

**Socio-economic Factors Affecting People's Participation
in Rural Development Projects: The Case of Bio-fuel
project at Tanqua-Abergele and Kola-Tembien Districts
of Central Tigray Zone, Ethiopia**

By

Abraha Hailu Lemma

Enrolment No. 099108596

E-mail: abraha22002@yahoo.com

**A Thesis Submitted to Indra Ghandi National Open University (IGNOU)
in Partial Fulfillment of the Requirements for the Degree of Master of Arts in
Rural Development (MARD)**

Advisor: Maru Shete (Asst. Prof.)

May, 2014
Addis Ababa, Ethiopia

Table of Contents

	Page
Acknowledgements	III
Abstract	IV
List of tables	V
List of Figures	VI
List of Annexes	VII
Acronyms	VIII
Glossary	IX
Chapter 1 Introduction	1
1.1 Background	1
1.2 Statement of the Problem	3
1.3 Significant of the Study	6
1.4 Hypothesis and Research Questions	7
1.4.1 Hypothesis	7
1.4.2 Research Questions	8
1.5 Objective	8
1.5.1 General objective	8
1.5.2 Specific Objectives	8
1.6 Scope and Limitation of the Study	9
Chapter 2 Literature Review	10
2.1 Socio-economic Factors and Participation	10
2.2 People’s Participation	11
2.3 Development	13
2.4 Development Project	15
2.5 Sustainability	16
Chapter 3 Methodology	17
3.1 Description of the Study Area	17
3.2 Research Design and Sampling Method	20
3.3 Data Collection Tools and procedure	21

3.4	Data Processing and Analysis Method	22
Chapter 4	Data Analysis and Interpretation	23
4.1	Introduction	23
4.2	Socio-economic Characteristics of Respondents	23
4.3	Community’s practice towards participation in local development projects	27
4.4	Community’s level of participation in local development projects	32
4.5	Major socio-economic factors affecting participation of community in local development projects	37
4.6	Respondents’ perception on local leaders’ influence and participation.....	44
Chapter 5	Conclusion and Recommendations.....	48
5.1	Conclusion	48
5.2	Recommendations	50
References	.....	53
Annexes	.....	58
Annex 1	.....	58
Annex 2	.....	65
Annex 3	.....	69
Annex 4	.....	70
Annex 5:	.....	71
Annex 6:	.....	72

Acknowledgements

First and for most, I would like to express my deepest gratitude to my supervisor Maru Shete (Asst. Prof.) for his invaluable intellectual advice, guidance and encouragement in the process of my thesis writing. Moreover, I would like to extend my thanks to Dr. Eylachew Zewde for his intellectual advice in shaping my thesis proposal.

Then I would like to express my heartfelt thanks to Tigray Agricultural Marketing Promotion Agency (TAMPA) for sponsoring and enabling me to study the Master's Program. My thankfulness also goes to the Indira Gandhi National Open University (IGNOU) for giving me the opportunity to study the MA Program in Rural Development.

I would also like to thank all my colleagues in TAMPA and friends for their contributions in one way or the other to realize this thesis work. In addition, I would like to express my special thanks to my friend Abreha Kiros (PhD fellow in Addis Ababa University) for his limitless help in supervising the data collection process and write up of the thesis.

Last but not least, I would like to extend my gratefulness to my darling wife and my beloved children for their limitless encouragement and assistance to pursue my MA at the expense of their precious time of sharing family relations.

Abstract

The main objective of this study is to examine the socio-economic factors that affect participation of local communities of Tanqua-Abergele and Kola-Tembien districts of the Central Zone of Tigray region in development projects. Multistage sampling has been exercised in this study. Thus, a total of 164 respondents have been used as source of information. Both qualitative and quantitative methods of data collection are employed. The collected data have been examined, categorized and analyzed qualitatively and quantitatively in line with the research objectives. The study revealed that economic and environmental benefits of the bio-fuel development project were not perceived enough by the local community. It was found that predominantly projects were decided and prioritized by tabia leaders. Income earning base and information/knowledge are found to be the major factors that affect community participation in development projects. Finally, the study recommended that bringing about attitudinal change and community consultation should be priority interventions. Community should participate starting from idea generation throughout a project cycle. Further, different product outputs should be introduced to increase the price for the oilseeds. Individual farmers should also be made to use their marginal lands for bio-fuel plantation and local leaders should be role models in this regard.

List of tables

	Page
Table 4.1	24
Table 4.2	26
Table 4.3	28
Table 4.4	30
Table 4.5	33
Table 4.6	34
Table 4.7.....	36
Table 4.8	37
Table 4.9	38
Table 4.10	39
Table 4.11	40
Table 4.12	40
Table 4.13	41
Table 4.14	42
Table 4.15	43
Table 4.16	45

List of Figures

	Page
Figure 1	18
Figure 2	19
Figure 3	21

List of Annexes

	Page
Annex 1: Household Community Participation Assessment Survey Questionnaire -----	58
Annex 2: Tabia Leaders Community Participation Assessment Survey Questionnaire ---	65
Annex 3: Community Participation Assessment Open-ended Interview Questions for Wereda officials and tabia DAs -----	69
Annex 4: Community Participation Assessment Open-ended Interview Questions for API project staff -----	70
Annex 5: Community Participation Assessment Focus group Discussion Points -----	71
Annex 6: Tables of results of survey data -----	72
6.1 Factors affecting participation -----	72
6.2 Level of participation -----	75
6.3 Perception towards participation -----	77
6.4 Role of Leaders -----	81
6.5 Respondents' Personal Information -----	83
6.6 Survey results of Tabia leaders -----	85
6.6.1 Respondents' personal characteristics -----	85
6.6.2 General information on participation -----	88

Acronyms

ADB	African Development Bank
API	African Power Initiative
ARD	Agriculture and Rural Development
BoPF	Bureau of Plan and Finance
CBOs	Community based Organizations
CSA	Central Statistics Authority
DAs	Development Agents
FAO	Food and Agriculture Organization
GDP	Gross Domestic product
GIS	Geographical Information System
GTP	Growth and Transformation Plan
IFAD	International Fund for Agricultural Development
IGNOU	Indira Gandhi National Open University
MOU	Memorandum of Understanding
TFSCO	Tigray Food Security Coordination Office

Glossary

Degua	Temperate zone
Kebele	Lowest administrative unit (national language)
Kola	Hot zone
Region	Administrative province
Tabia	Lowest administrative unit (local language)
Weina-degua	Semi-temperate zone
Wereda	Administrative district

Chapter 1 Introduction

1.1 Background

Now a day, people's participation becomes an important approach to development interventions. Many scholars define participation as the active involvement of people in all phases of development projects including initiating, planning, implementing, monitoring & evaluation. Nisha (2006) says participation of beneficiaries in a project implementation is supposed to make the development demand-driven and effective. According to (Anna, 2010), the dominant consensus is that by involving people actively in the development process, the production of economic and social progress is accelerated. It also leads to sustainable development as it is mutually agreed upon action between all stakeholders.

It is widely accepted that decentralization is a major instrument for public participation at grass roots level development affairs. In this regard, it is clearly provided in the Ethiopian constitution that power is devolved to the regions and thereby to the weredas (administrative district) and kebeles (lowest administrative unit) so that the people may be able to participate directly and indirectly in all socio-economic and political affairs. Confirming this, in the growth and transformation plan (GTP) of Tigray it is stated that Public participation is central to ensuring citizens own development and to the success of good governance initiatives in a sustainable way. Hence, efforts have been made to expand democracy and good governance through the participation of the community based organizations (CBOs) and then to make them own the development process, to play the role of main characters in any activity and to feel a sense of responsibility for any development activities (Bureau of Planning and Finance, 2011). As stated by law, in Tigray region there is a clear power distribution between the Regional and Woreda

administrations. The Woredas have the autonomy to administrate their own human resource and to utilize their allocated finance based on the real situations of their administrative areas. So, currently there is an opportunity for the Woredas to carry on various developmental activities that benefit the local people.

Agriculture in Tigray is the dominant source of subsistence for the majority of the population. It accounts for about 52.9 percent of GDP and 85 percent of employment. Over 90 percent of the crop output is produced by the peasant sector, which is characterized by a low-level of technology and largely rain-fed (Tagel, 2008). It is repeatedly said that Tigray is one of the most drought-prone parts of the country. The land is degraded as a result of centuries of cultivation without adequate attention to environmental protection. Hence, in order to combat poverty it is important to look for alternative ways of income diversification through rehabilitating the environment by re-vegetating it. According to Bhatia and Rai (2004), rural development basically aims at uplifting of socio-economic condition of rural community.

The main objectives of rural development programs/projects are to uplift the people living in poverty by providing self employment and to create permanent assets for strengthening the rural economy. And, of course, as literature tells us, this uplifting can only be achieved whenever there is significant and meaningful involvement of the local community in development projects. Although it is true that projects are being developed to help poor communities achieve economic self-reliance, there are some factors that may hinder the active participation of local people in development projects. As (Anna, 2010) stated it, education, skills and income of community members are influential factors that can have serious limitations to the success of participation.

In conformity to the above assertions (Dilshad et al, 2010), in their research article, concluded that socio-economic factors such as occupation, income and educational level affected the level of people's involvement in community development projects.

1.2 Statement of the Problem

According to Norsworthy, (2000 cited in Sarawuth Chesoh, 2010), community participation has been promoted worldwide intensively in the fields of rural development and natural resources conservation. Moreover, International Fund for Agricultural Development (IFAD) stated participation as a shared understanding and empowerment leading to joint decision-making. It starts with consultation, moves to negotiation (problems solutions approaches) and ends with decision-making and action (IFAD, 2001 cited in Terefe, 2003). Various literatures also relate participation with decentralization where power of decision making is redistributed to local people. In conformity of the decentralized power sharing (Brandon, 1993 cited in Terefe, 2003) defined local participation as empowering people to mobilize their own capacities, be social actors rather than passive subjects, manage the resources, make decisions, and control the activities that affect their lives.

Emphasizing the role of participation in development projects especially in natural resource management, Terefe (2003) indicated that the role of local people in managing natural resource is the most valuable instrument for sustainability of development projects. In light of this, therefore, participation is essential to the success of development projects and to empowering local people. Referring to World Bank 1998, Terefe (2003) indicated that the motivation for

popular participation is that beneficiary involvement makes projects more likely to succeed in meeting their objectives; local people's participation in project planning and implementation make them more committed to its success. Participation facilitates local people's acceptance of new policies and technologies promoted by outsiders. Through participation, indigenous knowledge can be exploited and local labor, financial, and in-kind contributions can lower the implementation costs. Hence, it is believed that sustainability of development projects is ensured if and only if the involvement of local people in all aspects is ensured.

Participatory relationships are voluntary and their effectiveness depends on stakeholders being convinced that the process serves their interest. In this regard, efforts are needed to arouse interest among the community and create sense of ownership on the development projects that are intended to benefit the local community. Community participation always influences the direction and execution of community development projects in contrast to communities merely being consulted and receiving project benefits. This shows that participation is not a matter of consultation but involvement and decision of the local community in development projects starting from the project inception to the planning, implementation, monitoring and evaluation stages of the project. In support to this assertion, (Chesoh, 2010), citing (Bureekul, 2000) stated that the conditions for creating public participation are to: encourage the advantage image of project agent, provide the information to the people from the preparation phase of the project and promote participation in every step of the project to make sense of belonging by working as a partnership.

According to (Anna, 2010), the dominant consensus is that by involving people actively in the development process, the production of economic and social progress is accelerated. It also leads

to sustainable development as it is mutually agreed upon action between all stakeholders. In this regard, looking at the situation of Ethiopia, decentralization and people's participation are the major elements of the constitution. The kebele/tabia, which is the lower administration unit, plays a decisive role in terms of local governance. This role includes identifying problems, designing areas of intervention for community action, developing regulations related to resource use, and community mobilization for development activities.

The bio-fuel project, which is the case of this study, is designed to be implemented taking into account the people's participation as it is clearly stated in the Memorandum of Understanding (MOU) signed in December 2008. The government of Tigray has taken the responsibility of mobilizing the community's participation by aligning with its productive safety net program. As a result, according to the agreement made, the regional state of Tigray will have 40% of the total benefits created by the project including the carbon trade. Besides, the local community will receive benefits from diversified income by selling the cash crop of the bio-fuel plantation in addition to the benefits that they will get from the environmental rehabilitation because of the reforestation made by the project. This study is based on the assumption that all stakeholders completely comprise a freedom, ability and willingness to participate in every step of project procedures. However, such assumed community participation is not being observed in the project which is subject to this study. To this effect, some questions may arise to the mind of development practitioners. Does the decentralized administration really facilitate the mobilization of community participation in development projects? Do socio-economic factors affect the people's participation in development projects? Therefore, this study is an endeavor to look through such important questions.

1.3 Significant of the Study

As Terefe (2003) indicated, community participation in development projects has been promoted worldwide intensively in the fields of rural development and natural resource conservation. Likewise it is promoted in Ethiopia in general and in Tigray in particular in the area of rural development and environmental rehabilitation programs. Especially these days in Tigray there are exemplary efforts being done to mobilize the community at mass in the watershed development activities. However, despite the good experiences of people's participation in community asset building programs like the watershed development, there are also cases where local development projects are being failed or their sustainability is under question because of lack of the local people's participation due to different reasons. Thus, participatory development is becoming a central focus for policy makers and development practitioners. Taking the case under study, it is designed to address the deforestation problem while at the same time creating employment and income diversification. However, governmental reports as well as reports of the project partner (API) showed that the bio-fuel project in Tigray is not moving as it was intended to be and as a result the sustainability of the project is in question.

To this effect, therefore, the study aiming to find out the socio-economic factors that may affect attitudes and practices of the local people's participation in local development projects is important both for the beneficiaries and policy makers. Hence, the findings which have been explored and the detailed analysis that has been made will help the local leaders at grassroots level and policy makers and planners at all levels to understand the existing realities with regards to people's participation in development projects and take appropriate measures in promoting

and enhancing people's participation. Moreover, this study may help as an input for further study in the area of participatory development projects.

Although there are different factors that may affect participation of people in development projects, the focus of this study is on some socio-economic factors. Thus, in this study some aspects of socio-economic such as access to information, occupation and household income have been selected and studied to know whether they have any influence on community participation in development projects with specific reference to the biodiesel development project.

1.4 Hypothesis and Research Questions

1.4.1 Hypothesis

Socio-economic factors that were hypothesized to have significant influence on people's participation in development projects in the study areas are stated as follows.

- Literacy or access to information has significant influence on people's participation in development projects in the study area
- Occupation has significant influence on people's participation in development projects in the study area
- Income has significant influence on people's participation in development projects in the study area

1.4.2 Research Questions

This study is going to answer some questions in connection with local people's participation in the local development projects with special focus on the bio-fuel project. The answers to these questions may disclose the practice of the local community and local leaders regarding their participation in local development projects like the case under study. Besides, answers to these questions may find ways of addressing the issue of participation in local development projects. Accordingly, the following research questions are formulated.

- To what extent has literacy or information access influenced the local people towards participation in local development projects?
- To what extent has occupation influenced the local people's participating in the local development projects such as the Bio-fuel project?
- To what extent has income affected the people's participation in local development projects as the case at study?

1.5 Objective

1.5.1 General objective

The main objective of this study is to examine the socio-economic factors that affect participation of local communities in development projects

1.5.2 Specific Objectives

The specific objectives are to:

- assess the practice of the local communities towards participation in the local development project of Bio-fuel
- assess the level of participation of the local people in the local development project of Bio-fuel
- identify the major socio-economic factors that affect the extent of participation of local people in local development projects

1.6 Scope and Limitation of the Study

The study has focused on two weredas/districts of Central Zone of Tigray where the project of bio-fuel has been started and established its plantation sites since 2009. It further focuses on selected tabias (lowest administrative units) where the African Power Initiative (API) sites are situated and expanded within these project weredas. But this does not mean the output of the study has been compromised as the results can be applied to other similar types of development projects in other weredas.

Chapter 2 Literature Review

2.1 Socio-economic Factors and Participation

Research has shown that socio-economic factors have significant impact on a person's level of participation (Wall et. al, 2005). According to these writers, socio-economic status is an indicator derived from income, level of education/information access, and occupation. Thus, these researchers suggest that as communities with lower socio-economic status tend to participate less in community development projects than those with higher socio-economic status, community development efforts need to address this participation gap (Wall et. al, 2005). "In some cases, the socio-economic status of people often limits their access to the decision-making process, excluding them from community affairs." (Wall et al, 2005:155) Further, Sarawuth Chesoh in his research asserted that higher level of education, higher social status, higher income, and higher ability of accessing information were statistically significant related with participation of community in development projects (Chesoh, 2010).

Economic self-reliance, empowerment and sustainable development in Africa are mostly dependent on human development (Saide, 2006). This statement indicates that awareness creation, knowledge and skill building are important to bring about attitudinal change towards economic self-reliance and sustainable development. In other words, in order a certain community be able participate in development activities, information/awareness creation, knowledge and skill can be considered as prerequisites. The community should be communicated well that projects are being developed to help the poor achieve economic self-reliance and get out of poverty. In this regard, one can easily see the role of socio-economic elements such as information/knowledge, income, occupation and the like on participation in

development projects. As it is indicated in the works of Saide, 2006, community participation leads also to engagement in an active social learning process and the empowerment of local people, enabling them to use local resources both effectively and equitably so as to improve the standard of living. Doing so should lead to poverty alleviation, greater economic self-reliance and more sustainable development.

Furthermore, in conformity to the above assertions (Dilshad et al, 2010), in their research article concluded that socio-economic factors such as occupation, income and educational level affected the level of people's involvement in community development projects. They further hold the opinion that participatory community development process provides an opportunity to weaker section of the community to include them in the process of empowering for improving their standard of living (Dilshad et al, 2010). Supporting the aforementioned statements, Angba et al, 2009 stated in their research article that some relationship exist significantly between socio-economic factors like occupation, educational level, and participation in development projects.

2.2 People's Participation

All human beings must get the right to participate in decisions and above all to decide on their own destiny, on their "development" (Züger, 2005). Now days, people's participation becomes an important approach in regard to development interventions. According to Mohammad, 2010, participation is defined in relation to development as people's involvement in decision making processes, implementing program, their sharing in the benefits of development programs and their involvement in efforts to evaluate such program. Thus, in most of the cases participation is

defined as the active involvement of people in all aspects of development projects including initiating, planning, implementing and so on. In conformity to these definitions of participation Nisha (2006) indicated that community-based development projects assume participation of beneficiaries in the implementation and management of the schemes under consideration. Participation of beneficiaries in the project implementation is supposed to make the development demand-driven and effective. Nisha, further, adds that participation in any form of community schemes varies from mere attendance to active involvement in decision-making.

In agreement to the above given statements in regard to participation, Wall et al, 2005 indicated that advocates and practitioners believe that citizens should be meaningfully involved in community decision making. According to Chesoh, 2010, community participation has been promoted worldwide intensively in the fields of rural development and natural resource conservation. Furthermore, Chesoh reflected his opinion that participation needs to be considered in decision-making, implementation and maintenance, and evaluating successes and failures. Community participation always influences the decision and execution of community development projects in contrast to communities merely being consulted and receiving project benefits (Chesoh, 2010). Moreover, African Development Bank (ADB) holds the opinion that Participation is all about communication and collaboration amongst different groups of people. It is about different individuals coming together to collaboratively agree on their expectations, share information, discuss issues, plan, implement, monitor and evaluate development actions/projects. In most of the cases, such communication and collaboration takes place in the context of meetings or workshops. (ADB, 2001)

2.3 Development

Development can be described taking account of different contexts. According to the Oxford Dictionary, development is described as growth or advancement. But this definition seems general to describe what development is. As growth or advancement may refer to the economic growth or improvement, the concept of development does mean beyond the economic growth.

According to a text document of Indira Gandhi National Open University, development implies an overall positive change in the physical quality of life. This positive change for the better encompasses economic as well as social aspects. Therefore, development not only calls for economic growth but also the equitable distribution of the gains made from economic growth (IGNOU, 2005). Moreover, “in the parlance of development economics development means improvement in a country’s economic and social conditions. More specifically it refers to improvements in ways of managing an area’s natural and human resources in order to create wealth and improve people’s lives” (Mohammad, 2010:18). Thus, according to Mohammad, 2010), development has been treated as a multidimensional process, involving major changes in social structures, acceleration of economic growth, reduction of inequality, and eradication of absolute poverty. This process deals not only with the ideas of economic betterment but also with greater human dignity, self-reliance, security, justice and equity.

Taking the aforementioned ideas in to consideration therefore, development can be defined as the overall material as well as social wellbeing of a particular society. In this regard, one can sense that development does not refer to the economic growth only, but also to the distribution of such growth among the society. Thus, development encompasses not only the material growth and

advancement but also the social wellbeing of people as well as the equal distribution of such material and social advancement.

Considering the notion of development, rural development generally is all about improving the socio-economic conditions of the rural population. A reasonable definition of rural development, according to FAO, would be: development that benefits rural populations; where development is understood as the sustained improvement of the population's standards of living or welfare. (FAO, 2007) Furthermore, FAO indicated that in the 1960s and early 1970s rural development was defined as a part of structural transformation characterized by diversification of the economy away from agriculture which had been facilitated by rapid agricultural growth. (FAO, 2007) Besides, as it is indicated in the FAO working paper that later during the 70's, mostly based on equity considerations, the focus and definition of rural development turned to the provision of social services to the rural poor. This shift was partially founded on the recognition that even under rapid growth of income in rural areas, the availability or equitable access to social services and amenities was not guaranteed (FAO, 2007).

Moreover, Haris, 1982 (cited in <http://www.adb.org/Documents/Books/Rural-Development-Outcomes-Drivers/Chapter-II.pdf>) referring to the World Bank documents defined rural development as "...a strategy designed to improve the economic and social life of a specific group of people—the rural poor." Besides, this writer noted that rural development's focus is especially on reduction of poverty and inequality among the rural population. Extending the conceptual definition of rural development Chino, 2000 (cited in the above indicated website) said the concept now encompasses concerns that go well beyond improvements in growth,

income, and output. The concerns include an assessment of changes in the quality of life, broadly defined to include improvement in health and nutrition, education, environmentally safe living conditions, and reduction in gender and income inequalities.”

The rural population especially of developing countries is characterized by extreme poverty, low income level, unemployment, low access to basic social services, backward technology and low status of some social groups such as women among others. Hence, to change such attributes of the rural setting and bring about socio-economic development, rural development is mainly associated with the increasing of the standard of living of the poor rural population and considered as a prerequisite for rural poverty reduction.

2.4 Development Project

In most cases, a project is given the meaning of a temporary endeavor which is undertaken to create a specific goal with a definite beginning and end. According to National University of Ireland (2003), projects tend to be area-based at the local level. The area-based initiatives draw down program funds in response to identified local needs. Projects tend to involve the local community in the active decision making and planning for their communities. In this light, it can be concluded that projects have clearly defined goals and set out clear results to produce. Thus, projects should be designed to solve a problem and bring about development. A project, in this study, refers to the bio-fuel development project in the project weredas (Tanqua-Abergele and Kola-Tembien).

2.5 Sustainability

Literature shows that sustainability can have varied definitions. However, the common working definition for sustainability is that it is about maintaining and continuing of programs and projects after the funding period is over. An occasional paper of International Fund for Agricultural Development (IFAD) referring the IFAD strategic Framework 2007-2010, defined sustainability as “Ensuring that the institutions supported through projects and the benefits realized are maintained and continue after the end of the project...”(IFAD, 2009:14). The working paper further stated that assessment of sustainability requires determining ‘whether the results of the project will be sustained in the medium or even longer term without continued external assistance’. Hence, we can see that such definitions of sustainability indicate whether the local community as well as the local leadership accept and own the project/program and show efforts for the sustainability of the results.

Chapter 3 Methodology

3.1 Description of the Study Area

The study has been conducted in Tanqua-Abergele and Kola-Tembien weredas/districts of the Central Zone of Tigray region. The selection of the study area has been done purposively because the project which is selected as a case study is located in these districts. Three tabias /kebeles from each wereda that are located around the project sites have been further selected using purposive sampling method. Brief profile of the two sample weredas is presented hereunder.

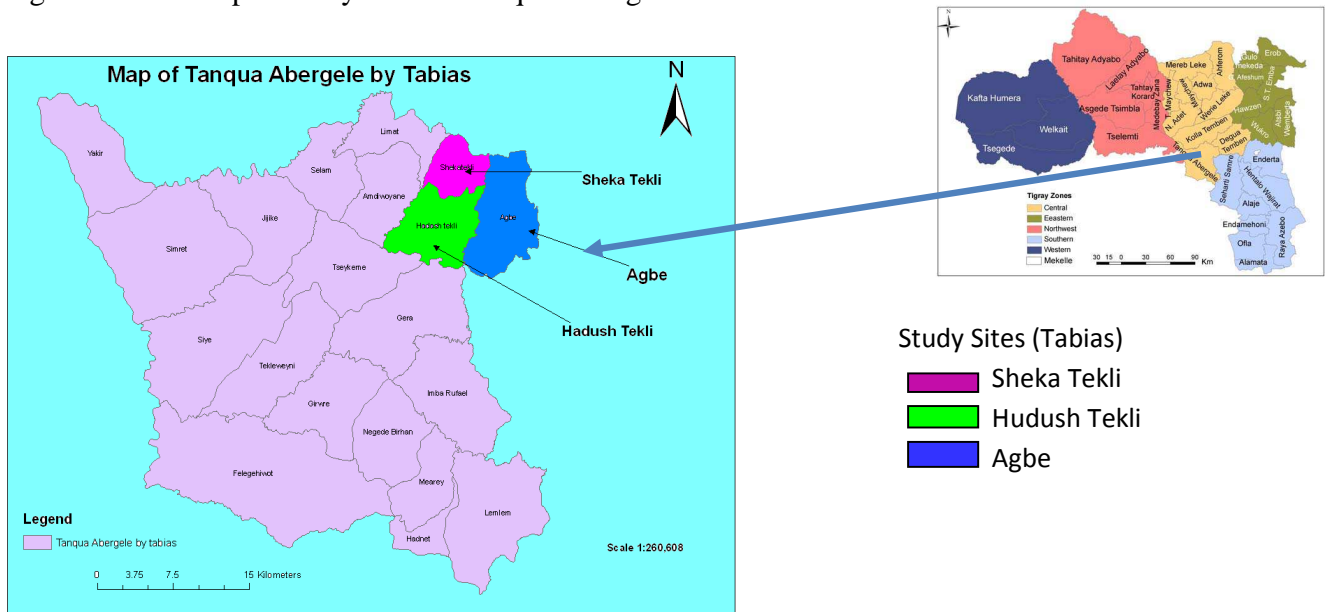
Tanqua-Abergele District

Tanqua Abergele is one of the 34 rural weredas/districts of Tigray which is found in the Central Tigray Zone. The topography of the wereda is similar to that of the Central Zone which is dominated by rugged and hilly mountains with elevation variation from 1300-1800 meters above sea level (TFSCO, 2000). According to unpublished report of the wereda office of ARD (2011/12), the wereda has a total area coverage of 144,564 hectares out of which 30,913 ha is arable land, 98,271 ha un-arable land and 15,380 ha is forest area. The average land holding per household is not more than a hectare. It is also worth to mention that currently area closure is adapted in the wereda to regenerate the natural resource.

The two major seasons of the wereda are wet and dry season. Rainfall in the district is characterized by one rainy season that runs from June/July to August/September. Unpublished sources of the wereda indicated that the mean annual rainfall is 539 mm and the temperature ranges from 38-40⁰c. Unpublished documents found in the wereda further indicated that agro-

ecologically the wereda is characterized by kola (hot zone) which constitutes 95% and weina-dega (semi-temperate zone) that comprises only 5%.

Figure 1: Map of study sites in Tanqua-Abergele



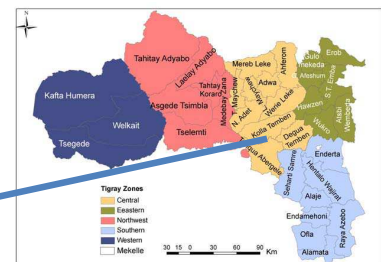
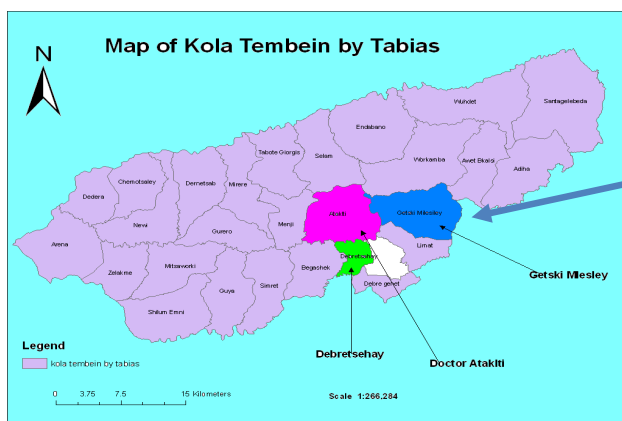
The population size of the wereda is projected to reach 105,048 in mid 2012 of which 53,319 are men and 51, 729 are women. A total number of 17, 784 households are counted in the wereda/district (CSA 2007). The wereda is divided into 20 administrative Tabias/kebeles (Wereda Office of ARD report 2011/12). The administration is carried out through councils at wereda, and Tabia levels. Members of the Tabia cabinet are elected by a general assembly of the tabia/kebele council members.

The general farming system of the wereda is cereal production dominated, mono-cropping, oxen cultivation where livestock production is undertaken complimentary to crop production. Crop production is predominantly carried out under rain fed condition. The type of the soil is 66.4% silt (cambisol), 8.2% clay (vertisol), 20.6% sandy (entisol) and 4.8% mixed i.e vertisol & cambisol (TFSCO 2000).

Kola-Tembien District

Kola-Tembien is one of the 34 rural weredas/districts of Tigray which is found in the Central Tigray Zone located at 105 km away from Mekelle, the capital city of the region, towards West. . The topography of the wereda is dominated by rugged and hilly mountains. The elevation varies from 1400-2300 meters above sea level. (wereda ARD Office report, (2011/12). According to the unpublished report (2011/12), the wereda has a total area coverage of 136,930.2 hectares out of which 31,021 ha is arable land, 29,502.14 ha un-arable land, 25,058.23 ha forest area, 47,925.57 ha grazing land and 3423.25 ha is residential area. The average land holding per household is not more than a hectare.

Figure 2: Map of study sites in Kola-Tembien



Study Sites (Tabias)

- Doctor Atakilty
- Getskimlesley
- Debretehay

Source: Tigray BoPF, GIS center, 2012

Rainfall in the district is characterized by one rainy season which runs from June/July to August/September. The unpublished wereda report (2011/12) indicated that the annual rainfall is 500-800mm and the temperature ranges from 25-30⁰c. The report further indicated that agro-ecologically the wereda is characterized by kola (hot zone) which constitutes 58%, weina-dega (semi-temperate zone) 41%, and degua (temperate zone) only 1% . .

The population size of the wereda is projected to reach 148,282 in mid 2012 of which 73,873 are men and 74,409 are women. A total number of 30,388 households are counted in the wereda/district (CSA 2007). The wereda is divided into 27 administrative Tabias/kebeles (Wereda Office of ARD report 2011/12). The administration is carried out through councils at wereda, and Tabia levels. Members of the Tabia cabinet are elected by a general assembly of the tabia/kebele council members.

Crop led livestock production system is the dominant part of the economy in the wereda. Maize, sorghum and teff are the major crops that supplement to the animal husbandry. Forest package is also considered as one of the potentials of the wereda. (wereda ARD Office report, 2011/12). The type of the soil is 65% silt (cambisol), 2.5% clay (vertisol), 20% sandy (entisol), 3% mixed i.e vertisol & cambisol and 9.5% others (Wereda ARD Office report 2011/12). Farming system of the wereda is traditional. Crop production is predominantly carried out under rain fed condition which is complemented by livestock production (<http://en.wikipedia.org>).

3.2 Research Design and Sampling Method

Multistage sampling has been exercised in this study. In the first stage, the two weredas/districts (Tanqua-Abergele and Kola-Tembien) were selected purposively as the project understudy is located in these weredas. Three tabias/kebeles, which are located alongside the project sites, from each wereda have been selected using purposive sampling method. 20 households from each tabia/kebele were selected using simple random sampling method. Thus, 60 respondents have been selected from each wereda.

In addition, 5 tabia leaders, 4 project staff members in the two weredas and as well as Development Agents (6 DAs) who are responsible for natural resource management were selected for focus group discussion. Besides, the head for the office of Agriculture and Rural Development and wereda natural resource management expert were interviewed.

Therefore, a total of 120 household respondents, 30 tabia leaders, 4 project staff, 6 DAs and 4 wereda Agriculture and Rural Development Office staff i.e a total of 164 individuals have been used as source of information (Figure 1).

Figure 3: Sampling and sample size distribution

S/No	Wereda/ district	Number of Tabias	Type and number of respondents					Total
			Households	Tabia leaders	Wereda staff	DAs	Project staff	
1	Tanqua- Abergel	3	60	15	2	3	2	82
2	Kola- Tembien	3	60	15	2	3	2	82
Total		6	120	30	4	6	4	164

3.3 Data Collection Tools and procedure

The study used both qualitative and quantitative methods of data collection. Qualitative data have been collected through direct observation, focus group discussion and in-depth individual interview whereas quantitative data have been collected by employing a survey questionnaire. Both qualitative and quantitative methods of data collection helped to capture perceptions, attitudes and practices towards participation of the local community, local leaders and government and project staff members.

Moreover, this study was based on both the primary and secondary sources of data. Primary data have been obtained through structured survey questionnaire, in-depth interview, focus group discussion and direct observation. Relevant documents were also reviewed as a secondary source of data. The structured survey questionnaire was subject to pre-test so as to know whether it is understandable both by the interviewer and the respondent. For the interview instrument mainly close-ended questions were designed, but some open ended questions were included to dig out more facts. For those issues and information that were not possible to gather using the interview instrument, direct observation and focus group discussion have been employed.

3.4 Data Processing and Analysis Method

The data have been examined, categorized and analyzed qualitatively and quantitatively in terms of the research objectives. The analysis of quantitative data was done with the help of Statistical Package for Social Science (SPSS). Descriptive statistics has been employed for data analysis including frequencies and Pearson's chi square test. The qualitative data have been presented in a narration format supplementing to the quantitative results and findings.

Chapter 4 Data Analysis and Interpretation

4.1 Introduction

This chapter deals with presentation of data collected and discussion of results. The findings are analyzed in connection with the research objectives. The objectives were designed in such a way as to answer the research questions. Basic questions were: “what is the Practice of the local people towards participation in local development projects?” “To what extent are the local people participating?” “What are the socio-economic factors that influence and affect people’s participation in reference to the study area?”

The analysis is done based on the data collected from a sample of 120 households selected randomly from six tabias/kebeles found in two weredas/districts. The two weredas were selected purposively since both are the major project sites of the study. Moreover, the analysis is supplemented by the survey findings obtained from thirty tabia leaders drawn from 6 tabias (five each), and one selected group of focus group discussants from each weredas. Besides, data results obtained from key informants’ interview were utilized to supplement the survey results. Hence, each of the data obtained from the project were further analyzed and interpreted below based on their thematic and meaningful categorical groups and procedures.

4.2 Socio-economic Characteristics of Respondents

Socio-economic characteristics of 120 household farmers and 30 tabia leaders were assessed. The survey included age, sex, marital status, educational level, and major occupation of the respondents. The respondents’ socio-economic profile is presented in tables 4.1 and 4.2 below.

Table 4.1: Socio-economic Profile of Respondents

S/N	Variables	N=120	
		Frequency	Percentage
1	Age range:		
	15-25 years	11	9.2
	26-35 years	27	22.5
	36-45 years	53	44.2
	46-55 years	19	15.8
	Above 55 years	10	8.3
	Total	120	100
2	Sex:		
	Male	84	70
	Female	36	30
	Total	120	100
3	Marital status:		
	Single	10	8.3
	Married	96	80.0
	Divorced	10	8.3
	Widowed	4	3.3
	Total	120	100
4	Educational level		
	Illiterate	36	30
	Literate	54	45
	Elementary school completed	21	17.5
	Secondary school completed	4	3.3
	Preparatory school completed	4	3.3
	Others	1	0.8
	Total	120	100
5	Major Occupation:		
	Crop production	4	3.3
	Livestock production	3	2.5
	Mixed farming	109	90.8
	Labor	2	1.7
	Others	2	1.7
	Total	120	100

Source: Survey data, September 2012

As indicated in table 4.1 above, the majority of the respondents (44.2%) were between the age categories of 36 and 45 years old. While a smallest amount (8.3%) were found to be above 55

years old. With regards to the sex ratio, the table indicated that 70% of the respondents were male and the remaining 30% were female respondents. Furthermore, the above table revealed that most of the respondents (80%) were married while the least respondents (3.3%) were reported widowed. Taking the educational background of household respondents, the above table revealed that the majority (45%) of the respondents can write and read while 30% of the total respondents were illiterates. The remaining 24.1% comprises for those who have completed elementary, secondary and preparatory school. With regard to the respondents' major occupation, table 4.1 indicated that mixed farming was the major (90.8%) source of income for the respondent farmers while the remaining 9.2% is distributed among crop production, livestock production, and rural labor as the source of their main stay.

In conclusion, from the above table it can be said that quite a significant number (69%) of the respondents are literate. Thus, it is believed that literacy may have positive impact on people's participation. Besides, as the findings revealed, almost 91% of the respondents' livelihood is based on mixed farming. And this in turn may influence participation.

Table 4.2: Socio-economic characteristics of tabia leaders

S/N	Variables	N=30	
		Frequency	Percentage
1	Age range:		
	15-25 years	2	6.7
	26-35 years	10	33.3
	36-45 years	12	40.0
	46-55 years	4	13.3
	Above 55 years	2	6.7
	Total	30	100
2	Sex:		
	Male	23	76.7
	Female	7	23.3
	Total	30	100
3	Marital status:		
	Unmarried	2	6.7
	Married	24	80.0
	Divorced	3	10.0
	Widowed	1	3.3
	Total	30	100
4	Educational level		
	Illiterate	1	3.3
	Literate	10	33.3
	Elementary school completed	10	33.3
	Secondary school completed	3	10.0
	Preparatory school completed	2	6.7
	Degree holder	1	3.3
	Diploma	3	10.0
	Total	30	100
5	Major Occupation:		
	Livestock production	1	3.3
	Mixed farming	24	80.0
	Government employee	5	16.7
	Total	30	100

Source: Survey data, September 2012

As shown in table 4.2 above, the majority of the tabia leaders (73.3%) were between the ages of 26 and 45 years. With regards to the sex ratio, the table indicated that 76.7% of the tabia leaders were male and the remaining 23.3% were female respondents. Moreover, the above table

revealed that most (80%) of the respondent leaders were married. Furthermore, the above table disclosed that 33.3% of the tabia leaders can write and read while another 33.3% of them have completed elementary school. It is indicated only 3.3% of the tabia leaders were illiterate. As to the major occupation, table 4.2 showed that the main source of income for the grass-root level leaders was predominantly mixed farming (80%).

Thus, the findings showed that the majority (96.7%) of the grass-root leaders were literate and still the majority (80%) were based their livelihood on mixed farming. Therefore, it can be assumed that the leaders were in a better position in relation to the educational attainment which in turn may affect their community mobilization efforts towards participation.

4.3 Community's practice towards participation in local development projects

Assessing the practice of the communities towards participation in local development projects with special reference to the bio-fuel development project is one of the objectives in this study. Thus, some selected respondents were asked to understand their participation status forwarding some basic questions as: how often did they attend meetings, to what extent were development groups participatory, why they were involved in development groups, who motivated them to be involved in the groups, what they feel while involved in project activities, and similar related questions. The following two tables include the practice towards participation and participation status of development group member respondents in the study area.

Table 4.3: Membership and participation status of respondents in development groups

S/N	Variables	N=120	
		Frequency	Percentage
1	Are you a member of any development group in your Tabia?		
	yes	109	90.83
	No	11	9.17
	Total	120	100
2	If you are a member, how often did the development group held meeting?		
	Every week	62	56.88
	Every month	45	41.28
	Every quarter	1	0.92
	Every two weeks	1	0.92
	Total	109	100
3	How often do you attend the meeting?		
	Regularly	56	51.4
	sometimes	45	41.3
	whenever I am idle	8	7.3
	Total	109	100
4	What is the nature of the development group's meeting?		
	participatory	72	66.1
	partially participatory	36	33.0
	non participatory	1	0.9
	Total	109	100

Source: Survey data, September 2012

Table 4.3 indicated that the majority (90.83%) of the respondents were members of development groups in their locality. Regarding the frequency of the group meeting, the above table revealed that the majority (56.88%) held meetings every week, while another significant number (41.28%) reported that they held meetings once in a month. Moreover, out of the member respondents the majority (51.4%) claimed that they attend meetings regularly. Furthermore, in describing the nature of the development groups' meetings, the above table revealed that 66.1% of the member respondents claimed that the meetings were participatory while another significant number of the respondents (33%) said that the meetings were partially participatory in

nature. In addition, the majority (80.7%) household respondents claimed that members participated on free will in: soil and water conservation, reforestation activities, school and health post construction activities, and in group discussions on issues related to community problems and their resolutions. Afterward, respondents were also asked how they came to be involved in. In answering this particular question, 50.5% of the respondents claimed that they were motivated by the development agents while some 28.4% of the respondents become to participate in the activities because their respective development groups forced everyone to participate. Further, respondents were asked about their feeling while they were participating in development activities on free basis. In response to this issue 61.3% of the respondents said that they were very happy.

Therefore, from the above described results one can understand that most of the respondents were members of their respective development groups. However, only about half of them (51.4%) were able to attend regular meetings of their respective groups. Concerning the nature of the development groups, majority of the respondents claimed it was either participatory or somehow participatory. This indicated that most of the development groups were allowing members to freely share their ideas about any development activity. In line to this opinion, African Development Bank (ADB) asserted that Participatory meetings are differentiated from non-participatory ones in terms of the way they are designed and led. Participatory meeting ensures each and everyone has the opportunity to forward his/her views and be heard while non-participatory meetings are often top-down, with the chairperson deciding what will be talked about. (ADB, 2001)

In conclusion, it is noticeable that almost all farmers were members of development groups at Tabia level and such development groups had regular meeting schedules be it weekly or monthly. Thus, one can see that there is an opportunity for peasant dwellers to come together in their groups and discuss on issues that affect their livelihoods. More to the point, findings from the focus groups' discussions and key informants' interviews revealed that such development groups are assumed to be good forums to ensure community's participation in all aspects of development activities.

Table 4.4: Respondents' practice towards bio-fuel plantation

S/N	Variables	N=120	
		Frequency	Percentage
1	What is your perception towards bio-fuel plantation in your Tabia in terms of conserving forest and reclaiming the environment?		
	It is very important	64	53.3
	It is somewhat important	47	39.2
	I don't have idea	9	7.5
	Total	120	100
2	Are you supportive of the bio-fuel plantation project operating in your Tabia?		
	yes	119	99.2
	not in favor	1	0.8
	Total	120	100
3	If you are supportive, how are you participating in the bio-fuel plantation project?		
	Planting on communal lands	57	47.9
	Protecting from animals	15	12.6
	Planting, watering, and protecting from animals	45	37.8
	others	2	1.7
	Total	119	100
4	What do you get immediately for your participation in return?		
	I'm paid money by the project staff	4	3.33
	Paid from the safety net program	43	35.83
	No immediate return in the form of money or in kind	73	60.83
	Total	120	100

Source: Survey data, September 2012

As indicated in table 4.4 above, the majority (53.3%) of the respondents claimed that bio-fuel plantation is very important in terms of reforestation and reclaiming the environment while another 39.2% of the respondents had somewhat important position. Further, table 4.4 showed that almost all (99.2%) of the respondents had supportive positions to the bio-fuel project in their localities. Moreover, the table disclosed that 47.9% of the respondents have shown their support only by planting bio-fuel seeds on communal lands while 37.8% of the respondents have shown their support by planting, watering and protecting the seedlings from animals.

Furthermore, table 4.4 revealed that 60.83% of the respondents have not got any remuneration in response to their participation although 39.16% of the respondents have been paid from the safety net program and the project to value their participation in the bio-fuel plantation. Subsequently, most of the respondents (77.5%) disclosed that they were motivated by the development agents (DAs) in order to participate in the bio-fuel plantation programs although some 13.3% of the respondents claimed that they have been persuaded by tabia leaders.

In general, the above description indicated that the community felt bio-fuel plantation is important for environmental protection and held supportive position. However, the majority had confirmed their support only by planting bio-fuel seeds on communal lands, and a significant number of the participants were paid by the safety net program and by the project to value their participation. Findings from the key informants and focus groups' discussions were further disclosed that instead of only at communal lands, private farm lands also had to be used for the bio-fuel plantation for better management and real participation. Further, as most of the respondents claimed that they were persuaded to participate in the bio-fuel plantation by the DAs, it can be deduced that although the majority were members of development groups there

was no tangible contribution of such groups in mobilizing members in case of the bio-fuel project. Thus, from the quantitative analysis it can be said that the perception status and supportive position among the community is positive. However, the focus groups' discussants hold a different position in this case although they have acknowledged that there were some farmers who were participating in plantation of bio-fuel seeds in the communal lands. The discussants confirmed that nobody has known among the farmers that the project had economic advantages and environmental benefits. Farmers among the discussants said "it is true that some farmers were participating in the plantation of bio-fuel seeds, but it was not because they understood the benefits rather they were forced by the Agriculture and Rural Development Office".

To sum up, although the majority of the survey respondents felt that the bio-fuel project is important and felt they were supportive, it was found that near to 40% of them were paid for their participation. Besides, from the focus group discussions, it became clear that the community in the study area did not have prior knowledge regarding the benefits of the project. The key informants also confirmed that the community was not supportive in action. Therefore, it can be concluded that the diversified benefits (economic, environmental) of the bio-fuel project were not perceived enough by the local community so as to lead the community to action.

4.4 Community's level of participation in local development projects

As it is indicated in the literature review part of this paper, in most cases participation is defined as the active taking part of people in all aspects of development projects including initiating, planning, implementing and so on. Above and beyond, participation of beneficiaries in the

project implementation is supposed to make the development demand-driven. In this regard, participation of beneficiary communities can vary from mere attendance to active involvement in the decision making process. In this light, therefore, one of the objectives of this study is to assess the level of participation of the local people in the local development projects with special focus on the bio-fuel project in the study area. Accordingly, therefore, communities' level of participation in local development projects is analyzed below.

Table 4.5: Respondents' participation in development project activities

S/N	Variables	N=120	
		Frequency	Percentage
1	Have you been consulted whenever a development project is initiated to be undertaken in your locality?		
	Yes	104	86.7
	No	16	13.3
	Total	120	100
2	Did you participate in planning of any development project which is undertaken in your locality?		
	yes	102	85
	No	18	15
	Total	120	100
3	Did you participate in any ways in implementation of any development project in your locality?		
	Yes	117	97.5
	No	3	2.5
	Total	120	100
4	Did you participate in any ways in monitoring and evaluation of any development projects in your locality?		
	Yes	105	87.5
	No	15	12.5
	Total	120	100
5	If you participated in any stage of the development project cycle, did your views considered enough?		
	Yes	102	85
	No	18	15
	Total	120	100

Source: Survey data, September 2012

Table 4.5 indicated that majority of the respondents (86.7%) stated that the community have been consulted whenever a development project was initiated to be undertaken in their localities. Further, the above table revealed that most of the respondents (above 85%) claimed that they have participated in planning, implementation, and monitoring & evaluation of any development project in their localities. Similarly, 85% of the respondents claimed that their views were considered enough whenever they participate in any stage of the project cycles.

In general, from the above descriptions (table 4.5) it can be said that usually community is consulted whenever a development project is initiated. In addition, it was reported that majority of the community was in most cases participating in almost all stages of a development cycle. In contrary, regarding the case of the bio-fuel project, findings from the focus group discussions revealed that the project was introduced even without consulting the community leave alone ensuring full participation.

Table 4.6: Respondents' participation level

S/N	Variables	N=120	
		Frequency	Percentage
1	In which stage of participation do you think you have involved well?		
	Idea generation	9	7.5
	planning	8	6.7
	decision making	5	4.2
	implementation	33	27.5
	monitoring & evaluation	2	1.7
	in some of the above stages	19	15.8
	in all of the above mentioned stages	43	35.8
	none	1	0.8
	Total	120	100

S/N	Variables	N=120	
		Frequency	Percentage
2	How do you rate your participation in the bio-fuel development project in your locality?		
	Low	26	21.7
	Medium	78	65
	High	15	12.5
	No participation	1	0.8
	Total	120	100

Source: Survey data, September 2012

As shown in the table above, 35.8% of the respondents declared that they believed they have involved well in all stages (idea generation to monitoring & evaluation) of any project undertaken in their locality while 27.5% of the respondents have the feeling to be involved well only in the implementation stages. Furthermore, table 4.6 revealed that 65% of the respondents rated their participation as medium.

From the results given in table 4.6 it can be inferred that the level of participation of the community was not full-fledged. In conformity, the majority of the respondents rated themselves their participation was medium and a significant percent rated as low. In a nutshell, it can be deduced that usually the community was consulted whenever a development project is initiated but mere consultation is not enough. The community should have been made to participate fully in all stages of a development project.

Table 4.7: Respondents' view on decision making and prioritizing of development projects

S/N	Variables	N=120	
		Frequency	Percentage
1	In most of the cases who makes decisions concerning development activities in your locality?		
	Tabia leadership	52	43.3
	Wereda leadership	4	3.3
	Community	61	50.8
	Project owners	1	0.8
	I don't know	2	1.7
	Total	120	100
2	How are Tabia development issues prioritized?		
	By community discussion	84	70
	By the decision of Tabia leaders	31	25.8
	By the decision of wereda leaders	1	0.8
	I don't know	4	3.3
	Total	120	100

Source: Survey data, September 2012

As indicated in table 4.7 above, 50.8% of the respondents stated that the community made the decisions concerning development activities while 43.3% of the respondents had the contrary position that they claimed the Tabia leadership made the decisions in most of the cases. Regarding prioritization of tabia's development issues, table 4.7 revealed that 70% of the respondents said prioritization had been made by community discussions while 25.8% of the respondents claimed prioritization to be made by the decisions of tabia leaders.

In conclusion, it can be deduced from the above results and descriptions that although there were development activities which demanded community decisions and prioritization, there was also a significant indication that projects were decided and prioritized by the tabia leaders without considering the consent of the respected community.

4.5 Major socio-economic factors affecting participation of community in local development projects

As reflected in the literature review, it was discussed that there are some socio-economic factors that hinder the active participation of local people in development projects. To mention some, information/education, income, occupation, motivation and the like are influencing factors to have communities' active participation in their local development activities. To this effect, therefore, one of the objectives of this study is to identify the major socio-economic factors that affect the extent of participation of local people in the local development projects with special focus on the bio-fuel project in the study area. Accordingly results are analyzed and interpreted below.

Table 4.8: Respondents' reaction towards community's motivation for participation

S/N	Variables	N=120	
		Frequency	Percentage
1	What motivates you to participate in any development activity?		
	Mental satisfaction	69	57.5
	Material benefits	38	31.7
	Social status	12	10
	others	1	0.8
	Total	120	100
2	Do you normally expect any incentives from participating in development projects?		
	yes	82	68.3
	No	38	31.7
	Total	120	100
3	What type of incentives do you expect for your participation in development projects?		
	Appreciation and recognition by the leadership	18	22
	Material incentives	64	78
	Total	82	100

Source: Survey data, September 2012

As shown in table 4.8 above, from those who expected incentives for their participation, the majority (78%) expected material incentives. In fact, 31.7% of the total respondents claimed that their root means of motivation to participate in local development projects was material benefits. Therefore, it can be inferred that material incentive is the most expected motivating factor for participation in development projects.

Table 4.9: Respondents' income/expected benefit and participation

S/N	Variables	N=120	
		Frequency	Percentage
1	Do you expect individual benefits if you involved in bio-fuel development project in your locality?		
	yes	87	72.5
	No	33	27.5
	Total	120	100
2	What are the benefits you expected?		
	Benefits from reforestation	19	21.8
	Benefits from soil and water conservation	9	10.3
	Income by selling oilseeds	39	44.8
	Secondary income generation like animal feed, bee keeping etc	20	22.9
	Total	87	100
3	Do the benefits you expected initiate you to participate in the bio-fuel development project?		
	yes	75	86.2
	No	12	13.8
	Total	87	100

Source: Survey data, September 2012

According to the above table, the majority of the household respondents (72.5%) declared that they expected personal benefits for their involvement in the bio-fuel development project in their locality. Moreover, the above table discovered that 44.8% of the respondents identified their expected benefit was income from the sale of oilseeds. Another 22.9% of the respondents claimed that they expect benefit from secondary income generation as animal feed, bee keeping,

etc. Furthermore, the table indicated that the majority (86.2%) of the respondents claimed the expected benefits initiate them to participate in the bio-fuel development project.

Thus, it can be deduced from the above descriptions that in order people to participate in the bio-fuel development project, they have to be ensured that there is individual benefit. By and large, the expected benefit is income from the sales of the oilseeds as well as secondary income generated from animal feed and bee keeping as a result of the project. In conclusion, income is one of the major factors that affect community participation in development projects.

Table 4.10: relationship between expected benefits/income and participation

Variables		Do the benefits you expected initiate you to participate in the bio-fuel development project?		Total
		Yes	No	
Do you expect individual benefits if you involved in bio-fuel development project in your locality?	yes	75	12	87

N=87

Source: Survey data, September 2012

Table 4.10 indicated that 86% of the respondents who claimed individual benefits for their participation confirmed the expected benefits initiate them whether to participate in the bio-fuel development project. This assumption was verified by employing Pearson's Chi-Square Test as given below.

Table 4.11: Chi-Square Test for expected benefits/income

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1.200E2 ^a	2	.000
Likelihood Ratio	141.161	2	.000
Linear-by-Linear Association	105.806	1	.000
N of Valid Cases	120		

a. 1 cells (16.7%) have expected count less than 5. The minimum expected count is 3.30.

The above result showed a significant relationship between expected benefits/income and participation in the bio-fuel project as the calculated Pearson's Chi-Square is less than 0.05. This is supported by Dilshad et al, 2010, in their research article concluded that socio-economic factors such as income affected the level of people's involvement in community development projects.

Table 4.12: Respondents' access to information/knowledge and participation

S/N	Variables	N=120	
		Frequency	Percentage
1	Have you ever been informed about the benefits of the bio-fuel development project in your locality?		
	Yes	67	55.8
	No	53	44.2
	Total	120	100
2	If you have not been informed, do you feel that your knowledge of the benefits of the bio-fuel hinders your participation?		
	Yes	39	73.6
	No	14	26.4
	Total	53	100

Source: Survey data, September 2012

Analyzing respondents' access to information about the bio-fuel development project, table 4.12 indicated that 44.2% of the respondents claimed that they have not been exposed to any information about the matter. Subsequently, those respondents who have never been informed were asked to discover whether their lack of information about the benefits of the bio-fuel development project hindered them from participation. Thus, the above table revealed that the majority (73.6%) of the respondents confirmed that their lack of knowledge hindered them from participation. Pearson's Chi-Square Test was conducted to verify the initial assumption.

Table 4.13 Chi-Square Test for access to information

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1.200E2 ^a	2	.000
Likelihood Ratio	164.718	2	.000
Linear-by-Linear Association	106.675	1	.000
N of Valid Cases	120		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 6.18.

The result on table 4.13 showed a significant relationship between access to information and participation in the bio-fuel project as the calculated Pearson's Chi-Square is less than 0.05. This finding was supported by a similar finding by Chesoh, 2010, asserted that higher ability of accessing information was statistically significant related with participation of community in development projects.

From the above presentations, it can be said that a significant portion of the community did not have access to information concerning the benefits of the bio-fuel development project. Besides, most of the members of the community who denied information confirmed that their lack of

information significantly hindered them from participation. Supplementing to this, findings from the focus groups' discussions and key informant interviews confirmed that there was not awareness creation and information dissemination among the beneficiaries on the benefits of the bio-fuel project in the respective weredas. Besides, the focus group discussions confirmed that the development agents who were supposed to assist the farmers did not have technical knowledge of the bio-fuel plantation. Thus, it is unusual to expect public participation without calling a benefit. Further, it is believed that informing citizens of their rights, responsibilities and options can be the most important first step toward legitimate citizen participation (Anna, 2010). Therefore, it is evident that access to information/knowledge affected communities' participation.

Table 4.14: Respondents' compromised occupational interests and participation

S/N	Variables	N=120	
		Frequency	Percentage
1	Do you think that there are interests that are compromised because of your participation in the bio-fuel development project?		
	Yes	61	50.8
	No	59	49.2
	Total	120	100
2	If yes, what are the interests that possibly be compromised?		
	Free grazing lands	38	62.3
	Farmland expansion	10	16.4
	It adds extra work	1	1.6
	Time that may have been allocated for other high income generating activities	12	19.7
	Total	61	100
3	Do you feel that the compromised interests hinder your participation in the bio-fuel development project of your locality?		
	Yes	39	63.9
	No	22	36.1
	Total	61	100

Source: Survey data, September 2012

The above table disclosed that 50.8% of the respondents believed there were occupational interests that were compromised because of their participation in the bio-fuel development project. Further, table 4.14 showed the distribution as 62.3%, 19.7%, 16.4%, and 1.6% of the respondents claimed that the possible compromised occupational interests were: free grazing lands, time that may have been allocated for other high income generating activities, farmland expansion, and addition of extra work respectively. Moreover, respondents were asked whether they feel that the compromised interests hindered their participation in the bio-fuel development project, hence 63.9% of the respondents confirmed that the compromised interests hindered their participation. Pearson's Chi-Square Test was conducted to verify the initial assumption.

Table 4.15: Chi-Square Test for Compromised Occupational Interests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1.200E2 ^a	2	.000
Likelihood Ratio	166.322	2	.000
Linear-by-Linear Association	101.319	1	.000
N of Valid Cases	120		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 10.82.

The result on table 4.15 revealed a significant relationship between compromised occupational interests and participation in the bio-fuel project as the calculated Pearson's Chi-Square is less than 0.05. This finding was supported by Angba et al, 2009 stated in their research article that some relationship exist significantly between socio-economic factors like occupation and participation in development projects.

From the above analysis, it can be inferred that as the majority of the respondents' occupation was mixed farming, i.e. crop production supplemented by animal husbandry, free grazing land was their major compromised interest as a result of the bio-fuel development project since the plantation has been done in communal lands. Thus, it is evident that the compromised interest in turn hindered some of the community members from participation in the bio-fuel development project. Therefore, as it has been concluded earlier, since the community was not communicated well about the diversified individual and societal benefits of the bio-fuel development project, it would not be surprising for some of the community members to think their interests were compromised and in consequence to detach themselves from participating.

4.6 Respondents' perception on local leaders' influence and participation

As mentioned elsewhere in this paper, it is widely believed that decentralization is a major instrument for public participation at grass roots level development affairs. In light of this, it is true that in Ethiopia power is constitutionally devolved among and between regional states, weredas and kebeles/tabias so that the people may be able to participate directly and indirectly in all socio-economic and political affairs that concerns their communal life. Accordingly, considering the fundamental idea that community participation being the central to ensuring citizens own development, in Tigray regional state and other respective parts of the country, development groups were being established so that to ensure their participation in any development activities. However, it is apparent that the grass-root level leadership can influence positively or negatively to impact the movement of the development groups. To this effect,

therefore, this study tried to grasp the perception of the respondents on local leaders' influence on their participation in local development projects/activities. Thus, the results are presented in table 4.16 below.

Table 4.16: Respondents' perception on local leaders' influence and participation

S/ N	Variables	N=120	
		Frequency	Percentage
1	What are the roles being played by Tabia/wereda leaders in promoting participation?		
	Let know the community about a decision made by higher authorities	17	14.2
	Enable the community to discuss on priority issues and seek collective decision for solutions	44	36.7
	Let the community to decide on the type of participation to be involved	15	12.5
	Inform the community about possible benefits of a development project	23	19.2
	All the above	19	15.8
	Nothing of the above	2	1.7
	Total	120	100
2	How often do the leaders themselves participate in development projects?		
	Always	57	47.5
	sometimes	58	48.3
	rarely	5	4.2
	Total	120	100
3	To what extent have tabia leaders influenced you to participate in development projects?		
	To a great extent	36	30
	To some extent	68	56.7
	Rarely	16	13.3
	Total	120	100
4	Whatever the influencing level is, how do the tabia leaders exert their influence so that you can participate in local development projects?		
	By convincing me in discussions that are held at tabia level	62	51.7
	By enabling development groups to discuss the benefits of the development projects	43	35.8
	By giving material incentives (payments) for participation	11	9.2
	By forcing	2	1.7
	others	2	1.7
	Total	120	100

S/ N	Variables	N=120	
		Frequency	Percentage
5	How often do the government sectors seek consent of the community in a locality for launching any development projects?		
	always	59	49.2
	sometimes	58	48.3
	rarely	3	2.5
	Total	120	100

Source: Survey data, September 2012

Table 4.16 above indicated that respondents' perception on roles played by tabia or wereda leaders in promoting participation is distributed as: 36.7%, 19.2%, 14.2%, and 12.5% of the respondents perceived the role as to enable the community to discuss on priority issues and seek collective decision for solutions; to inform the community about possible benefits of a development project; to let know the community about a decision made by higher authorities; and to let the community to decide on the type of participation to be involved respectively. Likewise, 15.8% of the respondents perceived the role to be played upon as all the aforementioned responsibilities. Further, the above table indicated that 47.5% of the respondents claimed leaders always participate in development projects while 48.3% of the respondents said that the leaders sometimes participate in development projects. Moreover, on the extent of tabia leaders' influence on respondents' participation, 30% of respondents claimed that their influence is to a great extent while the majority (56.7%) of the respondents disclosed that they were influenced by tabia leaders to some extent. Furthermore, whatever the influencing level it is, table 4.16 disclosed that the mode of influence of the tabia leaders varies. Thus, 51.7% and 35.8% of the respondents declared that the mode of influencing was by convincing individuals at discussions that were held at tabia level and by enabling development groups to discuss the benefits of the development projects respectively. In addition, table 4.16 discovered that while

answering the question 'how often do the government sectors seek consent of the community in a locality for launching any development projects', 49.2% and 48.3% of the respondents replied always and sometimes respectively.

In conclusion, from the above discussion it can be said that although the community perceived that there was an important role to be played by the tabia leaders in mobilizing participation, the leaders themselves were not model participants as they were mainly participating either sometimes or rarely. As a result they could not able to exert a meaningful influence on the community to realize participation. Besides, from the discussion it can be also inferred that in most of the cases government agencies did not seek consent of the local people whenever a development project was launched.

Chapter 5 Conclusion and Recommendations

5.1 Conclusion

Assessing practice of the communities towards participation in local development projects with special focus on the bio-fuel development project is one of the objectives of this study. Thus, the study found that most of community members were participants in their respective development groups although not all of them were attending regular meetings of their respective groups. Development groups are assumed to be appropriate mediums to ensure community's participation in all aspects of development activities as such groups are designed to bring farmers together in to groups and enable them to discuss on issues that affect their livelihoods. However, although most of the farmers were members of development groups, there was no real contribution of development groups in mobilizing members for participation in case of the bio-fuel development project. To this effect, therefore, it can be concluded that the diversified benefits (such as economic and environmental benefits) of the bio-fuel development project were not perceived enough by the local community.

Participation of beneficiary communities in development projects can vary from mere attendance to active involvement in the decision making process. Accordingly, to find out communities' level of participation in local development projects is one objective of this study. In this regard, the study disclosed that usually the community was consulted whenever a development project has been initiated although the scenario was to the contrary in the case of the bio-fuel development project. But mere consultation is not enough. The community should have been made to participate fully in all stages of a development project cycle.

Furthermore, although there were development activities which demanded community decisions and prioritization, findings of this study discovered that notably projects were decided and prioritized by the tabia leaders without considering the consent of the respected community.

As there are some socio-economic factors that hinder the active participation of community in local development projects, one major objective of this study is to identify these possible factors that affect the extent of participation of local community. Hence, material incentive is found to be the most motivating factor in this case. Consequently, income is found to be one of the major factors that affect community participation in development projects. Particularly in the case at hand, participants expected income generated from the sales of oilseeds and other secondary income generated from animal feed and bee keeping as a result of bio-fuel plantation activities. However, the sales price of the bio-diesel oilseeds offered by the relevant company (API) was not attractive, hence hindered the community's participation.

Access to information/knowledge is one among the socio-economic factors that affect participation. A significant portion of the community did not have access to information concerning the benefits of the bio-fuel development project. In addition, the development agents who were supposed to assist the farmers did not have technical knowledge of the bio-fuel plantation. Consequently, lack of information/knowledge significantly hindered the community from participation. Communication calls a benefit to guarantee beneficiaries' involvement. Therefore, it is unthinkable to expect community participation unless information is provided to create awareness and knowledge among the beneficiary community.

As the livelihood of the community in the study area is based on crop production and animal husbandry, it is found that there were compromised interests like demand for free grazing land and expansion of farm land. These compromised interests are directly related with the major occupation of the community which is mixed farm. Therefore, since the community was not communicated well about the broad personal and communal (environmental) benefits of the bio-fuel development project, it had a reason to think compromised personal interests would outweigh, hence hindered the community from participating in the development project.

Finally, it is found that the tabia leaders could not able to exert a meaningful influence on the community to realize participation, because the leaders themselves were not model participants to gain public confidence in this regard.

5.2 Recommendations

There is a dominant consensus that by involving people actively in the development process, the production of economic and social progress is accelerated. It also leads to sustainable development as it is mutually agreed upon action between all stakeholders. More to the point, uplifting of socio-economic condition of rural community can only be achieved whenever there is significant and meaningful involvement of the local community in development projects. Therefore, in order to improve the level of community participation in development projects, the following recommendations may be the major areas of intervention.

- **Building positive attitude towards the bio-fuel development project:** as it is found that the attitude of the local community and local leaders towards the bio-fuel development project is meager, bringing about attitudinal change among the ultimate beneficiaries should be a priority intervention. To realize this intervention development groups at grass root level should be strengthened and mobilized in this regard.
- **Community consultation:** whenever a development project like the bio-fuel development is initiated the community should be consulted. It should have say as this is the first step towards participation. Tabia or wereda leaders should not made decisions and prioritizations disregarding the consent of the ultimate benefiting community as development projects are meant for the people.
- **Improve level of participation:** full community participation at all levels of a project cycle is very important in ensuring sustainability. Thus, the community should participate starting from idea generation through project planning to implementation as well as monitoring and evaluation in different ways. In case of the bio-fuel development project, the community should show participation practically: by pitting for seedlings, planting, watering, weeding, pruning, and protecting from animal overstep among others.
- **Access to information and knowledge:** it has been found that a significant portion of the community did not have access to information and knowledge concerning the benefits of the bio-fuel development project. Thus, a communication strategy should be in place so that information and knowledge would be disseminated among the benefiting community and other relevant facilitating agencies.
- **Income generation:** fundamentally, projects are being designed to improve the livelihood of the community by increasing income generating opportunities in a locality.

Likewise, the bio-fuel development project's one major objective was to create diversified income generating opportunities among the beneficiaries. However, it was found that the oilseeds price offered by the relevant company (API) was not attractive enough to pull people to be engaged in the bio-fuel plantation. Hence, mechanisms should be devised by introducing different product outputs to increase the price for the oilseeds.

- **Communal land/hillside utilization:** to utilize communal lands and hillsides for the bio-fuel development purpose, the landless rural young people should be organized in enterprises and made own the land on lease basis so that they can manage the land properly and produce oilseeds sustainably.
- **Private marginal land:** individual farmers should be made to use their marginal lands for bio-fuel plantation so that they may able to diversify their income and in fact, protect the environment thereby.
- **Local leaders should be role models:** to influence the community in a positive way, local leaders should be role models. Practically they should be engaged in the bio-fuel plantation activities in order to lead their followers in the desired direction.
- **Capacity building activities:** to enhance the community's participation in the bio-fuel development project, capacity building activities such as experience sharing programs, skill training packages and the like should be designed and undertaken among the community, local leaders, development agents and other relevant stakeholders in this regard.

References

African Development Bank /ADB/, (2001), Handbook on Stakeholder Consultation and Participation in ADB Operations

African Power Initiative Tigray project, (2011), Project Status Report

Angba, A. O., Adesope, O. M. & Aboh, C. L. (2009), Effect of Socioeconomic Characteristics of Rural Youths on Their Attitude Towards Participation in Community Development Projects, International NGO Journal Vol. 4 (8)

Assefa Abreha, Getachew Tikubet and Johann Baumgartner, (2003), Resource management for Poverty Reduction: Approaches & Technologies- Selected Contributions to Ethio-Forum 2002, Ethiopian Social Rehabilitation and Development Fund(ESRDF), Adiss Ababa.

Bernard van Heck, FAO: (2003), Participatory Development: Guidelines on Beneficiary Participation in Agricultural and Rural Development, Food and Agriculture Organization of the United Nations, Rome, Italy.

Chesoh, Sarawuth, (2010), Community Perception, Satisfaction and Participation toward Pauer Plant Development in Southernmost of Thailand, Journal of Sustainable Development, Vol. 3, No. 2; June 2010

Dilshad, T., Yasin, G. & Fani, M. I. (2010), Impact of Socio-Economic Factors on Participatory Community Development: A case of Tehsil Dera Ghazi Khan, European Journal of Social Sciences, Vol. 18, No. 2, 2010

Eusebio M. Saide, (2006), Community Building for Economic Empowerment in Rural Mozambique: an Exploratory Study in the Maganja da Costa District, MA thesis, University of Stellenbosch

Fitsum Hagos, J. Pender and Nega Gebreselassie, (2002), Land Degradation and Strategies for Sustainable Land management in the Ethiopian Highlands: Tigray Region, Socio-economic and policy research Working Paper No. 25, ILRI

Gustavo Anriquez and Kostas Stamoulis (2007), Rural Development and Poverty Reduction: Is Agriculture Still the Key?, ESA Working Paper No. 07-02, FAO, Retrieved November, 2011 from www.fao.org/es/esa

Harold Lockwood, Alex Bakalian, Wendy Wakeman, Assessing Sustainability in Rural Water Supply: the Role of follow-up Support to Communities, a report funded by Bank-Netherlands Water Partnership (BNWP), retrieved on January 2012 from <http://www.aguaconsult.co.uk/uploads/pdfs/WBAssessingSustainability.pdf>

Indira Gandhi National Open University, (2005), Rural Development- Concept, Strategies and Experiences, School of Continuing Education, New Delhi.

Jim Cavaye, Understanding Community Development, Retrieved November, 2011 from www.communitydevelopment.com.au/.../Understanding%20Community%20Development.pdf

Kola-Tembien Wereda Office of Agriculture and Rural Development, (2012), Annual Report, unpublished, Abi-Adi

Leidreiter, Anna (2010), Community Participation in Common natural Resource Management in the Lake Tana Watershed, Ethiopia, University of Amsterdam, MSc. Thesis.

Michael Kenny, (2003), Social and Economic Aspects of Policy and Planning, Module 21, BSc Rural Development by Distance Learning, National University of Ireland, Retrieved on December, 2011 from <http://eprints.nuim.ie/1177/1/MKMod.pdf>

MOU, (2008) Memorandum of Understanding on Joint Bio-fuel, Energy, Agro and Industrial Development between African power Initiative, INC and Regional State of Tigray

National Regional State of Tigray Bureau of Urban Development, Trade and Industry, (2009), Investment Opportunities in Tigray, Investment Promotion Core Process

Nisha, K. R (2006) Community Participation in Rural Water Supply: an Analysis using Household Data from North Kerala, Working Paper, No.173. Institute for Social and Economic Change.

Patrick Dattalo, (2008), Determining Sample Size: Balancing Power, Precision and Practicability, Oxford University Press Inc., New York.

“Rural Development: The Meaning”, Retrieved December 2011 from <http://www.adb.org/Documents/Books/Rural-Development-Outcomes-Drivers/Chapter-II.pdf>

Sarawuth Chesoh, (2010) Community Perception, Satisfaction and Participation toward Power Plant Development in Southernmost of Thailand, Journal of Sustainable Development, Vol. 3 No. 2, June 2010, retrieved in September 2011 from www.ccsenet.org/jsd

Sheikh Noor Mohammad (2010), People’s Participation in Development Projects at Grass-root Level: a Case Study of Alampur and Jagannathpur Union Parishad, MA Thesis, North South University, Bangladesh.

Tagel Gebrehiwot, (2008), Rural Food Security inTigray, Ethiopia: Policy Impact Evaluation, International Institute for Geo-information Science and Earth Observation, Netherlands, MA Thesis,

Tango International, (2009), Sustainability of Rural Development Projects: Best Practices and Lessons Learned by IFAD in Asia, Occasional Papers, IFAD

Tanqua-Abergele Wereda Office of Agriculture and Rural Development, (2012), Annual Report, unpublished, Yechila

Terefe Degeti, (2003) Factors Affecting People’s Participation in Participatory Forest Management: The case of IFMP Adaba-Dodola in Bale zone of Oromia Region, Addis Ababa University, MA Thesis

Tigray Food Security Coordination Office (TFSCO), (2000), Vulnerability Profile, Strengthening Emergency Response Abilities (SERA) Project, Tigray

Tigray Regional State Bureau of Planning and Finance, (2010), Five Years (2010/11-2014/15) Growth and Transformation Plan, Mekelle

UNFPA, (2008) Summary and Statistical Report of the 2007 Population and housing Census, Federal Democratic Republic of Ethiopia Population Census Commission, Addis Ababa

V.K. Bhatia and S.C. Rai (2004) Evaluation of Socio-economic Development in Small Areas, Project Report, New Delhi

Wall, Leah J, Pettibone, Timothy J. & Kelsey, Kathleen D. (2005), The Impact of Socioeconomic Status on Leadership Potential in an Agricultural Leadership Program, Journal of Southern Agricultural Education Research, Vol. 55, No. 1

Züger Cáceres (2005), Participatory Development Projects in The Andes-Looking for Empowerment with Q-Methodology, Script presented at PRGA Impact Assessment Workshop, October 19-21, 2005, CIMMYT Headquarters, Mexico

<http://en.wikipedia.org>, accessed February, 2012

<http://www.is.cityu.edu.hk/staff/isrobert/phd/ch3.pdf>, accessed February, 2012.

www.businessdictionary.com/definition/socioeconomic, accessed August 05, 2012.

<http://en.wikipedia.org> accessed on 05 Aug. 2012

Annexes

Annex 1

Household Community Participation Assessment Survey Questionnaire

The questionnaire is designed for the purpose of collecting data from the grass-roots level with the objective of assessing socio-economic factors that affect people's participation in rural development projects with special emphasis on the Bio-fuel development project in Tanqua-Abergele and Kola-Tembien weredas of Tigray. The information that you provide is critically important for this research output and in fact for future mobilizing participation for rural development projects. In this light, therefore, please provide accurate information.

Instruction: Enumerator should circle on the letter that provides the answer.

Date of interview _____ Enumerator's name _____

Code:

I. Personal information

1. Age
 - a. 15-25
 - b. 26-35
 - c. 36-45
 - d. 46-55
 - e. 55 and above
2. Sex
 - a. Female
 - b. Male
3. Marital status
 - a. Unmarried
 - b. Married
 - c. divorced
 - d. Widowed
4. Educational level
 - a. Illiterate
 - b. Literate
 - c. Elementary school completed
 - d. Secondary school completed
 - e. Preparatory school completed
 - f. Others (specify)
5. Major occupation
 - a. Crop production

- b. Livestock production
- c. Mixed farming
- d. labor
- e. Others (specify)

II. Attitude and perception of people towards participation

6. Are you a member of any development group in your Tabia?
- a. Yes
 - b. No
7. If your answer for Q.6 is yes, how often did the development group held meetings?
- a. Every week
 - b. Every month
 - c. Every quarter
 - d. Twice a year
 - e. Every year
8. How often do you attend the meetings?
- a. Regularly
 - b. Sometimes
 - c. Whenever I am idle
 - d. Not attending
9. What is the nature of the development meetings?
- a. Participatory
 - b. Partially participatory
 - c. Non-participatory
10. If you are a member of development group, what do you do in group?
- a. We participate in soil and water conservation on free will
 - b. We participate in reforestation activities on free will
 - c. We participate on constructing of schools and health posts on free will
 - d. We regularly discuss on problematic issues and seek solutions
 - e. We raise fund for development projects
 - f. We do all the above whenever necessary
 - g. We do nothing of the above

11. If you are involved in all or some of the activities mentioned above as a group or member of a group, how you come to such involvement?
- Motivated by tabia leaders
 - Motivated by DAs
 - Because it is mandatory to participate
 - The development group discusses and decides unanimously to participate
 - Others (Specify)
12. What do you feel while you are participating on free basis in development activities?
- Very happy
 - Somewhat happy
 - Indifference
 - Not happy
13. What is your perception towards bio-fuel plantation in your tabia in terms of conserving forest and reclaiming the environment?
- It is very important
 - It is somewhat important
 - It is not important
 - I don't have idea
14. Are you supportive of the bio-fuel plantation project operating in your tabia?
- Yes
 - Not in favor
 - indifferent
15. If you are supportive how are you participating in the bio-fuel plantation project?
- Planting on communal lands
 - Planting and watering
 - Protecting from animals
 - Planting, watering and protecting from animals
 - Only collecting seeds
 - Others (specify)
16. What do you get immediately for your participation in return?
- I'm paid money by the project staff
 - Paid from the safety net program
 - No immediate return in the form of money or in kind

d. Others (specify)_____

17. Who motivates you to participate in the bio-fuel plantation project?

- a. Tabia leaders
- b. DAs
- c. The group decides
- d. Wereda leaders
- e. Project staff
- f. market price of selling oil seeds

III. Extent/Level of participation

18. Have you been consulted whenever a development project is initiated to be implemented in your locality?

- a. Yes
- B. No

19. Did you participate in planning of any development project which is undertaken in your locality?

- a. Yes
- b. No

20. Did you participate in any ways in implementation of any development project in your locality?

- a. Yes
- b. No

21. Did you participate in any ways in monitoring and evaluation of any development projects in your locality?

- a. Yes
- b. No

22. If you have participated in any stage of the development project cycle, did your views considered enough?

- a. Yes
- b. No

23. In which stage of participation do you think involved well?

- a. Idea generation
- b. Planning
- c. Decision making
- d. Implementation
- e. In monitoring and evaluation
- f. In some of the above mentioned stages
- g. In all of the above mentioned stages
- h. None

24. In most of the cases who makes decisions concerning development activities in your locality?

- a. Tabia leadership
- b. Wereda leadership

- c. Community
 - d. Project owners
 - e. I don't know
25. How are Tabia development issues prioritized?
- a. By the community discussion
 - b. By the decision of the Tabia leaders
 - c. By the decision of the wereda leaders
 - d. I don't know
26. How do you rate your participation in the bio-fuel development project in your locality?
- a. Low
 - b. Medium
 - c. High
 - d. No participation

IV. Socio-economic Factors affecting participation

27. What motivates you to participate in any development activities?
- a. Mental satisfaction
 - b. Material benefits
 - c. Social status
 - d. Others (specify)
28. Do you normally expect any incentives from participating in development projects?
- a. Yes
 - b. No
29. If your answer is yes for Q. 28 what type of incentives do you expect for your participation in development projects?
- a. Appreciation and recognition by the leadership
 - b. Material incentives
 - c. Others (specify)
30. Do you expect individual benefits if you are involved in bio-fuel development project in your locality?
- a. Yes
 - b. No
31. If your answer for Q. 30 is yes, what are the benefits you expect?
- a. Benefit from reforestation/greenery
 - b. Benefit from soil conservation
 - c. Income by selling oilseeds
 - d. Secondary income generation like animal feed, bee keeping ect.
 - e. Others (specify)

32. Do the benefits you expected initiate you to participate in the bio-fuel development project?
- a. Yes
 - b. No
33. Do you think that there are interests that are compromised because of your participation in the bio-fuel development project/
- a. Yes
 - b. No
34. If your answer to Q. 33 is yes, what are the interests that possibly be compromised?
- a. Free grazing lands
 - b. Farmland expansion
 - c. It adds extra work
 - d. Time that may have been allocated for other high income generating activities
 - e. Others (specify)
35. Do you feel that the compromised interests hinder your participation in the bio-fuel development project of your locality?
- a. Yes
 - b. No
36. Have you ever been informed about the benefits of the bio-fuel development project in your locality?
- a. Yes
 - b. No
37. If your answer to Q. 36 is No, do you feel that your Knowledge of the benefits of the bio-fuel hinders your participation?
- a. Yes
 - b. No
38. What do you feel about the current price of oil seeds (jatropha, castor, croton etc) per kilogram/ offered by the buyers?
- a. Very good
 - b. Somehow good
 - c. Very low
 - d. No idea
39. Do you feel that the price offered hinders your participation in the bio-fuel development project in your locality?
- a. Yes
 - b. No

V. Role of leaders, staff

40. What are the roles being played by tabia/wereda leaders in promoting participation

- a. Let know the community about a decision made by higher authorities
- b. Enable the community to discuss on priority issues and seek collective decision for solutions
- c. Let the community to decide on the type of participation to be involved
- d. Inform the community about possible benefits of a development project
- e. Others (specify)

41. How often do the leaders themselves participate in development projects?

- a. Always
- b. Sometimes
- c. rarely

42. To what extent have tabia leaders influenced you to participate in development projects?

- a. To a great extent
- b. To some extent
- c. Rarely

43. Whatever the influencing level is, how do the tabia leaders exert their influence so that you can participate in local development projects?

- a. By convincing me in discussions that are held at atbia level
- b. By enabling development groups to discuss the benefits of the development projects
- c. By giving material incentives (payment) for participation
- d. By forcing
- e. Others (specify) _____

44. How often do the government sectors seek the consent of the community in a locality for launching any development projects?

- a. Always
- b. sometimes
- c. rarely

Annex 2

Tabia Leaders Community Participation Assessment Survey Questionnaire

The questionnaire is designed for the purpose of collecting data from the grass-roots level with the objective of assessing socio-economic factors that affect people's participation in rural development projects with special emphasis on the Bio-fuel development project in Tanqua-Abergele and Kola-Tembien weredas of Tigray. The information that you provide is critically important for this research output and in fact for future mobilizing participation for rural development projects. In this light, therefore, please provide accurate information.

Instruction: Enumerator should circle on the letter that provides the answer.

Date of interview _____ Enumerator's name _____

Code:

I. Personal information

1. Age
 - a. 15-25
 - b. 26-35
 - c. 36-45
 - d. 46-55
 - e. 55 and above
2. Sex
 - a. Male
 - b. Female
3. Marital status
 - a. Unmarried
 - b. Married
 - c. divorced
 - d. widowed
4. Educational status
 - a. Illiterate
 - b. Literate
 - c. Elementary school completed
 - d. Secondary school completed
 - e. Preparatory school completed
 - f. Others (specify)
5. Occupation
 - a. Crop production
 - b. Livestock production
 - c. Mixed farming
 - d. labor
 - e. Others (specify)
6. Leadership position
 - a. Chair person

- b. Tabia manager
- c. Community organizer
- d. Tabia PR
- e. Others (specify)

II. General information

7. Does any discussion take place in the tabia before launching any project?
 - a. Yes
 - b. No
8. Are the local people involved in project planning and implementation
 - a. Yes
 - b. No
9. If the answer is yes, how are they involved?
 - a. Labor contribution
 - b. Material contribution
 - c. Money contribution
 - d. Providing opinion
 - e. Providing decision
 - f. Others (specify)
10. Do the local political institutions (such as tabia council, tabia cabinet) exert any influence in selecting and implementing development projects?
 - a. Yes
 - b. No
11. How do you determine the priorities of development projects in your tabia?
 - a. The community decides
 - b. The tabia leadership decides on behalf of the community
 - c. The tabia simply accepts what is decided by the wereda
 - d. Others (specify)
12. Is there any evidence where local people disagree /reluctant in participation of development projects?
 - a. Yes
 - b. No
13. If your answer to Q No. 12 is yes, can you mention some of the evidences?
 - a. _____
 - b. _____
 - c. _____
 - d. _____
14. What are the socio-economic factors that influence in participation of local people in development projects?
 - a. money
 - b. Awareness
 - c. Literacy level
 - d. All the above

- e. Others (specify)
15. What are the socio-economic factors that influence in non-participation of local people in development projects?
- a. illiteracy
 - b. ignorance
 - c. social status
 - d. economic status
 - e. all the above
 - f. others (specify)
16. To what extent does the tabia leadership involve itself in the bio-fuel development project?
- a. To a great extent
 - b. To some extent
 - c. Hardly
 - d. None
17. Do you think that people's organizations are necessary for promoting participation in local development activities?
- a. Yes
 - b. No
 - c. I do not know
18. If your answer is yes, what type of organizations do you think are necessary?
- a. Youth association
 - b. Women's association
 - c. Farmers' association
 - d. All the above
 - e. Others (specify)
19. How often do project initiators seek your consent for starting any development project in your locality?
- a. Always
 - b. Sometimes
 - c. Rarely
20. How important do you feel is the involvement of people in the bio-fuel development project?
- a. Very important
 - b. Somehow important
 - c. Not practicable

21. What do you think hinders people from participating in the bio-fuel development project in your tabia?
- a. Lack of sufficient time
 - b. Economic status
 - c. Lack of awareness of the benefits
 - d. Market price of the oilseeds
 - e. Others (specify)
22. What sort of involvement do you expect from people in development projects in general?
- a. Participation in planning, implementing, controlling etc
 - b. Contribution in cash/kind
 - c. Spreading awareness on the need for participation
 - d. All the above
 - e. Others (specify)
23. What sort of involvement do you expect from people in particular for the bio-fuel development project in your locality?
- a. Participation in planning, implementing, controlling etc
 - b. Contribution of labor for the plantation
 - c. Spreading awareness on the need for participation
 - d. All the above
 - e. Others (specify)
24. Are you satisfied with the involvement of people in the bio-fuel development project?
- a. Yes
 - b. No
 - c. I cannot say
25. If not satisfied, what do you suggest is good to incorporate all community members in the bio-fuel development project?
- a. Let the community know well about the benefits of bio-fuel plantation
 - b. Let the project (API) increase the price of the oilseeds
 - c. Let the wereda office of Agriculture and Rural Development pay on time the labor commissioned by productive safety net
 - d. Others (specify) _____

Annex 3

Community Participation Assessment Open-ended Interview Questions

For Wereda officials and tabia DAs

1. How often do project initiators seek your consent for starting any development project in your locality?
2. Does any discussion take place in the wereda/tabia before launching any project?
3. Are the local people involved in project planning and implementation? How?
4. Is there any evidence where local people disagree /reluctant in participation of development projects?
5. What are the factors that influence in participation or non-participation of local people in development projects?
6. How important do you feel is the involvement of people in the bio-fuel development project?
7. What sort of involvement do you expect from people in particular for the bio-fuel development project in your locality?
8. Are you satisfied with the involvement of people in the bio-fuel development project?
9. If not satisfied, what do you suggest is good to incorporate all community members in the bio-fuel development project?
10. What do you think hinders people from participating in the bio-fuel development project in your wereda/tabia?
11. To what extent does the tabia leadership involve in the bio-fuel development project?
12. What do you think is appropriate for you (wereda/tabia staff) to contribute so that the community may be able to participate in local development projects?
13. What mechanisms (if any) are you employing in order to motivate people to participate in the bio-fuel development project in your wereda/tabia?
14. What forestry tree (crop) do you see as a priority in your wereda/tabia? Please rank 3-4 and justify your ranking.

Annex 4

Community Participation Assessment Open-ended Interview Questions

For API project staff

1. How important do you feel is the involvement of people in the bio-fuel development project?
2. What sort of involvement do you expect from people in particular for the bio-fuel development project?
3. Are you satisfied with the involvement of people in the bio-fuel development project?
4. If not satisfied, what do you suggest is good to incorporate all community members in the bio-fuel development project?
5. What do you think hinders people from participating in the bio-fuel development project?
6. To what extent and how the wereda staff, DAs and tabia leadership you think should be involved in the bio-fuel development project?
7. What is your general observation with regard the involvement of the wereda/tabia government staff in motivating people for participation in the bio-fuel development project?
8. Have you ever approached the tabia level leadership to solicit support in regard of community participation in the bio-fuel development project? If no why? If you have approached what are the feedbacks you received?
9. What do you think is that you feel you failed to do in order to bring about community participation of the local community in the bio-fuel development project?
10. What do you think is appropriate for the relevant government bodies at regional, wereda and tabia level to do in the future so that the community could be able to participate in the bio-fuel development project?

Annex 5:

Community Participation Assessment Focus group Discussion Points

1. How important do you feel is the involvement of people in the bio-fuel development project?
2. What sort of involvement do you expect from people in particular for the bio-fuel development project in your locality?
3. To what extent and how the wereda staff, DAs and tabia leadership you think should be involved in the bio-fuel development project?
4. What do you think hinders people from participating in the bio-fuel development project?
5. What is your general observation with regard the involvement of the wereda/tabia government staff in motivating people for participation in the bio-fuel development project?
6. What do you think is appropriate for the relevant government bodies at regional, wereda and tabia level to do in the future so that the community could be able to participate in the bio-fuel development project?

Annex 6:

Tables of results of survey data

6.1 Factors affecting participation

Do you feel that the price offered hinders your participation in the bio-fuel development project in your locality?

		Respondent's wereda address		Total
		Tanqaabergele	Kolatenben	
Do you feel that the price offered hinders your participation in the bio-fuel development project in your locality?	Yes	5	34	39
	No	55	26	81
Total		60	60	120

Have you ever been informed about the benefits of the bio-fuel development project in your locality?

		Respondent's wereda address		Total
		Tanqaabergele	Kolatenben	
Have you ever been informed about the benefits of the bio-fuel development project in your locality?	yes	37	30	67
	No	23	30	53
Total		60	60	120

If your answer is no, do you feel that your knowledge of the benefits of the bio-fuel hinders your participation?

		Respondent's wereda address		Total
		Tanqaabergele	Kolatenben	
If your answer is no, do you feel that your knowledge of the benefits of the bio-fuel hinders your participation?	Yes	11	28	39
	No	12	2	14
	not applicable	37	30	67
Total		60	60	120

Do you think that there are interests that are compromised because of your participation in the bio-fuel development project?

		Respondent's wereda address		Total
		Tanqaabergele	Kolatenben	
Do you think that there are interests that are compromised because of your participation in the bio-fuel development project?	Yes	20	41	61
	NO	40	19	59
Total		60	60	120

If your answer is yes, what are the interests that possibly by compromised?

		Respondent's wereda address		Total
		Tanqaabergele	Kolatenben	
If your answer is yes, what are the interests that possibly by compromised?	Free grazing lands	8	30	38
	Farmland expansion	1	9	10
	It adds extra work	1	0	1
	Time that may have been allocated for other high income generating activities	10	2	12
	not applicable	40	19	59
Total		60	60	120

Do you feel that the compromised interests hinder your participation in the bio-fuel development project of your locality?

		Respondent's wereda address		Total
		Tanqaabergele	Kolatenben	
Do you feel that the compromised interests hinder your participation in the bio-fuel development project of your locality?	Yes	4	35	39
	NO	16	6	22
	not applicable	40	19	59
Total		60	60	120

Do you expect individual benefits if you involved in bio-fuel development project in your locality?

		Respondent's wereda address		Total
		Tanqaabergele	Kolatenben	
Do you expect individual benefits if you involved in bio-fuel development project in your locality?	Yes	37	50	87
	No	23	10	33
Total		60	60	120

If your answer is yes, what are the benefits you expect?

		Respondent's wereda address		Total
		Tanqaabergele	Kolatenben	
If your answer is yes, what are the benefits you expect?	Benefit from reforestation	10	9	19
	Benefit from soil and water conservation	4	5	9
	Income by selling oilseeds	4	34	38
	Secondary income generation like animal feed, bee keeping, etc	18	2	20
	1&3	1	0	1
	not applicable	23	10	33
Total		60	60	120

Do the benefits you expected initiate you to participate in the bio-fuel development project?

		Respondent's wereda address		Total
		Tanqaabergele	Kolatenben	
Do the benefits you expected initiate you to participate in the bio-fuel development project?	Yes	33	42	75
	No	4	8	12
	not aplicable	23	10	33
Total		60	60	120

What motivates you to participate in any development activities?

		Respondent's wereda address		Total
		Tanqaabergele	Kolatenben	
What motivates you to participate in any development activities?	Mental satisfaction	38	31	69
	Material Benefits	18	20	38
	Social status	4	8	12
	Others	0	1	1
Total		60	60	120

Do you normally expect any incentives from participating in development projects?

		Respondent's wereda address		Total
		Tanqaabergele	Kolatenben	
Do you normally expect any incetives from participating in development projects?	Yes	37	45	82
	No	23	15	38
Total		60	60	120

If your answer is yes, what type of incetives do you expect for your participation in development projects?

		Respondent's wereda address		Total
		Tanqaabergele	Kolatenben	
If your answer is yes, what type of incetives do you expect for your participation in development projects?	Appreciation and recognition by the leadership	11	7	18
	Mterial incetives	26	38	64
	not aplicable	23	15	38
Total		60	60	120

6.2 Level of participation

Have you been consulted whenever a development project is initiated to be undertaken in your locality?

Count		Respondent's wereda address		Total
		Tanqaabergele	Kolatenben	
Have you been consulted whenever a development project is initiated to be undertaken in your locality?	yes	46	58	104
	No	14	2	16
Total		60	60	120

Did you participate in planning of any development project which is undertaken in your locality?

Count		Respondent's wereda address		Total
		Tanqaabergele	Kolatenben	
Did you participate in planning of any development project which is undertaken in your locality?	Yes	45	57	102
	No	15	3	18
Total		60	60	120

Did you participate in any ways in implementation any development project in your project?

Count		Respondent's wereda address		Total
		Tanqaabergele	Kolatenben	
Did you participate in any ways in implementation any development project in your project?	Yes	58	59	117
	No	2	1	3
Total		60	60	120

Did you participate in any ways in monitoring and evaluation of any development projects in your locality?

		Respondent's wereda address		Total
		Tanqaabergele	Kolatenben	
Did you participate in any ways in monitoring and evaluation of any development projects in your locality?	Yes	49	56	105
	No	11	4	15
Total		60	60	120

If you participated in any stage of the development project cycle, did your views considered enough?

		Respondent's wereda address		Total
		Tanqaabergele	Kolatenben	
If you participated in any stage of the development project cycle, did your views considered enough?	Yes	51	51	102
	No	9	9	18
Total		60	60	120

In which stage of participation do you think involved well?

		Respondent's wereda address		Total
		Tanqaabergele	Kolatenben	
In which stage of participation do you think involved well?	Idea generation	3	6	9
	Planning	5	3	8
	Decision making	0	5	5
	Implementation	20	13	33
	In monitoring andf evaluation	0	2	2
	In some of the above mentioned stages	8	11	19
	In all of the above mentioned stages	23	20	43
	None	1	0	1
Total		60	60	120

In most of the cases who makes decisions concerning development activities in your locality?

Count		Respondent's wereda address		Total
		Tanqaabergele	Kolatenben	
In most of the cases who makes decisions concerning development activities in your locality?	Tabia leadership	19	33	52
	Wereda leadership	1	3	4
	Community	37	24	61
	Project owners	1	0	1
	I don't know	2	0	2
Total		60	60	120

How are Tabia development issues prioritized?

Count		Respondent's wereda address		
		Tanqaabergele	Kolatenben	Total
		How are Tabia development issues prioritized?	By community discussion	44	40	84
	By the decision of tabia leaders	11	20	31
	By the decision of Wereda leaders	1	0	1
	I don't know	4	0	4
Total		60	60	120

How do you rate your participation in the bio-fuel development project in your locality?

Count		Respondent's wereda address		
		Tanqaabergele	Kolatenben	Total
		How do you rate your participation in the bio-fuel development project in your locality?	Low	2	24	26
	Medium	43	35	78
	High	14	1	15
	No participation	1	0	1
Total		60	60	120

6.3 Perception towards participation

Are you a member of any development group in your Tabiya?

Count		Respondent's wereda address		
		Tanqaabergele	Kolatenben	Total
		Are you a member of any development group in your Tabiya?	yes	50	59	109
	No	10	1	11
Total		60	60	120

If your answer is yes, how often did the development group held meeting?

Count		Respondent's wereda address		
		Tanqaabergele	Kolatenben	Total
		If your answer is yes, how often did the development group held meeting?	Every week	29	33	62
	Every month	19	26	45
	Every quarter	1	0	1
	every two weeks	1	0	1
	not aplicable	10	1	11
Total		60	60	120

How often do you attend the meeting?

Count		Respondent's wereda address		
		Tanqaabergele	Kolatenben	Total
		How often do you attend the meeting?	Regularly	33	23	56
	Sometimes	15	30	45
	Whenever I am idle	2	6	8
	not applicable	10	1	11
Total		60	60	120

What is the nature of the development meetings?

Count		Respondent's wereda address		
		Tanqaabergele	Kolatenben	Total
		What is the nature of the development meetings?	Participatory	42	30	72
	Partially participatory	8	28	36
	Non participatory	0	1	1
	not applicable	10	1	11
Total		60	60	120

If you are a member of development group, what do you do in group?

Count		Respondent's wereda address		
		Tanqaabergele	Kolatenben	Total
		If you are a member of development group, what do you do in group?	we participate in SWC on free will	2	9	11
	We participate in reforestation activities in free will	0	3	3
	We participate in construction of schools and health posts on free will	0	3	3
	We regularly discuss on problematic issues and seek solutions	0	4	4
	We do all the above whenever necessary	48	40	88
	not applicable	10	1	11
Total		60	60	120

If you are involved in all or some of the activities, how you come to such involvement?

Count		Respondent's wereda address		
		Tanqaabergele	Kolatenben	Total
If you are involved in all or some of the activities, how you come to such involvement?	Motivated by Tabia leaders	3	8	11
	Motivated by DAs	6	49	55
	Because it is mandatory to participate	10	1	11
	The development group discusses and decides unanimously to participate	30	1	31
	Others	1	0	1
Total	not aplicable	10	1	11
Total		60	60	120

What do you feel while you are participating on free basis in development activities?

Count		Respondent's wereda address		
		Tanqaabergele	Kolatenben	Total
What do you feel while you are participating on free basis in development activities?	very happy	46	27	73
	Somewhat happy	11	32	43
	Not happy	1	1	2
	indifference	1	0	1
Total		59	60	119

What is your perception towards bio-fuel plantation in your tabia in terms of conserving forest and reclaiming the environment?

Count		Respondent's wereda address		
		Tanqaabergele	Kolatenben	Total
What is your perception towards bio-fuel plantation in your tabia in terms of conserving forest and reclaiming the environment?	It is very important	35	29	64
	It is somewhat important	24	23	47
	I don't have idea	1	8	9
Total		60	60	120

Are you supportive of the bio-fuel plantation project operating in your Tabia?

Count		Respondent's wereda address		
		Tanqaabergele	Kolatenben	Total
		Are you supportive of the bio-fuel plantation project operating in your Tabia?	yes	60	59	119
	Not in favor	0	1	1
Total		60	60	120

If you are supportive, how are you participating in the bio-fuel plantation project?

Count		Respondent's wereda address		
		Tanqaabergele	Kolatenben	Total
		If you are supportive, how are you participating in the bio-fuel plantation project?	Planting on communal lands	34	23	57
	Protecting from animals	7	8	15
	Planting, watering and protecting from animals	17	28	45
	Others	2	0	2
	not applicable	0	1	1
Total		60	60	120

What do you get immediately for your participation in return?

Count		Respondent's wereda address		
		Tanqaabergele	Kolatenben	Total
		What do you get immediately for your participation in return?	I'm paid money by the project staff	0	4	4
	Paid from the safety net program	22	21	43
	No immediate return in the form of money or in kind	38	35	73
Total		60	60	120

Who motivates you to participate in the bio-fuel plantation project?

Count		Respondent's wereda address		
		Tanqaabergele	Kolatenben	Total
		Who motivates you to participate in the bio-fuel plantation project?	Tabia leaders	11	5	16
	DAs	40	53	93
	The group decides	5	1	6
	Wereda leaders	1	1	2
	Market price of selling oil seeds	2	0	2
	I do not participate	1	0	1
Total		60	60	120

6.4 Role of Leaders

What are the roles being played by Tabia/Wereda leaders in promoting participation?

Count		Respondent's wereda address		
		Tanqaabergele	Kolatenben	Total
		What are the roles being played by Tabia/Wereda leaders in promoting participation?	Let know the community about a decision made by higher authorities	4	13	17
	Enable the community to discuss on priority issues and seek collective decision for solutions	34	10	44
	Let the community to decide on the type of participation to be involved	12	3	15
	Inform the community about possible benefits of a development project	9	14	23
	all the above	1	18	19
	nothing of the above	0	2	2
Total		60	60	120

How often do the leaders themselves participate in development projects?

Count		Respondent's wereda address		
		Tanqaabergele	Kolatenben	Total
		How often do the leaders themselves participate in development projects?	Always	35	22	57
	Sometimes	23	35	58
	Rarely	2	3	5
Total		60	60	120

To what extent have Tabia leaders influenced you to participate in development projects?

Count		Respondent's wereda address		
		Tanqaabergele	Kolatenben	Total
		To what extent have Tabia leaders influenced you to participate in development projects?	to a great extent	8	28	36
	To some extent	36	32	68
	Rarely	16	0	16
Total		60	60	120

Whatever the influencing level is, how do the Tabia leaders exert their influence so that you can participate in local development projects?

Count		Respondent's wereda address		Total
		Tanqaabergele	Kolatenben	
		Whatever the influencing level is, how do the Tabia leaders exert their influence so that you can participate in local development projects?	By convincing me in discussion that are held at Tabia level		21	41	62
	By enabling development groups to discuss the benefits of the development projects	28	15	43
	By giving material incentives(payments) for participation	9	2	11
	By forcing	0	2	2
	Others	2	0	2
Total		60	60	120

How often do the government sectors seek consent of the community in a locality for launching any development projects?

Count		Respondent's wereda address		Total
		Tanqaabergele	Kolatenben	
		How often do the government sectors seek consent of the community in a locality for launching any development projects?	Always		35	24	59
	Sometimes	22	36	58
	Rarely	3	0	3
Total		60	60	120

6.5 Respondents' Personal Information

Respondents major occupation				
Count		Respondent's wereda address		
		Tanqaabergele	Kolatenben	Total
		Respondents major occupation	Crop production	2	2	4
	Livestock production	0	3	3
	Mixed farming	55	54	109
	labor	1	1	2
	Other	2	0	2
Total		60	60	120

Respondents educational level				
Count		Respondent's wereda address		
		Tanqaabergele	Kolatenben	Total
		Respondents educational level	Illiterate	11	25	36
	Literate	33	21	54
	Elementary school completed	13	8	21
	Secondary School Completed	2	2	4
	Prepatory school completed	0	4	4
	Others	1	0	1
Total		60	60	120

Respondents marital status				
Count		Respondent's wereda address		
		Tanqaabergele	Kolatenben	Total
		Respondents marital status	Unmarried	1	9	10
	Married	53	43	96
	Divorced	3	7	10
	Widowed	3	1	4
Total		60	60	120

Respondents sex

Count		Respondent's wereda address		
		Tanqaabergele	Kolatenben	Total
Respondents sex	male	52	32	84
	female	8	28	36
Total		60	60	120

Respondents sex

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid male	84	70.0	70.0	70.0
female	36	30.0	30.0	100.0
Total	120	100.0	100.0	

Age of respondents

Count		Respondent's wereda address		
		Tanqaabergele	Kolatenben	Total
Age of respondents	15-25 years	4	7	11
	26-35years	11	16	27
	36-45years	29	24	53
	46-55years	12	7	19
	>55years	4	6	10
Total		60	60	120

Age of respondents

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 15-25 years	11	9.2	9.2	9.2
26-35years	27	22.5	22.5	31.7
36-45years	53	44.2	44.2	75.8
46-55years	19	15.8	15.8	91.7
>55years	10	8.3	8.3	100.0
Total	120	100.0	100.0	

6.6 Survey results of Tabia leaders

6.6.1 Respondents' personal characteristics

Age of tabia leaders

Count		Name of Wereda		Total
		Tangua-Abergele	Kola-Tembien	
		Age of tabia leaders	15-25		1	1	2
	26-35	5	5	10
	36-45	6	6	12
	46-55	3	1	4
	>55	0	2	2
Total		15	15	30

Age of tabia leaders

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 15-25	2	6.7	6.7	6.7
26-35	10	33.3	33.3	40.0
36-45	12	40.0	40.0	80.0
46-55	4	13.3	13.3	93.3
>55	2	6.7	6.7	100.0
Total	30	100.0	100.0	

Sex of tabia leaders

Count		Name of Wereda		Total
		Tangua-Abergele	Kola-Tembien	
		Sex	Male		11	12	23
	Female	4	3	7
Total		15	15	30

Sex

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Male	23	76.7	76.7	76.7
Female	7	23.3	23.3	100.0
Total	30	100.0	100.0	

Educational Status by wereda

Count		Name of Wereda		
		Tangua-Abergele	Kola-Tembien	Total
Educational Status	Illiterate	0	1	1
	Literate	4	6	10
	Elementary School Completed	7	3	10
	Secondary School Completed	1	2	3
	Preparatory School Completed	0	2	2
	Degree holder	0	1	1
	Diploma	3	0	3
Total		15	15	30

Educational Status by sex

Count		Sex		Total
		Male	Female	
Educational Status	Illiterate	0	1	1
	Literate	10	0	10
	Elementary School Completed	8	2	10
	Secondary School Completed	1	2	3
	Preparatory School Completed	1	1	2
	Degree holder	1	0	1
	Diploma	2	1	3
Total		23	7	30

Educational Status

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Illiterate	1	3.3	3.3	3.3
Literate	10	33.3	33.3	36.7
Elementary School Completed	10	33.3	33.3	70.0
Secondary School Completed	3	10.0	10.0	80.0
Preparatory School Completed	2	6.7	6.7	86.7
Degree holder	1	3.3	3.3	90.0
Diploma	3	10.0	10.0	100.0
<i>Total</i>	30	100.0	100.0	

Marital Status

Count		Name of Wereda		
		Tangua-Abergele	Kola-Tembien	Total
		Marital Status	Unmarried	0	2	2
	Married	13	11	24
	Divorced	2	1	3
	Widowed	0	1	1
	Total	15	15	30

Occupation by Wereda

Count		Name of Wereda		
		Tangua-Abergele	Kola-Tembien	Total
		Occupation	Livestock Production	1	0	1
	Mixed Farming	11	13	24
	government employee	3	2	5
	Total	15	15	30

Occupation by Sex

Count		Sex		Total
		Male	Female	
		Occupation	Livestock Production		0	1	1
	Mixed Farming	19	5	24
	government employee	4	1	5
	Total	23	7	30

Occupation

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Livestock Production	1	3.3	3.3	3.3
Mixed Farming	24	80.0	80.0	83.3
government employee	5	16.7	16.7	100.0
Total	30	100.0	100.0	

Leadership Position by wereda

		Name of Wereda		Total
		Tangua-Abergele	Kola-Tembien	
Leadership Position	Chair Person	3	2	5
	Tabia Manager	3	2	5
	Community Orgaizer	3	2	5
	Tabia PR	3	3	6
	women's affair	3	3	6
	tabia Land administration	0	1	1
	Tabia Finance	0	1	1
	tabia youth/league	0	1	1
Total		15	15	30

Leadership Position by Sex

		Sex		Total
		Male	Female	
Leadership Position	Chair Person	5	0	5
	Tabia Manager	4	1	5
	Community Orgaizer	5	0	5
	Tabia PR	6	0	6
	women's affair	0	6	6
	tabia Land administration	1	0	1
	Tabia Finance	1	0	1
	tabia youth/league	1	0	1
Total		23	7	30

6.6.2 General information on participation

Does any discussion take place in the tabia before launching any project? * Name of Wereda Crosstabulation Count

		Name of Wereda		Total
		Tangua-Abergele	Kola-Tembien	
Does any discussion take place in the tabia before launching any project?	Yes	15	15	30
Total		15	15	30

Does any discussion take place in the tabia before launching any project?

Count		Name of Tabia						Total
		Shekatekli	Hadash Tekli	Agbe	Debre Tsehay	Dr.Ataklti	Getski-Milesley	
Does any discussion take place in the tabia before launching any project?	Yes	5	5	5	5	5	5	30
Total		5	5	5	5	5	5	30

Are the local people involved in project planning and implementation?

Count		Name of Wereda		Total
		Tangua-Abergele	Kola-Tembien	
Are the local people involved in project planning and implementation	Yes	15	15	30
Total		15	15	30

Are the local people involved in project planning and implementation?

Count		Name of Tabia						Total
		Shekatekli	Hadash Tekli	Agbe	Debre Tsehay	Dr.Ataklti	Getski-Milesley	
Are the local people involved in project planning and implementation	Yes	5	5	5	5	5	5	30
Total		5	5	5	5	5	5	30

If the answer is yes, how are they involved?

Count		Name of Wereda		Total
		Tangua-Abergele	Kola-Tembien	
If the answer is yes, how are they involved?	Labour Contribution	11	2	13
	Providing Opinion	0	2	2
	Providing Decision	1	6	7
	some of the above	2	1	3
	all of the above	1	4	5
Total		15	15	30

If the answer is yes, how are they involved?

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Labour Contribution	13	43.3	43.3	43.3
Providing Opinion	2	6.7	6.7	50.0
Providing Decision	7	23.3	23.3	73.3
some of the above	3	10.0	10.0	83.3
all of the above	5	16.7	16.7	100.0
Total	30	100.0	100.0	

Do the local political institutions(such as tabia council,tabia cabinet) exert any influence in selction and implementing development projects?

Count		Name of Wereda		
		Tangua-Abergele	Kola-Tembien	Total
Do the local political institutions(such as tabia council,tabia cabinet) exert any influence in selction and implementing development projects?	Yes	1	2	3
	No	14	13	27
Total		15	15	30

How do you determine the priorities of development Projects in your tabia?

Count		Name of Wereda		
		Tangua-Abergele	Kola-Tembien	Total
How do you determine the priorities of development Projects in your tabia?	The community decides	13	15	28
	The tabia leadership decides on behalf of the community	1	0	1
	The tabia simply accepts what is decided by the wereda	1	0	1
Total		15	15	30

How do you determine the priorities of development Projects in your tabia?

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid The community decides	28	93.3	93.3	93.3
The tabia leadership decides on behalf of the community	1	3.3	3.3	96.7
The tabia simply accepts what is decided by the wereda	1	3.3	3.3	100.0
Total	30	100.0	100.0	

Is there any evidence where local people disagree/reluctant in participation of development projects?

Count		Name of Wereda		Total
		Tangua-Abergele	Kola-Tembien	
Is there any evidence where local people disagree/reluctant in participation of development projects?	Yes	0	6	6
	No	15	9	24
Total		15	15	30

Is there any evidence where local people disagree/reluctant in participation of development projects?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	6	20.0	20.0	20.0
	No	24	80.0	80.0	100.0
Total		30	100.0	100.0	

what are the factors that influence in participation of local people in development projects?

Count		Name of Wereda		Total
		Tangua-Abergele	Kola-Tembien	
what are the factors that influence in participation of local people in development projects?	Money	3	0	3
	Awareness	5	3	8
	Literacy Level	1	0	1
	All the above	6	12	18
Total		15	15	30

what are the factors that influence in participation of local people in development projects?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Money	3	10.0	10.0	10.0
	Awareness	8	26.7	26.7	36.7
	Literacy Level	1	3.3	3.3	40.0
	All the above	18	60.0	60.0	100.0
Total		30	100.0	100.0	

What are the factors that influencing non-participation of local people in development projects?

Count		Name of Wereda		Total
		Tangua-Abergele	Kola-Tembien	
What are the factors that influence in non-participation of local people in development projects	Illiteracy	1	0	1
	Ignorance/ lack of awareness	0	5	5
	Socail Status	10	4	14
	All the above	4	6	10
Total		15	15	30

To what extent does the tabia Leadership involve itself inthe bio-fuel development project?

Count		Name of Wereda		Total
		Tangua-Abergele	Kola-Tembien	
To what extent does the tabia Leadership involve itself inthe bio-fuel development project?	To a great extent	10	6	16
	To some extent	5	6	11
	Hardly	0	3	3
Total		15	15	30

To what extent does the tabia Leadership involve itself inthe bio-fuel development project?

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid To a great extent	16	53.3	53.3	53.3
To some extent	11	36.7	36.7	90.0
Hardly	3	10.0	10.0	100.0
Total	30	100.0	100.0	

Do you think that people's organizations are necessary for promoting participation inlocal development activities?

Count		Name of Wereda		Total
		Tangua-Abergele	Kola-Tembien	
Do you think that people's organizations are necessary for promoting participation inlocal development activities?	Yes	15	15	30
Total		15	15	30

If your answer is yes, what type of organizations do you think are necessary?

Count		Name of Wereda		Total
		Tangua-Abergele	Kola-Tembien	
If your answer is yes, what type of organizations do you think are necessary?	Youth association	9	0	9
	Women's association	4	0	4
	All the above	2	15	17
Total		15	15	30

If your answer is yes, what type of organizations do you think are necessary?

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Youth association	9	30.0	30.0	30.0
Women's association	4	13.3	13.3	43.3
All the above	17	56.7	56.7	100.0
Total	30	100.0	100.0	

How often do project initiators seek your consent for starting any development project in your locality?

Count		Name of Wereda		Total
		Tangua-Abergele	Kola-Tembien	
How often do project initiators seek your consent for starting any development project in your locality?	Always	11	10	21
	Sometimes	4	5	9
Total		15	15	30

How often do project initiators seek your consent for starting any development project in your locality?

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Always	21	70.0	70.0	70.0
Sometimes	9	30.0	30.0	100.0
Total	30	100.0	100.0	

How important do you feel is the involvement of people in the bio-fuel development project? * Name of Wereda Crosstabulation

Count		Name of Wereda		Total
		Tangua-Abergele	Kola-Tembien	
How important do you feel is the involvement of people in the bio-fuel development project?	Very important	12	15	27
	Somehow	3	0	3
Total		15	15	30

How important do you feel is the involvement of people in the bio-fuel development project?

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very important	27	90.0	90.0
	Somehow	3	10.0	100.0
	Total	30	100.0	100.0

What do you think hinders people from participating in the bio-fuel development project in your tabia?

Count		Name of Wereda		Total
		Tangua-Abergele	Kola-Tembien	
What do you think hinders people from participating in the bio-fuel development project in your tabia?	lack of time	2	0	2
	Economic status	4	0	4
	Lack of awareness of the benefits	7	15	22
	market price of the produces	2	0	2
Total		15	15	30

What do you think hinders people from participating in the bio-fuel development project in your tabia?

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	lack of time	2	6.7	6.7
	Economic status	4	13.3	20.0
	Lack of awareness of the benefits	22	73.3	93.3
	market price of the produces	2	6.7	100.0
	Total	30	100.0	100.0

What sort of involvement do you expect from people in development projects in general?

Count		Name of Wereda		Total
		Tangua-Abergele	Kola-Tembien	
What sort of involvement do you expect from people in development projects in general?	Participation in planning implementing controlling etc	2	2	4
	Contribution in labor and or cash/kind	1	0	1
	Spreading awareness on the need for participation	1	3	4
	All the above	11	10	21
Total		15	15	30

What sort of involvement do you expect from people in development projects in general?

	Frequency	Percent	Valid Percent	Cumulative Percent	
Valid	Participation in planning implementing controlling etc	4	13.3	13.3	13.3
	Contribution in labor and or cash/kind	1	3.3	3.3	16.7
	Spreading awareness on the need for participation	4	13.3	13.3	30.0
	All the above	21	70.0	70.0	100.0
	Total	30	100.0	100.0	

What sort of involvement do you expect from people in particular for the bio-fuel development project in your locality?

Count

		Name of Wereda		Total
		Tangua-Abergele	Kola-Tembien	
What sort of involvement do you expect from people in particular for the bio-fuel development project in your locality?	Participation in planning implementing controlling etc	1	2	3
	Contribution of labor and/or cash/kind for the plantation	2	0	2
	Spreading awareness on the need for participation	2	2	4
	All the above	10	11	21
Total		15	15	30

What sort of involvement do you expect from people in particular for the bio-fuel development project in your locality?

	Frequency	Percent	Valid Percent	Cumulative Percent	
Valid	Participation in planning implementing controlling etc	3	10.0	10.0	10.0
	Contribution of labor and/or cash/kind for the plantation	2	6.7	6.7	16.7
	Spreading awareness on the need for participation	4	13.3	13.3	30.0
	All the above	21	70.0	70.0	100.0
	Total	30	100.0	100.0	

Are you satisfied with the involvement of people in the bio-fuel development project?

Count

		Name of Wereda		Total
		Tangua-Abergele	Kola-Tembien	
Are you satisfied with the involvement of people in the bio-fuel development project?	Yes	9	9	18
	No	5	6	11
	I cannot say	1	0	1
Total		15	15	30

Are you satisfied with the involvement of people in the bio-fuel development project?

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Yes	18	60.0	60.0	60.0
No	11	36.7	36.7	96.7
I cannot say	1	3.3	3.3	100.0
Total	30	100.0	100.0	

If not satisfied, what do you suggest is good to incorporate all community members in the bio-fuel development project?

Count

		Name of Wereda		Total
		Tangua-Abergele	Kola-Tembien	
If not satisfied, what do you suggest is good to incorporate all community members in the bio-fuel development project?	Let the community know well about the benefits of bio-fuel plantation	5	5	10
	Let the wereda office of Agriculture and Rural Development pay on time the labor Commissioned by productive safety net	0	1	1
	N/A	10	9	19
Total		15	15	30

If not satisfied, what do you suggest is good to incorporate all community members in the bio-fuel development project?

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Let the community know well about the benefits of bio-fuel plantation	10	33.3	33.3	33.3
Let the wereda office of Agriculture and Rural Development pay on time the labor Commissioned by productive safety net	1	3.3	3.3	36.7
N/A	19	63.3	63.3	100.0
Total	30	100.0	100.0	