

Analyzing the Relevance of VRA Resettlement Trust Fund as a Benefit Sharing Mechanism

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Received: March 14, 2018

Accepted: May 22, 2018

Online Published: July 29, 2018

doi:10.5539/jsd.v11n4p99

URL: <https://doi.org/10.5539/jsd.v11n4p99>

Abstract

The Volta River Authority Resettlement Trust Fund (VRA RTF) was established by the Ghanaian Government, with some threshold of assistance from the VRA outfit. More than thirty years after the dam's construction project got its finality, a scheme was subsequently introduced to ensure that earnings emanating from the dam's activities would be of immense relevance to the deranged folks by providing socio-economic amenities like water and sanitation, infrastructural developmental projects among others. However, financing deficiencies appear to be an indispensable and integral setback as far as the pursuance of the Trust's mission is concerned. The study set out to analyze the relevance of VRA RTF as a benefit sharing mechanism in Ghana, specifically, using the employees of VRA RTF in conjunction with the resettlers belonging to Senchi Ferry Township (VRATFCs). Among other objectives, the study determined the distinctive relevance of RTFs to affected individuals, identified the key monetary and non-monetary benefit sharing mechanisms (BSMs) adopted by project developers for displaced individuals, in addition to the critical challenges confronting the smooth functioning of RTFs in Ghana. Both qualitative and quantitative methods of research were adopted for the study. Convenience sampling using questionnaire instrumentation was used to collect data from the staff of VRA RTF and chosen Senchi Ferry Township resettlers. A 5-Point Likert scale which was later fine-tuned into the Relative Importance Index (RII), SPSS Version 22.0 and Microsoft Excel were used for the data analysis. The results indicated the 6 distinctive relevance of RTFs at VRATFCs as water and sanitation, educational enhancement, health improvement, improvement of agricultural projects, community development via socio-cultural activities. To add to this, the 5 key monetary and non-monetary benefit sharing mechanisms as revealed by the participants' were as follows: revenue sharing, development funds, property taxes, equity sharing as well as livelihood and restoration enhancement. More so, with reference to the critical challenges confronting the smooth functioning of RTFs at VRATFCs, 6 bottlenecks realized were as follows: improper costing of relocation packages (ineffective budgeting), inadequate compensation of displaced individuals, inactive involvement of the displaced individuals in the decision making process, insufficient grant allocation to the fund, clarity of rules and policies relating to fund disbursement, vis-à-vis questionable timing of the resettlement processes. It is recommended that the management of VRA RTF, well-informed resettlers and policy-makers at VRATFCs in Ghana and beyond strictly adhere to the establishment of project specific development funds, accountability and transparency regimes, active involvement of resettlers in the decision making process, increment of grant to the RTF, adequate compensation of displaced individuals, effective costing of relocation packages. These strategic initiatives will inadvertently go a long way to manage the issues identified during the study.

Keywords: relevance, VRA, trust fund, benefit, sharing mechanism

1. Introduction

1.1 Background of the Study

Albeit the environmental consequences are an indispensable issue of grave concern encompassing the establishment of cutting edge dams, the communal and health implications specifically expatriation questions are the recent impacts that troubled individuals (AP) are confronted with even before dam construction gets to its finality stage (Duvail & Hamerlynck, 2003; Raschid-Sally, Akoto-Danso, Kalitsi, Ofori & Koranteng, 2008).

From Ghanaian historical perspective, the construction of dam for irrigation and hydropower could be traced back to the early sixties with quite a sizable plethora of dams being built purposely for irrigation of arable lands. That notwithstanding, it was not until the construction of the Akosombo Dam cited on the Volta River (VR) that the bottlenecks associated with expatriation cropped up. With a planned capacity of 960MW, being augmented to 1020MW after retrofitting, the project provides substantial national benefits in terms of fishing, irrigation for farming, inland water transport, and tourism among others. Unfortunately, the dam required resettlement of 80,000 persons and inundated a total land size of 8, 502 Km², and contemporarily, five decades after the construction, there is still deficits relating to an absolute and pragmatic resolution of the crippling effects emanating from this incessant and debilitating resettlement enigma (Raschid-Sally, Akoto-Danso, Kalitsi, Ofori & Koranteng, 2008).

Furthermore, codes pertaining to commitment and participation of the populace afflicted by mega dam constructional projects have withstood an instrumental evolutionary processes over the past few decades. According to the World Commission on Dams submission (2000), forty to eighty million individuals have been deranged by dams across the nooks and crannies of the globe during the twentieth century. From the historical perspective, connoisseurs of hydropower endeavours gave minimal precedence to the negative implications inflicted on those troubled populace and to the surrounding frontiers. Indemnity for the evacuation of indigenes and compromise of human sustenance, and strategic interventions to curtail the damage caused to the environment, was more often than not insufficient or preferably vacuous, prompting the commission to postulate that dams have made a significant addition to the advancement of humankind, coupled with the advantages obtained from them have been appreciable (WCD, 2000a). That notwithstanding, pertaining to myriads of scenarios, an unwarranted and often irrelevant tariff has been reimbursed in order to lay hands on the gains, specifically with respect to communal and environmental perspective, by individuals deranged by expatriation just to mention a few (Skinner, Krauss & Newborne, 2014).

To add to this, indigenous demands were too often relegated to the background, or subordinated to national development priorities. The WCD assertion triggered critical argument and came out with a phenomenal code movement. Pertaining to the 5th of 7 WCD “Strategic Priorities, instead of deranging indigenes from their lands and sustenance without recourse to any control over other options (WCD, 2000a). In effect, the project developers were encouraged to see to it that negatively deranged populace are recognised as pacesetters (1st) within the project beneficiaries and that symbiotically-acknowledged and lawfully binding benefit-sharing mechanisms (BSMs) are deliberated upon to ensure effectuation (Skinner et al. 2014). The WCD report emphasised that the troubled populace had an obligation to get involve completely in the indemnity means of labelling/extenuation and befitting advancement initiatives (WCD, 2000a).

One pivotal dimension of hydro-electric project at Akosombo effectuated during the early parts of 1960s was the expatriation of approximately eighty thousand folks whose households were dislocated owing to the lake formation, in consonance with the dam construction. The standard of living in connection with the inhabitants of the fifty-two re-establishment townships erected had been an agitation precursor to successive Ghanaian governments. In its quest to decimate their predicament, Volta River Authority, in association with the Ghanaian Government in 1996 came to a consensus to establish a fund with significant addition emanating from VRA to embark upon projects with the rationale of reaching out to the resettlement townships’ benefits, popularly referred to as the “VRA Resettlement Trust Fund (RTF). The projects include: (a) Improvement projects that are environmentally-oriented; (b) Welfare projects that are communal-based; just to mention a few. In view of this, VRA allocates 500,000.00 US dollars to be shared among the fifty-two expatriation townships to be spent on advancement projects of their own preference. To this effect, Town Development Committees (TDC) have been established in all the townships to accord the necessary precedence to community projects for effectuation (VRA Manual, 2014).

That notwithstanding, from the African perspective, there exist a dimension in sovereignty and societal deficit to ensure adherence to explicit codes, and less stimuli, beyond the universal impression of obligation to pay back, through expatriation for corporate entities to reach out to their corporate social responsibilities. Oversight roles’ proportion enhancement, coming out with privileges from the sectoral perspective to advocate for a mutual consideration to correspond with African happenings are significant assignments to be effectuated in order to fortify the non-public precinct’s significant addition to Africa’s advancement (Tetteh, 2012; USAID, 2014).

However, as a result of the incessant enigmas underpinning the construction of dams, specifically the mega types, stiffer adversarial antics to dams surge and became pronounced as dam construction experienced an astronomic and meteoric rise after the nineteen fifties (WCD, 2000). From the general perspective, such turmoil and objections have been formed by dam-deranged localities, environmentalists, non-governmental organizations, in

addition to the society. These turmoil specifically the one emanating from the construction of the Akosombo Hydroelectric Dam yielded dividend when in 1995, and invariably culminated into the setting up of a special fund dubbed “RTF” mentioned earlier (Kyei-Dompreh, 2012; Tetteh, 2012; Mettle, 2011).

The ultimate rationale for the creation of the VRA RTF is to significantly beef up the quality of life enhancement that pertains to the fifty-two resettlement communities through the execution of projects that are socio-economically affiliated projects like the provision of infrastructural facilities among others. Regardless, there exist a glaring distinction between “TF” that creates dependency and one that develops a community or region in a sustainable way through development. The challenge for some corporate entities therefore is to develop “TF” strategic intervention mechanisms that maintain good will for the entity and address the perpetual developmental needs of communities in a benefit-sharing mode and sustainable way, without creating a culture of dependency (Tetteh, 2012; Skinner et al. 2014).

Consequently, the paper in contention sets out to determine the distinctive relevance of resettlement trust funds on affected individuals, identify the key monetary and non-monetary benefit-sharing mechanisms adopted by project developers for displaced individuals, in addition to investigating the critical challenges bedeviling the smooth functioning of resettlement trust funds in Ghana, with a vivid reliance on the Volta River Authority (VRA) resettlement Trust Fund (RTF).

1.2 Problem Statement

The pivotal rationale of dams’ construction is to stimulate on one hand, economic development and subsequently promote social welfare on the other. Albeit, conventional dam advancement strides have culminated into the subjugation (background relegation) of immemorial communities and cultures culminating in broadening poverty arroyos. The VRA Resettlement Trust Fund was set up to address some perennial problems such as inaccessibility to potable drinking water, high illiteracy rate, and insufficient accessibility to healthcare and poor sanitation. The mindboggling question however is; several decades on, has the fund been able to address the various challenges faced by the communities? What has been the level of the community participation in the administration of the fund? Whether the fund is actually been relied upon as a benefit sharing mechanism among others (Tetteh, 2012).

Dam-afflicted individuals are saddled with the enormous hazards of the building of dam in view of the fact that they are always relegated to the background as far as the decision making processes underpinning expatriation, questionable benefit sharing mechanism plan, needs assessment and available options as per the assertion of WCD (2000). The navigating dictum encompassing the conventional codes for expatriation of the GOG is based is on the premise that no individual should be made to fall into the poverty-stricken zone as a result of the effectuation of projects that are state-owned, specifically, the construction of large dams like Akosombo. Thus, the pivotal goals underpinning indemnity are spelt out as below:

- Reinstatement of property deficits;
- Rejuvenate and augment the sustenance of deranged individuals through the allocation of lands suitable for arable (agric) productivity;
- Make certain deranged individual’s optimum activities like education, as well as health are accessible;
- Make certain less interruptions regarding their communal configuration and subsequent provide assistance to them to enhance their feasible communal interrelationships;
- Make certain deranged folks distribute sufficiently in gains emanating from the projects (benefit sharing mechanisms) (Tetteh, 2012; Skinny et al. 2014).

The intriguing query here is “how these praiseworthy thoughts do alter into action and whether there is sufficient space for advancement?” Pertaining to the Akosombo and Kpong projects, unflinching strides were made to attain the 1st three rationales specifically, reinstatement of vanished properties, sustenance optimization, in addition to providing pivotal serviceabilities cited above. That notwithstanding, the same precedence were not accorded to the last 2 objectives, captioned “minimum disruption in their social organization” and “adequate sharing in project benefits” (Kalitsi, 2008; Raschid, Akoto-Danso, Kalitsi, Ofori & Koranteng, 2008). Among the articles search for past studies that pertains to resettlement in developing economies such as Ghana, none of the studies have been conducted on the relationship between VRA RTF’s relevance and its benefit sharing mechanism in Ghana.

Past research works that pertains to conducting analysis on the significance of VRA RTF in consonance with its benefit sharing mechanism between authorities and affected individuals in Ghana, appears to be non-existent,

unexploited and under-researched. Strictly speaking, research works that seeks to probe into a thorough analysis underpinning VRA RTF's relevance that can be used as a mechanism or tool for benefit sharing in Ghana seemed to be a mirage and out-of-coverage area. Put simply, previous research works that seeks to determine the distinctive relevance of resettlement trust funds to affected individuals, identify the key monetary and non-monetary benefit-sharing mechanisms adopted by project developers for displaced individuals, and investigate the critical challenges confronting the smooth functioning of resettlement trust funds as well as proffering remedies to manage the drawbacks appears non-existent and far-fetched.

Furthermore, as ascribed to a thorough appraisal of related literature on resettlement funds suggest myriads of research projects embarked upon by the likes of Mettle (2011), Adu-Gyamfi (2015), and De Wet (2006) among others that relates to resettlements across the globe but absolutely not the topic under scrutiny. However, the researcher's chosen topic is yet to be extensively subjected to any rigorous empirical assessment especially in many developing countries including Ghana (a void or research gap that needs to be filled).

It is against this backdrop that the researcher seeks to determine the distinctive relevance of resettlement trust funds to affected individuals, identify the key monetary and non-monetary benefit-sharing mechanisms adopted by project developers for displaced individuals, vis-à-vis a thorough investigation into the critical challenges confronting the smooth functioning of resettlement trust funds in Ghana, with entrenched emphasis on VRA RTF as the case in point.

1.3 Aims and Objectives of the Study

The aim of this study is to analyze the relevance of VRA resettlement trust fund (RTF) as a benefit sharing mechanism in Ghana, specifically using VRA RTF as the case study organization. The specific objectives are:

- 1) To determine the distinctive relevance of resettlement trust funds to affected individuals in Ghana.
- 2) To identify the key monetary and non-monetary benefit-sharing mechanisms adopted by project developers for displaced individuals in Ghana.
- 3) To investigate the critical challenges confronting the smooth functioning of resettlement trust funds in Ghana.
- 4) To propose remedies that could be employed to manage the critical challenges confronting the smooth functioning of resettlement trust funds in Ghana.

1.4 Research Questions

Arising from the problem statement, the under-listed research questions are of immense relevance to the study:

- 1) What are the distinctive relevance of resettlement trust funds to affected individuals in Ghana?
- 2) What are the key monetary and non-monetary benefit-sharing mechanisms adopted by project developers for displaced individuals in Ghana?
- 3) What are the critical challenges confronting the smooth functioning of resettlement trust funds in Ghana?
- 4) What remedies should be put in place to manage the critical challenges confronting the smooth functioning of resettlement trust funds in Ghana?

1.5 Significance of the Study

This study is effectuated on the premise that it would render some vital empirical information on the nature, type of resettlement trust funds that pertains to Ghana and beyond, in addition to the benefit sharing mechanisms with its associated challenges bedeviling its efficient functioning of processes, systems among others. The reasons for these lapses will be documented to provide future guidelines for project developers, displaced individuals, communities emanating from dam's construction, etc.

With particular reference to the VRA RTF's Deed, the fund exists to embellish the living standards quality of the fifty-two resettlement communities through the execution of social and economic endeavours like water and sanitation, education (human development), health infrastructure refurbishment, electrification enhancement, improvement in agricultural projects, etc. It is an undeniable truth the use of resettlement fund has more often than not being plagued with myriads of encumbrances and inadvertently, woefully failed to live up to its billing per the researcher's opinion in consonance with the submissions of Cernea (2004), in addition to Fahim (1983).

Strategic intervention mechanisms could be devised to curtail incessant gaps or excesses associated with resettlement trust funds as well as benefit sharing mechanisms so as to put perpetual smiles on the faces on most

affected or displaced individuals relating to dams' construction and other development projects geared towards enhancing sustainable development in Ghana.

In view of this, the findings of this research will invariably assist fund's administrators to judiciously manage it and subsequently channel it to where it's needed the most and also improve upon the structural frameworks put in place with respect to modernisation to suit prevailing situations. The study has the propensity to excavate and bring to the fore, opportunities and challenges bedevilling the VRA Resettlement Trust Fund. More so, the revelations and remedies proffered encompassing the study will invariably expose gaps that would require further investigation. The study will also contribute to existing body of knowledge with respect to the topic under scrutiny.

1.6 Scope of the Study

This research, like any other, had limitations in its conduct and scope. It was limited to Volta River Authority (VRA). The research conclusions are therefore based on findings from some employees at VRA Resettlement Trust Fund (RTF) and some selected displaced individuals due to dam's construction in Akosombo and not the entire country, specifically, localities where dam construction has taken place in Ghana.

1.7 Organization and Structure of the Study

The research paper is divided into 5 chapters. Chapter one of the study epitomizes an overview of the research and capture domains like the research background, the statement of problem, and aim and objectives, study relevance via the ambit and constraints of the study. Furthermore, Chapter two comprehensively talks about the extant literatures of the topic in contention and subsequently makes a premeditated and calculated endeavours to elucidate the theoretical and empirical schemas with respect to the topic under scrutiny. Reference to findings in erstwhile compositions as well as the modus operandi opted for in arriving at such fact findings and upshots are also deliberated on. Chapter three addresses the techniques that is embraced in executed this circumstantial piece of research. The research motif and techniques utilized for data gathering as well as the researcher's logical proposition for abridging, examining and translating the data gathered not losing sight of its reliability and validity as well as ethical consideration. Chapter four accentuates on the research findings. Data would be analysed and discussed through the effective utilization of the analytical and statistical accoutrements enumerated in the methodology above. The synopsis and characterization of the data gathered as well as the first-hand surveillances from the cross-sectioned interview and questionnaire data are deliberated upon. Chapter presents a synopsis of the fact findings of the research for conclusions and policy recommendations. More significantly, an unflinching attempt is made to advance pivotal suggestions that are expected to shape both metropolitan and non-public sector codes initiatives on the relevance of VRA RTF as a benefit sharing mechanism in Ghana.

2. Literature Review

2.1 Introduction

This section focuses on the discussion of key theoretical and empirical developments relating to resettlement trust funds (RTFs) and benefit sharing mechanisms (BSMs) in Ghana and beyond.

2.2 Concept and Definition of Resettlement

De Wet (2006), a renowned Anthropologist defined resettlement as a scenario in which (a) an advancement control initiative, like dam erection occurs; (b) folk inhabiting the dam's pathway are evacuated, or permitted to relocate voluntarily; (c) contingency plans are put in place in the form of house provision, new lands allocation just to mention a few. He further distinguished expatriation (resettlement) from other types like straightforward evacuation from a locality, or folks being moved from one geographical precinct to another locality, devoid of contingency put in place for them should the unexpected occur. De Wet (2006) submits that expatriation involves derangement, with the view that individuals are restricted to locomote, whereas derangement encompasses the trial to reinvigorate the deranged individuals, and to indemnify them for the excesses associated with the dislocation emanating from dam construction.

2.3 Concept and Meaning of Benefit Sharing Mechanism

Egré (2007), as captured in the UNEP 2007 Compendium publication defines mechanism of benefit sharing as mechanisms directing partially or complete earnings or gains to project-afflicted populace due to dam's construction, be a representative of dam-troubled populace faction to the fiscal rents that dams regularly create, with the propensity to set up a collaboration with indigenous populace or develop a perpetual fund for monetary advancement (Egré, 2007). The document effectively applies the afore-mentioned 5 segments as contained in the

UNEP 2007 Compendium as: (a) sharing of economic gains; (b) proceeds for advancement; (c) distribution of equity or absolute proprietary rights; (d) Provincial or indigenous authority taxes; (e) advantageous electricity tariffs, including miscellaneous water-oriented tariffs (Egre, 2007; Egre, Roquet & Durocher, 2002; Skinner, Niasse & Haas, 2009; Skinner et al. 2014).

2.4 Analysis of Benefit-Sharing Mechanisms (BSM) Procedures

The next subsection touches on the pivotal approaches to the sharing of benefits accrued from resettlement schemes that pertains to large dam’s construction, specifically, resettlement trust funds across the rank and file of the globe:

2.4.1 Approaches to Analysis

Contemporarily, quite a sizable plethora of approaches have been formulated to facilitate the analysis and classification of initiatives advocating for DDIs deranged by mega dam constructional endeavours. This section illuminates on designations propounded by notable thespians and expositors among others. It then proceeds to proffer a straightforward characterization of measures advantageous and tilted towards dam displaced individuals (DDI) (WCD, 2000a).

2.4.2 WCD’s System of Classification

The WCD system of designations (refer to table 1 below) brings out the disparities between rectification (indemnity) strategies geared towards the development of favourable deficits experienced by DDI (WCD, 2000a), moderating for property deficits or diminished accessibility to natural resources owing to dam erection just to mention a few.

Table 1. Project’s fund sources (PFSs)

No	Project’s Fund Sources
1	The WCD report spells out the disparities existing between 6 project gains’ origin
2(a)	Earnings relating to projects like profit sharing (%), nobilities and the like
3(b)	Benefit that pertains to projects, like permission to agricultural that have been irrigated
4(c)	Constructional projects, in addition to operation-oriented types like constructional employment regimes
5(d)	Resources-related, like advantageous accessibility to catchment natural resources and the like
6(e)	Provincial serviceability-oriented endeavours like enhanced health status, education, road constructional project just to mention a few
7(f)	Domestic-inclined projects, like skills mentoring, interest liberal credits for fiscal operations

Source: WCD (2000a)

Box 1. Sources of project benefits, according to the WCDSource: 2000a:3

2.5 Akosombo Dam in Perspective

The Akosombo dam (AD), with a hydroelectric power generation capacity of one thousand and thirty-eight megawatts was built by the VRA on the Volta River in Ghana close to sixty years ago culminated into the displacement of eighty thousand folks (Skinner et al. 2009). At the time of its completion, in 1965, AD was not yet an international practice to

The forethought underpinning agreement (give and take) between state advancement precedence, like the generation of electric power, and socio-economic demerits to the folks troubled by dam erection.

2.6 Volta River Authority Resettlement Trust Fund (VRA RTF)

VRA RTF was inaugurated in nineteen ninety-six by the Ghanaian state and the VRA as per the assertion of VRA RTF in 2006. Approximately three decades after the dam construction was consummated, a mechanism was put in place to ensure that gains emanating from the Akosombo dam’s activities would be of immense benefit to the populace plagued by the dam’s erection and routines. The outfit in contention is controlled by a particular trustees’ board and its pivotal rationale is to financially cater for advancement endeavours encompassing the fifty-two expatriation municipalities (JVE, 2011). On a yearly basis, the RTF is entitle to

receive the Ghana Cedi equivalent of 500,000 US dollars from the VRA. The cash reserves are disbursed in tandem with specified set of nitty-gritty sustenance requirements, including schooling, among others stipulated by provinces under the auspices of the District Assemblies and approved by the Board (VRA RTF, 2005).

RTF legal documentation makes provision for the under-listed board of trustees' members: (a) Prolocutor chosen by the minister in charge of energy; (b) Ten affiliates belonging to the Ghanaian Parliament from troubled constituencies covering the four regions of Ghana; (c) 2 VRA delegates; (d) 3 councillors affiliated to the energy ministry; and (e) 1 fiduciary selected by the energy minister (VRA RTF, 2005).

2.7 BSM Calculation Basis

A specified amount of cash reserve is doled out to each of the fifty-two expatriation municipalities. The cash reserve per municipality is computed reliant on a method that take cognizance of indigenes' deranged population dynamics, magnitude and prevailing conveniences', irrespective of the fact that there have been myriads of dissatisfactions (castigations) pertaining to this scenario with the passage of time, which RTF has been triggered to provide a long lasting panacea to varying threshold (VRA RTF, 2005). From an equal measure perspective, the expatriation localities have envisaged some threshold of native and constitutional argy-bargies, entrenched in problems pertaining to land rectification and bickering between anchor localities and re-locators (VRA RTF, 2006, 2007), which makes administration extremely arduous. The yearly monetary significant addition from the VRA comprises the integral monetary source, but the trustees, in tandem with the RTF's legal documentation, may hanker after miscellaneous funding sources, like significant additions from NGOs, in addition to investment gains (VRA RTF, 2005).

2.8 RTF's Relevance

VRA RTF's pivotal rationale is to provide superior quality water to all communities, with the outfit been part of the Ghana Coalition of NGOs that pertains to Water and Sanitation about a decade and half years ago and publicizing alliances with the Community Water and Sanitation Agency (CWSA), together with DANIDA in the years spanning between 2005 and 2009 (VRA RTF, 2005, 2006, 2007, 2008 & 2009). Reiterative antecedences points to the basic necessities like health optimization, enhanced sanitary regimes, education, in addition to electricity supply improvement, with the initial stage of ensuring that all fifty-two municipalities gets connected to electricity in year 2003, but inadvertently, its advancement was saddled with the excesses relating to the ministerial reshuffling as postulated by VRA RTF (2006), (2008) as well as (2009) accordingly. The outfit in contention has also assisted in procuring 5 tractors demanded by the localities to boost agric-oriented projects' productive capacity levels, in association with the localities, via municipal outfits as far as decision making is concerned (VRA RTF, 2006). The 2007 yearly documentation introduced a cutting edge 'nitty-gritty requirements strategy, giving precedence to the afore-mentioned infrastructural projects, with a focus on kindergarten schooling (VRA RTF, 2008). This presupposes that, even three decades after the commencement of the dam's operation, its expatriation localities have a striking need for such bitty-gritty infrastructural facilities mentioned earlier (VRA RTF, 2009, 2010, 2011).

The figure 1 below epitomizes the projects which, per the appendices of the VRA RTF's reports generated on a yearly basis, obtained monetary support spanning between 2004 and 2010 (VRA RTF, 2005–2011). The rectangular diagrams highlighted red connotes the absolute amount expended, whereas the blue line represents the projects summation buttressed as per the yearly documentation appendices within the respective year. The figures for the respective years in tandem with the Ghanaian currency's devaluation exercise that took place in 2007 have been changed into the Ghana Cedis so as to boost flexibility and easiness with respect to comparability:

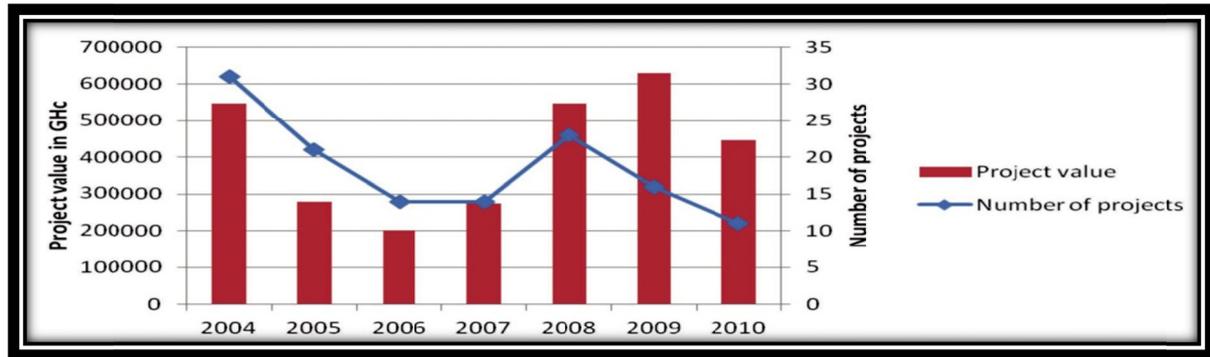


Figure 1. Projects Financed (Value) by VRA RTF 2004–2010

Source: Skinner et al. 2014

Figure 2 cited below depicts a meagre propensity to extend a helping hand to smaller number of projects over a specified time period. The outlays differ immensely, which may be attributed to the discrepancies that pertains to financial backing emanating from VRA, in addition to return on equity in dissimilar years. The reports spanning between 2004, and 2006 attested VRA outfit’s indebtedness covering erstwhile and contemporary years’ significant additions (VRA RTF 2005, 2006, 2007). The yearly report of 2008 postulated water deficits subsequently having its unfavourable toll on profits emanating from power generation reduction (diminishing returns) (VRA RTF, 2009).

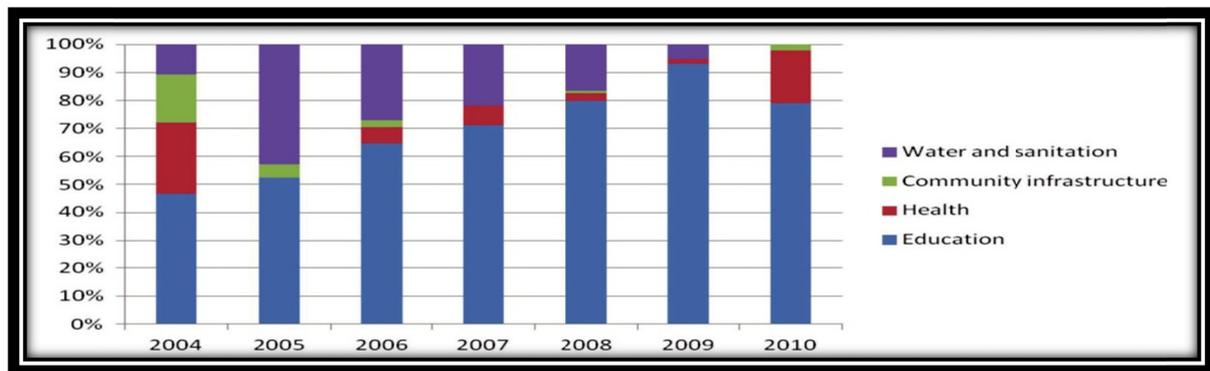


Figure 2. Monetary Amounts Dedicated to Each Project Type Annually as % of the Overall Funding Spent on Projects Financed by VRA RTF, 2004–2010

Source: Skinner et al. (2014)

2.9 Key Benefit-Sharing Mechanisms across the Globe

This subsection underpins key benefit sharing mechanisms adopted by myriads of economies worldwide:

2.9.1 UNEP Compendium

Developing a three-fold disparity between in-kind and monetary (fiscal) compensation (rectification), fiscal benefit-sharing (MBS) and non-fiscal benefit-sharing (NMBS), UNEP Compendium (2007) proposed 3 non-fiscal mechanisms, namely: (a) Sustenance rejuvenation and improvement; (b) Locality advancement; (b) Embellishment of catchment frontiers; as well as five fiscal MBS, listed as: (a) Sharing of profit margins; (b) Advancement cash reserves; (c) Distribution of equity; (d) Taxes relating property; and (e) Preferred electrification tariffs (Egre et al. 2002; UNEP, 2007).

It is worth noting that the second constructs that pertains to NMBS afore-cited is synonymous to Egre and his colleagues (2007) designations. More so, the disparity existing between “MBSs” and NMBSs will sometimes be fraught with clarity issues. For instance, while favoured electricity charges relates to minimal funds for dam operatives, and pardonable costs that pertains to enjoyers (Egré, 2007), since there are usually no direct capital outlays to localities or folks, the schemes seems to tilted towards NMBS granting preferential accessibility to natural resources. Moreover, “NMBS” encompasses some threshold of impartiality towards end-users with

excessive need, drawing maximum gains due to their exorbitant utilization thresholds.

The tables below (2) and (3) below presents a summary of BSMs Operations in Africa, vis-à-vis Asia, Americas/Europe respectively:

Table 2. Summary of benefit-sharing mechanisms (BSMs) in operation (Africa)

Project/Country	Benefit-Sharing Mechanism	Governance	Volume of Benefits/Number of Persons Resettled	Activities to be Funded
Akosombo, Ghana	VRA Resettlement Trust Fund (the 'VRA RTF')	Trust Fund, composed of Members of Parliament from affected constituencies, representatives of Ministry of Energy, representatives from VRA	US\$ 500,000 per annum (p.a.) 80,000 people, 52 resettlement townships	Basic needs', Education, water and sanitation, health; community infrastructure
Sélingué, Mali	60% of royalties to be passed on to the municipality; 40% to province and region	By local elected municipality as part of their budgetary process.	US\$ 662,500 (2005 Purchasing Power Parity (PPP) p.a. – 12,490	As per annual Municipal budget
LHDA, Lesotho	Lesotho Highlands Revenue Fund – LHRF; Lesotho Fund for Community Development-Lesotho Fund for Community Development (LFCD)	Since, 1996, sales revenue for water/ electricity paid to LHRF (until 1999), then LFCD. Board composed of Ministers. 2 local community positions not appointed	2000-2005: US\$ 41.3m (200 PPP)	Rural Infrastructure, Conservation, Education, Water and sanitation, Public health livelihoods
Kompienga, Burkina Faso	A fixed tax on infrastructure value paid to provincial/ municipal government	Local elected municipality	US\$ 454,000 (2005 PPP) -1,562	As per annual Municipal budget
Bagré, Burkina Faso	A fixed tax on infrastructure value paid to Bagré municipality	Local elected municipality	US\$ 225,000 (2005 PPP) p.a. – 618	As per annual Municipal budget

Source: Skinner et al. (2014)

Table 3. Summary of benefit-sharing mechanisms in operation (Asia, Americas/Europe)

Project/Country	Benefit-Sharing Mechanism	Governance	Volume of Benefits/Number of Persons Resettled	Activities to be Funded
Makawanpur, Nepal	Nobility disbursed to state threshold by HP operatives on HP retailing, re-dispensed to indigenous or municipal stage	Strategically handled by district advancement body; disbursed to upstream, downstream and infrastructure troubled localities	US\$ 1.43m (2005 PPP) (= 12% of royalty paid to District Development Committee (DDC) (Nepal), 65% of DDC budget 2001/02)	Social mobilisation and poverty reduction, Conservation, Rural electrification, Infrastructure, Human resource and institutional development
Columbia Basin Trust, Canada (Eastmain/Rupert)	Trust Fund specific to Columbia basin hydropower projects, from revenues, Equity sharing	Board of Directors constituted by basin residents. Approval committee, consulting advisory committees comprising members of public with	US\$ 244m (PPP 2005) initial endowment (=5% of downstream benefits) – 2,300 people displaced through flooding	Environmental, Social Economic, Youth, Water, Community Development
Glomma & Laagen Basin, Norway	28% tax on earnings, property taxes, natural resource taxes, licence fees, significant addition to business advancement cash reserves, preferred electricity tariffs	Budget of local municipality, budget of county, business development fund, national government	1998: US\$ 60m (2005 PPP) (= 1.9% of municipality and county budgets) – None displaced	Local county and municipality budget expenses, Local business development
Urrá, Colombia	3% of gross hydropower sales to regional environmental authorities, 3% to municipalities/districts	By regional environmental authorities (CARs) and districts and municipalities	US\$ 4.85m (2005 PPP) (= 6% of gross hydroelectricity sales) – 7,300 people displaced	Protection measures for environment and watershed (environmental authorities), Local development measures (priority: sanitation and environmental protection), -> Diverted to emergency/rehabilitation works for 2011 state of emergency
Cree Nation, Canada	Payments from Government of Québec for resource extraction (hydropower, forestry, mining)	To Limited Partnership fund redistributing to Cree governments	The greater amount of: US\$ 58m (2005 PPP) or indexed US\$58m (rising with actual resource extraction)	Community Development, Economic development, Social activities, Traditional economic Pursuits, Youth, Housing, Environmental activities, Local government

Nam Theun 2, Lao	Revenue from Electricity exports to Lao PDR Government	Redistributed by national government for poverty reduction in whole country, including project-affected communities through national budget process	US\$30 million p.a. (2010–2019); US\$ 110 million p.a. (2020–2034) – 6,300 people in 15 villages	Education in poor Districts, Rural roads, Public Health, Rural electrification. Environmental Protection, Livelihood opportunities, Teacher training
Binga, Philippines	Voluntary CSR Fund National legislation: percentage of hydropower sales, paid into three national funds	Spent on Community proposed projects, decisions made by company’s CSR representatives/ management Nationally managed electrification/ development, livelihood/ reforestation and watershed management fund	PHP4 million (US\$ 184,000 2005 PPP) in 2011 – 1% of net income after tax for CSR 1 centavo/US\$ cent 0.04) per kWh paid to national funds, 207 families Affected	Environment, sustenance and ecotourism, communal infrastructure, education and information technology, community health, indigenous peoples’ focus, governance: decided by communities, approved by company management, (Electrification, community development, environment

Sources: Skinner et al. (2014)

2.10 Glaring Challenges Bedevilling the Successful Functioning of Resettlement Trust Funds (Globally)

The drawbacks encompassing resettling displaced communities do not end with the displacement and relocation alone. One critical domain that cannot be underestimated relates to the issue of compensation for displaced and relocated individuals. Idealistically, compensation is expected to alleviate the potential risks associated with the displacement and relocation. Unfortunately, many compensation schemes rather than raising one’s standard of living through poverty alleviation, exacerbate same by displacing quite a sizable plethora of individuals without befittingly compensating them for the lost incurred through the relocation process. According to Bartolome, et al (1999), compensation usually takes the form of a one-off payment either in cash or kind and it principally about awards to negatively affected persons.

With respect to the extensive research project embarked upon by Cernia (2003), he accentuated on the comprehensive critique of the compensation principle. As ascribed to Cernia’s view, contemporary initiatives relating to compensation is encapsulated with fallacies, distortions and unsatisfactory outcomes. The whole theory of compensation tends to focus on socio-economic recovery of those displaced by merely compensating for asset losses. Although, the compensation theory has the guise of satisfying those dislocated comprehensively, it falls short by compensating only for economic losses. Cernia (2003) proposes that there has to be a shift from the “economics of compensation” towards “economics of resettlement with development.” A compensation that embraces economics of resettlement with development will pursue the final goal of affected people’s sustainable re-establishment rather than be focussed narrowly on compensation delivery, regardless of final overall delivery (Cernia, 2003). Indeed, it must be added that compensation for dislocated people due to developmental projects should go beyond paying damages in effort to recovering those affected unto rewarding those affected for willing sacrificing in the larger interest for the greater society and greater public good. Unfortunately the current situation leaves much to be desired in many circles. In the Ghanaian context, the problem is obvious. Since the establishment of the VRA Trust Fund in 1996, it cannot be said that affected communities have been restored to the expected level let alone to rewarding them by way of pursuing their development and forward growth.

Unfortunately, the statistics of affected people who did not to have the right compensation being proposed in all areas of the world where developmental projects are being undertaken are frightening. Cernia (2003) observes that in India alone, more than twenty million people were forcibly displaced (also referred to as involuntary displacement, a situation against UN Fundamental Human Right convention and World Bank Directives) by development interventions between 1950 and 1980. According to Fernandes and associates (1989), of these twenty million displaced people, about 75% that is 15 million people ended up worse-off than before the resettlement. China also has recorded 40-45 million people who have been displaced over fifty years (1950-2000). Shi, Su and Yuan (2002) further state that in a subsequent work done, out of more than twenty million people displaced by water and dam projects alone, just about one-third were “resettled well”; of the rest one-third were resettled only “so-and-so” and one-third were resettled “not well” (Shi et al. 2002).

More so, the efficacy of a resettlement programme hinges upon the financial resources available to implement it. With most projects, it has been found that funds tend to dry up once the relocation is effected and that leaves the resettled and other negatively affected people extremely vulnerable. Resettlement projects are often under-financed, particularly because the emphasis does not extend beyond physical relocation to the social and economic development of the resettled communities (Tetteh, 2012).

One of the main reasons for the financial bottlenecks has been inappropriate budgeting, typically characterised by the absence of clearly spelt out costs with respect to every individual component of the resettlement plan. The lack of attention in budgeting every detail of the resettlement plan such as the VRA RTF, etc. often leads to situations of shortages affecting the process crucially. The global review paper (Bartolome et al. 1999), drawing from the World Bank’s policy, addresses some of the important issues.

To add to this, quite apart from this displacement enigma being unfortunate, it also constitutes an illegality and an infringement on the fundamental human rights on all displaced residents. The UN General Assembly in 1986 adopted a Declaration on the Right to Development which states that “every human person and all peoples are entitled to participate in, contribute to, and enjoy economic, social, cultural and political development in which all human rights and fundamental freedoms can be fully realized.” In spite of this articulate UN convention, the problem even grows more because displaced people are not considered and allowed to fully participate in and contribute to the development process. Displaced people are treated like sacrificial lambs for the so called interests of the larger community. This is ceaselessly done with impunity with the slogan that the public interest is more important to minority rights. If that is indeed the case, then the minority rights should be looked at by fully consulting them so that an amicable compromise and better resettlement compensation can be sought for them. It is obvious that these considerations are what influenced the setting up of the VRA Resettlement Trust. But the intriguing question being posed is “Whether has trust been successful and efficient to live up to its absolute billing as anticipated (Tetteh, 2012)?

Furthermore, with respect to the critical bottlenecks bedevilling the effective functioning of the VRA resettlement trust fund, Tetteh (2012), in her scholarly work, captioned “The Effect of Activities of the VRA Trust Fund In Improving The Livelihood of the New Senchi Resettlement Community” identified the following parameters that are of immense relevance to the study in contention: (a) Improper costing of relocation packages; (b) Questionable planning and timing of the resettlement processes; (c) Lack of active involvement of the displaced individuals in the decision-making processes; (d) Non-existence of roles and policy clarity relating to funds’ disbursement; (e) Insufficient grant allocation to the fund just to mention a few.

3. Research Methodology

This section highlights on the research methodological processes adopted for the study. It entails the research approach, research design, research population, sample and sampling technique, source of data and data collection methods, data analysis method among others.

3.1 Research Approach

As far as contemporary research is concerned, 2 instrumental approaches cannot be overemphasized. These research approaches are as follows: (a) qualitative (b) quantitative as postulated by Yates (2004). Qualitative approach to research according to Creswell (2014) is hugely dependent on methodical conventions and strategies, where non-representative attributes of the investigator (research) are created into the findings and conclusions. Contrariwise, a quantitative research approach is a technique geared towards the advancement of demonstrable axiom and inferences which are generalized spanning a pattern of markings or arrangements (Creswell, 2009). Both approaches were employed for the study. Quantitative approach was chosen in view of the fact that it is not value-laden as the researchers’ values were kept out of the study. Also, qualitative was considered because the approach viewed truthfulness or reality to exist in the world that was subjectively measured.

3.2 Research Design

Burns and Grove (2009) delineate a research design (RD) as an archetype for executing a research study that contains optimum command over parameters that may compromise the findings' validity. Parahoo (2006) described a "RD" as a stratagem that explicates how, when and where data are to be gathered and figured out. The "RD" that was opted for the research was a case study design (CSD). "CSD" was adopted because the study took place at Volta River Authority (VRA), Resettlement Trust Fund (RTF) and selected resettlement communities (Senchi Ferry municipalities comprising of Apaaso, Dasaase and Awurahae settlements. The case study method was chosen because it's suitable for practical problems often being perceived as a problem – centered approach, in tandem with the postulates of Yin (2003).

3.3 Population Selection, Sample Size Determination and Sampling Technique Adopted

Population epitomizes an absolute categories of folks about which the researcher require information, whereas a sample connotes a segment within the population from which the researcher really want to garner information to be used for drawing inferences underpinning the study (Moore, 2009). The case study focused on staff of VRA RTF and some RCs (Senchi Ferry Township constituting Apaaso, Dasaase and Awurahae settlements) (VRATFCs). This was based on the premise that, this category of individuals within VRA RTF managerial set up was the pivot around which all day-to-day operations in the chosen outfit revolves. The total population of VRA RTF staff and some RCs for the study was 55. A sample size of 48 staff belonging to VRA RTF (28) via some RCs inhabitants (20) were selected for the study. The determination of the sample size was based on Miller and Brewer (2003) mathematical equation in consonance with what was captured by Saunders, Lewis and Thornhill (2007). Convenience sampling connotes a form of non-likelihood sampling technique where folks belonging to the bull's-eye population that meet certain pragmatic precedent, like simplistic accessibility, geographical nearness, availability at a specified time period, or the zealotness to get involved are considered for the study's purpose (Dorneyi, 2007). In view of this, convenience sampling strategy was employed in order to select respondents based on their easy accessibility, proximity among others.

3.4 Data Collection Procedure

Questionnaires were personally administered by the researcher. Sampled staff used purposely for the study were at liberty to elicit responses to the questions based on their own conscience without been placed under duress in order to satisfy the researcher. The questionnaires were pre-tested using a smaller sample size of the respondents underpinning the study. The total reliance on closed and opened ended questions permitted the investigator to facilitate simplistic assortment and evaluation.

3.5 Data Analysis Method

This study relied on Relative Importance Index (RII) method to determine the distinctive relevance of resettlement trust funds (DRRTFs) to affected individuals (AIs), identify the key monetary and non-monetary benefit sharing-mechanisms (MNBSMs) adopted by project developers for displaced individuals, via investigation into the critical challenges confronting the smooth functioning of resettlement trust funds (SFRTFs) in Ghana. The 5-Point Likert Scale ranging from 1(very irrelevant) to 5 (completely irrelevant) was effectively utilized and upgraded into the Relative Importance Indices (RII) for each of the factors as:

$$RII = \sum \frac{P_i \times U_i}{N \times n}$$

Where RII = Relative importance index;

P_i = Respondent rating of severity of the distinctive relevance of resettlement trust funds to affected individuals, key monetary and non-monetary benefit sharing-mechanisms adopted by project developers for displaced individuals, vis-à-vis the critical challenges confronting the smooth functioning of resettlement trust funds in Ghana.

U_i = Respondent's placing identical weighting or rating;

N = Sample size; n = the highest attainable score (The greater the RII score, the highly relevant the distinctive relevance of resettlement trust funds to affected individuals, key monetary and non-monetary benefit sharing-mechanisms adopted by project developers for displaced individuals, vis-à-vis the critical challenges confronting the smooth functioning of resettlement trust funds in Ghana. It is worth noting that RII values ranges between 0 and 1.

The estimated RII values was used to rate the distinctive relevance of resettlement trust funds to affected individuals, key monetary and non-monetary benefit sharing-mechanisms adopted by project developers for

displaced individuals, vis-à-vis the critical challenges confronting the smooth functioning of resettlement trust funds in Ghana.

The classification/rating was used for comparison purposes as regards the relative relevance of the parameters as intimated by the participants. The respective predictor of RII perceived by all participants was employed to evaluate the absolute ratings in order to give an overall picture of the distinctive relevance of resettlement trust funds to affected individuals, key monetary and non-monetary benefit sharing-mechanisms adopted by project developers for displaced individuals, vis-à-vis the critical challenges confronting the smooth functioning of resettlement trust funds in Ghana. SPSS Version 23.0 and Microsoft Excel were effectively utilized in the data analysis.

3.6 Reliability and Validity

Reliability is the magnitude to which a test produces the same results when it is repeated on countless occasions (Tavakol & Dennick, 2011). To ensure reliability, the procedures followed in the case study were documented. This approach enabled the researcher to apply the same procedures in performing the same case study to obtain similar findings and conclusions. Validity is the magnitude to which any evaluating apparatus estimates what it is intended to measure (Thatcher, 2010). Triangulation strategies were adopted to ensure that the data obtained was reliable and valid. In this study, triangulation took the form of cross-checking reported information using one method, with information found from alternative sources (Flick, 2014; Grbich (2013).

3.7 Ethical Considerations

With particular reference to the conducting of a research study, it is expedient for the researcher to ensure respondents are physically or emotionally protected; the premise on which ethical consideration stands (O'Leary, 2013). In addition to not causing havoc to respondent, it is also necessary for the investigator to uphold veracity (Coghlan & Brannick, 2014). Curtis and Curtis (2011) submit that an indispensable tenet of an ethically correctitude research is uncompelled cognizant permission. In lieu of this, the researcher ensured potential participants were inadvertently promised that the data gathered would be employed for the declared rationale just to mention a few. Furthermore, participants were consented to be unprejudiced in view of the fact that the investigator was not bent on getting correctitude or wayward panaceas.

3.8 VRA's Brief Historical Perspective

The implementation of the Akosombo hydro-electric power project, popularly referred to as "The Volta River Project (VRP)" during the period 1961-1964 resulted in the formation of the Volta Lake (VL). The project was executed by the government of Ghana (GoG) through the VRA, which was established in 1961 by an Act of Parliament, the VRA Act (Act 46) of 1962. The main purpose of the project was to generate, transmit and distribute cheap hydroelectric power (HEP) throughout Ghana to facilitate the economic and social development of the country through the planned industrialization of the national economy. This huge national asset, well intended to give impetus to the economic take-off of Ghana's national development aspirations soon after attainment of political independence, also unfortunately brought in its wake extensive environmental damage leading to perhaps one of the worst disasters for human habitation that has ever confronted the country (VRA Manual, 2014).

3.9 Establishment of the Trust Fund

The forced relocations of the people whose lands had been inundated by the lake formation of the Volta River Project caused profound disruptions in the lives of the thousands of individuals affected. Over the forty (40) years of their existence, the resettlement townships have suffered degradation due to deprivation and life has been very difficult in those resettlement communities.

The most ironical situation was that until the year 1996, even electricity supplies for which people in the resettlement township paid the ultimate price of losing their entire livelihood and human dignity had been denied them. For over thirty (30) years, the resettlement townships have wallowed in darkness and abject poverty as the rest of the country took for granted the many economic and social benefits of cheap, reliable electricity, made possible by the sacrifices of the displaced people.

As a result difficulties ranging from environmental degradation through poor drainage and road networks to low income levels faced by the resettlement communities, numerous complaints were persistently directed at VRA by members of the resettled communities regarding their plight. Finally in 1995, the VRA, in collaboration with Government, represented by the then Ministry of Mines and Energy, decided to establish a special fund to cater for the needs of the resettlement townships. This fund, known as the VRA Resettlement Trust Fund (RTF), was established in 1996. Details of this collaboration is expressed and defined in a Trust Deed which, among others, requires VRA to provide the Trust Fund (TF) with an annual grant to be used for developmental projects for the

52 Resettlement Townships (RTs). This, to date is the main source of revenue for the TF. The Trust Deed however, gives the Managing Trustees (MTs) the mandate to explore other sources of revenue for the Fund (VRA Manual, 2014).

3.9.1 Administration of the VRA RTF

The VRA RTF is administered by a seventeen member board comprising of:

- Board chairman appointed by the government;
- Ten members of parliament from affected constituencies in the four regions of Ghana;
- Two (2) representatives from the ministries of energy; and
- Another managing trustees appointed by the minister of energy as required by the trust deed.

The Regional Co-ordinating Councils (RCCs) in the four affected regions of Ghana namely: Volta, Eastern, Northern and Brong Ahafo regions are the appointing authorities of the MPs to serve on the board according to the following distribution pattern:

Table 4. Regional composition of trustee MPs

No.	Region	No. of Resettlement Townships	No. of Trustee MPs
1	Volta	23	4
2	Eastern	16	3
3	Northern	8	2
4	Brong Ahafo	5	1

Source: VRA Manual (2014)

3.9.2 The Secretariat

The Secretariat of the RTF, headed by the Executive Director (ED) is responsible for implementing all the decisions of the “MTs” and also working directly with the resettlement communities and other stakeholders.

3.9.3 Town Development Committees (TDCs)

At the local level, TDCs have been established in all the 52 resettlement townships to perform liaison functions between the secretariat of the “TF” and the respective communities for the prioritization and effective execution of development projects within the resettlement communities (RCs).

3.9.4 Who VRA RTF Are

VRA RTF came into being in 1996 by the VRA, in consonance with the Ghanaian Government, mirrored by the erstwhile mines and energy ministry. This fund was created to cater for the needs of the resettlement townships that were displaced as a result of implementation of the Akosombo Hydro-electric power (HEP) project. The project resulted in the formation of the “VL” which dislodged seven hundred and thirty villages with the affected folks totalling eighty thousand. These deranged individuals were re-established and expatriated to fifty two municipalities covering over four regions of Ghana; specifically Volta, Eastern, Brong-Ahafo and Northern Regions, sheltering seventeen districts.

VRA RTF exist to improve the quality of lives of 52 RCs through the carrying out of socio-economic projects such as provision of educational, social, health and sanitation facilities, reliable and potable water supply as well as economic empowerment through enhanced livelihood options. The objective of RTF is to ensure the socio-economic empowerment of the communities by helping raise their standards of living to levels similar to or better than what existed before the resettlement.

3.9.5 What VRA RTF Do

When the VRA RTF was set up, one of its priority areas was the provision of basic needs projects to enhance the living standards of the settlers. The projects areas ranged from Educational Projects, Health Facilities, Social Facilities, Water and Sanitation. The projects implemented are community driven in that the various townships submit their project needs every year based on priority, and the Board of Trustees does a further prioritization of all requests submitted and then selects projects to be implemented in a particular year. Formerly, the funds received from VRA for such projects were allocated to the communities based on the common fund formula. It

was later realized over the years that the smaller communities were being neglected due to their sizes and population. This brought about the need to consolidate the funds and use it for project implementation based on needs assessment and irrespective of size and population.

In line with the policy framework of the VRA RTF regarding the needs of the resettlement communities, the board of trustees normally meets once in every quarter to consider requests that the communities have submitted to the Secretariat be they requests for projects, interventions in conflict situations and other challenges being faced by the people. The quarterly meetings also create the forum for reviewing conditions affecting the communities (VRA Manual, 2014).

3.9.6 Corporate Statement

The next subsection illuminates on RTF's mission and vision statements, core values, in addition to its objectives:

3.9.6.1 RTF's Mission Statement

The mission of the Trust Fund is to contribute to the improvement of the quality of life in the 52 Resettlement Communities through the carrying out of socio-economic projects such as provision of educational, social, health and sanitation facilities, reliable and potable water supply as well as economic empowerment through income generating activities.

3.9.6.2 RTF's Vision Statement

RT's vision is to be the pacesetter in providing socio-economic empowerment to RCs in West Africa.

3.9.6.3 RTF's Values

- **Commitment:** Total dedication to the task of catering for the RCs to improve their conditions of living while ensuring that VRA has the peace required to focus on its core business;
- **Respect:** High regard for the people from the RCs as fellow human beings and as clients without whom the RTF would not be in existence;
- **Responsiveness:** Its awareness of and sensitivity to the needs of its clients.

3.9.6.4 RTF's Objective

RTF's objective relates to the social and welfare projects and other needs of direct benefit to the 52 resettlement townships in the following areas: (a) Environmental amelioration (b) Social welfare (c) Health (d) Education (e) Water and sanitation (f) Economic development among others (VRA Manual, 2014).

3.9.7 Projects

The VRA Resettlement Trust Fund undertakes social and welfare projects and other needs of direct benefit to the 52 resettlement townships in the following areas: (1) Environmental amelioration projects; (2) Social welfare projects; (3) Health projects; (4) Education projects; (5) Water supply and sanitation projects; and (6) Socio-economic projects (VRA Manual, 2014).

3.10 Brief Overview of Senchi Ferry Township (SFT)

SFT is positioned in the Asuogyaman District of the Eastern Region of Ghana. Between 1920 and 1956, SFT was an industrious metropolis with diverse activities owing to the fact that it represented a ferry port linking Southern to Northern Ghana, via the Volta River. The Tema-Akosombo highway established between 1952 and 1953 led to the relocation of the ferry station at Akosombo, triggering a sudden abolishment of the myriads of activities within that frontier. Senchi is a partially-urban locality with about one thousand and seven hundred populace. The predominant occupations within the locality relates to farming and trading. The remaining occupations are made up of drivers, carpenters, teachers, and hairdressers. SFT possess an untarred road running connecting the various parts which unites the Tema – Akosombo highway at its northern section. Quite a sizable plethora of the youth within the locality have relocated to Accra, including other regions in their quest to get lucrative job opportunities. Contemporarily, electricity is being linked to the locality, but there exist a health post, in addition to a portable water point. Nursery, basic and junior high schools also abound within the locality. Approximately ninety-five percent of children are enrolled in an educational outfit. SFT boasts of a traditional supreme who happens to be the Nifahene and heir to the Akwamu Traditional Paramount Chief out of the seventeen localities which constitute the Akwamu traditional frontier.

3.10.1 Brief Historical Perspective of Dasaase Settlement

The Senchi Expatriation Municipality (SEM) consists of Apaaso, Dasaase and Awurahae establishments. SEM is

adjacent to the primary SFT which happens to be the parent locality. Deliberations for this study were executed at the Dasaase portion of the expatriation locality. This expatriation locality came into being in 1963, and the indigenes were evacuated from Jekiti locality Farming happens to be the predominant occupation within the locality and all the Dasaase dwellers have to hire farmlands from their parent locality. Dasaase has a population of approximately 1000 folks mostly made up of children and those who have attained maturity. Quite a sizable number of the youth have migrate to Accra, Kumasi and Koforidua with the rationale of securing juicy jobs. Infrastructural facilities within the locality lives much to be desired (VRA RTF, 2011; Mettle, 2011).

4. Results and Discussion

This section presents the analysis of the data collected and discussed in relation to the literature review. It also presents the results of the research based on the responses collected from respondents. The analysis of the survey data was oriented towards delivering the perceived degree of significance ascribed to analyzing the relevance of Volta River Authority Resettlement Trust Fund (VRA RTF) as a benefit sharing mechanism in Ghana, using both employees of VRA RTF and selected community individuals (VRATFCs) (resettlement townships close to Akosombo) as the case study organization and localities respectively.

Table 5 illustrates the information that pertains to the management of questionnaire during the survey.

Table 5(A). Questionnaire management information

Questionnaire Data	Frequency	Percentage (%)
Retrieved and filled questionnaires	40	83.3
Unreturned and unfilled questionnaires	8.0	16.7
Total number of questionnaires	48.0	100.0

Source: Researcher’s Field Data (2017)

Strictly speaking, the table 5 cited above clearly depicts that out of the 48 questionnaires distributed to the participants at VRA RTF and selected communities, only 40 were retrieved representing 83.3% whereas the remaining 16.7% was unaccounted (un-retrieved and unreturned) for by the researcher. Hence, 83.3% which represented the responsive rate was used in the data analysis.

4.1 Socio-Demographic Characteristics of Respondents

This section of the chapter touches on the socio-demographic information of participants. Put simply, it commences with gender, age distribution, marital status, service length, and educational background as well as the distinctive relevance of resettlement trust funds to affected individuals, key monetary and non-monetary benefit-sharing mechanisms adopted by project developers for displaced individuals, in addition to the critical challenges confronting the smooth functioning of RTFs in Ghana. First and foremost, participants were asked to specify their gender type. The responses garnered were then analyzed using frequency, percentage table in addition to SPSS Version 22.0, Microsoft Excel among others.

Table 5 deals with the socio-demographic characteristics of respondents’ at VRATFCs.

Table 5 (B). Gender of respondents

Gender	Frequency	Percentage (%)
Male	25	62.5
Female	15	37.5
Total	40	100.0

Source: Author’s Field Data (AFD) (2017)

Table 5 glaringly shows that out of the 40 respondents belonging to VRATFCs, 25 connoting 62.5% were males and 15 which epitomized 37.5% were females.

Table 6 presents the ages of respondents’ at VRATFCs.

Table 6. Ages of respondents

Age Ranges (Years)	Frequency	Percentage (%)
25-29	3	7.5
30-34	12	30.0
35-39	18	45.0
40-44	6	15.0
Above 45	1	2.5
Total	40	100.0

Source: Author's Field Data (2017)

Table 6 depicts that respondents belonging to VRATFCs having age brackets within the ranges of 30-34 and 35-39 recorded maximum frequencies of 12 and 18 with percentage scorings of 30.0% and 45.0% respectively. Also, respondents within the age bracket of 40 to 44 had a frequency of 6 with an accompanying percentage score of 15.0%. It was closely followed by participants (respondents) with the age range of 25-29 and a subsequent occurrence number and a percentage scoring of 3 and 7.5% respectively. However, those above 45 years were the last in the pecking order as far as the respondents' age bracket is concerned. The category recorded a frequency of 1 as well as a percentage scoring of 2.5% accordingly.

Table 7 presents the marital disposition of respondents' at VRATFCs.

Table 7. Marital status of respondents

Marital Status	Frequency	Percentage (%)
Single	11	27.5
Married	29	72.5
Total	40	100.0

Source: Author's Field Data (2017)

With reference to table 7 above, out of the 40 respondents at VRATFCs, only 11 workers representing 27.5% were termed as "unmarried" while the remaining larger part representing the married category amounted to 29 and recording a percentage figure of 72.5%. This, to all intents and purposes suggest that a greater part of the workforce can be termed as responsible individuals which will ultimately augment VRATFCs' optimum efficiency, effectiveness, performance, productivity, profitability and the like.

Table 8 shows the service duration of respondents' at VRATFCs.

Table 8. Service duration of respondents

Age Range (Years)	Frequency	Percentage (%)
1-5	11	27.5
6-10	21	52.5
11-15	6	15.0
Above 16	2	5.0
Total	40	100.0

Source: Author's Field Data (2017)

As ascribe to table 8, respondents who have been working with VRATFCs for the past 6 to 10 years recorded a total frequency of 21 epitomizing roughly 52.5%. This was edgily followed by respondents' who have been working with the corporate entity and domiciled in the selected communities spanning between 1 to 5 years. The category recorded a percentage mark and a frequency of 27.5% and 11 respectively. Furthermore, VRATFCs

respondents' who fell within the service length range of 11 to 15 years also attracted a frequency of 6 as well as a percentage score of 15.0%. However, respondents' within the service length exceeding 16 years coincidentally recorded an extremely woeful percentage score of 5.0% and an accompanying frequency of 2.

Table 9 dwells on the educational background of respondents' at VRATFCs.

Table 9. Educational background of respondents

Highest Form of Qualification	Frequency	Percentage (%)
SSCE/WASSCE	4	10.0
Diploma/HND	11	27.5
Degree	19	47.5
Post Graduate	2	5.0
Other Professional Qualification	6	15.0
Total	40	100.0

Source: Author's Field Data (2017)

In relation to table 9 above, it can be inferred that 27.5% of respondents have Diploma/HND qualification with a frequency of 11, 47.5% were first degree holders and subsequently had a frequency rate of 19, 5.0% were master's degree holders with an accompanying occurrence number of 2. It is interesting to note that 15.0% of the respondents with a frequency rate of 6 at VRATFCs, represented various professional qualifications (Other) when the survey was carried out. However, the category of respondents' with a percentage score of 10.0% as well as a frequency of 4 were those who had successfully passed the SSCE/WASSCE examinations.

Table 10 presents the views of respondents' on distinctive relevance of resettlement trust funds to affected individuals, computed RII values and its subsequent rankings at VRATFCs.

Table 10. Respondents' view on distinctive relevance of resettlement trust funds (DRRTFs) to affected individuals at VRATFCs, Computed RII Values and Rankings

Distinctive Relevance of RTFs	RII Scoring	Ranking
Water and sanitation (WASA)	0.845	1 st
Educational enhancement (human development (EDEN))	0.790	2 nd
Health improvement (HEIM)	0.680	3 rd
Improvement of agricultural projects (IAGP)	0.550	4 th
Community development (CODT)	0.450	5 th
Socio-cultural activities (SOCA)	0.365	6 th

Source: Author's Field Data (2017)

With reference to table 10 above and figure 3 below, it could be inferred that participants at VRATFCs opted "Water and sanitation (WASA)" as the 1st most distinctive relevance of resettlement trust funds (RTFs) to affected individuals in Ghana. "WASA" recorded an RII scoring of 0.845 based on the 5-Point Likert scale's order of relevance, which was later transformed into the Relative Importance Index (RII). This 1st rated category (WASA) was edgily accompanied by "Education enhancement (human development) (EDEN)", "Health improvement (HEIM)", in addition to "Improvement of agricultural project (IAGP)" determinants. The 3 afore-mentioned constructs had RII values of 0.790, 0.680 via 0.550 and were subsequently ranked 2nd, 3rd and 4th respectively. Regardless, both "Community development (CODT)" as well as "Socio-cultural activities (SOCA)" categories recorded RII scorings of 0.450 and 0.365 and were inadvertently rated 5th and 6th in accordance with the scale in contention.

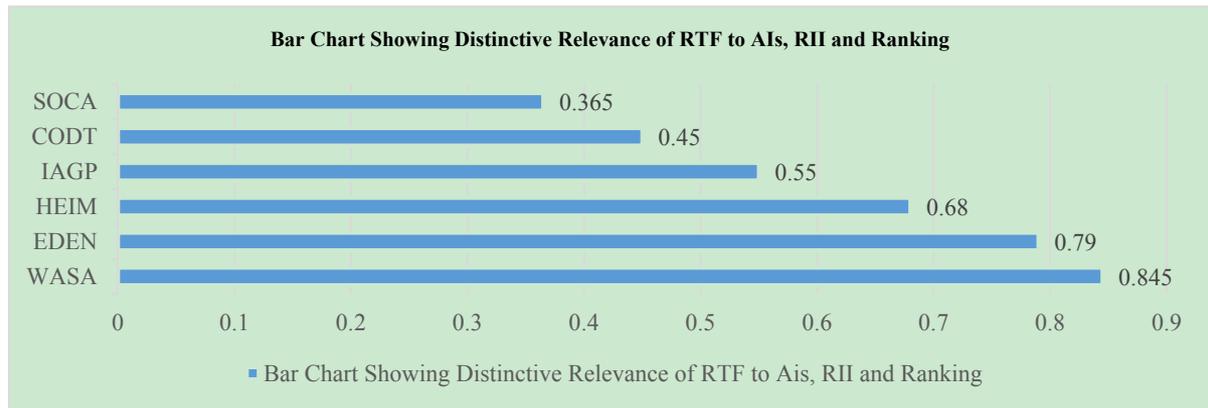


Figure 3. Distinctive Relevance of RTFs to AIs

Source: Author’s Field Data (2017)

Table 11 presents the views of respondents’ on key monetary and non-monetary benefit-sharing mechanisms (KMNBSMs) adopted by project developers for displaced individuals, computed RII values and its subsequent rankings at VRATFCs.

Table 11. Respondents’ view on key monetary and non-monetary benefit-sharing mechanisms (KMNBSMs) adopted by project developers for displaced individuals at VRATFCs, Computed RII values and rankings

Key Monetary and Non-Monetary Benefit-Sharing Mechanisms Determinants	RII Scoring	Ranking
Revenue-sharing (REVE)	0.875	1 st
Development funds (DEFU)	0.805	2 nd
Property taxes (PROX)	0.720	3 rd
Equity-sharing (EQAR)	0.580	4 th
Livelihood and restoration enhancement (LIRE)	0.455	5 th

Source: Author’s Field Data (2017)

As ascribed to the key monetary and non-monetary benefit-sharing mechanisms (KMNBSMs) adopted by project developers for displaced individuals in Ghana in consonance with results captured in table 11 above and what figure 4 depicts below, it could be inferred that participants at VRATFCs selected “Revenue sharing (REVE)” as the most critical that cannot be underestimated. “REVE” had an RII scoring of 0.875 as revealed by the 5-Point Likert model’s significance order and was subsequently rated 1st as compared to the 4 other parameters afore-cited. “REVE” was closely followed by “Development funds (DEFU)”, “Property taxes (PROX)”, “Equity sharing (EQAR)” and lastly, “Livelihood and restoration enhancement” designated as “LIRE” for the purposes of the study. The above mentioned constructs had respective RII scorings of 0.805, 0.720, 0.580 as well as 0.455 and were ranked 2nd, 3rd, 4th and 5th accordingly (see table 11 above).

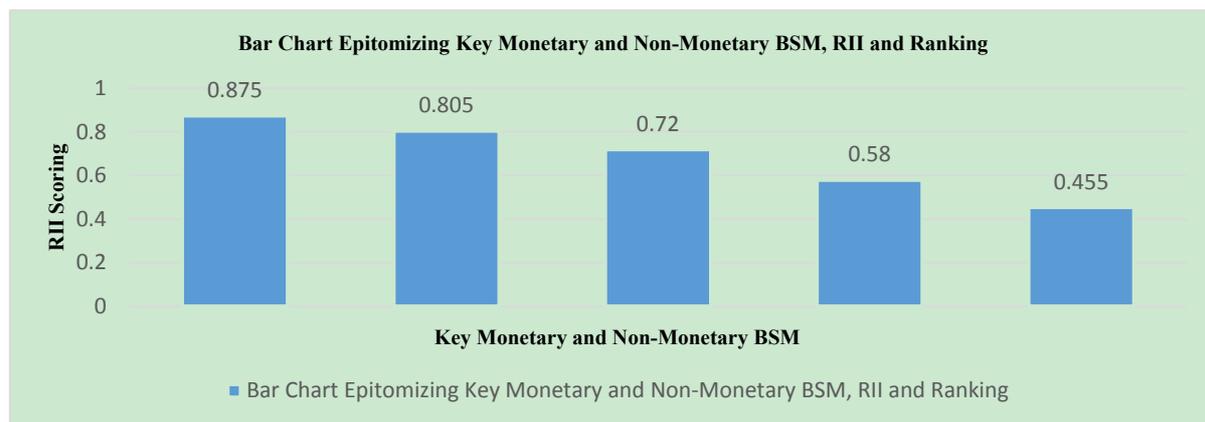


Figure 4. Key monetary and non-monetary BSM

Source: Author’s Field Data (2017)

Table 12 presents the views of respondents’ on critical challenges confronting the smooth functioning of resettlement trust funds (SFRTFs), computed RII values and its subsequent rankings at VRATFCs.

Table 12. Respondents’ view on critical challenges confronting (CCC) the smooth functioning of resettlement trust funds (SFRTFs) at VRATFCs, Computed RII values and rankings

Critical Challenges Confronting the Smooth Functioning of RTFs	RII Scoring	Ranking
Improper costing of relocation packages (ineffective budgeting) (ICRP)	0.880	1 st
Inadequate compensation of displaced individuals (INDI)	0.730	2 nd
Inactive involvement of the displaced individuals in the decision making process (IVDM)	0.675	3 rd
Insufficient grant allocation to the fund (IGAF)	0.575	4 th
Clarity of rules and policies relating to fund disbursement (CRPF)	0.485	5 th
Questionable timing of the resettlement processes (QTRP)	0.370	6 th

Source: Author’s Field Data (2017)

With respect to table 12 above and figure 5 below, it is so glaring that participants at VRATFCs chose “Improper costing of relocation packages (ineffective budgeting) (ICRP)” as the most crucial that cannot be overemphasized. “ICRP” recorded an RII value of 0.880 (5-Point Likert scale’s pecking order) in relation to the critical challenges confronting the smooth functioning of RTFs in Ghana. The 1st and highest ranked determinant (ICRP) was closely followed by “Inadequate compensation of displaced individuals (INDI)”, “Inactive involvement of the displaced individuals in the decision making process (IVDM)”, in addition to “Insufficient grant allocation to the fund (IGAF)” with accompanying RII values of 0.730 (2nd), 0.675 (3rd) as well as 0.575 (4th) respectively. Furthermore, last two constructs, namely: “Clarity of rules and policies relating to fund disbursement (CRPF)” and “Questionable timing of the resettlement processes (QTRP)” had woefully inadequate RII scorings of 0.485 and 0.370, and were rated 5th and 6th respectively based on the 5-Point Likert model’s order of importance which was later upgraded into the Relative Importance Index (RII).

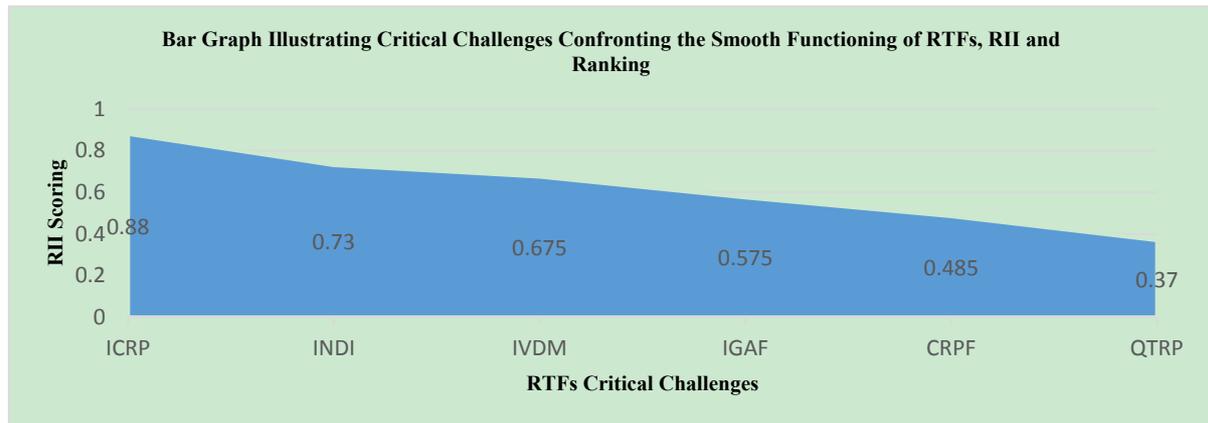


Figure 5. Critical Challenges of RTFs

Source: Author's Field Data (2017)

4.2 Detailed Discussion of Results

The 40 participants' suggestions as depicted on the questionnaires consented the researcher to assign weighted values to each of the parameters determined as the distinctive relevance of RTFs to affected individuals via the identification of the key monetary and non-monetary BSMs adopted by project developers for displaced individuals in Ghana. To add to this, critical challenges confronting the smooth functioning of RTFs in Ghana, which, when strategically managed, will inadvertently foster efficiency and efficient resettlement trust fund regimes to a varying threshold within any stipulated time period. In summary, with respect to the distinctive relevance of RTFs to affected individuals in Ghana, 6 pivotal categories were intimated by the participants (respondents). These are (1) Water and sanitation (WASA) (RII=0.845); (2) Educational enhancement (EDEN) (RII=0.70); (3) Health improvement (HEIM) (RII=0.680); (4) Improvement of agricultural projects (IAGP) (RII=0.550); (5) community development (CODT) (RII=0.450) and lastly; (6) Socio-cultural activities (SOCA) (RII=0.365).

Secondly, 5 key monetary and non-monetary BSMs adopted by project developers for displaced individuals were ranked based on the order of relevance on the Five Point Likert scale which was later transformed into the Relative Importance Index (RII). According to the ranking relating to the RII, 5 determinants were realized by the participants namely: (1) Revenue-sharing (REVE) (RII=0.875); (2) Development funds (DEFU) (RII=0.805); (3) Property taxes (PROX) (RII=0.720); (4) Equity-sharing (EQAR) (RII=0.580); and (5) Livelihood and restoration enhancement (LIRE) (RII=0.455).

Lastly, with respect to the critical challenges confronting the smooth functioning of RTFs in Ghana, the participants at VRATFCs intimated 6 critical constructs as (1) Improper costing of relocation packages (ineffective budgeting) (ICRP) (RII=0.880); (2) Inadequate compensation of displaced individuals (INDI) (RII=0.730); (3) Inactive involvement of the displaced individuals in the decision making process (IVDM) (RII=0.675); (4) Insufficient grant allocation to the fund (IGAF) (RII=0.575); (5) Clarity of rules and policies relating to fund disbursement (CRPF) (0.485) as well as (6) Questionable timing of the resettlement processes (QTRP) (RII=0.370).

4.3 Detailed Discussion of Results Pertaining to Research Question 1

With respect to the research question 1 cited earlier, an in-depth analysis of the under-listed parameters is of immense relevance to the study:

4.3.1 Water and Sanitation

As per the distinctive relevance of RTFs to affected individuals in Ghana, respondents at VRATFCs opted for "Water and sanitation (WASA)" as the 1st most influential in that recorded an RII scoring of 0.845 based on the 5-Point Likert scale's order of importance (see table 10 and figure 3 afore-cited). It is interesting to note that the respondents' findings agrees with the submissions of Tetteh (2012), Mettle (2011), in addition to the comprehensive research project embarked upon by Skinner and his compatriots in 2014.

4.3.2 Educational Enhancement (Human Development)

As ascribed to the distinctive relevance of RTFs to affected individuals in Ghana, respondents at VRATFCs selected “Educational enhancement (human development) (EDEN)” as the 2nd most pivotal determinant cannot be underestimated. “EDEN” had an RII scoring of 0.790 as revealed by the 5-Point Likert scale’s pecking order in close association with the results spelt out in table 10 and what figure 3 elucidates. It is worthy of note that extensive research works of Skinner et al. (2009), Tetteh (2012), in addition to what VRA RTF (2010) asserts tallies with the participants’ findings during the study.

4.3.3 Health Improvement

“Health improvement (HEIM)” construct was rated 3rd by the respondents at VRATFCs with respect to the distinctive relevance of RTFs to affected individuals in Ghana as it recorded an RII value of 0.680 in agreeableness with the 5-Point Likert scale’s order of importance which was later transformed into the Relative Importance Index (RII) (refer to table 10 and figure 3 afore cited). Undisputedly, the participants’ findings appears to be consistent with the postulates of Skinner et al. (2009), in tandem with what was contained in VRA RTF (2010).

4.3.4 Improvements of Agricultural Projects

With regards to the distinctive relevance of RTFs to affected individuals in Ghana, respondents at VRATFCs preferred option was “Improvement of agricultural projects (IAGP)”. The perspective in contention had an RII scoring of 0.550 based on the 5-Point Likert scale’s order of relevance and was inadvertently ranked 4th comparatively (5 other determinants) (refer to table 10 and figure 3 cited earlier). Candidly speaking, the respondents’ revelation conforms to the work of Tetteh (2012), in consonance with the assertion of VRA RTF (2011).

4.3.5 Community Development

Participants belonging to VRATFCs opted for “Community development (CODT)” as the 5th most phenomenal as regards the distinctive relevance of RTFs to affected individuals in Ghana. “CODT” as the acronym suggest for the purposes of the study, recorded an RII value of 0.450 as revealed by the 5-Point Likert scale’s relevance order (see table 10 and figure 3 afore-cited). Put simply, the discovery on the part of the participants’ tallies with the submissions of Skinner et al. (2009), Skinner et al. (2014) as well as Tetteh (2012) in their respective research project dubbed “Sharing the Benefits of Large Dams in West Africa”, “Redistribution of Revenues from Hydropower Dams: Review of Benefit Sharing Mechanisms and Local Control” as well as “Effect of Activities of the VRA Resettlement Trust Fund in Improving the Livelihood of the New Senchi Resettlement Community”

4.3.6 Socio-Cultural Activities

Lastly, in allusion to the distinctive relevance of RTFs to affected individuals in Ghana, participants’ preferred option was “Socio-cultural activities (SOCA)” in that it recorded an abysmal RII value of 0.365 based on the 5-Point Likert scale’s order of significance (see table 10 and figure 3 cited earlier). Strictly speaking, the respondents’ fact findings coheres with the publications of Skinner et al. (2009), Mettle (2011), in addition to VRA RTF (2010) during the study.

4.4 Detailed Discussion of Results Relating to Research Question 2

The under-listed determinants throws light on the detailed discussion of results that pertains to research question 2:

4.4.1 Revenue Sharing

With particular reference to the key monetary and non-monetary BSMs adopted by project developers for displaced individuals in Ghana, VRATFCs’ participants selected “Revenue-sharing” designated as “REVE” for the study in contention sake. “REVE” had an RII score of 0.875 and invariably ranked 1st comparatively, based on the 5-Point Likert scale’s order of significance (see table 11 and figure 4 afore-cited). In the strict sense, the participants’ discovery agrees with the assertions of Egre et al. (2002), in addition to what was captured in UNEP (2007).

4.4.2 Development Funds

“Development Funds (DEFU)” was rated 2nd by VRATFC’s respondents in relation to key monetary BSMs adopted by project developers for displaced individuals in Ghana. The construct had an RII value of 0.805 based on the 5-Point Likert scale’s relevance order in tandem with the dictates of table 11 and figure 4 spelt out earlier. It is worth noting that the respondents’ findings synchronizes with the postulates of Egre et al. (2002), Egre

(2007) as well as what was captured by the WCD (2000a) report.

4.4.3 Property Taxes

In conjunction with the key monetary BSMs adopted by project developers for displaced individuals in Ghana, participant at VRATFCs opted for “Property taxes (PROX)” as the 3rd most pivotal that cannot be relegated to the background. “PROX” recorded an RII scoring of 0.720 as revealed by the 5-Point Likert scale’s relevance order (see table 11 and figure 4 cited earlier). It is interesting to note that the extensive research projects executed by Egge et al. (2002), Egge (2007), vis-à-vis the publication of WCD (2000a) synchronizes with the participants’ revelation during the study.

4.4.4 Equity Sharing

Pertaining to the key monetary BSMs adopted by project developers for displaced individuals in Ghana, respondents’ at VRATFCs selected “Equity-sharing (EQAR)” as the 4th most crucial cannot be underestimated. The construct (EQAR) had an RII value of 0.580 in tandem with the 5-Point Likert model’s order of significance, which was later transformed into the Relative Importance (RII) (refer to table 11 and figure 4 afore-cited). Candidly speaking, the respondents’ findings synchronizes with the submissions of Skinner et al. (2014), Egge (2007), in addition to the publicized by WCD (2000a) (report).

4.4.5 Livelihood and Restoration Enhancement

The perspective under scrutiny captioned “Livelihood and restoration enhancement (LIRE)” was rated as 5th most critical determinant, as ascribed to the key non-monetary BSMs adopted by project developers for displaced individuals in Ghana. “LIRE” had an RII scoring of 0.455 based on the 5-Point Likert scale’s order of importance in consonance with the dictates of table 11 and figure 4 cited earlier. Again, what was realized by the respondents appears to be in conformity with the assertions of Skinner et al. (2014), vis-à-vis the publications of UNEP (2007) and WCD (2000a).

4.5 Detailed Discussion of Results in Association with Research Question 3

The following accentuates on the detailed discussion of results relating to research question 3:

4.5.1 Improper Costing of Relocation Packages

Relating to the critical challenges confronting the smooth functioning of RTFs in Ghana, VRATFCs’ participants opted for “Improper costing of relocation packages (ineffective budgeting) (ICRP)” as the most detrimental that cannot be underestimated. “ICRP” recorded an RII scoring of 0.880 in tandem with the 5-Point Likert scale’s relevance order and was invariably ranked 1st as compared to the other 5 determinants (see table 12 and figure 5 afore-cited). It is worth noting that the respondents’ findings agrees with the submissions of Bartolome et al (1999), in addition to Tetteh (2012).

4.5.2 Inadequate Compensation of Displaced Individuals

As ascribed to the critical challenges confronting the smooth functioning of RTFs in Ghana, VRATFCs’ participants selected “Inadequate compensation of displaced individuals (INDI)” as the 2nd most crippling. The perspective (INDI) recorded an RII score of 0.730 as revealed by the 5-Point Likert scale’s relevance order (refer to table 12 and figure 5 cited earlier). Candidly speaking, the respondent’s discovery synchronizes with the postulates of Bartolome et al. (1999), Cernea (2003), in addition to Shi, Su and Yuang (2002).

4.5.3 Inactive Involvement of the Displaced Individuals in the Decision Making Process

“Inactive Involvement of the Displaced Individuals in the Decision Making Process (IVDM)” was rated 3rd by the participants at VRATFCs in consonance with the critical challenges confronting the smooth functioning of RTFs in Ghana. “IVDM” construct recorded an RII scoring of 0.675 based on the 5-Point Likert model’s pecking order (refer to table 12 and figure 5 cited earlier). Interestingly, the scholarly works of Mettle (2011), Tetteh (2012) as well as Ofori (2008) appears to be at congruence with the respondents’ findings during the study.

4.5.4 Insufficient Grant Allocation to the Fund

Participants at VRATFCs selected “Insufficient grant allocation to the fund (IGAF)” as the 4th most crucial that requires exigent precedence as far as the critical challenges confronting the smooth functioning of RTFs in Ghana is concerned. “IGAF” recorded an RII scoring of 0.575 as revealed by the 5-Point Likert scale’s relevance order, in association with the results spelt out in table 12 and what figure 5 depicts. Honestly, the participants’ revelation is consistent with the reportage of Tetteh (2012) in her Master’s Thesis write-up, presented to the Kwame Nkrumah University of Science Technology (KNUST).

4.5.5 Clarity of Rules and Policies Relating to Fund Disbursement

Furthermore, with respect to the critical challenges confronting the smooth functioning of RTFs in Ghana, participants chose “Clarity of rules and policies relating to fund disbursement (CRPF) as the 5th most pestilential comparatively. Put simply, “CRPF” had an RII value of 0.485 in consonance with the 5-Point Likert scale’s relevance order (refer to table 12 and figure 5 afore-cited). Unquestionably, the participants’ fact findings shares some level of semblance with the postulates of Sutcliffe (2009), in addition the submission of Tetteh (2012) afore-mentioned.

4.5.6 Questionable Timing of the Resettlement Processes

Finally, as regards the critical challenges confronting the smooth functioning of RTFs in Ghana, participants’ selected “Questionable timing of the resettlement processes (QTRP)” as the 6th most aggravating determinant that cannot be overemphasized. “QTRP” had an RII scoring of 0.370 based on the 5-Point Likert scale’s order of importance, which was later upgraded into the Relative Importance Index (RII) (refer to table 12 and figure 5 cited earlier). Again, the respondents’ finding conforms to the submissions of De Wet (2006) as well as Tetteh (2012) afore-cited during the study.

4.6 Achievement of Objectives

The research objectives have been duly achieved in the preceding chapters. The first objective which reads “To determine the distinctive relevance of resettlement trust funds to affected individuals in Ghana” has been thoroughly dealt with. In a nutshell, 6 key determinants were discovered by the respondents’ at VRATFCs. It has thus been illustrated on table 10 and figure 3 cited earlier. The second objective captioned “To identify the key monetary and non-monetary benefit-sharing mechanisms adopted by project developers in Ghana” has also been accentuated on. This was achieved through the distribution of questionnaires to 40 participants belonging to VRATFCs. In the strict perspective, 5 distinctive constructs were realized by the researchers’ based on the respondents’ preferred options as it relates to the Relative Importance Index (RII) order of significance on the Five Point Likert scale (see table 11 and figure 4 spelt out earlier). Lastly, the third objective dubbed “To investigate the critical challenges confronting the smooth functioning of resettlement trust funds in Ghana” has also been thoroughly dealt with. Simply put, 6 determinants were intimated by the respondents as spelt out in table 12 and figure 5 cited earlier.

5. Summary, Conclusions and Recommendations

This chapter presents the summary of findings, conclusions as well as recommendations made to address the challenges confronting the smooth functioning of RTFs in Ghana.

5.1 Summary

According to VRA Resettlement Trust Fund (2007), the fund helped to enhance quite a sizable plethora of projects encompassing all the fifty-two resettlement townships. Strictly speaking, myriads of lives have been affected by this fund. Most of the towns dotted along the sub-transmission line routes also benefited immensely from the electrification project, invariably, adding up to a whooping one hundred and seventy-one beneficiary townships. Furthermore, the RTF also funded other socio-economic infrastructural facilities encompassing health, education, water and sanitation since its inception just to mention a few.

Candidly speaking, with respect to the distinctive relevance of RTFs to affected individuals in Ghana, 6 determinants were opted for by the participants at VRATFCs, based on the Five Point Likert Model relevance order relating to the Relative Importance Index values depicted in table 10 and figure 3 cited earlier, specifically: Water and sanitation (WASA) (RII=0.845); Educational enhancement (human development) (EDEN) (RII=0.790); Health improvement (HEIM) (RII=0.680); Improvement of agricultural projects (IAGP) (RII=0.768); Community development (CODT) (RII=0.450); and lastly, Socio-cultural activities (SOGA) (RII=0.365).

Secondly, with reference to the key monetary and non-monetary BSMS adopted by project developers for displaced individuals in Ghana, participants’ at VRATFCs intimated, 5 notable determinants, namely: Revenue-sharing (REVE) (RII=0.875); Development funds (DEFU) (RII=0.805); Property taxes (PROX) (RII=0.720); Equity-sharing (EQAR) (RII=0.580); in addition to Livelihood and restoration enhancement (LIRE) (RII=0.455).

Lastly, in connection with the critical challenges confronting the smooth functioning of RTFs in Ghana, participants 6 preferred options were as follows: Improper costing of relocation packages (ineffective budgeting) (ICRP) (RII=0.880); Inadequate compensation of displaced individuals (INDI) (RII=0.730); Inactive

involvement of the displaced individuals in the decision making process (IVDM) (RII=0.675); Insufficient grant allocation to the fund (IGAF) (RII=0.575); Clarity of rules and policies relating to fund disbursement (CRPF) (RII=0.485); as well as Questionable timing of the resettlement processes (QTRP) (RII=0.370).

5.2 Conclusion

Pertaining to the dying emblems of the study, it could be inferred that all the participants totaling 40 and belonging to “VRATFCs” intimated “water and sanitation” construct as the most pivotal in relation to the distinctive relevance of RTFs to affected individuals in Ghana. The construct inadvertently recorded an RII scoring of 0.845 and was rated 1st comparatively, in tandem with the 5-Point Likert scale’s relevance order. It was edgily accompanied by “educational enhancement (human development)”, “health improvement”, “improvement of agricultural projects”, “community development”, in addition to “socio-cultural activities. The above-mentioned 5 constructs had RII scorings of 0.790, 0.680, 0.550, 0.450 as well as 0.365 and were inadvertently rated 2nd, 3rd, 4th, 5th and 6th respectively.

To add to this, with respect to the key monetary and non-monetary BSMs adopted by project developers for displaced individuals in Ghana, 5 key parameters opined by the participants at VRATFCs are categorically spelt out as below: “revenue -sharing”, “development funds”, “property taxes”, “equity-sharing” as well as “livelihood and restoration enhancement” with accompanying RII values of 0.875; 0.805; 0.720; 0.580; in addition to 0.455 respectively. Furthermore, as regards the critical challenges confronting the smooth functioning of RTFs in Ghana, again, 6 key determinants were realized by the participants at VRATFCs, namely: “improper costing of relocation packages (ineffective budgeting)”, “Inadequate compensation of displaced individuals”, “inactive involvement of the displaced individuals in the decision making process”, “insufficient grant allocation to the fund”, “clarity of rules and policies relating to fund disbursement” as well as “questionable timing of the resettlement processes”, with their respective RII scorings of 0.880; 0.730 0.675; 0.575 0.485 including 0.370 in tandem with the 5-Point Likert model’s order of relevance which was later transformed into the Relative Importance Index (RII).

From a critical appraisal and thorough scrutiny of previous and past literature worldwide reaffirms that the strict adherence to tested and tried strategic initiatives into any resettlement trust fund regimes will inadvertently go a long way to manage the incessant excesses and encumbrances that continues to rear its ugly head as far as the smooth functioning of any RTF regimes across the globe is concerned.

5.3 Recommendations

With reference to the critical challenges confronting the smooth functioning of RTFs at VRATFCs, the following remedies are of immense relevance to the study:

5.3.1 Effective Costing of Relocation Packages

The development agents must take into accounts all the significant cost components of the to-be-relocated citizens. This may include an amount that can take care of their present needs to restore them of what they lost and future needs to develop them to attain their inspirations. Apart from the monetary aspect, psychological acceptance through allowing the citizens to participate in the relocation as well as training them to sharpen their skills and even tap their capabilities to achieve their lives aspirations.

5.3.2 Sufficient Compensation of Displaced Individuals

Adequate compensation using both monetary and non-monetary parameters/benefits should take into account, local conditions and cultural requirements of the to-be-relocated. Example, consideration of the extended family system especially in Ghana should be in mind when deciding on the size of houses to be undertaken in the communities.

5.3.3 Augmentation of Grant to the VRA Resettlement Trust Fund

A concerted and unflinching effort should be made to the Volta River Authority by the VRA Resettlement Trust Fund to augment its RTF’s contribution so as to judiciously and effectively meet the socio-economic needs of the displaced individuals belonging to the myriads of resettlement communities in Ghana and beyond.

5.3.4 Clarified Rules, Regulations and Policies (Beneficiaries)

Comprehensible and simplistic compensation rules and policies relating to funds’ disbursement for misplaced personal effects (properties) should be made available to the affected folks. This will inadvertently put smiles on their faces in tandem with Abraham Maslow’s Need Hierarchy, Frederick Herzberg’s 2 Factor Theory, Mc Clelland Need Theory, Adam Stacy Equity Theory, Contingency and Expectancy Theories, Hersey and Blanchard’s Situational Theory, Vroom’s Expectancy Theory of Motivation, Elton Mayo’s Philosophy, Max Weber, Justice and Distributive Theories, Human Relation Theory, Geert Hofstede’s Cultural Dimension Theory

and the like.

5.3.5 Active Involvement of Displaced Individuals in the Decision Making Process

A pivotal determinant encompassing local benefit and control governance in relation to the smooth functioning of RTFs is the making of decision framework set up and the magnitude to which expatriation troubled folks can unswervingly affect cash reserves' usability. More so, irrespective of the intent to create an effective BSMs involving RTFs, indigenous requirements and ambitiousness may still be downgraded to state, or provincial, advancement precedence. That notwithstanding, in order to curtail its occurrence, sufficient embodiment of indigenous localities affiliated decision-making outfits task with the role of giving out cash reserves cannot be overemphasized. In a nutshell, it is only the strict adherence to effective decision-making processes in tandem with the hankering for bargained causatum, executed in a fair and equitable fashion, with all legitimate actors could likely bring a perpetual remedy to the incessant and intriguing enigma encompassing water, dams and advancement.

5.3.6 Strict Adherence to Accountability and Transparency Regimes

There should be an entity put in place which is detached and autonomous of both the project developer and government so as to ensure transparency and accountability throughout the resettlement processes.

5.3.7 Creation of Sufficient Room for Manoeuvrability

From the legislative framework establishment at the national domain, sufficient room should be created to ensure manoeuvrability with respect to the adaptation of the fund to cater for local needs of the displaced individuals within any resettlement regime at any stipulated time period.

5.3.8 Establishment of Project-Specific Development Funds

Specific development funds for projects need to be set up specifically to 'ring-fence' funds and target them to local development ventures or initiatives.

5.3.9 Avoidance of Dependency on Sole Sourcing of Hydroelectric Power (HEP) Related Funds

From the contextual perspective of augmenting rainfall variation coupled with accompanying instrumental variabilities in river flows, it will be ideal to eschew a dependency on a sole source of hydropower related funds. For instance, pertaining to the case involving Cree Nation, funds are normally retrieved from 3 different types of resource extraction, likely to guarantee funds in every year, whereas revenues only generated by HED may experience a dip substantially in subsequent years as a result of unfavourable rainfall patterns (rainfall deficits), fixings or political instability.

5.3.10 Timing of Resettlement Processes

More so, ensuring that population dynamics of the displaced individuals is taken cognizance of swiftly during the resettlement process. Put simply, prospective sites should be sorted out in advance before embarking on any resettlement regimes. This initiative should be in tandem with Latham and Locke Goal Setting Theory, Total Quality Management (TQM), Benchmarking, usage of the Balance Score Card (BSC), Kaoru Ishikawa Tools of Quality (Quality circles, Pareto Charts, Scatter Diagrams, Run Charts), in addition to Kaizen Continuous Improvement among others will help immensely in this perspective.

5.3.11 Openness to Congenial Culture

More so, precedence should be given to open and congenial culture (Geertz Hofstede's Cultural Dimension Theory), Moral Philosophy Framework (cultural relativism, situational ethics, cultural theories), employee morale and motivation (empowerment), synergy, team spirit, transparency, goal congruence, fairness, superior quality, equity, ethicality just to mention a few by VRA RTF's top echelons.

5.3.12 Total Application of Quality Management Tools/Techniques

Lastly, W. E. Deming (non-faulty systems/out-of-crisis), Joseph .M. Juran (strategic quality planning), Armand. V. Feigenbaum (concept of total quality control and continuous quality improvements), Kaoru Ishikawa (quality circles, fishbone diagram as well as the emphasis on internal customers), Philip Crosby (cost of poor quality far outweighs cost of preventing poor quality), Genichi Taguchi (emphasis on consistency of performance, decrease variations, quality loss function (QLF), parameter design, etc.) will help immensely in curtailing the bottlenecks that continue to rear its ugly head as far as RTF excesses at VRA RTF is concerned.

References

Adu-Gyamfi, A. (2015). Involuntary resettlement in Ghana: Implementation, planning and management of social

- impacts in hydropower projects. *Developing Country Studies*, 5(4), 44-57.
- Bartolome, L., Chris, W., & Harsh, M. (1999). *Displacement, resettlement, rehabilitation and development*. World Commission for Dams.
- Burns, N., & Grove, S. K. (2009). *The practice of nursing research : appraisal, synthesis, and generation of evidence*. St. Louis, Mo: Saunders Elsevier.
- Cernea, M. M. (2003). For a new economics of resettlement: A sociological critique of the compensation principle. *International Social Science Journal*, 175(37). March.
- Coghlan, D., & Brannick, T. (2014). *Doing action research in your own organization* (4th ed.). Los Angeles, CA: Sage.
- Creswell, J. W. (2009). *Research design: qualitative, quantitative and mixed methods approaches* (3rd ed.). London: Sage Publications, Incorporated.
- Creswell, R. (2014). *Research design: qualitative, quantitative, and mixed methods approaches*. USA: Sage Publications.
- Curtis, B., & Curtis, C. (2011). *Social research: a practical introduction*. Los Angeles, CA: Sage. <https://doi.org/10.4135/9781526435415>
- De Wet C, (2000). *The experience with dams and resettlement in Africa*. Working paper of The World Commission on Dam (WCD). Prepared for Thematic Review 1(3). Displacement, resettlement, rehabilitation, reparation and development.
- De Wet, C. (2006). *Development-induced displacement*. Problems, Policies and People. Berghahn books.
- Dörnyei, Z. (2007). *Research methods in applied linguistics*, New York: Oxford University Press.
- Duvail, S., & Hamerlynck, O. (2003). Mitigation of negative ecological and socio-economic impacts of the Diama dam on the Senegal River Delta wetland (Mauritania), using a model based decision support system. *Hydrology and Earth System Sciences*, 7(1), 133-146. <https://doi.org/10.5194/hess-7-133-2003>
- Egré, D. (2007). *Revised final report – benefit sharing issues: compendium on relevant practices – 2nd stage*. United Nations Environment Programme. Dams and Development Project. Retrieved October 9, 2012, from http://www.unep.org/dams/files/Compendium/Report_BS.pdf
- Egré, D., Roquet, V., & Durocher, C. (2002). *Benefit sharing from dam projects*. Phase 1: Desk Study. Final Report. Prepared for The World Bank, Mr Alessandro Palmierei. Task Manager.
- Fahim, H. M. (1981). *Dams, people and development: the Aswan high dam case*. New York: Pergamon Press.
- Fahim, H. M. (1983). *Egyptian Nubians - resettlement and years of coping*. Salt Lake City: University of Utah Press.
- Fernandes, W., Das, J. C., & Rao, S. (1989). Displacement and rehabilitation: an estimate of extent and prospects. In W. Fernandes, & E. Ganguly Thukral (Eds.), *Development, displacement and rehabilitation* (pp. 62-68). Indian Social Institute, New Delhi.
- Flick, U. (2014). *An introduction to qualitative research* (5th ed.). Los Angeles, CA: Sage.
- Gebre, Y. (2009). Why did resettlement fail? Lesson from Metekel. In A. Pankhurst, & F. Pigeut (Eds.), *Moving people in Ethiopia, development displacement and the state*. Eastern Africa Series, Addis Ababa.
- Grbich, C. (2013). *Qualitative data analysis: an introduction*. Los Angeles, CA: Sage.
- JVE. (2011). *Perception et stratégie de mise en oeuvre du partage des bénéfices dans la construction du barrage d'Adjarala*. Décembre, rapport final.
- Kyei-Dompreh, F. (2012). *Management of VRA resettlement towns: case study of West Kpong resettlement town*. CEMBA Thesis, KNUST, 1-92.
- Magembe-Mushi, D. L., & Lupala, J. M. (2015). *Resettling displaced residents from regularized informal settlements in Dar-es-Salaam, Tanzania: challenges faced by house owners*. Ardhi University, Dar es Salaam, Tanzania. Scientific Research Publishing Inc., 1-11.
- Merriam, S. B. (1998). *Qualitative research and case study applications in education*. San Francisco: Jossey-Bass.
- Mettle, M. (2011). *Forced resettlement in Ghana: the dam and the affected people*. The Bui Hydroelectric Power

- Project in Ghana, Thesis for Award of Master of Philosophy in Development Studies Specialising in Geography, Norwegian University of Science and Technology (NTNU).
- Moore, D. S. (2009). *The practice of business statistics: using data for decisions* (2nd ed.). New York: W.H. Freeman and Co.
- Neuman, W. L. (2007). *Basics of social research: qualitative and quantitative approaches* (2nd ed.). Boston: Allyn and Bacon.
- O'Leary, N. (2013). *The essential guide to doing your research project* (2nd ed.). Los Angeles, CA: Sage.
- Obosu-Mensah, K. (1996). *Ghana's Volta resettlement scheme: the long-term consequences of post-colonial state planning*. Bethesda, Maryland: International Scholars Publications.
- Raschid-Sally, L., Akoto-Danso, E. K., Kalitsi, E. A. K., Ofori, B. D., & Koranteng, R. T. (2008). *The resettlement experience of Ghana analyzed via case studies of the Akosombo and Kpong dams*. Paper presented at the 9th Annual Symposium on Poverty Research in Sri Lanka exploring experiences of resettlement.
- Rossouw, N. (2010). *Benefit sharing with local impacted communities during project implementation*. Overview of the literature and practical lessons from the Berg River Dam. Retrieved October 9, 2012, from https://gc21.giz.de/ibt/gc21/area=gc21/style=liny/paint=bizyb/en/usr/modules/gc21/ws-FLEXportal-NRM/Net/info/ibt/downloads/swid/Berg_Benefit_sharing_rev0_md.pdf
- Saunders, M., Lewis, P., & Thornhill, A. (2007). *Research methods for business students* (4th ed.). Pearson Education Limited. Edinburgh Gate, England, 586.
- Shi, G., Su, Q., & Yuan, S. (2002). *Risks control and the design of a social security system for resettlers: a case study in Xiaolangdi reservoir resettlement in China*. Paper presented at the International Conference on Resettlement and Social Development. Nanjing, China, May.
- Skinner, J., Krauss, J., & Newborne, P. (2014). *Redistribution of revenues from hydropower dams: Review of benefit sharing mechanisms and local control*. International Institute for Environment and Development (IIED), 1-77 Retrieved from www.iied.org/pubs
- Skinner, J., Niasse, M., & Haas, L. (Eds.). (2009). *Sharing the benefits of large dams in West Africa*. Natural Resource Issues No. 19. International Institute for Environment and Development, London, UK.
- Sutcliffe, C. (2009). *Interviews with people to be affected by Bui dam: A field report*. Retrieved from <http://www.internationalrivers.org/files/Bui%20Field%20Report.pdf>
- Tavakol, M., & Dennick, R. (2011). Making sense of Cronbach's alpha. *International Journal of Medical Education*, 2, 53-55. <https://doi.org/10.5116/ijme.4dfb.8dfd>
- Tetteh, M. (2012). *Effect of activities of the VRA resettlement trust fund in improving the livelihood of the new Senchi resettlement community*. EMBA Thesis, KNUST, 1-85.
- Thatcher, R. (2010). Validity and reliability of quantitative electroencephalography (qEEG). *Journal of Neurotherapy*, 14, 122-152. <https://doi.org/10.1080/10874201003773500>
- United Nations Environment Programme (UNEP). (2007). *Dams and development: relevant practices for improved decision-making*. Nairobi: United Nations Environment Programme, DDP Secretariat.
- USAID. (2012). *Performance evaluation of USAID/Kenya's conflict mitigation and civil society strengthening activities: an evaluation to identify the effectiveness of USAID-funded activities in contributing to a peaceful Kenya*. United States Agency for International Development, 1-270.
- Volta River Authority Resettlement Trust Fund (VRA RTF). (2005). *Annual report and audited accounts for the year 2004 published by the managing trustees under the trust deed*. Accra: Volta River Authority Resettlement Trust Fund.
- Volta River Authority Resettlement Trust Fund (VRA RTF). (2006). *Annual report and audited accounts for the year 2005 published by the managing trustees under the trust deed*. Accra: Volta River Authority Resettlement Trust Fund.
- Volta River Authority Resettlement Trust Fund (VRA RTF). (2007). *Annual report and audited accounts for the year 2006 published by the managing trustees under the trust deed*. Accra: Volta River Authority Resettlement Trust Fund.
- Volta River Authority Resettlement Trust Fund (VRA RTF). (2008). *Annual report and audited accounts for the*

- year 2007. Accra: Volta River Authority Resettlement Trust Fund.
- Volta River Authority Resettlement Trust Fund (VRA RTF). (2009). *Twelfth annual report and audited accounts for the year 2008*. Accra: Volta River Authority Resettlement Trust Fund.
- Volta River Authority Resettlement Trust Fund (VRA RTF). (2010). *Annual report and audited accounts for the year 2009*. Accra: Volta River Authority Resettlement Trust Fund.
- Volta River Authority Resettlement Trust Fund (VRA RTF). (2011). *Fourteenth annual report and audited accounts for the year 2010*. Accra: Volta River Authority Resettlement Trust Fund.
- VRA. (2014). *Volta River Authority manual: resettlement trust fund*. Retrieved from www.vra.com
- Wang, C. (2012). *A guide for local benefit sharing in hydropower projects*. World Bank Social Development Working Paper No. 128, June.
- WCD. (2000a). *Dam and development: a new framework for decision-making*. The report of the World Commission on Dam. London: Earth can.
- Yates, J. S. (2004). *Doing social science research*. London: Sage Publications.
- Yin, R. K. (2003). *Case study research: design and methods* (3rd ed.). Thousand Oaks, CA: Sage.

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