Procedures for Kirandich River Dam Project of Baringo County, Kenya

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Abstract:
Dams and water reservoirs are essential infrastructure required for economic development. However, their establishment has always led to massive population displacement. The establishment of Kirandich River Dam in Kapkokei area led to the displacement of 98 households, who were later resettled in Kamailel Sub-location of Mochongoi division. However, the extent to which the community was involved as well as whether community concerns were addressed prior to their displacement remained unexplored. It is on this basis that this study examined the effectiveness of community involvement in the planning and procedures for the development of the dam. Specifically, the study examined sources of information on establishment of the dam, entities involved in decision making on establishment of the dam, issues negotiated between the community and government prior to dam construction. The study had a sample size of 106 selected multi-stage sampling. This study was anchored on Cultural Ecological Theory and Impoverishment, Risks and Reconstruction Model. This was a case study involving 106 respondents selected through multistage sampling methods. The study collected data through interview schedules and in-depth interviews, and then analyzed using descriptive and inferential statistics. This study found that community involvement in establishment of the dam was done through open gatherings and boardroom meetings, with political leaders, elders and professionals being its representatives. Compensation, alternative land for resettlement, provision of social services and security in the new settlement were the key concerns of the community. There was no effective community involvement in the planning and establishment of Kirandich River Dam. This was due, in part, to undesirable forums of involvement and domination of planning and decision-making forums by government functionaries, government friendly personalities and unenlightened individuals (elders), who had no capacity to interrogate technical aspects about the Dam. As a result, displaced people were not only inadequately compensated but also were resettled in an area that lacked essential human survival services such as health, water, schools, security and roads. This study has recommended for comprehensive review of compensation policies on forced evictions and the inclusion of community assets as part of compensable items. The study also recommends for the provision of social services and infrastructure in areas earmarked for resettlement prior to the actual resettlement.

Keywords: *Effectiveness, community, involvement, policies, procedures*

1. Introduction

This study analyzed the effectiveness of community involvement in developing policies and procedures for large scale development project, with focus being Kirandich River Dam in Baringo County, Kenya. Although large scale development projects have caused massive human displacements around the world, dams remain the single largest cause of human displacements. A World Bank report of the 1990s on population displacement found that Dam construction accounted for 66.4% of all development-induced development, which made it the largest single cause of development-induced displacement (World Bank, 1994). The high overall level of dam displacement is attributed to the rapid growth of dam construction since the 1950s.For instance, The International Commission on Large Dams (ICOLD) (2002) reports that the world had only 5,000 large dams in 1950 and over 45,000 by the late 1990s, representing establishment of about 800 dams per year around the world.

Large scale development projects such as dams have led to the displacement of millions of people around the world (Cernea 2000). It was estimated in mid 2000s that about 10 million people were being displaced each year to pave way for development projects (Cernea 2000). Population displacement occasioned by development projects is highest in Asia particularly India and China (Fisher, and Pandey, 2000; Mahapatra 1999b). Although development induced-displacement has led to population displacements in Africa whose numbers are fewer than those recorded in Asia, Cernea (1997) cautioned that in many African countries with relatively small populations, the numbers of displaced people may be lower, but the proportion of the population affected by development-induced activities is nevertheless significant, sometimes even higher than in the Asian cases.

Development-induced displacement has in some cases had negative while, in other cases, positive consequences on displaced people. Scholars such as Picciotto et al., (2001) observed that the consequences of development projects on displaced people depend on how resettlement is planned, negotiated, and carried out. While basing their observations on development-induced displacements in China, the authors noted that displaced people's incomes and living standards improved while satisfaction with resettlement was high (Picciottoet al.,2001). Furthermore, Downing (2000) asserts that large-scale development projects are important in transforming traditional, simple, third world societies into modern as well as poverty reduction (Downing, 2000). In contrast, Colchester (2000) noted that displaced people experienced cultural alienation, dispossession of land and resources, lack of consultation, insufficient or a complete lack of compensation, human rights abuses, and a lowering of living standards. Further, Mahato and Ogunlana (2011) assert that displacement leads to disruptions in people's socio-economic and cultural arrangement, social networks, and access to health, education and water.

Involvement refers to an active process by which a person or groups of people influence the direction and execution of developmental issues for purposes of among others enhancing not only their wellbeing but also that of the society in general (Hardina, 2003). Development institutions such as World Bank, UNDP and UNESCO have not only underscored the importance of involving community in local development projects, but have also made community involvement in local development projects a mandatory requirement for projects under their funding (The World Bank, 1993; UNDP, 2000; UNESCO, 2000). Development practitioners hold that involving community in local development offers community the opportunity to define their problems, interests and concerns, and suggest solutions to local developmental challenges (INEE, 2004; Silverman, 2005). Moreover, Flora and Fey (2004) have emphasized that involving community in local development projects is a means of utilizing the local resources as well as enhancing the capacity of local community to manage the project in a sustainable manner.

Kirandich River Dam is situated about 10 kilometers East of Kabarnet Town at a place known as Kapkokei. The principal objective of the project was to supply potable drinking water to the town of Kabarnet and its environs following persistent water shortage in the area. Feasibility studies on possible sources of water to Kabarnet Town and its environs were done in early 1980s. These studies revealed that the current site of Kirandich River was best suited for damming due to its geographical features and also being the confluence of several rivers in the area. The Dam was constructed between 1996 and 1999, with commissioning being done in 2001. Phase two of the dam's construction, which entails construction of sewerage plant to serve Kabarnet town and the surrounding area is meant to commence later. Feasibility study for dam recommended the eviction of some members of the community to pave way for the dam's construction. A total of 119 households were affected, with 98 households being compelled to give up their entire land for the establishment of the Dam and affiliated facilities. Displaced people were then resettled in Kamailel Sub-location of Mochongoi division, Baringo Central Sub-County. Displaced people have been in their new settlement since mid-1990s. However, the extent to which to which the community was involved as well as whether community concerns were addressed prior to their displacement remained unexplored. It is on this basis that this study examined the effectiveness of community involvement in the planning and procedures for the development of the Dam.

2. Objectives of the Study

This study sought to establish (1) Source of Information on establishment of the dam, (2) entities involved in decision making on establishment of the dam (3) issues deliberated by the community and government prior to dam Construction, and (4) effectiveness of current approaches of involving communities in the development of policies and procedures on large-scale development projects in Kenya.

3. Research Methodology

3.1. Sampling Method and Procedure

This study had a sample size of 106. The study used three sampling methods namely census, stratified random sampling and purposive sampling. Census method was used to pick households of displaced people. This method of sampling is preferred when entire population is very small or it is reasonable to include the entire population in the study. The entire households of the displaced were only 98; it, therefore, included all of them in the study. Purposive sampling was used to select key 8 informants. The key informants selected for this study were area assistant chief, area chief, 3 community elders and 3 senior managers of Kirandich River Dam.

3.2. Data Collection Methods

Qualitative and quantitative procedures of data collection were used in data collection. Interview schedules were the main instrument used to collect quantitative data for the study. Interview schedules had both structured and unstructured questions, which enabled for the collection of standardized responses while simultaneously providing respondents the opportunity to respond without restrictions. Qualitative data was obtained through the use of in-depth interviews. Interviews were largely used to obtain information from key informants. The study employed a semi-structured interview guide containing some pre-determined questions for the respondent.

3.3. Data Analysis

This study used descriptive and inferential statistics to analyze data after appropriate data coding. Descriptive statistics used in this study were frequencies and percentages. Inferential statistics were used to test the associations and relationships between independent and dependent variables. Inferential statistics used in this study were Chi-Square and Pearson Correlation.

4. Analysis and Interpretation

4.1. Profile of the Respondents

This study considered gender, diverse age groups, and levels of education and sources of livelihoods. Males accounted for 58% of the respondents against 42% females. Persons aged 29-39 and 40-50 years accounted for 32.3% and 33.3% of the respondents respectively. Other respondents were aged 18-28, 51-61 and 62-72 years, which constituted 11.8%, 14% and 7.5% of the respondents respectively. There was only 1 person aged over 72 years who participated in this study. In terms of religious affiliation, majority of the respondents were from Roman Catholic faith with 52% of the respondents professing the faith. This was closely followed by Protestants, which was reported by 48% of the respondents. However, 1% of the respondents were from Evangelicals. Respondents with secondary education constituted 43% of the respondents. This was followed by respondents with primary, college and university education, which accounted for 40.9%, 9.7% and 4.3% of the respondents respectively. Farming was the most common source of livelihood that supported up to 90% of the respondents. Formal employment and business were sources of livelihood to 9% and 1% of the respondents respectively.

4.2. Sources of Information on the Establishment of the Dam

This study found public gatherings and boardroom meetings as the sources of information about the planning and establishment of the Dam. Open gatherings accounted for 99% of the sources of information about the establishment of the Dam, with boardroom meetings accounting for just1% of the sources of information on the establishment of the Dam. It was evident from the study results that public opinion on the planning and establishment of the dam was sought through public open gatherings, which were probably convened by the provincial administration. Until recently, the government of Kenya employed the powerful Provincial Administration and the District Development Committees to communicate issues of development to the local community. The Provincial Commissioner, District Commissioner and the Chiefs were often directed by the national government to convene public meetings and pass government decisions to the people. Moreover, Provincial Administration was often directed to convene boardroom meetings with local leaders to discuss issues affecting local community. It was therefore not surprising that public gatherings and boardroom meetings were the only sources of information on the planning and establishment of the Dam.

Although the establishment of a project like Kirandich River Dam was meant to serve the population of the area, sometimes the adverse effects of such projects go beyond the areas where they are located. It is for this reason that such projects should be widely publicized through electronic and print media before their establishment to enable input of professionals from diverse backgrounds and locations. Accounts of some key informants indeed confirmed that these sources of information were not suitable in gathering public views about the project. One of the key informants remarked ''we could just hear people being called to the Provincial Commissioner's office in Nakuru and later the District Commissioner's office in Kabarnet to talk about how to bring water in this area. We were never involved in selecting elders to present our views on the project. When these people come back from these meetings, they never briefed us of what transpired in their meetings.''

4.3. Entities Involved in Decision Making on Establishment of the Dam

Individuals involved in the development of policies and procedures for the establishment of Kirandich River Dam were government officials, political leaders, community elders and professionals. However, government officials and community elders were the most involved, where they accounted for 40.9% and 38.7% respectively of the involvement. Political leaders accounted for 18.3% of the involvement. Professionals were the least involved in the planning and establishment of the Dam since their involvement constituted just 2.2% of the involvement.

Political leaders involved in the planning and establishment of the Dam were area Member of Parliament, area Councilors and area officials of the ruling political party-Kenya African National Union (KANU). Although Kenya had by then already embraced multi-party system of governance, there were no political leaders from the opposition. It is important to observe here that the area where the dam was located was the home district of then President Daniel Moi, whose reign was characterized by dictatorship and suppression of dissent. The provincial administration led by the Provincial and District commissioners, Kenya Water and Pipeline Corporation officials, Ministry of Water officials and

Ministry of Environment officials were the main government officials involved in the development of procedures and policies leading to the construction of the dam. Community elders drawn from various clans were also involved according to the respondents. The government as a single entity accounted for 40.9% of all the entities parties engaged. This left about 59.1% of the participants being drawn from political leaders, elders and professionals.

Political leaders were drawn from the ruling party and as such could not contradict government's position on the project. Elders could not understand the technical aspects of the project and might have endorsed decisions with far reaching implications without clear understanding of the critical and technical aspects of the project. The fact that the government was determined to have the project, imply that area professionals engaged were those who were friendly to the system according to some respondents. The overconcentration of government officials and friendly entities in the planning and establishment of the dam, is akin to what Arnstein (1969) calls manipulation and therapy in his typology of citizen involvement. Arnstein (1969) depicted people's involvement as an eight-rung ladder, with each rung corresponding to the extent of citizens' decision-making responsibility or power in determining a desired outcome. The lowest levels of involvement are manipulation and therapy. This he calls as non-involvement. Just above this level of involvement are consultation, informing and placation. This to him merely is degrees of tokenism but not real involvement. The top most levels of involvement are partnership, delegated power and citizen control.

4.4. Issues Deliberated by the Community and Government Prior to Dam Construction

Community involvement and consultations with the government centered on compensation, alternative land for displaced people, social services and security in the new settlement. Alternative land for the resettlement of displaced people accounted for 37.5% of the issues discussed between community and the government. Provision of social services notably water, schools and health facilities were the second most discussed issue between the community and the government, which accounted for 25% of the issues deliberated upon. This was followed by security and compensation, which accounted for 18.8% and 18.8% respectively of the issues discussed.

Majority (37.5%) of the respondents prioritized land over all other issues; a development, which is supported by Cernea, (2000) who, through a series of studies on displacement, concluded that the most immediate need of persons displaced by development is alternative land for resettlement. Landlessness is normally the immediate form of deprivation that is created by development- induced displacement. Land was exploited by the community for farming, livestock keeping and even bee keeping, all of which were important sources of livelihood for members of the community prior to displacement. Displaced people thus found it critical to have land as a priority during their engagements with the government because of its centrality to their economic survival.

Land for resettlement was one of the issues members of the community discussed with the government. This study sought to establish from the displaced people whether the amount of land given to them for resettlement was actually adequate. The results of the study revealed that slightly over 50% of the displaced people who participated in this study felt that land given to them for resettlement was actually adequate. Specifically, 28%, 20.4% and 3.2% of the respondents described the amount of land given to them as very adequate, adequate and somehow adequate respectively. However, the amount of land given for resettlement was described by 9.7% and 39.7% of the displaced people engaged in this study as least adequate and inadequate.

This study established through multiple interviews with some of the resettled people that the amount of land given for resettlement ranged from 2.5 acres to 10 acres. It was not clear to this study the criteria used to decide the amount of land to be allocated to the displaced families. Respondents noted that they were largely livestock keepers. They argued that there were numerous common properties such as grazing fields and water bodies in their previous settlements, which they accessed with ease. This allowed them to engage in livestock keeping effectively despite being in possession of far much less pieces of land at the individual level. Some key informants were critical of how the compensations were done, with their views suggesting that some of the individuals who received compensations were never displaced nor affected directly by the establishment of the dam. ''Some individuals who were not displaced or in any way adversely affected by the dam were also given land. Most of them were friends and relatives of the Provincial Commissioner, District Commissioner and local politicians'' asserted one of the key informants.

Monetary compensation was also one of the issues that the displaced people confirmed to this study as having been deliberated upon between the community and the government prior to the displacement and subsequent resettlement. When asked to state the extent to which they believed that monetary compensation was sufficient majority of the displaced who participated in this study felt that it was not sufficient. Respondents who felt that monetary compensation given to them was not sufficient accounted for 89.2% of the respondents. Further analysis of the results shows that those who felt that monetary compensation given to them was a sufficient extent and some somehow sufficient accounted for a mere 3.2% and 1.1% respectively of the displaced people engaged in this study. About 6.5% of the respondents felt that monetary compensation given to them was least sufficient.

Displaced people who received financial compensation stated that they were given money to build houses and physical structures similar to the ones they had in their previous homesteads. They further stated that the government did not keep its promise of helping them build community assets such as schools, churches and health facilities. The failure by the government to compensate displaced for the lost assets led a huge proportion of the respondents hold that the government was either not adequately carried out valuation of the cost of displacement or resources allocated for the compensation were swindled by government officials. This is well captured by one of the community elders who remarked ''some of us owned businesses, which we had accumulated a lot of experience over the years. We had also developed a strong relationship with some of our customers, who had become very loyal to us. Compensation given to us only covered

the cost of goods and buildings and other business assets. However, we were not given anything to cover loss of customers, good will and other interpersonal relationships that we had developed with our customers and other business people over the years.''

While some of the displaced people attempted to open similar business in their new settlement, most of them informed this study that they were never successful, and decided to close shop due to persistent losses. The findings of this study concur with the study of Mathur (2008), which equally found that compensation given to households displaced by mining projects covered just 20% of the displaced people's livelihood and assets. Members of community take several years to build both individual and community assets. Some of the individual assets include housing, businesses, livestock, and social networks (such as savings and lending schemes) among others. Community assets may include schools, markets, health facilities, grazing areas, local political systems and culture among others. Displacement may result in total or partial loss of these individual and community assets. Although it is generally difficult to quantify some of these social assets in monetary terms for purposes of compensation, it is important for governments to bear in mind that compensation goes beyond physical and tangible assets.

4.5. Effectiveness of Community Involvement in Development-Induced Displacements

Members of the community had issues that they wanted addressed before their displacement and subsequently resettlement. These issues were land for resettlement, security in the new settlement, provision of social services such as schools, water and health, and compensation. Given the high level of importance members of the community attached to these issues, this study measured effective involvement of the community in planning and establishment of the dam on the extent to which members of the community believed that their concerns were addressed against the avenue used by the government to engage the community as well as entities engaged during the negotiations.

When asked to state whether they agreed or disagreed that their concerns were addressed by the government before and after their displacement, majority of the respondents answered in the affirmative. Members of the community involved in this study that strongly agreed and agreed that their concerns were addressed accounted for 29% and 40.9% of the respondents. The results also showed that 28.3% of the respondents somehow agreed that their concerns were addressed before and after their displacement. However, 11.8% of the respondents disagreed that their concerns were addressed by the government following the establishment of the dam in their previous settlement.

This study found that there was no significant relationship between source of information about the planning and establishment of the dam and the level of community's satisfaction with their involvement in the planning and establishment of the dam (Table 1). The statistical results in Table 1 below show that 100%, 100% and 91.7% of the respondents who obtained information about the impending construction of the dam through public gatherings had very high, high, somehow high and low levels of satisfaction with their involvement in the planning and establishment of the dam. It is also evident from the results above that none of the respondents who obtained information about the establishment of the dam through boardroom meetings had neither very high nor high level of satisfaction with their involvement in the planning and subsequent establishment of the dam. However, a paltry 8.3% of the respondents who learnt about the impending establishment of the dam through boardroom meetings described their level of satisfaction with involvement in the planning and establishment of the dam as somehow high.

Satisfaction Level		**Source of Information**		**Total**
		Public Gathering	Boardroom Meeting	
	Very High	100%	0	100%
	High	100%	0	100%
	Somehow High	91.7%	8.3%	100%
	Low	100%	0	100%
Total		**98%**	**2%**	100%

Table 1: The Relationship between Source of Information and Community's Satisfaction Level

χ^2 = 4.686, Df= 3, P= 0.214, Cramer's V= 0.214

This study found no significant relationship between stakeholder involved and the level of community's satisfaction with their involvement in the planning and establishment of the dam (Table 2). An examination of the results in table 2 below shows that 20%, 35% and 45% of the respondents who were represented in the planning and establishment of the dam by political leaders, government officials and community elders respectively reported very high level of satisfaction with their involvement in the planning and establishment of the dam. High levels of satisfaction in the involvement in the planning and establishment of the dam was reported by 16.7%, 41.7% and 41.7% respectively of the respondents who represented by political leaders, government officials and community elders. It is also evident in results below that 16.7%, 41.7%, 33.3% and 8.3% of the respondents who were represented in the planning and establishment of the dam by political leaders, government officials, community elders and local professionals respectively described their level of satisfaction with their involvement in the planning and establishment of the dam as somehow high. The level of satisfaction in the involvement in the planning and establishment was low according to 33.3%, 22.2%, 33.3% and 11.1% of the respondents who were represented by political leaders, government officials, community elders and local professionals respectively.

Satisfaction Level	Engaged Entities				Total
	Politicians	Government	Elders	Professionals	
Very High	20%	35%	45%	0	100 %
High	16.7%	41.7%	41.7%	0	100 %
Somehow High	16.7%	4.1%	33.3%	8.3%	100 %
Low	33.3%	22.2%	33.3%	11.1%	100 %
Total	18.2%	40.8%	38.7%	2.1%	93

Table 2: The Relationship between Stakeholders Involved and Community's Satisfaction Level
$\chi^2 = 6.461$, Df= 6, P= 0.845, Cramer's V= 0.144

Although community's level of satisfaction with their involvement in the planning of the dam appears to be very high and high where public gathering was the source of information, this may have been due to large number of community members that attended the public gatherings. The insignificant relationship between the source of information and community's level of satisfaction with their involvement in the planning and establishment of dam was largely due to undesirability of each of the sources of information. Some respondents complained that most of the public gatherings were hurriedly convened, with agenda being drawn solely by the provincial administration. Respondents also claimed that government officials met and coached some of the participants ostensibly to praise the project and have it endorsed uncritically. It was further claimed by some respondents that government officials 'planted' and detailed some members of the public to shout down individuals with critical or divergent opinions about the project.

If well planned and managed public gathering can be important avenues for disseminating information to the public and also obtaining feedback from the public. However, respondents were categorical that the way the government planned and executed these gathering could not effectively be used to either educate the public or obtain quality feedback from the public about the project. Respondents were also concerned that the time allocated for the public gatherings were inadequate and that most members of the public were never given the opportunity to articulate their positions on the project. According to some of the respondents, most of the issues canvassed in the public gatherings were also either too technical or written in a language that they could not understand. Concerns were also expressed by members of the community interviewed about the suitability of boardroom meetings as a decision-making forum for the dam. Some respondents observed that boardroom meetings were exploited by some community elites to cut deals with the government, with others alleging that meeting resolutions were changed to serve personal rather than community interests.

This study maintains that both sources of information were suitable if only used for the public interest. For instance, issues that demand expert and high gear negotiations can best be handled in boardroom meetings. Public gatherings could then be used to seek broader consensus and validation of resolutions reached during boardroom discussions. However, the quality and success of decision-making process that led to the displacement, resettlement and construction of the dam could only be realized if it was spearheaded by individuals with integrity, experience and knowledge. It is this study's submission that no critical, insightful and informed discussions on the planning and establishment of the dam could be achieved through open gatherings.

Although the results above (table 2) tend to suggest that there were very high and high levels of satisfaction where members of the community were represented by the political leaders, government officials and elders and low satisfaction where members of the community were represented by local professionals, the results may have been caused by the higher number of forums attended by the three stakeholders. Professionals according the respondents were only invited in very few boardroom meetings. They were, however, not invited in public gatherings. While some respondents said that some professionals attended public gatherings, they were however, never given the opportunity to make their contributions during these gatherings.

The government through its local officials dominated key decision-making processes regarding the planning and establishment of the dam (part 4.3). The domination of decisions making process about the Dam by government officials and local political elites may have led the respondents being apprehensive about their effective involvement in the project leading to lower levels of satisfaction with their overall involvement in the project. Respondents felt that the technical aspects of the project could have better been handled by the professionals. Although professionals were engaged in the planning and establishment of the dam, their involvement was too negligible to make any meaningful impression, thus leading to community's low level of satisfaction with their involvement in the project. The subjugation of the voices of professionals especially those from the local area in the planning and establishment of the dam, in spite of their perceived knowledge and insight on the project meant that the project was embraced by the community without critical issues about the project being made clear to them. Although involvement of the elders was crucial especially in winning community's support for the project, members of the displaced community engaged in this study doubted the ability of elders to understand the technical aspects of the project.

5. Conclusions and Recommendations

Interpretation and analysis of data collected from interview schedules and discussions with informants reveal that there was no effective community involvement in the planning and establishment of Kirandich River Dam. This was due, in part, to undesirable forums of involvement and domination of planning and decision-making forums by government functionaries, government friendly personalities and unenlightened individuals (elders), who had no capacity to interrogate technical issues about the Dam. As a result, displaced people were not only inadequately compensated but also were resettled in an area that lacked essential human survival services such as health, water, schools, security and roads.

Although the institution of eldership remains an important social structure especially on issues that requires negotiation and building of relationships between communities on one hand and community and development agencies on the other hand, there is need to incorporate professionals and young people when it comes to negotiations of development projects that may result in population displacement or sharing of development proceeds. Though elders may be selfless and well-meaning in their participation in the planning and establishment of development projects or extraction of natural resources in their areas, most of the issues under negotiations and deliberations may be too technical for elders to comprehend and therefore contribute from an enlightened stand point. Therefore, incorporating professionals on a team of elders' negotiating on behalf of the community may go a long way in enriching their technical and interpersonal capacity thereby improving their effectiveness in the development of policies and procedures on development projects.

This study found that compensation framework for people displaced following the establishment of Kirandich Dam excluded community assets such as schools, churches, health centers, policing facilities, social networks and the social capital displaced people have built over the years. This made compensations given to displaced people too inadequate. There is, therefore, need for comprehensive review of current compensation framework so as to include community assets both tangible and non-tangible.

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