End Review of Sustainable Agricultural Program in Tigray National Regional State Implemented by DF in Partnership with the Relief Society of Tigray (REST) Women's Association of Tigray (WAT)

Final report

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Final Report

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Acronyms

BoARD	- Bureau of Agriculture and Rural Development
BoWRD	- Bureau of Water Resources Development
DF	- Development Fund (Norway)
IADP	- Integrated Agricultural Development Project
IGA	- Income Generation Activities
IGS	- Income Generation Scheme
MDGs	- Millennium Development Goals
PRSP	- Poverty Reduction Strategy Project
REST	- Relief Society of Tigray
RNE	- Royal Norwegian Embassy
SDPRP	- Sustainable Development and Poverty Reduction Project
SWC	- Soil and Water Conservation
WAT	- Women Association of Tigray
WoARD	- Woreda Office of Agriculture and Rural Development

Executive Summary

The Royal Norwegian Embassy (RNE) has been funding sustainable development programs implemented by Development Fund of Norway (DF) in collaboration with the Women's Association of Tigray (WAT) and Relief Association of Tigray (REST). This report provides a review of the program comprising the Integrated Agricultural Development Project (IADP) implemented by REST and the institutional capacity building of WAT and income generation schemes for vulnerable women in Tigray implemented during 2007-2008. REST has project coordination offices at woreda level to implement the IADP while WAT used the existing organizational structure of women's associations at different levels to implement the project. Due to its historical linkage with the women in Tigray, WAT enjoys the support of the people and its collaborating partners in the region.

The study was conducted based on review of program documents and reports, consultations with REST and WAT staff at regional, zonal and woreda levels. The field work was conducted in November 2008 by a team of consultants employed by RNE and DF.

Sustainable use of the environment and natural resources focused in the IADP is one of the very important attributes required for sustainable growth, alleviation of poverty and attainment of food security. A wide range of activities in SWC, reforestation, agricultural extension, livestock development, irrigation development, HIV/AIDS and gender and development has been implemented during 2007-2008. The interventions within the framework of IADP as well as similar past efforts made by REST and other development actors in the region clearly reveal that poor and vulnerable people, given the chances and opportunities, to improve their livelihoods and food security make good use of them. The interventions also demonstrated that what matters is not only the progresses made in socio-economic growth and rehabilitation of the natural resources, but just as much the ability of the target communities to contribute to and directly benefit from them. The participatory watershed development approach that is followed by REST and its implementing partners and outcomes attained in the different intervention components have clearly demonstrated this.

The implementation arrangements in which stakeholders shared different roles and responsibilities by and large worked very well although increased leadership role and capacity of partner line agencies is still desirable. Problems encountered are mainly attributable to lack of capacity on the part of line agencies all of which have smooth and camaraderie working relations with REST. The IADP implementation efficiency is fairly good both in terms of accomplishment of physical plans and budget utilization with 82% and 86% accomplishment rate, respectively as of October 2008 and is expected to be fully implemented at the end of the year.

The program implementation contributed to rehabilitation of the environment and improved natural resources management, food security, increased income, asset creation, increased access to children's education, increased market participation and social integrity.

In the current IADP intervention, opportunities in sector linkages to create opportunities through small scale agro-processing of primary agricultural and natural products from which the food insecure and vulnerable could directly benefit in the process of value addition through labor have not been adequately explored and considered.

Besides, the private sector which could play significant role in the provision of agricultural and rural services and facilitate watershed based development endeavors is not playing significant role. Supply of inputs and technologies (seedlings and planting materials, improved seeds and fertilizers, improved agricultural tools) marketing of agricultural products, processing provision of extension services, provision of veterinary services, provision of farm operation services and establishment of commercial wood lots could be few among many areas in which the private sector could actively and productively participate.

Future program design and implementation by REST should consider the following major recommendations: focusing on areas of highest competence and specializations of REST; limiting watershed sizes within the prescribed ranges of the national guideline (200-500ha) and applying sub-watershed classifications and clustering for efficient management; strengthening and further institutionalizing community by-laws and sustainable natural resources use regulations to ensure sustainability of watershed management; emphasis towards promoting and supporting indigenous/innovative non-farm livelihood alternatives as well as proper exit from agriculture and natural resources based livelihood systems; expanding integration of long term and short term benefits of interventions as demonstrated by the construction of series of check dams combined with small scale irrigation using water lifting technologies; focusing on highly complementary and supplementary activities having better chance of sustainability. Moreover, up-scaling of what worked in the intervention watershed requires strengthening the capacities of the partner line agencies and the private sector and cooperatives involvement.

The institutional capacity building activities of WAT have been implemented as planned while the M&E system development is not yet realized. Woreda and Tabia level women associations are responsible for identifying the credit beneficiaries and reporting. The zonal women's association allocates the fund to the districts depending on the amount of fund received from WAT.

The credit scheme implemented by WAT involves training and provision of initial capital through credit. Including training program is very much appreciated by the beneficiaries since it helped them understand the concepts and application of small businesses like petty trading. The loan provided has limited conditions and reasonable interest rate (9%). The repayment rate is high and there is no intentional default reported. The loan is used for petty trading, production of small ruminants and the purchase of dairy cows. The project has significant impact on the livelihood of the poor women.

The major challenges associated with the credit scheme are (i) small size of the credit made available (ii) reluctance of Muslim women to associate themselves with credit that involves interest (iii) institutional capacity limitation of WAT (iv) challenges of scaling up what worked well and (iv) overall lack of opportunities and business ideas by the rural poor. Overcoming these challenges determines the success of similar programs in the future.

It is highly recommended to increase the scope of the income generation activities and reach more women; link up with existing credit institutions for up scaling to create access to credit for experienced women and constrained by financial resources to continue or expand their business portfolio whereby WAT can play the role of collateral; promote saving and credit cooperatives at community level with provision of seed money; continuing with the type of

loan scheme implemented by WAT; develop business profile for small scale credit schemes and encourage innovative business activities.

In order to consolidate and reinforce the gains from the interventions and lay foundation for up scaling, the project support should continue with emphasis to areas of high success and building the of the implementing agencies. Building the capacity of WAT and developing and implementing the such as series of check dams and irrigation developing and implementation of effective M&E system of WAT is crucial.

1. Program Level Review

1.1 Introduction

The review covers RNE/DF funded development program. The program comprises of two projects implemented by REST and WAT. REST implemented an Integrated Agricultural Development Project (IADP) while the capacity building and women empowerment project was implemented by WAT. The program designed has not adequately considered the potential synergies and complementarities to enable joint project implementation and monitoring by the two institutions.

This report is organized in three parts: The first part summarizes the program level findings and analysis while the second and third part deals with IADP and capacity building projects respectively.

1.2 Impact

The program implemented by DF in collaboration with REST and WAT has significant contribution towards the attainment of the overall goal of improving and sustaining the livelihood of poor and vulnerable people in the intervention areas. The overall objective of the IADP was stated as "Ensuring the food security and rehabilitating the environment and natural resources base". The observations made at the project sites and discussions made with the project beneficiaries confirm that this objective has been attained. It was also apparent that the project interventions consolidated and enhanced development gains and positively contributed to food security and environmental rehabilitation. Vivid impacts are observed in the improved livelihood base and welfare due to increased income generated from program activities. Moreover, the peoples' resilience to shocks and social integration increased as a result of the program activities especially the environmental rehabilitation and water resources development. The program has also increased empowerment of women and the youth as they access and control resource bases developed and created by the program.

Activities under the institutional capacity building and women empowerment project have also contributed to the enhancement of food security at household level and reduction of gender inequality as anticipated in the overall objective of the project. More importantly, the capacity building of the beneficiary women enhanced the entrepreneurship and business skill of the target women.

1.3 Effectiveness

The effectiveness of the program implementation can be seen in terms of the outcomes. The IADP component of the program resulted in improved management and sustainable use of land and natural resources, increased vegetation cover that can be used as livestock feed or bee fodder, increased availability of potable and irrigation water, diversification of production and increased market integration, increased household income and increased participation of different social groups in development process. Moreover, the program has also resulted curbing down the spread of HIV and reducing its negative social impacts.

The outcomes of the integrated agricultural development program have been attained to a satisfactory level in the respective intervention areas though scaling up of the gains still remain a daunting challenge.

The environmental, economic and social impacts observed are the results of cumulative efforts made by the IADP and other development endeavors in the past. The efforts made during the last several years in SWC and forestation works resulted in improved soil condition, increased vegetation cover, reduced erosion hazards, improved micro-climate. The regeneration of natural vegetation is creating natural habit for wild animals which disappeared due to forest degradation. Area closure is also creating good opportunity for the landless youth to engage in beekeeping and supply feed for livestock through cut and carry system.

Capacity building through training and provision of credit for vulnerable women created income generation opportunities and directly contributed to enhancement of food security. The program also resulted in some gains in terms of enhancing the competence of WAT and REST through training of staff and experience sharing exercises. Further capacity building tasks are going on towards improvement of reporting, communication and information dissemination of WAT.

1.4 Efficiency

Trend show that the anticipated program outputs will be achieved by the End of 2008 with negligibly few remaining tasks. Most of the remaining tasks have been diverted , re-planned or rescheduled in repose to changing circumstances. The IADP implementation efficiency is fairly good both in terms of accomplishment of physical plans and budget utilization with 82% and 86% accomplishment rate, respectively as of October 2008.

1.5 Sustainability

Most of the program activities were planned in a participatory manner and are relevant to addressing the local needs and are compatible with government policies. The communities participation in program components planning and implementation is high in terms of time and resources contribution. Moreover, the program involves capacity building for the program beneficiaries to enable them benefit from the interventions on a sustainable basis. Overall the projects impacts can be sustained with some extra efforts of consolidation and institutionalization of some key areas of interventions such as area closures. Maintenance of structures built, input supply systems, market linkage and increased access to credit facilities will remain to be areas requiring support to ensure sustainability.

1.6 Synergy and Complementarities between Program Components

Activities of WAT which lead to empowerment of women very much complement the gender sensitive participatory approach followed by REST in its watersheds based development endeavors. Although the program design did not explicitly linked the

implementation of the program by the two agencies (REST and WAT), it was found out that the benefits from the view point of rational use of resources in areas where both WAT and REST operate is considerable due to experience sharing among the beneficiaries. The training facilities although not yet fully utilized provide important training facilities from which both IADP and the capacity building projects could benefit.

REST benefits from the know-how and complete overview of women's issues by WAT while practical aspects of integrating women in economic development activities and ensuring access and control of benefits to them are gained from REST. REST has drawn important lessons from the direct experience of WAT with regard to credit based IGA supported and issues revolving around alternative credit schemes.

2. Review of Integrated Agricultural Development Project (IADP)

2.1 Background

Unsustainable agricultural practices and systems that have been going on in the region have caused considerable land and natural resources degradation while land and natural resources degradation on its turn has undermined the very basis of agricultural production and livelihood in many socio-economic and agro-ecological settings. Not only physical soil loss as usually perceived is the major degradation aspect that is important but also the soil chemical as well as biological degradations that have resulted in significantly large unproductive or less productive areas. Soil nutrient loss due to excessive leaching and nutrient mining, soil acidity, infestation by noxious weeds, aggressive pests and diseases cause serious problems in many places including in areas that are traditionally regarded as high potential. Gullies have rendered large areas unproductive and created barriers in the agricultural landscape. Complete removal of vegetation cover and drying out of water bodies has disturbed ecosystem functions. Natural shocks have increased and resilience of livelihood systems to resist the shocks diminished.

The Integrated Agricultural Development Project (IADP) implemented during 2007-2008 is an extension of long standing development cooperation between the Relief Society of Tigray (REST) and the Development Fund (DF). The project builds on lessons drawn and experiences gained from a predecessor project that was implemented following the major shifts made in REST's development emphasis from scattered to focused and integrated activities; from protection biased to combining protection with production and use; and from community focused to seeking complementarities between community and household orientation. This project was designed to specifically address issues of food insecurity and environmental degradation in the central Tigray woredas of Tanqua Abergelle, Kolla Tembien, Werie Lekhe/Maikenetal, and Ahferom. Integrated activities are implemented in 14 watersheds: Endamehone, Begasheha, Wukro and Debresibhat (Kolla Tembein); Maygundi, Endagabir, Felekes and Agazene mariam (Ahferom), Teget, Limeat, Sait Ruba, Endemariam (Abergelle) and Begela, Ruba-gered, Mai-daero and M/Shirenigus (Maikenetal) watersheds.

The project watersheds studied range between 400 and 1,800 ha. Development activities in the watersheds began about 8 years ago and the activities under the current project have been implemented in these watersheds in most cases as continuation and further consolidation of the previous development results. Activities being carried out in an integrated manner using a participatory watershed planning and development approach and in which the DF supported project have been successfully integrated into include the following:

- Area closures
- Construction of series of check dams
- Construction of percolation ponds
- Soil and Water Conservation (SWC) activities on communal and private land
- Big gully rehabilitation
- Agro-forestry practices
- Vegetable and fruit tree development
- Beekeeping as IGA

- Stream diversion
- Shallow well construction
- Forage development
- Dairy and small ruminant development as IGA

2.2 Goal and Objectives of the Project

The overall goal of the project was improving food security on sustainable basis through enhancing rehabilitation of the natural resources base; promoting agricultural production and productivity as well as non-agricultural activities and improving social infrastructure of REST/DF project watersheds.

The specific objectives the project aimed to accomplish were:

i) Improve access to clean water and water resource security for irrigation.

ii) Promote economic empowerment and access to decision making of women mainly for the women headed households and landless farmers.

iii) Improve the natural resources base and management of degraded land for sustainable use.

iv) Increase and diversify rural household crop and livestock production and enhance productivity at household level.

v) Curb the spread of HIV/AIDS and reduce the negative socio-economic impacts in the watersheds.

vi) Improve competence of REST.

2.3 Objectives of the Review

The overall purpose of this review is to assess the progress towards the goal and the need for a next phase of the project by assessing past performance, and possibly, planning future collaboration. It is envisaged that the review finding will provide a basis for learning by RNE, DF, REST and line agencies with a view to designing improved future projects.

The specific objectives of the review are:

- To provide factual information on the efficiency, effectiveness and impact of the project;
- To assess the sustainability of the project, including opportunities for phasing out or scaling down in some project areas and the need for phasing in or scaling up in other project areas;

- To assess the relevance of the project in relation to Ethiopian federal and regional policies and strategies, as well as the bilateral priorities of Norwegian Development Cooperation with Ethiopia.

2.4 Methodology

In order to attain the above objectives, RNE and DF commissioned a team consisting of two consultants to make an independent review. The approaches followed during the review were.

i) **Document review:** The study commenced by reviewing secondary sources of information including the original project document and periodic progress reports. Moreover, financial and physical plans and implementation annual reports were collected from REST and reviewed.

ii) **Interviews and discussions:** Interviews and discussions were conducted during November 10-15, 2008. Interviews and discussions with key staff of the focal institution REST and project beneficiaries were carried out using pre-prepared checklists and data collection instruments such as matrices and formats. Project portfolio analysis matrixes were applied to analyze different aspects of project formulation and implementation. SWOT analysis was carried out for the different intervention components. Watersheds intervention performance ranking was also made using a 1-5 rating score. At the grassroots level, beneficiaries of the project activities evaluated the extent of their participation in decision making during the project design and implementation, contribution of the community, relevance and suitability of the different project components, economic, social and environmental impacts of the projects and sustainability issues. They were also asked the extent to which the woreda level line agencies participated in the project implementation and the opportunities and challenges for scaling up the positive impacts. A total of 170 persons participated in the review process (Annex 3.4).

iii) Field visit: Field visits to the different watersheds selected to represent different agro-ecologies and socio-economic settings and sites of intervention in Ahferom, Tanqua Abergelle, Kolla Tembien and W/Lekhe (Maikinetal) woredas along with discussions and interviews with people directly responsible for implementation and target beneficiary communities were the major sources of information for this evaluation. Check dams, water harvesting structures, irrigation schemes and fruits farms, beekeeping, dairy, women's cooperatives running poultry and grain mill, marketing of dairy products, oil extraction machines, small ruminants distributed to women, SWC works such as gully rehabilitation, area closure and seedlings planted, etc. were observed in the field. Moreover, physical conditions of the project beneficiaries have been observed during the group and individual discussions.

iv) Debriefings: Two debriefing sessions were held. The first debriefing was made to REST staff at the REST head quarters (November 14, 2008) while the second one was made to RNE and DF staff at DF office in Addis Ababa (November 18, 2008). In both debriefings, the review process and major findings and recommendations

were presented by the consultants and useful comments were given by the participants. The comments given have been incorporated into this report.

2.5 Findings

2.5.1 Summary of Findings

The project activities have been integrated to improve resource bases for agricultural production, access to food through income generations, implementation of complementary and integrated activities which are also consistent with government policies. Impressive results have been attained in the watersheds which have significantly transformed both the livelihoods of beneficiary communities as well as rehabilitation of the natural resources base. Area closures, construction of series of check dams and SWC activities in communal and private lands and rehabilitation of big gullies are areas in which REST has excelled. Recent activities under the IADP have made particularly significant contribution in strengthening check dam construction, SWC, vegetable and fruit tree development, agro-forestry, big gully rehabilitation and beekeeping. Conservation activities have resulted in visible changes in the agricultural landscape and significantly checked soil erosion from sloppy areas. Rehabilitated big gullies which have been handed over to landless community members and have in turn created value and demonstrated that gullies are no more waste land but are resources with opportunities that could be tapped to improve livelihoods. Enclosures which have led to the regeneration of the natural vegetation cover as a results of effectively preventing and controlling free grazing and other conservation activities carried out in them.

The newly constructed earthen dams and diversions for irrigation have created capacity to enhance agricultural production and productivity while at the same time adding to resilience to natural shocks (drought). Excellent workmanship in the structures and treatment of upper catchments with effective physical and biological measures (which is being undertaken) ensures longevity and sustainability of the structures.

Beneficiaries recall that the area used to be covered by natural vegetation and richly endowed with springs and rivers but this drastically deteriorated as a result of the population growth and inappropriate agricultural production and natural resources utilization. They say communities tried to cope with the deteriorating productivity and production by employing some traditional fertility management practices, homestead tree planting and traditional irrigation.

Serious developmental work began according to the beneficiaries through the initiatives taken by REST in which communities participated in and contributed to right from identification, prioritization of problems, intervention planning to implementation and monitoring. Communities have made significant contributions in form of providing labor (20 days in a year) and supplying local materials.

Beneficiaries say their crop production even in years of low rainfall has significantly increased due to improved soil moisture as a result of the SWC activities. Shallow wells in the area have become very productive and damages by floods to farm land have significantly declined as a result of treating upper catchments.

Farmers engaged in vegetable production introduced by the project generated incomes up to Birr 9,000 from a harvest of a single season using irrigation. Credits for small ruminants, dairy and beehives have benefited many farmers to augment their household income. The beekeeping interventions particularly for the landless youth created new livelihood opportunities and options which also contributed to reduce pressure on agricultural land. These activities also assisted empowerment of women in income generation and decision making.

Livelihood development effort is lob-sided towards options that directly or indirectly relay on rural land and natural resources. Indigenous non-farm livelihood alternatives that are based on local know-how and skills (artisanship, tannery, weaving, and pottery) and options outside of agriculture have received little or no attention.

Opportunities in sector linkages to create opportunities through small scale agro-processing of primary agricultural and natural products from which the food insecure and vulnerable could directly benefit in the process of value addition through labor have not been adequately explored and considered.

The private sector which could play significant role in the provision of agricultural and rural services and facilitate watershed based development endeavors is not in the picture. Supply of inputs and technologies (seedlings and planting materials, improved seeds and fertilizers, improved agricultural tools) marketing of agricultural products, processing, provision of extension services, provision of veterinary services, provision of farm operation services and establishment of commercial wood lots could be few among many areas in which the private sector participate.

Compatibility and coverage

- Compatibility was assessed by rating the relative competence of REST to perform the stated activities and suitability of the project component to the overall goals of the project. As discussed above, the project goal was improving household food security on sustainable basis through enhancing rehabilitation of the natural resources base, promoting agricultural production and productivity as well as non agricultural activities and improving social infrastructure of the REST/DF project watersheds.
- Relative coverage & actions by others including government (vertical)

Table 2: Matrix of compatibility and relative coverage

	Relative compatibility with project goal/organizational competence			
Relative coverage by other actors in the area		**High**	**Low**	**Remarks**
	Low	**SWC:** • Physical conservation • Big gully rehabilitation • Water harvesting Check dam • Stream water diverting to farm land	**Agricultural extension:** • Promotion of post harvest interventions	
		Agricultural extension: • Fruit development		
		Livestock development: • Rural dairy development through provision of Holstein dairy cows • Promotion of backyard poultry farm		
		Irrigation development: • Construction of underground tankers • Spring development for irrigation • Pump irrigation • Check dam pond construction • River diversion		
	High	**SWC**: • **Ford** construction • Training on SWC	**Livestock development**: • Forage development • Training on cooperative principle and business management	
		Reforestation: Seedling production Area enclosure		

Table 2: (Continued)

	Relative compatibility with project goal/organizational competence			
Relative coverage by other actors in the area	**High**	**High**	**Low**	
		Agricultural extension: • Provision of water lifting technologies /micro irrigation • Provision of vegetable seeds and high value crops		
		Livestock development: • Beekeeping • Promotion of small ruminants **production**		
		HIV/AIDS: • Training • **Care and Support for OVC** • Material **provision**		
		Gender and development: • Business skill training for women • IEC material development • Gender advocacy workshop		

The results of the competence mapping shows that compatibility of intervention portfolio is highly with the exception of post harvest, forage development, training on cooperative principles and business management. In terms of implementing the project components, the intervention components are properly placed since the coverage by the other actors including government agents and NGOs is low. The results also show that REST as a matter of necessity involved in certain activities such as provision of water lifting technologies, provision of vegetable seeds and fruits seedlings, HIV/AIDS and gender development in which the coverage by other agencies is high. The explanation given for this was related to low coverage of the projects in view of the magnitude of the problem in the area. For instance, DF/REST project covers on average 4 watersheds per woreda while the number of watersheds not covered is much larger. Besides, some of the activities such as the water lifting technologies, beekeeping, etc have been introduced by REST and taken up by the government for scaling up.

Another important quick assessment of REST as an institution was made by comparing the intervention concepts formulation and realization as shown below. The result shows that both the planning and implementation of SWC, irrigation and HIV/AIDS were good while the REST staff has the view that despite a good concept and design, the realization of reforestation, agricultural extension and livestock development was rated average showing that there are still challenges that should be overcome. The gender and development component requires extra efforts both in terms of concepts, design and realization.

Table 3: Project formulation/design & implementation

	Concept, formulation/design of project interventions			
		Good	**Average**	**Remark**
Implementation **(Realization)**	**Good**	• Soil and water conservation • Irrigation • HIV/AIDS		
	Average	• Reforestation • Agricultural extension • Livestock development	Gender and development	

The results of the watersheds intervention performance ranking made using a 1-5 rating score show variability in the perception of success and performance of implementing different intervention components in the different watersheds. Overall, performances were rated high in the interventions in which REST has high competence.

2.5.2 Project Relevance to Policies and Strategies

The IADP is compatible and relevant to the Agricultural Development Lead Industrialization (ADLI) economic policy of the federal government and that of the Regional State of Tigray. The country's second national poverty reduction strategy paper (PRSP), the Plan for Accelerated and Sustained Development to End poverty (PASDEP) 2005/6-2009/10 is under implementation. The Project deepens the fundamentals of its predecessor PRSP the SDPRP and carries forward it's important strategic directions related to human development, food security, rural development and capacity building and serves as a strategic framework for the five year period. Major focus is given to growth in the five years with particular emphasis on greater commercialization of agriculture and scaling up of efforts towards achieving the MDGs. Provisions are made for the conservation, management and sustainable utilization of natural resources as the basis for attaining the targets of accelerated economic growth.

As fundamentals of the county's agricultural strategy are mentioned:

- Strengthening human resources capacity and its effective utilization;
- Ensuring prudent allocation and use of existing land;
- Adaptation of development path compatible with different agro ecological zones;
- Specialization, diversification and commercialization of agricultural production;
- Integration of development activities with other sectors; and
- Establishment of effective agricultural marketing system.

Hence, the IADP financially supported by the RNE and implemented by REST/DF (or DF/REST) in Tigray is consistent with the government policies of rural and agricultural development. According to the strategic plan of DF, it wishes to be the leading Norwegian NGO combining environmental and development concerns in order to combat poverty and

strengthen food security in poor countries in the South in cooperation with local partners. In order to attain this vision, it among others puts the following as top priority interventions:

- Sustainable agriculture and food production for poor people by focusing on increasing food security for the poor, drawing on the considerable competence among its staff and partners. Its strategy also specifies the need to safeguard biological diversity in the farmers' fields, reversing the current trend of a vast number of traditional strains being lost all over the world, and the importance of a complex agricultural system composed of a multiplicity of plants and animals.
- In response to climate change, DF plans to contribute to its target groups' devising methods and strategies to adjust and mitigate the harm from ongoing climate changes, which are dramatically altering conditions for farmers, pastoralists and other vulnerable groups. The Development Fund sees itself as participant in the international struggle against a deteriorating climate.
- It also focuses on 'social mobilisation' and 'struggle against global inequality and poverty'.

2.5.3 Development Approach

The development and implementation of this project has benefited from the experiences gained in applying the watershed approach in which geographic units of watersheds are taken as units of local level planning and Natural Resources Management (NRM). It is combined with productive socio-economic activities and building of assets. REST has started using major elements of the watershed approach since 2003. The community based approaches to planning in watersheds was started by MoARD and FAO and later on developed and applied by the World Food Project (WFP) and several bilateral development institutions and Non Governmental Organizations (NGOs). The Ministry of Agriculture and Rural Development with the participation of major development partners developed a national Guideline for Community Based Participatory Watershed Development (CBPWD) in a bid to harmonize development approaches of the different actors, create synergy and complementarities. REST has not only been following the process, but has also made significant contributions by sharing its practice based experiences. The national guideline which defines participatory watershed development as: "rational and socially acceptable utilization of all the natural resources for optimum production to fulfill the present need with minimal degradation of all the natural resources such as land, water, and the environment" is built on a set of basic principles. The principles of participation by communities in the different stages of planning, implementation and management of watershed development activities and the involvement of women in particular are areas in which REST has put emphasis in the framework of this project. The focus on all dimensions of food security (availability, access and utilization); project activity integration within watersheds; and integration with government policy/project are in line with the principles laid out in the national guideline. Maximization of resources utilization through revolving fund, matching fund and user fees as well as mainstreaming of gender are all in conformity with provisions of the guideline. Unlike the manner in which HIV/AIDS was planned in the project, it should have been mainstreamed along all the project components.

Suitable size of watersheds for effective planning of conservation measures and production enhancement based on local and international experiences ranges between 200 and 500 hectares for effective facilitation of planning and implementation. Watersheds with very high diversity could have sizes less than the prescribed lower limit while watersheds with dispersed pattern of settlement and drier agro-ecological conditions could exceed the upper limits. Extensive moisture conservation activities to replenish ground water levels could have size ranging between 500 and 1800 hectares.

2.5.4 Implementation Arrangements

The ***focal institute*** REST closely collaborated and worked with the ***primary stakeholders*** which include the DF, BoARD, BoWR, WoARD, woreda community associations, the target communities and benefited from other ***actors*** such as training institutes and universities, research centers and other non governmental organizations. Collaboration in many respects with communities as well as other stakeholders has been good at least due to the historical development of REST which gives it wide-spread acceptance and tangible development results registered through its actions. Problems encountered in many instances are related to capacity deficiencies on the part of partner institutions and not lack of good will and readiness to deliver.

REST has established offices at woreda level with the objective of facilitating and coordinating project implementation in the watersheds. The REST woreda offices have ensured the timely preparation and delivery of periodic reports which has considerably helped the project steering and timely decision making. Although there is no ambiguity over ownership of interventions by the respective partner line agencies, REST takes the lion's share of direct implementation through its woreda offices and staff deployed. REST's lean organizational set up which is less bureaucratic gives it high flexibility, and quick decision making advantages over its line agency partners and commands sizeable fleet of machinery and trucks which are vital to support watershed development activities. REST carries out activities with the intent of filling the capacity gaps of the partner institutions and not replacing them. However, partner institutes whose capacity gaps are being covered will not be pressed to build their own capacities without which the up-scaling of piloted successful interventions would be unthinkable. The potential of private sector participation which could play vital and significant role in watershed development has not been fully tapped.

2.5.5 Analysis of Project Implementation Efficiency

2.5.5.1 Soil and water conservation activities

REST has been implementing Soil and Water Conservation (SWC) activities to restore the natural resource base in Tigray. Various physical and biological soil and water conservation structures have been implemented during the 2007-2008. Gullies were reclaimed, Hillside terraces and bunds were planned and implemented on the catchments of the watersheds to halt runoff and rate of land degradation. Moreover, water harvesting check dams, stream water diverting and training on proper water utilization and watershed management were major activities of the SWC component of the project.

Analysis of the records of the project implementation shows that overall 75% of the planned SWC activities have been accomplished until October 2008 (see Annex 1: Table 1.1). The remaining (25%) will be undertaken until the end of the year. Terracing and bunds construction, and ford construction have been fully accomplished while more than 80% of planned activities for gully reclamation (covering 6.5 km of land), water harvesting check dams, stream diversion, and training on appropriate utilization of water has been accomplished. Relatively low level of accomplishment was observed in the case of training on watersheds management and exposure visit to model sites but these activities are expected to be completed during the 4th quarter of the second year.

SWOT analysis

Strength

The strengths in the implementation of this component are the following:

- The presence of strong qualified professional and experts exist;
- Well established effectively functioning nurseries for planting material production available;
- Strong community mobilization capacity of REST and acceptance by grass-root people;
- Excellence in watershed based participatory development approach;
- Ability to combine components that bring immediate benefits to beneficiaries with those that have strategic and long-term impacts. For example, series of check dams with pump irrigation and rehabilitation works with cut and carry systems.
- Clearly set objectives and targets exist;
- Excellent collaboration and working relations with pertinent line agencies, relevant institutions and community organizations;
- Cost effectiveness through effective mobilization of beneficiary participation;
- Accessing and adopting appropriate technologies and systems for watershed development;
- Regular and consistent up-grading of technical and professional skills of experts of REST through training and experience exchange visits locally and internationally.

Weaknesses

Identified major weaknesses included:

- Large-scale mobilization associated quality decline of outputs occurred in catchment treatment especially of terracing activities;
- Not being able to achieve results from physical and biological measures in tandem to obtain maximum impact and benefit from integration in areas where there is free grazing practices;

- Low survival rate of biological measures in dry gully areas of having moisture stress problem.

Threats

Damage by livestock due to unregulated utilization and free grazing regime and natural disasters are considered as major threats.

Areas of highest success

Big gully rehabilitation, stream water diversion, water harvesting check dams, physical conservation and construction of fords are seen as activity areas in which REST excels.

2.5.5.2 Reforestation

In Tigray region, the vegetation cover decreased from time to time resulting in high erosion hazards, shortage of firewood, wood for construction and livestock feed. In order to mitigate the problem, reforestation of the degraded area was made by raising seedlings where small ponds were constructed in order to improve the soil moisture and sustain growth of the seedlings. Training of the community members on area closure, agro-forestry, seedlings transplantation, managements of seedlings and plantation was an important reforestation activities performed.

The project planned to raise and plant 4 million tree seedlings during the two years. So far about 3.5 million seedlings have been planted on 816 ha of land. The field observation shows that 50% of the trees survived after two counts one early in September and another in April. Given the poor soil condition and low rainfall in the area, the rate of survival rate may further decline during the following year. If those surviving seedlings can sustain, it will have a significant impact. Focusing on indigenous tree seedlings of economic and ecological values is highly encouraged. Overall plan accomplishment of the reforestation component of the project until October 2008 was 83% (Annex 1: Table 1.1).

SWOT Analysis

Strength

- REST has production capacity of planting materials;
- Integration of mutually reinforcing components in the watershed such as beekeeping and fodder production;
- Mobilization capacity of beneficiaries as well as line agencies at peak and critical planting seasons;
- REST has trucks to support operations;
- Timely supply of material inputs;
- Effective system of environmental and natural resources awareness; and

- Capacity to produce immediate benefits to target communities by at the same time undertaking conservation activities with long term impact.

Weakness

Major weaknesses were:

- Weak follow-up and up keep of rehabilitated vegetation;
- Low survival rate of seedlings.

Opportunities

- High level of government interest for reforestation in Tigray;
- Commitment and readiness of communities to cooperate in area closures and other rehabilitation schemes.

Threats

- Moisture stress was mentioned as the single most outstanding threat to reforestation interventions.

2.5.5.3 Agricultural extension

Agricultural extension involves introduction and dissemination of new crop production technologies. These include provision of water lifting technologies /micro irrigation, vegetable seeds and high value crops, fruit development and promotion of post harvest storage. The extension of crop production was designed to provide yield enhancing inputs such as organic fertilizers and irrigation facilities. Adoption of these technologies was expected to help households diversify sources of incomes and integration of smallholder production system to the market. Training was an integral part of this project component to improve the decision making capacity of the project beneficiaries.

The agricultural extension has several activities which have been accomplished at different rates. For instance, provision of fruits seedlings has been accomplished 23% more than the plan while vegetables seed supply was done as high as 78%. The accomplishment of micro irrigation technologies was also successful with an implementation rate of 108% of the planned activities. In this case also the capacity building component is scheduled for the last quarter of the project year with 75% accomplishment so far (Annex 1: Table 1.2). In order to adequately apply the knowledge gained through training, the capacity building components should have been implemented well earlier in the project life.

SWOT Analysis

Strengths

- Integration of mutually reinforcing and complementing activities such as irrigation, improved seeds, etc.

- Introduction of new vegetable and fruit varieties;
- Capability to provide consistent and effective technical back-up;
- Flexible and efficient extension approach in terms responding to changing circumstances and opportunities;
- Association and cooperatives development and market linking skills emerging; and
- Focus on high value crops and return-on investment considerations.

Weaknesses

- Institutionalization of technology and input supply system is at an infant stage to enable scaling up;
- Maintenance and up-keep of systems is becoming cumbersome as the number of motor pumps is increasing in the project area;
- Market linkages and product promotion is at its lowest level.

Opportunities

The establishment of tissue culture based planting material production by the private sector actors and availability of credit access facilities are considered opportunities to be tapped

Threat

High costs of promoted technologies out of the reach of most farmers such as drip irrigation.

Areas of highest success

Fruit development and provision and promotion of water lifting technologies are seen as the best areas of success.

2.5.5.4 Livestock development

In degraded areas of Tigary, shortage of livestock feed is said to limit livestock production and productivity. To overcome this problem, different strategies of feed supply were implemented. Area closure, enrichment of grazing land with local and improved seeds, plantation of elephant grasses on rehabilitated gullies, farm bunds and under sowing of legumes are different means of producing quality feed in sufficient quantities.

As shown in Annex 1: Table 1.3, 79% of the planned livestock development activities have been accomplished. Activities such as the provision of small ruminants and training on cooperatives principles have been implemented more than planned. On the other hand, the provision of Holstein Frisian dairy cows was not implemented due to high price and less low availability. This shows that the project implementation was flexible in the sense that the non-affordable components are reduced and feasible activities such the small ruminants increased.

SWOT Analysis

Strengths

- Forage and seed multiplication capacity including exotic varieties;
- Good integration of intervention components;
- Focus on local forage plants;
- Supply of forage development inputs;
- Skilled and committed professional base;
- Cooperatives development and capacity development support initiated;
- New technology introduction and dissemination such as queen rearing as a bee colony is sold for Birr 500 and farmers can make their livelihood from either honey production or queen rearing.

Weaknesses

- Weak institutionalization of input and technology supply in the watershed areas. Despite the establishment of some institutions such as milk marketing cooperatives, honey producer and marketing institutions, the technical and material capacities of these institutions are low.

Areas of highest success

Beekeeping, rural dairy development, and promotion of backyard poultry, and promotion of small ruminants especially in the lowland areas are considered high success areas.

2.5.5.5 Irrigation development

This project component aims to enable production under the small rainfall amount in the project area. The activities involve construction of underground tankers, spring development for irrigation, pump irrigation, check dam pond construction and river diversion. In order to increase the participation of women in the development processes and diversify women's income, individually owned hand dug wells were constructed for women headed households. Moreover, the utility component of food security was addressed through provision of clean and safe water. The project constructed boreholes and roof rain water harvesting.

The irrigation development activities planned for 2007 were successfully accomplished. The implementation of the second year plan is underway with an overall achievement of 65% so far (Annex 1: Table 1.4). The low implementation rate is attributable to the procurement of irrigation pump which is in progress. Moreover, over 90% of the planned water supply activities have been accomplished.

SWOT Analysis

Strengths

- Selection of appropriate technologies;
- Integration of irrigation with conservation activities;
- High mobilization of communities and line agencies for site selection and construction;
- Well trained and committed REST staff;
- Strong technical and machinery support from REST;
- Acceptance by communities.

Weaknesses

- Low capacity of the local institutions to maintain bigger structures which requires further capacitating of the water users associations established by the project.
- Poor maintenance capacity of pumps at woreda level
- Underutilization of built in irrigation capacities due unfinished tertiary structures;
- Fund availability only for structures and excluding other critical processes to get the system function;
- Low institutionalization of management systems and user-fee charges in a way that law enforcement by the water users associations become legally binding.

Opportunities

Strong government commitment and encouragement and availability of pockets of high ground water potential (although with high financial and technical demands to harness) are seen as opportunities that should be recognized.

Areas of highest success

River diversion, mini-dam construction, open well construction and check dam and pond constructions are seen as areas of specialization of REST.

2.5.5.6 HIV/AIDS

The project planned and implemented care and support for HIV/AIDS orphans and OVC, training for anti-HIV/AIDS clubs, health extension workers, religious leaders, adolescent promoters. The implementation of the HIV/AIDS activities aims awareness creation and bringing about attitude change. As shown in Annex 1: Table 1.4, the overall accomplishment

of these activities is only 69% owing to the delays in the provision of the materials needed for awareness creation and care.

SWOT analysis

Strength

- Considering the HIV/AIDS in the project formulation by itself is a strength;
- Implementation focused on the youth and women who are vulnerable;
- Orphanages targeted.

Weakness:

- HIV/AIDS is planned as a separate intervention. Lack of mainstreaming HIV/AIDS in the project implementation is a major weakness.

Opportunity

- Collaborating organizations for HIV/AIDS project implementation exists;
- Media coverage is high and this can contribute to increased impact.

Threat

- Low behavioral change due to high illiteracy.

2.5.5.7 Gender and development

The main focus of gender and development is increasing economic empowerment of women through business skill training for women and gender advocacy. The available data shows that the planned gender and development activities have been adequately implemented covering 94% of the plan (Annex 1: Table 1.5. The least accomplished activities are training on petty trading and training on small scale poultry. The accomplishment of the training activities has been measured through mere number of trainees rather than the quality of the training.

SWOT analysis

Strength:

- Training is a major component of empowering women although number of women trained is used as indicator rather than the quality;
- Income generation activities targeted female headed women.

Weakness:

- Some training components are scheduled late.

Opportunity:

- WAT has established women training center. The resources available can be used by REST to train more number of women and bring about significant impacts.

Threat:

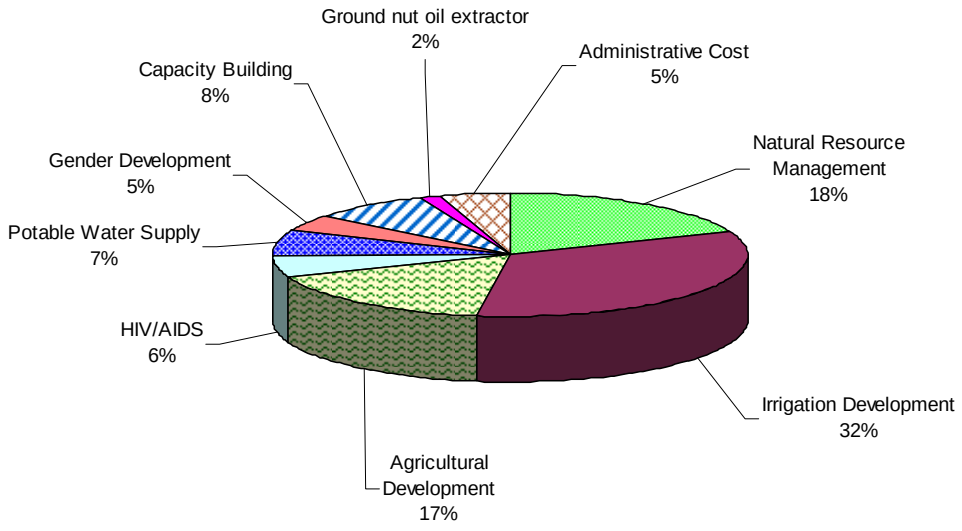
- Traditional labour division and workload of women is a challenge to be confronted.

2.5.5.8 Budget Allocation and Utilization Efficiency

The project fund allocated for the implementation of IADP during the two years was Birr 24,505,602 including the additional budget of Birr 788,377 allocated in 2007. Figure 1 shows the proportion of budget allocated to the different components of the project. The budget allocation is reasonable in the sense that larger share of the budget was allocated to the activities in which REST has competence and activities which are highly compatible with the goal of the project.

Overall budget utilization up to October 2008 was 86% indicating the availability of 14% (i.e. Birr 3.4 million) to be spent during the remaining project period (Annex 2).

Figure 1: Budget allocation by project component (%)



2.5.6 Project Outcomes/Effectiveness

The effectiveness of the project implementation could be evaluated against attainment of the project objectives. The set of outcomes planned in the project document are complementarily interlinked due to the nature of integration of the activities. As the result of improved soil conditions, soil moisture and improved crop management, crop yield has increased during the last few years whereas the beneficiary farmers recognize the contribution of SWC activities to increased crop yields. Yield gains due to SWC measures, enhanced agricultural extension, and investment in irrigation infrastructure and livestock technologies are significant. Interventions have provided foundation to increase and diversify agricultural production, increase the resilience to natural shocks such as drought and bring about livelihood diversification. Interventions such as irrigation, livestock development, agricultural extension and gender development increased participation in market and generate cash income.

Implementation of the integrated agricultural development projects for persistently long period has resulted in changes in livelihood strategies which in turn changed the social tie among the family members. It was indicated that the farmers used to out migrate during the slack labour period searching for casual work. The migrants stay for months away from the family causing a sort of social disintegration. It also creates risk of HIV/AIDS as the migrant moves to urban areas. Implementation of the project especially the SWC created direct benefit for the labour inputs while the crop and livestock development created opportunity for self-employment increasing social tie among the household members and the community.

The project outcome in terms of capacity building for the beneficiaries and the implementing agencies was also successful.

2.5.7 Project Impacts

The broadly formulated overall objective of the project was meant to put particular emphasis on ensuring food security and rehabilitating the environment and natural resources base, increased production and productivity and livelihood diversification. Hence, impacts are expected in terms of environmental rehabilitation and sustainable natural resources use, increased welfare of the community through improved income, reduced vulnerability to shocks, and social stability. As the interventions in the framework of this project are a continuation of past development activities, the outcomes should be viewed as contribution to the consolidation of development gains.

Environmental impacts

As a result of an extensive SWC and forestation works done on the hillsides and farm fields during the past several years, the soil condition is improving, vegetation over has increased, erosion hazards are relatively reduced, micro-climate is becoming more conducive for life. The regeneration of natural vegetation is immense to the extent that in some places wild animals have regained their natural habitat. The contribution of the SWC activities to the water balance is particularly outstanding when considering the increased outputs of shallow wells in the conserved areas and enhanced soil moisture conditions in agricultural fields.

Economic impacts

Benefits start from the direct subsistence transfers to the food insecure and vulnerable groups who participate in the different activities. Contribution to food security is high both through increased production and enhancing access of the vulnerable groups to food. After the catchments treatment through different physical and biological SWC measures along with controlled grazing, the area has been covered with grasses and many farmers cut the grasses for constructing houses, sell the grasses and generate income or feed their livestock especially dairy cows. Increased vegetation cover in most communal enclosure areas both from new plantations and natural regeneration is increasingly used for fodder supply (cut and carry system) for their livestock and beekeeping practices by organized farmers and landless youths.

Increased outcome through income resulted in increased food security, saving, creating additional assets such as livestock, better housing, good clothing, better access to nutritious food and investment in children education.

Milk yield increased from 2lt per day to 8 lt per day due to introduction of Holstein Frisian breed and improved livestock management. Organizing producers into cooperatives to participate in value chain helps them to generate more income. Small ruminants are suitable for the ecology and the beneficiary women increased the number of shoats they own by 3-4 folds in just two years.

Nutrition and food security

Increased crop and income sources diversification has great impact on the amount and composition of food stuff. Vegetables and fruits production have been introduced along the irrigation technologies. Watershed communities have adapted consuming vegetables and fruits of different types which have been introduced by the project. Dairy cows supply milk for the household members in general and children in particular. The income generated through sales of small ruminants, honey, milk, butter, vegetables and fruits increase access to food and hence increased food security in the watersheds.

Social impacts

The project activities also strengthened the labor cooperation among the community members, leading to labor and water resources use efficiency. Introduction of irrigation technology also resulted in improvement in work culture. Development of community institutions like the watershed committee is also a social asset through which communal problems are addressed.

The capacity building activities and women focused interventions increased participation of women in income generation activities and hence empowerment in resource allocation and income utilization decisions. Women's participation in social affair has grown more than any other time, which is a cumulative effort of government, REST and other development partners.

It is, however, important to note that sense of independence is not yet created and expectation for external support prevails. A more concrete targeting strategies and incentive mechanisms for successful beneficiaries can serve as an instrument to promote self reliance and confidence.

2.5.8 Major Challenges and Issues

The impressive results achieved from implementation of the integrated agricultural development project were not without challenges. The following challenges and issues were identified.

i) Due to the enormously large number of activities embedded in the project components, there was thin distribution of resources for implementation. As a result considerable impact of each of the project components should not be expected.

ii) The price hikes during the last two years especially of metals and cements created difficulties in project implementation. Moreover, increase in fuel prices has pushed operating costs of pumps for irrigation and affected cost of transport significantly.

iii) Due to the overall soaring food and agricultural input prices in the country and low purchasing power of money, it is difficult to mobilize communities for activities applying the 8 Birr/day norms.

iv) REST had to overcome initial community resistance to new technologies such as drip irrigation and very high demands for technologies that registered success. These phenomena put pressure in the implementing agency and challenges in out scaling of the successful interventions.

v) Farmers' decision to divert enterprise choice affects the profitability of irrigation schemes. For instance, farmers planted grain crops such as maize instead of cash generating vegetables and fruit crops that are anticipated during feasibility studies using irrigation.

vi) Discussions made with the project beneficiaries and the project implementing agency imply lack of overall capacity in partner institutions. Moreover, technical capacities of the staff of the woreda level partners is limited as evidenced by low qualified staff available for filling positions defined by the Business Process Re-engineering (BPR) reform being implemented.

vii) Community organization such as cooperatives are at an infant stage and lack the capacity and skill to link the intervention results to the market and participate in value chain to deliver in marketing of inputs and outputs and add value to them.

viii) Law institutionalization of communal resources management is still an issue of concern for sustainable realization of project objective. Water ponds created for livestock lack regulation and protection while the ownership of the conserved watersheds such as area closures and rehabilitated gullies should be further institutionalized.

ix) Financial resources are crucial for accessing inputs and equipments such as motor pumps. Lack of a conducive credit terms by microfinance institutions remains to be a

challenge. On the other hand, credit collateral has been provided by the government but prescribed packages which are compulsory are not always acceptable by individual farmers.

x) Scarcity of agricultural land is also a major challenge for the agricultural extension and water security project implementation.

xi) Up-scaling of what worked remains a huge challenge when seen against the enormity pervasiveness of livelihood and environmental problems.

2.5.9 Sustainability

The participatory planning and implementation approach used, contributions made in form of free labor and materials by beneficiary communities that enhanced ownership, capacity development efforts made to enable grass-root communities to handle and manage technical as well as management issues in the framework of the project, as well as efforts made to build project activities on earlier rehabilitation and development experiences that have sufficiently proven to work, all contribute to sustainability. Linking longer-term rehabilitation efforts with those that provide immediate benefits to the target groups such as combining construction of series of check dams with pump based irrigation schemes and orientation of production to markets are other areas that contribute to sustainability. However, sustainability could further be enhanced with increased security of tenure and development of community by-laws to regulate access and control over resources.

2.5.10 Lessons Learnt

There are many lessons that can be drawn from the project implementation. The major ones are outlined below:

- Degraded areas including huge gullies could be turned into valuable communal and privet assets which could considerably strengthen and secure livelihood patterns.
- Successes attained in the rehabilitation of natural resources and agricultural development give very much hope, show clear future directions and most of all clearly reveal the enormity of the tasks to be accomplished and challenges to be overcome towards attaining the development goal of the project.
- Assets created through allocation of huge resources and long years of hard work by the community in collaboration with development actors will be easily wasted and destroyed unless use regulations and systems of protection are not developed and put in place through unambiguous government policy and legal support.
- Strengthening watershed communities, institutionalization of natural resources regulation and management mechanisms through the development of, among others, community by-laws and ensuring and enhancing ownership are vital for sustainability of natural resources use.
- Up-scaling of what worked well should consider both vertical and horizontal options and focus on capacities at woreda, Tabia and community levels.

- Efforts have been made but should be further strengthened to incorporate interventions that insure short-term direct benefits with longer term development benefits. Integrating short term direct benefits with rehabilitation and conservation measures whose benefits will be realized in relatively longer term and realization of income generation by resources poor women who invested in grain mill the short term return of which is heavily challenged by loan repayment needs.
- No matter how we undertake our rehabilitation and development work in our watersheds, they will be overtaken by the growing pressure in them (population and livestock) unless deliberate actions towards checking this through promotion of non-farm livelihood options are incorporated.
- Direct participation of the poor and marginalized in the process of creating and or improving their livelihood options and developing their communal and individual assets is the only approach towards sustainable growth and poverty alleviation.
- Integration of complementary and supplementary activities in the project implementation enhanced the economic and environmental impacts. Integration of SWC, irrigation infrastructure, water lifting technologies, high value crop production and market linkages are crucial for sustainable improvement in the livelihood of the watershed communities.
- Lack of converging most promising activities with greater impact leads to thinly spreading of budgets and less impacts.
- As the promising technologies such as irrigation based production system, beekeeping, dairy, etc are up scaled, post harvest technologies and market participation becomes important determinant for sustainability.
- Gender development interventions empower women to strengthen their positions as key actors in partnership with their spouse in decision making, income generation and utilization.
- Mainstreaming of HIV/AIDS interventions shall have higher impacts as compared to an isolated HIV/AIDs component in a project design and implementation.

2.6 Recommendation

i) Although participatory watershed development approach inherently calls for integration of diverse activities and measures, it is important for organizations like REST to differentiate between its areas of highest competence and specializations and those that it carries out as a matter of necessity.

ii) Efforts should be made to limit watershed sizes within the prescribed ranges of the national guideline (200-500ha) and apply sub-watershed classifications and clustering for efficient management of implementation.

iii) Watershed communities and their organizations should be supported and strengthened through institutionalization of community by-laws and sustainable natural resources use regulations to ensure sustainability and impact.

iv) Growing pressure on land and natural resources should be checked and reduced by exploring and promoting non-farm/natural resources livelihood options and opportunities. Particular emphasis should be made towards promoting and supporting indigenous/innovative non-farm livelihood alternatives as well as proper exit from agriculture and natural resources based livelihood systems.

v) The construction of series of check dams combined with small scale irrigation using water lifting technologies is an area of intervention which effectively combines long-term conservation with immediate benefits to target communities and needs to be pursued with great emphasis.

vi) Focusing on highly complementary and supplementary activities such as SWC, agricultural extension, irrigation development, and production of high value crops will have better chance of sustainability. Reforestation, area closure, water resources development and beekeeping, livestock feed (cut and carry) also establish good integration.

vii) Up-scaling of what worked in the intervention watershed should combine both vertical and horizontal integrations. The capacities of the partner line agencies should be strengthened through collaborative project interventions and encouraged to widely disseminate proven technologies and systems with minimum external support.

viii) Issues of land and natural resources ownership particularly with regard to communal resources need to be addressed and efforts need to be made to lobby and facilitate the implementation and improvement of the federal rural land administration and land use proclamation (No. 456/2005).

ix) Private sector participation should be promoted and supported through among others showing areas of profitable and productive areas of engagement, training and capacity development. The private sector role in agricultural inputs supply and agricultural commodity processing and marketing is necessary.

x) Community participation in agricultural commodity value chains enables them to increase their price margins. Capacitating the communities' cooperative movement in specialized commodities should be seen as part and parcel of the project up scaling process.

xi) HIV/AIDS intervention project will result in more effective impact if mainstreamed into the other project components.

xii) Coordinating the women training project of REST with the capacity building project of WAT enable reaching large number of women and fully utilize the WAT training facilities.

xiii) In order to consolidate and reinforce the gains from the interventions and lay foundation for up scaling, the project support should continue with emphasis to areas of high success such as series of check dams and irrigation development.

3. Review of Institutional Capacity Building Project of Women's Association of Tigray and Income Generation Scheme for Poor Vulnerable Mothers in Tigray

3.1 Introduction

The Development Fund of Norway (DF) and Women's Association of Tigray (WAT) have been collaborating to building the capacity of WAT and in supporting income generation schemes aimed at economic empowerment of the poor vulnerable women. The fund for the project implementation was provided by the Royal Norwegian Embassy in Addis Ababa, Ethiopia. This review focuses on the project implemented during 2007-2008. This project is seen as a continuation of long standing development cooperation between the DF and WAT.

Major components of the interventions through the DF support were:

1. Capacity building of WAT through formal higher level education;
2. Capacity building of local WAT leaders through short-term trainings;
3. Improvement of the Monitoring and Evaluation system of WAT; and
4. Income Generation Scheme (IGS) for poor vulnerable women specially the female headed households.

3.2 Objectives of the Project

The overall goal of the project was to contribute to the overall women empowerment endeavors of WAT and to enable it play a role in reducing gender inequalities by contributing to food security of the most vulnerable groups of the society and institutional capacity building of the association.

The specific objectives of the project were:

- to strengthen the overall capacity of the association in addressing the need of its members;
- to improve the reporting, communication and information dissemination capacity of the association; and
- to improve income generation opportunities of the vulnerable women in Tigary.

3.3 Objectives of the Review

The overall purpose of this review was to assess the progress towards the goal and the need for a next phase of the Project by assessing past performance, and possibly, planning future collaboration. It is envisaged that the review findings will provide a basis for learning by RNE and DF with a view to designing improved future Projects.

The specific objectives of the review are:

- To provide factual information on the efficiency, effectiveness and impact of the Project;

- To assess the sustainability of the project, including opportunities for phasing out or scaling down in some project areas and the need for phasing in or scaling up in other project areas;
- To assess the relevance of the Project in relation to Ethiopian federal and regional policies and strategies, as well as the bilateral priorities of Norwegian Development Cooperation in Ethiopia.

3.4 Methodology

The review process involved review of the project documents and project implementation reports made by WAT during 2007 and 2008, discussions with staffs of WAT and project beneficiaries at selected zone, district and Tabia levels. The list of persons who participated in the discussions is given in Annex 3.

The discussions focused on the type of interventions made by WAT/DF project, approach followed in planning, target beneficiary selection, strengths and weaknesses, challenges, impacts of the project on the wellbeing of the beneficiaries, suggestions for improving the weaknesses and scaling up of best practices.

Preliminary findings of the review were briefed to WAT staff. De-briefing was made to RNE and DF staff. The comments given at the debriefing session were incorporated into this report.

3.5 Findings

3.5.1 Implementation Arrangements

WAT collaborates with different institutions in the implementation of this project. In Tigray, it collaborates with the Relief Society of Tigray (REST), Regional Women Affairs Office, Micro-and small enterprises Development, Justice Bureau, Dedebit Saving and Credit Association, Mekelle University, Bureau of Agriculture and Rural Development (BoARD), Bureau of Capacity Building and Bureau of Trade and Industry. The zonal and district women's associations are part of WAT. At their respective levels, the associations work in collaboration with the government line agencies.

The discussions made at zonal and district level indicate that the identification of beneficiaries and type of the interventions needed in income generation activity is made at the grassroots level by the Kushet and Tabia administration in collaboration with community representatives. The poor and vulnerable women are selected. The number of beneficiaries in need of loan from WAT is compiled at district level women's association and channeled to the zonal women's association office. On the other hand, the fund available is allocated by WAT to the zones which then allocate the fund to the target districts considering the applications received from them.

The selected beneficiaries participate in a 10 days training for participants in livestock production and a 6 days training for the petty trade participants. The training is

acknowledged as useful for effective use of the loan provided. The trainings were given tailored to the identified possible intervention areas for income generation such dairy production, small ruminants and petty trade. The training also included entrepreneurship skills.

Loan disbursement and collection is made by the zonal women association and training centers while reporting and follow up is more closely done by the district women association.

3.5.2 Summary of Findings

WAT, due to its historical development and confidence it enjoys by the great majority of women in Tigray, is better placed to promote the causes of women in the region. The project activities mainly focus on capacity building for WAT through education of its executive members, training of actors of income generation scheme. As capacity development of women in the protection of their rights and participating in socio-economic life is a long process, the interventions in the framework of this project are believed to have contributed to this at different levels. So useful as the interventions made through the support were, their scope was very limited due to limitation of the resources made available to make significant impact. Additional WAT resources had to be mobilized to cope with the problems encountered due to the price increase of items required to cover the project running costs.

Beneficiary women very much appreciated the trainings they obtained and the credit support made to them to engage in petty trade activities, rearing small ruminants (sheep and gats) and dairy production. Many say, not only have they explored additional areas of business opportunities by participating in the trainings, but are also capacitated to run their businesses in much better and profitable manner. Participation in the trainings has increased their risk taking attitude and encouraged them to engage themselves more and more in business activities and making use of credits. They prefer credit made available through WAT in the framework of this project over the credit provided by other microfinance institutions due to its favorable rate of interest (9% viz 18%) and repayment modalities as well as the training support that is integrated. Repayment in most places is excellent and defaults are only limited to forced major conditions such as death of animals and natural disasters.

3.5.3 Project Relevance to Policies and Strategies

Both the Sustainable Development Program to Reduce Poverty (SDPR) and the PASDEP pursued by the Government have placed a strong emphasis on the participation of women in the development process, polices and strategies, These policies and strategies have been formulated to integrate and mainstream the gender dimensions in economic, social, and political decisions. Hence, the Government has taken strong measures in placing gender responsive goals and targets to reduce the workload of women so as to enable them to participate in political and socio-economic decision-making. The regional government of Tigray has replicated the gender development policies and strategies.

Targeting women as partners of growth and poverty reduction and promoting gender empowerment through different interventions was consistent with the government policy of gender equality and equity.

3.5.4 Implementation Efficiency

Physical project implementation as of June 2008 stands at an overall rate of 86% compared to the plan (Annex 1). The objective of strengthening the capacity of WAT through upgrading the educational status of its management team is progressing well. M&E system, which is crucial for the planning, implementation, follow up and evaluation of crucial activities of the association is lagging due to delays in the procurement of appropriate consultancy service.

The project created good opportunity for the disadvantaged and vulnerable women to participate in income generation activities. Obviously, economic empowerment is the basis for social improvement and ensuring the right of women. Provision of training has opened up the business mind of those that have been trained. As of June 2008, a total of 559 women were trained at the three training centers (located in Adgrat, Mychew and Aksum) managed by WAT. The training expense was Birr 833 per trainee.

The credit provided to the beneficiaries was used to purchase dairy cow, sheep and goat in the rural areas while most of the small town dwellers that have been involved in the trainings were involved in petty trading. The loan size for petty trade was Birr 1000 in 2007 but now increased to Birr 2000 due to the soaring commodity prices in the country while the loan size increased from Birr 600 in 2007 to Birr 1000. The overall loan size during 2007 averaged Birr 888. Despite the attempt made by WAT to respond to increasing commodity price, the amount disbursed remained insufficient to generate good profit and significantly improve the livelihood of women and their families.

The overall budget allocated for the project implementation during the two years was about Birr 2.122 million of which WAT contributed about 26.75%. The project fund utilization was successful and high during the first year and low during early second year with an overall budget utilization of 60% (up to June 2008) (see Annex 2).

3.5.5 Project Outcomes/Effectiveness

Improving the implementation capacity of WAT and empowerment of the vulnerable rural women were key outputs expected from the institutional capacity building and income generation schemes implemented by DF/WAT. The review shows that the long term training for the executive members of WAT is instrumental for motivating them effectively serve the association. Moreover, the short term training for women beneficiaries enabled skill building to generate income.

3.5.6 Project Impacts

The training and credit service provided to the vulnerable rural poor helped them ease the trap of poverty. The following major outcomes/impacts could be observed during the field review:

- Women who used to borrow money from private lenders at exorbitant interest rate could access loan at reasonably low interest rate as a result of which they became beneficiary of the income they generated using the loan.
- Some petty traders expanded their business activities and improved the wellbeing of their family members. For instance, three beneficiaries from Raya Azebo district who received loan of Birr 1,000 each from WAT in 2007 made a cash profit ranging from Birr 1,200 to Birr 2,700 on top of what they spent for daily subsistence. The cash benefit has been used for children education, purchase of bed, household items that can support their business activities. Experiences from Maikinetal Tabia also reveal that the credit beneficiary women managed to purchase TV, mobile phones, beds and still kept on expanding her small scale trading. It is also interesting to note that women who purchased goats through the loan that they were provided with increased the number of goats they own from none to 16 in just two years. Some of them sold the offspring/siblings and accessed food as well as sent their children to school.
- Economic empowerment of women also created opportunities for social and political empowerment. Through the project activities, women could participate in meetings where right issues are discussed. The beneficiaries also started to claim for support so as to improve their living conditions. The credit provision enabled the beneficiary women to participate in training to engage in productive and income generation activities. This has a long term knowledge and skill building impact as the beneficiary women become more visionary to improve their living conditions.

3.5.5 Strengths and Limitations

In the project planning and implementation, both strengths and limitations could be observed. The following are the major ones.

Strengths:

- The project was done by women for women. The Project implementation benefited from the established structure of the association which is closely linked from the grassroots level to the regional WAT. Because of the strong linkage and the respect it (WAT) already secured, the associations at the various levels i.e. zone and woreda/district enjoy support from line agencies at their respective levels.
- WAT could extend credit to the Muslim women who would have not accessed credit due to traditional norms that prohibits interest payment. The approach used by WAT does not expose them that they are involved in interest payment.
- Incorporating a training component in the credit scheme is a major achievement of the project. The training built the capacity of the beneficiaries to act differently than before. For instance, the petty traders at Raya Azebo increased their rate of market participation and diversified the commodities they handle to reduce market risk and increase their business portfolio.

Limitations

Although the project aimed at building the capacity of WAT, the scope of the capacity building could not commensurate the need. The limitations observed are related to low capacity to implement projects as highlighted below.

- Limited capacity of the association to provide technical backstopping to the beneficiaries. After the training, there is no mechanism for checking how effective the beneficiaries are utilizing the loan they are provided with and feeling the gap.
- Low linkage of the loan scheme with input supply channels. For instance, the dairy loan beneficiaries purchase local cows from the local market which are generally poor in terms of milk yield. In most cases, improved agricultural technologies are distributed through Bureau of Agriculture and Rural Development. However, systematic linkage with this office was not observed during the review.
- Limited M&E by the program office.
- The loan beneficiaries that were found to have been involved in undertaking petty trading or livestock rearing follow the traditional practices due to lack of capacity to think of innovate ways of doing business differently. Currently there is limited options for income generations. In the short run there is a need to explore alternative business activities to assist women to diversify their business portfolios.
- WAT has three training centers which are used for training the beneficiary women. The observations made during the review shows the trainings are thematically (i.e. petty trading, small ruminants and dairy cows production) for 10 days. On the other hand, other stakeholders rarely use the training facilities. Hence, the training facilities and resources available in the training centers are under utilized.
- Lack of business plan which helps understanding the feasibility of the envisaged activity. Business plan also helps to determine the financial requirement for business activities. Business planning techniques encourage record keeping, and disbursement of different loan size for different activities.
- The loan size is small to engage in more profitable business undertaking.

3.5.6 Major challenges

1. The size of the credit made available ranges from which is very little particularly when seen against the current increase in price is a major challenge to be overcome;
2. Reluctance of Muslim women to associate themselves with credit that involve interests. Islamic faith followers believe that paying interest on loan is forbidden. Due to a large number of Muslim population (e.g. 47% in Raya and Azebo district), this challenge cannot be overlooked.

3. Institutional capacities of WAT and the need for large sum of money pose challenges to scaling up the credit scheme to reach a large number of women who could be supported through credit;
4. Overall lack of opportunities and business ideas by the rural poor is still a challenge regardless of efforts made by the project.

3.5.7 Sustainability

Capacity development of beneficiary women in the IGA schemes, and the created asset base through the support provided by the project laid the foundation for sustainability. Women were made to engage in income generation activities of their own choices and preference to which the project provided critical support. Most beneficiaries as a result of this are fully committed to the business activities they undertake and are determined to father develop them. As beneficiaries have started to directly benefit from the businesses and, initiating and supporting saving credit schemes will consolidate the gains made and invite other poor women to participate in small business activities and benefit from them.

3.6 Recommendations

The following major recommendations are forwarded to increase the benefits of women through credit services:

i) Increase the scope of the income generation activities and reach more women. This will definitely require huge financial resources, institutional linkages and partnerships and strong institutional capacity. Thus different development paths should be pursued.

- Link up with existing credit institutions for up scaling. This is necessary to target women who have experiences of benefiting from credit services and constrained by financial resources to continue or expand their business portfolio. WAT can play the role of collateral and encourage women to engage in borrowing to make business.
- Promote saving and credit cooperatives. This basically requires seed money to initiate the cooperative movement and mobilize savings. Rural Saving and Credit Associations are often established at kushet level since the members will know and trust each other.
- Loan provision through WAT can also be simultaneously provided for social groups especially of Muslim women lacking access to credit due to cultural, religious grounds or otherwise. This requires larger provision of revolving fund, efficient utilization of the revolving fund, and technical support to the clients. The technical support can also benefit from the synergy between REST and WAT projects.

ii) Develop business profile for small scale credit schemes and encourage innovative business activities.

iii) Further building the capacity of WAT to enable it provide technical support to the beneficiaries and WAT members at zone and district levels is necessary.

iv) Develop and ensure the implementation of effective M&E system of WAT.

Acknowledgements

We appreciate and thank the Royal Norwegian Embassy and the Development Fund (Norway) for entrusting us with the assignment. The management and staff of REST and WAT collaborated with us in the review processes. The Project beneficiaries were very generous to share with us their views and opinion about the Project. We thank all people and institutions who directly or indirectly helped us accomplish this task.

Bezabih Emana and Girma Geberemedhin

Annexes to Chapter 2: REST's IADP

Annex 2.1: Comparison of plan with accomplishment

Table 2.1.1: Soil and water conservation and reforestation

S/N	Activity	Unit	2007		2008		Total (2007-2008)		% achieved
			Plan	Achievement	Plan	Achievement	Plan	Achievement	
1	**Soil and water conservation**								**74.9**
1.1	Terraces and bunds	km	32.7	33.09			32.7	33.09	101.2
1.2	Gully reclamation	No	8	8	5	3	13	11	84.6
1.3	Water harvesting check dam construction	No	3	3	2	1	5	4	80.0
1.4	Stream water diverting	No	4	4	2	1	6	5	83.3
1.5	Ford construction	No	5	5			5	5	100.0
1.6	Training on proper water utilization(5 days)	No	223	190	136	136	359	326	90.8
1.7	Training on watershed management	No	243	174	168	168	411	342	83.2
1.8	Exposure visit to model sites(7 days)	No	188	152	104		292	152	52.1
1.9	Training on sustainable land management				20		20	0	-
1.10	Groundnuts oil extraction	Number	3	3			3	3	100.0
2	**Reforestation**								**83.4**
2.1	Seedling production	No	2,400,000	2,049,053	1,600,000	1,501,000	4,000,000	3,550,053	88.8
2.2	Plantation of seedlings	No	2,395,000	2,040,411	1,600,000	1,501,000	3995000	3541411	88.6
2.3	Pond construction	No	60	58	6	6	66	64	97.0
2.4	Area closure	Ha	639	639			639	639	100.0
2.5	Exposure visit(6 days)	No	72	36			72	36	50.0
2.6	Training of community members(6 days)	No.			80	61	80	61	76.3

Table 2.1.2: Agricultural extension

S/N	Activity	Unit	2007		2008		Total (2007-2008)		% achieved
			Plan	Achievement	Plan	Achievement	Plan	Achievement	
3	**Agricultural extension**								**96.2**
	Micro-irrigation technologies								**108.8**
3.1	Motor pump provision	No	3	3	16	16	19	19	100.0
3.2	Treadle pump provision	No	25	25			25	25	100.0
3.3	Drip system	No	25	38	24	24	49	62	126.5
	Vegetable seeds								**78.0**
3.4	Swiss chard	Kg	5.5	7	7		12.5	7	56.0
3.5	Lettuce	Kg	5.5	5.5	7	7	12.5	12.5	100.0
3.6	Onion	Kg	5	5	6	6	11	11	100.0
3.7	Tomato	Kg	5	3.76	6	6	11	9.76	88.7
3.8	Potato	Qtl			10	8	10	8	80.0
3.9	Groundnut	Qtl	12	5.5	17	7	29	12.5	43.1
	Fruit development								**123.0**
3.10	Orange	No	10,000	14,470			10,000	14,470	144.7
3.11	Grfted mandarin	No			1,400	1,400	1,400	1,400	100.0
3.12	Apple seedlings	No	901	2,824	1,000	2,000	1,901	4,824	253.8
3.13	Banana sucker	No	1,200	1,384	6,500	5,500	7,700	6,884	89.4
3.14	Post harvest storages construction	No	18	18			18	18	100.0
3.15	Office construction for producer groups	No	4	2			4	2	50.0

Table 2.1.2: Agricultural extension (Continued)

S/N	Activity	Unit	2007		2008		Total (2007-2008)		% achieved
			Plan	Achievement	Plan	Achievement	Plan	Achievement	
	Capacity building								**75.0**
3.16	Training on water lifting technologies utilization and maintenance (4 days)	No	219	207			219	207	94.5
3.17	Training on post harvest storage management and market linkage (5days)	No	63	70			63	70	111.1
3.18	With in region exposure visit to best irrigation practices(5days)	No	48	43			48	43	89.6
3.19	BNbat liquid fertilizer				80	80	80	80	100.0
3.20	Field pea & chick pea inoculants				50	50	50	50	100.0
3.21	Training on water lifting technologies utilization and maintenance	No			158	119	158	119	75.3
3.22	Training on post harvest storage management and market linkage	No			48	50	48	50	104.2
3.23	With in region exposure visit to best irrigation practices	No			96		96		-
3.24	Training on application of fertilizer				132		132		-

Table 2.1.3: Livestock development

S/N	Activity	Unit	2007		2008		Total (2007-2008)		% achieved
			Plan	Achievement	Plan	Achievement	Plan	Achievement	
4	**Livestock development**								**79.1**
4.1	Managing of forage multiplication centers	No	3	3	3	3	6	6	100.0
4.2	Provision of modern be hives with accessories	No	64	64	40	40	104	104	100.0
4.3	Training on modern beekeeping	No	64	69	40	40	104	109	104.8
4.4	Provision of Holstein Frisian dairy cows	No	30	21	20	10	50	31	62.0
4.5	Training on dairy cow management	No	30	22	20	10	50	32	64.0
4.6	Group formation on poultry	No	3	3	2	2	5	5	100.0
4.7	Purchase of hatchery	No	1	1	2	2	3	3	100.0
4.8	Poultry house construction	No	1	1	2		3	1	33.3
4.9	Small ruminant production	No	300	480			300	480	160.0
4.10	Training on cooperative principle and business management	No	80	114			80	114	142.5
4.11	Training on animal health	No	70	46			70	46	65.7
4.12	Training on planning, data collection, documentation, M&E techniques	No	28	21			28	21	75.0
4.13	Training on innovative ideas expansion				80		80	0	-

Table 2.1.4: Irrigation, potable water and HIV/AIDS activities

S/N	Activity	Unit	2007		2008		Total (2007-2008)		% achieved
			Plan	Achievement	Plan	Achievement	Plan	Achievement	
5	**Irrigation development**								**65.2**
5.1	Underground tankers construction	No	74	74	100	30	174	104	59.8
5.2	Spring development	No	2	2	2		4	2	50.0
5.3	Pump irrigation	No	1	1	2		3	1	33.3
5.4	Check dam pond irrigation	No	4	4	2	0.5	6	4.5	75.0
5.5	River diversion	No	2	2	3	1	5	3	60.0
5.6	Community HDW	No	32	32	47	30	79	62	78.5
5.7	Women Headed HDW	No	25	25	23	23	48	48	100.0
6	**Potable water development**								**94.1**
6.1	Borehole Construction	No	11	11	6	4	17	15	88.2
6.2	Roof Rain Water Harvesting	No	5	5	5	5	10	10	100.0
7	**HIV/AIDS**								**69.1**
7.1	Training to health package workers	No	90	85	90	66	180	151	83.9
7.2	Training to Anti-AIDS club member	No	115	108	115	115	230	223	97.0
7.3	Training to religious leaders	No	64	73	64	54	128	127	99.2
7.4	Training to REST adult education staffs	No	94	89	94	100	188	189	100.5
7.5	Training to Adolescent promoters	No	80	73	80	60	160	133	83.1
7.6	Care and Support	No	240	238	240	234	480	472	98.3
7.7	Orphanded children	No			240	234	240	234	97.5
7.8	Women living with HIV/AIDS	No			20	20	20	20	100.0
7.9	Provision of gloves	Box			200		200	0	-
7.10	Booklets	No			6,000		6,000	0	-
7.11	T-shirts	No			400		400	0	-

Table 2.1.5: Gender development activities

S/N	Activity	Unit	2007		2008		Total (2007-2008)		% achieved
			Plan	Achievement	Plan	Achievement	Plan	Achievement	
8	**Gender development**								**94.5**
8.1	Training on gender awareness and sensitization(5 days)	No	72	87			72	87	120.8
8.2	Training on Women Leader ship(5 days)	No		97			0	97	
8.3	Training on Income diversification (1 to 3 months)	No	73	73			73	73	100.0
8.4	Training on beauty salon	No	20	20			20	20	100.0
8.5	Training on petty trade	No	24	24	40	20	64	44	68.8
8.6	Training women in Embroidery, carpet making and waving	No	29	29			29	29	100.0
8.7	Training women in small scale poultry	No			60	30	60	30	50.0
8.8	Exposure visit for REST gender committees members(10 days)	No	94	89			94	89	94.7
8.9	Exposure visit for head office level	No	8	8			8	8	100.0
8.10	Exposure visit for DF coordination offices	No	4	4			4	4	100.0
8.11	Gender sensitization campaign	No	34	34			34	34	100.0
8.12	Development of IEC material (posters)	No	100	100	100	100	200	200	100.0
8.13	Gender advocacy workshop	No			115	115	115	115	100.0
	Overall implementation efficiency								**82.1**

Annex 2.2. Summary of budget and expenditure

Description	2007		2008*		Total		% utilized
	Budget	Expenditure	Budget	Expenditure (up to October)	Budget	Expenditure (up to October)	
Natural Resource Management	2,556,100	2,576,710	2,068,904	1,158,586	4,625,004	3,735,296	80.8
Irrigation Development	3,198,265	3,449,795	4,960,213	3,928,038	8,158,479	7,377,833	90.4
Agricultural Development	2,154,269	2,204,545	1,993,148	1,634,792	4,147,416	3,839,336	92.6
HIV/AIDS	670,782	566,720	692,938	514,714	1,363,720	1,081,434	79.3
Potable Water Supply	1,002,080	1,011,593	635,412	536,361	1,637,492	1,547,954	94.5
Gender Development	508,837	381,288	594,076	388,513	1,102,913	769,801	69.8
Capacity Building	1,087,451	953,683	876,779	620,738	1,964,230	1,574,422	80.2
Ground nut oil extractor	380,000	398,475			380,000	398,475	104.9
Total Project Cost	11,557,784	11,542,809	11,821,470	8,781,742	23,379,254	20,324,551	86.9
Administrative Cost	535,274	534,550	591,074	220,281	1,126,348	754,831	67.0
Total	**12,093,059**	**12,077,359**	**12,412,544**	**9,002,023**	**24,505,602**	**21,079,381**	**86.0**

Annex 2.3: Contacted persons by institution

2.3.1: List of persons contacted and contact addresses

Sr. No	Name	Organization	Position	Telephone
1	Mebrahtu Kebedew	REST, HQ	Division Head	0914727059
2	Ataklt Kebede	REST, HQ	ADP Division Head	0914722245
3	Abrha Lemlem	REST, HQ	Livestock Senior Expert	0911722453
4	Tadesse G/Hiwot	REST, HQ	Crop Expert	0914724656
5	Mebrhatu Tsegaye	REST, HQ	Crop Expert	0914703159
6	Daniel Hagos	REST, HQ	Senior Expert	0914706504
7	Tedros Girmay	REST, HQ	SWC/NR Expert	0914703100
8	Desta Gebremichael	REST, HQ	NRM Division Head	0914705704
9	Getachew Haile	REST, HQ	WRAD Head	0914706562
10	Mulugeta Berhanu	REST, HQ	ERAD Head	0914720452
11	Kahsay Girma	REST, HQ	Irrigation Construction Head	0914708782
12	Yemane Solomon	REST, HQ	Planning Head	0914706438
13	Tekle Hadgu	REST, HQ	Senior Public Health Expert	0344406706
14	Daniel Yemane	REST, HQ	Projectming, M&E Senior Expert	0914730529
15	G/Tsadik K/Mariam	REST, HQ	Division Head	0914708739
16	Hailay Hagos	REST, HQ	SWC Senior Expert	0914708033
17	Berhane Hadera	REST, HQ	Health Expert	0344406300
18	Teshome Tsehaye	T/Abergalle	Coordinator, REST	
19	Belay Tadesse	T/Abergalle	Agronomist	
20	Kassaye Yirgaw	T/Abergalle	Agronomist	
21	Fitahanegus Abera	T/Abergalle	SWC expert	
22	Berhanu G/Medhin	W/Lekhe/Maikenetal	REST project Coordinator	
23	Teka Tareke	W/Lekhe/Maikenetal	Livestock Expert	
24	Tewoldebrehan Kassa	Kolla Tembien	REST project coordinator	
25	Halefom G.Kidan	Ahferom	REST project coordinator	

2.3.2: Participants of REST debriefing

Sr. No	Name	Position	Telephone
1	Mebrahtu Kebedew	Division Head	0914727059
2	Tadesse G/Hiwot	Crop Expert	0914724656
3	Samson Abrha	SWC Expert	
4	Didey Berhanu	Forestry Expert	
5	Tedros Girmay	SWC/NR Expert	0914703100
6	Desta Gebremichael	NRM Division Head	0914705704
7	Getachew Haile	WRAD Head	0914706562
8	Mulugeta Berhanu	ERAD Head	0914720452
9	Yemane Solomon	Planning Head	0914706438
10	Tekle Hadgu	Senior Public Health Expert	0344406706
11	Daniel Yemane	Projectming, M&E Senior Expert	0914730529
12	Hailay Hagos	SWC Senior Expert	0914708033
13	Berhane Hadera	Health Expert	0344406300

2.3.3: Participants of REST/WAT Projectme Review debriefing at DF Office

Sr. No	Name	Organization
1	Kinfe Abrha	WAT
2	Jorn Stave	DF
3	Ayele Gebremariam	DF
4	Teklu Tesfaye	RNE
5	Bente Nilsson	RNE

2.3.4: Number of people contacted for the review

Sr. No.	Activity	Male	Female	Total
1	Institutional review			
1.1	REST HQ	17		17
1.2	REST Project Offices	8		8
1.2.1	Ahferom	1		1
1.2.2	Kolla Tembien	1		1
1.2.3	Tanqua Abergelle	4		4
1.2.4	W/Lekhe (Maikinetal)	2		2
2	Beneficiaries			
2.1	Ahferom	35	15	50
2.2	Kolla Tembien	17	15	32
2.3	Tanqua Abergelle	19	2	21
2.4	W/Lekhe (Maikinetal)	9	15	23
3	Debriefing			
3.1	REST HQ	15		15
3.2	RNE/DF	5	1	6
	Total	133	48	181

Annexes To Chapter 3 (WAT's Capacity Building)

Annex 3.1: Physical plan and achievements

Sr. No.	Activities	2007		2008*		Total		Actual (%)
		Plan	Actual	Plan	Actual	Plan	Actual	
1	Upgrading education for WAT leaders	10	10	10	10	10	10	100
2	Employment of professionals for 2 zones	2	2			2	2	100
3	Training of beneficiaries							
3.1	Petty trade	200	197			200	197	99
3.2	Sheep and goats production**	450	447			450	447	99
3.3	Dairy production	100	94			100	94	94
4	No. of beneficiaries of IGS**	570	559	509	313	1079	872	81
5	purchase of power point beamer	1	1			1	1	100
6	Developing monitoring and reporting system	1				1	0	-
7	Leasing website	1	1			1	1	100
	Overall average							**86**

* Note: Consolidated data until June 2008

** The figures include that of additional fund

Annex 3.2: Financial plan and expenditure

Sr. No.	Activities	2007		2008*		Total		
		Budget	**Expenditure**	**Budget**	**Expenditure**	**Budget**	**Expenditure**	**Expenditure**
1.0	Upgrading education for WAT leaders	36,000.00	35,100.00	36,000.00	4,200.00	72,000.00	39,300.00	55
2.0	Employment of professionals for 2 zones	36,880.00	26,391.00	36,000.00	13,087.00	72,880.00	39,478.00	54
3.0	Training of beneficiaries							
3.1	Petty trade	74,620.00	79,593.15	43500	42,009.95	334,460.00	264,782.80	79
3.2	Sheep and goats production**	218,960.00	222,772.85	115,500.00	65,216.20	88,480.00	121,196.20	137
3.3	Dairy production	53,200.00	55,980.00	35,280.00		88,480.00	55,980.00	63
4.0	Start up capital							
4.1	Petty trade	182,000.00	197,000.00	300,000.00				
4.2	Sheep and goats production**	153,600.00	160,800.00	275,000.00				
4.3	Dairy production	*95,000.00*	*139,000.00*	*168,000.00*				
5.0	Purchase of power point beamer	20,000.00	10,399.45			20,000.00	10,399.45	52
6.0	Developing monitoring and reporting system	19,000.00		20,000.00		39,000.00	-	-
7.0	Leasing website	5,000.00	5,000.00			5,000.00	5,000.00	100
8.0	Children's day care service	3,000.00	2,757.00		3,000.00	3,000.00	5,757.00	192
9.0	Field visit, M&E	5,000.00	5,993.50		5,000.00	5,000.00	10,993.50	220
10.0	Administrative	55,713.00	55,713.00		53,637.00	55,713.00	109,350.00	196
11.0	Purchase of photo copier	30,000.00	28,299.45			30,000.00	28,299.45	94
12.0	Experience sharing	69,888.00	66,198.00			69,888.00	66,198.00	95
13.0	Other expenses		3,536.68		1,537.17	-	5,073.85	
14.0	Training on project planning & management			35,460.00		35,460.00	-	-
	Total	**1,057,861.00**	**1,094,534.08**	**1,064,740.00**	**187,687.32**	**919,361.00**	**761,808.25**	**83**

* Note: Consolidated data until June 2008

** The figures include that of additional fund

Annex 3.3: Contacted persons (for data collection)

Sr. No.	Name	Institution	Position
1	Tirfu K/Mariam (F)	WAT	Chairwoman
2	Kinfe Abraha (M)	WAT	Program Coordinator
3	Amha Yohannis (M)	WAT	Public Relation Head
4	Eletabrehan Berhe (F)	Southern Zone Women Association	Chairwoman
5	Sindayehu Negash (F)	Southern Zone Women Association	Vice Chairwoman
6	Marim Yasin (F)	Raya Azebo District Women's Association	Chairwoman
7	Sesen W/Gebriel (F)	Raya Azebo District Women's Association	Beneficiary
8	Akeza Areda (F)	Raya Azebo District Women's Association	Beneficiary
9	Arfeya G/Tekle (F)	Raya Azebo District Women's Association	Beneficiary
10	Nigisti Hagos (F)	Maikenetal Tabia Women's Association	Chairwoman
11	Mebrat W/Hawariat (F)	Maikenetal Tabia	Beneficiary
12	Jemila Legesse (F)	Maikinetal Tabia	Beneficiary
13	Woinareg Legesse (F)	Abergelle District	Beneficiary
14	Hadige Abraha (F)	Abergelle District	Beneficiary
15	Lemlem Kahsay (F)	Ahferom District	Chairwoman

Annex 3.4: Participants of WAT staff on debriefing

Sr. No.	Name	Institution	Position
1	Tirfu K/Mariam	WAT	Chairwoman
2	Kinfe Abraha	WAT	Program Coordinator
3	Amha Yohannis	WAT	Public Relation Head
4	Ashenafi Seged	WAT	Documentation
5	Berhanu G/Medhin		Program Officer (ACSOT)
6	Shishay Bitew		Coordinator (TFSHA)
7	Shemsia Mohammed	WAT	Finance and Logistics Head
8	Kassu Knani	WAT	East-West Zone
9	Zufan Abebe	WAT	EGLDAM B/Office Coordinator
10	Leteberhan Teklu	WAT	East-West Zone