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Integrating Benefit Sharing with Compensation as a Poverty Risk Reduction Strategy for Persons Displaced by Large Dams: Focus on Thiba Dam Irrigation Development Project in Kenya

By

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Abstract

This article analyzes the process of compensation and benefit sharing for persons displaced by Thiba dam irrigation development project. It also highlights the level of stakeholder engagements in the negotiations and implementation of compensation and benefit sharing. Qualitative methods of data collection including; semi-structured interviews, participant observation, Key informant interviews, focus group discussions, document review and transect walk were applied in the study. The study assessed the effectiveness of benefit sharing as tool to foster sustainable development for local communities, reviews the legal frameworks for benefit sharing both in Kenya and selected countries across the globe and analyzes the key steps to be followed to ensure successful implementation of benefit sharing arrangements. The study established that important gaps in the legal framework for benefit sharing exist in Kenya. The study also found that proper identification of project affected persons and their meaningful engagement on compensation and benefit sharing arrangement contributes to successful project implementation and sustainable development. The study recommends the enactment of relevant legislation on benefiting sharing for large dams, stakeholder consultation and consensus building between project proponents and the land owners and land readjustment downstream or within the irrigation command areas to enable persons displaced by irrigation dams to share the benefits of dam water.

Key words: Kenya, Compensation, Displacement, Benefit sharing, public consultation, sustainable development, Thiba dam

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Introduction and Background

The Government of Kenya identified areas of expansion to boost supply of water for irrigation in Mutithi location of Mwea West Sub-County in Kirinyaga County. The objective of the project is to expand the irrigable area as well as increase cropping intensity in the original Mwea Irrigation Scheme area for higher production of rice and other crops among them French beans, tomatoes and onions and subsistence food crops (maize, beans, and bananas). The project consists of 8,860 hectares of irrigation area. To achieve this objective, a dam is being constructed across Thiba River which is located in two locations namely Kabare and Baragwi locations, of Gichugu Sub-County. The proposed dam was originally designed in 1996 and covers approximately 200 hectares of land, at a height of approximately 32 metres. (National Irrigation Board, 2009:4).

The purpose of the dam is to create a reservoir for water from several streams upstream of Thiba River, and for the release of this for irrigation via various existing canals. The proposed dam is expected to have a widespread positive impact on overall socio-economic status and livelihoods of the people within the command area which currently experiences bouts of dry weather and lack of water, hence agricultural productivity is below expected capacity. The land area to be inundated is owned by private individuals under freehold land tenure systems, and includes agricultural land, residential, commercial, and institutional and others types of users that are expected to be discontinued to pave way for the dam. A total combined population of 1792 people have been displaced by the dam. The resettlement is being undertaken based on the Constitution of Kenya 2010 and JICA guidelines. The project is being financed by the GoK and partial loan from JICA (National Irrigation Board, 2009:5).

The new economic development blueprint for Kenya popularly known as Vision 2030 was launched in 2008 to cover the period between 2008 to 2030 and aims at making Kenya a middle income economy by the year 2030. The blue print recognizes construction of dams as a major catalyst for industrial growth (NESC, 2008:1). The National government plans to construct 57 dams across the country in a bid to increase water coverage from the current 60 to 80 per cent (Citizen Digital, 2018:1). Massive investments in large dams aims to position Kenya on a stable economic growth path in line with global development agenda. In fact, Dobbs et al. (2013:1) recognized that half of the \$ 57 trillion projected to be invested in infrastructure by 2030 is expected to be in power and water infrastructure.

Statement of the Problem

Displacement of populations create harm which may permanently become part of their lifestyles especially where caution is not taken to restore the livelihoods of the uprooted persons. Impoverishment Risks and (livelihood) Reconstruction (IRR) model developed by Cernea (1996:2) identified eight key risks of resettlement including: landlessness; joblessness; homelessness; marginalization; food insecurity; loss of access to common

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property resources; increased morbidity and mortality (i.e. declining health); and community disarticulation. Interruption to education was later added by the World Bank as the ninth risk. Denying the local communities the opportunity to share project benefits has been identified as a major obstacle to sustainable development. Robinson et. al, (2006:448) posit that poor policies which result into mismanagement of natural resources may result into social disorders which may worsen the living conditions of people affected by projects. Similarly, Vanclay, (2017:14) asserts that building consensus and sharing the project benefit with local communities acts as a social licence for the project and insulate the project from resistance which may cause delay and project failure. He further argues that sufficient planning and allocation of adequate resources is necessary for successful execution of resettlement. Errors and delays in planning and execution can significantly increase the costs associated with resettlement and the project as a whole. Poor planning of dam projects not only causes delay and frustration in the execution of resettlement, but also increases the risks for all parties (Reddy et al., 2015:20).

Owen & Kemp (2015:479) posit that displacement of persons from their original ancestral homes is normally accompanied by anxiety and certain levels of stressful experiences that even a well planned and executed resettlement may not be able to prevent. Scudder and Colson (1982:270) have pointed out that involvement of the displaced persons in resettlement decision-making has the potential of reducing the anxiety and stress levels. They have noted that displaced persons may be exposed to either physiological, psychological and sociocultural stress or both. Other studies have also established the existence of a relationship between stress levels experienced by displaced persons and their level of involvement in resettlement planning and execution (Patel et al. 2002:162; Reddy et al. 2015:20; Wilmsen & Webber 2015:79).

Scudder (2005:10) developed a model which indicates that people being resettled undergo through four phases of experiences accompanied by varying levels of stress as follows: Phase one (planning and recruitment, communities are stressed by the preparations for the resettlement and uncertainty about the future). Phase two (coping and adjustment, which occurs after resettlement takes place, individuals attempt to learn to adjust and cope with their new circumstances). Phase three (community reformation or formation and economic development occurs, and individuals re-establish normal community life) and Finally, Phase four (handing over and incorporation, which occurs many years later, individuals and communities seek to take full control of their lives and the new community becomes fully established and integrated/incorporated into the regional economy). Van der Ploeg et al. (2017) have observed that when people are exposed to poor resettlement planning, they often fail to go through all the four phases. The resultant effect is that impoverishment of people occur, people do not cope well and fail to adjust economic development and community reformation do not occur, and instead of an independent, resilient community taking full control, the community remains dependent on the project and/or government and struggles to cope with inadequate service provision.

Review of Related Literature

Benefit Sharing

Benefit sharing in infrastructure projects can be defined as structured interventions put in place by the investors to sustainably benefit local communities affected by the project. Benefit sharing is emerging as one of the alternative approach to achieving sustainable

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development and has the potential of cushioning the indigenous populations from the risk of impoverishment associated with overreliance on compensation as the only way of restoring livelihoods (Wang, 2012:4). A carefully planned benefit sharing arrangement normally have implementation procedures, clear objectives, defined target population, sharing mechanisms and responsible agencies. Most Benefit sharing arrangements take into consideration the findings of resettlement action plan, social and environmental impact assessment and socioeconomic studies conducted within the project area. The key steps in benefit sharing include; analyzing the impacts of a project on local communities , analyzing the legal and regulatory framework and local development context ,carrying out consultations with stakeholders, designing the objectives of benefit sharing programs, determining the beneficiaries of benefit sharing programs, designing the types and mechanisms of benefit sharing, exploring benefit sharing arrangements through multiple entry points and setting up the implementation arrangements of benefit sharing programs (Wang, 2012:6). Implementing resettlement programmes as development projects is gaining traction in the development arena (Asian Development Bank, 2014:1).

World Bank safeguard policies require sharing benefits with project-affected people. For instance, the policy on Indigenous People (OP 4.10) provide for involvement and inclusion of the Indigenous people in project implementation to enable them to share equitably in the benefits when a project involves the commercial development of natural resources on land or territories that Indigenous Peoples traditionally owned. On the other hand, the policy on Involuntary Resettlement (OP 4.12) requires that resettlement activities should be conceived and executed as sustainable development programs, providing sufficient investment resources to enable the persons displaced by the project to share in project benefits when involuntary resettlement is unavoidable(World Bank, 2018: 5). A global paradigm shift is being witnessed in respect to the ways in which development companies relates with communities where they undertake their investments. Global investors have long began to view benefit sharing as sustainable way of implementing Corporate Social Responsibility (CSR). The relationship was initially tailored towards payments of compensation but has since evolved to include benefit sharing which has proven to be a leading tool for sustainable resource governance and implementation of Corporate Social responsibility (Ten Kate and Laird 1999:336, Prno and Slocombe 2012:348).

Henry and colleagues (2016:10) assert that the basic tenets of a sound CSR policy include; proper consultation, ethical behavior, transparency, labor rights, safety, compliance with applicable local and international laws and commitment to environmental protection and sustainable development. According to Wilson and Stammler (2006), benefit sharing should incorporate social justice to overcome the discrepancy between resource owners and the investors by addressing the needs and perspectives of the local communities thus contributing to achievement of sustainability goals for both communities and companies. Denying the local communities the opportunity to share project benefits has been identified as a major obstacle to sustainable development. Mismanagement of resource development may result into social disorders which may worsen the living conditions of people affected by projects (Robinson and Verdier 2006).

Cernea (2008:90) argues that benefit sharing is a forward-looking approach designed to invest in local well-being of the local communities. He further calls for the reformation of resettlement policies to ensure that local communities benefit from the local natural resources. Similarly, Wang (2012:6), argues that the success of benefit sharing is determined by the levels of stakeholder engagements, corporate social responsibility strategies of

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investors, the capacity of local communities, government policies and the legal and regulatory frameworks. Project benefits can either be shared through channeling part of the monetary flows generated by the project to the local communities or through non-monetary terms such as improved access to fisheries, improved road networks, electricity and water supply. Pham et al. (2013:13) have identified various forms of applied monetary benefit sharing arrangements including; equity sharing, community development fund, building of schools and health facilities, provision of training and employment and direct payments or revenue sharing with the affected families. Vanclay et al. (2015:8) have noted that benefit sharing mechanisms are often implemented to ensure that projects bring development to the local people and have called upon project developers to exhibit greater awareness and commitment to shared values.

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Table 1: Global comparative review of types of benefit sharing

Country	Name of project	Type of benefit sharing
Lao PDR	Nam Theun 2 Social and Environmental Project	Watershed management and livelihood restoration programs are part
Sierra Leone	Bumbuna Hydroelectric Environmental and Social Management Project	Watershed Management: Revenue Sharing:
Uganda	Private Power Generation (Bujagali)	A community development fund and Enhanced local employment
India	Rampur Hydropower Project	Integrated ancillary investment into the local development plan.
India	Vishnugad Pipalkoti Hydroelectric Project	Community Development Funds:
Mozambique	Water Resources Development	Local Development Plan
Vietnam	Trung Son Hydropower Development Project	Ancillary Investments
Indonesia	Upper Cisokan Pumped Storage Power Project	Revenue Sharing : A small hydropower plant at the lower dam—to mainly serve the local communities and/or share profits with the local communities
Nepal	Khimti I Hydropower Project in	Direct Payments for Education Scholarships
India	Vishnugad Pipalkoti Hydroelectric Project	Preferential Electricity Rates
Costa Rica	Angostura Hydropower Project	Payments for Environmental Services
Lesotho	Lesotho Highlands Water Project (LHWP)	Community Development Fund
Norway	Glomma and Laagen Basin	Equity Sharing
Egypt	High Aswan Dam	Enhance Benefits to Local Communities through Modifying Project Design
Costa Rica	Angostura Hydropower project	Watershed management
Nepal	Khimti Hydropower Project	Investment in Health Services
Columbia	San Carlos Hydropower Project	Local Employment Programcolombia

Source: Wang (2012)

Legal Framework for Benefit Sharing in Kenya

Kenya only began the initiative towards enacting benefit sharing legislations after commercially viable oil was discovered in Turkana County in 2012. Natural Resources (Benefit-sharing) Act 2018 recently enacted in Kenya defines benefit -sharing as the sharing of benefits which arise from the utilization of natural resources in a fair and equitable manner. Land is considered as the focal point because mineral resources, such as petroleum resources are land-based in nature. Article 61 of the Kenyan Constitution states that all land

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in Kenya belongs to the people of Kenya collectively as a nation, as communities and as individuals while Article 61(2) classifies land as being either public land, community land or private land. The Constitution categorizes all land containing minerals and mineral oils, as defined by an Act of Parliament, as being part of public land. The biggest gain in this endeavor is the enactment of Natural Resources (Benefit Sharing) Act, 2018 which allocates revenue from petroleum resources in the ratio of 20 per cent to local government, 5 per cent to communities living where oil was found and 75 per cent to central government. The acts provide for the parliament to review the percentages within 10 years. This Act apply to the following natural resources; sunlight, water resources, forests, biodiversity and genetic resources, wildlife resources, industrial fishing and wind. A comparative analysis of countires which have enacted benefit sharing legislations is provided in table 2.

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Table 2: Global comparative review of legal framework on benefit sharing

Country	Policy	Distribution
Brazil	The National Constitution (1988) provide for charges a fee for water used to generate electricity.	-Forty-five percent goes to municipalities losing land to reservoir inundation. -Forty-five percent goes to the state or provincial authorities where the project is located. -Ten percent goes to the federal government to finance regulatory functions, of which 8 percent is to the Federal Electricity Regulatory Agency and 2 percent to the Ministry of Science and Technology.
China	In 2007, the government introduced a new policy on revenue transfers from the power sector to regional and local authorities. The policy established national resettlement fund and Reservoir area infrastructure improvement fund	National resettlement fund : -The fund pays RMB 600 yuan to each resettled person each year for 20 years. The funds are derived from a 0.08cents per kwh standard charge on the bulk electricity tariff from all hydropower projects in the country, regardless of the number of persons resettled. Payments are automatically applied on dams under construction and will be applied to future projects. For existing projects, the payment will be based on an investigation of persons resettled. Reservoir area infrastructure improvement fund: -The fund is supported by a 0.08 cents per kwh chare on the bulk electricity tariff from hydropower generation paid to the provincial finance authority. The province then allocates the funds to prefecture and local government authorities to “develop production and improve living conditions of residents after relocation and to realize stable and sustainable development of the residents’ living and working conditions.
Colombia	Law 56 (1981) establishes a set of obligations to hydropower, irrigation, and water supply projects with affected municipalities and displaced people.	-Creating a special fund to develop socioeconomic activities and works identified in the socioeconomic studies that should be conducted by the implementing agency to identify the potential impacts of the project. ---Payment of commercial taxes based on the generation capacity installed.

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	The third provision was modified by Law 99 in 1993. It increased the transfer of gross sales from 4 percent to 6 percent	<p>-The implementing agency to invest 4 percent of gross energy sales annually to rural electrification (2 percent) and protection of natural resources in the watershed (2 percent).</p> <p>-Three percent goes to the watershed agency of the dam to fund watershed management activities working with basin communities.</p> <p>-Three percent goes to municipalities to finance infrastructure projects identified in municipal development plans, of which 1.5 percent goes to the municipalities that border the reservoir, and 1.5 percent goes to the municipalities in the watershed upstream of the dam reservoir.</p>
India	Approved in 2008, India's new hydropower policy	- requires an additional 1 percent free power over and above the 12 percent that will be earmarked for a local area development fund aimed at providing a regular stream of revenue for income generation, infrastructure creation, and welfare schemes in the affected areas. The national policy also mandates funding of 10 percent of the cost of setting up rural electricity distribution infrastructure around a certain area of the project.
Lao PDR	Specific revenue and expenditure management arrangements are set out in the project agreements in its largest hydropower project, Nam Theun 2. These provide a framework for the transfer of power revenues when Nam Theun 2 is commissioned.	(1) basic education; (2) basic health care; (3) rural roads; (4) local development initiatives identified through a participatory decision-making process; and (5) environmental protection initiatives.
Nepal	The Hydropower Development Policy includes the following provisions: A Rural Electricity Fund shall be established by pooling a certain percentage of the amount received as royalties.	-One percent of royalties obtained from hydropower projects shall be provided to village development committees directly affected by the hydropower projects.
Norway	Transfer of income to Municipalities where hydropower projects are located	<p>-Tax on profit: 28 percent, of which 20.75 percent goes to the state, 2.5 percent to the county, and 4.75 percent to the municipalities</p> <p>-Property tax: 0.7 percent of the market</p>

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		<p>value of the power installations</p> <ul style="list-style-type: none">-Resource tax: NKr 0.013 per KWh, of which NKr 0.011 goes to the municipalities and NKr 0.002 goes to the county-Fees: licensees pay up to 10 percent of electricity generation to local authorities.-Equity sharing: Municipalities have an equity share in the hydropower project, and receive benefits in the form of dividends.-Preferential electricity rates: This is for municipalities that host hydropower projects.-Business development fund: Municipalities are entitled to receive from the hydropower companies a non-recurrent amount to be used in a local area business development fund.
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Source: Wang (2012)

Public Participation

Public participation is the process of involving members of the local communities at various levels through consultation, negotiation, information sharing and gathering, shared decision-making and transfer of decision-making. A meaningful participation is normally accompanied by a genuine intention to allow participants to influence decision-making. Putting community aspirations into consideration by involving them in making key decisions about the project at an early stage and providing accurate information normally make benefit sharing acceptable and ensures sustainable development. Stakeholder Consultations and negotiations are key processes in preparation of resettlement Action Plans and the implementation of a successful benefit sharing arrangement (Downing 2002: 10). Dore and Lebel (2010:136) argue that gaining public acceptance includes aspects of both procedural and distributional justice through the inclusion of stakeholders and access to information, and facilitates consent. They proposed three principles for ensuring distributional justice. First, establishing a mechanism for benefit sharing between concerned stakeholders. Second, identifying and assessing risks to both stakeholders and the ecosystem. Third, ensuring that population has secure and continuous access to the natural resources, ecosystem and other services required to maintain a living. Bass et al. (1995) posit that achieving sustainable development would require a paradigm shift in the implementation of development projects in order to entrench participation in decision-making. They have noted that experience over the last decade has shown that projects which have created positive impacts on the lives of the local people are usually those which have gained the acceptance of civil societies and other stakeholders through processes of community participation. Participation brings considerable benefits in terms of improving the content of strategies and building the conditions necessary to facilitate effective project implementation. Participation brings technical expertise and practical experience to inform the planning process, enables the interests of different stakeholders to be identified and helps to build consensus. It also builds awareness and capacity, enhanced trust and collaboration, and generates motivation to put strategies into

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practice. Other benefits include a strengthening of community cohesion and possible avoidance of future conflict, and strengthening of government capacity for public consultation. Opening up a process to engage a broad cross-section of society has obvious cost implications more time and resources are needed to solicit and incorporate different perspectives. An effective participatory process requires management and secretarial support, as well as funding for consultations at National and Regional levels and for community participation. However, investing in participation is important to ensure that the adopted benefit sharing arrangement is effective and the benefits of participation can far outweigh the costs. More often than not, the gains of participation certainly outweighs the possible drawbacks or costs, such as the use of resources and donor funds. Access to public participation in decision making is one of the three pillars of environmental democracy established in the Aarhus Convention. The other two pillars are access to information and justice (United Nations Economic Commission for Europe 2019:5). World Commission on Dams (2000:7) noted that public involvement is necessary in the decision-making process in order to gain public acceptance. The Commission further pointed out that public participation, or the inclusion of stakeholders is highly important and can ensure that the rights and entitlements of rural communities and other vulnerable groups within society, who have hitherto tended to be most affected by dams are secured. Gaining public acceptance through various forms of public involvement is needed to explore and justify positive and negative impacts of dam projects. To this extent, the Commission also recommended the establishment of stakeholder forums to facilitate a democratic decision-making process and using independent, external dispute resolution organizations. The success and level of community participation depends on the extent to which views are taken on board in decision-making, the ability to reach consensus and make successful trade-offs where divergent interests are at stake, mechanisms used in involvement, the extent to which stakeholders have the information and capacity to participate and the stage in the project cycle at which inputs are sought.

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Stakeholder Engagement Typology

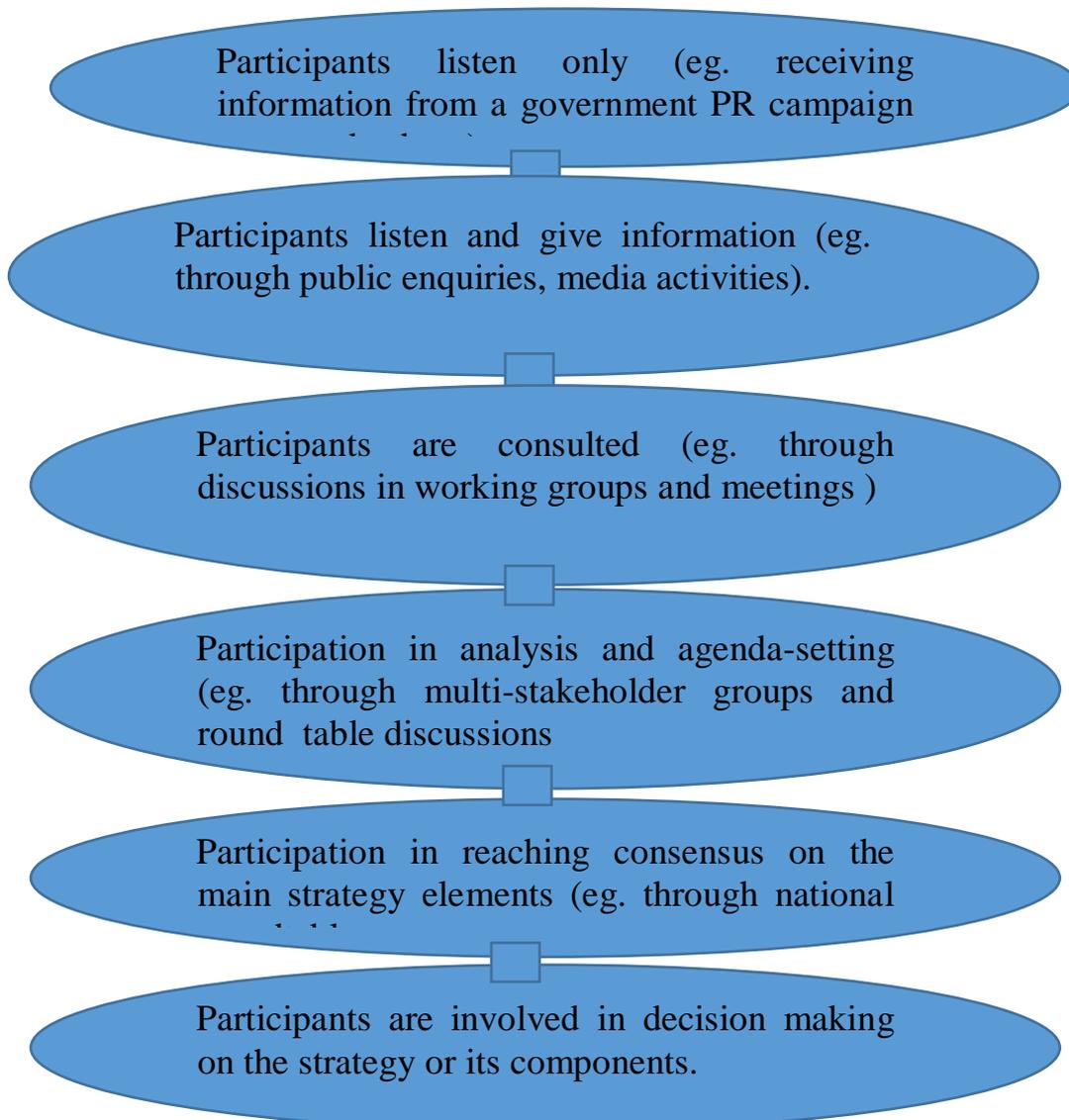


Fig.1: Stakeholder engagement typology: Source: adopted from Bass et al. 1995

Data Collection

Semi-structured interviews were the primary source of data collection. Random sampling was adopted in selection of study participants. Random sampling offers every case in the sample frame equal opportunity to be included in the study (Mugenda and Mugenda 1999, Barbour 2001; Creswell 2014). Purposive sampling was used to select 120 respondents drawn from among Project Affected Persons (PAPs). The sample included two categories of PAPs. The first category comprised PAPs who were affected partially by the reservoir and did not relocate as they still retained parts of their original parcels. The second category comprised PAPs who were resettled in two resettlement sites identified by the project. The main inclusion criteria were project affected persons. Key government officials and other project proponents were also interviewed alongside the PAPs. The lead author conducted 120 interviews during the two year study period from January 2017 to October 2019 with the PAPs. The interviews lasted between 30 to 45 minutes. Most of the participants were illiterate

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and an interpreter was recruited from the local community to support the research team. Most participants were peasant farmers who depended on parcels of land which were earmarked for dam construction for their livelihoods. Opinion leaders including elected members of the county assemblies, members of parliament, county governors, local chiefs and village elders were also interviewed as key informants. The researchers undertook systematic transect walks within the proposed dam reservoir areas at various dates during the study. This gave the researcher an opportunity to meet some of the PAPs who expressed their views with regard to the manner in which the entire resettlement process was executed to pave way for the construction of the dam. The collected data was recorded in note books. Extensive literature review preceded the field data collection. Review covered the existing legal frameworks on benefit sharing, information on the proposed dam and media reports on the dams. Participant observation was also used in the study. Participant observation as a method of data collection provides room for a better understanding of group dynamics and social interactions among participants (Vanderstoep and Johnston 2009).

Research Design

Exploratory and inductive approaches were adopted in the study. Creswell (2014) posits that exploratory methods give the researcher an opportunity to explore a wide range of issues under investigation. Qualitative case study of community engagement and legal provisions for benefit sharing was developed. The case focuses on the perspectives of project affected persons (PAPs). The world views of the indigenous communities were given due considerations because they are better placed to highlight the kind of benefits that may practically accrue to them by virtue of exploitation of their natural resources. Qualitative methods of data collection including; semi-structured interviews, participant observation, Key informant interviews, focus group discussions, document review and transect walk were applied in the study.

Analysis

The steps followed in data processing included reading, coding, displaying, reducing and interpreting. Audio-taped data from in-depth interviews, focus group discussions, key informant interviews and case narratives were transcribed, translated and coded. The process led to the identification of the emerging themes and labels were attached to the bulk of the data according to the themes. Data transcription and translation was undertaken concurrently with the process of data collection. This was done mostly in the evenings and during weekends in the researcher's hotel room and enabled the researcher to identify issues not properly covered in the data collection tools. The process also led to the identification of emerging issues and themes for further interrogation. Coding was performed inductively and revealed grounded themes and subthemes pertinent to each research objective (see Tables 2–3). Data from in-depth interviews, focus group discussions, key informant interviews, case narratives and direct observations were analyzed using ATLAS.ti. The software is used in the analysis of qualitative data. The transcribed data was stored in word document format and imported to the ATLAS.ti. The software simplified the process of data analysis by generating codes. Constant comparison method was used during the analysis.

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Research Findings

In 110 interviews (92%) participants reported that the government conducted proper surveys to identify and bring on board all the project affected families. To collect PAPs data, a census survey was carried out between 13th June 2009 and 20th June 2009 for Kabare and Baragwi locations. The survey process involved; acquiring location maps from the land survey office at Nyeri, updating the maps, preparing a list of plot numbers and obtaining names of owners from the land registry. Census processes entailed; preparation of census tools, conducting informative meetings and training of data collectors. Cut-off date notices were issued on 1st July, 2009. This implies that the census was to commence on 7th July in accordance with the provisions for a seven-day period after notice. At the request of the PAPs to have scheduled meeting with the local area Member of Parliament, Consultants, NIB staff and Provincial Administration, the commencement date was rescheduled to 14th July. During census, the enumerators were issued with location maps, and with assistance from village elders, they visited each affected parcel of land. On completion of the interview, each PAP was required to append their signature on the last page of the questionnaire, and provide a copy of his/her Identity Card for identification. In Kenya, the identity card (ID) is the most recognised and authentic national document of identification.

In one hundred and fifteen interviews (96%) participants confirmed that each and every Project Affected Person (PAP) was consulted and their views were incorporated into the project planning and execution. One key concern for the participants revolved around benefit sharing for the project. Involvement of stakeholders was a key aspect for the success of Thiba dam project. To achieve this, public participation forums were organized at strategic locations targeting stakeholders. The stakeholders included; the landowners, community groups, farmers, water users, institutions, and traders. Others were government officials from relevant government ministries namely local government, Ministry of Lands, Water, Environment, Health, Education, Planning, Agriculture and Community Development Trust Fund (CDTF), a development agency operating in the region and elected leaders. Key activities involved in public consultative meetings included carrying out; Consultation meeting with selected Government Officials such as departmental heads, provincial administration and Member of Parliament for Gichugu constituency, Rapid interviews within the reservoir area, Focus group discussions with key community representatives and Informative meeting with the PAPs. In one hundred and four (87 %) interviews, participants confirmed that they attended at least three public meetings where issues of benefit sharing was discussed. The summary of public consultative meetings is indicated in the table below.

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Table 3: Schedule for public consultative meetings conducted

NO	Area	Date of first meeting
1	Consultation meeting with selected Government Officials such as departmental heads, provincial administration and Member of Parliament for Gichugu constituency.	19 th and 20 th May 2009
2	Rapid interviews with land owners within reservoir area	9 th and 10 th June 2009
3	Focus group discussions with PAP representatives	14 th and 15 th July 2009
4	Informative meeting with the PAPs	26 th June 2009
5	1 st public consultation meeting for ESIA/RAP	2 nd and 3 rd July 2009
6	2 nd public consultation meeting for ESIA/RAP	14 th August 2009

Source: RAP report, 2009

In one hundred and seventeen (98 %) interviews, participants confirmed that public participation was conducted in the language they understand. Preparation of consultative meetings entailed selection of the appropriate venues, days and time as guided by the chiefs in the respective areas, writing notice in liaison with NIB headquarters and inviting the key stakeholders through the District Officers, chiefs and assistant chiefs. The letters were both in English and translated into Kiswahili language to enable the community members to read and understand. The chiefs were given the notice one week prior to the scheduled meetings to allow time for invitation. The notices were pinned at strategic points such as market places. The information was also disseminated through announcement in the churches within the project areas. During the meetings, discussions were conducted in the local language (Kikuyu) for understanding by the community members.

During the meeting on 9th October, a RAP hand out was provided to the participants. The hand out was in English to effectively capture the technical issues. However, discussions were conducted using the three languages namely, English, Kiswahili and the local language –Kikuyu. The PAPs were advised to read the hand-out further after the meeting so as to understand fully the contents of the hand-out with the help of members of the family or the chiefs who were well versed with both languages. Any concerns were later addressed in consultation with the Consultants. In one hundred and twelve (93%) interviews, the participants reported that the stakeholder engagement meeting enabled the PAPs to present their views regarding benefit sharing to the government. The major issues raised by the PAPs was that they wanted to share the benefit of irrigation water and to be resettled within the Kirinyaga County, preferable within the command area. The reports of public consultation meetings with details of the requirements which the government needed to fulfil in order to actualise benefit sharing for the project was presented to the Cabinet Minister in charge of Water and Irrigation. In 120 (100%) interviews, the participants confirmed that the PAPs clearly indicated their resettlement preferences in the census survey i.e. land for land or land for cash.

Compensation Preferences

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A total of 331 households opted for land-for-land compensation while 285 households opted for cash for land. A total of 120 households were resettled at Ahiti Ndomba while 211 were resettled at Gathigiriri. The Government expropriated 150 acres of land from Ahiti Ndomba Agricultural training Institute and 200 acres from Gathigiriri prisons which are both public institutions and handed over to the National Irrigation Board to resettle all the PAPs who had opted for land-for-land to actualise the agreement made between the PAPs and the Government.

Table 4: Compensation preferences for PAPs

Compensation Preferences	Total number of Households	Total Acreage
Land for land	331	239.75
Cash for land	285	327.46
Total	616	567.21

Source: RAP report, 2009

Resettlement sites

The government provided two resettlement sites which comprised two parcels of land hived off from Ahiti Ndomba Agricultural training Institute and Gathigiriri GK prisons which were both public institutions.

Ahiti Ndomba resettlement site

The site which covers 150 acres is located about 3.0 Km from Kutus town and was acquired by the GoK from Ahiti Ndomba Agriculture Training Institute. A total of 120 households were resettled here. The main activity around this site is crop farming and limited dairy farming. The site was observed to be well drained and linked to Kutus town by an all-weather marram access road. The main power lines are also within reach. The area was noted to be sparsely populated. The acquired land was generally bushy with only small portions under maize cultivation and about five acres under rice paddies. To actualize requirement for benefit sharing arrangement, the government designed and implemented irrigation water supply systems for the PAPs who were resettled here. The PAPs were also given extra land to boost their agricultural production. An acre of land taken at the reservoir area was exchanged for one and half an acre at the resettlement site. In fifty six (47%) interviews at this resettlement site, the participants confirmed that they were having access to irrigation water. They had planted various crops ranging from bananas, French beans among others. The benefit sharing for Thiba dam had become a reality to these PAPs.

Gathigiriri Resettlement Site

This site is located approximately 4 Km from Mwea town and is accessible through a tarmac road. The internal roads within the proposed settlement land are however not yet developed and most of the land is under cultivation. The site covers 200 acres and is part of the Mwea GK prison land that has been acquired by GoK for resettlement purposes. A total of 211 households were resettled here. Part of the land is well drained with a gently sloping terrain while a portion of the land is flat with black cotton soil and poor drainage. The portion on black cotton soil has been dedicated to farming activities. Like Ahiti Ndomba, an acre of land taken at the reservoir area was exchanged for one and half an acre at this resettlement site.

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Field observation revealed that irrigation system has been designed but water is yet to flow through the system. In forty two (35%) interviews with the PAPs confirmed that they were happy with the benefit sharing arrangement for the project which would allow them to use the irrigation water once the construction of the dam is complete. Unlike Ahiti Ndomba whose intake has been constructed in a different river, the PAPs here will wait for the dam construction to be completed before they can irrigate their farms.

Discussion

One of the outcome of this study is an acknowledgement by majority of the participants that proper benefit sharing mechanisms has the potential of cushioning them from the risk of pauperization. The sharing of project benefits is today considered by a number of countries as an alternative financial instrument to secure the resources to be invested in reconstruction post-displacement. The principle of need requires that the benefits from the natural resources are distributed based upon the needs of the community which is targeted (Söderholm and Nanna 2014). Cernea (2008, p.94) contends that resources generated from the very projects which causes displacement can be very well be channeled towards financing benefit sharing arrangement and address the bottleneck of resource constraints. The PAPs were given two options for compensation which included land for land or cash for land options. A section of PAPs who chose land for land were resettled within the command area. This was made possible due to the availability of public land within the command area.

The Project Affected Persons (PAPs) who were settled here will share the project benefits as they shall be entitled to irrigation water once the dam is complete. Similarly, the International Water Management Institute (2007:16) reported that one of the most promising means for raising the living standards of rural river communities is through investment in improved, low-technology irrigation opportunities). Enhancing downstream agricultural economies can generate a multiplier effect, spurring other aspects of the local economy such as agro-industry, non-farm enterprises and rural towns with associated employment generation. The spread of a number of affordable irrigation technologies for small farms, such as treadle pumps, have raised living standards in rural parts of Bangladesh, sub-Saharan Africa, and elsewhere (Polak, 2008:5; Postel 1999:12).

There is no legislation which compels the government to provide land to the Project Affected Persons (PAPs) within the command area. Cernea (2008:92) posit that enabling people displaced by dam projects to get land in the irrigation area is a noble practice but is currently only applied selectively in some parts of the world. He noted that the government of India enacted a legislation making it legally enforceable to redistribute land in the command area. Provision of irrigation water to dry lands which previously relied on rain-fed farming has been found to enhance the production in such lands.

Conclusion and Recommendations

Currently, benefit sharing legislation available in Kenya addresses benefit sharing in the oil and gas sector but should be streamlined to be applicable in other sectors and more so the irrigation sector. Legislations are required to enable redistribution and land readjustment in the command areas to enable the people who are displaced at the reservoir to get farmland within the command areas. Such agreements should be secured before the commencement of implementation of reservoir projects. The first important step in advancing the interests of the local communities is the need to provide financial and technical resources as well as political support to enhance stakeholder participation in irrigation projects. Benefit sharing

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arrangements should be negotiated in transparent manner by creating more opportunities for meaningful participation. Accurate baseline information is critical in the identification of key stakeholders. The involvement stakeholders such as civil societies may enhance public participation and contribute to recognition locally relevant opportunities and allow for equitable distribution of benefits. This would promote the process of determination and agreement on benefit sharing opportunities which is practically possible to be implemented in various projects. Finally, this study has revealed that sustainable benefit sharing arrangement can be negotiated and agreed upon between the project developers and the local community and be implemented successfully even in the absent of enabling legal frameworks. Whilst enabling legal frameworks are necessary, local communities need not to be denied the opportunity to share benefits especially in instances where no legal framework for benefit sharing exist. Thiba dam project was implemented successfully because both the government and the land owners engaged in meaningful discussions which lead to the identification of appropriate benefits streams suitable for the local communities who offered their land for the construction of the dam.

The study recommends that there is need to:

1. Have legislation on benefiting sharing for people displaced by large infrastructure projects in Kenya.
2. Put in place a legal framework for stakeholder consultation and consensus building between project proponents and the land owners
3. Enact legislation to provide for land readjustment downstream or irrigation command areas to enable persons displaced by irrigation dams to share the benefits of dam water.

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