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**ADDIS ABABA UNIVERSITY**

**COLLEGE OF DEVELOPMENT STUDIES**

**ENVIRONMENT AND SUSTAINABLE DEVELOPMENT**

**EFFECTS OF RESETTLEMENT SCHEMES ON THE LIVELIHOOD OF  
PROJECT AFFECTED HOUSEHOLDS: THE CASE OF RIBB  
IRRIGATION DAM**

**AMHARA REGIONAL STATE, ETHIOPIA**

**BY**

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ADDIS ABABA UNIVERSITY  
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DAM

AMHARA REGIONAL STATE, ETHIOPIA

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Arts in Environment and Sustainable Development

BY

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## DECLARATION

I, the undersigned, declare that this thesis work is my original work carried out by me. All the resources and materials used for this thesis have been fully acknowledged.

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THESIS APPROVAL  
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This is to certify that the thesis prepared by Teketel Adefres, entitled: Effects of Resettlement Schemes on the Livelihood of Project Affected Households: The Case of Ribb Irrigation Dam Amhara Regional State, Ethiopia and submitted in partial fulfillment of the requirement for the degree of master of arts (Environment and sustainable development) complies with the regulations of the university and meets the accepted standards with respect to originality and quality.

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## ABSTRACT

*Large scale projects such as buildings of irrigation dam can bring significant benefits to the community by enhancing their resilience to natural shocks including climate change. However, they could affect the natural and social environments and cause further devastation for local livelihoods unless managed properly. To this end, an assessment of the effects of resettlement schemes and the environment on the livelihoods of project affected households due to Ribb irrigation dam had been conducted. The Dam is located in South Gondar zone Ebnat and Farta woreda, Amhara regional state in Ethiopia. The purpose of the irrigation is to improve irrigation facilities in order to enhance crop production by providing stable water supply to agricultural production. The study used the new environmental setting, social interference, capability to generate income plus building assets, and resettlement compensations as inputs to understand how livelihood sustainability of the Project affected people (PAPs) affected. This study is based on the 115 of the 227 project affected households (PAHHs) that have been displaced by the construction of Ribb Irrigation Dam. Data was collected using pretested questionnaires. The data was analyzed using Statistical Package for Social Sciences (SPSS) version 20 and Microsoft Excel. Assessment result of the livelihood condition of project affected households (PAHHs) reveals that only 6.96 % of the PAHHs have access to all the basic services including clean energy, clean water supply, sanitation, road access, school, finance, market access and due compensation with 100% of this promising result belonging to male-headed households. Relationship between income generation activity, and socio-demographic characteristics (age, sex, family size, education and marital status) show positive correlation with sex and marital status of the family head being significant. It's also noted that connection between compensation negotiation and compensation fairness is major demonstrating partial negotiation process. Hence, it's concluded that almost all of the host community are leading unsustainable livelihood. To make matters worse, vulnerable groups such as women are excluded from livelihood opportunities. Therefore, it's hereby recommended that the government and development partners closely monitor the impact of any livelihood restoration programs that focuses on project affected households. Transparency, public participation and inclusiveness, equity and rule of law, and accountability are required to ensure sustainable livelihood of the host community.*

**Keywords:** *Resettlement, Social interference, Compensation, Vulnerable, Livelihood sustainability, PAHHs, Host community.*

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## ABBREVIATIONS AND ACRONYMS

<b>AfDB</b>	African Development Bank
<b>DFID</b>	Department International Development
<b>DIDR</b>	Development Induced Displacement
<b>EIA</b>	Environmental Impact Assessment
<b>ENIDP</b>	Ethiopian Nile Irrigation and Drainage Project
<b>FDRE</b>	Federal Democratic Republic of Ethiopia
<b>FGD</b>	Focus Group Discussion
<b>HHSS</b>	Household Sample Survey
<b>IADB</b>	Inter-American Development Bank
<b>INDR</b>	International Network on Displacement and Resettlement
<b>IRR</b>	Impoverishment Risk and Reconstruction
<b>JAICA</b>	Japan International Cooperation Agency
<b>LSLAs</b>	Large scale land Acquisitions
<b>MOWIE</b>	Ministry of Water Irrigation and Energy
<b>PAHHs</b>	Project Affected households
<b>PAPs</b>	Project Affected Peoples
<b>RAP</b>	Resettlement Action Plan
<b>RCALD</b>	Regional Commission against Large Dams
<b>RIDP</b>	Rib Irrigation and Drainage Project
<b>RPF</b>	Resettlement Policy Framework
<b>SPSS</b>	Statistical Package for Social Science
<b>UNHCR</b>	United Nation office of the Higher Commission for Refugees
<b>WB</b>	World Bank
<b>WCD</b>	World Commission on Dam

## CHAPTER ONE

### 1. INTRODUCTION

#### 1.1 Background of the Study

Large scale development projects such as hydropower and irrigation dam projects result in displacement of sizeable number of people from their location. Currently, it has been customary to resettle such displaced people properly after assessing the possible impacts that the projects created on them. Such forced resettlements results in substantial socio-economic crisis unless properly managed. In this regard, it'll be worthy to mention here loss of livelihood practices that they have been used to and shift into new form of livelihood as in for instance a farmer displaced and resettled into urban environment would not be able to engage in an income generating activity unless trained and oriented to do so. Moreover, the common practice so far is to compensate the project affected people based on studied resettlement action plan without understanding and devising a means so that the Project affected Households (PAHHs) can learn new livelihood earnings and cope up with the new situation.

Mathur (2006) noted that resettlement is one of the social manifestations of what can be imposed by large projects. Besides, different scholars say that unless managed properly, forced resettlement or relocation results into high magnitude of social and economic challenges. Moreover, according to Downing (2002), it can also create extensive loss of asset that is physical or non-physical. Forced resettlement can exacerbate risk vulnerability of the affected population leading to Impoverishment that hampers their livelihoods creating stagnated development.

Internationally recognized funding agencies and investment banks including the World Bank and African Development Bank (ADB) give due consideration about proper resettlement process and action. To this end, policies, laws and guidelines exists among the various stakeholders including international organizations, government, etc. In Ethiopia among the different relevant environmental and social proclamation, expropriation of lands and compensation laws is imperative to mention here. However, it should be noted that apart from mere compensation of property loss, impactful, pragmatic approach like that of livelihood restoration plan based on proper assessment of resettlement impacts on livelihoods is required. This will in turn help us realize sustainable development.

The Government of the Federal Democratic Republic of Ethiopia (FDRE) in agreement with the World Bank prepared the Ethiopian Nile Irrigation and Drainage Project (ENIDP) that will finance implementation of up to 20,000 ha of new irrigated agriculture and detailed feasibility studies of up to 80,000 ha. The selection of the irrigation schemes to be included in the ENIDP is the result of a strategic analysis of potential irrigation developments in the Ethiopian Nile Basin by Ministry of Water Irrigation and Energy (MoWIE) in July 2006. Ribb irrigation project is one of the irrigation project constructed by Ethiopian government found within Amhara National Regional state South Gondar zone Fogera and Libo kemkem woredas. Ribb Irrigation and Drainage Project (RIDP) was planned to develop gross area of about 14,500 ha of land to benefit about 11,500 HHs. The Ribb dam and its associated components are located in the boarder kebeles of Farta and Ibinat Woredas, namely Medeb Gubda, Jara Shekera, and Ayva Niva from Farta Woreda and Ziha and Amisteya kebeles from Ibinat Woreda ( LRP for Ribb Dam and Reservoir PAPs May, 2018)

The dam is a 73.2 m high dam and the flooded area at elevation of 1,943 m a.s.l. is 1123.5 ha at maximum water level with full reservoir storage capacity of 234 million cubic meters will be about 1300 ha. Other features include: Saddle dams (3), Cofferdam, and side channel spillway, required for the safe passage of flood discharge; and in-take tower and outlet pipeline. The dam site area had been extensively used for farming, and settlements being denser at the upper reservoir slopes and top of the hills. The area has been used for rain fed agriculture by farmers and the valley that is inundated by water was under cultivation and settlement by farmers at large. The construction of the dam on the Ribb River, the reservoir and the development of various related infrastructures have resulted in affecting the livelihood of about 1,486 PAHHs. These 1,486 final net lists of project affected households are identified as the real PAHHs. Therefore, the main objective of the current study is to assess the Effects of Resettlement Schemes on the Livelihood of Project Affected households in the case of Ribb Irrigation Dam. (LRP for Ribb Dam and Reservoir PAPs May, 2018)

## **1.2 Statement of the Problem**

Undertaking of projects such as construction of roads, dams, establishment of different types of infrastructures in general may necessitate relocating of group of people or communities. This process requires physical movement of people from one environment to a new environment. Development projects including dam projects can cause significant environmental damages and

threaten the natural resources base, and the socio-economic and public health of the community unless they are properly and adequately planned and managed.

In this regard the Project Ribb Dam has caused 227 relocated project affected households to undergo resettlement. Assessing and compiling of findings on the prevailing socio-economic situation, the process of adaptation and the support provided can be an important case study that can be used in future resettlement actions.

So far, there was no effort to assess the extent to which the affected households have coped with the change in location, income and living conditions in this project.

Project affected households need great attention during the construction of the dam. According to Ethiopian Ministry of water, irrigation and energy livelihood relocation report (2018); about 1486 final net lists of project affected households are identified as the real project affected households. Of these, 227 are the ones that fully lost their farm land and housing. Due to this, they were relocated to Ebinat and Debre Tabor towns with provision of town land for residential construction for each individuals and working area for organized and licensed groups.

The previous studies of the Ribb irrigation dam project in south Gondar zone mainly focus on Ribb irrigation dam techniques and the other one single study also focus on the Ribb irrigation Environmental Impact Assessment (EIA) Document. Generally the previous studies such as Evaluation of the implementation of environmental impact assessment in dam projects: the case of Ribb and dire dams (June, 2011), Ribb irrigation Dam LRP document (May, 2018) did not show the effects of resettlement schemes and environment on livelihoods of project affected households. These studies did not indicate the effects of resettlement schemes on the livelihood of project affected households. Hence, this particular study focus on the cultural beliefs, religious backgrounds, environmental setting and socioeconomics of the project affected households. This research tries to answer the following research questions:

1. What are the effects of the local environmental setting on the project affected households and vice versa?
2. What are the effects of social interference on the livelihoods of project affected households?

3. What is the capability of the project affected households to generate income and build assets in the new environment?
4. How does the effects of resettlement compensation on livelihood of project affected households?

### **1.3 Objectives**

#### **1.3.1 The General objective of the study**

To assess the effects of resettlement schemes on the livelihood of Project affected households the case of Ribb irrigation dam.

#### **1.3.2 The Specific objectives of the study**

1. To investigate the effects of local environment on project affected households and vice versa.
2. To study the effects of social interference on the livelihoods of project affected households.
3. To assess the project affected household's capability to generate income and build assets in the new environment.
4. To examine the effects of resettlement compensation on livelihood of project affected households.

### **1.4 Scope of the Study**

The scope of this study was to assess the effects of resettlement schemes and state of the environment on the livelihood of project affected households (PAHHs) in the case of Ribb irrigation dam. The study was include the socioeconomics problems of PAHHs based on the State of the Environment, Social interference, Capability to generate income and build assets and Resettlement Compensation. The resettled project affected households are 227 who fully lost their farm land, housing and were relocated to Ebinat and Debre Tabor towns with provision of town land for residential construction for each households and working area in organized and licensed groups.

### **1.5 Significance of the Study**

This study will assist as an input for the government decision makers by providing valuable information concerning appropriate policy and legal framework to address the gaps in the existing resettlement action plans and also livelihood restoration plans. It also helps policy makers to access additional information on the impact of resettlement on sustainable livelihood of project affected households. Furthermore, the study can also be used as a source of information or other researchers and used as a springboard for detail studies on the impact of resettlement on livelihood of project affected households.

### **1.6 Limitations of the Study**

The researcher encountered a number of problems during data collection period. The major problems were failure to conduct easily face to face coordination and meetings due to the occurrence of Corona virus in the country at the time. Inaccessibility of respondents because of their other engagements such as social duties and marketing activities caused barriers. Besides, inaccessibility of roads in the community has constrained the transportation facilities. The researcher also faced financial limitation. Time constraint was prominent due to the Corona virus pandemic situation. Despite all these, the researcher tried to manage them and come up with reasonable findings.

### **1.7 Organizations of the Thesis**

This research thesis contains five chapters. The first chapter introduces the background, the statement of the problem, objectives, scope; significance of the Study and limitations of the study. The second chapter covers review of related literatures that are related to the subject matter. The third chapter is about methodology, which consists of description of the study area, research design and approach, target population, sample size, data collection methods, data analysis techniques, ethical considerations and operationalization of variables. Results and discussion parts of the study are found in chapter four. Chapter five conclusion and recommendations.

## CHAPTER TWO

### 2. REVIEW OF RELATED LITERATURE

#### 2.1 Concept of Resettlement and Livelihood Sustainability

Resettlement is the process of moving people to a different place to live because they are no longer allowed to stay in the area they used to live. The government of Ethiopia has established the EIA system for development projects with promulgation of Environmental Impact Assessment Proclamation (Proc. no. 299/2002). Even though EIA has become a legal requirement after the enactment of the enabling legislation, it has a number of constraints which makes it fall short of realizing its full potential as a frontline instrument to promote sustainable development (Mellese Damte and Mesfin Bayou, 2008). The difficulties and constraints encountered require the need to undertake systematic studies to objectively know the extent of the problem and recommend possible measures that will help the improvement of EIA practices in the country.

A study in China by Jun (1997) was based on reviewing three resettlement projects namely: the Vinanjing project, Yongjing project and Sanmenxia project. The study concluded that the communities displaced by the projects were not adequately compensated with their life ending up being worse than the people in the neighborhood who avoided the resettlement. In Brazil, community activists formed the Regional Commission against Large Dams (RCALD), which remained as evidence to people affected by resettlement (Cernea & Guggenheim, 1993).Lund (2009), therefore, calls for a clear distinction to be made between the refugee regime and situations of displacement, especially when the displacement is caused by development projects

In India, Bhati (2002) assessed the impact of implementing resettlement program in NuthaJhatri hydro power project and concluded that magnitudes of indices during the 2002 programme and implementation are compared to the baseline data and with the control sample household data in the project area which are not affected by the NJPC project. The data revealed the family size of the Project Affected Families (PAFs) had declined from 7.14 to 5.44 persons per family.

In Africa, the insufficiency of resettlement compensation was noted in two hydro power projects: the Kiambere and the Akosombo Dam projects which led to increased socio- economic deterioration (Mburugu, 1994; Tamaroke, 1994). In Kenya Adams Kijazi (2014) looked at the

Impact of Derema forest corridor on community Livelihood and Forest conservation. Using descriptive survey, in-depth interviews and focus group discussion the study showed that resettlement and resettlement compensation exercise did not adequately address the interest of the farmers.

The Government of the Federal Democratic Republic of Ethiopia (FDRE) in agreement with the World Bank prepared the Ethiopian Nile Irrigation and Drainage Project (ENIDP) that can finance implementation of up to 20,000 ha of new irrigated agriculture and detailed feasibility studies of up to 80,000 ha.

## **2.2 Global Overview of Displacement and Resettlement**

### **2.2.1 Displacement**

Displacement is defined by WCD (2000a) as both physical displacement and livelihood displacement (or livelihood deprivation). Physical displacement refers to moving people from their original place. Livelihood displacement includes deprivation of people of their means of production and dislocates them from their existing socio-cultural milieu (WCD, 2000a P. 102-103).

To clarify displacement, it is important to understand its core features which make it different from migration. First, it is involuntary since people's choices are limited and involves a higher degree of risks which they face in the new place compared to their original place (Muggah, 2003). Second, displacement is often simply interpreted by policy makers and practitioners as physical movement of individuals, households and communities (Muggah, 2008). However, displacement should be defined in a broader term that encompasses the challenges of sense of place and 'home', which go beyond just the physicality. Hirsch *et al.* (1992), WB (1996), WCD (2000a) also refer to the fact that displacement of production means the removal of those things necessary for people's livelihoods such as land, forest and water resources. In addition, Terminski (2013) highlighted that the term is mostly used in the context related to deprivation of access to existing land and resources, unaccompanied by adequate support mechanisms for the affected people.

Dam development not only causes human relocation but also partial or total losses of people's livelihoods. For the sake of this research, the term of displacement is defined in a broader view, including both physical relocation and livelihood displacement.

### **2.2.2 Resettlement**

The World Bank definition of resettlement covers all direct social and economic losses resulting from land taking and restriction of access, together with the relevant compensatory and remedy measures. Resettlement includes

- (a) Acquisition of land and physical structures on the land;
- (b) Physical relocation; and
- (c) According to (WB, 2004: P 5) notes that Economic rehabilitation of displaced persons, to improve (or at least restore) incomes and living standards.

WB (1996) and world commission on dams (WCD 2000a) defined resettlement as the two phase process of relocating people from their original place to other sites and re-establishing their livelihoods. Thus, the phase of livelihood re-establishment makes it different from displacement. Moreover, according to McDowell and Morrell (2010) emphasized that resettlement aims to provide "development" and improvement but displacement does not.

There is no consensus on the boundary between displacement and resettlement. Displacement is considered to end when resettlement starts taking place by planners in the development project (Muggah, 2008). However, it is easy to find cases where sense of place continues even when resettlement works have been implemented.

### **2.2.3 Factors and Conditions Relevant to Resettlement Actions**

Rdiaw-Kwasie, *et al* (2014) argues the factors for relocations and displacement of populations can be looked into in terms of impacts on livelihoods and wellbeing of people and communities as well as in the context of environmental changes. According to the idea of Montreux *et al* (2018), political economy also has influence on interventions by the government that while seeking legitimacy and power to control it, avoid perceived negative consequences and lack of accountability. This comes with uneven actions and inactions which result into uneven social-economic implications to localities. Jaeger *et al* (2013) describes the social interventions attempt

to extend the government power and also according to Scott, 1998) legitimacy which result to uneven incentives and disincentives.

Gutman (1994) concluded that “*the* effects of Development Induced Displacement (DIDR) may destroy temporary and permanently the lifestyle and living standards of poor people in local communities”. International communities have since codified policies and guidelines on involuntary resettlement including the World Bank operation policy (World Bank, 2004), Asian Development Bank Operation Manual Section F2/BP Involuntary resettlement (ADB). Through this the Resettlement action plan emerged as a key instrument towards mitigation displacement impacts. According to Michael *et al* (2014) notes that lack of engagement has derailed resettlement outcomes and also the other scholars Mathur and Marsden, 1998 says those have gone beyond economic and environmental impacts, and now create a pattern of gross violation of human rights and enormous trauma on countries such as India.

While large scale resettlement may appear to represent effective solutions in response to immediate or short-term needs, it is viewed from a long-term perspective to have potential to unleash major social, economic and environmental effects that may affect people and their surrounding as witnessed in Qinghai Province during Longyangxia Dam induced displacement in China.

Based on the idea of Erdiaw-Kwasie, *et al* (2014) also notes that lack of involvement of the affected population as an obstacle in resettlement from Mining-Induced Displacement and Resettlement (MIDR) perspective. They hence recommend effectiveness of livelihood promoting interventions using case evidences in contexts of engagement prospects and challenges of experienced in the programme. The recommended territorial governance proposes multiplicity of relations that characterize the interactions amongst actors and different but non conflictual interests as proposed by Le Gales (2002). Four conditions need to be met, namely vertical coordination, horizontal coordination, participation and involvement of civil society organized interests and territorial actions whose importance varies from (EPSON, 2006). Davoudi *et al* (2008) notes that reiterated the need for involvement stakeholders and interests (public/private partnerships) whose participation is necessary for design of implementation and participation of citizens as private actors who include joiners and non-joiners. In their views, involvement should include consultations, information sharing listening, learning and joint

assessment. Where participation involves shared decision making, collaboration and empowerment. This should come with training of resettlement facilitators, effective and more localized monitoring and evaluation, good governance and strict policies.

According to Berkes and Jolly(2001) towards mitigation, suggested that a sustainable approach and models that contribute to mitigation of any possible vulnerabilities to cultural life ways that encourage bottom up approach and also De Plessis (2012) in the same view demonstrates that ecological design and planning processes should have four characteristics that are responsive to local conditions, adapt to changing conditions, employ decentralized approaches and develop through collaboration and contribution of simple entities by bottom up self-organization; so it is linked to social and cultural components as most important factor for success.

The approaches should provide resilience by leveraging on cultural capital and culture change to reduce stresses on health, wellbeing and security. According to Oliver and de Sherbinin (2014) describes that the governments and multinationals tend to dismantle resettlement, focusing primarily on the economic aspects. This should not be the case since the resettlement processes involve dynamics and reorganizations within the system that always elude the possibility of restoring livelihoods to a similar state of pre-resettlement. According to their review and feedback on World Bank Guidance Notes, the International Network on Displacement and Resettlement (INDR) the implementation of displacement and resettlement processes international scope need to be reconsidered and relevant guidance operationalized (INDR,2018).

The debates above show need for a comprehensive approach that considers the possible impacts, human rights, livelihood and wellbeing, economic and environmental need for involvement and participation.

#### **2.2.4 Environment**

The environmental impacts show up in large scale land Acquisitions (LSLAs) and resultant activities on the biodiversity, environmental aesthetics, and natural habitats due to general land degradation as a result of land clearances and use of vibration, wells drilling, spillage and loss of vegetation cover and wildlife species.

### **2.2.5 Livelihood and Sustainability**

A Livelihood comprises the capabilities, assets (including both material and social resources, and activities required for a means of living. Livelihood is sustainable when it can cope with and recover from stresses and shocks and maintain or enhance its capabilities and assets both now and in the future while not undermining the natural resource base (Scoones, 1998).

## **2.3 Review of Empirical Literature**

### **2.3.1 Effects of Resettlement Schemes on Project affected households**

According to Terminski (2013), a usual consequence of development projects is progressive land degradation in their vicinity. Terminski argues that creation of large dams significantly affects the landscape, ecology, and animal populations. For example, the construction of a Dam lead to water pollution along the river's entire course and thus to deterioration in the Economic situation of local residents. Further, environmental problems are a common Consequence of exploitation of mineral resources, in particular through the creation of large Open-cast mines. The environmental costs of development projects therefore lead to a significant decline in the living conditions of many communities. Kamakia (2015) assessed the resettlement process based on a case study of Olkaria IV Geo-Thermal Project. The location of the project is home to an indigenous Maasai population that had to be removed and resettled elsewhere. The data collection process on resettlement Action plan included site visits, air and noise dispersion modeling, a census, a social **survey, land** and asset valuations and consultative meetings with PAPs. Overall, Kamakia observed that the implementation of the resettlement process was carried out with utmost professional standards and consultations and budgetary resources were allocated for construction of housing and other social amenities for the PAPs. Families were temporarily relocated during the construction phase and later were fully resettled at the main resettlement site that was agreed by the community members. The anticipated environmental and social impacts therefore for the most part, had low significance. He concluded that the resettlement programme was a salient example of successful resettlement management practice of PAPs in Kenya.

### **2.3.2 Effects of Resettlement Schemes on Social Organization networks and Livelihoods**

According to Turtianien (2012), social upheaval that results from involuntary resettlement in development projects creates profound discontinuity to the order and predictability that culture has brought into daily life and social situations. Consequently, traditional systems break down and when cultural protection and security fail, the problems of project affected persons are related to cultural disintegration.

Terminski (2013) suggested that the main cause of human security problems affecting the displaced is landlessness and limited access to resources on which the communities depend. This in turn leads to extermination of previously cohesive communities.

Generally it is observed that once communities are resettled they often remain weak and disorganized as a result of divisive negotiation practices prior to eviction and; while community members may help each other, share or borrow food from each other, there is often no strong sense of community support and few mutual help networks (UNHCR, 2012). A study undertaken in Cambodia found that community cohesion and participation at resettlement sites was generally weak. The author suggests that social integration was rarely taken into consideration in resettlement plans.

### **2.3.3 Effects of Resettlement Schemes on Income Generation and Livelihoods**

When resettlement is an agenda, the primary issue to be considered is about the forthcoming livelihood of the displaced people. The point here is that the livelihoods of people after resettling in the new area must be improved as compared to their former livelihoods. If that is not possible, the minimum requirement is restoring their previous livelihoods. The new life must not be worse off. The safeguard principle of World Bank indicates that where the people affected by land acquisition are being resettled, the resettlement should be that they are in “no worse-off if not better off” in the post resettlement periods. If the impact is on land and that people may be affected in their sustainable livelihoods, the preferred form of restoration will be land-for-land provision rather than pure cash compensation and this is in consistency with the Ethiopian Constitution and WB OP 4.12. The livelihood restoration applies to the people who are not certainly physically displaced but affected by the land loss, which in turn affects their livelihood sustainability. Furthermore, where there is moving or loss of shelter, the Resettlement

Policy Framework (RPF) needs that measures to support the displaced persons be implemented according to the Resettlement Action Plans.

In the cases where the affected people will be monitored in the rehabilitation of their livelihood restoration, measures will be assessed in relevant RAPs based on the particular condition of the considered location, which may comprise the following issues:

- Agricultural development actions, i.e. agriculture, livestock
- Micro-financial support which includes savings and credit, and other small scale business development actions
- Skill development and training activities

#### **2.3.4 Effects of Resettlement Compensation on Livelihood of PAHHs**

In recently projects executed thus far, rehabilitation of the displaced and prevention of their impoverishment have been anchored on monetary factor disseminated through compensation packages usually in the form of payments made to the victims. According to Mathur (1995) and in a document by ADB (1998), stakeholders and victims have conveniently replaced the concept of resettlement with cash compensation paid for the acquired assets which include land and property on it.

To this end, the argument was that the assets which the projects acquire resulting into the displacement of persons have monetary value and thus making payments in form of cash or just in kind to the affected persons effectively eliminates the barrier towards acquisition of such assets. It is noted that the projects have resorted to offering cash in lump sum to the affected persons who impact is so little has it has failed to prevent acceleration of the people into impoverishment as would be expected (Mathur, 1995 and Duan & McDonald,2004).

In some cases of resettlement, alternative land has been sourced. However, the productivity of such land has always been found to be low to ensure adequate production and buffer the victims from economic hardships (Mathur, 1995 and McDonald, 2006). Thus, resettlement programs have been found to be less adequate, especially from the perspective of compensation, with the affected livelihoods deteriorating rather than being restored. This has been revealed by studies on resettlement projects in Africa and Asia.

Jun (1997) conducted a review of three projects with massive resettlement activities in China. The study on the projects of Sanmenxia, Xin-Anjkang and Yurngijing found that the people who are actually displaced receive compensation which is insufficient leaving them to be worse than people who were not displaced and thus did not receive any resettlement compensation. In India, Murickan and Boband (2003) working on the Kerala project found dissatisfaction with the compensation received by the affected persons considering it to be insufficient in enhancing their living standards. In Africa, Mburugu (1994) and Tamakloe (1994) noted that there is increased prevalence of socio-economic impoverishment among the resettled persons in Kiambere and Akosombo dam projects which was attributed to the inadequate compensation offered.

From the above studies in China, India and Africa, it can be deduced that compensation is not effective in reducing alleviating impoverishment which may occur due to resettlement of populations. As such, stakeholders are of the opinion that only structured and careful planning through appropriate and customized programs for the affected populations can the impoverishment be alleviated. According to Cernea (1991) and WCD (2001) the most effective way of ensuring that the displaced persons are restored to their original livelihood is by considering resettlement as an independent project with its own objectives. Similarly, Fernandez (2000) argue that having the beneficiaries as the number one objective of the project can be prevent the related risks of impoverishment making the displaced persons not to bear the negative impact of the project. Cernea (199) explains that in the application of this line of thinking, there is need for change from the traditional way resettlement with focus being on planning of the resettlement program as opposed to compensation as the main focus. This view was termed as resettlement with development by McDonald (2006)

In modern resettlement projects, resettlement with development focus has been increasingly propagated by scholars in the resettlement field especially in the formation of policies for national governments, humanitarian groups and international institutions (Cernea, 1995; Mahapatra, 1999 and Muggah, 2000). In line with this philosophy, the expectation is that during forced resettlement, the life of the affected persons should be transformed positively. The risks of impoverishment associated with resettlement can adequately be mitigated using the philosophy of resettlement development.

It has been shown that each risk of impoverishment is related to livelihood reconstruction in an inverse relationship such that increased impoverishment risk leads to decreased livelihood reconstruction (Cernea & McDowell, 2000). Thus it is possible to restore the livelihood of the affected population with improved income so that their living standards become better than the period before displacement (Cernea, 1997). Based on this statement, it is considered that development is initiated and made to occur rather than occurring spontaneously on its own. Despite the existing support and agreement with reference to application of the development concept of resettlement, there is little research on resettlement especially on the agreed criteria of development measurement.

For a resettlement program to be considered as development, it must be able to enhance human capabilities and increase the space for social benefits which will be able to address the social limitations as well as personal constraints of the affected persons. To date, the many years of empirical studies have given valuable lessons from previous experiences on livelihood restoration leading to development of new strategies, policies and risk mitigation plans in case of development initiated displacement of persons.

Displacement and resettlement (DIDR). These changes have been put into consideration in most of the international financial institution policies and framework, especially where unintentional resettlement has taken place (WB, 2001, 2004). The main aim of these policies and frameworks are that unintentional resettlement should not be encouraged. However, where it is inescapable, suitable measures to alleviate or minimize unfavorable socio-economic effects on displaced people and host communities should be cautiously designed and executed and to ascertain that livelihoods and living standards of resettled people are maintained or improved (WB, 2001, 2004; ADB, 2003, IFC, 2006).

A primary aim in achieving these objectives in Resettlement Action Plan (RAP) as stated by Downing (2002) is to set out procedures and requirements for resettlement with minimum socio-economic interference of the displaced households. These plans have also spelt out clearly what the project has achieved hitherto and the next cause of action (Overnden, 2007).

With these frameworks put in place, the project will have the capacity to lessen the unfavorable social-economic impacts and to take care of losses and damages that may come up as a result of involuntary resettlement and give development advantages to the resettled households

(Overnden, 2007). Most crucial, the incorporation of the sustainable development concept into socio-economic welfare reinstatement initiatives also known as rehabilitation was seen as deserving greater significance in resettlement and development discourses (Downing, 2002; Muricken, 2002; Muricken *et al*,2003).

Joshi (1987) also elaborate that rehabilitation is settling community in a new location without compromising sustainable socio-economic development of the displaced people. The process of rehabilitation also puts into account the resettlement compensation to ensure that, income streams and other revenue indicators of the affected people are sustained (Mander, Hemadni & Wagaraji, 1999).

The main aim of rehabilitation is to guarantee displaced people favorable resettlement and not making them worse before displacement (Mahapatra, 1999). Mahapatra (1999) further argued that this process of rehabilitating the displaced people should ensure that the affected people continue with life as it was without any interruption to the humanity. The concept of restoration of the resettled people as a result of being displaced is therefore in line with the fundamental philosophy of sustainable socio-economic development. Cernea, (1998) also acknowledge the rehabilitation and restoration as a component of social capital in the society, where the host community and the displaced persons coexist in harmony and peaceful. Peaceful coexistence fosters economic development of an area and as such social capital promotes sustainable development (Pearce, 1999).

Many authors such as Gutman (1994) and Duan & McDonald (2004) also argued that any loss of social capital weakens the local potential to rebuild their lives and livelihood. This loss further disempowered the displaced people in terms of advocating for their lives (Gutman, 1994, Downing, 2002). A resettlement and rehabilitation framework would therefore need the local potential to examine these resources could assist in addressing the plight of the displaced and resettled people (Cernea, 1998; McDonald, 2006). From a sustainable livelihood perspective, people rely on a number of capital assets and resources which they can draw upon to make their livelihoods (DFID, 1999, 2004; Carney, 2003).

The livelihood capitals consist of the building blocks that can be amalgamated or substituted for each other. Therefore, people can adopt one or more types of capitals to access to others (DFID, 1999; Carney, 2003). Reconstructing livelihood capitals and strengthening the local capacity to

access these capitals should be very important for accomplishing sustainable livelihood outcomes.

## **2.4 Theoretical Models of Resettlement**

The study is anchored on impoverishment risk and reconstruction (IRR) model advanced by Corneas (1990). Cernea's Impoverishment Risks and Reconstruction (IRR) model arose in the 1990s. Unlike the Scudder–Colson model, the IRR model does not attempt to identify different stages of relocation, but rather aims to identify the impoverishment risks inherent to forced resettlement and the processes necessary for reconstructing the livelihoods of the displaced. Precisely, this model emphasizes that, unless specifically addressed by targeted policies, forced displacement can cause impoverishment among displaced by bringing about landlessness, joblessness, homelessness, marginalization, food insecurity, loss of access to common property resources, increased morbidity and mortality, and community disarticulation. The IRR model has been used as a framework for a number of studies.

## **2.5 Policy Framework on Resettlement**

### **2.5.1 International Legal Policy Framework on Resettlement**

According to World Bank guidelines (OP 4.12), many international agencies recognize that involuntary resettlement is associated with impacts that require avoidance or minimization. The guidelines require that an entity whose work involves involuntary resettlement should in the first instance prepare a resettlement policy framework (RPF) to guide its activities, and secondly prepare a resettlement action plan (RAP) for each project undertaken. It is on these instruments and principles that the implementation can be audited and reviewed against minimum safeguards. An examination of various international agencies (World Bank, African Development Bank, Asian Development Bank, Inter-American Development Bank, JAICA (Japan) and Commission on Dams) yield common principles that are internationally recognized to undertake projects involving involuntary resettlement:

1. Need for preparation of the Resettlement Policy Framework (RPF) as well as Resettlement Action Plans (RAPs).

2. Identification of legal and institutional framework within which the compensation and rehabilitation measures have to be implemented.
3. Avoidance of involuntary resettlement wherever feasible, and minimizing of resettlement where population displacement is unavoidable by exploring all viable project options.
4. Compensation at equivalent cost required to replace the asset in its existing condition.
5. Assistance to the affected people to relocate and improve their living standards, capacity for income generation, and production levels, or at least to restore to their former levels.

### **2.5.2 National Legal Policy and Administration Frame work on Resettlement**

Legal frameworks of the Federal Democratic Republic of Ethiopia and Amhara National Regional State relevant proclamations, regulations, guidelines, have been considered in the original RAP are Relevant for this addendum. The RAP Addendum is prepared based on the references made to the WB Operational Policy on Involuntary Resettlement OP 4.12 in the original RAP. There are no Changes in the legal frameworks, regulations and guidelines.

## **2.6 Conceptual Framework**

Sustainability of livelihood which is considered to be affected by natural capital, social capital, economic/financial provisions are summarized for simplicity into two blocks as follows in order to assess the livelihood condition of the PAHs (Figure 2):

Factors for Social/Infrastructure/Natural (Environmental) conditions

- Cooking and lighting
- Clean water supply
- Availability of sanitation service
- Residence ownership
- School distance
- Access road

Factors for Indicators for Economic/Financial provision

- Access to finance

- Market access
- Compensation fairness

Furthermore, livelihood participation was also evaluated based on information gathered on income generating activities and it's anticipated that such livelihood participations are affected by age, family size, educational status, gender, and marital status.

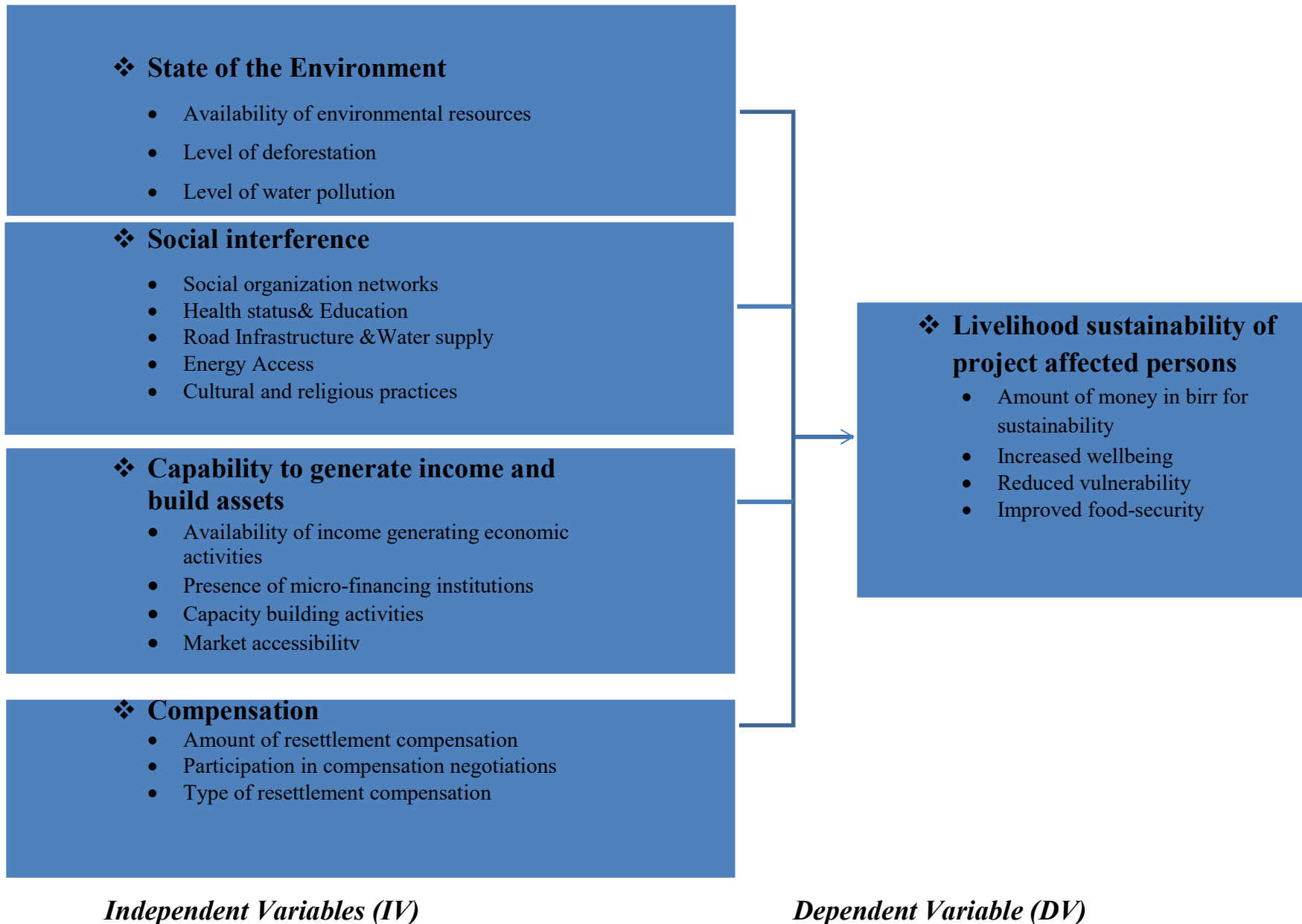


Figure 1: Conceptual framework on resettlement and livelihood of project affected persons

# CHAPTER THREE

## 3. METHODOLOGY

### 3.1 Description of the Study Area

Ribb Dam, financed by MoWIE for irrigation water storage and for flood management of Lake Tana, is located at the border of Ibinat and Farta woreda as of South Gondar Zone in Amhara National Regional State on Ribb River. The Dam can be accessed from two directions: one North East of Bahir Dar city at a distance of 142 km east of Lake Tana through the town of Addis Zemen (using 40 km long gravel road) and another through 115 km via Debre Tabor (using 24 Km dry weather).It's geographically; the dam site is located at 12° 02' 30" N and 37° 59' 45"E

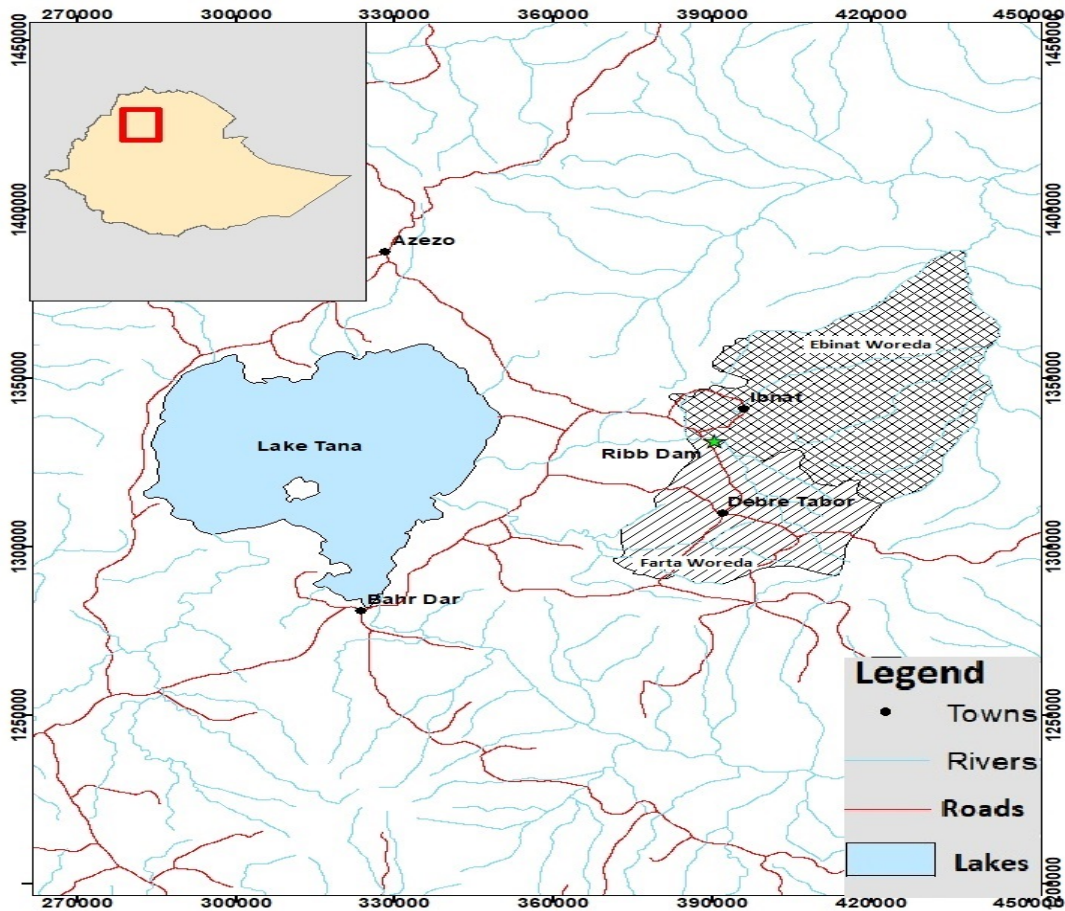


Figure 2: Location map of the study area.

### **3.2 Research Design and Approach**

The study adopted a descriptive survey design. Mugenda and Mugenda (1999) explained descriptive survey as the process in which data is collected in order to test hypothesis or to answer questions concerning the current status of the subject under study. Descriptive study according to Kothari (1993) also engages an assessment of the situation of affairs describing, analyzing and reporting conditions that exist or that existed. The choice of this type of research design is because the study investigated the effects of resettlement schemes and environment on livelihoods of project affected households the case of Ribb irrigation dam in south Gondar Zone, Amhara national regional state.

### **3.3 Target Population**

The project affected household's are 1486 but 227 Project affected households (PAHHs) had fully lost their farm land and houses. They were relocated to Ibinat and Debre Tabor towns. The target Population of the study are the number of relocated project affected households. These are 38 in Ibinat and 189 in Debre Tabor which adds up to a total population of 227.

### **3.4 Sample Size**

The study applied both probability and non-probability sampling procedures to obtain the number required for the study. As mentioned under target population section of the document, 227 project affected households are the total population considered for the research. Hence, the sample size was calculated as indicated below.

The probability samplings apply simple random sampling technique. Mugenda and Mugenda (1999) pointed out that where time and resources allow, a researcher should take a sample as big as possible. Therefore, the researcher adopted the following formula from Israel (1992) to select the sample size;

$$n = \frac{N}{1 + N(e)^2}$$

Where n = sample size

N = Target population

e = Acceptable error (6.5% for this study)

When substituted in the formula above, the sample size for household survey will be;

$$n = \frac{227}{1 + 227 * 0.065 * 0.065}$$

n = 115

### **3.5 Data Collection Methods**

The data collection instruments were researcher developed questionnaire for the project affected households (PAHHs), project development programs (PDPs), Key Informant Interview for the administrators, and document analysis.

#### **3.5.1. Secondary Data Collection Method**

All relevant secondary data and information were collected and organized. The following information's were required for this particular study:

- Agricultural production
- Energy consumption
- Water supply
- Health information
- Road infrastructures

#### **3.5.2. Primary Data Collection**

Three types of tools used for primary data collection as indicated below.

##### ***1. Focus group discussion (FGD)***

A Focus Group Discussion (FGD) is a qualitative research method and data collection technique in which a selected group of people discusses a given topic or issue in-depth, facilitated by a professional, external moderator. This method serves to solicit participants' attitudes and perceptions, knowledge and experiences, and practices, shared in the course of interaction with

different people. The technique is based upon the assumption that the group processes activated during a Focus Group Discussion (FGD) helped to identify and clarify shared knowledge among groups and communities, which would otherwise be difficult to obtain with a series of individual interviews. Yet, this method did not presume that A) all the knowledge was shared equally among a studied group, or that B) in each community there is a common, underlying, homogeneous knowledge. Rather, an FGD allows the investigator to solicit both the participants' shared narrative as well as their differences in terms of experiences, opinions and world views during such 'open' discussion rounds.

Under the focus group discussion part, the underserved and most vulnerable members of the community were given special attention. Therefore, this research study conducted two focus group discussions (FGD) concentrating on women and elders.

## ***2. Key Informant Interview (KII)***

Key Informant Interview (KII) is qualitative in-depth interviews with people who know what was going on in the community. The purposes of key informant interviews were to collect information from a wide range of people including community leaders, professionals, or residents-who had firsthand knowledge about the community. These community experts, with their particular knowledge and understanding, can provide insight on the nature of problems and give recommendations for solutions.

Under the key informant interviews part, the woreda Agriculture, Water, Energy, Health and the Public Administrator were given special attention. This research work applies face-to-face interviews.

## ***3. Household Survey (HHS)***

Household Survey (HHS) is quantitative in nature and is the process of collecting and analyzing data to help understand the general situation and specific characteristics of individual household or all households in the population. During a household survey, field researchers investigate and record facts, observations and experiences from the sample households which are representative of all households in the study area.

In addition to the above specified techniques, field observations supported with Photos were documented.

### **3.6. Data Analysis Techniques**

After data collection, editing and coding were completed, it was entered into computer using Statistical Package for Social Science (SPSS) version 20 software and Microsoft Excel. For the purpose of this particular study, the collected data was analyzed in different ways based on the objectives of the study, both descriptive and inferential statistics. As descriptive statistics, frequency distribution, charts, arithmetic mean, percentage distribution and standard deviation was employed to analyze the quantitative data. As inferential statistics, correlation and regression analysis were used while taking the research objective into consideration. Data that was obtained from key informant discussion, Focus Group Discussion (FGD) and other qualitative data were analyzed in qualitative way.

### **3.7. Research Ethics**

The Belmont Report (1979) outlines three basic principles relevant to the ethics of research involving human subjects, namely respect of persons, beneficence, and justice. In conducting this research great care was taken to understand and be familiar with any and all of the regulations associated with field of the study. It was extremely important to protect the right of the participants. Cooper and Schindler (2003) argued that research must be designed so that a respondent does not suffer physical harm, discomfort, pain, embarrassment, or loss of privacy. Informed consent, confidentiality, anonymity and, the participant right to privacy were some of the measures used to ensure that the participant, respondent or subject would be treated with principal of respect of the person, beneficence and justice.

### 3.8 Operationalization of Variables

No	Specific Objectives	Research question	Methodology					Hypothesis/ theoretical foundation
			Variables	Indicators	Data required	Data Source	Analysis Method	
1.	<ul style="list-style-type: none"> <li>To investigate the effects of state of the environment on project affected households and vice versa.</li> </ul>	<ul style="list-style-type: none"> <li>What are the effects of environment on the project affected households and vice versa?</li> </ul>	<ul style="list-style-type: none"> <li>Effect of environment on PAHHs and vice versa</li> </ul>	<ul style="list-style-type: none"> <li>Availability of environmental resources</li> <li>Level of deforestation</li> <li>Level of water pollution</li> <li>Level of waste management</li> <li>Level of air pollution</li> </ul>	<ul style="list-style-type: none"> <li>Deforestation rate, water supply, sanitation, waste management, energy</li> </ul>	<ul style="list-style-type: none"> <li>project affected households</li> <li>Woreda administration burro</li> </ul>	<ul style="list-style-type: none"> <li>Quantitative</li> <li>descriptive statistics of arithmetic means</li> <li>standard deviations</li> <li>percentages</li> </ul>	<ul style="list-style-type: none"> <li>There will be significant relationship between Livelihood sustainability and state of the environment</li> </ul>
2.	<ul style="list-style-type: none"> <li>To study the effects of social interference on the livelihoods of project affected households.</li> </ul>	<ul style="list-style-type: none"> <li>What are the effects of social interference on the livelihoods of project affected households?</li> </ul>	<ul style="list-style-type: none"> <li>Social interference</li> </ul>	<ul style="list-style-type: none"> <li>Social organization networks</li> <li>Health status</li> <li>Education</li> <li>Road Infrastructure</li> <li>Water supply</li> <li>Energy Access</li> <li>Cultural and religious practices</li> </ul>	<ul style="list-style-type: none"> <li>Energy access (%), water supply coverage, source of energy and water supply, primary school enrollment, health posts</li> </ul>	<ul style="list-style-type: none"> <li>project affected persons</li> <li>Woreda administration bureau</li> </ul>	<ul style="list-style-type: none"> <li>Quantitative</li> <li>descriptive statistics of arithmetic means</li> <li>standard deviations</li> <li>percentages</li> </ul>	<ul style="list-style-type: none"> <li>There will be social interference on LPAHHs</li> </ul>

3.	<ul style="list-style-type: none"> <li>• To assess the project affected household's capability to generate income and build assets in the new environment.</li> </ul>	<ul style="list-style-type: none"> <li>• What is the capability of the project affected households to generate income and build assets in the new environment?</li> </ul>	<ul style="list-style-type: none"> <li>• Capability to generate income and build assets</li> </ul>	<ul style="list-style-type: none"> <li>• Availability of income generating economic activities</li> <li>• Presence of micro-financing institutions</li> <li>• Capacity building activities</li> <li>• Market accessibility</li> <li>• Level of income</li> </ul>	<ul style="list-style-type: none"> <li>• Employment opportunity, Entrepreneurs hip</li> </ul>	<ul style="list-style-type: none"> <li>• project affected households</li> <li>• Woreda administration burro</li> </ul>	<ul style="list-style-type: none"> <li>• Quantitative</li> <li>• descriptive statistics of arithmetic means</li> <li>• standard deviations</li> <li>• percentages</li> </ul>	<ul style="list-style-type: none"> <li>• Poverty level affects sustainability of livelihoods</li> </ul>
4.	<ul style="list-style-type: none"> <li>• To examine the effects of resettlement compensation on livelihood of project affected households.</li> </ul>	<ul style="list-style-type: none"> <li>• How does the effects of resettlement compensation on livelihood of project affected households?</li> </ul>	<ul style="list-style-type: none"> <li>• Compensation</li> </ul>	<ul style="list-style-type: none"> <li>• Amount of resettlement compensation</li> <li>• Value of resettlement compensation</li> <li>• Type of resettlement compensation</li> </ul>	<ul style="list-style-type: none"> <li>• Effects of resettlement schemes on compensation of LPAPs</li> </ul>	<ul style="list-style-type: none"> <li>• project affected households</li> <li>• Woreda administration bureau</li> </ul>	<ul style="list-style-type: none"> <li>• Quantitative</li> <li>• descriptive statistics of arithmetic means</li> <li>• standard deviations</li> <li>• percentages</li> </ul>	<ul style="list-style-type: none"> <li>• Resettlement compensation affecting LPAPs.</li> </ul>

**Table 1: Table of Operationalization of the variables.**

## CHAPTER FOUR

### 4. RESULTS AND DISCUSSIONS

#### 4.1 Introduction

This chapter presents and interprets the study findings and discusses the findings in view of the literature. The chapter begins by presenting the response rate. The rest of the chapter is presented thematically according to the specific objectives. The first section presents the descriptive statistics of respondents 'general information. The second section analyzes the findings on the effects of environment on project affected households and vice versa. The third section presents findings on the effects of social interference on the livelihoods of project affected households due to Ribb irrigation dam. The fourth section analyzes the project affected household's capability to generate income and build assets in the new environment of project affected households due to Ribb irrigation dam. The last section presents the analysis of the effects of resettlement compensation on livelihood of project affected households due to Ribb irrigation dam.

#### 4.2 Response Rate

Out of the 115 questionnaires, 115 were fully filled and returned. This is equivalent to 100% response rate as shown in Table 2. Therefore, this implies that the response rate was adequate.

**Table 2: Response Rate**

<b>Response rate</b>	<b>Frequency</b>	<b>Percent</b>
Responded	115	100
Did not respond	0	0
<b>Total</b>	<b>115</b>	<b>100</b>

#### 4.3 Characteristics of the Respondents

In this study, the researcher has tried to constitute different sample households with various demographic and socio-economic characteristics.

##### 4.3.1 Demographic Characteristics of the Respondents

The demographic features of the respondents include gender; age structure and marital status as presented in Table 3.

**Table 3: Gender, age and marital status of the study participants**

		<b>Frequency</b>	<b>Percent %</b>
<b>Gender</b>	Male	61	53.04
	Female	54	46.96
<b>Age of respondents</b>	18-25	8	7
	26-35	31	27
	36-45	33	28.7
	46-55	33	28.7
	above 56	10	8.7
<b>Marital Status</b>	Married	90	78.3
	Unmarried	11	9.6
	Widowed	8	7
	Divorced	6	5.2
<b>Family size</b>	<=2	16	13.9
	3-5	34	29.6
	6-10	65	56.52
<b>Head of family</b>	Father	76	66.1
	Children	2	1.7
	Mother	37	32.2
	<b>Total</b>	<b>115</b>	<b>100</b>

In this study, from a total of 115 household respondents, 53% were male-headed and the remaining 47% respondents were female-headed. Therefore, both genders were adequately represented in the study.

Beside, out of the total respondents 33 (28.7%) sample respondents belongs to adult age group(36–45 ages) and also 33(28.7%) of respondents aged between.46-55 years. Therefore both from 36 - 45

and 46 – 55 respondents were the majority age groups. This also contributed for the accuracy of the information gathered from such respondents.

Furthermore with respect to marital status 90(78.3 %) of the respondents were married; 11 (9.6 %) were unmarried; 8 (7.0 %) were widowed and the remaining 6 (5.2 %) were divorced.

The findings as indicated in table 3 above shows the percentage proportion of family sizes of <=2, 3-5, 6-10 are registered as 13.9%, 29.6%, 56.52% respectively indicating that most of the respondents have 6-10 family size. No family is registered to have family size of more than 10.

The head of the families in 66.1 % of the households are the fathers whereas in 32.2% of them goes to the mothers demonstrating the majority to have male headed households. Only 1.7% of the families are registered to have Children as head of the family.

#### 4.3.2 Socio-economic Status of the Respondents

The Socio-economic status of the Respondents include Family size, Head of family and level of educations have been presented in table 3.

**Table 4: Level of Education of the Study Participants**

		<b>Frequency</b>	<b>Percent %</b>
<b>Level of Education</b>	No read and write	97	84.3
	Primary education	16	13.9
	Secondary education	1	0.9
	Missing System	1	0.9
	<b>Total</b>	<b>115</b>	<b>100</b>

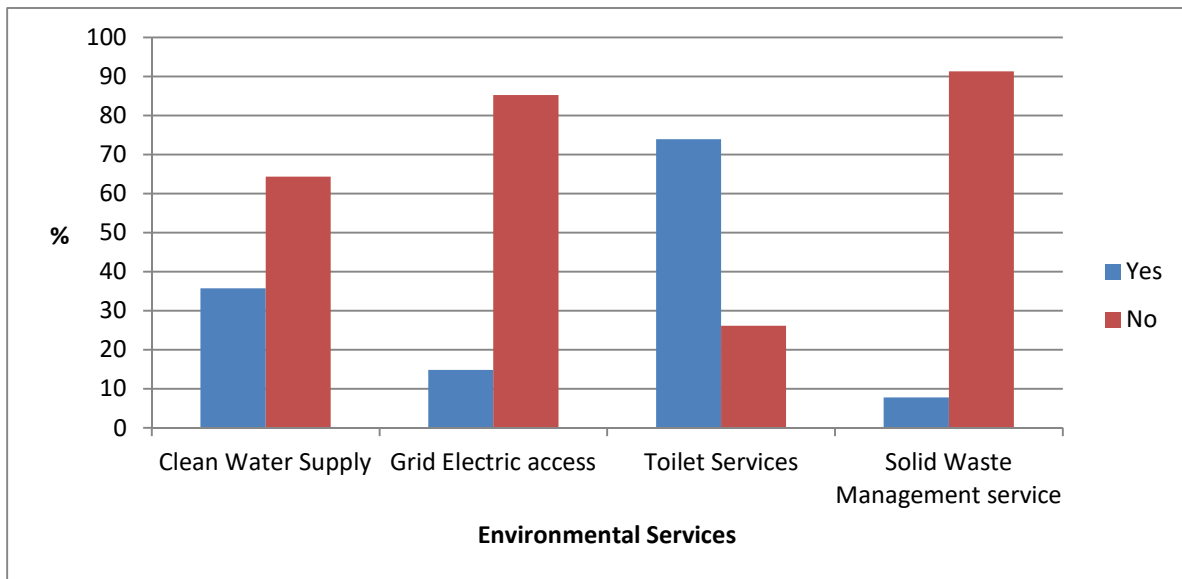
The majority of the respondents, 84.3%, have no education showing that they are more vulnerable to the risks brought about by resettlement. Consequently, this will potentially affect sustainability of their livelihoods (table 4).

## 4.4 State of the Environment in the new Resettlement Area

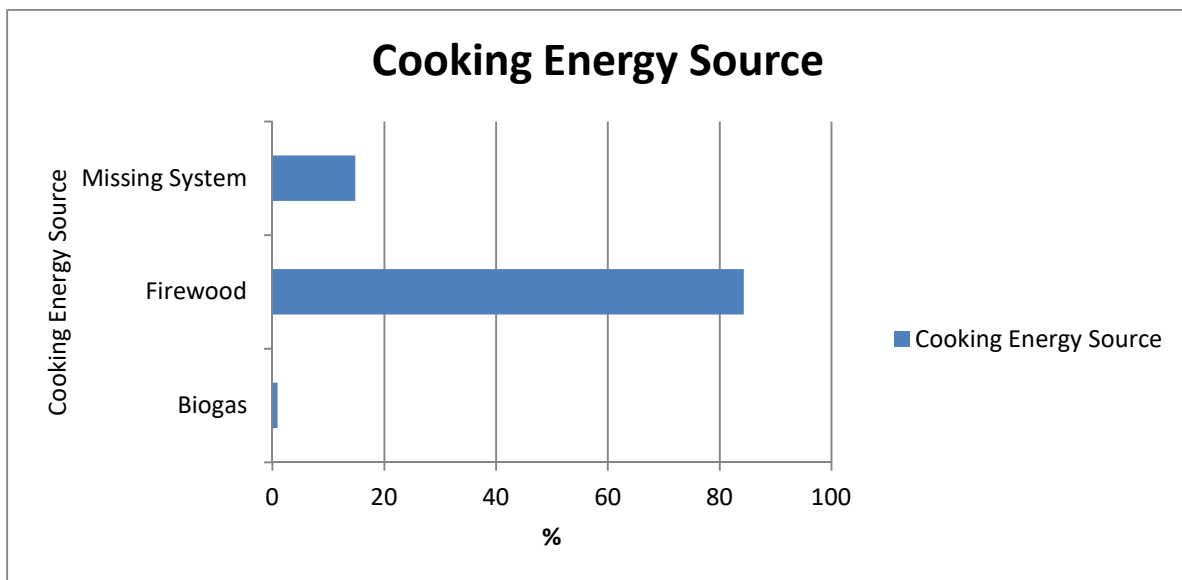
### 4.4.1 Effect of the Environment on Sustainability Livelihood

Electric access, water supply, access to toilet and waste management facilities were measured in this section of the study. The results retrieved from analyzing the data acquired through questionnaires are reported in figure 3 & 4 and discussed subsequently.

**Figure 3: Showing state of the environment**



**Figure 4: Cooking energy sources disaggregated by type**



85.2 % of the respondents said that they don't use electric grid network signifying the fact that the community is with no access to the grid. Amongst those with no access to the grid, most of them, 84.3%, said that they use firewood for cooking creating significant damage to the environment and contributing as one driving force to climate change.

During the Key Informant Interview (KII) it was raised that it has been three years since payment was made about 2.5 million Birr for Electric utility of the district to render electric service but only electric poles were erected without any further service.

As it is made evident from the responses of the study participants, the majority of them, 64.3%, stated that they don't have access to clean water supply. Whereas the countries water supply coverage currently reached 64%, only 35.7% of the respondents in the study area said that they have access to clean water supply showing that they are less served in this regard compared to the rest of the country.

Toilet service and availability of solid waste disposal facilities are also the least offered with their respective coverage being only 26.1% and 7.8% (Figure 3).

#### **4.4.2 The Availability of Environmental Resources in the new Settlement Area**

The responses of respondents about the availability of Environmental resources in the new settled area have been presented in table 5.

**Table 5: Analysis of the Availability of Environmental Resources in the new Settled Area**

STATEMENTS	SD	D	N	A	SA	Perce nt	N	Mean	Std. Deviation
	Percentages %								
We have environmental management activity in the new resettlement area.	43.5	53.9	0.9	1.7	0	100	115	1.609	0.60256
We have grazing land and water resource for livestock.	43.5	50.4	2.6	2.6	0.9	100	115	1.67	0.73415
We enjoy due to cleaner water supply and air condition than before.	47.0	30.4	0	21.7	0.9	100	115	1.991	1.19572
Our quality of life has improved due to the availability of electricity for lighting compared to the previous.	63.5	23.5	0	10.4	2.6	100	115	1.652	1.08453
We enjoy good health due to access to clean water.	41.7	35.7	0.9	19.1	2.6	100	115	2.052	1.19827
Conflicts between neighbors have increased due to competition for resources in the new resettlement area.	19.1	34.8	6.1	30.4	9.6	100	115	2.765	1.32672
Our waste management mechanism is poor.	39.1	14.8	0.9	40.9	4.3	100	115	2.565	1.45777
Generally our quality of life has improved greatly.	80.0	18.3	0	1.7	0	100	115	1.235	0.53526

In all the factors indicated in the table above, much of the respondents made it clear that they have limited access to environmental resources such as grazing land, water and energy resources as compared to the previous location. Most of them agreed that their health is compromised due to unsafe water use. To make matters worse, as per their response, they have been exposed to a state of conflict due to resource competition with the locals posing serious threat to their livelihood (Table 5).

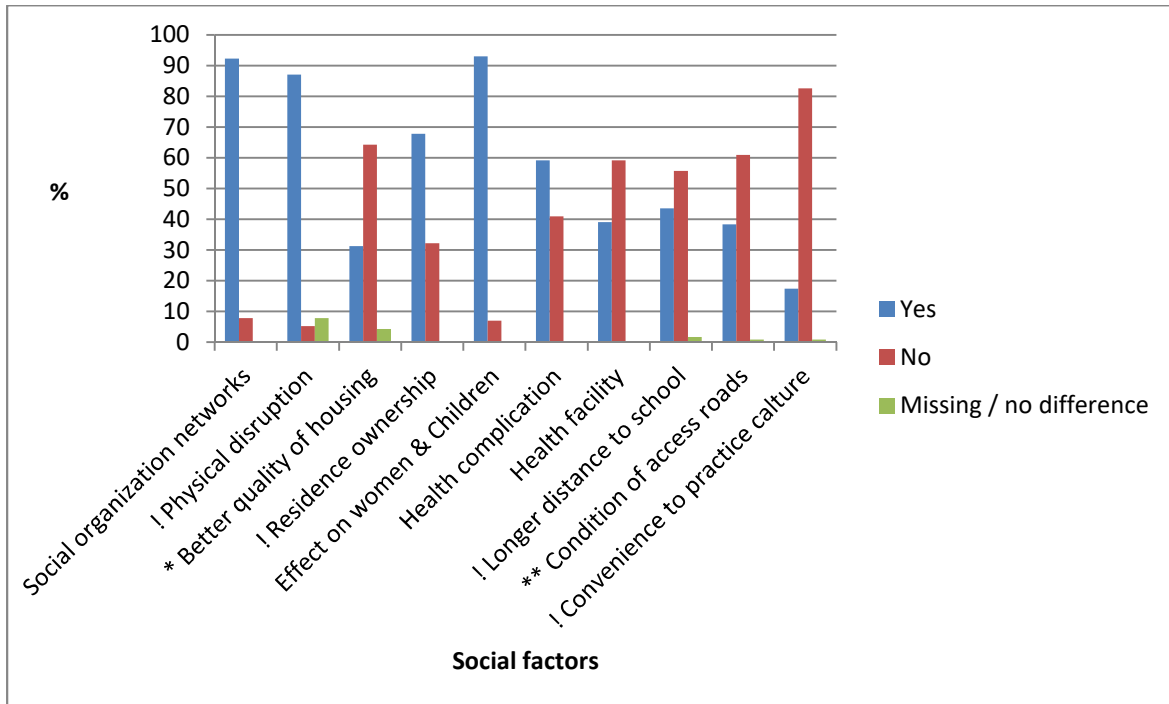
## 4.5. Social Interferences of the Project on PAHHs

### 4.5.1 Effect of Social Interferences on PAHHs

Based on the World Bank Involuntary Resettlement Policy, it's required to have:-

- Plans to provide (or to finance resettles' provision of) housing, infrastructure (e.g., water supply, feeder roads), and social services (e.g., schools, health services);
- Plans to ensure comparable services to host populations; and
- Any necessary site development, engineering, and architectural designs for these facilities.

**Figure 5:- Social Interferences of the Project on PAHHs**



*Key: \*\* = Instead of yes/No, apply better/worse respectively; no difference for Missing/No difference column; \* = No difference for Missing/No difference column; != Missing for Missing/No difference column*

According to the majority of the respondents as can be observed in figure 5 above, 92.2%, subscribe to the idea their social life in the community is affected by the new resettlement. Based on the responses from 87% of the respondents, it is further noted that the Rib project is the cause of the physical disruption.

International human rights law recognizes everyone's right to an adequate standard of living, including adequate housing (UN Habitat fact sheet No. 21/Rev.1). Unlike this fact, 64.3% of the respondents revealed that they are in worse condition than before when it comes to quality of their residence. To make matters worse, 67.8% of them stated that they don't own the house that they live in.

Women and children are among those in the community who are highly vulnerable to human rights abuse and structural discrimination. According to the African Gender and Development Index, Poverty remains a core issue in Africa; and rural households and female-headed households are among the poorest groups as are the dwellers in urban shantytowns. In line with this fact, this study identified 93.0% of the study participants that women and children are more affected than men and only 7% of them are in disagreement showing that the resettlement to the new location by the Ribb irrigation dam project did not affect them. However, Universal Declaration of Human Rights clearly stipulated that the peoples of the United Nations have in the Charter reaffirmed their faith in fundamental human rights, in the dignity and worth of the human person and in the equal rights of men and women and have determined to promote social progress and better standards of life in larger freedom.

Education and health are the components considered under the social power, 'capabilities', block of the African Gender and Development Index. Consistent with this, below are the results retrieved from the survey for each component.

- a. Health:- 59.1% of the respondents said that members of their families had experienced repeated health complications after resettling to the new area whereas 40.9% of them explained that they haven't encounter such problem. Moreover, the majority of the resettled community 59.1%, responded that they don't have access to health facility in the new resettlement area.
- b. Education: - In this regard, the study sought to establish whether respondents' children had to travel longer distances to access schools than before. 43.5% of the respondents said "yes" this means that the resettlement project did interfere with the distance to school for children, whereas 55.7% of the respondents said that "no" and 0.9% missing. Therefore, majority of respondents said that the resettlement project did not interfere with the distance to school for children. This may be due to the fact

the existence of schools which are close by to the resettlement area. However, substantial population of the resettled community still doesn't have schools in their vicinity.

Respondents were asked to compare the condition of access roads to where they settled with the access road they used in their previous places. It's indicated that 38.3 % of the respondents agreed that it's better whereas 60.9 % of the respondents said that "worse" while on the other hand 0.9% of respondents said that the condition of access roads is not different.

Everyone is entitled to all the rights and freedoms set forth in the universal declaration of human rights, without distinction of any kind, such as race, color, sex, language, religion, political or other opinion, national or social origin, property, birth or other status. Contrary to this right, 82.6% of the study participants said that they have difficulties to practice their culture. As discussed in the focus group discussion, this may be due to non-acceptance by the existing dwellers of the new settlers.

#### **4.5.2. Effect of Social Interferences on PHHs**

In this section the respondents definition about the Effect of social interferences on Social organization networks, Health status, Education, Road Infrastructure, Water supply, Energy Access, Cultural and religious practices in the new resettlement area that have been presented in Table 6.

**Table 6: Analysis of the Effects of Social Interferences in the new Settled Area**

STATEMENTS	SD	D	N	A	SA	Per cent	N	Mean	Std. Deviation
	Percentages %								
We enjoy better interaction and closeness with friends and the community.	31.3	20.9	0	36.5	11.3	100	115	2.7565	1.49614
Women and children were more affected by the construction of Rib irrigation dam	33	13.9	0	12.2	40.9	100	115	3.1391	1.79613
Our life has improved due to better health facilities in the new resettlement area than the original place.	47	33.9	0	18.3	0.9	100	115	1.9217	1.13283
Our life has improved due to better road access (networks) in the new resettled area of the community	42.6	37.4	0.9	18.3	0.9	100	115	1.9739	1.11969
We enjoy good health due to access to clean water supply scheme.	44.3	29.6	0.9	23.5	1.7	100	115	2.087	1.24651
The project has not interfered with our culture and way of life	53.9	36.5	0	1.7	7.8	100	115	1.7304	1.1186
People with physical disabilities are given a choice of replacement properties of similar or higher value.	55.7	40	1.7	1.7	0.9	100	115	1.5217	0.70522

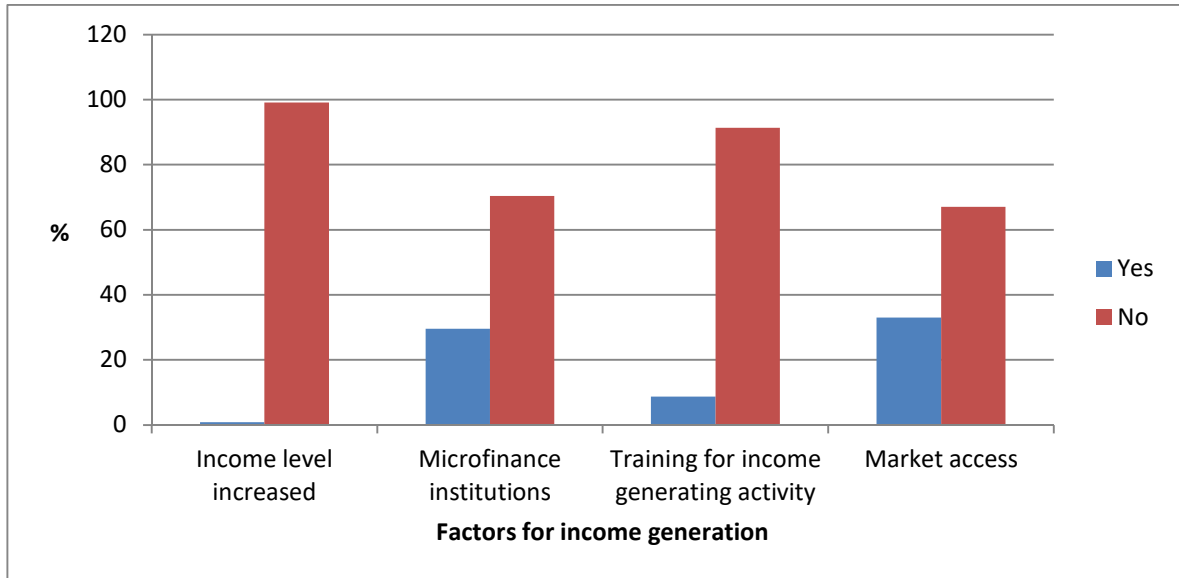
Seven items were developed to measure the extent of Social interference on livelihood of Project affected households. Item 2 sought to find out how women and children were more affected by the construction of Ribb irrigation dam, the mean score was the highest (3.139) and the standard deviation was relatively as low as 1.796 in comparison with the other items. This result indicates that the majority (40.9%) respondents of project affected households said that **strongly agree**, that means Women and children were more affected by the construction of Ribb irrigation dam. Next to this, Item was followed closely by item 1 which had a mean (mean=2.757; standard deviation of =1.496) and it sought to find whether we were enjoy better interaction and closeness with friends and the community.. The findings indicated that a majority; (36.5%) of respondents agreed that we enjoy better interaction and closeness with friends and the community. Item seven sought to find out whether People with physical disabilities are given a choice of replacement properties of similar or higher value; it had the lowest mean of (1.5217) in comparison with the other items and standard deviation = 0.705, this implies that project affected households or respondents were relatively varied in their response concerning People with physical disabilities are given a choice of replacement properties of similar or higher value; Therefore this results were the lowest mean and standard deviation (table 6).

## **4.6 Income Generation and Building Assets versus Livelihood Conditions**

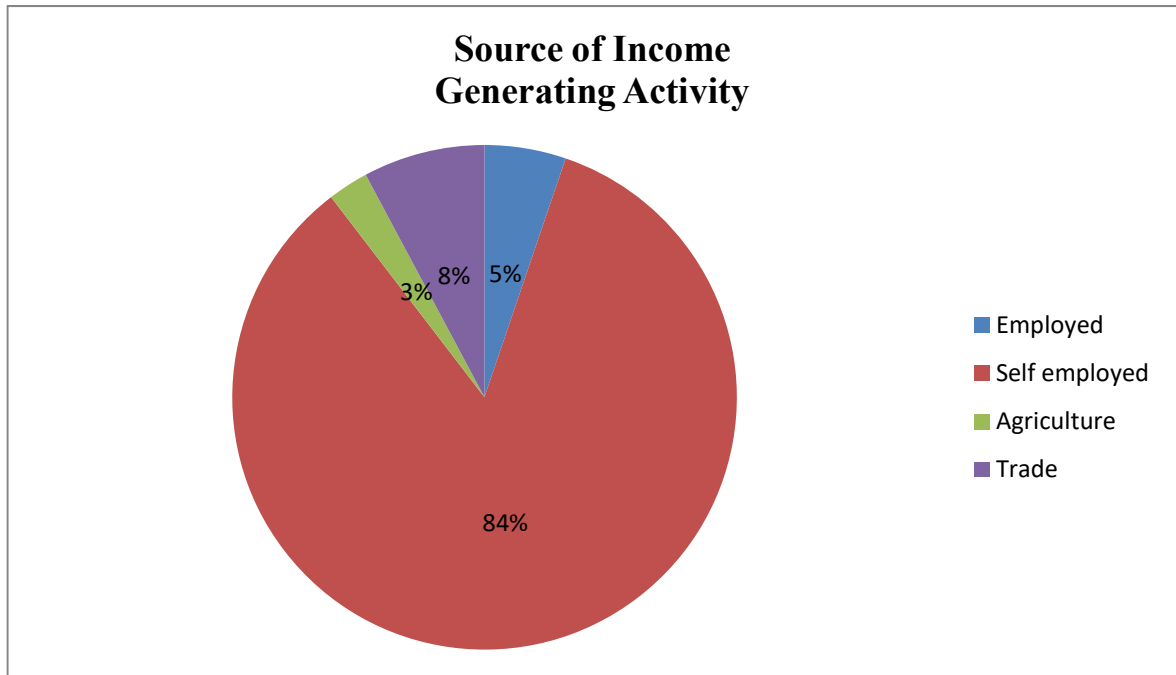
### **4.6.1 Capability to Generate Income and Build Assets**

Many researchers agree that income generation strategies and building assets are crucial to enhance resilience of communities and thereby alleviate poverty. In this regards, several job creation activities has been deployed by government of Ethiopia for many years. Particular to the study site, among other efforts, livelihood restoration plan that aims at creating employment to the locals in addition to promoting entrepreneurship had been operational for the past ...years. Therefore, among other things, this particular study gave synopsis of the impacts of such livelihood restoration activities. The results obtained from this study are indicated in figure 6 & 7 and described afterwards.

**Figure 6: Factors for Income Generation**



**Figure 7: Income Generation Activities by Type**



The study wanted to establish the source of income of the households. Income was used as one of the variables to estimate the livelihoods of households living in study area. The PAHHs, in contrast to their previous life style that is dominantly based on agriculture are now ends up being self-employed on any low salary jobs that comprise 84.3% of the study participants;

whereas 5.2% and 2.6% of the respondents are respectively employed and still dependent on agricultural practices. Hence, it is found that the dam project had not brought about sustainable job opportunities for the host communities.

One of the things that a project shall successfully conduct is stakeholder management that includes identification, engagement and monitoring stakeholder engagement. Stakeholder analysis is also done in order to identify the level of engagement of each stakeholder. Considering this, since the PAHs are directly affected, they have high interest in the project in addition to their power as member of the community living in the locality. Such stakeholders are supposedly needs to be managed closely. However, due to poor stakeholder engagement monitoring, the stagnated income level of the PAHs has gone unnoticed as it's made clear from the response from 99.1% of the study participants who declared that their income hasn't been changed since resettled.

Earning better income depends on various things and one of the issues in new resettlement area is acceptance by the new host society. During the FGD it was raised that there is segregations in some employment areas. The participant said,

*“When I try to get new job like guarding, employers reprimanded me not to come again because I'm from Ribb resettled.”*

Among the respondents 34(29.6%) agreed that they had microfinance institutions in the new resettlement area and the other 81(70.4%) of the respondents said that they had no microfinance institutions in the new resettlement area. Therefore the majority of respondents had no microfinance institutions in the new resettlement area. This implies that the PAHs are affected due to lack of access to microfinance institute in their new locality.

Only 8.7 % of the respondents agreed that they have received income generating activities while the rest responded to the same question. Therefore, based on the result, the majority of respondents had not been trained in any income generating activity indicating that they are neglected in basic training to improve their livelihoods.

Finally, it was noted again that only 33.0 % of the respondents gets market access. And it should be emphasized here that market access is key to the betterment of the PAHs livelihood.

#### 4.6.2 Availability of Income Generating Economic Activities, Presence of Micro-financing Institutions, Capacity Building Activities and Market Accessibility

In this section, the respondents definition of the Capability to Generate Income and Build Assets of the project affected households in the new resettlement area were Availability of income generating economic activities, Presence of micro-financing institutions, Capacity building activities and Market accessibility in the new resettlement area that have been presented in the Table below.

**Table 7: Analysis of the Capability to Generate Income and Build Assets of the PAHHs in the new Resettlement Area**

STATEMENTS	SD	D	N	A	SA	Per cent	N	Mean	Std. Deviation
	Percentages %								
We have microfinance institutions in the new resettlement area.	47	50.4	2.6	0	0	100	115	1.5735	0.49824
Our financial services are sufficient to project affected households.	46.1	51.3	2.6	0	0	100	115	1.5735	0.49824
We have taken different income generating training activities.	41.7	53	0	5.2	0	100	115	1.75	0.79879
Our Livelihood activities are not sufficient to feed the household members after we resettled to the new area.	37.4	11.3	0	3.5	47.8	100	115	3.4265	1.91082
We have market accessibility in the newly resettled area.	37.4	32.2	1.7	28.7	0	100	115	2.6324	1.38116
In the new resettled area our income has increased	80	19.1	0	0.9	0	100	115	1.1765	0.38405

Six items were developed to measure the effect of capability to generate income and build assets on livelihood of project affected persons. Item 4 (four) sought to find out our livelihood activities are not sufficient to feed the household members after we resettled to the new area, the mean score was the highest (3.427) and the standard deviation was relatively as low as 1.911 in comparison with the

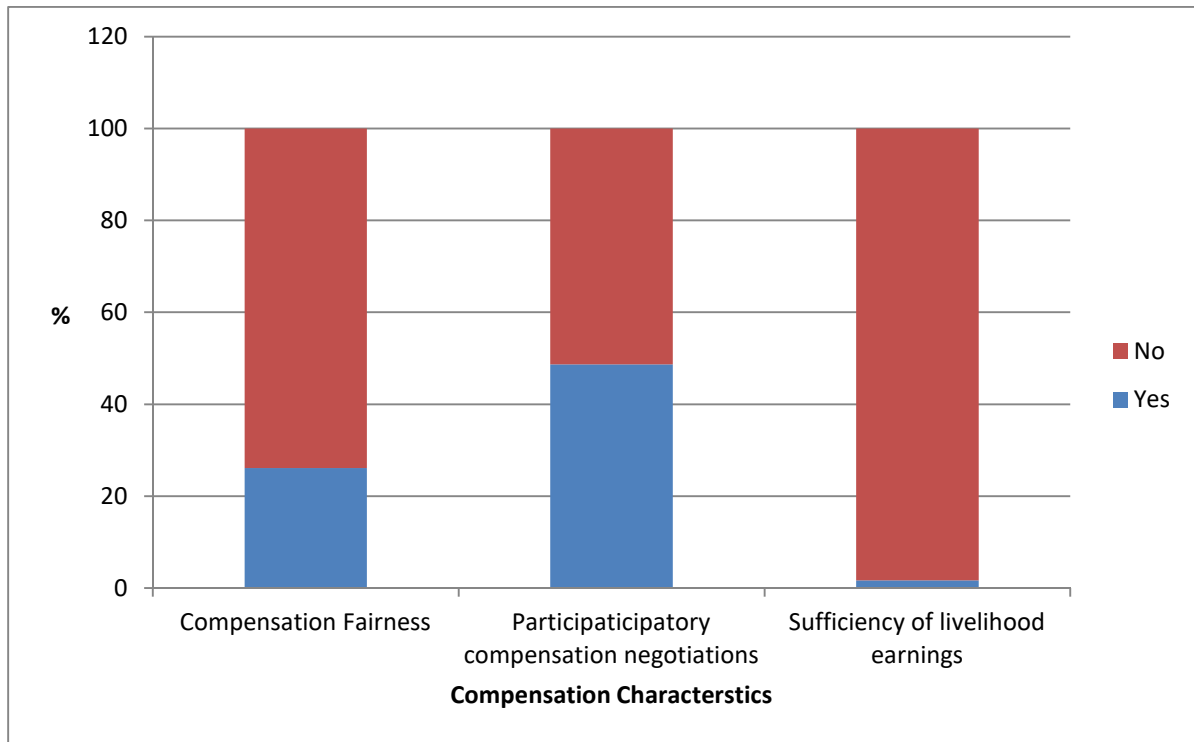
other items, this result indicates that the majority (47.8%) of respondents said that **strongly agree**. Therefore, this implies that the project affected household livelihood activities were not sufficient to feed the household members after we resettled to the new area. Next to this, Item was followed closely by item 5 which had a mean (mean =2.632 standard deviation of 1.3812) and it sought to find whether we had market accessibility in the newly resettled area. The findings indicated that a majority; (37.4%) of respondents agreed that they had not market accessibility in the newly resettled area. Item 6 (six) said that our income has increased in the new resettled area; it had the lowest mean =1.177 in comparison with the other items and standard deviation=0.384, this implies that almost all of the respondents response were **strongly disagree** that means our income had not increased in the new resettled area; Therefore this results were the lowest mean and standard deviation (table 7).

The project tried to ensure livelihood restoration mechanisms like cattle fattening, pasture, and poultry. The sheds built with corrugated iron and partitioned among PAPs. During observation and FGD, the participant stated that it is difficult to use the shed in sustainable manner together; most of the Project Affected Households left the shed since the area is congested, and lacks water, electricity facilities and drainage to wastes.

#### **4.7 Characteristics of Resettlement Compensation**

In order to reduce significant impacts of such projects, Environment and Social Management Plan (ESMP) should be developed as a tool to assess the implementation and the expected effectiveness of the mitigation and compensation measures and to identify any unforeseeable adverse effects as per Ethiopia's regulations and proclamation applicable to environment and social impact of projects. Consistent with this, various environmental and social monitoring and evaluation that were conducted in the project area indicated that the PAHHs were duly compensated but leading unsustainable livelihood. This is attributed to loss of previous livelihood that essentially depends on agriculture. To make matters worse, 99.1% of them earned cash for land with majority lacking the skills and proper trainings to engage in rewarding livelihood participation. Eventually, they are forced to involve in insufficient means of livelihood (Figure 8).

**Figure 8: Characteristics of Resettlement Compensation**



According to the above figure, 30(26.1%) respondents said that the amount of resettlement Compensation was fair, whereas the other 85(73.9%) of them said that the amount of resettlement compensation was not fair. Therefore, the findings showed that almost three quarters of the household representatives agreed that the compensation was not worthy the land market price. This finding upholds the claim made by Miceli and Segerson (2007) that the compensation paid to owners by using market price is systematically less than the amount owners would ask for their land in a consensual transaction because acquired land owners always respond to compensation value by their subjective value or reservation price that reflects the market value.

One of the FGD participants explained the fairness of the compensation in terms of transparency and he described it as follows and said,

*“The compensation payment money is embezzled and which was in closed account that we don’t have access but the bureaucrats build their own houses.”*

Where host communities are affected by resettlement decisions, representatives of these communities should be included in these consultations (IFC Handbook for RAP preparation). In

agreement with this idea, the study showed that almost half of the respondents 56(48.7%) were involved in the negotiation. However, regression analysis conducted between participation in compensation negotiation and compensation fairness resulted in p-value of 1.40034E-13 which is highly significant displaying that those who have not been involved in the negotiations were affected adversely. Deconstructing the resettlement process with a good governance framework, the problematic areas of the resettlement can be effectively differentiated between the planning and implementation phases kwabena Obeng Asiama , *et al* (March, 2015)Hence, it’s imperative to adhere to transparency, public participation and inclusiveness, equity and rule of law and accountability in such resettlement processes.

## 4.8 Sustainability of Livelihood

### 4.8.1 Livelihood Condition of the PAHs

In view of the assumptions stipulated in the conceptual framework section of the document, it’s revealed that only 6.96 % of the PAHs have access to all the basic services including clean energy, clean water supply, sanitation, road access, school, finance, market access and due compensation .

**Table 8: Summary table of regression analysis results of education, gender, and family size versus livelihood condition**

<b>Socio-demographic Attributes of PAHs</b>	<b>P-values</b>
Family Size	0.009
Sex of head of the family	0.087
Education	0.226

**Table 9: Pivot table showing gender of household head versus livelihood condition**

<b>Count of Result</b>	<b>Column Labels</b>		<b>Grand Total</b>
	<b>Negative</b>	<b>Positive</b>	
<b>Row Labels</b>			
Female	39	0	39
Male	68	8	76
<b>Grand Total</b>	<b>107</b>	<b>8</b>	<b>115</b>

Regression analyses were also conducted to understand the significance of gender, education and family size on the livelihood condition of the PAHHs. Consequently, it was revealed that family size, with a p-value of 0.009, stands out to be statistically significant whereas the rest remains insignificant (table 8). However, summary of pivot table specifies the importance of gender in determining the livelihood condition of the PAHHs as 100 % of the 6.96 % promising results are male-headed households (table 9).

Considering post resettlement gender based analysis especially none of female headed households enjoyed the benefit of a hundred percent benefit or positive impact from the resettlement. Similar study conducted in India regarding Post resettlement livelihood impact analysis from Gender lens shows that relocation in the new environment relocation in the new environment has led to a decline in women’s social and economic status. In the document it is concluded that men wield considerably more economic, political and social power post Resettlement than do women folk Gaurav Sikka *et al* (2017).From this it can be concluded that resettlement actions need to give special attention to gender perspective in order to promote the positive livelihood restoration action.

#### 4.8.2 Livelihood Participation

**Table 10: Relationship between Income generation activity and socio-demographic characteristics**

Income generation versus socio-demographic characteristics		X 1	X 2	X 3	X 4	X 5	X 6	X 7	X 8
X1	Income generating activity	1							
X 2	Age	0.144	1						
X3	Family size	0.074	0.027	1					
X 4	Educational Status	0.018	-	-	1				
X 5	Gender of Family-head	0.320	-	-	0.143	1			
X 6	Marital Status	0.333	0.062	0.081	-0.077	0.513	1		
X 7	compensation fairness	0.254	-	0.068	0.0315	0.300	0.073	1	
X 8	Market access	0.084	0.217	0.229	-0.136	-0.0825	0.146	0.375	1

**Table 11: Relationship between socio-demographic characteristics of PAHHs and their involvement in livelihood activities using regression analysis**

Socio-demographic attributes of PAHHs	P-values
Age	0.124153
Family Size	0.426482
Education	0.848137
Sex of head of the family	0.000499
Marital Status	0.000271

From table 10, it was deduced that livelihood participation has positive correlations with all the socio-demographic characteristics designated in the table. However, the degree to which each affects the PAHHs participation in livelihood activities differs, and presented below.

The right to social security is the right to access and maintain benefits, whether in cash or in kind, without discrimination in order to secure protection, inter alia, from (a) lack of work-related income caused by sickness, disability, maternity, employment injury, unemployment, old age, or death of a family member; (b) unaffordable access to health care; (c) insufficient family support, particularly for children and adult dependents. – *Committee on the Economic, Social and Cultural Rights, General Comment 19* (OHCHR). Contrary to this right, aged member of the community are supposed to search for and involve in income generating activities. Besides, family size and education are also identified as insignificant factor for participation in income generating activity. Most importantly, sex of family head and livelihood involvement shows substantial relation. Hence, despite various efforts that advocate participatory approaches, empowerment and inclusion, women endure a persistent marginalization in income generation activities. Major correlation between marital status and livelihood participation was observed which suggests that they are saddled with responsibilities. (Table 11)

#### 4.8.3 Health and Sustainable Livelihood

**Table 12: Relationship between water supply and toilet service versus health**

<b>Socio-demographic attributes of PAHs</b>	<b>P-values</b>
Water supply	0.0089
Toilet Service	0.0001

Adequate sanitation, together with good hygiene and safe water, are fundamental to good health, social and economic development (Duncan *et al* 2010). In line with this, regression analysis conducted between clean water supply and health is identified to be statistically significant as shown in table 12. In a similar approach, sanitation also becomes important for health status of the community.

## CHAPTER FIVE

### 5. CONCLUSION AND RECOMMENDATIONS

#### 5.1 Introduction

The final part of the paper deals with the conclusions and the recommendations forwarded based on the findings for each specific objective. The major purpose of this study was to assess the effects of resettlement schemes and state of the environment on the livelihoods of Project Affected households due to Rib irrigation dam. This investigation was addressed by employing questionnaires, structured interview with Ebnat and Farta woreda Bureau administrator and worker, field observation, focus group discussion (FGD) and reviewing published and unpublished documents. Finally, recommendations were based on the results for policy and practice as well as suggestions for further research was made. The following Conclusions and recommendations were drawn from the findings which were done based on qualitative and quantitative analysis.

#### 5.2 Conclusion

**Based on the findings, the following conclusions are drawn:**

- ❖ Only 6.96 % of the PAHHs are leading relatively better livelihood condition with access to social and infrastructure facilities such as clean energy, clean water supply, availability of sanitation service, residence ownership, school and access road in addition to economic/financial provisions including access to market, due compensation and access to finance.
- ❖ As indicated in the discussion, family size becomes determining factor for livelihood condition as the p-value of the regression analysis is 0.009.
- ❖ Among the 6.96 % of the PAHHs that are having relative better livelihood condition, it's understood that all are male-headed households. Moreover, from the interviews, it's learned that majority of women and children were more affected by the Rib irrigation dam project with most of them experiencing frequent health complications after the resettlement.

- ❖ Regression analysis conducted has shown that water supply and sanitation services play significant role for health status of the community with their respective p-value being 0.008 and 0.00011.
- ❖ The project affected households don't have electricity access from the electric grid network and enough clean water supplies. Because of this, they used firewood, charcoal and unsafe water sources. Besides, most of the project affected households have toilet and solid waste disposal collection center. However, the PAHHs don't use the solid waste disposal collection center.
- ❖ The project affected households don't have better quality of housing after the resettlement even though they have residence ownership in the new resettlement area.
- ❖ Children have to travel longer distances to school than before they were resettled.
- ❖ Almost all of the income level of project affected households hasn't increased in the new resettlement area leaving them with a livelihood activity that is not enough even to feed their family.
- ❖ Majority of PAHHs don't have access to finance from microfinance institutions in the new resettlement area.
- ❖ Almost all of the PAHHs don't obtain education, training or information about any income generating activity. Market access is also one of the problems in the project affected households.
- ❖ The amount of resettlement compensation was not fair but almost half of the respondents were involved in the negotiation and the type of resettlement compensation mechanism was cash for land productivity.

### 5.3 Recommendations

Based on the findings of the study and the conclusion drawn, the researcher has suggested the following recommendations as the solution measures need to be taken by all stakeholders to solve the Effects of Resettlement Schemes and Environment on the Livelihood of Project Affected Households due to Rib Irrigation Dam.

- Livelihood restoration mechanisms should be monitored and evaluated frequently to ensure the effectiveness of resettlement interventions.
- The government and development partners needs to closely monitor the impact of any livelihood restoration programs that focuses on project affected households.
- Good governance principles, transparency, public participation and inclusiveness, equity and rule of law, and accountability are required to ensure sustainable livelihood of the host community
- Access to basic social services such as water, electricity, and access road, solid waste disposal etc. should be facilitated. Hence, Women, children, elderly and disabilities should get proper care and attention throughout the project phases. .
- Raise awareness on environmental protection and enhance participation of PAPs in natural resource protection activities.
- The environmental protection activities like flood retention, replantation and awareness raising activities should be given to the resettled PAHHs to facilitate their livelihood participation.
- Create cooperation mechanism and acceptance by the host community, access to local government services, employment opportunities in the new settled area.
- Follow up and listen to the needs and complaints of the PAHHs and try to solve their problems in organized manner.
- Record documents and livelihood conditions of PAPs to get lessons to other similar dam construction and resettlement projects.

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## Appendices

### Appendix 1: Research Questionnaire

#### The Effects of Resettlement Schemes and Environment on the Livelihood of Project Affected Households: Due to Rib Irrigation Dam

Dear Sir/ Madam,

**As a partial fulfillment of the requirements for the award of the degree of Master of Arts in Environment and Sustainable Development, Addis Ababa University (AAU), I am carrying out a research on the above subject.**

*I am now on the data collection phase where by data collected will be analyzed for academic research only. The data obtained from you will be handled confidentially and not exposed to or shared with third parties.*

***Thank you in advance for your willingness to participate.***

***Teketel Adefres – Research Student***

*Please place a tick on the appropriate box or fill in the blanks as completely and accurately as possible.*

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#### SECTION A: GENERAL INFORMATION

1. **Gender:**

Male  Female

2. **Age:**

18 – 25 years  26 – 35 years  36 – 45 years

46 – 55 years  Over 55 years

**3. Marital Status:**

- |         |                          |                    |                          |
|---------|--------------------------|--------------------|--------------------------|
| Married | <input type="checkbox"/> | Widowed            | <input type="checkbox"/> |
| Single  | <input type="checkbox"/> | Divorced/Separated | <input type="checkbox"/> |

**4. Family Size:**

- |             |                          |          |                          |
|-------------|--------------------------|----------|--------------------------|
| Two or less | <input type="checkbox"/> | 6-10     | <input type="checkbox"/> |
| 3-5         | <input type="checkbox"/> | above 10 | <input type="checkbox"/> |

**5. Who is head of family:**

- |        |                          |       |                          |
|--------|--------------------------|-------|--------------------------|
| Father | <input type="checkbox"/> | Child | <input type="checkbox"/> |
| Mather | <input type="checkbox"/> | Other | <input type="checkbox"/> |

**6. Highest level of education attained:**

- |                   |                          |                                |                          |                     |                          |
|-------------------|--------------------------|--------------------------------|--------------------------|---------------------|--------------------------|
| None read & write | <input type="checkbox"/> | Middle level college education | <input type="checkbox"/> | Secondary education | <input type="checkbox"/> |
| Primary education | <input type="checkbox"/> | University education           | <input type="checkbox"/> |                     |                          |
- Other (please specify) \_\_\_\_\_

**SECTION B: STATE OF THE ENVIRONMENT**

7. Do you have cultivable land? What is the size of your farm land? Please explain?

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8. Do you have livestock? If yes, what are the numbers and type? Please describe?

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9. Do you have access to and use of grazing lands in the new resettled area? What is the size of grazing lands? What are the numbers of users? Please explain?

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10. Do you have water source for Livestock? Howfar is it from your house? Please explain?

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11. Are there environmental management activities in the new resettlement area? If yes, how would you explain the communities and that of your participation in the process?

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12. Do you have electricity access from the grid network?

Yes

No

13. If your answer is yes to question number 12, are you using electric stove for cooking?

Yes, I use electric cook stove

No, I am not using electric cook stove

14. If your answer is yes to question number 12, are you using 'EnjeraMitad'?

Yes, I use 'EnjeraMitad'

No, I am not using 'EnjeraMitad'

15. If your answer is yes to question number 12, are you using other energy sources/technology?  
Please describe? Example Firewood, charcoal, Biogas etc.

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16. If your answer to question no 12 is no, what energy source do you use for cooking?

Biogas  Kerosene

Firewood  Charcoal

Please explain \_\_\_\_\_  
\_\_\_\_\_

17. If your answer to question no 12 is no, what energy source do you use for lighting?

Solar Energy  Kerosene/diesel

Firewood  Biogas

Please explain? \_\_\_\_\_  
\_\_\_\_\_

18. Is there any clean water supply in your new settlement area?

Yes,

No

Please explain? \_\_\_\_\_  
\_\_\_\_\_

19. If your answer is yes to question number 18, How far is it from your new house?

30 minutes  from 1:00 hour-1:30

From 30minutes -1:00 hour

from 1:30-2:00 hour

Please explain? \_\_\_\_\_

\_\_\_\_\_

20. Do you have toilet?

Yes, I have

No, I have not

Please explain? \_\_\_\_\_

\_\_\_\_\_

21. If no to question number 20, do you have other alternatives?

Please explain? \_\_\_\_\_

\_\_\_\_\_

22. How do you remove Solid-waste from your household?

To solid waste collection container  No waste management mechanism

Though we have waste collection center, we don't use it

Please explain? \_\_\_\_\_

\_\_\_\_\_

23. Please place a tick against the answer which closely represents your opinion on the following statements

Statement	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
	1	2	3	4	5
1. We have environmental management activity in the new resettlement area.					
2. We have environmental resources, such as grazing land and water resource for livestock.					
3. We enjoy due to cleaner water supply and air condition than before					
4. Our quality of life has improved due to the availability of electricity for lighting compared to the previous					
5. We enjoy good health due to access to clean water					
6. Conflicts between neighbors have increased due to competition for resources in the new resettlement area.					
7. Our waste management mechanism is poor					
8. Generally, our quality of life has improved greatly					

**SECTION C: SOCIAL INTERFERENCE**

24. Has the resettlement affected your social life in the community e.g. family, friends you used to interact with, church or Mosques and other religious places?

Yes

No

Please explain? \_\_\_\_\_

\_\_\_\_\_

25. If yes to question number 24, did the construction of Rib irrigation dam cause any form of physical disruption?

Yes

No

Please explain? \_\_\_\_\_

\_\_\_\_\_

26. Is your new house/home where you have resettled of better quality compared to the one you had originally?

Yes

No difference

No

Please explain? \_\_\_\_\_

\_\_\_\_\_

27. Do you own the house/home where you have resettled in?

Yes

No

Please explain? \_\_\_\_\_

\_\_\_\_\_

28. Do you think that women and children were more affected by the construction of Rib irrigation dam?

Yes

No

29. Has member of your family experience any repeated health complication after resettling to the new area?

Yes

No

30. Is there any health facility in the new location?

Yes

No

Please explain? \_\_\_\_\_

\_\_\_\_\_

31. Do your children have to travel longer distances to access school than before?

Yes

No

Please explain? \_\_\_\_\_

32. What is the condition of access roads of the area where you resettled as compared to where you lived originally?

Better

No difference

Worse

33. Is the new resettlement area convenient to practice your culture?

Yes

No

34. Please place a tick against the answer which closely represents your opinion on the following statement

Statement	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
	1	2	3	4	5
1. We enjoy better interaction and closeness with friends and the community.					
2. Women and children were more affected by the construction of Ribb irrigation dam.					
3. Our life has improved due to better health facilities in the new resettlement area than the original place.					
4. Our life has improved due to better road access (networks) in the new resettled area of the community.					
5. We enjoy good health due to access to clean water supply scheme.					
6. The project has not interfered with our culture and way of life.					
7. People with physical disabilities are given a choice of replacement properties of similar or higher value.					

**SECTION D: CAPABILITY TO GENERATE INCOME AND BUILD ASSETS**

35. What is your income generating activity?

Employed  Agriculture

Self Employed  Trade

Please explain? \_\_\_\_\_

\_\_\_\_\_

36. Do you have microfinance institutions in the new resettlement area?

Yes

No

37. If yes to question number 38, do you have access to financial services at affordable interest rate?

Yes

No

38. Have you been trained in any income generating activity?

Yes

No

39. If yes to question no. 40, who provided the training?

Woreda Government office  Non-governmental Organization

Zone Government office  Federal Government

Regional Government

Please explain? \_\_\_\_\_

\_\_\_\_\_

40. What is your income level i.e. how much do you earn daily, monthly or annually

Please explain? \_\_\_\_\_

\_\_\_\_\_

41. Has your income level increased since you were resettled by the project?

Yes, income has increased  No, there is no change in income

No, income has reduced

42. Is your household income from livelihood activity sufficient to feed the household members?

Yes

No

43. Do people have market access in the new resettlement area?

Yes

No

**44. Please place a tick against the answer which closely represents your opinion on the following statement**

Statement	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
	1	2	3	4	5
1. We have microfinance institutions in the new resettlement area.					
2. Our financial services are available to project affected households.					
3. We have taken different income generating training activities.					
4. Our Livelihood activities are not sufficient to feed the household members after we resettled to the new area.					
5. We have market accessibility in the newly resettled area.					
6. The irrigation project/ dam project directly/indirectly has improved our food security					
7. Our household income has increased since were settled here.					

### SECTION E: COMPENSATION

45. Was the amount of resettlement compensation was fair?

Yes

No

Please explain? \_\_\_\_\_

46. If yes to question number 47, how would you describe the compensation?

Adequate

Not adequate

Please explain? \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

47. Were you involved in compensation negotiations?

Yes

No

48. What was the type of your resettlement compensation mechanism?

Land for land

Cash for Land productivity

Please explain? \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

**አዲስ አበባ ዩኒቨርሲቲ**

**የሀገር ልማት ጥናት ኮሌጅ**

**የአካባቢና ዘላቂ ልማት ጥናት ትምህርት ክፍል**

**አባሪ አንድ፡ የጥናት ጥያቄዎችን በተመለከተ**

እኔ ተማሪ ተከተል አደፍርስ በአዲስ አበባ ዩኒቨርሲቲ ስድስት ኪሎ ካምፓስ በሀገር ልማት ጥናት ኮሌጅ የMA ዲግሪ በአካባቢና ዘላቂ ልማት ጥናት ትምህርት ክፍል ተማሪ ስሆን በአሁኑ ሰዓት የመመረቂያ ጥናት ጽሁፍ ለመስራት «በርብ የመስኖ ግድብ ግንባታ ምክንያት የንዋሪዎች መፈናቀልና የአካባቢ ለውጥ በቤተሰብ አኗኗር ላይ ወይም በአካባቢ ላይ ያስከተለው ተጽዕኖ» በሚል የጥናት ርዕስ የመመረቂያ ጽሁፍ ለመስራት መረጃ በመሰብሰብ ላይ እገኛለሁ።

በመሆኑም እርስዎ የጥናቱን መጠይቆች በመሙላት እንዲተባበሩኝ በቅድሚያ በትህትና እየጠየቅሁ የጥናት መጠይቆቹን በራስዎ አመለካከት መልስ ይሆናል የሚሉትን በመምረጥ በሳጥኑ ውስጥ የ[✓ ] ምልክት በማስቀመጥና እንዲሁም በጽሁፍ መልስዎን በመልስ መስጫው ላይ በመጻፍ (በማስቀመጥ) እንዲተባበሩኝ በአክብሮት እየጠየቅሁ ግዜዎትንና ዕውቀትዎን መስዋእት በማድረግ ስለተባበሩኝ ከፍተኛ ምስጋናዬን በቅድሚያ አቀርባለሁ።

**ክፍል አንድ፡- አጠቃላይ መረጃዎች**

**1. ጾታ፡**

ወንድ  ሴት

**2. ዕድሜ፡**

ከ 18-25 ዓመት  ከ 36-45 ዓመት  ከ 56 ዓመት በላይ

ከ 26-35 ዓመት  ከ 46-55 ዓመት

**3. የጋብቻ ሁኔታ፡**

ያገባ  በሞት የተለያየ

ያላገባ  ፈት

**4. የቤተሰብ መጠን፡**

2 እና ከዚያ በታች  ከ 6-10

ከ 3-5  ከ 10 በላይ

**5. የቤተሰቡ አስተዳዳሪ ማነው?**

አባት  እናት

ልጆች  ሌላ

**6. የትምህርት ደረጃ**

ማንበብና መጻፍ የማይችል  ሁለተኛ ደረጃ  ዲግሪ

የመጀመሪያ ደረጃ  ዲፕሎማ

ሌላ ካለ ይግለጹ፡ \_\_\_\_\_

**ክፍል ሁለት፡- የአካባቢ ጉዳይን የሚመለከቱ ጥያቄዎች**

7. የእርሻ መሬት አለዎት? የእርሻ መሬት ካለዎት የእርሻ መሬትዎ ስፋትስ ምን ያክል ነው?

እባክዎን ይግለጹ? \_\_\_\_\_

\_\_\_\_\_

8. የቀንድ ከብት (እንሰሳቶች) አለዎት? ካለዎት ስንት ይሆናሉ? በአይነት ቢገልጹ?

\_\_\_\_\_

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9. በአዲሱ አካባቢ የግጦሽ መሬት መኖሩንና ተጠቃሚ ስለመሆንዎ ይግለጹ? ካለስ ስፋቱ ምን ያህል ነው? ስንትስ ተጠቃሚ አለው?

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10. በአዲሱ የመኖሪያ አካባቢዎ ለከብቶች/ለእንሰሳት/ የሚውል የውሃ ሀብት ካለ በውሃ ሀብቱ ተጠቃሚ ስለመሆንዎ ይግለጹ? ከመኖሪያ አካባቢዎስ ምን ያህል ይርቃል?

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11. በአዲሱ የመኖሪያ አካባቢዎ የአካባቢ እንክብካቤ ስራ አለ? ካለ፣ የማህበረሰቡ ተሳተፎ ምን ይመስላል? እርስዎስ በምን መልኩ እየተሳተፉ እንደሆነ ይግለጹ?

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12. የግሪድ ኤሌክትሪክ መብራት አገልግሎት ዕድል ተጠቃሚ ነዎት?

✓ አዎ የግሪድ ኤሌክትሪክ ሀይል ተጠቃሚ ነኝ

✓ የግሪድ ኤሌክትሪክ ሀይል ተጠቃሚ አይደለሁም

13. ለጥያቄ ቁጥር 12 መልሶ አዎ ከሆነ፣ የኤሌክትሪክ ምድጃ ተጠቃሚ ነዎት?

✓ አዎ የኤሌክትሪክ ምድጃ ተጠቃሚ ነኝ

✓ የኤሌክትሪክ ምድጃ ተጠቃሚ አይደለሁም

14. ለጥያቄ ቁጥር 12 መልሶ አዎ ከሆነ፣ የእንጀራ ምጣድ ተጠቃሚ ነዎት?

✓ አዎ የእንጀራ ምጣድ ተጠቃሚ ነኝ

✓ የእንጀራ ምጣድ ተጠቃሚ አይደለሁም

15. ለጥያቄ ቁጥር 12 መልሶ አዎ ከሆነ፣ ሌላ የሚጠቀሙት የኢነርጂ ቴኬኖሎጂዎች ካሉ ይጥቀሱ? ምሳሌ፡ የከሰል ምድጃ፣ ባዮጋዝ፣ ወዘተ...

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16. ለጥያቄ ቁጥር 12 መልሶ የግሪድ ኤሌክትሪክ መብራት አገልግሎት ዕድል ተጠቃሚ አይደለሁም ከሆነ፣ ምን ለማብሰል የሚጠቀሙበት የኃይል ምንጭ ምንድን ነው?

- ✓ ባዮጋዝ  ነጭጋዝ/ናፍታ
  - ✓ የማገዶ እንጨት  ከሰል
  - ✓ ተጨማሪ ሌላ ካለ እባክዎን ይግለጹ: \_\_\_\_\_
- 

17. ለጥያቄ ቁጥር 12 መልሶ የግሪድ ኤሌክትሪክ መብራት አገልግሎት ዕድል ተጠቃሚ አይደለሁም የሚል ከሆነ፣ ለመብራት አገልግሎት ምን ይጠቀማሉ?

- ✓ የጸሀይ ሀይል  ነጭጋዝ/ናፍታ/ኩራዝ
  - ✓ የማገዶ እንጨት  ባዮጋዝ
  - ✓ ተጨማሪ ሌላ ካለ እባክዎን ይግለጹ: \_\_\_\_\_
- 

18. በአዲሱ የመኖሪያ አካባቢዎ ንጹህ የመጠጥ ውሃ አቅርቦት አለ?

- ✓ አዎ ንጹህ የመጠጥ ውሃ አቅርቦት አለ
  - ✓ ንጹህ የመጠጥ ውሃ አቅርቦት የለም
  - ✓ ተጨማሪ ሌላ ካለ እባክዎን ይግለጹ: \_\_\_\_\_
- 

19. ለጥያቄ ቁጥር 18 መልሶ አዎ ንጹህ የመጠጥ ውሃ አቅርቦት አለ የሚል ከሆነ ከመኖሪያ አካባቢዎ ምን ያህል ደቂቃ/ሰዓት ይርቃል?

- ✓ 30 ደቂቃ እና በታች  ከ 1:00 ሰዓት-1:30
  - ✓ ከ 30 ደቂቃ-1:00 ሰዓት  ከ 1:30-2:00 ሰዓት
  - ✓ ተጨማሪ ሌላ ካለ እባክዎን ይግለጹ: \_\_\_\_\_
- 

20. የመጸዳጃ ቤት አለዎት?

- ✓ አዎ አለኝ  የለኝም

21.ለጥያቄ ቁጥር 20 መልስዎ የለኝም የሚል ከሆነ፣የት ይጠቀማሉ?

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22.የደረቅ ቆሻሻ አወጋገድዎ እንዴት ነው?

- ✓ በቆሻሻ ማጠራቀሚያ እቃ በመጠቀም ወደ ተዘጋጀለት ስፍራ በመውሰድ ማስወገድ [ ]
- ✓ ቆሻሻ የምናስወግድበት የተለየ ስፍራ የለም [ ]
- ✓ ቆሻሻ የምናስወግድበት የተለየ ስፍራ ቢኖርም አንጠቀመውም [ ]
- ✓ ተጨማሪ ሌላ ካለ እባክዎን ይግለጹ: \_\_\_\_\_

23.በሚከተሉት ሀሳቦች ላይ የእርሶን ሀሳብ በሚገልጸው ላይ የ✓ ምልክት ያስቀምጡ?

መግለጫ	በጣም	አልስማማም	አልስማማም	መልስ የለኝም	እስማማለሁ	በጣም	እስማማለሁ
	1	2	3	4	5		
9. በአዲሱ የመኖሪያ አካባቢ በአካባቢ ጥበቃ ፣እንክብካቤ ተግባር ላይ እሳተፋለሁ።							
10. አሁን በሚኖሩበት የመኖሪያ አካባቢ ለእንሰሳት (ለከብቶች) የግጦሽ መሬትና የውሃ አቅርቦት አለ።							
11. ከቀድሞው የመኖሪያ አካባቢዬ ጋር ሲነጻጸር አዲሱ የመኖሪያ አካባቢዬ ተስማሚ የአየር ሁኔታና ንጹህ የመጠጥ ውሃ አቅርቦት አለ።							
12. ከቀድሞው የመኖሪያ አካባቢዬ ጋር ሲነጻጸር አዲሱ የመኖሪያ አካባቢዬ የመብራት ሀይል አገልግሎት በመኖሩ ኑሮዬ (ሂወቴ) ተሻሽሏል።							
13. የንጹህ ውሃ አቅርቦት በመኖሩ ጤናዬ በጥሩ ሁኔታ ላይ ይገኛል።							
14. በአዲሱ የመኖሪያ አካባቢ የሀብት አጠቃቀም አለመስማማት (ግጭት) በጎረቤት መካከል ተባብሷል (ጨምሯል)።							
15. የቆሻሻ አያያዝ (አወጋገድ) ስርዓቴ የወረደ (ዝቅተኛ) ነው።							
16. በአጠቃላይ ኑሮዬ (ህይወቴ) በከፍተኛ ደረጃ ተሻሽሏል።							

**ክፍል ሶስት፡- የህብረተሰብ ጉዳይ**

24. ከቀድሞው የመኖሪያ አካባቢዎ በመፈናቀልዎ በቤተሰብ፣ በጓደኛ እና በእምነት አምልኮዎ ላይ የእርስ በርስ ግንኙነት ችግር (አለመግባባት) ፈጥሮበዎታል?

- ✓ አዎ ያለመግባባት ተጽዕኖ ፈጥሮብኛል። [ ]
- ✓ ያለመግባባት ተጽዕኖ አልፈጠረብኝም። [ ]
- ✓ ተጨማሪ ሌላ ካለ እባክዎን ይግለጹ፡ \_\_\_\_\_

25. ለጥያቄ ቁጥር 24 መልስዎ አዎ ያለመግባባት ተጽዕኖ ፈጥሮብኛል የሚል ከሆነ፣ የርብ የመስኖ ውሃ ግድብ ግንባታ ለህይወትዎ መመስቃቀል ምክንያት (መሰረት) ነው?

- ✓ አዎ የህይወቴ መመስቃቀል ምክንያት ነው። [ ] ህይወቴ አልተመስቃቀለም [ ]
- ✓ የህይወቴ መመስቃቀል ምክንያት አይደለም። [ ]

26. አዲሱ የመኖሪያ ቤትዎ ከቀድሞው ጋር ሲነጻጸር የተሻለ ነው?

- ✓ አዎ የተሻለ ነው [ ] ልዩነት የለውም [ ]
- ✓ የተሻለ አይደለም [ ]

27. በአዲሱ የመኖሪያ አካባቢዎ የግል የመኖሪያ ቤት አለዎት?

- ✓ አዎ የግል የመኖሪያ ቤት አለኝ [ ]
- ✓ የግል የመኖሪያ ቤት የለኝም [ ]
- ✓ ተጨማሪ ሌላ ካለ እባክዎን ይግለጹ፡ \_\_\_\_\_

28. በርብ መስኖ ግንባታ ምክንያት ሴቶችና ህጻናት በይበልጥ ተጠቂ/ተጎጂ ነበሩ ብለው ያስባሉ?

- ✓ አዎ ተጎጂ ነበሩ ብዬ አስባለሁ። [ ] ተጎጂ ነበሩ ብዬ አላስብም። [ ]

29. ወደ አዲሱ የመኖሪያ አካባቢ በመፈናቀልዎ በቤተሰብዎ አባላት ላይ ተደጋጋሚ የጤና ችግር አጋጥሞዎታል?

- ✓ አዎ አጋጥሞኛል። [ ] አላጋጠመኝም። [ ]

30. በአዲሱ የመኖሪያ አካባቢ ለህብረተሰቡ የጤና ተቋማት አገልግሎት አለ?

- ✓ አዎ አለ [ ] የለም [ ]
- ✓ ተጨማሪ ሌላ ካለ እባክዎን ይግለጹ፡ \_\_\_\_\_

31.አዲሱ የመኖሪያ ቦታዎ ከቀድሞው የመኖሪያ ቦታዎ ጋር ሲነጻጸር ተማሪዎች የትምህርት ዕድል የሚያገኙት ረጅም ርቀት በመጓዝ ነው?

✓ አዎ ረጅም ርቀት በመጓዝ ነው [ ] ረጅም ርቀት በመጓዝ አይደለም [ ]

✓ ተጨማሪ ሌላ ካለ እባክዎን ይግለጹ: \_\_\_\_\_

32.አዲሱ የመኖሪያ አካባቢዎ ከበፊቱ ጋር ሲነጻጸር የመንገዱ ሁኔታ ምን ይመስላል?

✓ የተሻለ ነው:: [ ] ልዩነት የለውም:: [ ]

✓ ዝቅተኛ ነው:: [ ]

33.አዲሱ የመኖሪያ አካባቢዎ ባህልዎንና የአኗኗር ዘይቤዎትን ለመተግበር ምቹ ነው?

✓ አዎ ምቹ ነው [ ] ምቹ አይደለም [ ]

34.በሚከተሉት ሀሳቦች ላይ የእርሶን ሀሳብ በሚገልጸው ላይ ምልክት ያስቀምጡ?

መግለጫ	በጣም	አልስማማም	አልስማማም	መልስ የለኝም	ሁሌምላሁ	በጣም
	1	2	3	4	5	አስማማልሁ
1. በአዲሱ መኖሪያ አካባቢዬ ከጓደኞቼና ከአካባቢው ማህበረሰብ ጋር ጥሩ ግንኙነት አለኝ::						
2. በርብ የመስኖ ግድብ ግንባታ ምክንያት ሴቶችና ህጻናት በይበልጥ ለጉዳት ተዳርገዋል::						
3. አዲሱ የመኖሪያ አካባቢዬ ከቀድሞው የመኖሪያ አካባቢ ይልቅ በተሻለ የጤና አገልግሎት ምክንያት ህይወቴን/ኑሮዬን አሻሽሎታል::						
4. በአዲሱ የመኖሪያ አካባቢ የተሻለ የመንገድ አገልግሎት ስላለ ኑሮዬ /ህይወቴ ተሻሽሏል::						
5. በአዲሱ የመኖሪያ አካባቢ ንጹህ የመጠጥ ውሃ አቅርቦት በመኖሩ ኑሮዬ /ህይወቴ ተሻሽሏል::						
6. በርብ መስኖ ግንባታ ምክንያት በኑሮዬም ሆነ በባህሌ ላይ ተጽዕኖ /ችግር አልመጣም::						
7. በርብ የመስኖ ግድብ ግንባታ ምክንያት ለተፈናቀሉ አካል ጉዳተኞች ተመጣጣኝ ወይም የተሻለ ካሳ ተሰጥቷቸዋል::						

**ክፍል 4:- የገቢ ምንጭ ማግኛን በተመለከተ**

35. የገቢ ምንጭዎ ምንድን ነው?

- ✓ ተቀጣሪ  ግብርና
- ✓ በግል ስራ  በንግድ
- ✓ ተጨማሪ ሌላ ካለ እባክዎን ይግለጹ: \_\_\_\_\_

36. በአዲሱ የመኖሪያ አካባቢዎ አነስተኛ የብድርና ቁጠባ ተቋማት አሉ?

- ✓ አዎ አሉ
- ✓ የሉም

37. ለጥያቄ ቁጥር 36 መልስዎ አዎ በአዲሱ የመኖሪያ አካባቢ አነስተኛ የብድርና ቁጠባ ተቋማት አሉ የሚል ከሆነ የብድርና ቁጠባ ተቋማቱ ወለድ ተመጣጣኝ ነው?

- ✓ አዎ ተመጣጣኝ ነው
- ✓ ተመጣጣኝ አይደለም

38. ለገቢ ምንጭዎ የሚጠቅም ስልጠና ወስደዋል?

- ✓ አዎ ወስጃለሁ
- ✓ አልወሰድኩም

39. ለጥያቄ ቁጥር 38 መልስዎ አዎ ስልጠናውን ወስጃለሁ ከሆነ ስልጠናውን ያቀረበው ተቋም ማነው?

- ✓ የወረዳው የመንግስት አስተዳደር ቢሮ  በፌዴራል መንግስት
- ✓ የዙሃን የመንግስት አስተዳደር መምሪያ ቢሮ  መንግስታዊ ያልሆነ ተቋም
- ✓ በክልሉ መንግስት
- ✓ ተጨማሪ ሌላ ካለ እባክዎን ይግለጹ: \_\_\_\_\_

40. የቀን/ወር/ዓመታዊ ገቢዎ ምን ያህል ይሆናል? \_\_\_\_\_

41. በፕሮጀክቱ ምክንያት በአዲሱ መኖሪያ አካባቢዎ ከሰፈሩ በኋላ የገቢ ምንጭዎ ጨምሯል?

- ✓ አዎ ገቢዬ ጨምሯል::  የገቢ ምንጭ ልዩነት የለውም::

✓ የገቢ ምንጩ ቀንሷል። [ ]

42. የእርሶ ቤተሰብ የገቢ ምንጭ በበቂ ሁኔታ የቤተሰብዎን አባላት ይመግባል?

✓ አዎ ይመግባል። [ ]

✓ በበቂ ሁኔታ አይመግብም። [ ]

43. በአዲሱ የመኖሪያ አካባቢ ህዝቡ የገበያ ቦታ አለው?

✓ አዎ አለው [ ]

✓ የለውም [ ]

✓ ተጨማሪ ሌላ ካለ እባክዎን ይግለጹ፡ \_\_\_\_\_

44. በሚከተሉት ሀሳቦች ላይ የእርሶን ሀሳብ በሚገልጸው ላይ ምልክት ያስቀምጡ?

መግለጫ	በጣም	አልስማማም	አልስማማም	መልስ	የለኝም	አስማማለሁ	በጣም	አስማማለሁ
	1	2	3	4	5			
1. በአዲሱ የመኖሪያ አካባቢ አነስተኛ የብድርና ቁጠባ ተቋማት የወለድ ምጣኔ ተመጣጣኝ ነው።								
2. ለተፈናቀሉ አካላት የሚሰጠው የብድር አገልግሎት በቂ ነው								
3. የተለያዩ የገቢ ምንጭ ማስገኛ ስልጠናዎች በበቂ ሁኔታ ወስጃለሁ።								
4. ወደ አዲሱ የመኖሪያ አካባቢ ከመጣሁ በኋላ በበቂ ሁኔታ የቤተሰቡን አባላት ማስተዳደር አልቻልኩም።								
5. በአዲሱ የመኖሪያ አካባቢ የገበያ ቦታ እና ሱቆች ይገኛሉ።								
6. ወደ አዲሱ የመኖሪያ አካባቢ ከመጣሁ በኋላ የገቢ ምንጩ ጨምሯል።								

**ክፍል አምስት፡- የካሳ ክፍያን በተመለከተ**

45. የካሳ ክፍያው መጠን አግባብነት ባለው መልኩ ነበር?

✓ አዎ የካሳ ክፍያው አግባብነት ባለው መልኩ ነበር [ ]

✓ የካሳ ክፍያው አግባብነት ባለው መልኩ አልነበረም [ ]

✓ ተጨማሪ ሌላ ካለ እባክዎን ይግለጹ፡ \_\_\_\_\_

46.ለጥያቄ ቁጥር 45 መልስዎ አዎ የካሳ ክፍያው አግባብነት ባለው መልኩ ነበር ካሉ የካሳ ክፍያውን እንዴት ይገልጹታል?

✓ በቂና ተመጣጣኝ ነበር  በቂና ተመጣጣኝ አልነበረም

✓ ተጨማሪ ሌላ ካለ እባክዎን ይግለጹ: \_\_\_\_\_

47.በካሳ ክፍያው ድርድር ላይ ተሳትፈዋል?

✓ አዎ ተሳትፌያለሁ  አልተሳተፍኩም

48.የካሳ ክፍያው ሁኔታ ምን ይመስል ነበር?

✓ ተለዋጭ መሬት መስጠት  ለመሬቱ ተለዋጭ ገንዘብ መስጠት

ተጨማሪ ሌላ ካለ እባክዎን ይግለጹ: \_\_\_\_\_

## Appendix 2: Focus Group Discussion

### Questions for vulnerable groups/women, disabled and elders

1. Are there any negative things caused by the Ribb irrigation dam project? Please list:

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2. What were the solutions given for the effects of Ribb irrigation dam project? Please mention:

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3. What would you recommend to be modified in similar resettlement projects to improve the Lives of Disables and Women living in communities affected by development projects?

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4. Any other issue you want to suggest to this study?

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### Appendix 3: Key Informant Interview Schedule

#### SECTION A: KII Questions for woreda administrators/key sector offices

1. What are the Initiatives by the local Government that contribute to create income generating activity/Livelihood for the project affected households in the new resettlement area?

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2. Does the local Government avail access to financial services for the project affected households?

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3. What roles did the local government play in issuing proper compensation payment for the project affected households?

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4. What are the types of infrastructure that is being implemented in the new resettlement area for the project affected households?

**A. Access to Health Facility:** \_\_\_\_\_

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**B. Access to clean water supply:** \_\_\_\_\_

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**C. Access to Education:** \_\_\_\_\_

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**D. Road infrastructure:** \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

**E. Energy Source:** \_\_\_\_\_

\_\_\_\_\_

5. Is there conducive environment for the project affected households to practice their cultural and religious practices as well as enhance their social interaction?

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

6. What are the Initiatives by the local Government that contribute to create income generating activity/Livelihood for the project affected households in the new resettlement area Does the local Government avail access to financial services for the project affected households?

\_\_\_\_\_  
\_\_\_\_\_

7. What roles did the local government play in issuing proper compensation payment for the project affected households? \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

**SECTION B: KII for Water and Energy office**

1. What are the sources of energy facilities provided to project affected people?

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

2. What are the main sources of energy in the area?

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

3. What measures are taken to protect the environment?

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4. What are the supports given to access of safe drinking water/sanitation for community water for cattle?

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5. What are the sources of water? How far they travel to access water from the village?

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**SECTION C: KII for land administration and environmental protection**

1. How project was affected people compensated for land?

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2. Is there any access to communal or grazing land?

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3. Explain the solid waste management practice?

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4. Is there Environmental Management Practice in the new resettled area? If there is environmental Management Practice, when and how the communities Participate?

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5. What supports were given to the project affected people in terms of land?

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**SECTION D: KII for Project Owner (administrator) MoWIE, Irrigation and Drainage Directorate**

1. Which Strategy do you follow during Stakeholder Identification?

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2. How was the Stakeholder Participation during Compensation to PAHHs?

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3. How was the Monitoring and Evaluation Processes, technical supports in general especially considering the PAHHs after the new resettlement like assessing the PAHHs Satisfaction?

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## **Appendix 4: Summary of KII and FGD findings**

### **Summary of Key Finding from KII (Woreda Level)**

- There is resettlement rehabilitation team in the woreda. Some of the settlers are improved their lives by investing on different activities. Some of them bought Bajaj car and new home but other who were using the money in appropriate way are facing difficulties. The biggest problem is after they took compensation it is difficult to manage the money in useful way.
- Credit access was enabled by the woreda but the bureaucracy is not suitable for the farmers to use credit services.
- Regarding the environmental protection the project had water shade management activities to enhance the safety of the dam and protect from erosion. Currently the project phased out and the environmental protection endeavors are stopped. One of the KII from Ibinat woreda land administration and environmental protection raised the issue in this way:-

*“The major problem lies in implementing the ESIA study. The study identified major environmental and social impacts but there is no implementation on the ground based on the recommendations. The waste management in the cattle shade is inappropriate which is difficult for the farmers to manage it.”*

- 68 of the resettled households obtained house plan but the remaining households are in pending because of design and plan problems.
- From the livelihood restoration process 280 cows, 276 oxen, 89 pasture, 175 poultry had been distributed. Most of the farmers sold the cattle immediately after receiving with lower value from the bought. One of the reasons was the cattle bought from another place and couldn't adapt the area and is not productive. This was agreed by the farmers during FGD session.

### **SUMMARY OF KEY FINDING FROM KII (PROJECT OWNER)**

The key informant interview with the project owner (administrator) MoWIE Specially Irrigation and Drainage Directorate respective experts revealed that the Monitoring and evaluation process and technical support was limited and was not satisfactory particularly since 2008. As explained by the experts one of the reasons for this is due to the occurrence of political instability in the country.

Monitoring, follow up and technical support is joint responsibility of MoWIE (Irrigation and Drainage Directorate) and the Amhara regional state Rural Land Administration and Utilization Bureau. Because of this the following problems happened:-

- Unsustainability of the livelihood restoration of the PAHHs
- Lack of Continuous technical support to PAHHs and respective operating offices
- Limited access of different infrastructure, road access, clean water supply, modern energy access, market and financial services.

### **FOCUSS GROUP DISCUSSION (FGD)**

Payment of compensation has its own legal process in resettlement and rehabilitation process. One of the important aspects of public consultation process is to give full information and keep promises to project affected persons. The farmers lack full information and awareness about resettlement compensation and about the unfulfilled promises said the following.

*“We thought the compensation was for 10 years and after ten years we want to claim compensation again but they deceived us. The Shade built for cattle rearing and pasture lacks electric, water and sewer facilities. The chickens need warm conditions. In addition the compensation for grazing land unpaid until now. ”*

## Appendix 5: Annex Photos



Annex 1: Photos showing Key Informant Interview with Farta woreda administrator.



Annex 2: Focus group discussion in Debretabor- Qegawuha village.



Annex 3: Photos were taken at Debre Tabor Selamco village during observation in the shed.



Annex 4: Photos were taken at Debre Tabor Selamco village during observation in the shede.



Annex 5: Photos were taken at Ebinat woreda Ayermarefiya village during focus group Discussion.