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Integrated Rural Development Approach as a Strategy for Rural Poverty Alleviation: The Case of Kemashi WIBS Program

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A Girl in Chichachugi PA, Kemashi Woreda, on the way to fetch water

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ACRONYMS

ADDP	Ada District Development Project
BGNRS	Benishangul – Gumuz National Regional State
CADU	Chilalo Agricultural development Unit
CBOs	Community Based Organizations
CD	Community Development
CSD	Child Survival and Development
ESRDF	Ethiopian Social Rehabilitation and Development Fund
FA	Farmers association
FADEP	Family Development Project
FAO	Food and Agricultural Organization
FDRE	Federal Democratic Republic of Ethiopia
GDP	Gross Domestic Product
GNP	Gross National Product
GOE	Government of Ethiopia
ICC	International Coordinating Committee
ILO	International Labor Organization
IRD	Integrated Rural Development
LGPR	Leading Group Office for Poverty Reduction
MPO	Master Plan of Operation
MPP	Minimum Package Program
NGO	Non-Governmental Organizations
NICs	Newly Industrialized Countries

PADO	Poor Area Development Office
PC	Producers cooperative
RIBS	Rural Integrated Basic Service
RRC	Relief and Rehabilitation Commission
RSC	Rural Settlement Commission
SIDA	Swedish International Development Authority
SPSS	Statistical Package for Social Studies
TANU	Tanganyika African National Union
TGE	Transitional Government of Ethiopia
UIBS	Urban Integrated Basic Service
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
VSA	Village Settlement Agency
ASS	Village Settlement Scheme
WADU	Wollaita Agricultural Development Unit
WIBS	Woreda Integrated Basic Service

Abstract

Rural development is a strategy designed to improve the living standard of the subsistence population. This is mainly to happen through grass root planning process and mass participation in order to make the process self-sustaining. Ethiopia has been practicing different types of rural development approaches in the past in which most of them were planned and implemented in a centralized way. To mention some of them the package programs (comprehensive and minimum packages); Villagization and resettlement programs; Rural Integrated Basic Services (RIBS); and Woreda Integrated Basic Services (WIBS) are the major ones.

In this study an attempt is made to evaluate the performance of WIBS program in Kemashi Woreda, Benishangul-Gumuz National Regional State. The performance of WIBS in Kemashi Woreda is compared with an other control Woreda, Agalo Meti Woreda. The principal source of information for the study is the primary data generated through survey questionnaire at household level from 200 sampled households in four PAs from the two Woredas. Focus group discussion and key informant interviews are also conducted in order to supplement the quantitative information obtained through survey by qualitative information.

Various statistical tools such as measures of central tendency, descriptive statistics and Cobb-Douglas production function are used to compare the performance of the program with respect to basic service provision; economic benefits obtained by the households; and community participation and capacity building efforts. From the findings of the study credit services and grinding mill provisions are showing significant achievement eventhogh credit was not coordinated with income generating activities. The food availability of the household in the program area is found to be very low which indicates low nutritional status of the households.

Empirical results of the study reveals that the program performed well in some of its components while in others there is no significant improvement. And hence it needs to undertake certain measures to improve the performance of such type integrated rural development programs. Among the various recommendations given in this study, the improvement of institutional set up; the rearrangement of the basic service components; the integration of training with skill development and income generating activities; and the introduction of various activities which are used to increase the productivity of the area are the major ones.

CHAPTER ONE: BACKGROUND

1.1. Integrated Rural Development (IRD) Approaches in Ethiopia

Many countries experienced different types of rural development approaches in the past in order to alleviate rural poverty in their respective countries. This long time experience of rural development efforts patterned and characterized by different models and approaches shows little improvements in the life of the rural society because the majority of the rural mass still lives in absolute poverty. The overall achievements of the rural development efforts seem very sobering because rural mass poverty has not been overcome; in fact it has hardly been contained in many of the developing regions.

The great mass of people in Ethiopia is agrarian and rural. Most of the populations are very poor and illiterate. Hence, the development effort of the country should be geared towards a strategy, which insures the improvement of the living conditions of the majority of the rural population. In the Ethiopian context the improvement in agriculture is central to the development of rural areas. This is because agriculture is the major source of livelihood and income for most rural people. Raising agricultural productivity to improve subsistence food production and, where possible, providing surplus for cash sales lies at the core of rural development processes. Eventhough, agricultural development is the primary area of concern in rural development; it is recognized that the improvement in agriculture alone will not provide satisfactory improvements in the living conditions of rural people. It needs to provide other integrated activities, which supports the agricultural sector and satisfies the growing population. These integrated service provisions could be income earning opportunities, health, education and infrastructures.

Ethiopia being one of the developing countries with almost 85% of the population living in rural areas has been practicing different types of rural development strategies in the past in order to alleviate the rural mass poverty. These rural development strategies which were successively practiced in Ethiopia were the package programs (Comprehensive and Minimum Packages); villagization and resettlement programs; Rural Integrated Basic Services (RIBS); and Woreda Integrated Basic Services (WIBS).

1.1.1. The Package Programs (Comprehensive and Minimum Packages)

When we look into the evolution of the major rural development projects in the country we can identify that it was in 1968 that for the first time the Third Five-Year Plan had provided rural development projects to be implemented in the country. This plan was suggesting for the promotion of large-scale commercial farms and two types of integrated rural development projects called comprehensive and minimum package projects (Dejene, 1990). The comprehensive package programs were the first attempts of development planning in Ethiopia from the regional point of view to develop the agricultural sector in specific regions, although it was planned from above (Asres, 1994).

The first three comprehensive package projects undertaken in Ethiopia for rural development were the Chilalo Agricultural Development Unit (CADU), the Wollaita Agricultural Development Unit (WADU), and the Ada District Development Project (ADDP) which were launched in 1967, 1970 and 1972, respectively (Dejene, 1990). These programs were initiated, in general, to develop agricultural activities in certain specified aspects of agriculture, which could serve as models for the surrounding traditional agricultural practices. These programs also

designed to serve additionally transport and market services, credit facilities, improved seeds, fertilizers and useful information about better methods of agriculture. And therefore, the long-term strategy of these programs were to transfer experience and new developments or improvements to non-program areas (Ayele, 1987).

The first of these comprehensive package programs were CADU, which was started in 1967 with a technical and financial assistance from the Swedish International Development Authority (SIDA). The choice of the Chilalo area for the program was based on the accessibility and suitability of the area for the program to be undertaken (Tesfai, 1977). The second rural development project, WADU, was started in 1970 in Wollaita District. This project was started in Wollaita because of the reasons that the area was the most densely populated areas in the country; it was a place with a large homogeneous region that badly needed improvement in its agricultural activities; and it was a place with a population and local administration that showed wholehearted willingness to support any development efforts.

ADDP was the third rural development program started in 1972 and the Ada District was selected as the site for a comprehensive package project because it was believed that the area could exemplify traditional Ethiopian high land agriculture. And also in addition to this it was accessible for obtaining sufficient knowledge and people which was required for the program in the area. The ADDP project, which was supported by United States Agency for International Development (USAID), was to serve as an experimental unit testing alternative rural-development approaches and later on to replicate the experience through out most of the Ethiopian highlands (Tesfai, 1977).

It is learnt that eventhough these comprehensive programs had objectives of raising the real income of small farmers; promoting of participation; generating employment opportunities; narrowing the income disparities; and searching suitable methods of agricultural development, they failed to attain the stated objectives. Their failure was mainly attributed to the reasons that they cover only limited areas and it was highly costly both in terms of capital and trained manpower to replicate the approaches to other areas. Therefore as a result of this the Minimum Package Programs (MPP) were started with the hope of reaching large number of farmers over a large areas as compared to the previous programs (Tesfai, 1977).

The MPP, which was less costly and required less technical manpower, was initiated in 1971 to cover larger areas and serve more farmers with some basic production requirement elements such as extension advice, input supply, credit provision and marketing services (Asres, 1994). The basic idea of the MPP was based on the propagation of few proven methods and innovations tested by the comprehensive packages. MPP areas were selected from all parts of the country, primarily on the basis of the availability of an all-weather road passing through the area and the availability of tested innovations adopted to the area (Tesfai, 1977).

This program was undertaken in two phases of MPP-I and MPP-II. MPP-I had the problem of concentrating only on grain producing areas and only to those farmers along the highways. And due to this problem the MPP-II was designed to be implemented between 1981-1987 covering a wider area of intervention incorporating new activities like improved animal husbandry and soil and water conservation. This approach had also its own problems because the intervention area expansion and the introduced new activity components were tried to be implemented with out the

proportional increase of the technical staffs and financial inputs. It was also highly affected by the marketing and pricing policy of the government. Due to this the quality of services provided to the farmers were not as expected (Asres, 1994).

1.1.2. Villagization and Resettlement Programs

The intervention of the Ethiopian Government in the rural economy was highly increased after the 1974 radical agrarian change. After this change among the various interventions the villagization and resettlement programs were the major rural development programs designed by the Ethiopian Government. These were the programs which reflected a radical new land use policy (Brune, 1990).

Villagization is a process by which the rural households are moved from scattered dwellings into more compact villages with the aim of modernizing the rural life and changing agricultural production patterns. These changes were envisaged to happen by providing them with essential services, including social and economic infrastructural facilities (Alemayehu, 1990; Brune, 1990).

According to Cohen and Isaksson (1988), the official objectives of villagization in Ethiopia can be summarized as: (1) promoting more rational land use patterns and conserving natural resources; (2) enhancing extension services aimed at increasing agricultural productivity; (3) facilitating access of rural people to schools, clinics, water supplies, and service cooperatives; and (4) strengthening security and self-defense.

The villagization program was assumed to be the prerequisite for the more efficient utilization of natural resources and as an appropriate and adequate approach to rural development. With respect to this the villagization program that has been implemented in Ethiopia had social and political gains where as the economic gains was negligible. From government's point of view villagization has helped to strengthen village security and the control of contraband; it made easier to hold peasant association meetings; improved the access to social services in rural areas; and facilitated reforestation efforts and extension services to peasant households (Alemayehu, 1990).

However there are many criticisms raised to the villagization program by international agencies and donor communities due to the fact that the program was not in a position to change the rural development as expected. According to Alemayehu (1990), among the various problems observed in the program the major ones were the absence of feasibility studies and professional planning which leads to enforced implementation within a short time with little knowledge of local conditions and neglect of peasant attitudes.

The other major problems were that the government was not in a position to supply those services which peasants expected. This failure occurred due to lack of sufficient resources. In addition to this houses were built on marshy lands, waterlogged plains or near the habitat of wild animals. The significant increase of distance between the fields and between the new homes, due to villagization was also one major problem. This distance leads to loss of crops and roots, as a result of being unable to protect their fields from wild animals, pests and thieves; it was difficult for the farmers to carry manure to the farms and use it as fertilizer; and the increased distance to

grazing land had reduced grazing time and consequently livestock mortality increased significantly (Alemayehu, 1990).

Cohen and Isaksson (1988), also mentioned some critics raised by the international community on the villagization program of Ethiopia, which was carried out between December 1985 and March 1986, a period between the harvest and the next planting season. In this criticism the overall idea lies in that the government acted unwisely in undertaking the program because the program was done at a time when the nation is recovering from a terrible famine and will have an effect of food deficits for the foreseeable future. Based on this general consensus there are assumptions that villagization will lead to loss of work time, increased problems with plant diseases and pests on distant fields, overgrazing close to villages and resulting erosion, high population pressure on nearby water resources, crowding and spread of communicable diseases, and excessive tree cutting to construct new village facilities. They also argue that villagization will lead to greater government control over agricultural marketing and private traders, increased social control and the use of villages to promote unpopular Producers' Cooperatives (PCs).

Resettlement programs were also one form of rural development strategy practiced in Ethiopia. These programs were planned in Ethiopia for the gradual transfer of people from the over-populated central, northern, eastern regions to the less densely populated southern and southwestern regions. In developing countries until the late 1950s resettlement was considered as the chief means of increasing agricultural production (Brune, 1990). In addition to this it was also to serve a range of issues from ecological, economical and social point of view. From ecological perspective it was seen as a way to redress population imbalance and reduce

population pressure in the highlands; from economic point of view it was believed that resettlement could help to increase agricultural productivity and make use of fertile lands; and from social point of view it was seen as a mechanism of providing land to those without it, to settle pastorialists and remove unwanted urban unemployed labor (Pankhurst, 1990).

There were also other various reasons why resettlement programs were conducted. Settlements are not homogeneous nor do they follow identical patterns of development in different countries or within a country. There are different types of settlement programs undertaken in the past in different countries, which can be characterized by different points of origin, different motivations, varieties of organizational forms and a range of objectives. The settlement program that had taken place in Ethiopia was done mainly due to natural disasters aiming at finding an alternative living space for the affected population (Last, 1977).

Prior to the Ethiopian revolution, resettlement was carried out on small scale, as a result of individual initiatives by local governors and aid agencies with a variety of motives and objectives. It was after the revolution that resettlements were conducted intensively specially the Land Reform Proclamation in 1975 and the creation of various new agencies with responsibilities of resettlement (the Relief and Rehabilitation Commission (RRC) in 1974, the Settlement Authority in 1976) facilitated the dramatic increase of the programs in Ethiopia (Pankhurst, 1990).

The resettlement program was highly criticized, especially by bilateral and multilateral donors, due to its various problems it imposed on the population. The Ethiopian Government

acknowledged that the resettlement process was hastily conceived, poorly planned and executed, and resulted in considerable hardship for the population. Due to these reasons and in response to the international criticism the government declared a temporary suspension on settlements in March 1986 (Brune, 1990). In addition to this, according to Pankhurst (1990), the program was criticized from its slow pace, high costs and low productivity. The number of settled populations were too insignificant to affect its major goals such as population redistribution and increase in agricultural productivity. The economic results were poor in terms of production, yields, and costs and hence settlements had not become self-sufficient and still required food aid. The program also had social problems in which it gave no regard to the local population; an attempt to settle people without their will and settling people without their families had all disastrous results.

Western criticism to resettlement program in Ethiopia goes beyond what the Ethiopian Government conceived as the major problems of the program. As Cohen and Isaksson (1988) listed out, there are considerably serious problems observed in the program by which it was highly criticized. These were: (1) it violets human rights because the selection of settlers were not voluntary and settlers were forced to join PCs while they are seeking individual holdings; (2) some members of northern secessionist argue that the program is designed to depopulate the areas of resistance so that to make it difficult for opponents of the government to get food supplies and recruits; (3) the southern opposition groups argue that the indigenous people living in the resettlement area lost their land and forced to provide labor and food to settled population; (4) agriculturists and conservationists argue that the program accelerated deforestation and introduced intensive highland agricultural techniques in areas that have delicate soils; (5) the

government was failed to provide funds for housing, sanitation, rudimentary health care, and agricultural implements; and (6) the program was suffering from the attack of western development professionals as a result of inhuman transport, separation of families, hardships at resettlement camps, and death from diseases not found in their previous areas.

1.1.3. Rural Integrated Basic Services (RIBS)

UNICEF's assistance was being effected through various programs since the period it started to function in the country. These programs were Family Development Project (FADEP), Urban Integrated Basic Services (UIBS), Rural Integrated Basic Services (RIBS) and Woreda Integrated Basic Services (WIBS). UNICEF began assisting the FADEP, a local Non-governmental Organization (NGO), in 1980 and it had been undertaking community-based and family-focused social development activities. Funding for FADEP was phased out in 1994. Since 1978 UNICEF, in cooperation with NGOs and international organizations, was assisting the urban poor through the International Coordinating Committee (ICC) in Addis Ababa. From the experience gained in ICC, in the second half of 1983 UNICEF considerably extended its involvement to four towns namely, Dessie, Dire Dawa, Jimma and Nazareth through the UIBS program which continued until it was subsumed by the WIBS program in 1995 (UNICEF, 1996).

In addition to these urban programs since 1983, UNICEF has been assisting the Government in promoting the concept of an integrated development approach in the rural areas through its support to the RIBS project in Bale. Given the success of this project, the Government requested UNICEF's cooperation in 1985 to extend the scope of this project to cover one Awraja in each of the three regions, namely, Gojam, Keffa and Illubaboar. It was this expanded program which

became RIBS later on (UNICEF, 1996). The formation of Farmers Associations (FAs) after the popular revolution of 1974 was considered as a unique opportunity for mass mobilization in effecting community based development strategies and it was based on this ground of community involvement practice that RIBS program was initiated (UNICEF, 1986).

RIBS was operating under the objectives of capacity building of the government to plan, manage and implement projects at the community level; supporting demonstration projects at the local level to promote interests and replicability; reach the needy by targeting the most underdeveloped groups (UNICEF, 1996). Generally, the primary aim of the RIBS program was to promote access to and utilization of basic services by the disadvantaged section of the rural population with emphasis on Child Survival and Development (CSD) (UNICEF, 1986). In adopting RIBS as a community based development strategy, a substantial improvement in accessibility to and utilization of basic services is anticipated in the intervention areas. In order to achieve this the major areas of intervention designed by the RIBS program were primary health care; water supply and sanitation; food and nutrition; leadership training; child development and education; and environment protection (UNICEF, 1996).

During its implementation, RIBS had certain observed weaknesses. Some of these, organizational structures were not functioning as intended; certain technical and financial matters at the community level and community leadership were not strengthened; there was lack of clearly visible criteria for the selection of a project area in the region; and the program is only confined to certain regions (Berhanu, 1994). Having all these observed problems in its implementation, the program phased out and was replaced by WIBS mainly due to the

inconvenience of the approach with the changed administrative structure. The decentralization of government administrative structure down to the Woreda level initiates the emergence of Woreda based development approach which is WIBS rather than the regional approach, RIBS.

1.1.4. Woreda Integrated Basic Service (WIBS) Program

The development effort of the country has been supported by different bilateral and multilateral organizations since a long time. UNICEF is one of the oldest organizations supporting the country since 1952. The support was changing from time to time in terms of budget amount and area of intervention, showing some improvements from time to time, eventhough it was approached in a centralized manner until 1994. Much of the supports was concentrating on relief and related activities until 1980.

It was in 1980-1994 that the organization started for the first time an integrated development approach through which a defined national program was prepared, which is called Master Plan of Operation (MPO). And accordingly it can be said that WIBS program is one of the recent rural development approaches being undertaken in the country to practice bottom-up approaches in development projects planning. This program was successively started after the termination of the RIBS program.

The 1994-99 country program of cooperation of the Government of Ethiopia (GOE) and UNICEF is based on an integrated approach of providing quality social and health services. The experience gained from the implementation of integrated basic service approaches like RIBS, UIBS programs and the decentralization policy of the Transitional Government of Ethiopia

(TGE) and its Woreda based approach for development led to the emergence of new area integrated approach. The new Woreda based approach, WIBS, focuses on communities and Woredas for planning, implementation, monitoring and evaluation of development programs. GOE and UNICEF in the Fourth Country Program (1995-99) of Cooperation adopted this Woreda based approach of development program. Generally, WIBS can be considered as a continuation of the locally based development efforts of RIBS and UIBS with special emphasis to communities and Woredas (TGE/ UNICEF, 1995).

The Government has instituted a regional- and Woreda-level planning and implementation approach that, for the first time, assigns socio-economic tasks and gives corresponding power to the decentralized administrative structure to manage these responsibilities. Using these initiatives, WIBS targets the most deprived Woredas and uses the program as a model for the rest of the region. During its inception in 1994 the WIBS program planned to reach ten percent of the Woredas of the country, which are supposed to be very remote and less developed as compared to others. The selected Woredas are planned to enter into the program gradually in which 14 Woredas began implementation in 1994; 21 Woredas in 1995 and the last 20 Woredas in 1996 which becomes totally 55 Woredas through out the country. The selection criteria adopted for these Woredas, as provided by the TGE and UNICEF, were greater density of population than an average Woredas; high fertility rates and poor child and maternal health conditions; inadequate health service; and weak Woreda infrastructure (GOE/UNICEF, 2000).

WIBS focuses on area-specific objectives and targets that are based on a decentralized and consultative planning process carried out between local authorities and the communities that they

serve. It relies on capacity building, empowerment and the delivery of quality services-all at the community level. The empowerment of the community by the WIBS program includes their involvement in the identification of needs, planning of interventions, the mobilizing and management of resources and the implementation of these programs using low-cost, community-managed technologies. WIBS is a program which is designed to enable the community to be responsible for guiding and initiating its socio-economic developments; decide on their own development program and as a result realize affordable, sustainable and replicable programs with special emphasis of poverty reduction. And hence, the program has the following main objectives:

- Establish sustainable systems to save lives and improve access to basic services;
- Improve the nutritional status of the community especially children and women through the improvement in economic performance;
- Initiate and facilitate community involvement in development process and to assist capacity building at Woreda and community level (TGE/ UNICEF, 1995).

In order to achieve the above mentioned main objectives, the program designed to implement the following specific objectives under each main objectives:

- Improving access to basic services;
  - Providing safe water and sanitation through the construction of water supply and sanitary facilities;
  - Enhancing access to primary education and increase enrollment ratios for disadvantaged groups;

- Improving health facilities and providing basic medical equipment and drugs in order to increase access to health services;
- Providing credit facilities for microfinancing;
- Decreasing workload of women through providing grinding mills to the community;

- Improve the nutritional status of the community;
  - Improving the agricultural productivity of the community;
  - Increasing access to off-farm income earning opportunities;
- Initiate community participation and assist the community through capacity building;
  - Promoting bottom up planning process;
  - Initiating and facilitating community involvement in identification of needs, planning of interventions, mobilizing and management of resources;
  - Assisting the capacity of the community through training in order to improve management and delivery of basic services, especially women (TGE/ UNICEF, 1995).

WIBS program as an integrated approach to alleviate rural poverty is expected to perform the task through the establishment of sustainable rural projects at community level. It is the program, which provides access to local resources in a multi-sectoral and decentralized way. Hence the program is composed of different services such as health and nutrition, education, water and environmental sanitation, gender and development, disaster preparedness, and monitoring and evaluation. Here it is believed that the integrated approach to rural poverty alleviation is essential for the reason that rural poverty is a multi-faceted problem caused due to various reasons. The ultimate aim of WIBS is to tackle rural poverty through the provision of integrated development

services in a certain area by fully participating the beneficiaries in the process of planning, implementation and management and finally to replicate the positive experiences to other places.

The implementation process of the WIBS program was arranged in such a way that the Woreda is responsible to implement the program with a technical assistance from regional and zonal sector departments. In order to facilitate the implementation of the program WIBS committee[1] was formed at regional, zonal and Woreda levels constituting various stakeholders. The financial resource allocated by UNICEF to the program is directly transferred to the Woreda accounts by which it is administered by three signatories of the Woreda WIBS committee members. In addition to this, UNICEF works with zonal and regional administrations through providing technical support to WIBS committees to prepare, implement and manage projects.

Some of the activities in the program components, for instance construction of water supply schemes are beyond the implementation capacity of the Woreda. In this and other similar cases the regional departments are expected to undertake the tasks, where in other hand the finance for such activities is not under the authority of such departments. In BGNRS there are two Woredas, Wombera and Kemashi, which were selected as WIBS program areas. Wombera Woreda started to implement the program in the first round in 1994 where as Kemashi Woreda started in the second round in 1995. The selection of these two Woredas, specifically from the others, was based on the criteria of being remote and relatively back ward with respect to infrastructures and social services.

[1] WIBS committee includes Regional, Zonal and Woreda Councils, Planning and Economic Development, Education, Agriculture, Water Resource, and Women's Affair.

1.2. Statement of the Problem

The approach to development planning depends on the extent to which a certain country is centralized or decentralized and also to the extent to which the intervention of the State in the economic development is dominant. Based on this the approaches to development planning can be either top-down or bottom-up (Dereje and Jemal, 1994).

Many writers argue that bottom-up approach to development planning is the one that favors rural development. As Haddis indicated that, the bottom-up approach to development planning is the appropriate approach to develop the rural areas. This is because it is more favorable to utilize the available appropriate indigenous technologies of the rural areas; it is easier to develop new structures of social, economic and political organizations and more importantly it is the only mechanism to make an increase in the productivity of the agricultural sector (Haddis, 1994). That is why in many countries, nowadays, development from below is advocated in every aspect of the development process.

Eventhough different countries have been practicing different types of rural development approaches for a long period of time, still there exists considerable poverty and inequality among countries and communities (GTZ, 1993). Ethiopia has been also undertaking various types of rural development approaches of which the Package Programs; Villagization and resettlement Programs; Rural Integrated Basic Services (RIBS); and Woreda Integrated Basic Services (WIBS) are the major ones.

Integrated rural development programs, which were undertaken in the country in previous times, were not effective due to various problems. The problem still persists that nowadays-such type of programs like the WIBS program are not also performing in the desired level. Some of the mentioned main problems are that such type of programs mostly depend on financial help from outside the country; they require a team of specialists, whether nationals or foreign experts, to cooperate closely with the local population and the existing administration; they need special executive body, with considerable degree of local autonomy and authority to ensure coordination among departments and agencies; the programs most of the time are situated in remote and economically back ward areas; the local authorities are not strong enough to handle the programs.

The Benishangul-Gumuz National Regional State (BGNRS) is one of the regional states attempting to exercise the decentralization process. In addition to the above mentioned problems, the region also specifically faces considerable problems in the process of decentralization of power and duties down to the lower level administrative structures. Some of the most important problems which can be mentioned as a reason for low capacity of performance are lack of trained manpower; lack of appropriate and/or sufficient institutional set up down to the community level; poor infrastructure and communication; low level of community awareness; etc. Due to these and other reasons most of the plans especially government budgeted plans are prepared, decided and implemented at regional level with out the participation of the beneficiaries.

Due to the above mentioned problems, the practice of development from below is very much low except certain experiences observed by few organizations and NGOs. These organizations try to

exercise community participation in identifying their needs by involving them in the planning process. In this regard, the Ethiopian Social Rehabilitation and Development Fund (ESRDF) and WIBS program can be cited as an example. The ESRDF gives the chance for the local community to identify their needs and priorities by their own and upon approval of the identified projects the community is expected to contribute 10% of the project cost in different forms like labor, local material, cash, etc.

On the other hand the WIBS program supported by UNICEF tries to involve the community in the planning of their priority areas for sustainable project management. The implementation of the WIBS program is left to the Woreda level. These two are some of the start up exemplary exercises of bottom-up planning process in the Region. By the intervention of the WIBS program in the selected Woreda, it was expected to raise the capacity of the rural community which would make capable to identify priorities and manage projects sustainably; to facilitate the program area, as a whole, with better service provision; and finally to replicate the experience to other parts of the Region.

However, with the presence of the above mentioned problems in the region particularly and with the past experience of rural development problems observed in the country generally, how the WIBS program is performing in the region is the basic issue to be raised. Therefore, there is a need to evaluate the performance of the WIBS program undertaking in the region in order to benefit the rural community. Such type of evaluation may be helpful to replicate the positive experiences gained to other areas or make necessary area specific adjustments to the program approach.

1.3. Objectives of the Study

From the background of the integrated development approach so far exercised in Ethiopia and the statement of the problem mentioned for this research it is possible to have the following general and specific research objectives.

1.3.1. General Objective

Integrated Development Approach, WIBS, aims at alleviating the problem of the rural community with special emphasis to women and children. The main objective of this survey is to evaluate how the local community has benefited from the intervention of the integrated development programs through the process of participation in planning and implementation of integrated development programs.

1.3.2. Specific Objectives

In light of the above general objectives, the research will have the following specific objectives:

* to evaluate how the rural community access basic services (water and sanitation; primary education; health services; credit facilities and provision of grinding mills);
* to identify the achievements obtained in agricultural production;
* to identify the impact of WIBS intervention in food availability of the household;
* to evaluate the extent of off-farm activity involvement;
* to evaluate the household's potential for market supply;
* to identify the capacity developed and available at local level to plan and manage development programs, through participation and training.

1.4. Research Questions

Having the above stated general and specific objectives, the research tries to answer the following questions.

- Are the basic service needs of the society addressed by the program?
- How are women benefiting from the intervention?
- What are the benefits obtained in agricultural production?
- What is the status of food availability (food intake) of the household?
- What is the opportunity created in off-farm activity?
- Is there a potential for market supply?
- What is the level of community participation?
- Does the community received training in order to develop capacity to manage community based development activities?

1.5. Research Methodology

1.5.1. Source of Data Used for the Study

For the purpose of obtaining data, which can be statistically analyzed, and to obtain a kind of information, which gives the real situation of the providers, a combination of several data sources were used. This is because triangulation of data source has a number of advantages that no single source could have. Thus for the purpose of attaining the objectives of the research both quantitative and qualitative data are used from primary and secondary sources. The primary data for the study were collected from a combination of different sources such as from Peasant Associations (PAs); the sampled households; and from government institutions (See Annex-7).

The main primary data source for the study were the sampled households of the program and non-program Woredas in which information was collected through the survey questionnaire. To supplement the primary data qualitative information was collected through discussions and interviews from focus groups and key informants using checklists from the selected PAs and from government institutions.

The secondary data source used for the study includes periodic evaluation and appraisal documents, published and unpublished materials, donor organization and government agency reports, project documents and other available information sources. These documents were particularly useful to describe the historical performance of rural development approaches in Ethiopia and specifically in providing information in the origins and objectives of the WIBS program and the various projects it encompasses.

1.5.2. Sampling Techniques Used

The study area, Kemashi Woreda, is selected purposely from the two Woredas (Kemashi and Wombera) where the WIBS program is taking place in the region. This Woreda is selected due to its convenience for the study as compared to the other Woreda, which is very remote and difficult to handle it with the available time and finance. For the sake of comparing the program's impact in Kemashi Woreda another non-program Woreda (Agalo Meti Woreda) with almost similar situation in socio-economic condition, such as in agro-ecology, population, climate, economy of the residents, was selected. According to the 1994 Population and Housing Census result there are 13 PAs with a total of 1611 households in Kemashi Woreda and 15 PAs with a total of 2489 households in Agalo Meti Woreda.

In order to know the situation of the integrated rural development approach of the specified Woreda in the study period, a cross-sectional survey method was employed. This method, based on appropriately selected samples, can generate information, which can be generalized to the population of the Woreda. Therefore, from both Woredas (the program Woreda and the non-program Woreda) representative sample households were taken for the survey.

The sampling technique implemented for the household survey was a two stage random sampling. In this method, in the first stage sampling from the total Kebeles available in each Woredas two Kebeles were selected from each randomly, which made a total of four Kebeles selected for the study. In the second stage of sampling, from the list of all households in each selected PAs, 50 households were selected by employing systematic random sampling with random start method and this made a total of 200 households from both Woredas (See Annex-1).

1.5.3. Methods of Data Collection

The data from the sampled households were collected from both Woredas (the WIBS Woreda and the non-WIBS Woreda) by using structured questionnaires and in addition to this in order to get people's perspective about the rural development process taking place in their Woredas, qualitative interview was conducted using checklists for selected government institutions, focus groups and key individual informants. The focus group includes community leaders, PA leaders, religious leaders and elders and the key informants were development agents, Kebele administrators and community leaders. The information obtained from the depth interview of key informants and focus groups are used as a supplementary to the information collected through survey questionnaire.

Eight enumerators and one supervisor, which assists the researcher in supervision, were selected from the two Woredas, who have previous experiences in data collection and who are professionally capable to perform the task and participated in different surveys in the past. These enumerators and supervisor were provided a one day intensive training about interview techniques, how to approach a respondent, serious measures in recording the responses and on the contents of the questionnaire before the survey.

1.5.4. Data Analysis and Presentation

The data obtained through the survey questionnaire was entered into a computer by using Statistical Package for Social Studies (SPSS) statistical tool. The information obtained from the focus groups, key informants and government institutions were used to supplement the interpretation of the data obtained through survey questionnaire.

The study basically uses a quantitative approach employing statistical and econometric tools. To examine the nature of the data and to produce concise summary of the data measures of central tendency; measures of variability and other techniques of descriptive statistics are applied. In order to measure the significance level in the variation between the program and non-program area chi-square tests and t- test for equality of means are adopted. In addition to these, in order to estimate the available food at household level net benefit per capita is calculated; and to know the effect and magnitude of the explanatory variables on the net benefit per capita regression is employed using the Cobb-Douglas production function.

The Model

The Cobb-Douglas production function is used because it is the prefered specification to estimate production related fuctions (Judge et al, 1982). Therefore to assess the effects of different independent variables on the level of food availability at household level, a production function specification is used as follows.

$$Y_i = f(X_i, \beta) + u_i \quad -- \quad (1)$$

The general form of the production function model indicated in equation (1), which can not be transformed into linear model, is sometimes called intrinsically nonlinear models. This general form of the production function model can be written in the form of the Cobb-Douglas production function which makes possible to find a transformation in order to convert the considered model into linear specification, as in equation (2).

$$Y_i = \alpha X_i^{\beta i} L_i^{\beta i} + u_i \quad -- \quad (2)$$

If the error term is attached to the Cobb-Douglas production function in a multiplicative way and taking labor as constant it can be specified as equation (3) and then the model is not intrinsically nonlinear because it can be linearized by taking logarithms as in equation (4) (Judge et al, 1982).

$$Y_i = \alpha X_i^{\beta i} e_i^{ui} \quad -- \quad (3)$$

$$\ln Y_i = \ln\alpha + \beta_1 \ln X_1 + \beta_2 \ln X_2 + \ldots + \beta_k \ln X_k + u_i \quad -- \quad (4)$$

where, Y_i is the dependent variable, the net benefit per capita, whose mean is a function of X_i

X_i is an independent variables, explanatory variables such as:

INPUT- modern inputs such as DAP, UREA and improved seed are expected to increase the productivity of the farm and hence 1 if household used modern inputs and 0 otherwise.

ETNIC- ethnicity of the household is differentiated as indigeneous (Gumuz/Berta) and settlers because this may affect the level of technology adaptations and hence productivity. The settlers are expected to produce more while the indegeneous are expected to produce less and obtain less net benefit, therefore 1 if household is indigeneous, 0 otherwise.

HHEDU- education level of the household head. The more the household head educated, the more likely to accept new technologies and produce more, 1 if literate, 0 otherwise.

SEXHH- sex of the household head, which indicates whether the household is male headed or female headed. If male headed household 1, and 0 otherwise.

HHAGE- age of the household head. Age is a proxy for experience with farming and hence increase production and net benefit.

HHSZ- household size. As the household size increases the net benefit of the household decreases, and also the increase or decrease in the number of the household may have influence on the net benefit per capita of the household.

FRMSZ- total farm size cultivated by the household. Farmers with larger cultivated area have high net benefit per capita.

OXOWN- number of oxen owned by by the household. The number of oxen owned is positively related to net benefit per capita and hence 1 if household own oxen, 0 otherwise.

β is parameter estimator.

e_i is the base for natural logarithm and $\mathbf{u_i}$ a random error in operation, farm specific factor, which makes the farm operates below the maximum.

1.6. Significance of the Study

Development effort in a certain area could involve different stakeholders such as the government, the private sector, NGOs, civic societies, Community Based Organization (CBOs), donor agencies, the community, etc. The approach undertaken to involve these parties depends on the development policies a country is following.

WIBS program is an approach, which involves different stakeholders and exercises the participation of the beneficiaries in planning, implementation and management of the development projects. It can be said that it is a program, which exercises bottom-up planning approach, aiming at the empowerment of the rural community and for the sustainability of the projects. The evaluation of such types of approaches is extremely important for all development partners in order to make them involve in the development process and to be able to serve the communities in a coordinated way.

Therefore, this study will be significant in the following ways:

- It will indicate the level of community participation in the development process.
- It will serve to know how much such type of approach is applicable in solving the problems of the rural community in the region.
- It indicates future rural development intervention strategies and mechanisms for the replication of the approach to other places.
- It gives directions for future planning approaches appropriate for community based development projects.
- The study can be used as a plat form for related researches and investigations in the future.

Generally, the result of the study will be useful for policy formulation regarding rural development approaches in the region; for planning purposes; for providing information about the region's effort in bottom-up planning exercise; and as a result of which government agencies and NGOs are the primary beneficiaries of the result.

1.7. Scope and Limitation of the Study

As the intervention of the program is too wide in its components it may not be possible to address all issues in this paper due to limited time and resource. Therefore, the paper covers only some selected indicators in some main components, as indicated in Annex-4. It needs to undertake detailed research on each components based on the basic priority and need of the local community, which helps to critically identify the performance of each components.

There was a problem of finding project documents and reports at the study area due to which it was difficult to include suplementary information about the physical and financial excution of the program per year. In order to complement some of the difficiencies in documents, an attempt was done to solve the problem by searching information from regional departments and federal institutions.

1.8. Organization of the Paper

This thesis tries to look into the performance of integrated development approach and the practical experience and benefit gained by community in project planning and management through the intervention of WIBS program. The various tasks done in this research is organized in five chapters. The first chapter deals with background information and justification of the study consisting of background of Integrated Rural Development (IRD) in Ethiopia, statement of

the problem, objectives of the study, research questions, research methodology, significance and limitations of the study. Chapter two tries to review some relevant literatures and documents, which are found to be important and supportive to the objective of the study. Chapter three describes some general features of the BGNRS and the specific study area. Major findings of the study and discussion is presented in chapter four and finally in chapter five conclusion and recommendations are presented.

CHAPTER TWO: LITERATURE REVIEW

2.1. Development Process

Development has been taking different meaning in the past and it has been incorporating different types of criteria to measure it from time tot time. In the traditional economic measures development had a meaning that can be equated to the increase in Gross National Product (GNP) at the rate of perhaps 5% to 7% or more. Here it only indicates the economic growth of a certain country. But this economic growth does not necessarily mean change in the levels of living of the masses of the people. It does not show the level of benefit distribution among the people. Therefore, during the 1970s the new economic view of development came into action to redefine development in terms of the reduction or elimination of poverty, inequality, and unemployment within the context of the growing economy (Todaro, 1994).

Indicating the complex dimension of development process, Burkey (1993) defined development as something more than the provision of social services and introduction of new technologies, but it is something which involves changes in the awareness, motivation and behavior of individuals and the relations between individuals as well as between groups within a society. This indicates us that as development is not only the economic growth in per capita GNP but also it is a multidimensional process incorporating the changes taking place in a society. It would be appropriate here to mention the comprehensive definition of development given by Todaro (1994) as:

> *"...Development must therefore be conceived of as a multidimensional process involving major changes in social structures, popular activities, and national institutions, as well as the acceleration of economic growth, the reduction of inequality, and the eradication of poverty." (P-16).*

Development approaches have been changing from time to time and at the same time government intervention in the development process was changing. In the 1950s and 1960s there was a need for reconstruction of Europe after the 2nd World War and therefore the intervention of the government was so high that central planning was given high priority (Kotze, 1997). Theorists in the 1950s and early 1960s viewed the process of development as a series of successive stages of economic growth through which all countries must pass. It was believed that the Third World countries must proceed along an economic growth path through which the more developed countries followed in their development process. Therefore during this time development became synonymous with rapid, aggregate economic growth (Todaro, 1994).

In 1970s the principle of equity emerged so that the emphasis in people's participation in the development process, especially in developing countries, increased and decentralization rather than central planning was advocated. Therefore, the linear-stages approaches of the 1950s and 1960s was largely replaced by the theories and patterns of the structural change and the international dependence revolution (Kotze, 1997). During this time it was realized that economic growth in the aggregate did not necessarily eliminate poverty. Therefore this lead to the formulation of basic needs approach which was adopted by International Labor Organization (ILO) in 1976.

The 1980s was the time when the 'Third World' starts to loose its meaning because the Newly Industrialized Countries (NICs) started to be differentiated from others. It was in this time that the 'basic human need approach' was taken as a central objective for national development (Kotze, 1997). In order to assure equity in resource allocation for meeting the basic human needs

such as minimum requirements of a family for private consumption (food, shelter and clothing) and provision of essential services to the community (safe drinking water, sanitation, public transport, health and education facilities) alternative development strategies were critically needed as a result of which emphasis for rural development emerged (Burkey, 1993).

2.2. Rural Development

The term "Rural Development" is composed of two main words rural and development in which they have their own meaning and concepts. Rural can be defined as an area, which is different from urban in settlement pattern, life style, occupational structure and social organization. Rural is an area in which most of the activity is agricultural and occupationally dependent on crop farming, animal husbandry and related activities. The settlement pattern consist of villages and homesteads; it is a place where there is socially greater inter-dependence among the people (Berhanu, 1994).

Rural development is defined in different ways by different organizations and individuals. The World Bank Sector paper written on Rural Development, which was published in 1975, defined rural development in the following way as coated in Chambers (1983) as:

> *" Rural Development is a strategy designed to improve the economic and social life of a specific group of people- the rural poor. It involves extending the benefits of development to the poorest among those who seek a livelihood in the rural areas. The group includes small-scale farmers, tenants and the landlless." (P-147).*

Lele (1976) defined rural development from the point of view of three important features, such as improving the living standards of the subsistence population; mass participation and making the process self-sustaining. These features have considerable implications for how rural

development programs are designed and implemented. In this context rural development is defined as improving living standards of the mass of the low-income population residing in rural areas and making the process of their development self-sustaining. Cleaver (1997) also defined rural development as the improvement of the economic and social well being of the rural population as well as the improvement of the local people's participation in political decisions.

Raising the poor (usually small) farmer's production and productivity requires not only the traditional efforts of agricultural development, but it includes other specific aspects of the rural society, such as the provision of health services to increase work capacity; the provision of education, to increase comprehension and absorption of new knowledge and of extension, to increase technical skills, etc. This aspect of the rural development, as a direct result of working with the poor, makes rural development synonymous with human development. Thus, the fundamental distinction between pure agricultural and rural development is the emphasis on physical capital development of the former, and human capital development of the latter (Lacroix, 1985).

In the 1950s and 60s agriculture, which is the main component of rural development, was given less emphasis and instead countries were adopting import-substituting strategies to promote industry by transforming resources from agriculture to industry. At this time it was believed that economic growth could reduce poverty through trickle-down effect. But the result was not as expected because the import substituting strategies constrain the agricultural growth and the problem of poverty can not be solved. There was also a problem of solving the basic food problem by the strategy. World Bank (1997) acknowledged the existence of many reasons why

rural development has been neglected in the past and pointed three of them to be the critical reasons. These are poor commitment and capacities in partner countries, waning international interests in rural issues, and poor commitment and weak past performance in the Bank.

As a result of the failure of the import-substituting strategy in the 1970s development economists started to give greater attention to employment and distribution of incomes. This gave rise to the initiation of giving high attention to the rural development. The rural development became a program and a strategy, especially, after the famous address's of McNamarra[1] at the World Bank's annual conference in Nairobi in 1973. At his speech he made the general public aware and disclosed that 40% of the World population are poor and live mostly in rural areas (Gsanger, 1994). According to Fasil (1977), the need for greater attention to rural development is readily appreciated due to the practical reasons that the majority of the population of developing countries live in rural areas; the scale of the poverty weighs too heavily on rural people as compared to the urban people; and also in the long-term the economic development of these countries depends on the rate of progress that can be achieved in the rural sector.

Since most of the African population is rural and mostly dependent on agriculture, the emphasis given to agriculture is critical which highly contributes to Africa's economic, social, and rural development. But in most African countries, especially in Sub-Saharan African, since independence agricultural performance has been poor. This poor performance, which resulted high rural poverty and environmental degradation, was as a results of many factors which can be attributed to low agricultural growth which averaged less than 2 percent per year for the past

[1] McNamarra- former president of World Bank who initiated rural development at international level as an approach to combating poverty with his famous speech in Nairobi in September 1973 (Gsanger, 1994).

thirty years; high population growth which is more than 3 percent per year; declining food production per capita; and the failure of many donor-supported projects (Cleaver, 1997).

When we look into the individual countries, especially African Countries, the poverty situation in rural areas is much worse than the urban areas. It is emphasized that nowadays to give high attention for rural development approaches because of this fact that the rural society is in a worse condition than the urban society. A nutrition survey conducted by Mlay (1985) in Tanzania indicated that urban areas have a much higher standard of living than the rural areas. This study further indicates that the rural population is found to be more vulnerable to various problems because of the fact that the rural development projects designed in many countries are not in their expected targets. In addition to this, especially, the improvement made in agriculture is minimal and even in some countries it is declining.

Bibangambah (1985) listed out various reasons why both nationally and internationally it is important to give more attention to the problem of rural poverty in the process of formulating appropriate policy intervention strategies, which ameliorates the problem. The reasons for high priority are the rural poverty is the major constituent of the world-wide poverty; the incidence of poverty is disproportionately high among the rural population; rural dwellers, specially in Africa, are the most disadvantaged occupational group; the severity of rural poverty and the special characteristics of the rural areas are different from urban areas.

Generally, the concept of rural development should be understood as a direct response given to the immediate needs of the rural community and to the demand for assigning the rural sector its

rightful place in the process of long-term national development (Fasil, 1977). Thus rural development is concerned with four major issues, which are necessary for satisfying the diverse needs of the rural community. These are the acceleration of agricultural growth; the development of the non-agricultural sector to absorb surplus labor; promotion of people's participation; and human resource development through the provision of services in health, nutrition and education (Mulat, 1999). In order to achieve these countries have been adopting different types of rural development approaches. These rural development approaches, generally in one way or another, were being affected by natural environment, human factors and resources. The most significant factors which acts as a constrain upon the rural development in which measures must be taken to counteract their negative effects are geographical and ecological; economic; technological; sociological and institutional; and political factors (ECA, 1977).

2.3. Approaches to Rural Development

Various approaches have been adopted, at various times in various countries, in order to realize broad based rural development. The approaches had their own successes and failures in solving the problems of the rural poor. In general terms despite the introduction of different types of rural development approaches in many developing countries the rural population are in absolute poverty.

In the process of designing rural poverty reduction strategies it will not be appropriate to recommend standardized way of approach. The strategy designed depends on the different country's situation and more specifically on the individual community's situation. With this respect it would be appropriate to mention the 'World Development Report 2000/ 2001' which

stresses this fact as there is no simple, universal blueprint strategies for poverty reduction, by stating the following.

> *"Developing countries need to prepare their own mix of policies to reduce poverty, reflecting national priorities and local realities. Choices will depend on the economic, socio political, structural, and cultural context of individual countries- indeed, individual communities." (World Bank, 2001a: 7).*

The approach to rural development was changing from time to time and different countries have been exercising different types of rural development approaches. The selection of any one approach to rural development depends on the policy objectives of the government. Eventhough there is some difference between agricultural development and rural development, they have also some common features because of the fact that any actions taken for the development of agriculture can be considered as an action/ strategy, which is necessary for the rural development. Generally, this means that agricultural development may be regarded as rural development but where the reverse is not true (Mulat, 1999).

Therefore, agricultural development strategies which can also be considered as rural development strategies, as advocated by different institutions, have taken several and varied forms in the past (Berhanu, 1994; Mulat, 1999). Among these approaches the Community Development; the Green Revolution; the Integrated Rural Development (IRD); and the pricing and Marketing Policy are the major rural development strategies which are discussed in the following paragraphs in detail.

2.3.1. Community Development

Community development started after World War II in India and the Philippines, spread throughout Asia and much of Africa, and was popular on the West Coast of South America for a time. This approach was based on the fact that no government could afford to place teams of technicians in every village. The solution was to create the multipurpose, village-level worker. This worker, a person from outside the village and with at least a high-school education, lived and worked with the villagers. He was expected to gain their confidence, organize village groups, and help them identify their felt needs. In this process the village worker was aided by funds from the national government, which often came from international donors (Gow and Vansant, 1983).

Efforts taking place to improve the life of the rural society through the introduction of rural development are not new. An early international rural development exercise, and one that can be seen as the predecessor of current program, was community development. Its decade of growth and prominence were the 1950's, although the origin of the term can be traced to the 1930's when it was used to define community participation in municipal planning in the United States. It is believed that the British Colonial Office first used CD, in relation to rural development, in 1948. At this time this program was designed to encourage self-help efforts and creates self-reliant communities in social and political spheres, so that it was related to meeting social and political objectives than economic objectives (Lacroix, 1985).

But on the other hand, Ruttan (1984) pointed out that community development, which became the major focus of development assistance in the first decade after World War II, included from

its inception both economic and political development objectives. According to Ruttan, community development was viewed as a process of three major actions. These actions are the direct participation of people in the solution of their common problems; employing a democratic process in the joint solution of community problems; and activating and/or facilitating the transfer of technology to the people of a community for more effective solutions of common problems.

The CD approach, which was the main strategy between the periods of 1950s and 1960s, had a recommended strategy of overcoming economic backwardness and traditional attitudes through modernization by targeting the village level rural community (Gsanger, 1994). At this time agriculture was not seen as a primary important sector rather it was focused on the transfer of resources (especially labor) from agriculture to industry. According to the Lewis two sector model, agriculture was considered traditional, overpopulated rural subsistence sector with surplus labor which can be shifted to industry which was considered as high-productive modern urban industrial sector (Todaro, 1994). The efforts to develop agriculture were limited only to CD. Therefore, CD focused on the village level community with its traditional social order and patterns of behavior. It was believed that it was possible to bring comprehensive social change in the rural areas by eliminating hunger, disease and ignorance through the introduction of approaches related to education, the promotion of agricultural production, the improvement of infrastructure, and hygiene and health (Gsanger, 1994).

The CD approach was designed to do much in changing the life of the rural community but after the implementation of almost for a decade it was found that there is no significant change in the

basic condition of the rural community. The effectiveness of the approach was not as desired because the traditional balance of power and the distribution of land in the villages could not be changed by the reforms taken in agriculture and the administrative structures did not allow free movements towards the grass- roots-oriented development through decentralization. The assumption that productivity can increase with the existing resources would not be practical. Even in India, where the approach was started and remained committed for a long period of time, the achievement of the CD program were low (Gsanger, 1994).

In the same way Ruttan (1984) explained some major reasons why community development programs were criticized starting from the mid-1960s. These reasons of criticisms were emerged because that the programs failed to improve the economic and social well-being of rural people; failed to reform the community power structure which led to local elites capturing a disproportionate share of both the economic and political gains generated by the programs; and also when the programs were successful they set in motion political forces that were not easily controlled by the center authorities. In most countries population was growing highly where as agriculture was not showing any progress by the CD approach. As a result of the gap between population growth and food production, food crisis was becoming the challenge to many countries. Therefore, developmentalists try to think another alternative rural development approach, which could solve this problem.

2.3.2. Green Revolution

The broadly based village development program, which is the Community Development approach, failed to solve the problem of the rural community especially in food supply.

Therefore, the ever-increasing food crisis led to the emergence of a new approach, which is supply-oriented, called the "Green Revolution". This approach was active between 1960s and 1970s and mainly was focusing on the growth of agricultural production through the provision of high-yielding seeds, fertilizer, technology to sectoral policies and agricultural service institutions (Gsanger, 1994).

The newly created technology, the green revolution, consists of the application of a package of inputs; the most prominent of which are the new high-yielding seeds in which the core of this new technology is based on biological research. This technology is advocated due to its various advantages such as higher yields per crop; shorter cropping cycles in some crops which economizes water; the shorter cycles permitting multiple cropping which economizes land; utilization of much more labor per unit of land as a result of increasing farm employment; and the ability of being easily disseminated. And it was these advantages which have led some observers to predict an end to the food grain problem in underdeveloped countries and the beginning of an era of worldwide surplus production (Griffin, 1973).

Therefore, as it was predicted, the approach when it was launched in 1960s has shown some remarkable results in raising yields in agriculture in some countries. Especially countries like India, Pakistan, Indonesia and the Philippines were those countries, which showed high achievements in the Green Revolution approach, and it helps them to become self-sufficient and improve their food security. Even outside Asia, countries like Ethiopia were successful by programs like MPP designed for small farmers to increase their productivity through the provision of subsidized seed and fertilizers (Gsanger, 1994).

However, such optimistic advantages and those results observed in some countries did not resulted in solving the food problem sustainably. This is because of the serious disadvantages of the new technology and due to the problem observed in the technical application of the program. The major disadvantages of the technology, which makes difficult the implementation are the high-yielding varieties are more delicate than the indigenous plants requiring more care by the cultivator; the high-yielding varieties are more susceptible to disease and infestation by insects and thus requiring protective applications of herbicides and pesticides; and in order to produce high yield from the new variety it needs to apply substantially high amount of fertilizer as compared to the local varieties. In general the wide spread extension of the Green Revolution is found to be expensive in terms of fixed and working capital and the opportunity cost of the capital (Griffin, 1973).

As a result of the above mentioned disadvantages, the Green Revolution, which was highly subsidized by the governments, was not working efficiently because it was highly capital-intensive. The benefit of the approach was only for few capable farmers as a result of which the income was concentrated on the hands of few which worsened the income distribution. In this program the large and medium sized farms were benefited where as the small farms lagged behind as a result of which the new technology exacerbated the already marked social differentiation in rural areas. By this approach, the really poor, those with no resources of their own, were largely overlooked. Consequently, the approach was highly criticized and later on it was realized as that the small and medium-sized family farms have a potential that can be tapped and as this need to be mobilized in an alternative approach (Gsanger, 1994). This was because of the fact that the Green Revolution was benefited mainly landlords and large farmers in

ecologically favored areas and due to this reason there was a need to initiate a new approach which could solve the stated problems in this approach.

2.3.3. Integrated Rural Development (IRD)

While it is difficult to say precisely when and where IRD came into being, the concept matured at international level in the early 1970s (Gsanger, 1994). Eventhough, a number of countries had been engaged in rural development policies for a number of years, the term IRD started to acquire special importance when, from 1976 onwards, the World Bank took it as one of its main line of activity. And also it became familiar when the different aid agencies of the countries like Canada, the Federal Republic of Germany, The Netherlands, Sweden and the USA started to give high priority for rural development through an integrated approach (Hilhorst, 1990). Cleaver (1997) also argue on the emergence of IRD as it was in 1970s that when donor agencies and African governments began significant investment in various agricultural projects in which IRD was one of the major part of these projects.

IRD deals with the provision of integrated multiple activities to the rural areas so as to achieve comprehensive development and be able to participate the poor in the benefits of development. Projects embodied in IRD provided investments needed for development in specific region within a country. They are area-based approaches. Therefore, IRD can be defined as those integrated projects, which try to bring a basket of goods and services, consisting of different activities such as production, social and infrastructural components to the poor rural areas (Lacroix, 1985). Thus from this comprehensive definition, IRD in general have the following objectives:

- To improve the living standards of the mass of the people by securing them some basic needs such as food, shelter, clothing and employment;
- To make rural areas more productive and create mutually beneficial relationship with other parts of the local, regional and national economy;
- To make rural development self-sustaining and participatory; and
- To ensure as much local administration and autonomy and as little disruptions to traditional custom as possible (Berhanu, 1994).

Bwalya (1985) stressed the need for integrated rural development approaches by citing as an example the failure observed in Zambia in co-operative strategy and rural settlement schemes. These programs was designed in the form of single rural development approaches without coordinating and not incorporating multi-activities so that their implementation was not successful. Therefore, Bwalya, further pointed out four distinguishing factors, which have to be taken into account when an attempt is done to alleviate rural poverty and encourage local level participation in decision-making and implementation of development programs in Zambia. These factors, which are influential in the adoption of integrated development strategy are the multi-disciplinary package; coordination and cooperation of people and activities; greater local participation; and project complimentarily and wider coverage.

But how these different types of activities are integrated perfectly to achieve the required targets is the most complex perspective of the approach. As Ruttan (1984) pointed out that especially, the institutional design and the program implementation systems were to be seen critically. This was to be done because the recognition that rural development involves the interaction of a large

number of interrelated activities was interpreted to imply that integrated program implementation could contribute to the achievement of rapid and measurable gains in agricultural production and rural welfare. Nowadays still many development agencies advocates integrated development programs, but in practice it can be seen that these programs are more multi-sectoral than truly integrated. This is because such programs consist of sectoral activities such as health, education, water supply and agriculture. Each sector is usually planned by sectoral experts who are primarily interested in seeing the people organize to implement 'their' Activities (Burkey, 1993).

The concept of integrated rural development is often considered to be vague, which later on raises various criticisms. Most practitioners use the term integrated as describing the fact that this type of rural development projects tries to integrate a number of otherwise unrelated components, each of them addressing one aspect of rural underdevelopment. It is generally agreed that the various components of the integrated rural development projects can be sub-divided into three main categories such as components related to agricultural production; components related to social services; and infrastructural components. In the first category, components directly related to agricultural production are agricultural credit, extension and technical assistance, input supply, and marketing assistance. Social components of the integrated rural development project consist of education and health. Finally, the infrastructural component consists of road construction, potable water supply system, irrigation works and rural electrification (Lacroix, 1985).

IRD having a noble objective subjected to various criticisms in later stages of its development. The main cause for the many of its problems was the lack of conceptual clarity and of

operationality in the early stages of its development. The diversity and vagueness of definitions given to IRD was the result of the lack of an understanding of the rural problems (Gsanger, 1994). IRD projects were failed mainly by being of excessively centralized and top-down approach. Most decisions regarding their design and implementation were made by central government officials, and community were rarely involved in project design, implementation, or monitoring (World Bank, 1997). It failed to bring about any meaningful structural and power change suited to the rural community nor achieved the desired broad-based mobilization of resources.

According to Cleaver (1997), the IRD approach, in general, faced problems of policy, management and coordination. In terms of policy the IRD approach was assuming a remarkable homogeneity access of all countries in Africa. The policy towards marketing and pricing was not taken into account. The intervention of the government was too high and no consideration for private intervention. There were urban bias government expenditures. And all these policy problems were aggravated by the distortion of world markets through agricultural subsidies in developing countries, which resulted the reduction of world prices for agricultural products. This decline in global prices further reduced African farmers' income.

The project management problem observed in IRD was that the management structures designed for IRD projects do not incorporate government line agencies. Projects were run by donors and expatriates, with out the direct involvement of the government agencies. The governments' capacity to manage the programs was not developed. The projects were not included to the already existing government institutions because the projects were not embedded locally, and as

a result of which many of these projects and their services simply disappeared once donor funds dried up and the expatriate went home.

The problem of coordination was also one factor that leads the IRD approach to fail. Each rural development projects were independent with separate administration and donor procedures depending on the type of donor. Each project was very expensive, as management and overhead costs were duplicated. Projects that seem to be working in a specific area were not practical for a larger area.

Generally, from the experience observed that the public sector-managed agricultural and rural development projects widely supported by the African governments, and intellectuals, the Western academic community, and donors, were fatally flawed in design and execution. This was partly due to factors external to the projects themselves (poor government policy, international prices, climatological constraints, and institutional weaknesses) and partly to fundamental project design flaws (Cleaver, 1997).

2.3.4. Pricing and Marketing Policy

Due to the increasing criticism to the IRD approach in the late 1980s and 1990s a change in approach began to take place. The IRD programs started to phase out because governments and donors reduced the priority given to this approach due to its various criticisms. In the new approach that was emerged between 1980s and 1990s the change in government agricultural policy became an objective of some donors and governments in a growing number of African Countries (Cleaver, 1997).

The new strategy focuses on strengthening the capacity for self-help of the development organizations in rural areas. Its main recommended strategy is that sustainability of action is ensured only if beneficiaries are actively involved in the solution of their own problems. So that in this new approach the governments' agricultural market and pricing policy plays an important role (Gsanger, 1994).

The pricing and marketing policy was initiated because of various reasons. The most important of these reasons was that, firstly, donors supported "structural adjustment" programs were to take place in many countries. And according to this structural adjustment economic reforms including exchange rate reform, removal of price controls, public expenditure reforms, and marketing and input reforms were to take place to allow all stakeholders to participate in competitive environment. Secondly, integrated rural development projects, which were blamed of being costly, centralized, not coordinated, and not involving the private sector, began to be phased out by donors and governments. This strategy tries to use government line agencies over project management units and African staffs rather than foreign expatriates for management. Economic and agricultural policies were designed to encourage private sector development, market development, reduction of price distortions, and market deregulation (Cleaver, 1997), in which these were the major problems observed in IRD approach and by which it was highly criticized.

The new approach has also its own weaknesses in which the most important one has been the wide spread failure of structural adjustment to create an enabling environment healthy enough to stimulate private investment in the rural sector. Donors have exacerbated the situation by working independently or through government, with out establishing good instruments to support the private sector. Although the new strategy identified the building of African capacity to

manage as an important element, efforts to build such capacity were most often half-hearted. The African capacity that exists often continues to be ignored. Many donors persist in financing expatriates to manage "their" projects than using the local experts by building the capacity required (Cleaver, 1997).

2.4. Community Participation in Development Process

Participation of the rural community in the process of rural development is not a new idea; it has existed under different names starting from the early 1950's. What is new is the increasing emphasis and even faith being placed in participation by host governments and international donors. Especially since the early 1970's, Third World governments and international donors have directed development efforts toward the poor majority. And hence based on their experience, a consensus has evolved that participation is a necessary conditions for rural people to mange their affairs, control their environment, and enhances their own well being. This necessary condition of participation is well accepted due to its various significance in the development process such that: people organize best around problems they consider most important; local people make rational economic decisions in the context of their own environment and circumstances; voluntary local commitment of labor, time, material and money to a project is a necessary condition for breaking patterns of development paternalism which reinforce local passivity and dependency; and local control over the amount, quality and especially the distribution of benefits from development activities is directly related to those benefits becoming self-sustaining (Gow and Vansant, 1983).

Participation of the rural poor in their own development has been measured as a key factor in the success of projects. However, this participation can be seen from different angles based on the

development strategy to be followed. Different kinds of development approaches require different types of participation. For instance as Goulet (1989) pointed out a 'people centered' development which mainly assigns priority to the satisfaction of basic human needs in the poor masses, to job creation, self-reliance, and the active preservation of the cultural diversity, requires a form of participation in which non-elites play an active role in the identification of their own problems. On the other hand if a country followed top-down, growth-oriented approaches to development, it is common that whatever participation does occur will not be generated by the people themselves from below, rather participation will be imposed by the government for the purpose of rallying the populace to implement activities planned for it.

It is understood that for rural centered development approaches the form of participation that allows the active role of the non-elites in the identification of their own problem is much more appropriate. This is because if participation is to really release the people's own creative energies for development it must be much more than the mere mobilization of labor forces or the coming together to hear about pre-determined plans. It must be more than a policy- statement, in which at all levels of development aspects there must be a genuine commitment to encourage participation (Burkey, 1993).

From the rural development point of view participation of the people in the development process has an indispensable advantage in which without participation the efforts of poverty alleviation will be more difficult, if not imppossible. The comprehensive definition of participation explaining its various dimensions and advantages to rural development is given by Food and

Agricultural Organization (FAO) in Peasants' Charter as quoted by Burkey (1993) can be stated as follows:

> *"Participation by the people in the institutions and systems which govern their lives is a basic human right and also essential for realignment of political power in favor of disadvantaged groups and for social and economic development. Rural development strategies can realize their full potential only through the motivation, active involvement and organization at the grassroots level of rural people, with special emphasis on the least advantaged, in conceptualizing and designing policies and programs and in creating administrative, social and economic institutions, including cooperative and other voluntary forms of organization for implementing and evaluating them." (P-56).*

In the Third World context, the participatory approach to rural development has been, and continues to be, seen as a panacea for solving rural development problems. This happens due to the fact that the approach consists of a strategy which helps to succeed rural development programs by engaging the beneficiary population (Yeraswork, 2000). In addition to this World Bank recognized the importance of participating poor communities and poor people in rural development efforts to promote asset accumulation in rural areas, by forwarding three main objectives of participation. These are to ensure that the preferences and values of communities are reflected in the choice and design of interventions; to use community and participant monitoring as a mechanism to improve implementation, transparency and accountability; and to give poor people more influence over their lives (World Bank, 2001a).

Therefore, rural development strategies need to be geared towards enhancing local-level participation in formulation, implementation and management of development policies. With respect to this Bwalya (1985), suggested the most conventional wisdom of local level participation in three ways that: (1) it increases the quality and relevance of decisions since these are made with the specific needs of the locality in mind; (2) it increases chances of success and

of local mobilization since the local people are (or will tend to be) committed to their own decisions and see the activities deriving from such decisions as beneficial to themselves; and (3) these in turn, will tend to motivate a sense of self-reliance and a wider and more efficient use of local resources. Goulet (1989) also forwarded three important positive functions of participation, which it serves if taken as a vital component of development strategy. In these vital functions participation guarantees government's non instrumental treatment of powerless people; it serves as a valuable instrument for mobilizing, organizing, and promoting action by people themselves; and it functions as a channel through which local communities or movements gain access to larger, macro arenas of decision making.

There are also different arguments on whether to take people's participation in development activities as a means to an end or an end in itself. The concept of participatory development forms three strands of thought: the mobilist, the instrumentalist and the radical models of participatory development (Yeraswork, 2000). According to these models, the mobilist model conceives people's participation in development in terms of labor and material contributions; the instrumentalists view popular participation as the active involvement of people in decision-making process; and the radical model, on the other hand, view participation as an active process, by which a person or a group takes the initiative and asserts its autonomy to do so, and as an organized effort on the part of excluded groups to increase control over resources and regulative institutions in given social situations.

Integrated rural development programs are supposed to be essential instruments of rural development approaches in order to improve people's living conditions on the basis of better utilization of both natural and human resources. This can be achieved only by making to

participate the community in the planning, implementation and management of their needs and therefore this makes it extremely necessary to formulate a strategy, which takes into account the participation of the beneficiaries in any development effort if the development has to be sustainable. Dereje and Jemal further expressed that lack of participation in any development effort to be considered as the result of following inappropriate approaches to development planning by countries (Dereje and Jemal, 1994).

From the experiences observed in the implementation of integrated rural developments in Ethiopia by international non-governmental organizations, Tegegne (1994), firmly argues and suggests the importance of genune participatory and people-centered development approaches to be followed by development partners, NGOs. According to Tegegne, this approach will be effective if only NGOs are able to cultivate a conducive environment of entry prior to designing and implementing any type of development projects; if they are able to make sure that the intended beneficiaries want, know and support the proposed projects; and if they are able to make sure that the local people are convinced and comitted to the development projects. In addition to these, it is also when NGOs work closely with the state and its development institutions in order to influence the development agenda in favour of the poor at micro and macro levels.

2.5. Country Experiences in Integrated Rural Development (IRD)

It is very difficult to choose one approach from the other and recommend for a specific country due to the variations that exists among countries. There are various economic, social, political and institutional factors that affect rural development along which countries also differ. Even if, there exists difference in economic, social and political condition among countries, sometimes the strategies followed and the program implementation process resembles one another. Hence, much can be learned about the effectiveness of different development strategies from the experiences of individual economies. Many countries practiced IRD as an approach to rural development and from which the experiences of India, China and Tanzania are discussed in this section to be taken as a lesson.

2.5.1. Indian Experience in IRD

The Indian government has been actively involved in the production process, regulating the scale, technology, and location of any investment projects other than relatively small ones. This extensive government involvement was accompanied by macro economic stability in the 1960s and 1970s, but during this time the growth achieved was slow. During the period 1960-79 the growth of per capita income averaged one percent a year, absolute poverty declined from about 55 percent in the early 1960s to only 45 percent in the mid-1980s. But later on the partial reforms undertaken since the late 1970s contributed to an acceleration in the per capita growth rate to about 3 percent in the 1980s (World Bank, 1991).

India's planned development approach aimed at improving the social and economic conditions of the vast rural population. The introduction of several programs and the shift in the emphasis from one program to the other particularly from community development program to Integrated Rural Development indicates the concern of the planners to achieve an objective of equity. This objective of equity is expressed in terms of reduction of unemployment, reduction of income inequality, removal of poverty, improvement in accessibility to public goods and services and the reduction of inter-regional imbalances in development (Vivekananda, 1980).

India has passed through five distinctive phases in rural development planning. These were community development approach; community development blocks with local self-government; green revolution (agricultural development); target group-oriented or area-oriented approaches; and Integrated Rural Development (IRD). The first phase coincides with the community development approach of the early fifties. The community development program, which was initiated in the country in 1950s, was aimed at all-round development of rural society. This all-round development was based on the assumption that people would take up development activities of their villages with the initial assistance of the government. The program was designed to initiate micro-level planning at block level by integrating specialists from different departments of the Government. However, the program was not in a position to evoke the interests of the villages and the functional integration at block level also did not show results as the different departments were concerned with achievements of sectoral targets (Vivekananda, 1980).

The second phase of rural development planning in India was characterized by the creation of community development blocks and the introduction of a system of local self-government to strengthen popular participation in the program (Berhanu, 1994). But there was a rapid fall in food production in the mid-sixties in India and as a result of this the planners shifted from a broad-based community development approach to a specific agricultural development program, which is the third phase. In this phase Green Revolution was introduced in order to increase agricultural productivity and as a result of which there was a remarkable achievement in food production. However, the green revolution resulted in regional disparity and increased inequality between the rich and the poor in rural areas.

The fourth phase of rural development was initiated to address the deprived community by the previous approach. This approach was designed to diffuse benefits to the weaker section of the community through target group-oriented or area–oriented approach. The diffusion of benefits to the weaker section of the society was assumed to be provided through growth center approach in which central villages were selected as nodal points. The provision of packages of functions to the central villages along with the developmental programs is expected to activise the nodal points and the nodal points in turn to generate development impulses in their hinterland through spread effect. But there were doubts about the beneficial spread effects towards the periphery from the centers in, which instead there could be a probability that growth centers to drain their hinterland rather than induce prosperity in them. Therefore, later on it was stressed to have a balanced development strategy of all rural settlements in the absence of beneficial spread effect. This balanced development strategy of the rural settlements was assumed to be achieved through

the strategy of Integrated Rural Development, which is the fifth phase of rural development in India (Vivekananda, 1980).

Pilot projects for Integrated Rural Development were initiated in India in the year 1976-77 in twenty districts, one in each state. Later on, IRD has become the accepted strategy for rural development in the Five-Year Plan of the 1978-83 of the Government of India and it was started implementation in 1979 in order to provide comprehensive services in approach and coverage to the rural settlements (Vivekananda, 1980).

The IRD was designed to cover 2000 community development blocks and envisaging 300 additional blocks to be covered every year until 1983. The entire block is divided into clusters designated as the basic planning unit, which consists of a group of settlements (villages), organized around a service center. The specific objectives of the block plan were:

- To identify the growth potential of the block in terms of physical, biological and human resources;
- To review the on-going development activities in terms of production and employment generation;
- To assess the magnitude of the problems both in agriculture and non-agriculture sectors;
- To identify and formulate a package of projects;
- To identify the gaps in the distribution of basic needs and facilities and find a mechanism to narrow it (Berhanu, 1994).

2.5.2. Chinese Experience

From 1950 to 1978 the Chinese economy was centrally planned in most respects. Such a highly centralized administrative system was too rigid, involves excessive command planning from above and makes productive enterprises subordinate to administrative organs. The defects of this centralized approach became clear later on except it showed some progress in infrastructure and resource mobilization and due to this structural reforms were introduced in 1978. The most striking event of this structural reform were rural reforms that introduced price and ownership incentives to farmers. Due to this reform real farm prices have increased by 50 percent, and the agricultural growth rate rose from 2.5 percent in 1965-78 to 7.2 percent in 1978-88 (World Bank, 1991).

In addition to these, according to World Bank (1995) there were also other considerable achievements in the Chinese economy due to the market-oriented reforms of the 1978. After this reform real Gross Domestic Product (GDP) growth has averaged over 9 percent a year, and inflation 7.5 percent a year. Average consumption more than doubled and over 170 million of the 270 million Chinese living in absolute poverty in 1978 were raised above the poverty threshold. The household responsibility system and partial liberalization of agricultural prices helped to raise agricultural production and rural incomes, especially in the early years of reforms.

Therefore, China was widely recognized for its achievements in reducing absolute poverty since the adoption of the broad rural economic reform of the 1978. These reforms, which resulted in dramatic rural economic growth, were the adoption of the production responsibility system; the dismantling of the commune system; the increase in agricultural product price; and market

liberalization. These reforms combined with broad participation and a well-funded national poverty reduction program have brought about a tremendous reduction in rural absolute poverty (World Bank, 2001b).

Despite China's achievement since 1978, the government faces significant challenges over the medium term in achieving sustainable growth within a stable macroeconomic environment, and reducing poverty and maintaining a relatively egalitarian distribution of income and wealth. According to the World Bank (2001b) findings, there has been an increasing concentration of remaining poverty in China's western provinces during the 1990s. Therefore, in order to achieve further reduction in poverty and to challenge the existing poverty it was required to establish stronger institutions, and a more targeted and concentrated program, poverty reduction program, than the previous ones. In order to improve the effectiveness of the village and household-based approach the measure taken was to strengthen institutional arrangements. This is because the program needs strong and effective leadership, accountability from the top levels of government, better control over the use of funds, improved coordination between funding channels, and a much stronger monitoring effort.

China's poverty reduction program comprises a wide variety of actors, programs and funding channels, because it was believed that the most effective means to address the problems of the absolute poor is through a set of multisectoral, and complementary interventions, delivered through a multiyear project approach. In order to do these most government ministries and agencies were given special poverty reduction responsibilities and also most domestic organizations, international donors and NGOs have played an increased role in the program. All

these activities and institutions were to be directed and coordinated by the State Council's Leading Group Office for Poverty Reduction (LGPR) which was established in 1986 to provide greater coherence to the large number of poverty reduction programs. Since its establishment, LGPR and its executive agency, the Poor Area Development Office (PADO), has emerged as the principal advocate of China's rural poor (World Bank, 2001b).

The experience obtained from a number of large and small-scale projects in China during the 1990s suggests that one of the most effective means of assisting the absolute poor is found to be through an integrated set of interventions in the form of a multiyear project. In most cases, the multisectoral rural development project model includes an integrated program of intervention in:

- Upland agricultural development including field and tree crop and livestock activities;
- Labor intensive construction of rural roads, drinking water systems, small scale irrigation, agricultural drainage works, and other rural infrastructure;
- Provision of off-farm employment opportunities;
- Institution building and poverty monitoring;
- Rural enterprise development;
- Improved access to basic education and health; and
- Separate microcredit components. (World Bank, 2001b).

However in the process of poverty reduction program in China there has been some observed problems. Before the 1990s, local beneficiary participation in project design, management and evaluation were given less emphasis and still after the 1990s tend to occur primarily only in programs funded by international organizations. Less work has been done on building

participatory institutions at local level for project management and monitoring and evaluation systems have rarely tried participatory methods and tend in general to lack qualitative input. Therefore in order to increase benefits to the rural poor the following points were proposed to be applied to future poverty reduction programs:

- Creating projects that bring management organization down to village level;
- Building participatory institutions based on existing social networks;
- Training for local project officials about participatory methods and their goals;
- Attempts to build new participatory administrative unit or building more community input into existing institutions; and
- Minority community participation to help projects adjust to local cultural differences. (World Bank, 2001b).

2.5.3. Tanzanian Experience

Rural development policy in Tanzania was a post-Arusha Declaration phenomenon. During the British colonial administration there was very little emphasis on rural development. It was after 1967 that rural development in Tanzania took a shape, which can be said that it was of different shape from the previous one. In the process of decentralization and development planning, Tanzania seems to combine the centralized and self-help approaches to development planning to achieve the desired goals. The developmental programs, which were planned through this methodology, seem to have succeeded. This is because it is the hybrids derived from a selective utilization of the advantages of both the self-help and centralized planning approaches (Omari, 1976).

Even before the colonialists came to Tanzania, due to ecological situations and social changes which were taking place in Tanzania (Tanganyika then), there was differentiation of development. The colonial intensified the existed developmental situation and created more differentiation among peasants, which could not be overcome through regulation, and the phenomenon has remained up to the present time. Big plantations were remained in the hands of foreigners and the laborers working in this plantations were not allowed to go back to their home land. Due to this situation some kind of underdevelopment was created in their home areas and in addition to this social problems were high due to division of families (Omari, 1976).

The village settlement program, which was in essence the rural development strategy of the early sixties until 1966, was launched in Tanzania under a two-prolonged approach to the problem of rural-underdevelopment in the first five-year plan. These approaches were the improvement approach and the transformation approach. In the improvement approach it was designed for the continuation of the conventional and pre independence extension approach and attempted to bring increased production without changing the traditional social and legal structure. On the other hand the second approach was aimed at bringing about rapid production increase under institutional and legal systems created by the government. The transformation approach was aimed at ensuring the production of priority cash crops by removal of selected farmers from their traditional setting and placing them in the village settlement schemes where they are provided necessary infrastructures like roads, water, schools, clinics and modern agricultural inputs under close government supervision (Ndissi, 1979).

After independence the struggle in the process of rural development has been and was an attempt to break away from the inherent patterns of rural development that has been taking place in the previous times. In order to be able to implement the government policy of developing the rural areas a new institution called the Village Settlement Agency (VSA) was created in 1963. This agency launched the program on Village Settlement Scheme (VSS). The approach conducted here was a kind of supervised rural development through settlements because in this approach the VSA was to report to a committee called 'Rural Settlement Commission' (RSC). This approach to rural development was believed to be the road to a better life for the Tanganyikan farmers and consequently accepted as a logical way to move Tanganyikan (Tanzanian) post-independence agricultural economy much faster (Omari, 1976).

Initially the settlements were intended as a pilot experimental scheme for the future development but this experimental aspect of settlement schemes were not accepted by the government due to the expectation of wonders of development. Therefore later on many village settlements were created in various areas with a lot of people moving into them. In the first Five Year development plan which was started in 1964 and ended in 1969, the emphasis of creating new villages which was very expensive exercise was laid down by the Government (Omari, 1976).

The village settlement programs were ineffective and were not accepted by officials. Ndissi (1979) pointed out reasons why the village settlement program failed from being the model of development. These has been the overcapitalization of the scheme as compared to the economic benefits it generates; the dependency syndrome it create among the settlers; and its

inability to coincide with the socialist content of Ujamaa[1] ideology. The problems that were existing in the rural area was revealed nationally in February 1967, after Nyerere toured the country to observe the gap in living standard between urban and rural areas. Accordingly, in February 1967, at the town of Arusha, the TANU's[2] national executive met and deliberated on the general economic, political and social problems that have been revealed and as a result the resolutions that were passed came to be known as the "Arusha Declaration" (Ndissi, 1979).

The first five year plan was highly centralized, it gave less attention to the regional and district level, it was generally a set of national macroeconomic and sectoral objectives without policies for rural development and it was too optimistic about external or foreign source of financial contribution. From these experiences, Tanzania at the end of the first five year plan in 1969, launched a new second five year plan on June 1969 to July 1974, in which its broad objectives and strategies were laid down in the Arusha Declaration of February 1967 (Ndissi, 1979).

The components of the Arusha Declaration were later on emphasized in the second five-year plan as the main objectives and strategies for rural development. These components were an emphasis on rural and specifically agricultural development; an understanding of rural socialism that stresses the building of Ujamaa or cooperatively producing communal villages rather than either state farms or independent peasant homesteads; primary education which emphasize and reflect Tanzania's socialist values; and generally rural development that can be achieved through

[1] Ujamaa in Swahili is loosely translated to mean communalism, cooperation and familyhood (Ndissi, 1979).

[2] TANU is an abbreviation for Tanganyika African National Union, which is a simple political democratic party that has ruled Tanzania under the leadership of president Julius K. Nyerere (Ndissi, 1979).

self-reliance by active mobilization of people and domestic resources but not by depending on foreign aid (Ndissi, 1979).

The Ujamaa village policy was developed out of necessity as an alternative towards rural societies' development in Tanzania. Especially in September 1967 a document on rural development was prepared showing in detail how to start the Ujamaa villages based on the traditional African family system. And also the emphasis of Ujamaa policy on rural development was justified by the fact that agriculture and related activities continue to make up the largest sector in the Tanzanian economy. Therefore it was argued that from the situation and realities, which existed in Tanzania, the Ujamaa village policy is chosen to be the best alternative policy for rural development and comprehensively benefiting the rural societies. Omari (1976) described the basic reason why Ujamaa villages are initiated and established as:

> *"One of the reasons of establishing Ujamaa villages is that, besides owning the means of production communally, working together, living together and distributing the produces accordingly among the members of the Ujamaa village; this system of living would make it much easier for the government to utilize its resources more beneficially in the provision of necessary social services to her citizens." (P-106).*

The basic rationale for creating Ujamaa villages was that in the past Tanzania had depended too much on big plantations, foreign aid and money for the development of the country. The big plantations created differentiation in rural areas, which ultimately leads to class development and exploitation. In order to change these situations the Ujamaa villages are created based on the principle of self-reliance. The Government applied three methods in the process of forming Ujamaa villages. These are the voluntary method to avoid any kind of force in establishing Ujamaa villages; well planned mass Ujamaa village formation; and using some circumstantial

methodology which leads people to come together such as shortage of land, population pressure and disasters (Omari, 1976).

The Ujamaa village program in general terms refers to a total integrated strategy encompassing a framework for the farmers political participation; an instrument to facilitate the rural development process; a mechanism for checking forces that would give rise to class formation and uneven distribution of income; and a mechanism where by political unity is consolidated and the need for national defense fulfilled. The ultimate objective of establishing Ujamaa villages is to farm the village land collectively, using modern techniques of production and sharing the returns according to the work contributed and by doing so the following potential benefits are expected:

- It would be easier to supply technical advice through agricultural extension and supervisory officers to collective farmers than individuals;
- It is expected to be much easier and economical to provide basic infrastructural requirements such as clean water, clinics, marketing and transport facilities;
- Ujamaa villages as individual institutions are expected to become viable enterprises to attract loans for agricultural investment;
- The Ujamaa rural development strategy rests on two assumptions, which can be summarized in terms of productivity and welfare returns. (Ndissi, 1979).

The Ujamaa village formation in Tanzania was not with out any difficulty. Eventhogh there was high commitment form the government side in implementing the program, there were a lot of

problems observed during implementation and even after implementation. Some of the major problems were:

- The whole scheme was a very expensive operation as compared to the Tanzanian resources, it required a lot of money, time, manpower and energy.
- The settlers' expectations and those of the planners (government) were not in accord as a result of which the settlers' economic productivity became low.
- The failure of the settlement schemes can also be attributed to the differences existed between the experts, technocrats and the politicians. While the planners and technocrats argued for small scale experimental schemes, the politicians with an enthusiasm for getting Tanzania's society developed in a shorter time decided to establish large number of new settlement schemes which would cost the government huge resources.
- The process tried to implement carbon copies from other countries (like Cuba, Russia, China, etc.).
- There was a problem of communication between the top layer of leaders and the local people and also misinterpretation about the village's way of living. (Omari, 1976).

CHAPTER THREE: DESCRIPTION OF THE STUDY AREA

3.1. Natural Conditions

The Benishangul-Gumuz National Regional State (BGNRS), having an estimated area of about 4, 205, 500 ha (about 50, 382 Km^2), is situated in the north western part of Ethiopia bordering the Sudan in the west, Amhara Region in the north and east, Oromia Region in the south and south east. The region is located between 9^o 30' and 11^o 30' north latitude and 34^o 20' and 36^o 30' east longitude (UNECA, 1998). The Region is divided by the Blue Nile into two parts. The Northern part-Metekel Zone and Pawe Special Woreda- comprises an area of 26,561Km^2, the Southern part- Assossa Zone, Kemashi Zone and Mao Komo Special Woreda- of 23,820Km^2 .

The elevation of the region ranges from 580masl to 2,731masl. The highest peak is the Belaya plateau in Dangur Worerda, the lowest is where the Blue Nile crosses the Ethiopian-Sudanese border. The major part of the region, about 75%, is low lands (Kolla, below 1500masl), 24% is midlands (Woyna dega, 1500-2500masl), and only 1% is highlands (Dega, above 2500masl). The temperature reaches a daily maximum of 20-25degree centigrade in the rainy season and rises to 35-40 degree centigrade in the dry season. The hottest period is from February to April. The minimum temperature range from 12 to 20 degrees centigrade, depending on season and altitude (BOPED, 2001).

3.2. Population and Settlement Structures

Benishangul-Gumuz Region consists of three administrative zones, which are Metekel Zone, Assossa Zone and Kemashi Zone. The Region has 20 Woredas out of which two of them are special Woredas (Pawi and Mao Komo). The rural part of the region has a total of 631 farmers

associations, while the urban part has 14 Kebeles (CSA, 1996). See annex-5, map for the location of the region.

According to the 1994 Population and Housing Census, the total population of the region was 460,459 out of which 233,013 were males while 227,446 were females. From the total population of the region 92 percent lives in rural areas while only about 8 percent lives in urban areas. According to this statistical evidence, with an estimated total area of 50,382 Km^2 the region has a population density of 9.1 individual/Km^2 , which shows sparsely populated. The population is growing very fast. The projections from the Population and Housing Census of 1994 indicated a population of 543, 627 to be expected by the end of the year 2000.

The vast majority of the population lives in rural areas, often in remote, inaccessible places. In some areas in the region people have started to come closer to existing settlement centers with schools and health infrastructure in recent times. In Kemashi Zone, however, the settlement pattern is still much scattered. People are living in small villages spread all over the area. This condition makes it very difficult, or impossible, to supply people with services and infrastructure (BOPED, 2001).

Among the major ethnic groups found in Benishangul-Gumuz Region, Jebelawi is the dominant one constituting about 25.1 percent in the 1994 Population Census of the region. Accordingly, Gumuz comprises 23.3 percent followed by Amhara 22.2 percent, Oromo 12.8 percent and Shinasha 7.0 percent. Regarding the distribution of ethnic groups by Zone, Gumuz is the largest ethnic group, with respect to area coverage, found in the two Zones of Metekel and Kemashi and

next Jeblawi in Assossa Zone. Kemashi is one of the three zones located in Benishangul-Gumuz consisting of five Woredas namely Kemashi, Agalo Meti, Yaso, Sirba Abay and Belo Jeganfoy, with a total population of 50,783. The majority of the populations in the Zone are Gumuz and their main religion is Christianity and traditional beliefs (BOPED, 2001).

The study area Kemashi Woreda is located at a distance of about 220 Km from the regional capital Assossa. The Woreda has a total population of about 8,335 of which all is considered to be the rural population according to the 1994 Population and Housing Census (CSA, 1996). Kemashi Woreda was selected for WIBS program implementation in 1994 to be taken as a model for future replication of the program to other Woredas. The evaluation in this report was based on the performance of WIBS program in the Woreda taking into consideration some selected indicators. In order to evaluate the performance of WIBS program in Kemashi Woreda, another Woreda, which is called Agalo Meti Woreda, was taken as a control group. According to the 1994 Population and Housing Census Agalo Meti Woreda has a total population of 14,190. The Woreda has similar socio-economic characteristics with Kemashi Woreda, except the intervention of the WIBS program in Kemashi Woreda. See annex-5, map for the location of the two study areas.

3.3. Household Characteristics of the Study Areas

The general household characteristics of the sampled households like household type, family size, age, education level and marital status of the household head mostly have impact on the acceptability and smooth implementation of any program introduced in a certain area. This is because in most cases the household heads are the decision-makers in the family, so that their awareness level is unquestionably important for any type of interventions.

From the total of 200 sampled households in the program and non-program areas 96.5% households are male-headed households while only 3.5% are female headed. With respect to the household type there is no significant difference between the program and the non-program areas only few female household heads are found in both areas. As shown in Table-1 below, 97.0% and 3.0% in the program area and 96.0% and 4.0% in the non-program area are male headed and female-headed households, respectively ($\chi^2 = 0.148$).

With respect to ethnic group distribution, two major ethnic groups Gumuz and Oromo are dominantly found in both areas. From the total sampled households in both Woredas 83.5% are Gumuz while 16.5 % are Oromos. Variation is observed among the program and non-program areas in ethnic group distribution at 1 percent significant level ($\chi^2 = 16.004$). Gumuz ethnic group, which is highest in both areas, has a share of 73.0% in the program area and 94.0% in the non-program area. But this variation in ethnicity does not have any relation with the program intervention.

Table-1: Household Type and Ethnic Group of the Sampled Household Heads

Variable	Program Area		Non-program Area		χ^2	Total	
	No.	%	No.	%		No.	%
Household Type					0.148		
• Male headed	97	97.0	96	96.0		193	96.5
• Female Headed	3	3.0	4	4.0		7	3.5
Total	100	100.0	100	100.0		200	100.0
Ethnic Group					16.004***		
• Gumuz	73	73.0	94	94.0		167	83.5
• Oromo	27	27.0	6	6.0		33	16.5
Total	100	100.0	100	100.0		200	100.0

*** Significant at 1 percent level.
Source: Own survey, 2002.

The average family size of the total sampled households is 6.4 persons with standard deviation of 2.60 showing that high family size in almost all the observations with out dispersion. As shown in Table-2 below, there is no significant difference between the two groups, with respect to family size. The average family size in the program area is about 6.2 persons with standard deviation of 2.61, while the non-program area has an average of 6.7 persons with standard deviation of 2.59. As it can be seen from the value of the standard deviation, which is the measure of variability in descriptive statistics, in both areas the majority of the households have family size closer to the mean value, which shows the presence of larger family members in both areas without variation.

Household heads in the sampled households are found in a younger ages. This is 38.8 years on average with standard deviation of 14.1. Between the program and non-program areas there is no much variation in the age of the household heads in which for the program area the average age

is 39.7 years with standard deviation of 14.7, while for the non-program area it is 38 years with standard deviation of 13.4. The high value of the standard deviation in age, shows the presence of high variation in the range between the minimum and the maximum ages in both groups (See Table-2).

Table-2: Family size and Age of the Sampled Households

Variable	Program Area		Non-program Area		T-Value	Total	
	Mean	SD	Mean	SD		Mean	SD
Family Size	6.2	2.6076	6.7	2.5913	-1.170	6.4	2.6018
Age of respondent	39.7	14.7131	38.0	13.4427	0.873	38.8	14.0838

SD- Standard Deviation
Source: Own survey, 2002.

The program and non-program areas show no significant variation in marital status ($\chi^2 = 2.376$) as that of religion which shows variation at 1 percent significance level ($\chi^2 = 33.961$), which is highly significant variation. From the total sampled population 71.0 % are married for single spouse while 23.0% have more than one spouse. This shows that in both Woredas there are significant numbers of peoples who have married to more than one wife. This condition of having more than one wife have also its own impact on the socio-economic condition of the households. Eventhough the number of those having more than one spouse is slightly lower in the program area than the non-program area, it can be said that the program intervention does not have significant role in changing the attitude of the society in this respect (See Table-3).

On the other hand religion shows significant variation among the program and non-program areas. From the total sampled households 54.5%, 25.0% and 10.0% of the households are the followers of Orthodox, Protestant and traditional beliefs, respectively. Traditional belief

followers are higher in the non-program area (16.0%) while there are only few (4.0%) in the program area (See Table-3).

Table-3: Marital Status and Religion of the Sampled Household Heads

Variable	Program Area		Non-program Area		χ^2	Total	
	No.	%	No.	%		No.	%
Marital status					2.376		
• Single	2	2.0	-	-		2	1.0
• Married for single spouse	72	72.0	70	70.0		142	71.0
• Widowed	5	5.0	5	5.0		10	5.0
• Have more than one spouse	21	21.0	25	25.0		46	23.0
Total	100	100.0	100	100.0		200	100.0
Religion					33.961***		
• Orthodox	61	61.0	48	48.8		109	54.5
• Protestant	15	15.5	35	35.0		50	25.0
• Catholic	18	18.0	1	1.0		19	9.5
• Muslim	2	2.0	-	-		2	1.0
• Traditional Belief	4	4.0	16	16.0		20	10.0
Total	100	100.0	100	100.0		200	100.0

*** Significant at 1 percent level

Source: Own survey, 2002.

The status of formal education attendance of the household heads in the study area in both groups is found to be very low. Out of the total sample, only 3.5% reported that they are attending school at present time while 60.5% received formal education in the past. The rest 36.0% of the sample never attended any kind of formal education. With the level of formal education attendance, there is no significant difference between the two groups ($\chi^2 = 0.273$). As shown in Table-4 below, proportional number of households are attending school now and were attended in the past formal education in both program and non-program areas. In the same way

in both areas considerable percentage of the household heads never attended any kind of formal education, showing higher percentage of adult illiteracy.

Table-4: Status of School Attendance of the Sampled Household Heads

Status of school attendance	Program Area		Non-program Area		χ^2	Total	
	No.	%	No.	%		No.	%
• Attending now	4	4.0	3	3.0		7	3.5
• Attended in the past	59	59.0	62	62.0	0.273	121	60.5
• Never attended	37	37.0	35	35.0		72	36.0
Total	100	100.0	100	100.0		200	100.0

Source: Own survey, 2002.

When we look into the education level of the sampled household heads as shown in table-5, from the total sample 36.0% are illiterates in which they never attended any type of formal education. The majority of the household heads (45.5%) are at primary education level (1-6 grades). With the level of formal education attainment of the sampled household heads there is no significant variation between the program and non-program areas ($\chi^2 = 0.149$).

Generally, the education level of the sampled household head is limited to primary education with out significant variation between the two groups. This low level of educational attainment is contrary to the presence of younger household heads in both areas, on the average. As it is discussed in the previous paragraphs the average age of the sampled household heads is about 38 years. This shows that the majority of the household heads stopped their education at primary level and engaged in marriage.

Table-5: Education Level of the Sampled Household Heads

Education level	Program Area		Non-program Area		χ^2	Total	
	No.	%	No.	%		No.	%
• Illiterate	37	37.0	35	35.0		72	36.0
• Primary (1-6 grade)	44	44.0	47	47.0		91	45.5
• Secondary (7-12 grade)	18	18.0	18	18.0	0.149	36	18.0
• Not stated	1	1.0	-	-		1	0.5
Total	100	100.0	100	100.0		200	100.0

Source: Own survey, 2002.

3.4. General Economic Characteristics of the Region and the Study Areas

In Benishangul-Gumuz Region, the poor reside predominantly in the rural areas. The population of the region is overwhelmingly rural (92%) compared with 80 percent rural population share of the country as a whole. Of the economically active population, about 93 percent earn their living from agricultural activities, while the remaining 7 percent are engaged in government and non-government work, petty trade and commerce, and primitive gold quarrying (BGNRS, 2001).

The people in both Woredas are predominantly dependent on traditional farming and animal husbandry with subsistence production. Since the zone as a whole was established recently (in 1993) it can be said that there is no sufficient economic and social infrastructures in both Woredas. Due to this reasons the people in the Woredas are leading backward life and the poverty situation is expected to be the highest in the areas.

The households in the study areas are entirely dependent on the resources they get from agricultural activities and livestock production. This can be seen from the major occupation they are involved in and from the basic resources statistics they have. The major occupation of the household indicates the economic activity to which the household depends. In both program and non-program areas over 95.0% of the household depends on farming activity as shown in Table-6. This shows that there is no variation observed among the two groups on the major occupation on which their livelihood of the household depends ($\chi^2 = 3.354$).

Table-6: Major Occupation of the Sampled Household Heads

Major Occupation	Program Area		Non-program Area		χ^2	Total	
	No.	%	No.	%		No.	%
• Farmer or family farm work	98	98.0	96	96.0		194	97.0
• Trader	1	1.0	-	-		1	0.5
• Student	1	1.0	2	2.0	3.354	3	1.5
• Soldier	-	-	1	1.0		1	0.5
• Official, administrator/ clerical	-	-	1	1.0		1	0.5
Total	100	100.0	100	100.0		200	100.0

Source: Own survey, 2002.

With respect to farming activity of the household, in both areas there are few households, which are engaged only in crop cultivation or livestock husbandry separately. Table-7 shows that most of the households undertake both crop cultivation and animal husbandry together. From the total sampled households, 88.5% of the households are engaged in mixed farming (both crop and livestock) activities; while 10.5% in crop production; and 1.0% in livestock production only. No

significant variation is observed between the program and non-program areas in the type of farming activity they undertake ($\chi^2 = 2.434$). This result shows that crop production and animal husbandry are the main sources of resources for the households in the study areas.

Table-7: Main Farming Activity of the Sampled Household

Main farming activity	Program Area		Non-program Area		χ^2	Total	
	No.	%	No.	%		No.	%
• Crop production	12	12.0	9	9.0		21	10.5
• Livestock production	-	-	2	2.0	2.434	2	1.0
• Mixed farming (both crop and livestock)	88	88.0	89	89.0		177	88.5
Total	100	100.0	100	100.0		200	100.0

Source: Own survey, 2002.

The basic resource statistics presented in Table-8 below indicates that the households in both the program and non-program areas are practicing very backward traditional farming. As a result of which they have very low out put and own minimum number of livestock. The average area cultivated in both groups is less than half a hectare, 0.48 ha in the program area and 0.37 ha in the non-program area for Maize production. It is slightly higher than half a hectare in Sorghum production. The settlement pattern of the region shows that the population is sparsely populated so that there is no shortage of land, but the problem is that the agricultural practices and the means of production are very traditional that the area under cultivation is very low.

Maize and Sorghum are the two major crops cultivated in both areas in which 65.0% of the households in the program area and 50.0% of the households in the non-program area are growing Maize while 97.0% in the program and 100.0% in the non-program area are producers of Sorghum. The production level observed in both types of crops is very low with slightly higher in sorghum production in the non-program area.

With respect to draught power ownership the program area farmers have 1.7 oxen and bulls on the average while the non-program hold 2.2 oxen and bulls. The mean difference in oxen and bulls availability among the two groups of farmers is not statistically significant. The pattern of distribution of oxen and bulls among the households is not also varying between the two groups. Fewer number of households such that 12.0% and 9.0% in the program and non-program area, respectively, own oxen and bulls. This indicates that in both groups the majority of the households suffered from lack of oxen and bulls and practice traditional agricultural activities mainly by using hand plow implements only.

In general, on the average small number of livestock are owned by the sampled households in both areas with out difference. Among the livestock small ruminants and poultry are relatively possessed at higher numbers by larger households than other type of livestock (cattle and equine).

Table-8: Basic Resource Statistics

Basic Resources	Program Area	Non-program Area	T-value
Average cultivated area (ha) – Maize	0.4846 (n=65)	0.3655 (n=49)	2.428**
Average cultivated area (ha) – Sorghum	0.7130 (n=97)	0.8023 (n=98)	-1.564
Average out put (qt) – Maize	9.2385 (n=65)	6.4518 (n=49)	1.674*
Average out put (qt) – Sorghum	6.9175 (n=97)	12.2562 (n=98)	-4.507***
% of households growing Maize	65.0%	50.0%	
% of households growing Sorghum	97.0%	100.0%	
% of households owning oxen and bulls	12.0%	9.0%	
% of households without oxen and bulls	88.0%	91.0%	
Average number of oxen and bulls owned	1.6667 (n=12)	2.2222 (n=9)	-1.363
Average number of livestock owned:			
Cattle	1.8222 (n=45)	1.5625 (n=48)	1.062
Small ruminants	3.3924 (n=79)	5.7241 (n=87)	-4.318***
Equine	1.2727 (n=11)	1.3636 (n=11)	-0.368
Poultry	6.1765 (n=68)	7.6049 (n=81)	-1.701*
% of households having oxen plow implements and hand plow implements	16.0%	12.2%	
% of households having only hand plow implements	84.0%	87.8%	

*,**,*** Significant at 10, 5 and 1 percent levels, respectively.
n= number of households.
Source: Own survey, 2002.

CHAPTER FOUR: DISCUSSIONS AND MAJOR FINDINGS

The results of the survey undertaken among the 200 sampled households in the two groups (the program and non-program areas) are discussed in this section on comparative perspective under each topic. The major topics under which the results given are access to basic services; economic performance of the sampled households; and the level of community participation and capacity building at local level.

4.1. Access to Basic Services

The accesses the community has to various basic services are measured using some selected indicators in each components of the WIBS program. The components of the program's basic service provision on which the evaluation is done are water supply and sanitation services; access to education services; access to health services; access to credit services; and access to grinding mills. The interpretation of the survey result is given for each component by comparing the program and non-program areas as follows.

4.1.1. Water Supply and Sanitation Services

The absence of safe water supply and environmental sanitation are the causes of most of the water born and water related diseases, which attack the community most of the time. As a result of poor sanitation condition the health situation of the labor force will be affected and this in turn will affect the productivity of the household. Further more the availability of safe water at reasonable distance from the community will minimize the burden on women and children, who are mostly responsible for fetching water. In addition to this it will also saves times spent for fetching water, which helps them to use for other productive purposes. As a means to alleviate

women's and children's burden in fetching water for their family, WIBS program provides low cost water supply schemes such as spring development and hand dug wells.

In both Woredas, the communities were asked from what source they use water for drinking in order to know the quality of water supply and the distance they traveled to fetch water. Thus with respect to source of drinking water, the majority of the households responded that they use river/ pond as a main source of drinking water. From the total of 231responses, those who use river/ pond as a source for drinking water accounts for about 75.3% while from unprotected spring/ well accounts for about 23.8%. There is no significant difference in the source of drinking water between the program and non-program areas (χ^2 = 2.933). As shown in Table-9, both the program and non-program areas use drinking water at higher percentages from river/ pond and next from unprotected spring/ well. This happens due to the fact that these are the only accessible sources found near the community.

Table-9: Source of Drinking Water of the Sampled Household

Drinking water source	Program Area		Non-program Area		χ^2	Total	
	No.	%	No.	%		No.	%
• Hand dug wells	2	2.0	-	-		2	0.9
• Unprotected spring/ well	26	25.5	29	22.5	2.933	55	23.8
• River/ pond	74	72.5	100	77.5		174	75.3
Total	102@	100.0	129@	100.0		231@	100.0

@ Figures are greater than the sample size indicating multiple responses given by the household.
Source: Own survey, 2002.

The above mentioned drinking water sources are known of having high risk of being contaminated by the fact that 98.0% of the sampled household do not have private latrine out of which 99.0% of them uses field disposal as a means of excreta disposal. Since almost all sampled households do not have private latrine and use field disposal as a means, the condition is the same in both program and non-program areas, which means there is no difference in sanitary situation between the two groups. Generally the observed sanitary conditions of the two study areas indicates that the inhabitants in both areas are highly vulnerable to water born diseases (See Table-10).

Table-10: Sanitary Situation of the Sampled Households

	Frequency	Percent
Access to private latrine		
▪ Have private latrine	4	2.0
▪ No private latrine	196	98.0
Total	200	100.0
If you don't have, where to use?		
▪ Common pit latrine	2	1.0
▪ Field disposal	194	99.0
Total	196	100.0

Source: Own survey, 2002.

The distance traveled by the households to fetch water for drinking from the indicated sources (unprotected spring/ well, river/ pond) also has no significant difference between the program and non-program areas. From the total responses, about 97.0% travel less than one hour to fetch water from the unsafe water sources as indicated in Table-11. Eventhough the source of water used by the sampled population is not safe for drinking, the time spent is low in both groups which is less than one hour.

Table-11: Approximate Travel Time to Drinking Water Sources (one way)

Approximate travel time	Program Area		Non-program Area		χ^2	Total	
	No.	%	No.	%		No.	%
• Less than or equal to one hour	98	96.1	126	97.7	0.494	224	97.0
• 1: 01 – 2 : 00 hours	4	3.9	3	2.3		7	3.0
Total	102[@]	100.0	129[@]	100.0		231[@]	100.0

[@] Figures are greater than the sample size indicating multiple responses given by the household.

Source: Own survey, 2002.

4.1.2. Access to Education Services

The presence of schools equipped with the necessary facilities (teachers, furniture, and books) at accessible distances to the community is the basic requirement for providing quality education to the society. And further more this helps to encourage the community to send their children to school regularly. From the total responses 66.7% indicated to have access to primary school (1-6 grade) and 32.6% to junior secondary school (7-8 grade), as shown in Table-12. With respect to the type of the school the households access, both the program and non-program areas do not have significant variation. In both the program and non-program areas the proportion of households accessing primary school and lower secondary school is almost identical, with out significant variation ($\chi^2 = 2.322$).

Table-12: Type of Schools Used by Sampled Households

School Type	Program Area		Non-program Area		χ^2	Total	
	No.	%	No.	%		No.	%
• Primary school (1-6 grade)	100	66.7	88	66.7		188	66.7
• Junior secondary school (7-8 grade)	50	33.3	42	31.8	2.322	92	32.6
• Senior secondary school (9-12 grade)	-	-	2	1.5		2	0.7
Total	150[@]	100.0	132[@]	100.0		282[@]	100.0

[@] Figures are greater than the sample size indicating multiple responses given by the household.

Source: Own survey, 2002.

The distance the community travels to access the available school vary among the two groups at a significance level of 5 percent (χ^2 = 8.513). From the data obtained it can be seen that the households in the program area travel longer distances than the non-program area. As shown in Table-13, the majority of the households in the non-program area travel less than one hour while there are households in the program area who travels up to less than three hours. This shows that the population in the non-program area has better chances of sending their children to school at accessible distances. Access to school at lower distances have the advantage of encouraging those households who are not sending their children to school because of requiring them to work on farm and other activities. On the other hand, the condition observed in the program area in travelling longer distances to access schools could be considered as positive gain of the program through awareness creation among the society. But this condition will not be long lasting because it is only when schools are at lower distances that children are motivated to attend regularly without dropouts.

Table-13: Approximate Travel Time to Schools (one way)

Approximate travel time	Program Area		Non-program Area		χ^2	Total	
	No.	%	No.	%		No.	%
• Less than or equal to one hour	119	79.3	121	91.7	8.513**	240	85.1
• 1:01 – 2:00 hours	27	18.0	10	7.6		37	13.1
• 2:01 – 3:00 hours	4	2.7	1	0.8		5	1.8
Total	150@	100.0	132@	100.0		282@	100.0

** Significant at 5 percent level.
@ Figures are greater than the sample size indicating multiple responses given by the household.
Source: Own survey, 2002.

Eventhough almost all the households have access to schools, a slight variation is observed between the two groups in the responses given on the quality of the education provided. The difference is statistically significant at 10 percent level ($\chi^2 = 2.765$). As it can be observed from Table-14, households in the non-program area are relatively more satisfied with the quality of education provided than the households in the program area. Fewer percentages of households in both areas, especially in the program areas, show dissatisfactions with the quality of education. Among the various reasons give for the dissatisfaction in the quality of education, shortage of teachers and teaching materials (books, furniture) in the school are the highest reasons from the total responses.

Table-14: Whether Satisfied With the Quality of Education Provided or Not

Are you and your family satisfied with the quality of education?	Program Area		Non-program Area		χ^2	Total	
	No.	%	No.	%		No.	%
• Yes	90	90.0	96	96.0		186	93.0
• No	10	10.0	4	4.0	2.765*	14	7.0
Total	100.	100.0	100	100.0		200	100.0

* Significant at 10 percent level
Source: Own survey, 2002.

One of the objectives of the WIBS program is to promote school attendance and increase the enrollment of students. This depends mainly on the availability of schools at accessible distances, which encourages the community to send their children to schools regularly. In order to know the status of the school attendance of the household members, we try to compare the education level of those household members of age 5 years and over between the two groups.

From the total of 854 household members in this age group, 48.2% are illiterate while the rest 51.7% are literate. From the total literate 45.3% are at primary school level (1-6 grades) while only 6.4% are at secondary school level (7-12 grades). As shown in Table-15 below, it was found that there is no any significant variation between the program and non-program areas with respect to education level ($\chi^2 = 0.669$).

Table-15: Education Level of Household Members of Age 5 Years and Over

Education Level	Program Area		Non-program Area		χ^2	Total	
	No.	%	No.	%		No.	%
• Illiterate	202	49.4	210	47.2		412	48.2
• Primary (1-6 grades)	183	44.7	204	45.8	0.669	387	45.3
• Secondary (7-12 grades)	24	5.9	31	7.0		55	6.4
Total	409	100.0	445	100.0		854	100.0

Source: Own survey, 2002.

There are various reasons given by the sampled households for those household members of age 5-25 who are not attending school. Among these reasons, children are too young to go to school; children was required for farm activities; school too far; and marriages are the major reasons given by the households. In both the program and non-program area children from age 5-10 years old are considered to be as too young to go to school and this reason accounts for the highest percentage among other reasons (37.2%). Table-16 shows that the variability in the reasons given is significantly high between the two groups at 1 percent significance level ($\chi^2 = 70.494$). Households in the program area reported reasons such as too young (37.7%) and school too far (25.3%) as the main reasons for low level of school attendance. On the other hand

households in the non-program area also give reasons such as too young (36.8%) and children required for farm activities (23.9%) as the top reasons for why children are not attending school.

Table-16: Reasons for not Attending School (for age 5-25 years)

Reasons for not attending school	Program Area		Non-program Area		χ^2	Total	
	No.	%	No.	%		No.	%
• School too far	37	25.3	2	1.3		39	13.0
• Was required for other household activities	11	7.5	18	11.6		29	9.6
• Marriage	19	13.0	18	11.6	70.494***	37	12.3
• Too young	55	37.7	57	36.8		112	37.2
• Was required to work for wages	-	-	17	10.0		17	5.6
• Was required for farm activities	11	7.5	37	23.9		48	15.9
• Other reasons	13	9.0	6	3.8		19	6.3
Total	146	100.0	155	100.0		301	100.0

*** Significant at 1 percent level.
Source: Own survey, 2002.

From the above results we can conclude that there are some cultural, conceptual and economic problems prevailing in both areas which prevents school attendance. In both areas girls are married at early age and this problem is practically aggravated by the presence of cultural practice of having more than one wife as indicated in the discussion presented in the household characteristics. The other problem is that the conception of the households to consider children 5-10 years old as too young to go to school in which in most of the cases it is for requiring them for farm activities specially for herding livestock. The program was expected to change these existing situations in education, which is not significantly observed in the program area.

4.1.3. Access to Health Services

Vulnerable population groups like children and women specially living in remote areas are victims of different kinds of diseases if they do not have access to health services. Access to health services are ensured by having health infrastructure at accessible distances from the community and by making aware of the community to use the available health institutions instead of using traditional practices. With respect to access to health institution, eventhough they differ by the type of health institution, all the sampled households have access to health institution. As shown in Table-17, 50.0% of the respondents in the program area have access to health post while the rest 50.0% have access to health center where better medical service is expected to be provided, as compared to the non-program area where all the households have access to clinic.

Table-17: Type of Health Institutions Used by Sampled Households

Type of health institution	Program Area		Non-program Area		χ^2	Total	
	No.	%	No.	%		No.	%
•Health post	50	50.0	-	-		50	25.0
•Clinic	-	-	100	100.0	200.000***	100	50.0
•Health Center	50	50.0	-	-		50	25.0
Total	100	100.0	100	100.0		200	100.0

*** Significant at 1 percent level
Source: Own survey, 2002.

Eventhough the distance traveled by the program area is higher than the non-program area, the high significant variation in the access to the type of health institution between the two groups may indicate the program area has better types of health institution. From the total sampled

households 50.5% of the household travels less than one hour, 29.5% less than two hours and 19.0% less than three hours. The distance traveled by the households to health institution significantly varies at 1 percent level (χ^2 = 14.398) between the program and non-program areas. Households in the program area travels up to less than three hours where as in the non-program area the majority travels only less than one hour. Eventhough both groups have access to health institutions, the households in the non-program area are closer to health institutions than the households in the program area (See Table-18).

Table-18: Approximate Travel Time to Health Institutions (one way)

Approximate travel time	Program Area		Non-program Area		χ^2	Total	
	No.	%	No.	%		No.	%
• Less than or equal to one hour	39	39.0	62	62.0		101	50.5
• 1:01 – 2:00 hours	32	32.0	27	27.0	14.398***	59	29.5
• 2:01 – 3:00 hours	27	27.0	11	11.0		38	19.0
• 3:01 – 4:00 hours	2	2.0	-	-		2	1.0
Total	100	100.0	100	100.0		200	100.0

*** Significant at 1 percent level
Source: Own survey, 2002.

Access to health institution only does not mean that the community obtained proper health care facilities. In order to provide proper medical treatment the health institutions should have at least sufficient medical personnel, equipment and medicine. The sampled population was asked whether they got sufficient medical treatment or not and as a result it is found that from the total sample 69.5% of the households responded that they do not receive sufficient medical treatment

from the available health institutions. As it can be seen from Table-19, the variation in the response obtained in the satisfaction by medical treatment of the institutions between the two groups is statistically significant at 1 percent level ($\chi^2 = 61.352$).

The majority of the households in the program area (95.0%) explained that, they do not get sufficient medical treatment while this is 44.0% for the non-program area. Among others the shortage of medical personnel and the high price requested by health institutions are the major reasons reported by the households for poor medical treatment in the health institutions.

Table-19: Whether Sufficient Medical Treatment Provided or Not

Do you get sufficient medical treatment?	Program Area		Non-program Area		χ^2	Total	
	No.	%	No.	%		No.	%
• Yes	5	5.0	56	56.0		61	30.5
• No	95	95.0	44	44.0	61.352***	139	69.5
Total	100	100.0	100	100.0		200	100.0

*** Significant at 1 percent level
Source: Own survey, 2002.

4.1.4. Access to Credit Services

Provision of credit service to the community is one strategy followed by rural development efforts to enhance the capacity of the rural community. This is because credit provision can increase agricultural production and encourage the rural community to involve in off-farm activities that, which ultimately used to create employment opportunities and generates income for the households.

The sampled household was asked whether they had received any kind of credit in the past or not. The response shows that from the total sampled households only 19.5% received credit from different sources where as 80.5% of the sampled household do not received any kind of credit in the past. As it can be seen from Table-20, the access to credit service highly varies between the program and non-program areas in which the variation is significantly high at 1 percent level (χ^2 = 43.606). This difference between the two groups can be seen from the table that 38.0% of the households in the program area have access to credit facility while on the other hand 99.0% of the household in the non-program area do not have received any kind of credit.

Table-20: Access to Credit Service

Have you ever-received credit?	Program Area		Non-program Area		χ^2	Total	
	No.	%	No.	%		No.	%
• Yes	38	38.0	1	1.0		39	19.5
• No	62	62.0	99	99.0	43.606***	161	80.5
Total	100	100.0	100	100.0		200	100.0

*** Significant at 1 percent level
Source: Own survey, 2002.

There are various reasons given by those respondents who do not receive any type of credit in the past. Among these the absence of credit service and the fear for not paying the credit are the major reasons reported. These reasons account for about 67.7% and 22.4% from the total sampled households, respectively. There is a slight difference between the program and non-program areas in the given reasons at 10 percent significance level (χ^2 =10.497). The majority of the respondents who stated the absence of credit facility as the main reason are found to be in the non-program area than the program area (See Table-21).

Table-21: Reasons for not Obtaining Credit

Reasons for not obtaining credit	Program Area		Non-program Area		χ^2	Total	
	No.	%	No.	%		No.	%
• Credit was not available	40	64.5	69	69.7		109	67.7
• Interest rate on credit was too high	-	-	2	2.0		2	1.2
• Had no money for down payment	-	-	2	2.0		2	1.2
• Fear of unable to repay the credit	20	32.3	16	16.2	10.497*	36	22.4
• No need to take credit	2	3.2	5	5.1		7	4.3
• Collateral requirement	-	-	5	5.1		5	3.1
Total	62	100.0	99	100.0		161	100.0

* Significant at 10 percent level
Source: Own survey, 2002.

On the other hand the majority of the respondents who have access to credit service are found in the program area (97.4%). These households who have access to credit service, have mentioned different sources from which they obtain the credit. The major sources of credit mentioned are agricultural offices, credit from friends/ relatives and the WIBS program. These sources have percentage share of 38.3%, 38.3% and 19.1% respectively, in the program areas. In addition to this the respondents mentioned different reasons for what they spend the credit they received. Among the various reasons, spending for inputs such as seeds, fertilizer and pesticides; and for household consumption are the major reasons mentioned, with a percentage share of 39.6% and 27.1%, respectively. These reasons as well holds true for the program area since the majority of the households who received credit are found in the program area (See Annex-2 and Annex-3).

The condition of spending credit received for household consumption indicates the absence of well designed credit provision procedures. This is to mean that there are no pre-studied income generating projects for which the households should allocate the credit they received and there is no proper monitoring mechanisms established by the institutions who provided the credit.

Future intervention in credit services depends on the need of the community, on the awareness of the community to take credit and involve in some income earning activities. The credit need in the future is high for both groups, there is no significant variation between them which means both areas equally demand the provision of credit service. As indicated in Table-22, from the total sampled households 89.5% need credit provision in the future, while only 10.5% responded that they are not interested to take credit.

Table-22: Credit Need in the Future

Do you need any credit in the future?	Program Area		Non-program Area		χ^2	Total	
	No.	%	No.	%		No.	%
• Yes	86	86.0	93	93.0		179	89.5
• No	14	14.0	7	7.0	2.607	21	10.5
Total	100	100.0	100	100.0		200	100.0

Source: Own survey, 2002.

4.1.5. Access to Grinding Mills

One of the major problem facing the rural women is the work burden they have as compared to the other family members. Providing community based interventions, which are replicable and sustainable, such as grinding mills, can solve this work burden. The provision of grinding mills on sustainable bases in accessible distances is one way of changing the life of the rural community. The sampled households were asked whether they have accessible grinding mill in their area or not. The program area was found to be in a better condition of having grinding mill services. Accordingly all the sampled households (100.0%) in the program area have access to grinding mill while only 5.0% have access in the non-program area.

Thus with respect to grinding mill services, we observe high variation among the two groups, which is statistically significant at 1 percent level (χ^2 = 180.952), and the difference can be attributed to the intervention of the WIBS program in the area. The households in the non-program area use traditional mill for grinding purpose due to the absence of modern grinding mill in the area, which means that the burden on women still persists in the non-program area (See Table-23).

Table-23: Access to Grinding Mill

Is there any grinding mill in your area?	Program Area		Non-program Area		χ^2	Total	
	No.	%	No.	%		No.	%
• Yes	100	100.0	5	5.0		105	52.5
• No	-	-	95	95.0	180.952***	95	47.5
Total	100	100.0	100	100.0		200	100.0

*** Significant at 1 percent level.
Source: Own survey, 2002.

The distance of the grinding mills from the center of the community determines the utilization of the grinding mills by the beneficiaries. It is difficult to compare the travel time to the grinding mills between the two groups since almost there are no accessible grinding mills in the non-program area. With in the program area, the available grinding mills are at accessible distances from the community in which 40.0% of the respondents access grinding mill at less than two hours and 54.0% accesses at less than one hour (See Table-24).

Table-24: Approximate Travel Time to Grinding Mill (one way)

Approximate travel time	Program Area		Non-program Area		χ^2	Total	
	No.	%	No.	%		No.	%
• Less than or equal to one hour	54	54.0	1	20.0		55	52.4
• 1:01 – 2:00 hours	40	40.0	4	80.0	4.193	44	41.9
• 2:01 – 3:00 hours	5	5.0	-	-		5	4.7
• Not stated	1	1.0	-	-		1	1.0
Total	100	100.0	5	100.0		105	100.0

Source: Own survey, 2002.

4.1.6. Major Findings

With respect to the provision of basic services to the community, there is some improvements in some of the components while not in others. In the provision of credit facility and grinding mills to the community the program area has significantly better access than the non-program area while in water supply and sanitation, education and health facilities no statistically significant improvement is observed.

The majority of the households are vulnerable to water born diseases due to the absence of safe drinking water points and sanitary facilities. Significant number of household members who are at school age are found to be illiterate due to various reasons mentioned for not going to school which could be due to cultural and attitudinal problems.

On the other hand, eventhough, households in the program area have better access to credit facility, the credit they received is not utilized properly in which most of them expends it for non-income generating activities such as for household consumption. This is an indication of the absence of credit monitoring system and lack of technical support to the community in preparing income-generating projects for which they might have spent the credit.

The availability of grinding mill in the program area enables to reduce the work burden on women. This can be taken as one major achievement of the program intervention, which helps to change the life of the community in general, and women in particular.

4.2. Economic Performance of the Households

The intervention of the program in basic services also has certainly impact on the economic activity of the rural community. In the evaluation of the program impact with respect to economic performance an attempt is done to look into the agricultural production; food availability and nutritional status of the household; off-farm activity; and the potential of the households for market supply.

4.2.1. Agricultural Production

The improvement in the living condition of the rural society with respect to agriculture is seen from different perspectives. Since agriculture is the main stay of the rural society, any intervention introduced to the rural community should have implication on the improvement of the agricultural practices and production. In the same way the improvement in agriculture and related practices can be used as an indirect measure of the effectiveness of program intervention in other sectors like education, health, capacity building, etc. In this report in relation to agricultural production, the improvement observed in the yield obtained with respect to the level of technology used by the sampled households is examined. Thus the yield obtained in major crops with respect to the cultivated area; the inputs used; and the type of agricultural implements used is compared between the program and non-program areas.

When we compare the productivity obtained in two major crops (Maize and Sorghum) between the program and non-program areas, generally the non-program area is more productive than the program area in Sorghum production and where as there is no productivity difference in maize production. Productivity in Maize on average is 16.5 qt/ha in the program area while it is 15.5

qt/ha in the non-program area. In this case, eventhough, the absolute figure is slightly higher for the program area (average mean difference of about 1 qt/ha), the mean variation is not statistically significant. On the other hand there is significant mean yield variation for Sorghum between the two groups, which is 9.6 qt/ha and 14.8 qt/ ha for program and non-program areas, respectively. As shown in Table-26, the mean variation in Sorghum production is highly significant.

In order to identify clearly the cause for the observed productivity between the two areas, the condition is analyzed in different ways. As shown in Table-25, since all fertilizer and improved seed users are found in the program area, it is necessary to identify the effect of fertilizer on productivity in the program area. Therefore in order to net out this effect, we tried to compare the average yield obtained by non-fertilizer users in both the program and non-program areas, without taking into account the fertilizer users in the program area.

Table-25: Proportion of Households Using Fertilizer

	Program area		Non-program area		Total	
	No.	%	No.	%	No.	%
Maize - Fertilizer users	19	23.2	-	-	19	16.7
- Non-fertilizer users	46	76.8	49	100.0	95	83.3
Total	65	100.0	49	100.0	114	100.0
Sorghum – Fertilizer users	-	-	-	-	-	-
- Non-fertilizer users	97	100.0	98	100.0	195	100.0
Total	97	100.0	98	100.0	195	100.0

Source: Own survey, 2002.

Accordingly, when we compare the yield obtained in Maize production between households of non-fertilizer users in both groups, the yield obtained is 11.3 qt/ha for the program area and 15.5 qt/ha for the non-program area. Therefore, the productivity of Maize production in the program area, in this case, where non-fertilizer users are compared, is lower than the non-program area by average mean difference of about 4.2 qt/ha. This higher mean difference in the non-fertilizer users, shows that the yield obtained in the first case (where both fertilizer users and non-fertilizer users are compared together) is due to the application of fertilizer by the households in the program area (See Table-26). This shows that farmers in the program area heavily depend on fertilizer to improve soil fertility while the non-program area farmers on the other hand rely on shifting cultivation and often cultivating new land.

Table-26: Yield Obtained on Two Major Crops

Yield (qt/ha)	Program Area		Non-program Area		T-Value	Total	
	Mean	SD	Mean	SD		Mean	SD
All producers							
• Maize	16.4974	15.8394	15.4910	10.8556	0.382	16.0648	13.8709
• Sorghum	9.6476	4.2317	14.7999	8.5097	-5.361***	12.2370	7.1930
Non-fertilizer users							
• Maize	11.2609	13.7622	15.4910	10.8556	-1.656		

*** Significant at 1 percent level.
SD- Standard Deviation
Source: Own survey, 2002.

The above condition can further be evaluated by taking another scenario which is by comparing the yield obtained in Maize production between the fertilizer users and non-users within the program area only. The result shows that within the program area those households who use fertilizer have obtained higher yield than the non-fertilizer users within the same area, which is 29.2 qt/ha and 11.3 qt/ha, respectively. The difference is highly significant at 1 percent level (T=4.871), which is the result of fertilizer application, as shown in Table-27. Generally, the above evidences show that the program area was originally less productive than the non-program area, in which later on as a result of fertilizer application there is an improvement in the productivity of Maize production in the program area. Had it not been for the introduction of inputs in the program area, the productivity condition would have been much worse than this.

Table-27: Maize Yield Obtained by Inputs Users and Non-Users in WIBS Site Only

Yield (qt/ha)	Fertilizer and Improved Seed Users (n=19)		Fertilizer and Improved Seed Non-Users (n=46)		T-Value
	Mean	SD	Mean	SD	
• Maize	29.1754	13.3719	11.2609	13.7622	4.871***

*** Significant at 1 percent level
SD- Standard Deviation
Source: Own survey, 2002.

The level of agricultural implement ownership and usage for agricultural activities also affects the productivity obtained. With respect to performing agricultural activities by using oxen plow implements and hand plow tools together as one category and using hand plow implements only as another category there is no significant variation between the program and non-program areas (χ^2=0.575). This is because in both the program and non-program areas the majority of the

households (85.9%), from the total sampled population, use hand plow implements for cultivation. When we compare the two groups, in the program area 16.0% of the household uses both oxen plow implements and hand plow implements together while 84.0% uses only hand plow implements for cultivation. In the same way this is 12.2% and 87.8% for the non-program area, respectively, as shown in Table-28. Generally, this indicates that the majority of the households in both areas are practicing traditional hand plow agriculture.

Table-28: Status of Agricultural Implement Possessions by Implement Category

Implement Category	Program Area		Non-program Area		χ^2	Total	
	No	%	No	%		No	%
▪ Oxen plow implement and also hand tools	16	16.0	12	12.2	0.575	28	14.1
▪ Hand plow implement only	84	84.0	86	87.8		170	85.9
Total	100	100.0	98	100.0		198	100.0

Source: Own survey, 2002.

The type of implement used has significant impact on the productivity obtained in both groups. As shown in Table-29, in Maize production there is statistically significant change at 1 percent level (T=5.267) in yield between those who uses oxen plow implement and hand plow implement together as one category and those using only hand plow implements as an other category. For the first implement category the average yield of Maize is about 29.0 qt/ha while it is about 13.1 qt/ha for the second implement category.

In the same way for Sorghum production, at 10 percent significance level of mean difference (T=1.954), it is 15.7 qt/ha for the first implement category and 11.7 qt/ha for the second category. Those households who have access to the first kind of implement category, eventhough they are few in number, have obtained significantly high amount of yield than those who use only hand plow implements. This shows that oxen plow agriculture contributed more to the productivity of the households than the traditional agriculture, which is practiced by the majority.

Table-29: Average Yield of Major Crops by Type of Agricultural Implement Category

		N	Mean	SD	T-Value
Maize	-Oxen plow implement and also hand tools	21	29.0144	11.1505	5.267***
	-Hand plow implement	93	13.1407	12.7425	
Sorghum	-Oxen plow implement and also hand tools	26	15.7302	10.2071	1.954*
	-Hand plow implement	169	11.6996	6.4857	

*, *** Significant at 10 and 1 percent levels, respectively.
N- Number of households
SD- Standard Deviation

Source: Own survey, 2002.

4.2.2. Food Availability and Nutritional Status of the Household

Any program intervention designed for changing the life of the rural society especially improving the nutritional status of the household primarily focuses on production increase at household level in order to improve consumption. The food available for consumption at household level mainly obtained after deducting all production costs mainly costs of modern input from the total value of crops produced. Thus the net benefit of the household is given by:

NB = VTP - CMI

Where, NB is the net benefit of the household

VTP is the value of total product produced by the household

CMI is the cost of modern inputs (DAP, UREA, improved seed) used for the production

As it is presented in the previous parts the productivity of the program area depends heavily on the application of modern inputs. In addition to the low productivity observed in the program area, high input costs and low prices of crops produced aggravate the problem of food availability at household level by reducing the net benefit of the household. The family size of the household also determines the available food per capita. As shown in Table-30 there is highly significant variation in both net benefit and net benefit per capita between the program and non-program areas. The program area has extremely lower net benefit per capita than the program area. In some of the figures the standard deviation is greater than the mean due to the presence of high variation between the minimum and the maximum values.

Table-30: Net Benefit of the Sampled Households

Variable	Program Area		Non-program Area		T-Value	Total	
	Mean	SD	Mean	SD		Mean	SD
Net benefit (birr)	339.2427	270.1713	589.6724	603.9303	3.753***	463.1928	481.6919
Net benefit per capita (birr/ person)	58.1003	47.3270	102.8250	106.7971	3.796***	80.2368	85.1125
Net benefit per hectare (birr/ ha)	327.6340	168.0742	529.8125	288.8314	6.004***	427.7022	256.0129

*** Significant at 1 percent level.
SD- Standard Deviation
Source: Own survey, 2002.

In order to evaluate the effects of different variables on the status of food availability of the sampled households the Cobb-Douglas production function is employed. From the results of these explanatory variables the use of modern inputs and family size have the expected negative relation with the dependent variable, net benefit per capita. Ethnicity does not show the expected sign because the net benefit per capita of the indegeneous households is found to be better by the ratio of 0.294 times than the settlers. Land size has the expected positive relation in which households with higher cultivated area have higher net benefit per capita. Family size has strong negative relation showing that the increase in the number of the household member highly affects the net benefit per capita. As it can be seen from Table-31 those households using modern inputs in the program area have lower net benefit per capita at 10 percent significance level. This is because eventhough the application of modern input in the program area have better achievements in production, the net benefit per capita decreases due to high cost of inputs paid by the farmers.

Table-31: Regression Equation Results of a Cobb-Douglas Production Function

Explanatory variables	Unstandardaized coefficients		T-Value	VIF
	B	Standard Error		
(Constant)	4.488	0.845	5.311	
INPUT	-0.418	0.217	-1.922*	1.370
ETNIC	0.294	0.169	1.738*	1.425
HHEDU	-0.113	0.141	-0.806	1.672
SEXHH	0.222	0.302	0.734	1.149
HHAGE (ln)	0.198	0.203	0.975	1.761
HHSZ (ln)	-0.844	0.134	-6.282***	1.256
FRMSZ (ln)	0.829	0.088	9.441***	1.210
OXOWN	0.178	0.192	0.929	1.285

*, *** Significant at 10 and 1 percent levels, respectively.
Source: Own survey, 2002.

The nutritional status of the sampled households also judged by looking into the food composition of the household mainly by considering the extent to which the household incorporated livestock products (meat, milk, eggs, etc.) into their diet within one week prior to the survey. Therefore, from the survey undertaken, the proportion of households taking livestock products as a diet within one week prior to the survey significantly varies between the two groups at 5 percent level ($\chi^2 = 4.861$). Accordingly, 21.0% of the household in the program area and 35.0% in the non-program area have taken livestock products as a diet by purchasing from market and/or from own stock, as shown in Table-32. Generally, from the total sampled households the proportion of households consuming livestock products is very low (28.0%) indicating low nutritional status in both areas.

Table-32: Households Consuming Livestock Products One Week Prior to the Survey

Have you consumed livestock products with in the past one week?	Program Area		Non-program Area		χ^2	Total	
	No	%	No	%		No	%
• Yes	21	21.0	35	35.0		56	28.0
• No	79	79.0	65	65.0	4.861**	144	72.0
Total	100	100.0	100	100.0		200	100.0

** Significant at 5 percent level.
Source: Own survey, 2002.

Those households who have taken livestock products as a component of their diet were using from two sources, by purchasing from market and from own source. The majority purchased from market and their total expenditure is calculated. As a result of which the total expenditure on livestock products within one week prior to the survey does not show significant variation

between the program and non-program areas. The households in the program area are found to be higher in their expenditure for nutritional diet than the non-program area. On the average the households in the program area expends Birr 15.12 while in the non-program area Birr 13.29 per week for livestock product which are purchased from market for consumption (See Table-33).

Table-33: Total Household Expenditures on Livestock Products

Variable	Program Area (n=15)		Non-program Area (n=24)		T-Value	Total (n=39)	
	Mean	SD	Mean	SD		Mean	SD
Total expenditure on livestock products within the last on week (Birr)	15.1067	13.3961	13.2917	11.8008	0.444	13.9897	12.2965

SD- Standard Deviation
n- number of households
Source: Own survey, 2002.

4.2.3. Off-farm Activity

Creating opportunity for off-farm activity is considered to be one form of rural development strategy for raising the income level of the household. These activities have high probability of being practiced if credit is available; the community is exposed to various skill development training; awareness creation programs are introduced; and if other non-farm employment opportunities are created in the rural areas. From the total sampled households, fewer proportions of households engaged in employment for wages and income earning activities for the last 12 months, which is 6.5% and 15.0%, respectively. When we compare the program and non-program areas, there is no significant variation in the number of households engaged in employment for wages in cash between the two groups ($\chi^2 = 2.057$). On the other hand there is

significant difference at 1 percent level (χ^2 = 6.816) in the households involving in income earning activities, which is 21.0% in the program area and only 9.0% in the non-program area (See Table-34).

Table-34: Proportion of Households Engaged in Off-farm Activity

Off-farm activity	Program Area		Non-program Area		χ^2	Total	
	No	%	No	%		No	%
Employment for wages							
• Yes	9	9.0	4	4.0	2.057	13	6.5
• No	91	91.0	96	96.0		187	93.5
Total	100	100.0	100	100.0		200	100.0
Income earning activity							
• Yes	21	21.0	9	9.0	6.816***	30	15.0
• No	79	79.0	91	91.0		170	85.0
Total	100	100.0	100	100.0		200	100.0

*** Significant at 1 percent level
Source: Own survey, 2002.

The total revenue generated by the households from off-farm activities has significant difference between the program and non-program areas. In both activities, wages for employment and income earning activities, the households in the non-program area earned higher income per year (Birr 1900.50 from employment for wages and Birr 333.89 from income earning activities) than the households in the program area (Birr 323.00 from employment for wages and Birr 161.67 from income earning activities). The standard deviation is greater than the mean due to the presence of high variation between the minimum and maximum values in revenue obtained from the off-farm activities. Eventhough, the income generated from off-farm activities is lower for

the program area than the non-program area, there is a tendency of more number of households to involve in off-farm activity in the program area, as shown in Table-34 and 35. But here it needs to find mechanisms to increase the income generated from the off-farm activities since higher participation in low paying activities does not benefit the households.

Table-35: Revenue Generated from Off-farm Activities

Variable	Program Area		Non-program Area		T-Value	Total	
	Mean	SD	Mean	SD		Mean	SD
Total revenue obtained from off-farm work for wages (birr)	323.0000	434.8345	1900.5000	771.2092	-4.795***	808.3846	921.4204
Income earned from income earning activity (birr)	161.6667	165.8865	333.8889	282.1323	-2.099**	213.3333	217.6692

, * Significant at 5 and 1 percent levels, respectively.
SD- Standard Deviation
Source: Own survey, 2002.

4.2.4. Market Supply

The potential of the households to supply crops produced to the market indicates the status of the crop production in the area. Households are able to supply to the market in order to generate income for other basic expenses only when their production is high enough for consumption. But what we can observe from the survey result is that only few households are engaged in crop sales in both areas, which is 16.5% from the total sampled households. The majority of the household did not sale any type of crop during one year prior to the survey (See Table-36).

Table-36: Proportion of Households Engaged in Crop Sales

Crop sales	Program Area		Non-program Area		Total	
	No	%	No	%	No	%
▪ Yes	16	16.0	17	17.0	33	16.5
▪ No	84	84.0	83	83.0	167	83.5
Total	100	100.0	100	100.0	200	100.0

Source: Own survey, 2002.

The revenue generated from the crop sales is too low, which indicates that even those who involved in crop marketing are in a position to supply small amount of crop to the market. As shown in Table-37, households in both areas generated revenue of about Birr 20.50 on the average, which is very low. Among the two groups at 10 percent significance level (T= 2.036) there is slight variation showing that the program area generated slightly higher revenue than the non-program area in crop marketing. The standard deviation is greater than the mean due to very high difference between the minimum and maximum revenue obtained from crop sales. Generally, the potential for supplying crops to the market is found to be very low which is the result of low production and insufficient amount for consumption.

Table-37: Revenue Obtained from Crop Sales

Variable	Program Area		Non-program Area		T-Value	Total	
	Mean	SD	Mean	SD		Mean	SD
Revenue obtained from crop sales (Birr)	29.9375	33.0282	11.5882	14.9041	2.036*	20.4848	26.6295

* Significant at 10 percent level.

SD- Standard Deviation

Source: Own survey, 2002.

4.2.5. Major Findings

The economic situation of the households in the program area does not show improvement as compared to the non-program area in general. The productivity of the households in the program area shows some improvements only with the application of fertilizer. This shows that the program area was originally less productive than the non-program area and hence they are highly dependent on fertilizer application to increase soil fertility.

From the overall agricultural performance in the program area the food situation (nutritional status) of the households were not improved due to program intervention. According to the result obtained from the regression equation the net benefit per capita is highly reduced in the program area due to the application of fertilizer. This happed because eventhough the households in the program area increased their production by applying fertilizer, due to the high cost of fertilizer their net benefit is decreasing. Therefore generally the program intervention did not improve the food situation of the households.

In addition to the low productivity observed in the program area, there is no significant involvement of the households in off-farm activity, which was very important to generate additional income for the households. This by itself shows that low effort is done in creating non-farm employment opportunities to increase the income level of the household. The low level of production is reflected in the potential of the household to sale crops for the fulfillment of other basic needs. In both areas, with slightly higher in the program area, minimum amount of revenue generated from crop sales.

4.3. Community Participation and Capacity Building

4.3.1. Community Participation in Planning and Management

Development efforts, which specifically focus on the rural society, should be able to participate the beneficiaries and be able to incorporate their needs and interests. In the intervention of a program in certain area, the involvement of the beneficiary plays an important role in the implementation and management of the program and ultimately insures sustainability. In the study areas the sample households are asked whether they had some experience of participating in the preparation of their area's action plan or not. As the responses reveals the households in the program area have more participation experience than the non-program area. The difference in participation between the two groups is highly significant at 1 percent level (χ^2 = 79.121) in which it is 95.0% in the program area and 35.0% in the non program area (See Table-38).

Table-38: Participation of Households in Preparation and Implementation of Plans

Have you ever participated in planning and management?	Program Area		Non-program Area		χ^2	Total	
	No.	%	No.	%		No.	%
• Yes	95	95.0	35	35.0		130	65.0
• No	5	5.0	65	65.0	79.121***	70	35.0
Total	100	100.0	100	100.0		200	100.0

*** Significant at 1 percent level.
Source: Own survey, 2002.

When we look into what type of activity the community participated mostly, we can find from the survey that there are different activities in which the community participated. But among others two of them are the most frequently practiced by the community, these are identifying the problem of the area (in deciding on the need of the community) and in contributing labor and material during the implementation of the development plan of the area. The participation levels

accounts for about 42.4% and 32.7%, respectively, from the total responses. Among the two groups variation is observed in participation. In most of the participation activities the households in the program area shows higher participation rates than the non-program area.

Community participation in the development process will be effective only when the community are able to influence the process. When this is achieved community empowerment becomes a reality. The role-played by the sampled household during participation in the planning process shows highly significant variation between the program and non-program areas. As it can be seen from Table-39, it is found out that 94.7% of the households in the program area are asked to explain their real problems, needs and interests during the preparation and implementation of their Woreda action plans, while this is 54.3% in the non-program area. Significant number of households (28.6%) in the non-program area has no experience of explaining their real problems, needs and interests in the process of planning.

Table-39: Role Played by the Sampled Households in the Planning Process

Role during planning process	Program Area		Non-program Area		χ^2	Total	
	No.	%	No.	%		No.	%
• I was asked to explain my real problems, needs and interests.	90	94.7	19	54.3		109	83.8
• I was not asked to explain my real problems, needs and interests	4	4.2	10	28.6	31.383***	14	10.8
• I was one of the committee members during preparation	1	1.1	6	17.1		7	5.4
Total	95	100.0	35	100.0		130	100.0

*** Significant at 1 percent level
Source: Own survey, 2002.

Community participation can also be expressed by giving the chance to the community to participate in different occasions like meetings related to development and letting them express their views and feelings in these meetings. In this respect the program area has better experience than the non-program area. It could be the influence of the program intervention that 95.0% of the households have the experience to be invited in different meetings while 69.0% have experience in the non-program area. As shown in Table-40, the situation to be invited to different meetings between the two groups is highly significant at 1 percent level ($\chi^2 = 29.900$).

Table-40: Invitation to Different Occasions Like Meetings

Are you invited in different meetings?	Program Area		Non-program Area		χ^2	Total	
	No.	%	No.	%		No.	%
• Yes	95	95.0	69	69.0		164	82.0
• No	5	5.0	31	31.0	22.900***	36	18.0
Total	100	100.0	100	100.0		200	100.0

*** Significant at 1 percent level
Source: Own survey, 2002.

The invitation of the community to different meetings by itself does not ensure empowerment of the community. On such type of meetings and popular gatherings they have to be able to express their ideas and views with out limitation. The program area is found to be better in this situation by which 75.0% of the sampled households expresses their views in all cases in meetings they attended while this is 66.7% in the non-program area. And also in the non-program area 27.5% are only informed what has happened in meetings with out participating in the decision. The situation of expressing views in meetings shows significant variation between the two groups being better in the program area than the non-program area (See Table-41).

Table-41: Extent to Which the Sampled Household Express their Views in Meetings

Chance to express views	Program Area		Non-program Area		χ^2	Total	
	No.	%	No.	%		No.	%
• I am always encouraged to express my views in all cases	72	75.0	46	66.7		118	71.5
• I am encouraged to express my views only in some cases	19	19.8	1	1.4	29.466***	20	12.1
• I am not allowed to say any thing	-	-	3	4.3		3	1.8
• I am only informed what has happened	5	5.2	19	27.5		24	14.5
Total	96	100.0	69	100.0		165	100.0

*** Significant at 1 percent level
Source: Own survey, 2002.

4.3.2. Capacity Building at Community Level

The participation of the rural community in the development process is an extremely important factor for the sustainability of the programs undertaken in rural areas. This can be realized by building the capacity of the rural community mainly by providing training on different issues and by assigning technical peoples who provide assistance to the community. The training provided to the rural community will help them to actively participate in the development process; able to create any income earning activities; adopt new technologies easily and increase production; and ultimately improve their livelihoods. With respect to the training given to the family members of the sampled households, the households in the program area have better chances of receiving training than the non-program area. Table-42 shows that the difference is highly significant

between the two groups, because 60.0% of the households in the program area received training while in the non-program area it is only 12.0%.

Table-42: Whether Training Given to Family Members or Not?

Has any one from the family received training?	Program Area		Non-program Area		χ^2	Total	
	No.	%	No.	%		No.	%
• Yes	60	60.0	12	12.0		72	36.0
• No	40	40.0	88	88.0	50.000***	128	64.0
Total	100	100.0	100	100.0		200	100.0

*** Significant at 1 percent level

Source: Own survey, 2002.

Different kinds of training were provided to the sampled population among which training on agricultural practices; conservation of natural resources; primary health care; and basic nutrition and proper feeding practices are the most frequently given, respectively. When we compare the training provided between the sex of the family members, most of the training was given for males than for females. From the total sampled households who received training, 67.8% are males while only 32.2% are females as shown in Table-43. In addition to this it can be seen from the table that the household members in the program area obtained the highest proportion of training than the non-program area.

With respect to the type of training provided and the sex of the participant, training on agricultural practices and conservation of natural resources are given mostly for males while primary health care and basic nutrition and proper feeding practices are given for female members of the households. These training which are provided to the rural community are

mainly given by the Agricultural offices, Region/ Zone/ Woreda councils, WIBS program and Health offices.

Table-43: Proportion of Trained Male and Female Household Members

Sex	Program Area		Non-program Area		Total	
	No.	%	No.	%	No.	%
• Male	49	65.3	10	83.3	59	67.8
• Female	26	34.7	2	16.7	28	32.2
Total	75	100.0	12	100.0	87	100.0

Source: Own survey, 2002.

The presence of trained professionals near the community who provides advice and training every time is also taken as an important factor for rural community empowerment. The majority of the sampled households (93.0%) responded that there are professionals living near the community. From these professionals, development agent (DA) is the one that commonly available near the rural community. The frequency to which each household is visited and consulted by DA significantly varies among the two groups. The household in the program area was visited by the DA on the average 9 times SD of 3.39 for the last 6 months while the household in the non-program area was visited only 5 times with SD of 5.23, as shown in Table-44. The frequency of the household to be consulted by DA is better in the program area with less variation among the households than the frequency in the non-program area.

Table-44: Average Frequency of Visit by Development Agent

Variable	Program Area		Non-program Area		T-Value	Total	
	Mean	SD	Mean	SD		Mean	SD
• Visit by DA	9.3400	3.3881	5.3378	5.2297	5.750***	7.6379	4.6955

*** Significant at 1 percent level
SD- Standard Deviation
Source: Own survey, 2002.

All the sampled households in the program area and 74.0% of the households in the non-program area are visited by the development agent during the last six months prior to the survey. The difference in the households visited between the two groups is highly significant, showing that the program area receives frequent professional consultation than the non-program area (See Table-45).

Table-45: Number of Households Visited by Development Agent

	Program Area		Non-program Area		χ^2	Total	
	No.	%	No.	%		No.	%
• Visited by DA	100	100.0	74	74.0		174	87.0
• Not visited by DA	-	-	26	26.0	29.885***	26	13.0
Total	100	100.0	100	100.0		200	100.0

*** Significant at 1 percent level
Source: Own survey, 2002.

4.3.3. Major Findings

Participation of the community in different development process seems higher in program area than the non-program area as it can be observed from the responses of the households. But this condition is not inline with the situation that in most of the program intervention components the program area does not show significant change from the non-program area. This could be due to the fact that the participation level observed in the program area was not a true participation which was able to change the attitude of the community and make use of resources available.

In the same way the program area received more capacity building supports through training and development agent's advice. But from the total training provided to the community in both areas, the majority was given for male members of the household in which the program intervention did little in women's empowerment. In addition to this the training provided were not targeted to activities, which generates income to the households and were not coordinated with the provision of credit facilities.

CHAPTER FIVE: CONCLUSION AND RECOMMENDATION

5.1. Conclusion

The study tried to address the stated main objectives such as the provision of basic services; economic performance of the households; and community participation level and capacity building efforts. Detail descriptive statistic and econometric results of the 200 sampled households are presented in chapter four. This part of the study provides the summary of the major findings for each program component, which leads to recommendations.

Provision of Basic services

The provision of safe drinking water and sanitary facilities to the rural area is the major component of the program intervention. It is found that the sampled population in both areas uses drinking water from unsafe sources such as from river/ pond (75.3%) and from unprotected spring/ well (23.8%). The sanitary condition is very poor and the contamination level of the water sources is very high in both areas due to the fact that 98.0% of the sampled households do not have private latrine out of which 99.0% of them uses field disposal as a means for excreta disposal. Except little indication that households in the program area uses hand dug wells, generally the program had not shown significant contribution in the provision of safe drinking water.

The program area and the non-program area have both similar accesses to schools, mostly to primary schools. The households in the program area travel longer distances than the non-program area and there is no difference in status of school attendance in both areas. In both areas considerable percentages of household members (about 40.0%) in school age category never

attended any formal education. The program did little in solving the problems, which contribute to this situation of school attendance. Some of the observed problems contributing to this situation are considering children of age 5-10 years as too young to go to school; requiring children for farm activities; school too far; and early marriage are the major ones. The program did less effort to solve these problems which were important to increase school attendance.

Eventhough all the sampled households in both areas have access to health institutions, the households in the program area travels longer distances than the non-program areas to access a health institution. And also the majority of the households in the program area are not satisfied with the quality of treatment given by the health institutions due to shortage of medical personnel and high price requested by the institutions. Generally the program intervention did not show significant change in health situation by improving health facilities through providing basic medical equipment and drugs, eventhough in the supply of medical equipment and drugs the program area is relatively in a better condition.

Provision of credit service is a means of supporting the rural community through filling the gap they have in financial resources. Especially in a society where the majority depends only on traditional backward agricultural practices and where alternative means of income generating schemes are not developed, the provision of credit service plays an important role. We can conclude from the findings that as compared to the total population the provision of credit service is minimal, only 19.5%. The program intervention has significant contribution in credit services, and in making aware of the society to use credit facilities in the program area. This is because in the non-program area the sampled population has no access for credit from other

sources or the effort done to aware the community is low. There is an indication that credit is not utilized properly for the desired objectives because considerable number of households (27.1%) uses the credit they have taken for household consumption. This indicates the absence of properly designed income earning activities and lack of consultation and monitoring.

The provision of grinding mills to the rural areas is one major strategy of reducing women's workload. The program area is significantly different from the non-program area with respect to access to grinding mills which is 100.0% and 5.0% of the households have access to grinding mills, respectively. Therefore, the program intervention has enabled the community to access grinding mills and ultimately benefited the rural women by reducing the workload they had.

Economic Performance

With respect to the yield obtained by the sampled households the non-program area is found to be better in productivity in general terms. Without the application of inputs the non-program area is highly productive than the program area. But due to the application of fertilizer and improved seed, the program area showed significant increase in productivity. Thus the efforts done to make the community aware of the use of inputs in the process of production in the program area contributed positive impact in productivity increase even if the coverage is too low.

Without significant differences between the two groups, less attention was given for the introduction of oxen plow agriculture because in both the program and non-program areas the majority of the households (85.9%) use hand plow implements for production. Eventhough, the

number of households using oxen plow agriculture are few, they show significant improvement in yield than those using hand plow implements only.

The food available for consumption at household level is seriously lower for the program area than the non-program area. The cost of modern inputs used and large family size are the most important factors contributed to the decline of the net benefit per capita of the program area. Considering the nutritional composition of the diet of the sampled households, it is found that from the total population low proportion of households have taken livestock products (meat, milk and eggs) as a diet one week prior to the survey. The condition is even worst in the program area, eventhough the expenditure on these food items is slightly higher for the program area. Generally, the program did not show significant change in the nutritional status of the community which could be due to the absence of appropriately and properly designed area specific program components. These specific program components should be those which are able to increase the production level of the households.

In rural development strategy off-farm activities play an important role in providing job opportunities in the rural areas and improving the income level of the household. The involvement in off-farm activity in both areas is found to be very low which is 6.5% in the case of employment for wages and 15.0% in income earning activities. However, there is a tendency to involve in income earning activities in the program area than the non-program area. Generally, the effort done to motivate and train the rural community to involve in an off-farm activity and effort done to integrate credit provision with rewarding off-farm activities is found to be low.

Community Participation and Capacity Building

From the survey findings it can be concluded that in the program area the community significantly participated in the preparation of the Woreda action plan; in different meetings related to development; and also significant number of them reported that they express their ideas with out limitation, as compared to the non-program area. But here it is difficult to generalize that households in the program area were participating truly in development process. Therefore it is important to cross check this with the results obtained in other components of the intervention. True participation can be considered as an active involvement of people in decision making process. If this highly significant participation level observed in the program area was a true participation, the results observed in some of the program components as discussed in the preceding sections such as in agricultural production, education and health would not have been low (with out significant variation from the non-program area).

Increasing the awareness level of the local community in general and women's in particular is the core element in integrated rural development strategy. One way of building the capacity of the local community is through the provision of different kinds of training. From the findings, it is possible to observe that the households in the program area have better chances of obtaining training with significant difference from the non-program area. The training was provided to higher proportion of male household members than their female counterparts. This condition reveals the inability of meeting the objective of the program, which is women empowerment by training higher percentages or at least 50.0%. In addition to this the type of training provided are not properly designed based on the purpose of promoting income-generating schemes in the rural areas, with particular emphasis to women.

5.2. Recommendations

The problem facing the vulnerable groups children and women in particular and the community at large are complex. To tackle these problems community centered basic service interventions, which are replicable, and sustainable should be implemented through an emphasis on community capacity building. However, a number of problems are observed in the implementation of such types of an integrated rural development program, like that of the WIBS program. Some of the generally observed problems are:

- Lack of serious appraisal and understanding of the grass root situation and due to this there are problems with the institutional arrangements through which the program was implemented and operated. The program was implemented through a committee established at all levels.
- The project was based upon unrealistically optimistic assumption about the possibilities for cooperation among the different agencies involved in the program. There is no legal ground that states the duties and responsibilities of each agency, as a result of which activities were performed, based on willingness.
- The program components were too many to implement and manage in a coordinated way. In addition to this some of the components were not designed based on the necessity of increasing the income level of the households.
- The project also suffered from the ineffectiveness of the decentralization process. The local authorities are much weaker than they had been intended to be to implement and manage the program.

- The program generally fails to integrate among the various program components especially community participation in decision making, training and activities performed, by giving more emphasis on local capacity development.

With in the context of the data analyzed and its associated problems explained in the previous parts of the study, it would not be worthwhile to provide conclusive policy recommendations. However some general policy implications and issues for further study on the specified area may be drawn from the above mentioned findings.

Overall Program Arrangement

- High priority must be given to institutional development and strengthening of the organizational base of farmers at the community and district levels. This is because where application of modern technology is very low and production is mainly of subsistence nature with low marketable surplus, the importance of grass-root level rural institutions such as Peasant Associations (PAs) and Service Cooperatives (SCs) is very high in carrying out coordinated and comprehensive development efforts in the rural areas.
- The implementation arrangement of the integrated rural development programs should be formally included in the operational structure of the concerned institutions.
- The program components must be designed in such a way that those within the capacity of the local authority as one package and others beyond these to be handled by higher technically capable institutions. And hence resource flow also should follow this arrangements.

- The number of program components should be reduced so as to simplify organization and coordination based on the immediate need of the society. Future projects should only concentrate on increasing agricultural productivity and out put of the rural community.
- Considerable attention must be given to mechanisms that will ensure the equitable distribution of project services and benefits, because there is a strong tendency for most of the services to be under utilized and covering only low proportion of the beneficiaries. This happened as a result of scattered settlements and hence requires to undertake villagization programs around the basic facilities and where future development is possible based on the willingness of the society. This is because villagization program will make possible the provision of integrated services easily and help to utilize the under-utilized services resulting in the improvement of the well being of the community.
- Generally, inorder to improve the performance of such type of integrated development approaches, the overall program arrangement that will fit into the local situation should be studied in the future especially, on the program management aspects; on financial aspects; on projects physical performance; on institutional arrangements; on benefits obtained by the beneficiaries; etc.

Provision of Basic Services

- Safe drinking water supply schemes and sanitation facilities should be established near the community and community health education should be incorporated to it.
- Traditional attitudes which hinders the utilization of health facilities and which prevents school attendance specially for women like that of considering children of age 5-10 as too young to go to school; early marriage for girls; and marriage to more than one wife should

have to be avoided through appropriate program intervention. Specific programs should have to be designed for these problems, based on the culture of the local community.

- Credit must be carefully planned and coordinated with properly selected income generating activities and other necessary inputs, which will increase farmers out put and income. The possibility should also be considered of including a technical assistance component in the credit program to help farmers in the preparation and management of the projects to be financed. Without this, it will be impossible for most farmers to repay the credit they received. It has to concentrate on productive activities through close supervision and professional assistance.
- Tight discipline is required in the administration of the credit programs. Credit monitoring and evaluation systems are required to ensure that projects are economically viable and strict repayment procedures are introduced.
- Grinding mill maintenance and administration by the community should be given of high priority and communities should have to be trained for effective administration and maintenance of grinding mills.
- Appropriate cost recovery mechanisms should be introduced in the operation of the grinding mills in order to replicate the system and replace worn out parts by the generated income, a system which ensures sustainability.

Economic Performance

- Various techniques and mechanisms should be introduced in order to increase the productivity of the households and also local market situations should be studied in order to reduce the effects of input cost on the benefit of the household.
- Since the productivity of the farmers in the program area is highly dependent on inputs and only few farmers are practicing this, it needs to involve more people and make the coverage area evenly distributed in order to increase the productivity of the rural society and improve the living conditions.
- For the majority of the farmers in the study areas, traction and improved agricultural hand tools and implements are critical for agricultural production. Therefore adaptation of improved farm implements as well as introducing oxen plow agriculture will help to change the status of traditional agriculture to improve the life of the rural society in the area.
- Off-farm income generating activities plays an important supplementary role to enhance self-provisioning of households. Therefore, in order to increase the income level of the households', off-farm activities should be created based on local condition and this must be coordinated with training and credit provision schemes.

Community Participation and Capacity Building

- The projects designed for the rural community must be designed to maximize participation of intended beneficiaries, and there should be an effective monitoring system to provide feedback on accessibility and distribution of benefits.
- Necessary staffs and financial resources must be allocated for training, technical assistance and for closely monitoring the community managed programs. This also requires training and

technical assistance for district authorities and other local level organizations, both to explain the concepts of the project and to provide them with the necessary skills to help implement and supervise it.

- Farmers' skill needs to be improved and hence the training provided to the community should concentrate on income generating activities and on other community skill development activities. Here women should given priority in training and skill development, at least on the ratio of one to one.

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Annexes

Annex- 1: Total Number of Sampled PAs and Households

No.	Woreda	Total no. of PAs	Total Population	Total Number of Households	Sampled PAs	Total Households in Sampled PAs	Sampled HHs
1.	Kemashi Woreda	13	8335	1611	• Chichachugi	278	50
					• Daguba Bedessa	95	50
2.	Agalo Meti Woreda	15	14190	2489	• Kutala Bedetino	172	50
					• Shimela Kono	190	50
	Total	28	22525	4100	4	735	200

Source: CSA, 1996.

Annex-2: Source of Credit

Source of Credit	Program Area		Non-program Area		χ^2	Total	
	No.	%	No.	%		No.	%
Agricultural office	18	38.3	-	-		18	37.5
Service cooperatives	1	2.1	-	-		1	2.1
WIBS program	9	19.1	-	-	1.559	9	18.8
Private money lenders	1	2.1	-	-		1	2.1
Friends/ relatives	18	38.3	1	100.0		19	39.6
Total	47	100.0	1	100.0		48	100.0

Source: Own survey, 2002.

Annex-3: Reasons for What the Credit is Taken

Reasons	Frequency	Percent	Cumulative Percent
To buy inputs e.g. seeds or fertilizer or pesticides	19	39.6	39.6
To buy farm or other tools/ implements	3	6.3	45.8
To buy livestock	4	8.3	54.2
To pay rent or taxes	3	6.3	60.4
To start an off-farm business (like weaving)	1	2.1	62.5
To spend for consumption	13	27.1	89.6
For medical treatment	5	10.4	100.0
Total	48	100.0	

Source: Own survey, 2002.

Annex- 4: Main Indicators Used to Evaluate the Program Performance

No.	Services Provided	Indicators
I. Basic Services		
	1. Water Supply and sanitation Services	▪ Main source of water[1] ▪ Distance to water point ▪ Existence of sanitary service (latrines)

	2. Access to Education Services (Improving Access to Primary Education)	▪ The existence of schools in the community
		▪ Distance to the nearest school from the community center
		▪ Availability of facilities
		  ▪ Availability of manpower (teachers)
		  ▪ Availability of teaching materials (texts, blackboards, desks)

	3. Access to Health Services (Strengthening Primary Health Care)	▪ The existence of health institution in the community
		▪ Distance to the nearest health unit
		▪ Availability of facilities
		  ▪ Availability of man powers
		  ▪ Availability of medicine and equipment

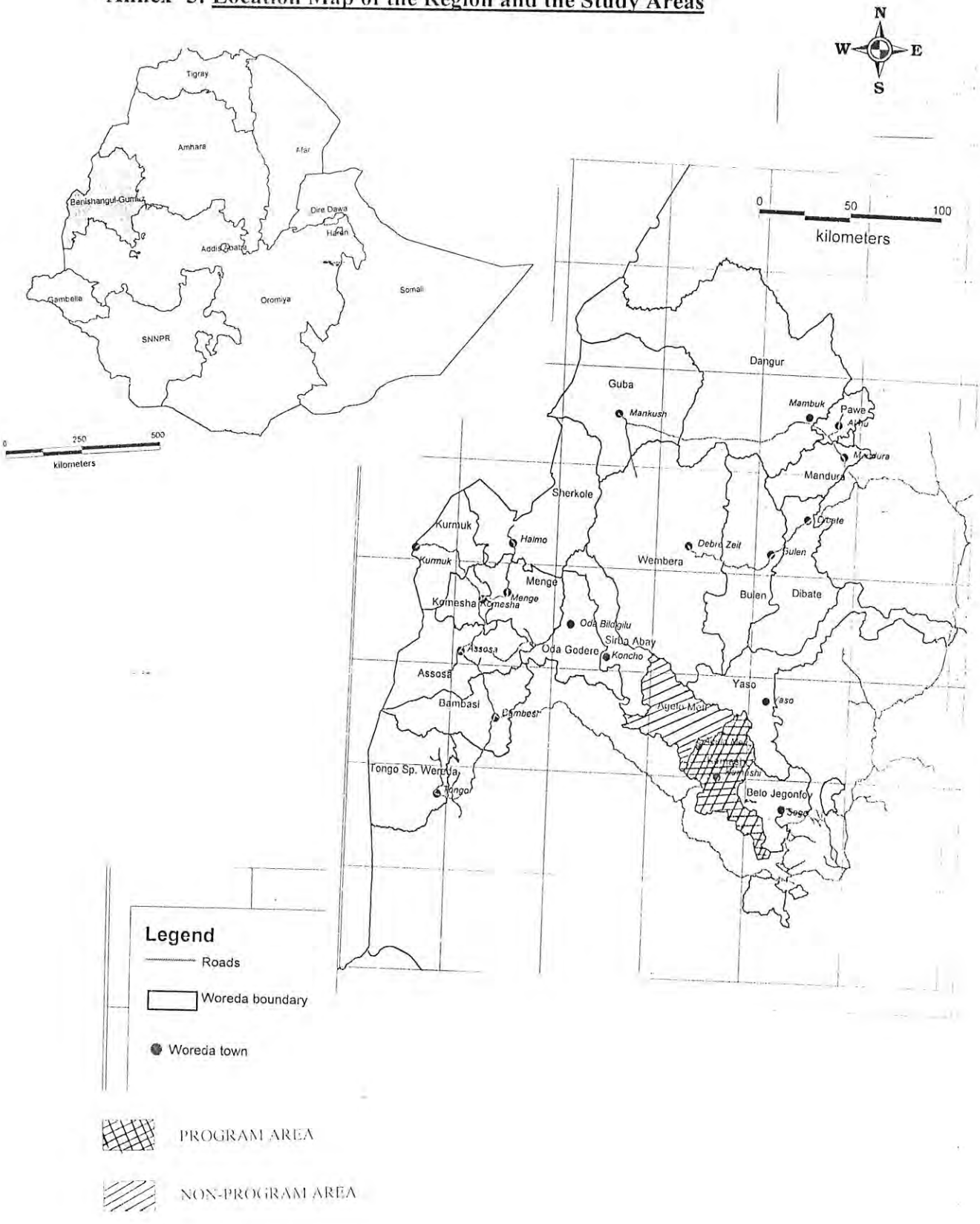
	4. Credit Services	▪ Availability of credit service ▪ Sources of credit
	5. Access to Grinding mills	▪ Availability of grinding mill ▪ Distance to the nearest grinding mill

II.	Improvement in nutritional status	▪ Improvement in yield
		  ▪ Yield with respect to inputs
		  ▪ Yield with respect to plow implements
		▪ Food availability at household level
		  ▪ Net benefit per capita
		▪ Off-farm activity
		  ▪ Extent of off-farm activity involvement
		  ▪ Income earned from off-farm activity
		▪ Potential for Market Supply
		  ▪ Revenue generated from crop sales

III.	Community Participation and Capacity Building	▪ Training provided to farmers ▪ Extent of community involvement in planning and implementing projects ▪ Availability of trained professionals ▪ Frequency to be visited by DA

[1] The type of water source is used to indicate the quality of water provision.

Annex- 5: Location Map of the Region and the Study Areas



Source: BOPED, 2001.

Annex-6 : Questionnaire Used for Household Survey

SCHOOL OF GRADUATE STUDIES

ADDIS ABABA UNIVERSITY

REGIONAL AND LOCAL DEVELOPMENT STUDIES (RLDS)

INTEGRATED RURAL DEVELOPMENT APPROACH AS A STRATEGY FOR RURAL POVERTY ALLEVIATION: THE CASE OF KEMASHI WIBS PROGRAM

QUESTIONNAIRE FOR HOUSEHOLD SURVEY

INSTRUCTION:

- Only enumerators who are trained for this purpose should fill this questionnaire. The appropriate respondent to be asked for the survey is the **head of the household.** The enumerator is required to make clear the questions to the respondents and finally fill the corresponding number of the correct reply on the space provided for each question.
- Introduce yourself politely before you start interviewing the respondents
- Use pencils to fill out the questionnaire
- Complete all questions precisely

SECTION –I: IDENTIFICATION

1.1. Household Code | | |

1.2. Name of respondent_____

1.3. Household Location
Region _____ Zone _____Woreda_____PA_____

1.4. Date of Interview (Day/ Month/ Year) | | | |

1.5. Time Interview Began (Hour: Minute) | | |

1.6. Time Interview Completed (Hour: Minute) | | |

1.7. Name of enumerator_____

SECTION – II: GENERAL HOUSEHOLD CHARACTERISTICS

INSTRUCTION: Please put the appropriate number in the boxes.

1. Household type
1. Male headed 2. Female headed

2. Age of respondent (Full years)

3. Total household size

4. Ethnic group
1. Gumuz 2. Berta
3. Amhara 4. Oromo
5. Tigray 6. Other (specify) _____

5. What is your religious affiliation?
1. Orthodox 2. Protestant
3. Catholic 4. Muslim
5. Traditional 6. Other (specify)_____

6. Have you ever attended school?
1. Attending now 2. Attended in the past
3. Never attended 4. Other (specify)_____

7. If currently attending indicate level of grade?

8. If attended formal school in the past, highest grade completed?

9. Marital status of the respondent
1. Single 2. Married 3. Divorced 4. Widowed
5. Have more than one spouse 6. Other (specify)_____

10. Major occupation of the respondent
1. Farmer or family farm working 2. Trader
3. Carpenter 4. Masonry
5. Weaver 6. Blacksmith
7. Teacher 8. Student
9. Health worker 10. Disabled
11. Soldier 12. Herding
13. Tailor 14. Looking for work
15. Official, administrator/ clerical 16. Other (specify)_____

Family composition of the household (Excluding the household head) **(Q11 – 19)**

ID CODE (0)	Name of household member (1)	**11.** Sex Male= 1 Female= 2 (2)	**12.** Age (write 0 for age less than one year) (Full years) (3)	**13.** Relation to household head (4)	**14.** Marital status (5)	Educational background (to be asked for those whose age is 5 and above)				**19.** Major Occu-pation/ activities (10)
						15. Has he/ she ever attended school Attending=1 attended=2 Never attended=3 (6)	**16.** If currently attending level of grade (7)	**17.** If attended formal school in the past highest grade completed (8)	**18.** For age 5-25 if not attending give reasons (9)	
02										
03										
04										
05										
06										
07										
08										
09										
10										
11										
12										
13										

Code for column 4 – Relation to household head

1= Husband/ wife
2= Son
3= Daughter
4= Grand child
5= Sister/ Brother
6= Parent (Father/ Mother)
7= Grand parents
8= Other (specify)_____

Code for column 5 – Marital status for the age of 10 or more

1= Single
2= Married (for single spouse-monogamy)
3= Divorced
4= Widowed
5= Have more than one spouse (polygamy)
6= Other (specify)_____

Code for column 9- Reasons for not attending school

1= School too far
2= Too expensive to go to school
3= Lack of interest
4= 12th grade completed
5= Disabled
6= Was required for other household activities
7= Marriage
8= Too young
9= Was required to work for wages
10= Was required for farm activities
11= Other (specify)_____

Code for column 10- Main activity

1= Farmer or family farm working
2= Trader
3= Carpenter
4= Masonry
5= Weaver
6= Blacksmith
7= Teacher
8= Student
9= Health worker
10= Disabled
11= Solider
12= Herding
13= Tailor
14= Looking for work
15= Official, Administrator/ clerical
16= Other (specify)_____

SECTION – III: ACCESS TO SERVICES

INSTRUCTION: Please put the appropriate number in the boxes.

1. Agricultural Services

Crop cultivation and input utilization

20. What is the main farming activity of the household?

1. Crop cultivation
2. Livestock husbandry
3. Mixed farming (both crop and livestock)
4. Other (specify)_____

21. How is your household crop production for the last 5 years?

1. Increasing
2. Decreasing
3. No change
4. Other (specify)_____

22. If the answer to question no. 21 is **increasing**, what do you think to be the major reason/ reasons? (Choose two main reasons in priority, put the most important one on top)

1. Due to presence of inputs (seed, fertilizer, pesticides)
2. Due to better access to oxen and implements
3. Due to training obtained
4. Due to technical assistance by the near by Development Agent (DA)
5. Other (specify)_____

Indicate the major crops cultivated, area covered, production obtained and Quantity of inputs used in the last cropping season **(Q23 – 28).**

23. Crop cultivated Crop Code (a)	Plot	**24.** Area covered (Hectare)	**25.** Yield Obtained (Quintal)	The quantity of inputs used for each crops? (if not used write 0)						
				26. Fertilizer		**27.** Seed		**28.** Chemicals		
				DAP (Kg.)	UREA (Kg.)	Local (Kg.)	Improved (Kg.)	Herbicides (Liter)	Insecticides (Kg.)	Fungicides (Kg.)

Crop Code (a)

1= Maize (Bekolo)
2= Sorghum (Mashila)
3= Teff
4= Barley (Gebis)
5= Wheat (Sinde)
6= Lentils (Misir)
7= Horse Beans (Bakela)
8= Zengada
9= Dagussa
10= Cow Peas (Ater)
11= Chick Peas (Shimbra)
12= Rice
13= Other (specify)_____

Indicate the sources of each inputs used **(Q29 – 31).**

Source of inputs	...inputs used from? 1= Yes 2= No					
	29. Fertilizer	**30.** Seed		**31.** Chemicals		
		Local	Improved	Herbicides	Insecticides	Fungicides
1. Purchased from Agricultural Office						
2. Purchased from dealers owned by regional government						
3. Purchased from private dealers						
4. Purchased from Service Cooperatives or Peasant Associations (Ps)						
5. Obtained from NGOs						
6. Obtained from WIBS program						
7. Saved from previous harvest						
8. Other (specify)_____						

Labor Use

32. What is the length of one working day (person day) in your village? (in hours) ☐☐

Indicate the amount of labor used in each of the activities for **one major** crop production in the last cropping season **(Q33 – 35).**

33. Crop cultivated Crop Code (a)	**34.** Type of activity Code (b)	**35.** Number of labor used and time spent in each activity			
		Male		Female	
		Number	Time spent (in hours)	Number	Time spent (in hours)

Crop Code (a)

1= Maize (Bekolo)
2= Sorghum (Mashila)
3= Teff
4= Barley (Gebis)
5= Wheat (Sinde)
6= Lentils (Misir)
7= Horse Beans (Bakela)
8= Zengada
9= Dagussa
10= Cow Peas (Ater)
11= Chick Peas (Shimbra)
12= Rice
13= Other (specify)_____

Code (b)- Activity

1= Clearing (removing stubble)
2= Land preparation first plowing
3= Land preparation second plowing
4= Land preparation third plowing
5= Land preparation fourth plowing
6= Planting (sowing)
7= First weeding
8= Second weeding
9= Transporting to threshing site
10= Threshing (shelling)
11= Transporting to store

Livestock ownership

36. Does your household own any livestock? ☐

1. Yes 2. No

If yes, please answer the following questions **(Q37 – 41).**

37. Type of livestock Code (a)	**38.** Number owned at present time	**39.** Number of livestock died during the last 12 months	**40.** Did you buy any livestock during the last 12 months?		**41.** Did you sell any livestock during the last 12 months?	
			Number bought (if none write 0)	Total purchase value of all bought (in Birr)	Number sold (if none, write 0)	Total sales value of all sold (in Birr)

Code (a)- Livestock type

1= Calves
2= Bulls
3= Oxen
4= Heifer
5= Cows
6= Sheep
7= Goats
8= Hens
9= Donkeys
10= Mules
11= Horses
12= Other (specify)_____

42. What is the major problem related to livestock in your area? (Choose two major problems in priority, put the most important one on top) ☐☐

1. Presence of disease
2. Lack of animal health facilities
3. Lack of drinking water
4. Lack of grazing land
5. Lack of improved breeds
6. Other (specify)_____

Food expenditure and consumption

43. Has the household sold, given to someone from the production and/ or purchased any crops within last week? ☐

1. Yes 2. No

Indicate the amount of crops sold, given to someone and/ or purchased within the last week and their value in Birr **(Q44 – 46).**

Crop Code (a)	44. Sold		45. Given to someone		46. Purchased	
	Amount in Kg.	Value in Birr	Amount in Kg.	Value in Birr	Amount in Kg.	Value in Birr

Crop code (a)

1= Maize (Bekolo)
2= Sorghum (Mashila)
3= Teff
4= Barley (Gebis)
5= Wheat (Sinde)
6= Lentils (Misir)
7= Horse Beans (Bakella)
8= Zengada
9= Dagussa
10= Cow Peas (Ater)
11= Chick Peas (Shimbra)
12= Rice
13=Other (specify)_____

47. Have your household consume meat and milk products within the past one week?

1. Yes 2. No ☐

If yes, answer the following questions **(Q48 – 50).**

48. Food type Code (a)	49. How much was purchased for consumption within last week?			50. How much did you consume this food from your own stock within last week?	
	Amount	Unit Code (b)	Total expenditure in Birr	Amount	Unit Code (b)

Code (a)- Food type

1= Beef (Yekebit Siga)
2= Mutton (Yebeg)/ Goat meat (Yefiyel Siga)
3= Chicken
4= Eggs
5= Milk/ Yoghort (Ergo)
6= Butter
7= Cheese
8= Other (specify)_____

Code (b)- Unit

1= Kilogram
2= Liters
3= Number

Agricultural implements

51. Do you have any agricultural implements?

1. Yes 2. No ☐

Indicate the type, number and source of agricultural implements you possessed **(Q52 – 54).**

52. Type of agricultural implement? Code (a)	53. Number of possessed implements?	54. Source of the implements? Code (b)

Code (a)- Type of implement

1= Maresha
2= Mofer
3= Kenber
4= Doma
5= Akafa
6= Metrebia
7= Gegera
8= Konchera
9= Other (specify)_____

Code (b)- Source of implement

1= Bought from market
2= Produce them locally
3= Got them from NGO
4= Got them from WIBS program
5= Other (specify)_____

Off-farm activity

55. Did you or any other members of the household engaged in off-farm activity for payment in cash for the last 12 months?

1. Yes 2. No ☐

If yes, answer the following questions **(Q56 – 59).**

ID Code of household member	**56.** Specify the kind of work Code (a)	**57.** Nature of employment Code (b)	**58.** Kind of employer Code (c)	**59.** Total estimated amount earned in the last 12 months. (amount in Birr)

Code (a)- Type of wage employment
1= Farm worker
2= Professional, teacher, administration, health worker, clerical
3= Laborer (skilled, i.e. builder, Thatcher)
4= Soldier
5= Driver/ mechanic
6= Unskilled labor
7= Domestic servant
8= Food-for-work
9= Other (specify)_____

Code (b)- Employment
1= Permanent
2= Temporary (contract)
3= Daily

Code (c)- Employers
1= Smaller farmer
2= Commercial farmers
3= NGO
4= Government organization
5= Urban dwellers
6= Other (specify)___

60. Have you or the member of your household been involved in any income earning activities such as crafts, traders, or other businesses? (Excluding sale of food and drinks)

1. Yes 2. No ☐

If yes, answer the following questions **(Q61 – 63).**

ID Code of the household member	**61.** Specify the kind of activity Code (a)	**62.** How much the household earned (net of costs) from this activity in the last 12 months? (amount in Birr)	**63.** What is the income used for? (the most important use) Code (b)

Code (a)- Kind of income earning
1= Weaving/ spinning
2= Blacksmithing
3= Tannery
4= Basketry
5= Pottery
6= Tailoring
7= Making and selling of charcoal
8= Trade in grain and vegetables
9= Trade in livestock
10= Other (specify)_____

Code (b)- Use of income
1= Maintenance and own consumption
2= Invested into the business (non-farm activity)
3= Education/ training expenditure
4= Saving
5= Purchase livestock/ other assets
6= Investment in farm/ land
7= Non-education support for children
8= Pay back debts
9= Other (specify)_____

2. Water Supply and Sanitation Services

Indicate the major source of drinking water and the approximate travel time to the sources from your home **(Q64 – 65).**

64. Source of drinking water? Code (a)	**65.** What is the approximate travel time (one way)? Code (b)	Prioritize

Code (a)- Source of water
1= Deep wells (Bore holes)
2= Shallow wells
3= Hand dug wells
4= Protected spring/ well
5= Unprotected spring/ well
6= River/ pond
7= Other (specify)_____

Code (b)- Distance
1= Less than 1 hour
2= Less than 2 hours
3= Less than 3 hours
4=Less than 4 hours
5= Greater than 4 hours
6= Other (specify)_____

66. Do you have your private latrine near your house?
1. Yes 2. No

67. If you don't have private latrine, what do you use?
1. Common pit latrine 2. Field disposal
3. Other (specify)_____

3. Access to Education Services

68. Did your family and yourself have access to educational facilities (schools)?
1. Yes 2. No

If yes, indicate the type of school available and the approximate travel time to the school from your home **(Q69 – 70).**

69. Type of school? Code (a)	**70.** What is the approximate travel time (one way)? Code (b)

Code (a)- Type of school
1= Primary school (1-6 grade)
2= Lower secondary school (7-8 grade)
3= upper secondary school (9-12 grade)
4= Other (specify)_____

Code (b)- Distance
1= Less than 1 hour
2= Less than 2 hours
3= Less than 3 hours
4= Less than 4 hours
5= Greater than 4 hours
6= Other (specify)_____

71. Are you and your family satisfied with the quality of education provided in the school?
1. Yes 2. No

72. If not satisfied, please indicate the main reason/ reasons?
(Prioritize according to their importance, put the most important one on top)
1. Shortage or absence of school
2. Shortage of teachers
3. Shortage of teaching materials (books, furniture)
4. The high price requested for educational institutions
5. Don't know
6. Other (specify)_____

4. Access to Health Services

73. Did your family and yourself have access to medical facilities?
1. Yes 2. No

If yes, indicate the type of health institution available and the approximate travel time from your home **(Q74 – 75).**

74. Type of health institution? Code (a)	**75.** What is the approximate travel time to the health institution (one way)? Code (b)

Code (a)- Type of health institution
1= Kebele (community) health service
2= Health post
3= Clinic
4= Health center
5= Other (specify)_____

Code (b)- Distance
1= Less than 1 hour
2= Less than 2 hours
3= Less than 3 hours
4= Less than 4 hours
5= Greater than 4 hours
6= Other (specify)_____

76. Do you and your family get sufficient medical treatment?
1. Yes 2. No

77. If you don't get sufficient treatment, what were the main reason/ reasons?
(Prioritize according to their importance, put the most important one on top)
1. Shortage or absence of health institution 2. Shortage of medical personnel
3. Shortage of medical equipment 4. Shortage of medicine
5. High price requested by medical facilities 6. Don't know
7. Other (specify)_____

5. Credit Services

78. Have you ever-received credit?
1. Yes 2. No

79. If the answer to the above question is **No**, what was the reason?
1. Credit was not available 2. Interest rate on credit was too high
3. Had no money for down payment 4. Fear of unable to repay the credit
5. No need to take credit 6. Collateral requirement
7. Other (specify)_____

If you got credit, answer the following questions **(Q80 – 82).**

	80. Source of credit Code (a)	**81.** Reasons for credit Code (b)	**82.** Amount borrowed In Birr
Credit 1			
Credit 2			
Credit 3			
Credit 4			

Code (a)- Source of credit
1= Agricultural Office
2= Service Cooperative
3= Formal Bank
4= Non-Governmental Organization (NGO)
5= WIBS program
6= The Benishangul-Gumuz Microfinance Institute
7= Private money lenders
8= Friends/ Relatives
9= Credit from other traditional organizations
10= Other (specify)_____

Code (b)- Reasons for credit
1= To buy inputs eg. seeds/ fertilizer/ pesticides
2=To buy farm or other tools/ implements
3= To buy livestock
4= To pay for hired labor
5= To pay rent/ taxes
6= To start an off-farm business (like weaving)
7= To spend for consumption
8= Other (specify)_____

- to start petty trad
- horticulture agric
- bee keeping
- animal fatting
- sheep and goat keep

83. Do you think that the service changed your way of life
① yes
② No
If Yes: how
1- feeding - capital
2- dressing -

83. Do you have any credit need in the future?
1. Yes 2. No

6. Access to Grinding Mills

84. Is there any grinding mill in your area?
1. Yes 2. No

If yes, indicate the type of grinding mill your household uses, the source and the approximate travel time from your home **(Q85 – 87).**

85. Type of grinding mill? Code (a)	**86.** Who provided the grinding mill? Code (b)	**87.** What is the approximate travel time to the grinding mill (one way)? Code (c)

Code (a)- Type of grinding mill
1= Traditional
2= Community grinding mill
3= Private grinding mill
4= Cooperatives grinding mill
5= Other (specify)_____

Code (b)- Who provided
1= Government
2= Bought by the community
3= NGO
4= WIBS program
5= Other (specify)_____

Code (c)- Distance
1= Less than 1 hour
2= Less than 2 hours
3= Less than 3 hours
4= Less than 4 hours
5= Greater than 4 hours
6= Other (specify)_____

7. Community Participation and Capacity Building

88. Have you ever participated in the preparation and implementation of your Woreda action plan?
1. Yes 2. No

89. If **Yes,** in what type of activity you participated mostly?
(Choose two most important in priority, put the most important one on top)
1. In identifying the problem (deciding on the need)
2. In selecting the sites for different establishments
3. In contributing labor and material during implementation
4. In monitoring development works
5. In managing and administering some projects
6. Other (specify)_____

90. What was your role during the planning process of current action plan of your Woreda?
1. I was asked to explain my real problems, needs and interests.
2. I was not asked to explain my real problems, needs and interests.
3. I was one of the committee members during preparation
4. Other 9specify)_____

91. Are you invited in different occasions like meetings related to development?
1. Yes 2. No

92. In those different occasions, do you get a chance to express your views about the program?
1. If I have any thing to say, I am always encouraged to express my view in all cases
2. If I have any thing to say, I am encouraged to express my view only in some cases
3. I am not allowed to say anything
4. I am only informed what has happened
5. Other (specify)_____

93. Has any one from the family received training?
1. Yes 2. No

If any one from the family received training, answer the following questions **(Q94– 95).**

ID Code of household member	**94.** Kinds of training received? Code (a)	**95.** Who provided the training? Code (b)

Code (a)- Kind of training
1= Training on agricultural practices (planting- storage)
2= Maintenance of water points
3= Project planning and management
4= Primary health care
5= Grinding mill maintenance
6= Basic nutrition and proper feeding practices
7= Handicraft skills
8= Credit and saving
9= Training on Cooperative formation
10= Conservation of natural resources
11= Training on non-formal and education participation
12= Other (specify)_____

Code (b)- Who provided the training
1= Agricultural office (Region/ Zone/ Woreda)
2= Region/ Zone/ Woreda Council
3= Non-Governmental Organization (NGO)
4= WIBS program
5= Health Office
6= Education Office
7= Water Resource Office
8= Bureau of Planning (BOPED)
9= Women's Affairs
10= Other (specify)_____

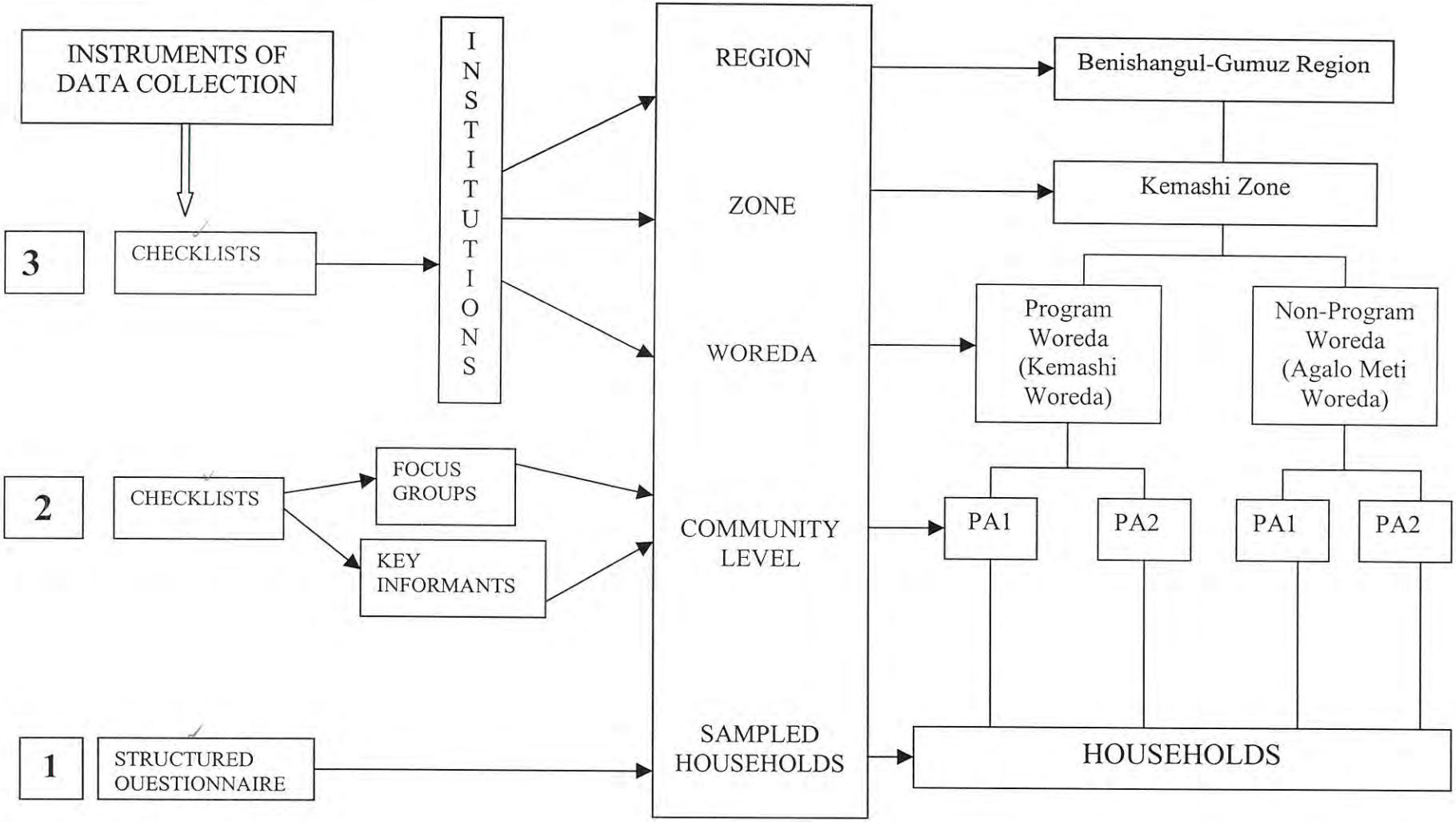
96. Are there trained professionals in your community who provides you advice and training every time?
1. Yes 2. No

97. If **yes,** what type of trained professionals are available?
1. Development Agent (DA)
2. Home economist
3. Health worker
4. Teachers
5. other (specify)_____

98. How many times did the development agent visited you during the last 6 months?

99. Do you generally feel that what has been done in your area, in terms of different development activity, has improved the life of the people, particularly children and women?
1. Yes 2. No

Annex-7: Schematic Presentation of Data Collection Levels



DECLARATION

I declare that this thesis is my original work and has not been presented for a degree in any University and all the sources of materials used for the thesis are duly acknowledged.

Name: Fiseha Kebede

Signature: _____

Date: July 1, 2002

Place: Addis Ababa University

This thesis has been submitted for examination with my approval as a university advisor

Mulat Demeke (Ph.D.)

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