

**THE RELATIONSHIP BETWEEN CORPORATE SOCIAL RESPONSIBILITY AND  
LIVELIHOODS OF RURAL COMMUNITIES: THE CASE OF SONDU MIRIU  
HYDRO-ELECTRIC DAM PROJECT, KISUMU COUNTY, KENYA**

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**DECLARATION**

This research project paper is my original work and has not been submitted for award of a degree in any other university

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This research project paper has been submitted for examination with my approval as University Supervisor



December 3, 2023

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## **DEDICATION**

Dedicated to my dear wife Jane and to my children Christine and Natalie who kept urging me to complete my research work. Thank you for your support and prayers.

To my late mother Rhoda Apiyo Agiso whose exemplary values of cheerfulness, kindness, honesty, and dedication has continued guiding me throughout

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## ABSTRACT

The aim of the project is to establish the relationship between Corporate Social Responsibility of Sondu Miriu river Hydro-electric Dam Project and the Livelihood Activities of the communities living downstream. Symbiotic harmonious business and the society relationship is essential for sustainability of enterprises and improvement of the livelihoods of the surrounding communities. Corporate Social Responsibility (CSR) is concerned with the role of corporates in ensuring that their activities enhance sustainable societal developments where they operate; that profit goals of enterprises is not pursued for its own sake but for the overall benefit of society. Hence, the following questions guided the research: To what extent has Sondu Miriu Hydro Electric Power Project (SMHEPP) CSR-led infrastructure influenced livelihoods of the households living downstream of the project? How has the Sondu Miriu Hydro Electric Power Project (SMHEPP) CSR-led influenced Provision of Social Services of the households living downstream of the project? To what extent has Sondu Miriu Hydro Electric Power Project (SMHEPP) CSR-led employment of locals influenced livelihoods of the households of the communities living downstream of the project? And have the livelihoods changed since “the Sondu Miriu Hydro Electric Power Project” was initiated? The study was guided by the social cost theory as a foundation for Corporate Social Responsibility where the social economic structure in the society is perceived to be affected by the forces of non-economic corporate. The study also used social exchange theory which was first advanced by George Homans in 1958, and is mainly concerned with explaining behavior change at individual level. The social exchange theory postulates that people make decisions (intentionally or unintentionally) based on the costs and rewards of the action or relationships (cost benefit analysis) they have with the project. In order to achieve the objectives, the study used a descriptive research method as the main research design owing to the data collection exercise that involved questionnaires as the main data collection tool. The questionnaires were both open and closed in such a manner that they captured wider view of the respondent’s perspective. Simple and purposive sampling methods were both used in the study in identifying the respondents in which the purposive sampling was mostly used during the administration of key informant interview that required particular number of people to participate in the study. The collected questionnaires were then cleaned for errors, and analysed using SPSS version 25. The researcher then used descriptive statics and inferential analysis methods where descriptive statistics involved frequency and percentage of responses and inferential statistics involved regression analysis and correlation analysis. The study found out that CSR provided by the Sondu Miriu Hydro Electric Power Project has improved the livelihood of the community living downstream through the provision of infrastructure and social services such as bursaries and scholarships to students from the area. The power project has built access roads, build hospitals and classrooms as top social amenities for the sorounding communities. The project has also installed clean water surply systems to area residents. By creation of employment opportunities through CSR, the project has improved the livelihood for residents living downstream through cash flow as proceeds from wages and salaries paid. The study recommends for community involvement of the designe and of CSR activities through effective public participation for more positive outcomes on household livelihoods. The study recommends further research on social impacts of the project in the area, as some of the respondents cited negative effects of the projects during the interview. Some respondents indicated that the project promoted social ills such as increased incidences of crime, alcoholism and other negative social ills- Thus any scholar may take up the research on social impacts of such large government projects.

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## CHAPTER ONE: INTRODUCTION

### 1.1 Background of the study.

#### 1.1.1 Sondu Miriu Hydro-Electric Power Project

The demand for electricity in Kenya is generally very high since it is a prime mover of the commercial sector of the economy. However, a large percentage of Kenya's population have inadequate accessibility to electrical power as they reside further away from the power grid, in which electricity can only be connected at a very high cost (Acker et al, 2012, Baral et al. 2015).

Sondu Miriu Hydroelectric power project was established as both a public service initiative as well as, most significantly, corporate business undertaking by Kenya Electricity Generation Company. The Hydroelectric project covers an estimated area of about 529 acres of land. The project is mainly located in Nyakach sub-county, with an estimated population of 168 140 living in about 357.30 square KM, and the projected population density in 2020 is 495 persons per square kilometer. The estimated population growth rate for the County is 2.6% which is higher than the national average of 2.2%. The expectancy of life at birth for females is 61 years (while the national average is 66 years), and for men is 58 years while the national average is 61 (Kisumu Country Integrated Development Plan-CIDP- 2018).

It is estimated that over 1000 households were affected by the Sondu Miriu hydro-electric dam project (Okeyo *et al.*, 2015). At the inception, most of the displaced people affected by the project were compensated based on the negotiated market value of their land. However, after one year of civil work, a group of NGOs named "Sondu-Miriu River Community Advocacy Group" was formed which questioned the project's activities. By "October" 2000, the local NGOs like Africa Water Network (AWN) and advocacy groups had collaborated with other global organizations.

#### 1.1.2 Corporate Social Responsibility (CSR)

The independent variable for this study was corporate social responsibility (CSR). In the past, CSR was narrowly seen as a philanthropic act but later evolved to include focus on the symbiotic interlink between business and society. In recent times, there is a growing acknowledgement by business entities that the interest and well-being of societies is essential for them to thrive.

Business ought to be responsible for the impact of their societal activities, and hence they must ensure the interest of the community and their employees are responsibly addressed as part of the

business obligations. This responsibility is even more essential for businesses whose activities are extractive in nature, such as hydro-electric dams, mining, and large infrastructure projects. These types of enterprise have a direct influence on surroundings and can fundamentally alter the livelihoods' situation of the surrounding communities.

The essence of CSR is anchored on the fact that enterprises exist to benefit the community and the society in general. CSR is concerned with the role of corporates in ensuring that their activities enhance sustainable development of the societies where they operate; that profit goals of enterprises is not pursued for its own sake but for the overall benefit of society. A symbiotic harmonious relationship between business and the society is essential for sustainability of enterprises and improvement of the livelihoods of the surrounding communities. Because enterprises need the society, the society also expect enterprises to embark on additional investments in social areas and to be accountable.

Primarily, societal welfare is a government responsibility. However, governments do not always sufficiently provide for the welfare of its citizens. Therefore, since enterprises benefit from their interaction with the society, engaging in CSR becomes a matter of good conscience and public policy. Socially responsible companies should not only guarantee shareholders' returns, fair wages for employees, and services and products at fair prices for consumers, but should also guarantee social services. They also address social issues and values relating to the societal, monetary, and conservational development of the community we live in (Brew *et al.* 2015).

CSR is, to that extent, any attempt by companies to enhance societal welfare and respond to societal social issues and values regarding social, economic, and environmental development of the system that we live in. These involve initiatives that restore and improve conditions of the surrounding communities and the wider society socio-economically. Brew *et al.* (2015) affirmed that there is a relation between CSR activities and education, health, livelihood, and community aid.

Hydro-Electric Power projects and operations such as Sondu Miriu project, must increasingly be evaluated from a community development perspective. They ought to restore and improve conditions of the surrounding communities and the wider society socio-economically. Some of the common CSR activities entail community development, aids, partnerships with non-governmental agencies, etc. (Turker, 2009, Sundström *et al.*, 2019). Other activities are

environmental protection initiatives, pollution reduction and sustainability-oriented activities. (El Akremi et al. 2018, Turker, 2009).

Previous studies in unindustrialized nations have pointed to the contribution of corporate social responsibility initiatives in solving difficulties, such as redundancy, and reduction of environmental pollution successfully (Williamson et al. 2006, Hodges 2015). Projects have also established “institutions and structures that enhance eradication of poverty, social justice, community welfare as well as protection of environment (Dobers & Halme, 2009).” Companies have also undertaken activities such as building roads, hospitals, schools, or similar contributions (Jamali, 2007). Organizations enhanced standards of education by building colleges and classrooms in the project area, by offering scholarships to highly excelling project students, supplied piped clean water and enhanced communication by building roads and bridges, and by providing social forestry plantings. Others have assisted communities in accessing electricity, employed community members in the projects or engaged the local community in recreational activities including sports (Abiero, 2010).

As a clean and renewable energy source, hydropower (HP) will play a big role in meeting the climate policy goals and in scrapping out nuclear energy. However, extractive businesses, such as hydroelectric projects, are often associated with environmental and socio-economic disruptions and, therefore, should restore the livelihoods of the communities that are affected by their activities (Abiero, 2010).

With regards to Sondu Miriu Hydroelectric Power (HEP) project, it was agreed that it would, through CSR, give several benefits such as employment priority to the affected people. All health centers were to be expanded and upgraded and new ones were to be built if there was need. The main road would be tarmacked, feeder roads opened, and that local electrification would begin immediately subject to regulation by the government agencies on quality assurance to ensure that any project being undertaken by on behalf the community meets set standards. The community with good literacy level are able to voice their concerns on the kind of CSR projects taking place in their area. Good education level gives reasonable public participation since the community act from the informed point of view (Abiero, 2010).

In this study, Corporate Social Responsibility (CSR) is conceptualized as any environmental protection initiatives, building roads, hospitals, schools, scholarships to top students near the

project area, piped clean water provision, employment by the project and accessing amenities such as electricity and sports to enhance societal welfare and respond to societal concerns and values (Abiero, 2010).

### **1.1.3 Livelihoods of Rural Communities.**

The concept of livelihoods can be defined as people, their capacities, their ways of livelihoods including food, revenue, and properties (Carney, 1998). Carney developed the framework comprising five assets on which households or individuals build their livelihoods to sustain their income. They consist of monetary assets, human resources, capital investments, social connections, and ecological processes. The assets, however, are vulnerable to external environments such as changes in economic trends, political systems, and technology, among others. Similarly, shocks (such as weather, illness, conflict etc.), as well as seasonality issues (such as prices, production cycle etc.) influence the assets. Other scholars posit that livelihoods are wider than than capitals - human, social, physical, financial and natural-That resources evolve and take on more different forms depending on the history and experiences of the community (Ontita, 2006).

Livelihood includes income (cash and in-kind), societal organizations (family, kin, composite, village and so forth), sex and the rights of property for supporting and maintaining a standard of living (Ellis, 1997). Also, livelihoods include accessibility to, and profits from, community social services such as water, hospitals, schools, roads and so on.

Community development is generally described as well-being or opportunities for improving living conditions for the individual and the community. A study by Hopkins (1999) stated “that corporate social responsibility is about building capacity for sustainable livelihoods.” However, some infrastructural development activities have alienated communities from their livelihood resources (Aubynn, 1997). Most corporate social responsibility undertakings majorly focuses on public service aspects of livelihood at the expense of other options. However, a good CSR program can help to alleviate poverty.

In this study, livelihood activities will be conceptualized as income (cash and in-kind) generating activities, access to and benefits from public social services such as water, hospitals, roads, and education.

## **1.2 Problem Statement.**

The construction of Hydroelectric power projects can enhance the economic situations, environmental and societal circumstances of their surrounding societies. On the other hand, Hydroelectric power projects can also have negative effects on the livelihoods of the surrounding communities, especially those living downstream. Besides the environmental and ecological effects, Hydro-electric dam projects can significantly affect the community livelihoods and related issues such as displacement of families, depletion of agricultural land for cultivation, decline in fish, and reduction in supply of food, housing, medicine revenue and local employment opportunities and cultural values (Okuku et al 2016). Just like in the growth of large-scale infrastructure projects, the consequences of the construction of hydro-electric power projects often lead to the exclusion of communities at local level of the access and use of the affected land of its traditional livelihood activities that can be linked to the level of education as those community members with high level of education are likely to give reasonable public participation on the CSR projects to be undertaken while those with low level of education may be duped into accepting unreasonable projects since they are not informed on the nature and operation of the CSR projects (Okuku et al 2016).

Yet, despite the inherent negative effects on the livelihoods of the surrounding communities, it is often assumed by the Government that the generation of electricity and the socio-economic benefits through CSR initiatives are an essential contribution to the overall development of the nation, and that it will ultimately enhance peoples' livelihoods directly influenced by the damming of a river. Based on experiences of previous dams done in Kenya such as Turkwel Gorge and Masinga HEP dams where rivers were diverted, the potential for the river course to dry up permanently or become a seasonal river is possible (Okuku et al 2016).

With regards to Sondu Miriu Hydro-Electric Power (HEP) dam project, since its establishment in 2007, hardly any published researches has been done on the CSR initiatives' influence on the livelihoods of the surrounding downstream communities. What is apparent is that the contractor diverted the river, and this might have disturbed the hydrological and ecological formation of the river and might have consequently impacted the way of living of the surrounding communities. The community depends on the river water for farming, fishing, domestic use and even recreation.

The activities of the hydro-electric dam project have also led to resettlement of households but there have been complaints of inadequate compensations and loss of arable land. Considering these concerns, public initiatives like the Sondu Miriu Hydroelectric Dam Project should therefore focus on the restoration of livelihood options in their CSR strategies to provide safety nets and increase its acceptability by the local community.

The proposed study therefore aimed to investigate “*CSR initiatives by the Sondu Miriu Hydro-electric dam Project relationship with the livelihoods of the communities living downstream*”. The study focused on the downstream communities that remained in the location after the project was initiated, because they are usually most affected by the changes in the river flow. Most people usually settle downstream of rivers due to topographical and economic considerations. Consequently, a variety of livelihood activities such as access to better transport, more cultivable agricultural land, cattle rearing as well as better opportunities for fishing are concentrated downstream of rivers.

### **1.3 Research Questions**

The study was guided by the following research questions:

- I. To what extent has Sondu Miriu Hydro Electric Power Project (SMHEPP) CSR-led infrastructure influenced livelihoods of the households living downstream of the project?
- II. How has the Sondu Miriu Hydro Electric Power Project (SMHEPP) CSR-led influenced Provision of Social Services of the households living downstream of the project?
- III. To what extent has Sondu Miriu Hydro Electric Power Project (SMHEPP) CSR-led employment of locals influenced livelihoods of the households of the communities living downstream of the project?.
- IV. Have the livelihoods changed since “the Sondu Miriu Hydro Electric Power Project” was initiated?.
- V. What is the mediator effect of education level on Sondu Miriu Hydro Electric Power Project (SMHEPP) CSR on livelihoods of the households of the communities living downstream of the project?



## **1.4 Research Objectives**

The primary aim of the study was to assess the relationship between Corporate Social Responsibility of Sondu Miriu river Hydro-electric Dam Project and the Livelihood Activities of the communities living downstream.

The specific objectives guiding the study were as follows:

- I. To examine the extent to which Sondu Miriu Hydro Electric Power Project (SMHEPP) CSR-led infrastructure has influenced Livelihood of the households of living downstream of the power project.
- II. To investigate how Sondu Miriu Hydro Electric Power Project (SMHEPP) CSR-led influenced Provision of Social Services of the households living downstream of the project.
- III. To determine the extent to which Sondu Miriu Hydro Electric Power Project (SMHEPP) CSR-led employment of locals has influenced Livelihoods of the households living downstream of the project.
- IV. To establish changes in livelihoods since “the Sondu Miriu Hydro Electric Power Project” was initiated.
- V. To find out the mediator effect of education level on Sondu Miriu Hydro Electric Power Project (SMHEPP) CSR on livelihoods of the households of the communities living downstream of the project?

## **1.5 Significance of the study**

Damming of rivers for electricity has increased tremendously in Kenya over the past few decades. Whereas their significant contribution to economic development is always well articulated in public discourse, the effects on the livelihoods of households of the surrounding communities has not been well documented. “In the case of Sondu Miriu Hydro-electric dam project, there” is hardly any significant study undertaken on the socio- economic effects on the communities living downstream since its construction in 2007. Most studies tend to focus on the environmental and geological effects of the project. This implies that there is hardly any accountability on the effects and consequences of the project on the livelihoods of the households of the surrounding communities.

It was therefore important to find out the relationship between damming of the river and the livelihoods of the surrounding downstream communities in Kisumu County. The research findings

of this study are beneficial in contributing to understanding the link between CSR, community development and livelihoods. The stakeholders will be able to comprehend the “role of Corporate Social Responsibility in” restoring the livelihoods of the people and thereby sustaining the affected downstream communities’ development. Therefore, this study in this regard invariably contributes to increase in the body knowledge about livelihood restoration through CSR in general, and the socio-economic effects of the damming of Sondu-Miriu river on the surrounding downstream households.

Similarly, since there is hardly any legal or policy regulatory framework to guide the CRS activities in Kenya, this study highlights the linkages of CSR and livelihood development. It hence contributes to the development of policy framework to guide the operation of CSR activities in the country. Furthermore, the study contributes to knowledge about possible ways to minimise any negative effects of dam construction on livelihoods of surrounding communities, so that all stakeholders can harmoniously enjoy the benefits.

### **1.6 Scope of the Study**

The research focussed on the population of the community living downstream of Sondu Miriu Hydro Electric Power Project which is located on 529 acres of land encompassing of 1253 families impacted either partially or completely (Abiero, 2010) in five locations near the project- S.W. Nyakach, Oboch and Thurdibuoro of Nyakach Sub County and West Kodhoch as well as East Kodhoch both of North Rachuonyo” Sub- Country.

*This study was however limited to Kisumu County, and specifically the three locations in Nyakach sub country (S.W. Nyakach, Oboch and Thurdibuoro). Only the households and key informants were given chance to participate in the study irrespective of the gender. The study discussion was all on the infrastructure development where it touched on the infrastructure construction such as schools, roads and health centers. The study also touched on the employment of the residents of the communities around the dam projecty and the provision of social services. Inroder to enrich the study findings, the researcher interviewed key community leaders such as area chiefs and the managers working at the Sondu Miriu Hydro Electric Powe Project.*

## CHAPTER TWO: LITERATURE REVIEW

### 2.1. Livelihoods

In a rural set up, livelihoods involve a 'combination of complex web of activities and interactions of how people earn their living' Ian Scoones (2009). In rural African communities social and kinship networks are essential in supporting diverse household incomes. The researcher further described the household as people living together under one roof or are far apart geographically but have a common family that binds all of them together. In most cases, households share one roof but in some situations, households can be virtual due to work or school that separate families. The households in this study have similar experience of economic gain brought about through living together and they share through earned wages and salaries from temporary and permanent jobs that arises from the project thus changing the livelihoods of the community positively.

Robert Chambers posits that, an environmentally sustainable way of life is possible if it helps to preserve or improve the local or global assets upon which it relies and if it has a positive overall impact on other ways of life. They argue further that, a livelihood is deemed to be socially durable when it is resilient enough to withstand and rebound from adversity, as well as when it is capable of supporting subsequent generations (Chambers et al 1991). Large scale infrastructure projects, such as the Sondu Miriu Hydro-electric dam project sometime disrupt social structures and affect the livelihoods of the surrounding households.

The communities living downstream Sondu Miriu river have always depended on and maintained the livelihoods around the river ecosystem. The common livelihood activities included fishing, small scale agriculture, cattle rearing, trade, transport, water for domestic use among others.

### 2.2 Community

Community is referred to a group of persons with a shared purpose and interdependent in the fulfillment of given needs, living in proximity and with regular interactions, while concept of development has been described generally as a positive change in the living standards people and generally livelihoods in the community (Maimunah, 2009).

Community development (CD) is termed as community-based initiatives that are implemented with collaboration with external entities or establishments to embolden groups and individuals by offering these segments with the ability to make changes in their communities. These skills

sometimes focus on utilising local resources and building political power by forming large social groups working towards a shared vision (Maimunah, 2009).

According to UNDP definition, “development is a multi-pronged effort that is made with the goal of improving everyone's standard of living. Therefore, social and economic growth, in addition to the conservation of the environment, are components of sustainable development that are relied on one another and mutually reinforce one another” (Maimunah, 2009).

### **2.3 Households**

Livelihood can be best understood by focusing on households as the entry point to understand the income of a community. Ellis (1977) describes household as the social group that lives in the same building, eats together on a regular basis, and takes decisions on resource distribution and income sharing either jointly or in coordination with one another. Others conceive the idea of household as a group of participants who have agreed, either voluntarily or out of historical necessity, to behave in concert with one another with relation to the rest of the world (Preston, 1997). More recently, household has been described by Ontita (2012) as a social group that may either live in the same building or separate building, may share income or part of it or property and can be traced to a particular family tree. He further observed that a family may be virtual in sharing of information and decision making because of separate geographical location.

In a rural set up such as the communities living around Sondu-Miriu Hydroelectric dam project, household is understood to include family members living abroad or in urban centres outside their rural villages but still contribute to their rural household income or livelihoods.

This study will focus on the livelihood situation of selected households to comprehend the relationship between the CSR activities of dam project and the livelihoods situation and generalize for the surrounding community.

### **2.4 Corporate Social Responsibility**

Corporate social responsibility (CSR) is regarded as a concept for contemporary company managing the company where an equilibrium is found between repaying the community and generating profits in ways in which both the community and the company find benefitting enabling the company operations get accepted by the community. Corporate responsibility's aim therefore,

is to create a stability that is long-term to an organization whilst improves its relations with the surrounding community and other stakeholders simultaneously (Karabasevic et al. 2016).

Karabasevic et al. (2016) indicates that the corporate environment as of currently, the competitiveness of organizations is reflected for their market positions, results in production as well as organizational features as to community responsibility and well-being, households or employees and business partners support, sustainable development and environmental care.

Though there is presently no generally acknowledged Corporate Social Responsibility –CSR definition (Blow field & Frynas, 2005), the term commonly refers to Greater corporate responsibility for society and the environment. Akachukwu (2005) argued that social responsibility is a responsibility of companies to community they must fulfill without even being pressured to do so. Corporate social responsibility is viewed as an obligation of enterprises which go beyond profitability for shareholders and contributes to the resolution of socio-economic and environmental issues (Idemudia, 2011).”

Arguably, the academic interest “on the first publication on corporate social responsibility came out in 1954, when Howard R. Bowen released his book titled "*Social Responsibilities of the Businessman.*" Bowen pointed out that managers have a moral need to evaluate the wider societal effects of the decisions they make, and he said that businesses that fail to honor the larger social compact should no longer be considered legitimate entities. He made the observation that it is in the rational self-interest of businesses to work toward the betterment of society as a sort of voluntary action that has the potential to prevent the establishment of unfavorable popular views and unwelcome legislation (Steiner & Steiner 2006). Friedman (1962:1970) argues that the one and only social responsibility of a corporation is profit maximization. That a corporation must always use its scarce resources to maximise profit for its shareholders. He argues that any other alternative undertaking by the business, such as CSR, will distract it from the primary purpose of profit maximisation and should be discouraged.

Another scholar defines CSR as the management of a company in such a way that it is economically successful, compliant with the law, ethical, and beneficial to the community (Carroll, 1991). According to Carroll, the society expects certain obligations and responsibilities from businesses which include *economic responsibilities*-which is basically to make profits. It is upon this that all other responsibilities are anchored. “There are also the *legal responsibilities*- business

must obey the law for them to survive. Legal responsibilities must be seen in almost all activities of the corporation from labour law, environmental, securities, financial and even criminal law. Corporations also have *ethical obligations* of doing right, fair, just and avoid harm as well as *philanthropic obligation* to the community resources contribution, enhance life quality for the society and generally be a good corporate citizen.”

## **2.5 Roles of Corporate Social Responsibility in Livelihoods Development**

CSR has implications in the development of livelihood in an array of ways including sharing of the negative consequences because of industrialisation. “Through Corporate social responsibility the presence of social system in companies is felt far beyond perception that businesses are just a place to get jobs and producers of goods and services.” Effective CSR keeps businesses and the community “in peace. It becomes an indispensable social capital in the development of the livelihoods of the community, such as those living around Sondu Miriu Hydro-Electric dam project.” Through social responsibility, identification of sustainable livelihood sources in the community can be enhanced in the best interest of all stakeholders. Also, CSR can be used to promote the “technology transfer (TOT) to the community. Closer ties can assist in TOT between enterprises such as Sondu Miriu Hydroelectric power project for the mutual benefit of the project and the communities living around it.” Social responsibility also aids in the protection of the environment assets of the community.

Several scholarly works have shown the link between CSR and community development. Usman (2015) assessed thoroughly the effects of corporate social responsibility on communal development in Nigeria based on a case of Julius Berger Company. Findings indicated that CSR (social reasons, supply of basic social facilities, and compensation to local residents) has a positive impact on community growth.

David (2012) examined community CSR prospects and the effect of the outdated, political, and managerial systems on communal Niger Delta region CSR prospects. In order to determine the importance of CSR and oil company CSR practices in the Niger Delta, the analysis of the data was through the principles of content and contextual analysis. Study findings demonstrate that the indigenous populace's hopes and dreams were filtered via the lens of underdevelopment and its effects on their social and economic well-being. Since CRS is mentioned, it's safe to assume that the two are linked in some way to local improvement.

Alabi and Ntukekpo (2012) studied how Oil Companies manage their Corporate Social Responsibility in Nigeria: “Empirically assessed community development projects of Chevron’s in the Niger Delta utilising descriptive survey research to examine the efforts of CSR of one of the oil companies - Chevron, in three oil firms of Niger Delta.” The study purposively selected 150 opinion leaders from three communities to take part in the research. The results demonstrate that although the efforts to develop the community by Chevron is meaningful and on-the-ground in the three communities, the CRS has been insufficient or sufficiently relevant to the desires of the resident communities.

Dang, Y. & Mabur (2014) investigated Corporate Social Responsibility (CSR) effectiveness in improving relations of Nigerian communities. The study was based on case of Grand Cereals Limited, located in Zawan community of Plateau State utilising Likert-scale surveys for collecting data from the community and presentation of findings was done in bar chart. The study established that activities of corporate social responsibility by Grand Cereals Limited were efficient to the Zawan community founded on perception of community on issues improving community relations. This reveals that there is a substantial link amongst CSR and communities’ livelihoods.

Numerous non-profit organizations such as the United Nations have been engaged in the learning and advocating SR for protecting the environment. They are for instance a) “Earths Friends” who outlines the “ecological effect of various multinational corporations and campaigns for tougher ecological liability legislation” (b) “Green Peace” is an independent global campaigning organisation, which promotes attitudes and behaviour, environment protection and peace in many respects, and promotes sustainable agriculture and environment through the promotion of ecologically and socially responsible practices of farming. “Green Peace uses unswerving action, lobby groups and studies to meet its goal in the local community.”

Also, the United Nations have initiated the “Global Compact” – “an initiative to persuade international enterprises to dedicate themselves to universal human rights principles (Rasche, 2013). The UN Global Compact is also” the globes largest voluntary corporate responsibility project, with the goal of a strategic policy for companies that align their human rights, labor and environmental operations and strategies. “And thereby, business as a crucial aspect of globalization can contribute to advancing markets, trade, finance and technology in ways in which economies and societies find benefitting everywhere.” Mutual objectives, like development of markets, anti-corruption,

protection of environment, and social inclusion, have led to tremendous collaborations and openness between businesses, government, civilians, the workforce, “and the United Nations. This ever-growing comprehension is associated with the development of the Worldwide Compact that currently represents the world's biggest nationality and sustainability initiative with more than 4,700 participants and stakeholders from more than 130 nations.

Social responsibility aids in the attainment of goals of corporate sustainability. For years, companies in Europe have taken “their social responsibility role seriously, always under the banner of corporate sustainable development. The European Union has established a framework for corporate sustainability that recognizes a gradual set of monetary, communal, and ecological goals that firms are persuaded to accomplish. For example, they proposed a strategy to evaluate employee views on supportable business practices (SBP). These practices constitute a company's continued adherence to ethical conduct and contribute to sustainable growth while enhancing the living standards of its staff and families, and local communities and society in general.” All these can be adapted by the enterprises in developing countries such as the Ken Gen initiated Sondu Miriu hydro-electric project to enhance the livelihoods of the communities affected by its operation.

## **2.6 Effect of Education Level on the Implementation of Corporate Social Responsibility**

In the business environment, CSR is becoming an essential element and its status within research and management education have been acknowledged given its significance in organizations (Pfeffer and Fong, 2004). Sobczak et al. (2006) made special efforts in their research of the community perception of CSR impacted by higher education where he indicated that higher-level educated communities are likely to experience greater impacts of CSR due to their positive contribution in the CSR programs. The study's primary findings showed that there's an impact of the different levels of education on the respondents' perception of companies towards CSR concept and implementation.

Although justice and fairness ethical norms are embodied by legal and economic, ethical responsibilities are not codified into law. Expectations, standards or norms embodying ethical responsibilities that reflect what is regarded as fair and just by employees, shareholders, consumers and the community which in most cases is controlled by the literacy levels of the community. Lastly, Philanthropic Responsibilities are comprised of those corporate actions responding to the



expectations of the society that businesses should be good corporate citizens. This is but not limited to engagement human welfare promotion initiatives or community goodwill (Carroll, 1991).

The debate about the perception of CSR between the literate and illiterate groups does not lie on any education level as the CSR results outweigh the corresponding community literacy since impacts of CSR is experienced in equal manner regardless of the level of education (Margolis and Walsh, 2003) and while CSR is regarded as the channel that can be used to avoid regulation by attempting to act in a manner that saves the environment in a friendly way (Freeman, 1970). The increasingly the borne of contention should the organization's wider goal closely relate to social responsibility issues or when the firm gets responsible to any activity that has no direct relationship to its interest ethically. These are the economic, legal, ethical and philanthropic perspectives of CSR among the literate and illiterate groups (Carroll, 1991).

## **2.7 Theoretical Framework**

### **2.7.1 The Social Cost Theory:**

Social cost theory has a foundation for Corporate Social Responsibility where the social economic structure in the society is perceived to be affected by the forces of non-economic corporate. It is as well-established as instrumental theory (Garriga & Mele, 2004) since it is comprehended that Corporate Social Responsibility is a way to the end, that results to the fact that the social power of a company is materialised in its political association precisely with the community. It indicates that the company must accept social obligations and civil liberties to engage in social cooperation. It is accurately argued by the functionalist theory that the company is often viewed as a component for system of economy, among its objectives being to make profits. The company is a profitable investment for stakeholders and investors." From an internal perspective, Corporate social responsibility was "designed as an industrial system defense tactic against exterior attacks since the stability between profits-building and communal goals is necessary for the balanced system of economy.

The social cost theory helps us understand the corporate goals for CSR but does not adequately answer the intrinsic value of the community's expectations from corporate presence in their locality. Therefore, social exchange can be applied to bring out the missing link.

### **2.7.2 Social Exchange theory**

Social exchange theory, first advanced by George Homans in 1958 (Social Behaviour as Exchange), is mainly concerned with explaining behaviour change at individual level. Homans argues that people make decisions (intentionally or unintentionally) based on the costs and rewards of the action or relationships (cost benefit analysis). The theory can be applied to explain community and corporate level actions. Since households within communities, such as those living around the Sondu Miriu river comprises a group of individuals, their action on building of the hydroelectric dam project was based on the cost and rewards of such a project. In this context, the social exchange theory can be used to analyse what the community loses or gains through the construction of hydroelectric dam project, such as Sondu Miriu. Looking at it from the community livelihoods perspective, the social exchange theory can help to examine the value of what the community gives away in traditional sources of livelihood and what it receives in exchange of having the hydro-electric power project within its locality.

The social exchange theory compliments the social cost theory by bringing out the perspective of the community's expectations in CSR initiatives. It helps to answer the overriding question in this study on whether the community livelihoods are better off or worse because of the CSR activities of the Sondu Miriu- Hydroelectric Dam project.

## **2.8 Conceptual Framework**

Founded on studies reviewed, a conceptual framework was generated to guide the examination of the association amongst Corporate Social Responsibility with Livelihood Activities of Rural Communities. The conceptual framework includes the broad concepts of influencers and Livelihood Activities of Rural Communities. Influencers are those factors which may determine Livelihood Activities of Rural Communities. The study examined the interactions between three categories of factors: (I) *infrastructure* constructions (roads, buildings, irrigation canals); (II) provision of *social services* (hospitals, schools, provision of scholarships, provision of piped clean water) and (III) *employment* by the project that includes employment by the locals, better salaries and wages, training of employees, food, shelter and clothing. The theories reviewed also contribute to an understanding of how these variables interact with one another.

The study's *independent variable* was Corporate Social Responsibility and was categorized into infrastructure constructions, provision of social services and employment by the project. These are the indicators quantified and qualified within Corporate Social Responsibility and which address the study objectives.

The *dependent variable* was Livelihood Activities of Rural Communities and was quantified and qualified by such indicators as income (cash and in-kind) generating activities, access to and benefits from public social services such as water, hospitals, roads, and education.

The following conceptual framework guided the study:

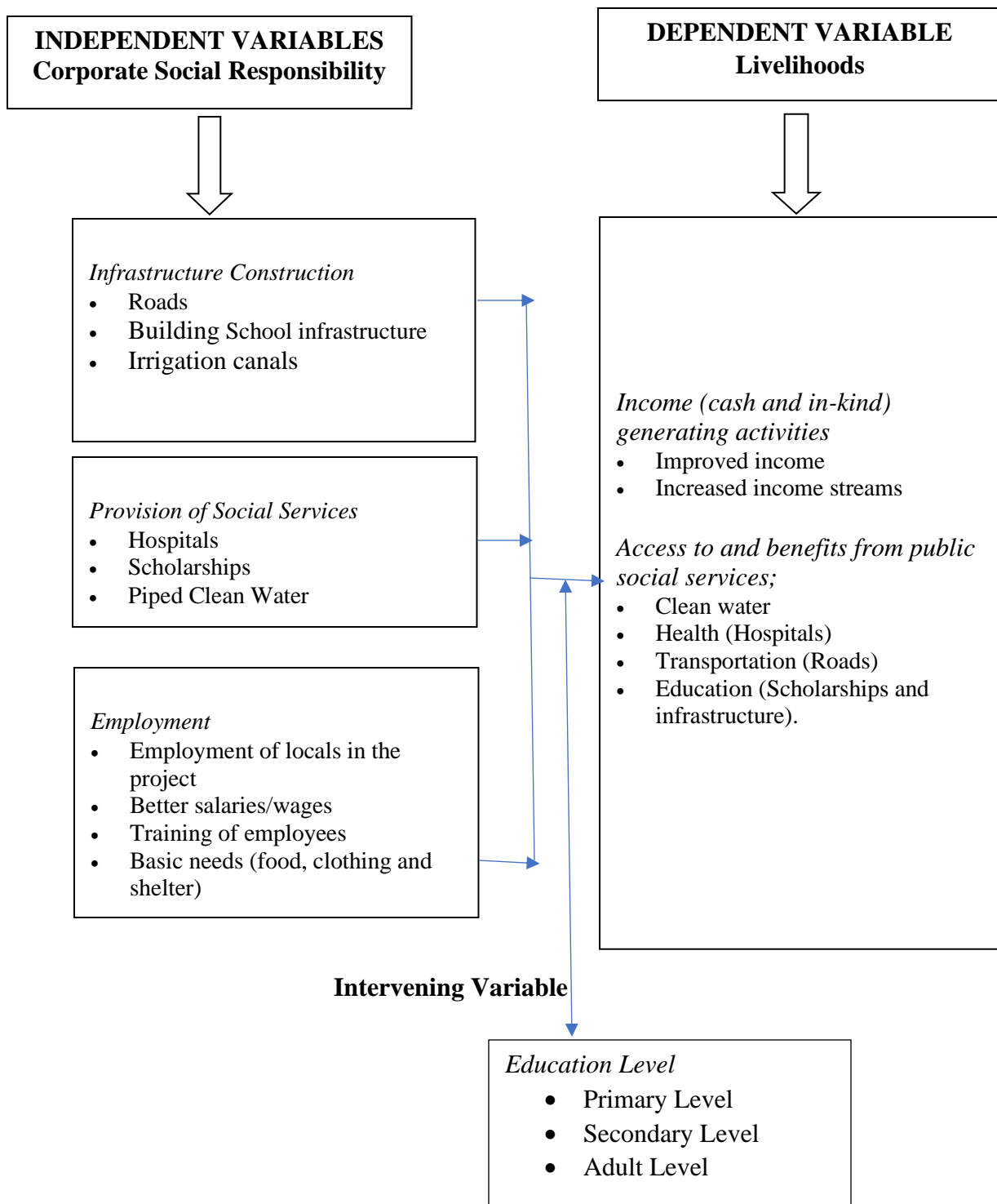


Figure 2.1 Conceptual Framework

## CHAPTER THREE: METHODOLOGY

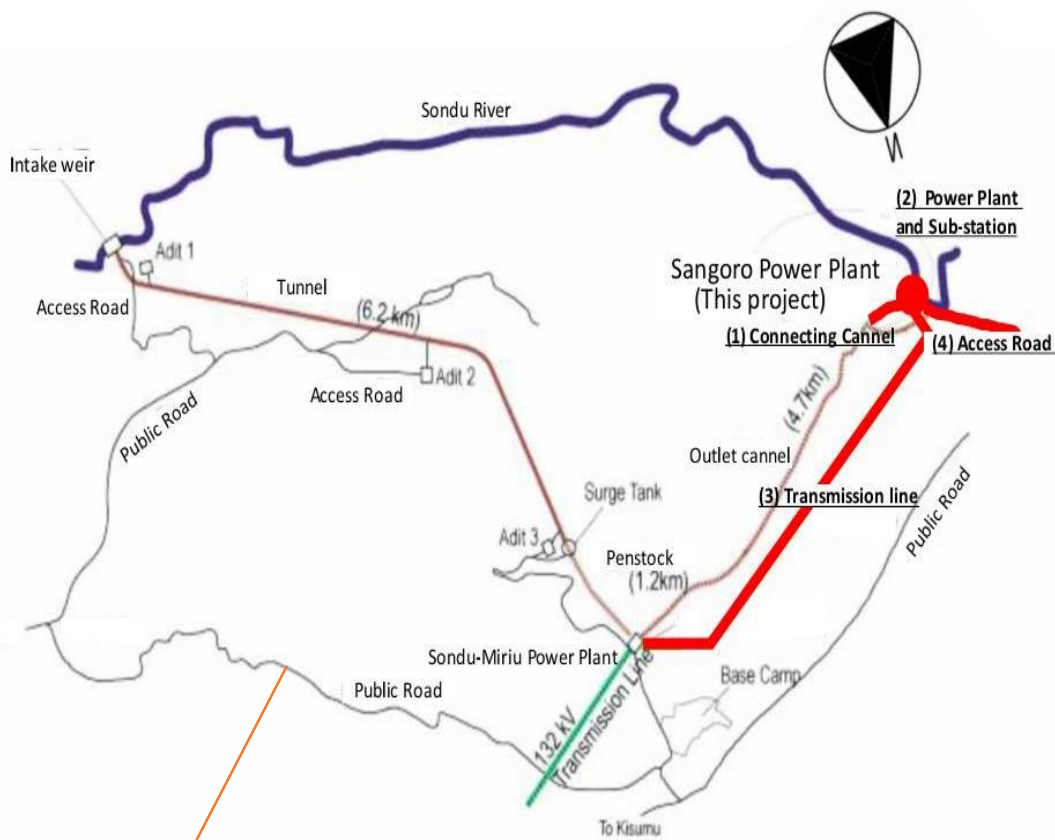
This section presents the procedures which was followed to attain research objectives. It covers the research design, study area, population, technique for sampling, tools for collecting data as well as technique for analysis and presentation of the data.

### 3.1 Research Design

This is a strategy for the collection and utilisation of data that aids the attainment of the desired information with sufficient precision to enable accurate answering of research questions. The research utilised a descriptive correlational research design as a result of the ability of the design to accurately portray the characteristic of a phenomena (Mugenda & Mugenda 2003). In using the descriptive research method, the researcher was nonetheless not able to regulate the variables: The investigator can only report what happened or what is going on. The research aimed at examining the role social responsibility plays in livelihood development for a community affected when an extractive enterprise is established within a location. The descriptive research gives the response based on where, what and who questions on issues being investigated. This entailed collection of data that answer questions pertaining to the present status of subjects studied. Since it allows correlation, this permitted the study to determine relationships between variables. The design enabled cross tabulation of the variables measured at ordinal level to assess the existing relationships between them.

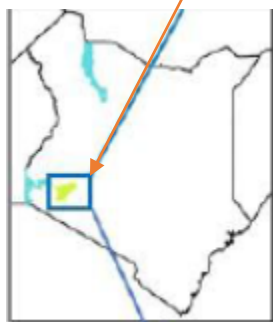
### 3.2 Study Area

The study area was in 5 locations that nears Sondu Miriu Hydro-electric dam project that includes: S.W. Nyakach, Oboch, Thurdibuoro of Nyakach Sub County, West Kodhoch as well as East Kodhoch both of North Rachuonyo” Sub- Country. This study was however limited to Kisumu County, and specifically the three locations in Nyakach sub country (S.W. Nyakach, Oboch and Thurdibuoro). That study area is as attached in the map:



Source: This figure has been created using materials provided by JICA.

Note: The red line on the map indicates the portion of the system that was covered by this project. The project consists mainly of (1) the connecting channels, head tank, and penstock, (2) the power station, generator, and substation, (3) power transmission lines, and (4) the access road.



**Figure 3.1 Site Map**

### 3.3 Population of Study

This is the group of items, objects or persons from where the samples are drawn from. It is the group from which the researcher generalizes (Mugenda and Mugenda, 2002). Based on Sondu Miriu Hydro-electric dam project, the study population included the key shareholders, with prominence or those near the project. “The project obtained a total of 529 acres of land encompassing of 1253 families impacted either partially or completely (Abiero, 2010)

The stakeholder groups included individual households and the nearby communities impacted by the project in adjacent areas, Technical Committee of the project, employees for executing agency (KenGen), Civil Society Organizations (Community-Based Organizations and NGOs), Provincial Administration and Contracted entities (Contractors and Consultants). The technical committee whose membership includes persons both from the nearby communities and project managers were important in articulating expert information about the social responsibility activities of the project.”

### 3.4 Sampling

A sample is a predetermined part of a larger population and from which measurement is taken. It represents the whole population to enable accurate generalization about the whole. Sampling is a selection of a sample suitable for the determination of establishing constraints or features of the total population or a representative part of the population (Mujere *et al*, IGI Global, 2016). Sampling helps to draw conclusions regarding populations’ portions that we can discern.”

The study utilised both purposive and simple random sampling methods. The random sampling method was utilised to interview the households of the communities affected by the dam project. The method gave equal probability of selecting every unit of the population (households) being examined, and so it reduced human biasness in the sample selection process.

The random sample size for the research was computed utilising Krejcie and Morgan tables (Krejcie and Morgan, 1970). Founded on the number of households affected by the project (1253) and relying on Krejcie and Morgan table attached as Appendix 2, questionnaire targeted a total of **290** households. These were proportionately divided across the 3 locations of the study. The households were then randomly targeted by the researcher.

The size of the sample size used was adequately large to get responses from participants even though qualitative analysis was relatively small in terms of sample size as compared to quantitative analyses. For phenomenological studies, Creswell (2003) recommends 20 to 30 participants for grounded theory methodology. To select the stakeholders to target with Key Informant Interviews, this study adopted Creswell's (2003) recommendation and targeted 25 participants.

Purposive sampling method was then used to get more insight from key informants about the livelihood situation of the project location. The sample population comprised selected number of staff from KenGen corporation, project technical committee members, and NGO/CBOs operating in the project location. These key groups were well-placed coherent informants and advanced the research far better than randomly selected samples. The researcher selected those stakeholders with special relationship with corporate social responsibility in their organizations, sufficient and relevant work experience, and background in CSR activities. The targeted 290 households were the analysis units for the study and participated in the data collection exercise.

### **3.5 Data Collection Methods**

The collection of the data through a mixture of methods such as Questionnaires; Key Informant Interviews (KII), Observations, and literature review which involved reading books, journals, and publications. The data collection methods used are described below:

#### **3.5.1 Household Survey**

The survey method was used to get the perception, thoughts and attitudes of the downward communities living around the Sondu Miriu Hydroelectric dam project regarding the effects of the project on their livelihoods. Households were the main target and entry point of the survey. Since the people living around the dam project are too many to be directly reached during this research, the survey method was ideal to gain the needed information from them.

#### **3.5.2 Key informant Interviews**

The research also relied on Key Informant Interviews (KII) targeting key groups such as NGO/CBO leaders and other stakeholders like local government officials; Senior KenGen personnel and local activists. The research selected the key informants with a depth of understanding about the issues of Sondu Miriu-dam project and established good relations, and rapport with the respondents to ensure clarification of issues so that insightful and rich information



is collected. A representative and varied sample of the key informants was selected to ensure insightful information was collected relevant to CSR and Livelihood restoration by the Sondu-Miriu Hydro dam project. A Key Informant Interview guide was prepared based on the main focus of the research.

### **3.5.3 Observation**

Observation method entails collection of the data utilising one's senses, predominantly observing, heeding in an organized and significant manner (Brigitte et al 2008).” In this study, the researcher keenly observed the livelihoods in the surrounding communities, noting those that could have been before the commencement of the project and those that might have been instituted including proxy indicators of hidden forms of livelihoods. The researcher observed and listened in to the community conversations about the project to gauge whether there are any CSR initiatives attributed to the Sondu Miriu hydro-electric dam project and their relations to livelihoods of the households interviewed. The data gathered has been triangulated with those collected through other methods to ensure objectivity.

## **3.6. Data collection tools**

### **3.6.1. Questionnaire**

The study used a carefully constructed questionnaire to ensure that the respondents could give information about the issues they have detailed knowledge about. These included their livelihood status, whether it has improved over the past decade, whether they could attribute any aspects of their livelihoods to the dam project and identify any livelihoods initiated by the CSR of the project. The researcher interviewed respondents taken from the sample. The likelihood of getting questionnaires that are fully filled was increased by personal interviews since the respondents could not return incompletely filled questionnaires. Secondly, interviewers clarified and explained to the respondent regarding any unclear questions. “Third, well-trained research assistants acquired (in round-the-clock ways) answers to questions the participant declined to answer. Finally, participants were obtained in their natural environment to make them more confident about disclosure.

Furthermore, open-ended and closed questions were used in the research. Since close-ended questions allows participants to choose answers from a list relevant to the information being

researched about, it was preferred in this research. The lists of possible answers was comprehensive, and the categories as mutually exclusive as possible to ensure that respondents only selected from the possible answers without confusion. The answers from the closed questions are easier to analyze because they are more uniform and mostly relevant. Open-ended questions were used sparingly, only on few cases where the personal view of the respondents was essential.

### **3.6.2. Key Informant Interview Guide**

A Key informant interview guide was developed consisting of a list concerning 7 key areas for investigations to guide the informants to delve deeper into the topic. These included reflections about the main livelihood activities that existed in the households before the Hydro-electric dam project and the new livelihood activities that have been initiated as CSR of the dam project. Also, the guide helped the key informants to explore the state of development of the community living downstream around the hydroelectric power project - noting those that have been initiated because of the CSR of the dam project and the impact on the households of the communities living downstream. The researcher also asked follow-up questions from some of the answers given, and therefore elaborated and explored more issues than those listed. Where there was difficulties in answering all the questions by the respondents, the research focused only on those that respondent could answer well.

### **2.6.3 Observation Guide.**

There are several approaches in observation guide such as *time intervals* (for observing activity and behaviour); *event sampling* (to capture certain events that happen in a period of time); *rating scale* (to record the degree or magnitude of what happens), *frequency counts* (how often an activity happens). For this study, the researcher mainly used a *checklist* to guide the recording of what livelihood activities are available in the households visited and in the community. The researcher used the checklist to tick the key livelihood activities such as: availability of piped water, electricity, hospitals, schools, infrastructure, and employment opportunities. These were compared with the data collected through other methods.

### **3.7 Reliability and Validity**

Reliability is the uniformity of the measurement, or the extent to that a study tool assesses in a similar manner every time it is utilised with the same subjects in the same condition. It's an

approximation that might be acceptable if the outcomes of the same test taken twice are consistent with one another (Cook & Campbell, 1979). The investigator *pre-tested* similar samples of the research tool for detecting any variations in the results. The final reliability guarantee was gotten from post-testing to check the similarity of pre-test, authentic data gathering results.

On the other hand, validity is the conclusions strength, assertions, or suggestions. It is the best approach obtainable to the truth or falsehood of a certain inference, statement, or deductions. It minimizes the possibility that the measurement itself will be reactive. This is accomplished by means of interviewees (to prevent discussions with friends) and the impartial, non-suggestive formulation of the question items (Ibid, 1979).

One of the main concerns of research of social sciences is how the findings of a study can be extrapolated for large populations or applied in various political, social, and monetary circumstances. By designing the survey, it seeks to fulfill the criterion of generalizability by interviewing field professionals and evaluating evidence on the subject. Secondly, the sample representativeness is ensured, and a cognizant effort is made to evaluate the population in its usual environment, short of attempting to manipulate or control the variables.”

### **3.8 Data Analysis and Presentation**

The research employed “both quantitative and qualitative methods of data analysis.

#### **3.8.1 Quantitative Data Analysis**

In order to perform statistical analysis, the researcher used quantitative data that was transformed into numerical form for ease of analysis. Data from surveys with closed-ended questions measured using Likert scales were translated into numeric data and ranked on a 1–5 scale based on the relative importance of the constructs under evaluation. The data entry was then done in SPSS to compute the generate the descriptive statistics like mean scores and standard deviation for each variable both dependent and independent.” Frequency and percentage were computed to highlight the demographic information of the participants as per the role in the organization, age, gender, marital status, and education.

Content analysis was used whereby information collected was categorised in text, verbal or behavioural information with the purpose of classifying, summarising and tabulating. Constant

comparative analysis with data collected using the quantitative collection method (Questionnaires) augmented content analysis.

Pearson Product-Moment Correlation Coefficient was calculated to establish the relationships which “exists amongst the independent and dependent variables. The study intended to determine the association amongst the various aspects of corporate social responsibility and livelihoods activities of communities. PearsonProduct MomentCorrelation (r) was conducted in SPSS to establish if there is a substantial link amongst the dependent and independent variable on the sampled data at 95 per cent level of confidence.

There was regression analysis test between the variables which gave linear relationship between the predictor variable and the dependent variable. The researcher thereafter performed a Sobel Test (Sobel, 1982) which was the method used to estimate the statistical significance of indirect effect in mediation analysis. It gave the mediation effect of education on the relationship between CSR led infrastructural development and livelihood.

$$Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4M + \epsilon \dots\dots\dots i$$

Where:

Y = livelihood

$\beta_0$  = Contant

$\beta_1, \beta_2, \beta_3$  = coefficient of indendepend variable

X1 –X3 = Infrastructure construction, Provision of social services and Employment

M = Mediating variable

$\beta_4$  = coefficient of intervening variable

$\epsilon$  = error term

### **3.8.2 Qualitative Data Analysis**

The researcher designed an interview guide that was administered to the key informants believed to have the right information in supporting the research findings. The key informants interview was structured according to the study themes to cover all the research questions. The interview was recorded then later transcribed in a more meaningful manner where irrelevant information was discarded.

Open ended responses from key informant interviews were noted suitably for theme analysis and further processing. Coding of responses was done and analysed in thematic forms, making comparison to variables in validating qualitative results and identifying any probable effect that were not captured by quantitative findings.

## CHAPTER FOUR

### DATA ANALYSIS AND PRESENTATION

#### 4.0. Introduction

The chapter covers the analysis of data, explanation, and study findings' discussions under themes and sub-themes based on objectives of the study. These include questionnaire response rate, demographic information of participants, and analysis founded on the key thematic and sub-thematic areas. Inline with the study's objectives, these themes and sub-themes include livelihood activities of the households, infrastructure construction (roads, buildings, irrigation canals), the provision of social services (hospitals, schools, scholarships, piped clean water), and employment of locals.

#### 4.1 Response Rate

A total of 290 questionnaires were obtained when correctly filled indicating that that the researcher had a well organized data collection exercise to reach out to the households in the community and collect the required data.

#### 4.2 Demographic Profile

The study presumed that there are likely to be differences in livelihoods activities at the household level based on demographic profiles. The demographic information considered were gender of the respondent or head of the household, age, marital status, education level and duration of stay in the community.

##### 4.2.1 Gender

The population was examined for differences in livelihoods activities between households founded on household head's gender. Distribution of household heads in line with these primary livelihoods activities was important in determining whether there may be variation in livelihoods activities. At the household level, men and fathers are anticipated to be the family providers, whereas the women are anticipated to be more of the caretakers of the home and family. Men are therefore expected to be responsible for the family's primary livelihoods. These roles bring about beliefs that mothers tend to be more nurturing than fathers, despite the fact that men and women could be comparably good parents. Table 4.1 indicates that, out of 290 household heads engaged in the research, 131 (45.2%) were males while 159 (54.8%) were female.

**Table 4.1 Distribution by Gender**

<b>Gender</b>	<b>Frequency</b>	<b>Percent</b>
Male	131	45.2
Female	159	54.8
<b>Total</b>	<b>290</b>	<b>100.0</b>

Women will spend a lot of time than men in customarily female livelihoods activities and men in customarily male ones (Yago and Martínez, 2009).

#### **4.2.2 Age**

The population was examined for differences in livelihoods activities between households based on household head's age. Table 4.2 shows that most (35.6%) household heads are aged 41 years and above while only 10.3% are aged below 25 years.

**Table 4.2 Distribution by Age**

<b>Age</b>	<b>Frequency</b>	<b>Percent</b>
Below 25 years	30	10.3
26 - 30 years	55	18.9
31 - 40 years	102	35.2
41 years and above	103	35.6
<b>Total</b>	<b>290</b>	<b>100.0</b>

The age of the household head can influence the type of livelihood activities that the household engages in. For instance, younger household heads may be more inclined to engage in wage employment, while older household heads may focus on farming or small business activities. This finding is relevant to a study on the finding by Ruzani et. al (2022) who studied livelihood-diversification ways that may arise from farmworker households in Tshiombo Irrigation Scheme, South Africa.

#### **4.2.3 Marital Status**

The population was examined for differences in livelihoods activities between households based on household head's marital status. Analyzing a population for differences in livelihoods between

households based on household head's marital status can provide valuable insights into the economic and social dynamics of a given community. This is because marital status can have a significant impact on a household's economic well-being, including their income, expenditure, and access to resources. Table 4.3 indicates that most (62.8%) of the household heads reached were married with 2.1% divorced while only 14.5% were single.

**Table 4.3 Distribution by Marital status**

<b>Marital Status</b>	<b>Frequency</b>	<b>Percent</b>
Married	182	62.8
Single	42	14.5
Divorced	6	2.1
Widowed	60	20.6
<b>Total</b>	<b>290</b>	<b>100.0</b>

Research has shown that households headed by married individuals tend to have higher incomes compared to those headed by single or divorced individuals. Marital status can also impact a household's access to resources such as credit, land, and labor (Yussuf & Mohamed, 2022). For example, households headed by married individuals may have better access to credit and land due to the perceived stability and reliability of their household.

#### **4.2.4 Education level**

Education is a key determinant of livelihood opportunities: Education can significantly impact a household's ability to access higher-paying jobs and engage in entrepreneurial activities. In general, highly educated people have higher job incomes and prospects than those with lower levels of education (Yussuf & Mohamed, 2022). Therefore, analyzing differences in livelihood activities based on education level can help identify disparities in income and employment opportunities between households. Table 4.4 indicates that the heads of the households mostly (40.3%) had secondary school level of education when only 7.1% had adult education levels.



**Table 1.4 Distribution by Education level**

<b>Education level</b>	<b>Frequency</b>	<b>Percent</b>
Primary	90	31.0
Secondary	114	39.3
Adult education	21	7.2
Other	65	22.5
<b>Total</b>	<b>290</b>	<b>100.0</b>

### **4.3 The Extent to which Sondu Miriu Hydro Electric Power Project CSR-led infrastructure has Influenced Livelihoods on The Households Living Downstream of the Project**

#### **4.3.1 Descriptive Statistics on Sondu Miriu Hydro Electric Power Project (SMHEPP) CSR on Livelihood**

The study was guided by the objective which was aimed to establish the extent to which Sondu Miriu Hydro Electric Power Project CSR-led infrastructure has influenced livelihoods on the households living downstream of the project using a scale of 1-5 where 5=Strong agreement (SA), Agreement (A)=4, Neutrality (N)=3, Disagreement (D)=2 and Strong disagreement (SD)=1

**Table 4.5 Sondu Miriu Hydro Electric Power Project (SMHEPP) CSR on Livelihood**

<b>ITEMS</b>	<b>SA</b>	<b>A</b>	<b>N</b>	<b>D</b>	<b>SD</b>	<b>Mean</b>	<b>Std. Dev</b>
<b><u>INFRASTRUCTURE CONSTRUCTION</u></b>							
<b>The project is involved in the construction of schools in the community</b>	25.1%	31.2%	5.1%	11.5%	27.1%	3.16	1.581
<b>The project has opened feeder roads in the community</b>	29.2%	41.7%	4.7%	6.4%	18.0%	3.58	1.429
<b>The project has constructed irrigation canals in the community</b>	0%	2.0%	5.8%	26.1%	66.1%	1.44	0.696

Following the study findings on Table 4.5, the highest percentage (31.2%-agree, 25.1%-strongly agree) of the respondents agreed that the Sondu Miriu Hydro Electric Power Project CSR-led infrastructure projects involved in the school developments in the community in supporting livelihoods living downstream of the project with a mean response of 3.16 which represents agreed with a standard deviation of 1.581 that indicates that the mean response is not deviated much from the actual mean. The highest percentage of the respondents agreed (41.7% - agree, 29.2%-strongly agree) that the project has opened feeder roads in the community with a mean response of 3.58 which represents ‘agreed’ with a standard deviation of 1.429 which indicates that the mean is not much deviated from the actual mean. However, the highest percentage (66.1%-strongly disagree, 26.1%-disagree) of the respondents disagreed that project has constructed irrigation canals in the community indicating the Sondu Miriu Hydro Electric Power Project did not participate in the construction of irrigation canals with a mean score of 1.44 for disagree and a standard deviation of 0.696.

The findings indicate that Sondu Miriu CSR-led projects involved the construction of infrastructure projects which includes office block 1.3 km, base camp 0.2km, intake road 16km and sondu miriu station road 1.1km. Furthermore, the CSR led infrastructure constructions developed the following roads: Thurdibuoro to Sangoro (through Apondo Kasaye) about 5km, Kolweny to Kasaye-3km and Kolweny to Apoko-10km. It also renovated the following schools: Aomo Primary School, Thurdibuoro Primary school, AIC Thurdibuoro Secondary School, Apondo primary School as well as AIC Thurdibuoro Church. The feeder roads from the CSR-led infrastructure also opened up new shopping centers in the area which has improved the community livelihood. As a result the community are additionally engaged in small businesses for livelihoods ,besides working on the project for wages. This is illustrated by the quoted response given below:

*“The project has created many roads leading to market centers and towns that were neglected and never developed creating more opportunities for business in the area”*

*“The project also brought about the improvement of learning in the area as more classrooms were built and in areas where they were dilapidated and ignored before”*

The project has therefore improved the livelihood of the area residents with regards to infrastructure development. One of the respondents said: *“We thought this project was all about electricity, but it has brought many other benefits to Nyakach community. We request the government to give us more of such projects”*

Also, the findings indicate that over 1000 community members were employed in the construction of the infrastructure projects as casual laborers and permanent staff.

#### **4.3.2 Inferential Statistics on Sondu Miriu Hydro Electric Power Project (SMHEPP) CSR on Livelihood**

Testing the variables relationships, the researcher used Pearson rank correlations (r) using either 1% or 5% level of significance in a 2-tailed test or 1-tail test depending on the SPSS output as indicated in the tables.

**Table 4.6 Correlation between Corporate Social Responsibility and Livelihood**

		<b>Livelihood</b>
<b>Corporate Social Responsibility</b>	Pearson correlation coefficient	.861**
	Sig.(2-tailed)	.000
	N	290

\*\* .Correlation is significant at the 0.01 level (2-tailed).

\* . Correlation is significant at the 0.05 level (2-tailed).

The findings in Table 4.6 indicate that  $r = 0.861$  which implies that there existed a strong and positive relationship between Corporate Social Responsibility and livelihood of locals. The positive relationship is in line with the descriptive statistics explained from Table 4.5 which revealed that the household heads who took part in the research were in agreement (Mean=3.21) that the initiation of Sondu Miriu hydro-electric dam project has promoted livelihood of locals in the area. Testing at 1% significant level at 2-tail test ( $0.01 / 2 = 0.005$ ), the correlation analysis is significant since the p-value (Sig. 0.000) is less than 0.005 which is an indication that the correlation analysis is relevant and can be relied upon to give a valid result.

#### 4.4 The Extent to which Sondu Miriu Hydro Electric Power Project CSR-led infrastructure has Influenced Provision of Social Services on The Households Living Downstream of the Project

##### 4.4.1 Descriptive Statistics on Sondu Miriu Hydro Electric Power Project (SMHEPP) CSR on The Provision of Services

The research focused to analyze the extent to which Sondu Miriu Hydro Electric Power Project CSR-led infrastructure has influenced provision of social services on the households living downstream of the project using a scale of 1-5 where 5=Strong agreement (SA), Agreement (A)=4, Neutrality (N)=3, Disagreement (D)=2 and Strong disagreement (SD)=1

**Table 4.7 Sondu Miriu Hydro Electric Power Project (SMHEPP) CSR on The Provision of Services**

ITEMS	SA	A	N	D	SD	Mean	Std. Dev
<b><u>PROVISION OF SOCIAL SERVICES</u></b>							
<b>The project provides scholarship to bright children from the community</b>	5.4%	24.4%	21.7%	19.0%	29.5%	1.57	1.286
<b>The project provides drinking water to the community</b>	9.5%	36.6%	9.5%	16.6%	27.8%	2.83	1.415
<b>The project provides medical requirements to hospitals in the community</b>	0.7%	4.7%	15.6%	24.4%	54.6%	1.73	0.938

The study findings in Table 4.7 as indicated, the highest percentage of the respondents disagreed that (19%-disagree, 29.5% strongly disagree) the project provides scholarship to bright children from the community which is an indication that the project did not provide scholarship to bright children as given by a mean of 1.57 for disagree and a standard deviation of 1.286 indicating that the response given is not much deviated from the actual mean. However, as much as the respondents agreed that the project provides drinking water to the community (36.6% -agree, 9.5% strongly agree), there is a huge number of respondents who disagreed with that finding (16.6%-disagree, 27.8%-strongly disagree) which is an indication that half (46.1%) of the population of the people living downstream have benefited from the drinking water provided by the project as the CSR while the other half (44.4%) have not benefited while the rest were undecided. Further, the study findings indicate that the highest percentage of the respondents (24.4%-disagree, 54.6%-

strongly disagree) disagreed that the project provides medical requirements to hospitals in the community. This is an indication that the project does not provide for medical requirements to hospitals in the community as part of their CSR. The mean response was 1.73 that stands for disagree with a standard deviation of 0.938 indicating that the response provided is not much deviated from the actual mean.

During the interview process, one of the respondent had this to say concerning the project:

*“As much as the project has enhanced education in our area through building of schools and providing bursaries in the area, it has not done much with regards to the provision of healthcare services such as availability of drugs to our hospitals”*

The project has not promoted health sector improvement in the area as much as it has done on infrastructure development such as water, roads and building of classrooms. The resident in the area feel let down when key areas like medical supplies is not taken into consideration yet they felt it should have been given priority by the project just as other aspects.

#### **4.4.2 Inferential Statistics on Sondu Miriu Hydro Electric Power Project (SMHEPP) CSR on The Provision of Services**

Testing variables relationship, the researcher used Pearson rank correlations (r) using either 1% or 5% level of significance in a 2-tailed test or 1-tail test depending on the SPSS output as indicated in the tables.

**Table 4.8 Correlation between Corporate Social Responsibility and the Employment**

		<b>Employment</b>
<b>Corporate Social Responsibility</b>	Pearson correlation coefficient	.741*
	Sig.(2-tailed)	.001
	N	290

\*\*. Correlation is significant at the 0.01 level (2-tailed).

\*. Correlation is significant at the 0.05 level (2-tailed).

The Table 4.8 has study results indicating that  $r = 0.741$  which implies that there existed a strong and positive relationship between Corporate Social Responsibility and Provision of Services to locals by the project. The positive relationship gotten is in tandem with the descriptive statistics

explained from Table 4.7 which revealed that the household heads who took part in the research were in agreement that the initiation of Sondu Miriu hydro-electric dam project has promoted the provision of services to locals in the area. Testing at 5% significant level at 2-tail test ( $0.05 / 2 = 0.025$ ), the correlation analysis is significant since the p-value (Sig. 0.001) is less than 0.025 which is an indication that the correlation analysis is relevant and can be relied upon to give a valid result.

#### **4.5 The extent to which Sondu Miriu Hydro Electric Power Project (SMHEPP) CSR-led employment of locals influenced livelihoods of the households of the communities living downstream of the project**

##### **4.5.1 Descriptive Statistics on Sondu Miriu Hydro Electric Power Project (SMHEPP) CSR on Employment**

The study establishes the extent to which Sondu Miriu Hydro Electric Power Project (SMHEPP) CSR-led employment of locals influenced livelihoods of the households of the communities living downstream of the project using a scale of 1-5 where 5=Strong agreement (SA), Agreement (A)=4, Neutrality (N)=3, Disagreement (D)=2 and Strong disagreement (SD)=1

**Table 4.9 Sondu Miriu Hydro Electric Power Project (SMHEPP) CSR on Employment**

<b>ITEMS</b>	<b>SA</b>	<b>A</b>	<b>N</b>	<b>D</b>	<b>SD</b>	<b>Mean</b>	<b>Std. Dev</b>
<b><u>EMPLOYMENT</u></b>							
<b>The project provides employment opportunities to community members</b>	12.2%	36.9%	18.0%	19.7%	13.2%	3.15	1.251
<b>The project has improved employability of individuals in the community through capacity building</b>	8.5%	21.0%	16.3%	34.6%	19.7%	2.64	1.285

The study findings in Table 4.9 indicate that the highest percentage of the respondents agree (12.1%-strongly agree, 36.9%-agree) that the project provides employment opportunities to community members as given by a mean score of 3.15 for agree and a standard deviation of 1.251. However, the households living downstream the project disagreed that (34.6%-disagree, 19.7%-

strongly disagree) the project has improved employability of individuals in the community through capacity building. During the interview process, the respondents indicated that the projects have created room for employment by engaging the locals in casual labors and security work. One of the respondent was quoted as saying:

*“We have been able to get some jobs but it’s not a reliable enough for one to take care of his family”*

*“.....the contractors should train us on skills and employ us on permanent jobs that can help us support our family or give us good skills to seek employment elsewhere”*

This is an indication that the project has not been able to generate enough employment to the community and there is need for alternative employment as lamented by the respondents during the interview process.

**4.5.2 Inferential Statistics on Sondu Miriu Hydro Electric Power Project (SMHEPP) CSR on Employment**

Testing the variables relationship, the researcher used Pearson rank correlations (r) using either 1% or 5% level of significance in a 2-tailed test or 1-tail test depending on the SPSS output as indicated in the tables.

**Table 4.10 Correlation between Corporate Social Responsibility and the Employment**

		<b>Employment</b>
<b>Corporate Social Responsibility</b>	Pearson correlation coefficient	.961**
	Sig.(2-tailed)	.000
	N	290

\*\* . Correlation is significant at the 0.01 level (2-tailed).

\* . Correlation is significant at the 0.05 level (2-tailed).

The findings in Table 4.10 indicate that  $r = 0.961$  which implies that there existed a strong and positive relationship between Corporate Social Responsibility and Employment of locals by the project. The positive relationship gotten is in tandem with the descriptive statistics explained from Table 4.9 which revealed that the household heads who took part in the research were in agreement that the initiation of Sondu Miriu hydro-electric dam project has promoted employment of locals in the area. Testing at 1% significant level at 2-tail test ( $0.01 / 2 = 0.005$ ), the correlation analysis

is significant since the p-value (Sig. 0.000) is less than 0.005 which is an indication that the correlation analysis is relevant and can be relied upon to give a valid result.

#### 4.6 The Changes in the livelihoods due to “the Sondu Miriu Hydro Electric Power Project”

A statement was developed to measure the changes in livelihood activities among households since the Sondu Miriu hydro-electric dam project was initiated in the area on a 5-point Likert scale in which; Strong agreement (SA)=5, Agreement (A)=4, Neutrality (N)=3, Disagreement (D)=2 and Strong disagreement (SD)=1.

**Table 4.11 Changes in Livelihoods of The Households Living Downstream of The Project**

ITEMS	SA	A	N	D	SD	Mean	Std. Dev
<b><u>CHANGES IN LIVELIHOODS ACTIVITIES</u></b>							
<b>Livelihood Changes since the Sondu Miriu Hydroelectric Dam Project started</b>	<b>18.3%</b>	<b>28.8%</b>	<b>25.4%</b>	<b>10.8%</b>	<b>16.6%</b>	<b>3.21</b>	<b>1.324</b>

The study finding in Table 4.11 indicated that Sondu Miriu Hydro Electric Power Project (SMHEPP) CSR-led projects have changed the livelihoods of the community living downstream as given by higher percentages for agree (18.3%-strongly agree, 28.8%-agree) with a mean score of 3.21 for agree and a standard deviation of 1.324 which indicates that the mean obtained is not much deviated from the actual mean. Following the findings from the interview schedule, the respondents agreed that the project has brought in a significant change in the livelihood through improvement of cash flow to the community.

*“We get our daily cash from the project work that put us in a better station when it comes to supporting our families as opposed to the previous situation when we could go without food for the night”*

*“Some of us have managed to pay for our children school fees using the money we are paid from project work and our lives have really improved ”*



This indicates lives of many residents in the area have ben improved since the inception of the project and on to the final stage, however, the level of employment reduced when construction stopped.

#### 4.7 Regression Analysis Results

The research’s objective was examining the relationship of Corporate Social Responsibility of Sondu Miriu river Hydro-electric Dam Project with the Livelihood Activities of the communities living downstream. A simple linear regression analysis was fitted on this influence with CSR led infrastructure construction, provision of social services and employment, while the intervening variable in this case was education. Tables 4.12, 4.13 and 4.14 represent the results of regression analysis. In the model summary Table 4.12, The R and the R-squares are 0.891 and 0.793 respectively. The findings given by he coefficient of determination indicates that the variation in the predictor in this model which is the independent variables explains up to 89.1% of the variation in livelihood. The remaining 10.9% of the variation in livelihood is explained by other factors that are not included in this study.

**Table 4.12: Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.891 <sup>a</sup>	.793	.790	.04523

a. Predictors: (Constant), infrastructure construction, provision of social services, employment and education.

For the levels of variability within the regression model to be assessed, Analysis of Variances (ANOVA) was carried out and inform of general significance test of the whole model. Table 4.12 presented results shows an F-statistic of 273.425 with a p-value of 0.000. The less than 0.05 p-value implies that the general significance of this bivariate regression model of independent variables on livelihood. It further implies that the causal relationship between the predictor in the model is significant(infrastructure construction, provision of social services and employment) and the livelihood.

**Table 4.13: ANOVA**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2.238	4	.559	273.425	.000 <sup>b</sup>
	Residual	.583	285	.002		
	Total	2.821	289			

a. Dependent Variable: Livelihood

b. Predictors: (Constant), Provision of Social Services, Employment ,  
Infrsatructure Construction, Education

A t-statistic was used to test the significance further to the ANOVA test of model significance of the coefficient estimate of independent variable in the model (Table 4.13). As revealed in the study findings, independent variables have significant coefficient estimate as given in Table 4.13 where the P-value of the t-statistic to this estimate is less than 0.05 implying that the equation generated from this model is significant. The model generated the equation given below;

$$Y = 1.656 + 0.451X_1 + 0.078X_2 + 0.976X_3 + 0.036M + 0.104$$

**Table 4.14 Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.656	.104		15.962	.000
	Employment	.451	.034	.380	13.450	.000
	Provision of Social Services	.078	.008	.296	9.560	.000
	Infrsatructure Construction	.976	.034	.778	28.318	.000
	Education	.036	.006	.175	5.867	.000

a. Dependent Variable: Livelihood

The p-value of the coefficient of independent variables in the model was found to be 0.000, 0.000, 0.000 and 0.000 which is less than 0.05 indicating that the study result is significant. From this analysis, the significant coefficient estimate found to be 0.451, 0.078 , 0.976 and 0.036 for infrastructure construction, provision of social services, employment and education where this

implies that a unit change in the dependent variables would change the livelihood by 0.451, 0.078, 0.976 and 0.036 respectively.

**Table 4.15 Mediation Effect of Education on the Relationship between CSR Led Infrastructural Development and Livelihood**

The mediating effect was tested using Sobel Test (Sobel, 1982) which gave the mediation effect of education on the relationship between CSR led infrastructural development and livelihood. The method also estimated the statistical significance of indirect effect in mediation analysis. The method works by testing the association between the independent variable and the mediator then it test the association between the dependent variable and the mediator after which it test the mediation effect of the variable.

Coefficients					
	Education	Std. error	Coefficient for moderating variable	Std. error for moderating variables	p-values
Employment	-1.206	0.256	0.036	.006	0.00006729
Provision of social services	0.314	0.042	0.036	.006	0.00000288
Infrastructure construction	-0.764	2.78	0.036	.006	0.78367557

The p-values for employment (0.00006729) and provision for social services (0.00000288) is less than 0.05 testing at 5% one taile test therefore the researcher concludes that the indirect effect (moderating effect) of education on the provision of social services and employment is statistically significant. This indicates that the level of education of the respondents influences their relationship between CSR-led provison of services and employment. The p-vauue for infrastructure construction is greater than 0.05 testing at 5% one tail test which is an indication that the relationship of CSR led infrastructure is not dependent on the level of education of the community.

## CHAPTER FIVE

### SUMMARY OF THE FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

#### 5.1 Introduction

This section covers the study findings summary, conclusion, recommendations, contribution to the knowledge body as well as recommendations for future studies. The results summary presents the results for the research questions. The conclusions are here directed by the study objectives and founded on the results, analysis, interpretations and discussions in the study. From the conclusions, the implication of the study. It also covers the recommendations for policy and practice, besides recommendations for future studies, based on the results, are presented here.

#### 5.2 Summary of the Findings

##### 5.2.1 The Extent to which Sondu Miriu Hydro Electric Power Project CSR-led infrastructure has Influenced Livelihoods on The Households Living Downstream of the Project

The study response established that Sondu Miriu Hydro Electric Power Project CSR-led infrastructure projects involved the construction of schools in the community in support of livelihoods of the community living downstream of the project. The project has improved the livelihood of the community through infrastructural development to the community living downstream. This study finding is inline with the finding of Akachukwu (2005) who argued that social responsibility is a responsibility of companies to community, which they must fulfill without even being pressured to do so. He further observed that it is the responsibility of companies to give back to the community they operate in as part of appreciation and empowerment.

The project through its CSR has improved the construction of feeder roads in the area and opened new shopping centers in the area which has improved the community livelihood where people can now undertake small scale enterprises for livelihoods besides working on the project for wages. There are new shopping centers that have opened up due to the project which has improved trading in the centers that havnever been active. Also, the project has opened up schools and roads leading to hopsitals that were always considered impassable. This is inline with the findings of Carroll (1991) that CSR is the management of the company in such a way that it is economically successful, compliant with the law, ethical, and beneficial to the community. In the case of Sondu Miriu Hydro Electric Power Project, it has enhanced the mode of learning and business operations

in the area by promoting development of feeder roads which has in turn opened up more shopping centers in the area. Further, the project has improved the livelihood of the area residents with regards to improved learning conditions in schools.

### **5.2.3 The Extent to which Sondu Miriu Hydro Electric Power Project CSR-led infrastructure has Influenced Provision of Social Services on The Households Living Downstream of the Project**

Sondu Miriu Hydro Electric Power Project through its CSR has been able to provide scholarships to bright children from the community. However the number of scholarships is inadequate and insignificant, hence making the community not to appreciate much about the scholarship program. As part of the CSR, the project has been able to provide drinking water to the household of the people living downstream that never had access to clean water for drinking before. The provision of clean water for drinking is part of the provision of social services by the project besides building schools and hospitals. However, as much as the project has been able to participate in the construction of hospitals and schools, it did not include the supply of drugs to the hospitals as part of its CSR.

This finding of inadequate CSR is in line with the study conducted by Alabi and Ntukekpo (2012) who examined the impact of Oil Companies on Corporate Social Responsibility in Nigeria: “Empirically assessed community development projects of Chevron’s in the Niger Delta utilising descriptive survey research to examine the efforts of CSR of one of the oil companies - Chevron, in three oil firms of Niger Delta.” The study purposively selected 150 opinion leaders from three communities to take part in the research. The results demonstrate that although the efforts to develop the community by Chevron is meaningful and on-the-ground in the three communities, the CRS has been insufficient or sufficiently relevant to the desires of the resident communities. This is similar finding to the Sondu Miriu Hydro Electric Power Project that gave inadequate CSR.

### **5.2.4 The extent to which Sondu Miriu Hydro Electric Power Project (SMHEPP) CSR-led employment of locals influenced livelihoods of the households of the communities living downstream of the project**

Sondu Miriu Hydro Electric Power Project through its CSR has been able to provide employment opportunities to household members which has improved the livelihood of the community living

downstream. The money obtained from employment has been used to assist the households to meet certain demands such as school fees, medical and food expenses. The project has therefore improved household income and living standards through employment. The project has created room for employment by engaging the locals in casual labors and security work. However, the project has not been able to improve on the community skills through training as most of the employment is on a casual basis.

The project came to the community through a great wave of employment where the locals were engaged with respect to supply of products and services as well as being employed as casual service providers to the project work. The women living around the project site got employed indirectly as they were able to supply food items to people working on the projects for food and accommodation services. The project then promoted cash flow in the areas where workers are able to buy basic commodities from the community. There is a similarity of this finding to the study finding that was done by Usman (2015) who assessed the effects of corporate social responsibility on communal development in Nigeria based on a case of Julius Berger Company. Findings indicated that CSR (social reasons, supply of basic social facilities, and compensation to local residents) has a positive impact on community growth.

### **5.2.5 Changes in the livelihoods due to “the Sondu Miriu Hydro Electric Power Project**

The project has brought in new changes to the livelihood of the community living downstream. It has improved access to education of the surrounding households through construction of more schools and provision of bursaries to bright and needy students. The project has promoted access to health services in the area by building some health facilities in the area. Also, the project has opened up new roads for development in some of the areas that were never accessible before. The residents are now able to move from one place to the other including to reach health centers without much faster than before. The supply of clean drinking water in the area where the households living downstream can now access safe and drinking water without having to walk long distance as was previously the case has been improved by the project.

### **5.3 Implication of the Study**

The study implies that CSR of mega government projects improve livelihoods of the surrounding households. The project has indicated that the CSR has been able to provide social services to

households such as bursaries and sponsorship to schools; that the CSR of the project has been able to create employment for the community living downstream thus creating positive impacts on the lives of communities. The project has been able to build access road, build hospitals and build schools which has brought some changes to the lives of households living downstream.

#### **5.4 Conclusions**

The research draws conclusions that infrastructure construction influences the livelihood activities of the households of communities living downstream of Sondu Miriu river in Kisumu country. This is an indication that with the appropriate infrastructure construction, the livelihood of households living downstream of Sondu Miriu river in Kisumu county has improved and the project has brought in a positive change to the community. The infrastructure developments such as access roads have opened up new shopping centers thus making the business in the area to improve, hence improvement on the livelihood through increased cash flow. The construction of schools and hospitals has improved the livelihood of the communities living downstream as the residents in the area no-longer have to move long distances in search of medical treatment.

The project has also enhanced the provision of social services of the community living downstream. The project through busary provision to students and medical support by constructing health facilities. The schools development in the area and bursaries provision could also influence improved the literacy levels in the community as students and pupils in the area are able to access more school facilities than before.

The study further concludes that the project has created employment opportunities to the locals through daily wages and salaries earned during the construction of infrastructure projects; this has enhanced and promoted livelihood of the households living downstream. The construction of feeder roads has improved business operation in the nearby urban centers thus also providing for employment and entrepreneurial opportunities to the local communities living downstream. The correlation between the employment of locals and livelihood of the households of communities was statistically significant. This is an indication that, as more locals got employed in the project, the livelihood of their households also improved.

The study concludes that since the CSR of the Hydro Electric Power Project was initiated, it has brought positive changes to the livelihood of communities living downstream through improved

access roads, improved learning and health facilities and improved cash flow to the locals through wages and salaries earned through working on the project activities. The CSR projects like access roads has opened more shopping centers in the area attracting neighboring communities thus making business operations in the area to thrive thus improving livelihood of the community living downstream. The constructed schools and health facilities has attracted more visitors to the area as staff and patients to the hospitals thus improving the eco-system of business interactions in the area thus improving livelihood of households.

The study having taken Sondu Miriu Hydro Electric Power Project to represent other projects being undertaken by the government, the findings are therefore considered to generalize any other CSR project on infrastructure project done by the government. Since the choice of Nyakach community members was not biased but rather informed by the purpose of the study, any other community selected for a similar study is expected to give the same results. Therefore any recommendation that has been given here based on the study findings is general and applicable to any other project in the country that has the component of CSR in it.

### **5.5 Recommendation**

Following the study findings, the study recommends that when initiating Hydro- Electric dam projects, the Corporate Social Responsibility aspects should include infrastructure constructions (roads, school buildings, irrigation canals and other related infrastructure) as it improves the livelihoods of the surrounding communities. The CSR on infrastructure should not be tied to only hydro-electric power projects but should be based on any national project that touches many lives of the community members.

Every CSR by any government project should cover construction of schools, construction of access roads, construction of hospitals and provision of clean drinking water as these are the main things that touch on many lives of the community unless the community where the project is being done has a different need other infrastructure. The CSR projects should be well discussed with the community during the time for public participation in order for the project to get right the community priority.

There should be needs analysis before any CSR is launched to ascertain if the intended projects are of top priority to the community. This will make the CSR has positive impact to the community



besides being accepted by the community that could have lost property such as grazing land, living grounds or market centers due to national project.

### **5.6 Areas for Further Research**

Following the research findings, further research is recommended by the researcher on social impacts brought about by mega government projects in the area as some of the respondents cited negative effects of the projects during the interview. Some respondents indicated that the project promoted social ills such as increased incidences of crime, drug use, alcoholism and other vices in the project area.

The study also recommends a further research on the CSR of the Hydro-electric dam project and its relationship to the livelihoods of the households of communities living upstream of the project.

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## APPENDICES

### Appendix 1.

#### Household Questionnaire

**Introduction;** My name is \_\_\_\_\_, working temporarily for Cosmas Agiso, a Masters student at the University of Nairobi as a research assistant. We are collecting data for an academic research aimed at establishing the Relationship Between Corporate Social Responsibility and Livelihoods of Rural Communities in Sondu Miriu Hydro-Electric Dam Project in Kisumu County. You have been randomly selected for the study and your participation is voluntary. Please allow me to ask you some questions, which should take roughly an hour to complete. Your responses to this survey will be kept strictly secret and will not be disclosed to any parties other than those who are a part of our team. We will not connect your identity with your responses in any communication of results or report. I hope you will agree to answer the questions since your views are important to the success of this study. If I ask you a question that you do not wish to answer, all you have to do is let me know and I will move on to the next question. If you would rather the interview not continue, you are free to terminate it at any moment. Thank you for agreeing to assist in our study.

#### SECTION A: DEMOGRAPHIC CHARACTERISTICS

<b>1.1</b>	Category <i>TICK</i>	<input type="checkbox"/> Household head <input type="checkbox"/> Spouse <input type="checkbox"/> Others (Specify) _____
<b>1.2</b>	What is the gender of the Respondent? <i>TICK</i>	<input type="checkbox"/> Male <input type="checkbox"/> Female
<b>1.3</b>	In which age group do you belong?	<input type="checkbox"/> Below 25 years <input type="checkbox"/> 26 - 30 years <input type="checkbox"/> 31 – 40 years <input type="checkbox"/> 41 years and above
<b>1.4</b>	What is your marital status?	<input type="checkbox"/> Married <input type="checkbox"/> Single <input type="checkbox"/> Divorced <input type="checkbox"/> Widowed
<b>1.5</b>	What is your education level?	<input type="checkbox"/> Primary <input type="checkbox"/> Secondary <input type="checkbox"/> Adult education <input type="checkbox"/> Other
<b>1.6</b>	How long have you stayed in this community?	<input type="checkbox"/> Below 2 years <input type="checkbox"/> 2 – 4 years <input type="checkbox"/> 5 – 10 years <input type="checkbox"/> 11 – 15 years <input type="checkbox"/> 16 years and above

#### SECTION A (i): Changes in Livelihoods Activities due to the Sondu Miriu Hydroelectric Dam Project

1b. To which degree is your agreement or disagreement that there have been changes in your household's livelihood activities since the Sondu Miriu Hydroelectric Dam Project was initiated?		1 = Stron gly Disag ree	2 = Disag ree	3= Neutr al	4 = Agree	5 = Stron gly Agree
<b>1b.1</b>	<i>Has improved</i>					
<b>1b.2</b>	<i>Has deteriorated</i>					

#### SECTION B: Corporate Social Responsibilities of the Sondu Miriu Hydroelectric Dam Project

Corporate Social Responsibility are the infrastructure constructions, provision of social services and employment by the project..						
<b>2. To what extent do you agree or disagree that Sondu Miriu Hydroelectric Dam Project has carried out Corporate Social Responsibilities in the ways indicated?</b>		<b>1 = Strongly Disagree</b>	<b>2 = Disagree</b>	<b>3 = Neutral</b>	<b>4 = Agree</b>	<b>5 = Strongly Agree</b>
<b>2.1</b>	<b><i>Infrastructure construction</i></b>					
<b>2.1.1</b>	The project is involved in the construction of schools in the community					
<b>2.1.2</b>	The project has opened feeder roads in the community					
<b>2.1.3</b>	The project has constructed irrigation canals in the community					
<b>2.2</b>	<b><i>Provision of Social Services</i></b>					
<b>2.2.1</b>	The project provides scholarship to bright children from the community					
<b>2.2.2</b>	The project provides drinking water to the community					
<b>2.2.3</b>	The project provides medical requirements to hospitals in the community					
<b>2.3</b>	<b><i>Employment</i></b>					
<b>2.3.1</b>	The project provides employment opportunities to community members					
<b>2.3.2</b>	The project has improved employability of individuals in the community through capacity building					
<b>SECTION C: Livelihood Activities of Rural Communities</b>						
Livelihood Activities of Rural Communities refers to the income (cash and in-kind) generating activities, access to and benefits from public social services						
<b>3. To which degree is your agreement or disagreement with the following statements about the livelihoods your community?</b>		<b>1 = Strongly Disagree</b>	<b>2 = Disagree</b>	<b>3 = Neutral</b>	<b>4 = Agree</b>	<b>5 = Strongly Agree</b>
<b>3.1</b>	<b><i>Income generating activities</i></b>					
<b>3.1.1</b>	Since the completion of Sondu Miriu hydro-electric dam project, your household has improved income (cash and in-kind) generating activities					
<b>3.1.2</b>	Since the completion of Sondu Miriu hydro-electric dam project, your household has increased income (cash and in-kind) streams					
<b>3.2</b>	<b><i>Access to and benefits from public social services</i></b>					
<b>3.2.1</b>	Since the completion of Sondu Miriu hydro-electric dam project, your household has better access to and benefits from water,					



<b>3.2.2</b>	Since the completion of Sondu Miriu hydro-electric dam project, your household has access to and benefits to better-quality hospitals,					
<b>3.2.3</b>	Since the completion of Sondu Miriu hydro-electric dam project, your household has enhanced access to and benefits from roads					
<b>3.2.4</b>	Since the completion of Sondu Miriu hydro-electric dam project, your household has improved access to and benefits from education.					
<b>3.2.5</b>	Since the completion of Sondu Miriu hydro-electric dam project, your household has more access to and benefits from employment					
<b>3.2.6</b>	Since the completion of Sondu Miriu hydro-electric dam project, your household has improved income					

**Appendix 2. Key Informants Interview Guide**

*(TheCommunity, TechnicalCommittee, Staffof the implementingAgency (KenGen), CivilSociety Organizations (Community-Based Organizationsand NGOs), ProvincialAdministration and ContractedEntities)*

1. Have there been changes in the main livelihood activities of the households in the communities affected by Sondu Miriu Hydro-electric dam project?

a. What were the main livelihood activities that existed in the households before the commencement of Sondu Miriu Hydro-electric dam project?

-----

b. What new livelihood activities have been initiated in this community because of the Sondu-Miriu Hydro-electric dam project?

-----

2. What is the status of the community development?

a. To what extent is this attributable to the Sondu Miriu Hydroelectric Dam project?

3. To what extent does the infrastructure provided by the project need redevelopment?

a. What type of infrastructure needs redevelopment?

.....

4. Any thing you would like to add.....

**Thanks**

### Appendix 3: Sample Size Determination Table (Krejcie & Morgan, 1970)

<i>N</i>	<i>S</i>	<i>N</i>	<i>S</i>	<i>N</i>	<i>S</i>
10	10	220	1400	1200	291
15	14	230	144	1300	297
20	19	240	148	1400	302
25	24	250	152	1500	306
30	28	260	155	1600	310
35	32	270	159	1700	313
40	36	280	162	1800	317
45	40	290	165	1900	320
50	44	300	169	2000	322
55	48	320	175	2200	327
60	52	340	181	2400	331
65	56	360	186	2600	335
70	59	380	191	2800	338
75	63	400	196	3000	341
80	66	420	201	3500	346
85	70	440	205	4000	351
90	73	460	210	4500	354
95	76	480	214	5000	357
100	80	500	217	6000	361
110	86	550	226	7000	364
120	92	600	234	8000	367
130	97	650	242	9000	368
140	103	700	248	10000	370
150	108	750	254	15000	375
160	113	800	260	20000	377
170	118	850	265	30000	379
180	123	900	269	40000	380
190	127	950	274	50000	381
200	132	1000	278	75000	382
210	136	1100	285	100000	384

Note; N- Population Size

S- Sample Size