

ANNEX 8:

Independent Project Impact Assessment Final Report

**Improving Nutrition and Household Food Security in North Shewa
(Amhara Region) and Southern Tigray (Tigray Region), Ethiopia
GCP/ETH/060/BEL**

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List of Acronyms

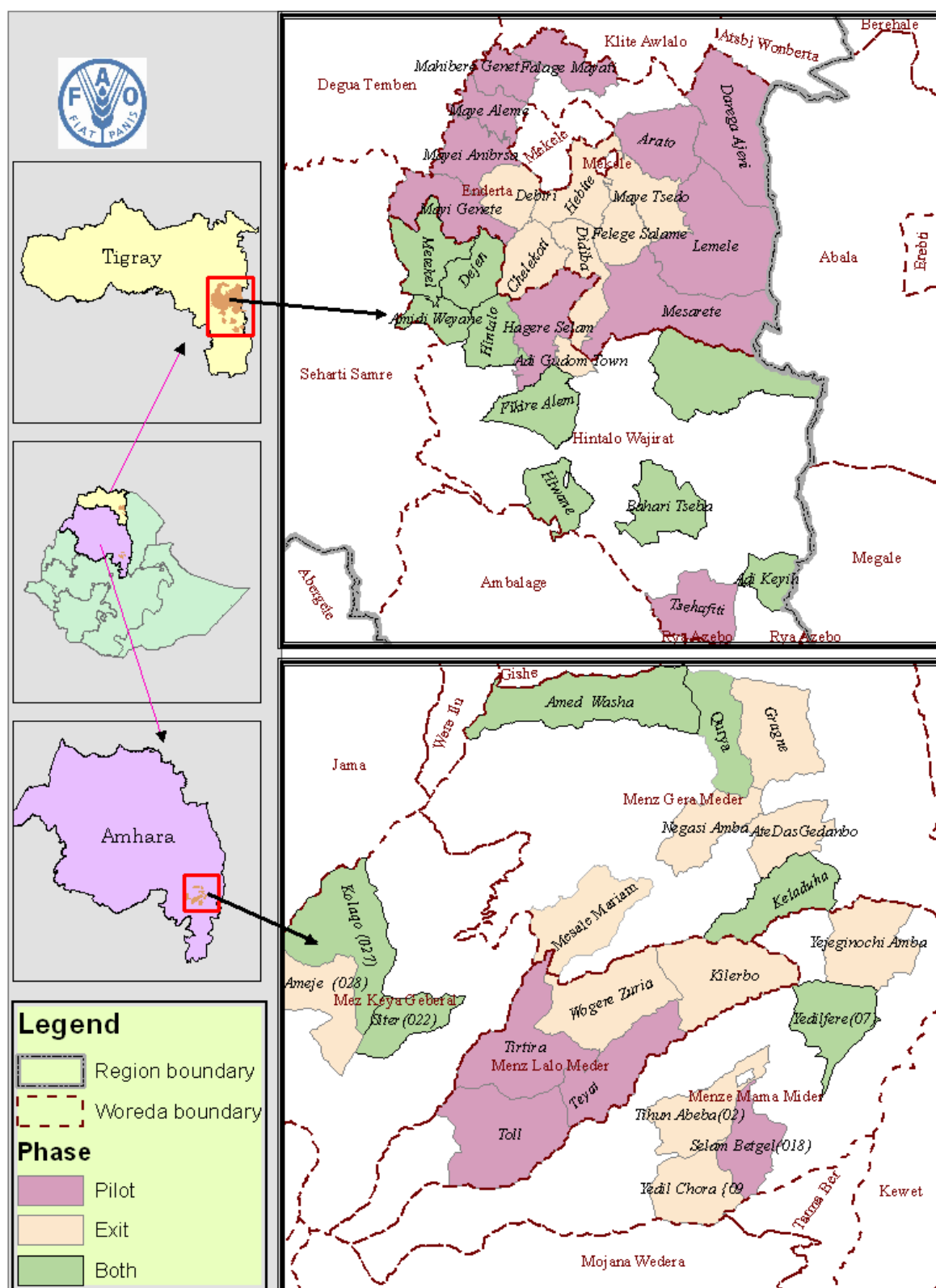
| | |
|----------|---|
| ADLI | Agricultural Development Led Industrialization |
| AIDS | Acquired Immune Deficiency Syndrome |
| BMI | Body Mass Index |
| BSF | Belgium Survival Fund |
| CAP | Community Action Plan |
| CDC | Centres for Disease Control and prevention |
| CDF | Community Development Fund |
| CHA | community health Agents |
| CHW | Community Health Workers |
| CTA | Chief Technical Adviser |
| DA | Development Agent |
| DHS | Demographic and Health Survey |
| DS | Direct Support |
| FAO | Food and Agriculture Organization |
| FGD | Focus Group Discussions |
| FHH | Female Headed Households |
| FSS | Food Security Strategy |
| FTCs | Farmers Training Centres |
| GCP | Government Co-operative Programme |
| GTZ | German Technical Cooperation |
| HABP | Household Asset Building Program |
| HDDS | Household Dietary Diversity Score |
| HEW | Health Extension Workers |
| HEW | Health Extension workers |
| HFA | Height-for-Age |
| HH | Household |
| HIV | Human Immune Virus |
| HIV/AIDS | Human Immune Virus/Acquired Immune Deficiency Syndrome |
| HP | Health Professionals |
| IA | Impact Assessment |
| IGA | Income Generating activities |
| IMR | Infant Mortality Rate |
| IPM | Integrated Pest Control |
| KII | Key Informant Interviews |
| LFA | Logical Framework Analysis |
| M&E | Monitoring and Evaluation |
| MDG | Millennium Development Goals |
| MoARD | Ministry of Agriculture and Rural Development |
| NCHS | National Centre for Health Statistics |
| NGO | Non Governmental Organization |
| OFSP | Other Food Security Programs |
| OoE-FAO | Office of Evaluation, Food and Agricultural Organization |
| PASDEP | Plan for Accelerated and Sustainable Development to End Poverty |
| PIM | Program Implementation Manual |
| PLWHA | People Living With HIV/AIDS |
| PMU | Project Management Unit |
| PSNP | Productive Safety Net Program |
| SMART | Simple Measurable Achievable Realistic and Time bounded |
| TBA | Traditional Birth Attendants |
| TBA | Traditional Birth Attendants |
| TVET | Technical and Vocational Education and Training |
| USD | United States Dollar |
| VCT | Voluntary Counselling and Testing |
| WFA | Weight-for-Age |
| WFH | Weight-for-Height |
| WFSTF | Woreda Food Security Task Force |
| WHO | World Health Organization |
| WOARD | Woreda Office of Agriculture and Rural Development |
| WOFED | Woreda Office of Finance and Economic Development |

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The Impact Assessment Team.

Intervention area for GCP/ETH/060/Bel Project



Map of BSF FAO Operation Woreda in Southern Tigray and North Shewa

Executive summary

Background

This report provides the results of an independent impact assessment (IA) of the Belgium Survival Fund/Food and Agricultural Organization (BSF FAO), Improving Nutrition and Household Food Security Project (GCP/ETH/060/BEL) which has been implemented over a 10 year period in two woredas (districts) of Tigray and four woredas of Amhara region, Ethiopia. The project had two phases: Phase I ran from November 2001 and ended in February 2007 and Phase II since February 2007 and continue up to February 2011. The project was largely funded by Belgium Government through Belgium Survival Fund and supplemented by other funding sources from the Spanish Government and Catalan towards the middle of Phase II. It had USD 9.3 million budget over the course of its life: USD 4.2 and USD 5.1 during Phase I and Phase II, respectively.

Project targets and coverage

The project was directly implemented by the Government of Ethiopia (GoE) with technical and management oversight from FAO Ethiopia. The BSF FAO project had four mutually reinforcing components: community empowerment, market and enterprise development, health and nutrition, and agriculture and natural resources management. It targeted the most vulnerable segments of the targeted communities including female headed households, jobless youth, oxenless, landless and other vulnerable groups (HIV infected individuals and persons with physical disabilities) in rural areas.

The BSF FAO project was able to reach about 16,423 households (9,050 during Phase I and 7,373 during Phase II) of which 43% were female headed (Project records and Woreda Data). It covered about 36% of chronically and transitory food insecure population in the target woredas. This coverage is found to be good despite greater demand from local communities and officials for expanded coverage.

About 80% of BSF FAO beneficiaries were also participants of the Productive Safety Net Programme (PSNP). This overlap between the two programmes was deliberate, intended to reinforce the National Food Security Programme in the target woredas and to promote graduation of households from the PSNP through BSF asset building activities.

Project components and outcomes

As part of the community empowerment component the project provided capacity building trainings for woreda experts and officials, development agents (DA) and community leaders. These trainings covered application of community action planning (CAP), gender awareness and mainstreaming, community development fund management and project cycle management. The trainings have helped participants to enhance genuine community participation in local development, to address gender issues in their regular activities, in preparation of micro-projects, and to create and manage sustainable rural financial services.

As reported by beneficiaries, about 73% and 24% of loans provide by BSF FAO during Phase I and Phase II, respectively, been paid back to the cooperatives responsible to manage the community development fund (CDF). The majority of loans given out in Phase II had not yet matured at the time of the IA field work¹. Although 73% repayment rate is encouraging for communities managing CDF for the first time, this level is still behind widely accepted standards applied by donor funded projects and micro-finance institutions in the country.

¹ Aug-Sept 2010.

The market and enterprise development component of BSF FAO has dealt with increasing income through enhancing engagement in micro-enterprises and creating market opportunities for local products from target beneficiaries. The project helped beneficiaries to engage in off-farm income generation activities after obtaining vocational and entrepreneurship skills training and start-up capital in the form of loans. The project also made efforts in linking these beneficiaries with markets through helping them participate in regional market promotion events such as bazaars. Currently most of the beneficiaries have shown improvement in their income, food consumption, educating children and social position.

The project aimed to improve health and nutrition in the target communities. It specifically focused on maternal and child nutrition. To this end, various activities were implemented including training, demonstration, school-based health and nutrition education, promotion of fortification and the use of iodized salt, construction of pit latrines, and provision of safe drinking water supply. On top of these, wider scale community awareness creation activities were carried out through local radio in Tigray.

The creation of market-based distribution system and community awareness on the purpose and use of iodized salt in Tigray was found to be a good model to address micronutrient deficiency in rural areas. In Tigray the project increased utilization of iodized salt from 5% to 51% and from 7% to 76% among Phase I and Phase II beneficiaries respectively. However, such interventions were not implemented in North Showa project woredas which demonstrate only 8% and 2% utilization of iodized salt with Phase I and Phase II beneficiaries respectively.

Initiation of breastfeeding within one hour, feeding colostrum, initiation of complementary feeding at six months and continuing breastfeeding up to two years are improved practices among project beneficiary households. However, prelacteal feeding practice in North Showa needs further effort to improve.

The mean household dietary diversity score (HDDS) for beneficiary households has increased from 4 (during the 2007 baseline) to 6 (at the time of this evaluation). This result is a good indication of improvement in access to diverse food among the project beneficiaries.

The girls' education component of BSF FAO project, supported by complementary funding from Spain and Catalonia, has resulted in active participation and improved academic performance of girls at target schools. The project supported funding snacks and facilitated school teachers to provide tutorial sessions for the target children. Woreda educational officials indicated high interest to continue such supports for girls. However, resource constraints represent a challenge for continuing with the provision of snacks.

The agriculture and natural resource management component of the project aimed to contribute to sustainable household food and nutrition security through improving crop and livestock production and productivity, rehabilitating the natural resource base, and improving local government capacity to effectively reach out to communities through extension services. On a cost-recovery basis various seeds and seedlings such as carrot, potato, tomato, cabbage and highland fruits were supplied to needy households in the operational woredas. One in three project beneficiary households (34% of Phase I and 30% of Phase II beneficiaries) in both regions have grown horticultural crops in 2010 cropping season at the time of the impact assessment.

In an attempt to mitigate the effects of rainfall irregularity and recurrent droughts, the BSF FAO project introduced motorized irrigation pumps to individual households; constructed small scale irrigation schemes for targeted communities; and promoted various water harvesting and conserving technologies. Households with access to irrigation facilities

through the project were able to make up to three harvests per year compared to one harvest using rain fed agriculture.

Project interventions in the livestock sector focused on innovative husbandry practices that consider the local potential and carrying capacity. These include dairy, small ruminant and poultry development. About 8.5% of Phase I and 5.1% of Phase II beneficiaries reported owning improved dairy cows. According to the 2007 baseline study, no household had such improved dairy cows prior to the BSF intervention. The dairy and small ruminant production has been identified by communities in the two regions as one of the key agricultural enterprises that would allow households to improve food security and nutrition. The livestock were provided to beneficiaries on credit basis while the extension service was given for free as part of the government and the project responsibility.

Project impacts

The project has brought about a range of impacts on the lives and livelihoods of target beneficiaries. It has also some spill-over effects in the diffusion of agriculture technologies, and health and nutrition practices to non-project households and areas. In general, these impacts can be viewed as follows:

Social Assets - Empowering communities and local institutions: Voiceless groups (FHH, jobless youth, people with disability, PLWHA) were able to voice their concerns to the community and officials through their organizations formed with the support of BSF FAO project. This has created economic and social empowerment among the target groups. Community participation and local ownership over development processes has been enhanced due to the application of CAP process. Different capacity building supports from BSF FAO have enhanced service giving capacity of institutions at woreda, kebele and community levels.

Financial Assets - Enhancing household food security: According to self-reported responses, from 45% to 48% of BSF FAO beneficiaries households at the project level did not face food shortage in the last 12 months, while only 13% of non-beneficiaries experienced the same. The mean number of food shortages per year is also less (2.5) among project beneficiaries as compared to non-beneficiaries (3.9). More than 70% of BSF FAO beneficiaries reported improvement in food security situation at household level over the last five years. Majority of them associate this improvement with enhanced self-efforts and use of improved technologies with the BSF FAO and other ongoing programmes. In this respect the contribution of BSF FAO stands high as the high proportion of project beneficiaries reported improvement in food security compared to non-beneficiaries.

Human Assets - Improving health and nutritional status: Nutritional status of children also indicates some degree of improvement despite chronic malnutrition requires longer term interventions and structural changes to address underlying and basic causes of malnutrition. In both regions stunting has reduced from 54% to 49% between 2007 and 2010 among Phase II beneficiaries.

Sustainability of the project

Because of the application of CAP process, local capacity building and ownership of woredas and communities to the project interventions from the very start, the project interventions and benefits have shown signs of sustainability. However, a further effort is required to sustain revolving fund mechanisms established through CDF.

Implementation challenges

Like most development interventions, the BSF FAO project was not without limitations and met with challenges in the course of its implementation. The following points were identified by the IA team as negatively affecting project performance:

- Low coverage of the project compared to the extent of poverty and vulnerability in the target areas.
- FAO fund release through tranches (30%, 50% and 20%)² and long bureaucratic procedures for approval of Letters of Agreement contributed to slow disbursement of loan funds to beneficiaries.
- Loan recollection rate from beneficiaries was reportedly low compared to existing standards in the country. This will hamper the sustainability of revolving credit funds.
- The limited roles of regional and zonal offices in the project have caused misunderstanding about project efforts and limited sharing of experiences.
- Rapid staff turnover and repeated restructuring of woreda offices, and frequent changes of FAO/PMU staff have affected the performance of the project.
- Climatic shocks such as recurring droughts and untimely rainfall are the key challenges for the community in sustaining project promoted agricultural interventions.

Recommendations

The IA team has organized its recommendation in two groups: wrapping-up current BSF FAO project activities and the way forward beyond this project. With regard to wrapping-up the current phase the following recommendation are forwarded:

- Conduct an inventory of CDF loans (repaid and outstanding) and provide the data to woredas with possible recommendations for their actions to ensure sustainability of the revolving funds inject in the target communities.
- Finalize the legalization of cooperatives and business groups and ensure linkages with financial and extension service providers.
- Provide refresher and/or introductory trainings on CAP, gender and CDF for staff to update their knowledge and ensuring sustainability of the project approaches and benefits.
- Organize the project guidelines, manuals and tools as a pack and hand over to the relevant government offices at Federal, regional and woreda levels working on national food security programme, health and agricultural extension, gender and social protection affairs after an appropriate orientation.

Given the depth of poverty and vulnerability in the country there is a greater demand to bring and implement projects of this type with a multi-sectoral approach to address food and nutritional insecurity. Thus, the following recommendations are given, beyond the current BSF FAO Project, to address different future design needs and intervention strategies:

- Future project designs should incorporate appropriate formulation of hierarchical objectives and indicators.
- Market and product development interventions should be guided by a comprehensive value chain analysis for potential products and services.
- Future project should be designed in the way they mitigate the impacts of climate change.
- It takes longer time and repeated efforts to bring nutritional improvement among children and women in communities with cultural taboos that harm feeding and health practices. Thus, future project should give due emphasis to activities and strategies that will help to change cultural taboos.

² This proportion has been improved to 30, 60 and 10% since the beginning of 2010. However, because long life of the project is completed with the application 30, 50 and 20% we have maintained to cite this throughout this report. Most of the qualitative respondents also commented on the earlier tranches they commonly worked with.

1. Introduction

1.1 Background on the BSF FAO Project

The Belgium Survival Fund/Food and Agricultural Organization (BSF FAO), Improving Nutrition and Household Food Security Project, GCP/ETH/060/BEL has been implemented in two woredas of Tigray and four woredas of Amhara. The project was officially launched in November 2001. The project had two phases. The pilot phase (or Phase I) went from November 2001 and ended in February 2007. The second phase also referred as the exit phase has been under implementation since February 2007 and will continue up to February 2011. Both phases were funded by Belgium Government through Belgium Survival Fund. However, during the exit phase the project secured additional funding from two complementary sources, Spanish Government including AECI-OTC (GCP/ETH/074/SPA) and Agencia Catalana de Cooperacio al Desenvolupament-ACCD (GCP/ETH/002/SPA/Catalana). The following table summarizes the phases of the project and funding sources.

Table 1: Summary Profile of Projects under BSF FAO Projects and Funding Sources

| Project | Amount of fund in USD | Project life | Status | Remark |
|---------------|-----------------------|--------------|----------------|---|
| BSF FAO Pilot | 4,200,000 | 2001-2005 | Ended in -2007 | Successfully completed |
| BSF FAO Exit | 3,600,000 | 2007-2011 | Ending | Expansion of the pilot phase to new communities |
| Spanish | 1,474,926 | 2008-2010 | Ending | Expansion of BSF to (other) new communities? |
| Catalonia | 184, 638 | 2009-2010 | Ending | Strengthen Spanish funded component |
| Total | 9,456,400 | | | |

Source: Belete, 2009.

1.1.1 Pilot Phase

The pilot phase of the project was fully funded by the Belgium Government through Belgium Survival Fund (BSF) with a budget of 4.2 million USD. This phase was designed with a development goal of improving nutrition status and household food security of selected communities in four woredas of Tigray and Amhara regions, namely Lalo Mama and Gera-Keya in Northern Shewa and Enderta and Hintalo Wujirat in Southern Tigray.” This development goal was envisaged to be achieved through the following four immediate objectives:

- Improving the effectiveness and sustainability of nutrition and poverty alleviation interventions through more active community participation in planning, implementation, monitoring and evaluation, and by strengthening the institutional integration of the development processes;
- Improving the utilization of the natural resource base and provide opportunities to the poor for overcoming their food and nutrition security constraints;
- Increasing the consumption and utilization of nutritious food, and health services through improvements in food, health, water and sanitation; and
- Improving access to food, health, and social care through increased income from skilled labour and off-farm income generating activities.

According to an evaluation report of the first phase of the project conducted in 2005, the following achievements were noted:

- The Community Action Planning (CAP) had empowered communities as well as government field agents (Development Agents, Home Agents, and Health Workers). In the CAP process they developed capacity to identify problems and plan and implement micro-projects at community and household level;
- The participatory and integrated approaches (including nutrition education) developed for the improvement of nutrition and food security were appreciated by officials and development practitioners within the project areas and elsewhere;
- The food and nutrition situation (and productive resource base) in the 40 focus villages had improved with the introduction of micro-projects, which provided fuel saving stoves, pit latrine slab construction, spring protection, cistern construction, horticulture and livestock packages;
- Awareness of gender in participatory planning had been raised through training of government staff and others - practical interventions focused on reducing women's time constraints (through provision of energy efficient stoves and establishing water points);
- Baseline information had been developed using the CAP process (and also by commissioning baseline surveys and beneficiary assessments), which would provide a basis for monitoring progress and assessing project impact.

The evaluation also noted that, the project had initiated two other activities which had important contribution to improve Household Food Security in the project areas:

- Training for enterprise development and livelihoods diversification; and
- Establishment of Saving & Credit Groups, in parallel with the current Government initiative to strengthen cooperatives. These two activities have become the primary focus of the project during the second phase project.

The evaluation findings noted that the project was constrained by various issues that compromised past performances and future expansion efforts of the then envisaged second phase of the project. The constraints of the first phase implementation can be summarised as follows:

- Weak collaboration with other institutional partners;
- High staff turnover (including the project CTA) at all levels;
- Cumbersome project administration requirement and long approval process for Letters of Agreement;
- Insufficient backstopping for some project components (by FAO as well as by the Technical Task Force in Ethiopia);
- Unresolved differences between Government policy;
- Inadequate reporting on the utilization of budget;
- Insufficient arrangements for monitoring and evaluation especially of project impact; and
- Limited operational resources and technical expertise at woreda, regional and federal level.

Due to these constraints and the longer time required to bring sustainable improvement in nutritional status and food security as indicated in the development goal of the project the evaluation mission made a conclusion that the project had not progressed much towards an important aspect of the "Expected End-of-Project Situation". According to the project document, cited in the first phase evaluation report, the "Expected End-of-Project Situation" was explained by "Project experiences and lessons learnt were regularly be shared between various project stakeholders from micro up to macro level as well as between various stakeholders operating on the same level." The exit phase of the project document envisaged development of a strategy to institutionalise technical support, experience and lessons

learned regarding the applied project management and methodologies to ensure sustainability of project achievements beyond the implementation phase of the project. However, by the time the first phase was concluded and the pilot phase evaluation was conducted this situation was not created. Therefore, the evaluation mission reached to a conclusion to strengthen the “Expected-End-of-Project Situation” by having an extension to the project through a second phase which was named exit phase.

With the aim of achieving the full potential of the project during the pilot phase and the then forth coming exit phase, the evaluation mission recommended:

- Improving in community development fund (CDF) and monitoring and evaluation (M&E) system;
- Improving and implementing irrigation interventions such as water harvesting structures and drip irrigation facilities;
- Improving the livestock carrying capacity of the environment and livestock health services;
- Enhancing organizational capacity and expanding enterprise developments and;
- Improving access to natural resources through equitable sharing of resources and application of integrated watershed management.
- Link up with the PSNP and use the PSNP classification for targeting

1.1.2 The exit phase

As indicated above, the exit phase of the BSF FAO project started towards the beginning of 2007. According to project records, the project is expected to end in February 2011. Like the pilot phase, the core source of funding for the exit phase was the Belgium Government with about 3.6 million USD worth of investment and two other complementary sources from the Spanish Government: GCP/ETH/074/SPA (USD 1,474,926) and GCP/ETH/002/SPA /Catalana (USD 184, 638). The complementary funds were aimed at expanding outreach to an additional four kebeles promoting interventions such as promotion of girls’ education, potable water supply, sanitation and hygiene, capacity building for health extension system and local production of complementary food for children.

By and large the exit phase of the project was designed based on the lessons from the pilot phase. It had a development goal of “attaining a significant improvement in the general nutrition and household food security situation in Northern Showa and Southern Tigray.” In this regard the project maintained improving nutritional status and food security as its core goal during both phases. However, during the exit phase the project had clearer immediate objectives as its expected outcomes. These include:

1. Strengthen community participation and capabilities to implement and manage their own development processes;
2. Develop Markets and micro-enterprise through strengthening technical capacity of service providers and enable them to provide quality services and outreach required for improving the food and nutrition security of poor people;
3. Improve quality of health and social well being, through increased consumption and utilization of nutritionally adequate diets, prevention of diseases and scale up HIV/AIDS prevention and impact mitigation; and
4. Rehabilitate the natural resource base and improve the productivity of the agricultural sector through rehabilitation of grazing lands, (re-) afforestation, improved soil fertility and water management, improved production and productivity of crops and livestock.

1.2 The objectives of BSF FAO project impact assessment

The independent Impact Assessment was commissioned by the Office of Evaluation of FAO as both a standalone evaluation of project performance and as key input into a broader evaluation of FAO Cooperation in Ethiopia which was undertaken during the second half of 2010.

This impact assessment (IA) has the dual function of accountability and learning. The key purpose is to determine the degree of success and/or failure of an ongoing or past undertaking (accountability), and to learn from these experiences so as to improve future performance and outcomes (learning). In this sense the exercise is both summative and formative – requiring the systematic use of both qualitative and quantitative research methods.

2. Methodology for the Impact Assessment

2.1 Study Organization

The impact assessment (IA) is guided by the technical protocol prepared and commissioned by the Office of Evaluation, Food and Agricultural Organization (OED-FAO), Rome. The technical protocol is further augmented by an agreed action plan detailing specific tasks to be accomplished by the consultants in agreed time table. A summary of the methodology followed in the IA is provided in the following sections.

This impact assessment was conducted by a team of four experts including an independent consultant as team leader and three other professionals from the Ethiopian Agricultural Research Organization, the Ethiopian Health and Nutrition Research Institute, and the Central Statistical Authority. The evaluation team has benefited from the guidance from OED-FAO and BSF FAO Project Management Unit (PMU) staff.

2.2 Study Area

The IA was conducted in the four woredas of the BSF FAO supported project areas in North Showa (Menz Gera Keya and Menz Lalo Mama) and Southern Tigray (Enderta and Hintalo Wujirat). The study areas are highly degraded, vulnerable to drought and chronically food insecure.

2.3 Methods of Data Collection

The key results and recommendations of the IA are based on three specific and complementary analytical tasks: (1) an extensive literature review and secondary data analyses; (2) qualitative assessment focusing on consultations with key stakeholders and focus group discussions at regional, zonal, woreda (district), kebele (sub-district) and community levels; and (3) a household quantitative survey involving randomly drawn project beneficiary and non-beneficiary households.

2.3.1 Literature Review and Secondary Data Analysis

Valuable project insights regarding implementation, performance and achievements were compiled through reviewing relevant literature. Among others, the following key project documents, baseline surveys and beneficiary assessment reports were reviewed:

- The 2004 baseline survey report;
- The 2007 baseline survey report;
- The 2009 auto-evaluation;
- The Beneficiary Impact Assessment Report, 2009;
- Evaluation Report on Agriculture and Related Interventions, 2009;
- Final Evaluation Report on the Pilot Phase, 2005;
- A Report on Assessment of Community Development Fund Management, 2009; and
- GCP/ETH/060/BEL - Exit Phase Design Document, 2006.

In addition to these, secondary data were collected from various relevant offices at woreda, zonal and regional levels.

2.3.2 Qualitative Assessment

The qualitative assessment was intended to collect data that provide insights about the performance of the project activities. The qualitative approach, involved focus group discussions (FGD), key informant interviews (KII) and team observations to various project sites. Most of the FGDs and KIIs were organized through the facilitation of BSF FAO project site coordinators in the respective woredas.

2.3.2.1 Qualitative Survey Instruments

The instruments for the qualitative survey included five check lists and a series of open ended questions prepared by the evaluation team, discussed and approved by the Office of Evaluation for use in the impact assessment (Annex 1). The qualitative assessment instruments include:

- Checklist for beneficiary focus group discussion
- Checklist for household case studies
- Checklist for group discussion with kebele food security task force
- Checklist for group discussion with woreda food security task force
- Checklist for discussions with community organizations

Using the above qualitative survey instruments, primary data were collected from the following informants:

- Amhara Regional Disaster Preparedness, Response and Food Security Coordination Office,
- Tigray Regional Bureau of Agriculture and Rural Development,
- Woreda Food Security Task Forces (Hintalo Wujirat, Enderta, Menz Mama and Menz Gera Woredas),
- Woreda Office of Health (Hintalo Wujirat, Enderta and Menz Mama),
- Woreda Office of Agriculture and Rural Development (in Hintalo Wujirat, Enderta, Menz Mama and Menz Gera Woredas),
- Woreda Office of Women's Affairs (Hintalo Wujirat and Enderta),
- Woreda Office of Youth, Sports and Social Affairs (Hintalo Wujirat),
- Kebele Development Agents.
- Kebele Health Extension Worker, and
- Beneficiary households, associations and cooperatives

2.2.2.2 Sampling of Beneficiaries for Focus Group Discussions

Focus group discussion (FGD) participants and key informants were sampled purposively. In each sample village (gott/kushet) selected for the survey, one focus group discussion of beneficiaries was conducted. The number of beneficiaries for the group discussion is maintained between five and seven. In the same manner two key informants (elders, knowledgeable persons, etc.), i.e., one male and one female were interviewed in each survey locality.

2.2.3 Quantitative Household survey

To quantitatively measure change at household level with respect to the stated key project outcomes, a survey was designed. The objective was to be able to compare household

status using outcome indicators with earlier surveys³ as well as with a non-intervention group with the same household socio-economic and demographic characteristics.

As in any household survey, the primary concern is to include representative and adequate number of cases in order to perform a meaningful analysis. In this household survey, all project woredas, namely, Menz Gera Medir and Menz Mama Medir from North Showa; and Enderta and Hintalo Wujirat from Southern Tigray were included. Procedures used for sampling representative kebeles and determination of the optimal sample size is described in the following section.

2.2.3.1 Sampling procedure and sample size

In order to meet the objectives and requirements of the survey, a two-stage cluster sample design was employed to select first eligible kebeles and then representative households. In the first stage the villages (gotts/kushets) within the target districts were stratified into BSF FAO intervention and non-intervention villages. Sampling frame for intervention villages were all villages included in Phase I (entry 2003/4) and Phase II (entry 2007) projects. Non-intervention villages, on the other hand, were villages in the same zone where there had not been any BSF FAO project activities. Attempts were made to purposefully match intervention villages to non-intervention villages using 1:1 based on matching criteria including agro-ecological zone and access to rural services (roads, markets, and government public services such as clinics, schools and agricultural extension).

In the second stage, equal number of Phase I and Phase II project beneficiary households were randomly selected from the BSF FAO beneficiary lists in the intervention villages. Similarly, non-beneficiary households (comparison group) were randomly selected from the Productive Safety Net Program (PSNP) beneficiary lists in the so called “non-intervention villages”. PSNP households were selected as comparison households mainly because they are the one most affected by chronic food insecurity and have very similar socioeconomic conditions with that of BSF FAO clients.

Statistical theory stresses the importance of optimal sample size for accurate estimation of the variables of interest. An optimal sample size is, therefore, determined at the point where no significant efficiency gains will result from the use of extra resources to select additional sampling units. In this study, project beneficiary and non beneficiary households were the sampling units at village level. Lists of beneficiary households were solicited from the respective woreda project coordination offices while lists of non-beneficiary households were obtained from the respective kebele level development agents (DA). The lists were then used as sampling frames to draw households using a simple random sampling technique.

In this study the optimal sample size required was determined on the basis of the desired level of precision as suggested by statistical theory. Accordingly, the 90% confidence interval, 10% tolerable error, design effect of 1.5 and 10% non-response rate were used as inputs to determine the optimal sample size. By taking into consideration these statistical factors and the available budget for the survey, a total of 660 households were included of which 440 were project beneficiary and 220 were non-beneficiary households. Of the 440 project beneficiary sample households, 220 are sampled from phase I project beneficiaries entering the programme in 2003/4 and the rest 220 are selected from the phase II project beneficiary households that entered the programme in 2007 and were included in the 2007 baseline survey. These cohorts were selected as the sampling frame (rather than the entire population of beneficiaries over the 8 year period) in order to ensure that time has been

³ In 2007 a baseline survey was undertaken of all households entering as BSF project beneficiaries that year. In 2003 (during phase I), a cross sectional survey was undertaken in all communities where BSF was being implemented.

sufficient for expected impacts to have occurred, and to ensure variability that will allow for comparison of Phase I and Phase II beneficiaries. Table 2 provides the distribution of survey households by beneficiary status, region and district.

Table 2: Distribution of Sample Households by Project Beneficiary Status and Woreda

| Region | District (Woreda) | Number of sample Households | | |
|--------|--------------------------------------|-----------------------------|-----------------|-------|
| | | Beneficiary | Non-beneficiary | Total |
| Tigray | Enderta | 110 | 55 | 165 |
| | Hintalo Wujirat | 110 | 55 | 165 |
| Amhara | Menz Gera Medir and Menz Keya Gebrel | 110 | 55 | 165 |
| | Menz Mama Medir and Menz Lalo Midir | 110 | 55 | 165 |
| Total | 4 woredas | 440 | 220 | 660 |

2.3.3.2 The Household Questionnaire

The quantitative survey is intended to collect data that would allow an accurate assessment of the impact of the BSF FAO interventions on the livelihoods of project beneficiaries. To this effect the development of the household questionnaire was mainly guided by the need to have consistency with the 2007 household survey instruments. Consequently, the content, format and structure of the 2010 IA household questionnaire as much as possible was based on the 2007 baseline survey in view of maximizing comparability across the two survey rounds. The second consideration was that the survey instruments should not be so large as to result in respondent fatigue. Accordingly, taking into account the two considerations a household questionnaire of a moderate size was prepared. The draft questionnaire was then translated to Amharic, pre-tested and modified based on feedback from the pre-testing. The final household questionnaire (Annex 2) had ten modules (Table 3).

Table 3: Modules of the HH level questionnaire for IA of BSF FAO project, Ethiopia

| Module | Coverage |
|--------|--|
| 1 | Identification |
| 2 | Household Roster |
| 3 | Housing, Utilities and Facilities |
| 4 | Household Assets, production, harvest , non-farm income and use of technological inputs and good practices |
| 5 | Household Food security |
| 6 | Program participation |
| 7 | Self-assessment of wellbeing |
| 8 | Child health |
| 9 | Nutrition practice and anthropometry |
| 10 | Household dietary diversity score (HDDS) |

2.2.3.2 Training of Field Staff

All field staffs/enumerators were intensively trained for three days at Mekele in Tigray and Mehal Meda in North Showa. In an attempt to maintain high quality data, supervisors checked each questionnaire for completeness and accuracy. Anthropometry equipments used in the survey were checked/calibrated daily before field visit.

Anthropometric measurements on weights and heights of 6-59 months old children and reproductive age group women were taken by health extension workers using the standard methods recommended by the World Health Organization. In all cases, weight and height were measured using electronic scales and height measuring boards, respectively,

2.2.3.3 Data Entry and Analysis

The household survey questionnaire was properly coded and tested prior to the start of fieldwork. The format and code of the questionnaires were matched to the 2007 phase II baseline survey questionnaires in order to facilitate the data entry work and data matching/merging. A data entry application was designed using CPro3.3 (Census and Survey processing) software. This software is very powerful in controlling for error introduced during data entry and data collection. The cleaned data file was then exported to SPSS for windows software for in-depth analysis.

The raw data of anthropometric measurements on weights and heights for children and women was converted into indices using Epi-Info, based on the growth reference curves developed by the National Center for Health Statistics (NCHS)/ Centers for Disease Control and prevention (CDC) and recommended by the World Health Organization (WHO). Information on age, sex, weight and height are used to calculate the values of various anthropometric indices; height-for-age (HFA), weight-for-age (WFA), and weight-for-height (WFH). These indices are expressed in terms of Z-scores, relative to the international growth reference values, as recommended by the WHO.

The cut-off points recommended by WHO, NCHS/CDC to classify low anthropometric levels (below $-2SD$ Z-score) are used in the analysis.

The data analyses used included determination of simple descriptive statistics (percentages, ratio and means) and cross-tabulation of some important variables to examine their associations. Time did not permit for multivariate (i.e. regression) analysis against the main outcome indicators – but could be considered to further strengthen analysis of predictive factors associated with the outcomes.

2.3 Methodological challenges and study limitations

Although utmost efforts were made in the design and implementation of the IA, the study is not without limitations and challenges. The challenge relates to the selection of non-beneficiary households having similar socio-economic characteristics that serve as a comparison (control) group. As has been noted in section 2.2.3.1, non-beneficiary households were selected from a list of PNSP beneficiary lists in non-intervention areas. These households were believed to have a similar socio-economic profile to that of the BSF FAO project beneficiaries. Nevertheless, there was no guarantee apriori that the control group would exactly match with the project beneficiaries in terms of their socio-economic profile.

Furthermore, even if the control group has by chance the desired socio-economic profile, a meaningful comparison could be compromised by spill over effects from intervention villages to non-intervention villages. Such comparison could also be endangered by the fact that non intervention areas have benefited from similar interventions implemented by other government and non-government organizations (NGO's) other than BSF FAO. It is worth noting that a number of NGO's with similar objectives and project activities have been actively working in the study areas more so in Tigray region. As a result finding a truly

“unexposed” control group was very difficult casting doubt on the extent to which valid comparisons can be made in the subsequent chapters. Therefore, interpretation of the results should be made with this caveat in mind.

The earlier two baseline survey questionnaires (in 200 and 2007) collected limited information related to household income and assets as proxy indicators of food access and household wellbeing. As a result of this, baseline information for these indicators is weak. Therefore the team gave due attention to collecting recall data for these indicators by asking informants about their situation five years ago. This approach has resulted in some interesting evidence with respect to improvement in household wellbeing. However, the results should be interpreted with caution insofar as there could be recall bias from the interviewed households.

3. Project Context

3.1 Food insecurity

Ethiopia is characterised by widespread chronic and transitory food insecurity. Nationally, about 8.29 million people are chronically food insecure of which 58% or 3.97 million people are living in Tigray (1,453,707) and Amhara (2,519,829). This vulnerable population is currently being assisted through the national Productive Safety Net Programme with the aim of filling household annual food gaps and protecting against the desperate sales of household assets.

In the last decade, across the country, about five million people were affected by transitory food insecurity and were subjected to receiving emergency relief assistance. According to the Humanitarian Document – 2010 issued by the Government of Ethiopia (GoE), the emergency relief assistance requirement was estimated at about 5.2 million people at national level. From these 31% or 1.6 million people with relief assistance requirement were from Tigray (641,949) and Amhara (994,800) regions.

BSF FAO project target woredas are some of the most food insecure obtaining both PSNP and relief assistances over the years. Based on the information obtained from the project operational woredas, about 55% of the population have been affected by chronic or transitory food insecurity that led them to obtain food or cash assistances in 2010 alone (Table 4). Despite significant resources committed over the past 5 years to the PSNP, recent reviews indicate that very few households have “graduated” – remaining in need of cash/food assistance year after year.

Table 4: Food insecure population of BSF FAO target woredas

| BSF Operational Woredas | Total Population | PSNP Assisted Population, 2010 | Emergency Assisted Population, 2010 | Total food insecure Population | |
|-------------------------|------------------|--------------------------------|-------------------------------------|--------------------------------|-------|
| | | | | Number | % |
| Hintalo Wujirat | 163,635 | 63,922 | 47,020 | 110,942 | 67.8% |
| Enderta | 130,076 | 75,323 | 24,426 | 99,749 | 76.7% |
| Menz Mama | 106,192 | 35,045 | 3,870 | 38,915 | 36.6% |
| Menz Gera | 127,467 | 42,936 | 15,503 | 58,439 | 45.8% |
| Menz Keya | 66,568 | 20,500 | 4,980 | 25,480 | 38.3% |
| Menz Lalo Midir | 34,824 | 12,732 | 0 | 12,732 | 36.6% |
| | 628,762 | 250,458 | 95,799 | 346,257 | 55.1% |

Source: The Respective Woreda Office of Agriculture and Rural Development

Ethiopia is also one of the countries in the sub-Saharan Africa with the highest rates of malnutrition. Although there have been trends of improvement, the country faces enormous challenges, with high malnutrition rates amongst children under-five years of age, notably with the prevalence of stunting at 47% and underweight at 38% (DHS, 2005). The project woredas are highly vulnerable to malnutrition as indicated in both the 2004 and 2007 baseline surveys (See Section xx).

3.2 Socioeconomic Characteristics of the Sample Household

Selected socioeconomic characteristics of the sample households, computed from the IA survey, are given in Table 5. Most of the sample households are natives who have lived in the study villages since birth. Overall male headed households dominate the sample households in both program beneficiary and non-beneficiary groups. A close examination of

the sample structure, however, revealed that male headed households make up about three quarters of the sample for Phase I beneficiaries in both regions whereas the number of female headed households are fairly large in Phase II and non-beneficiary categories.

Table 5: Selected Demographic Characteristics of Sample Households by Region and Program participation

| Variables | Tigray (n=330) | | | | Amhara (n=330) | | | |
|----------------------------------|----------------|----------|-------------------|------|----------------|----------|-------------------|------|
| | Phase I | Phase II | Non-Beneficiaries | All | Phase I | Phase II | Non-Beneficiaries | All |
| % Head by sex | | | | | | | | |
| Male | 72.1 | 51.2 | 54.0 | 59.1 | 75.0 | 45.5 | 52.9 | 58.2 |
| Female | 27.9 | 48.8 | 46.0 | 40.9 | 25.0 | 54.5 | 47.1 | 41.8 |
| Avg. Age of HH (years) | 47.3 | 40.4 | 39.1 | 42.3 | 44.0 | 35.8 | 40.5 | 40.2 |
| % HH head able to read and write | | | | | | | | |
| No | 65.9 | 64.3 | 59.5 | 63.3 | 24.2 | 42.1 | 54.6 | 39.9 |
| Yes | 34.1 | 35.7 | 40.5 | 36.7 | 75.8 | 57.9 | 45.4 | 60.1 |
| Average family size | 6.04 | 4.54 | 4.71 | 5.08 | 5.65 | 4.27 | 3.83 | 4.59 |
| % HH lived in the Kebele | | | | | | | | |
| Since birth | 90.6 | 89.1 | 86.2 | 88.7 | 89.1 | 88.4 | 82.4 | 86.7 |
| > 10 years | 8.6 | 9.3 | 12.2 | 10.0 | 10.9 | 9.1 | 14.3 | 11.4 |
| 5-10 Years | 0.8 | 0.8 | 0.8 | 0.8 | 0.0 | 2.5 | 1.7 | 1.4 |
| Less than 5 Years | 0.0 | 0.8 | 0.8 | 0.8 | 0.0 | 0.0 | 1.7 | 0.5 |
| Marital Status | | | | | | | | |
| Single | 5.4 | 19.4 | 22.2 | 15.6 | 3.1 | 8.3 | 1.7 | 4.3 |
| Married | 70.5 | 48.1 | 50.8 | 56.5 | 77.3 | 54.5 | 50.4 | 61.1 |
| Separated | 10.9 | 20.9 | 21.4 | 17.7 | 10.2 | 28.9 | 26.9 | 21.7 |
| Widowed | 13.2 | 11.6 | 5.6 | 10.2 | 9.4 | 8.3 | 21.0 | 12.8 |
| Main work | | | | | | | | |
| Agriculture | 95.6 | 87.6 | 79.0 | 87.4 | 89.6 | 87.4 | 79.1 | 85.4 |
| Schooling | 2.6 | 1.7 | 5.9 | 3.4 | 6.1 | 3.6 | 0.9 | 3.5 |
| Trade/ Exch | 1.8 | 8.3 | 8.4 | 6.1 | 1.7 | 1.8 | 5.2 | 2.9 |
| Wage work | 0.0 | 2.5 | 5.9 | 2.8 | 0.9 | 0.0 | 1.7 | 0.9 |
| Other | 0.0 | 0.0 | 0.8 | 0.3 | 3.5 | 5.4 | 13.0 | 7.3 |

BSF FAO has increasingly focussed on inclusion of female headed households when we observe the percentage of male and female headed households (FHH) accessed BSF FAO benefits during the two phases. In Tigray during Phase I and Phase II, 28% and 49% of beneficiaries were FHH, respectively. Likewise, in Amhara in Phase I 25% and in Phase II 47% of the beneficiaries were FFH. The project gave s due emphasis to FHH as they are the most vulnerable group to social and economic deprivations, and food insecurity. These percentages can be considered significant compared to the national statistics which indicates existence 20% FHH in the country (DHS, 2005).

Mean age of the phase I household heads is the highest (47 years in Tigray and 44 years in Amhara) compared to Phase II beneficiaries (44 years in Tigray and 39 years in Amhara). The literacy rate among household heads is significantly higher in the Amhara region (60.1%)

compared to the Tigray which stand at 36.7%. A comparison of the literacy rate by program participation, however, indicates that the sample households exhibit quite marked variability. In the Amhara region, Phase I sample households have the largest proportion of literate heads (76%) while in the Tigray region the proportion of literate households heads are the lowest (34%).

A comparison of the marital status of the household heads also revealed that program beneficiaries and non-beneficiaries are quite dissimilar. As shown in Table 5, the sample households in Tigray have a larger proportion of singles (15.6%) than the Amhara sample (4.3%). In addition non-beneficiary sample households have the largest single heads in Tigray whereas in the Amhara sample the non-beneficiaries have the lowest proportion of singles.

Across the three types of respondents agriculture is the main economic activity performed by household heads. However, in general it seems non-beneficiaries have better diversity in economic engagements than beneficiaries of both phases.

Finally, it is possible to conclude that in many of the different socioeconomic and demographic characteristics Phase II beneficiaries better match with non-beneficiaries than with Phase I beneficiaries. The main reason for this is that Phase II beneficiaries are mostly taken from PSNP beneficiaries as one of the most important project priority target groups.

3.3 Access to PSNP and Other Food Security Programme among survey households

The Ethiopian Food Security Programme (2010-2014) as its long-term goal is expected to substantially contribute to “Food security for chronically food insecure households in rural Ethiopia achieved” (MoARD, 2009). The programme envisages achieving its goal by addressing causes of food insecurity through multi-stakeholder and multiple complementary interventions. This programme is actively working in all BSF FAO operational woredas through its Productive Safety Net Programme (PSNP) and Other Food Security Programme (OFSP). The latter is replaced by Household Asset Building Programme (HABP) which is rolling out to chronically food insecure (CFI) woredas since mid 2010.

The PSNP has two objectives: protecting household as through provision of cash and food transfers and building community assets through payment-based public works. The OFSP or HABP has the objective of creating household asset and enhancing livelihood opportunities for CFI households benefiting from PSNP. This component of the Food Security Programme (FSP) avails different livelihood packages for households in the form of credit, training support and extension services. The extension support is ensuring technology transfer, market access and business development for households. In this way, the FSP is designed to graduate households from CFI by providing combined supports from PSNP, OFSP/HABP and regular extension services.

In order to examine the contribution of BSF FAO to the Food Security Programme (FSP) we have asked the IA survey households to indicate which programmes were they benefiting from (Table 6). In Tigray 62% and 77% of Phase I and Phase II BSF FAO project beneficiaries, respectively, reported to be part of PSNP as public and direct support participants. Likewise in Amhara 70% of Phase I and 86% Phase II beneficiaries were also receiving PSNP supports at the time of this survey. Overall about three in four (74%) of BSF FAO beneficiaries are CFI being supported by PSNP. Such coherence between PSNP and BSF FAO is deliberate, stemming from the use of similar targeting criteria that focus on the poorest of the poor households. Moreover, during Phase II woredas took bold measures so

that BSF FAO beneficiaries to be from PSNP in order to promote graduation from PSNP through asset building and income generating activities supported by BSG FAO.

Table 6: Percentage of BSF FAO beneficiary households obtaining support from PSNP

| Region and beneficiary status | | Total PSNP Participants (%) | PSNP Participant (%) | Public works (%) |
|-------------------------------|----------|-----------------------------|----------------------|------------------|
| Tigray | Phase I | 61.8 | 78.2 | 21.8 |
| | Phase II | 77.5 | 82.5 | 17.5 |
| Amhara | Phase I | 69.9 | 74.3 | 25.7 |
| | Phase II | 85.6 | 85.6 | 14.4 |
| Both | Phase I | 65.9 | 76.2 | 23.8 |
| | Phase II | 81.4 | 84.0 | 16.0 |
| | Total | 73.8 | 80.2 | 19.8 |

From our sample in Tigray and Amhara over 95% of BSF FAO beneficiary households received credit packages from the project. In total about 18% and 16% of Phase I and Phase II beneficiaries received credit package from OFSP/HABP (Table 7).

Table 7: Percentage of sample households received credit services

| Region and BSF FAO beneficiary status | | Received credit from | |
|---------------------------------------|----------|----------------------|---------------------------|
| | | BSF FAO (%) | Credit package of FSP (%) |
| Tigray | Phase I | 95.5 | 25.5% |
| | Phase II | 98.3 | 29.2% |
| Amhara | Phase I | 93.8 | 10.6% |
| | Phase II | 99.1 | 1.8% |
| Both | Phase I | 94.6 | 17.9% |
| | Phase II | 98.7 | 16.0% |

The IA has examined the extent of overlap between BSF FAO and OFSP/HABP at household level as explained by access to credit-based livelihood packages. The analysis of the IA survey data depicts the existence of limited overlap between BSF FAO and OFSP/HABP. This overlap is better observed in Tigray in which from 26% to 29% of households benefited from BSF FAO have received credit from OFSP/HABP. Contrary to this, in Amhara only a few proportion of BSF FAO beneficiary households (between 2 to 11%) have accessed similar supports from OFSP/HABP. The limited overlap between the two programmes is attributable to the targeting criteria used by woredas. As a general rule, every time, priority is given for households who had no access similar services before.

3.4 Project Coverage by Component and Phase

The IA team obtained data on beneficiaries per project components for the two phases from the PMU. Individual beneficiaries can participate in more than one components of the project therefore summing up the numbers under each component to get the total project participants result in inflation of actual project participants due to multiple counting.

Table 8: Number of households benefited by BSF FAO

| Region | | Community Empowerment | | | Market and Enterprise Development | | | Nutrition and Health | | | Agriculture and Natural Resources | | |
|-------------|--------|-----------------------|--------|-------|-----------------------------------|--------|-------|----------------------|--------|--------|-----------------------------------|--------|--------|
| | | Male | Female | Total | Male | Female | Total | Male | Female | Total | Male | Female | Total |
| Phase I | Tigray | 248 | 84 | 332 | 163 | 32 | 195 | 343 | 230 | 573 | 1,047 | 316 | 1,273 |
| | Amhara | 1,236 | 1,073 | 2,307 | 1,377 | 1,514 | 2,891 | 1,700 | 1,573 | 3,273 | 2,745 | 1,946 | 4,691 |
| | Total | 1,484 | 1,157 | 2,639 | 1,540 | 1,546 | 3,086 | 2,043 | 1,803 | 3,846 | 3,792 | 2,262 | 5,964 |
| Phase II | Tigray | 1,116 | 751 | 1,867 | 1,082 | 520 | 1,602 | 2,520 | 1,743 | 4,263 | 889 | 812 | 1,701 |
| | Amhara | 523 | 912 | 1,435 | 292 | 208 | 500 | 1,558 | 1,539 | 3,099 | 1,723 | 1,847 | 3,570 |
| | Total | 1,639 | 1,663 | 3,302 | 1,374 | 728 | 2,102 | 4,078 | 3,282 | 7,362 | 2,612 | 2,659 | 5,271 |
| Both phases | Amhara | 1,364 | 835 | 2,199 | 1,245 | 552 | 1,797 | 2,863 | 1,973 | 4,836 | 1,936 | 1,128 | 2,974 |
| | Tigray | 1,759 | 1,985 | 3,742 | 1,669 | 1,722 | 3,391 | 3,258 | 3,112 | 6,372 | 4,468 | 3,793 | 8,261 |
| | Total | 3,123 | 2,820 | 5,941 | 2,914 | 2,274 | 5,188 | 6,121 | 5,085 | 11,208 | 6,404 | 4,921 | 11,235 |

As shown in Table 8, about 2,639, 3,086, 3,846 and 5,964 households were benefited from the community empowerment, market and enterprise development, nutrition and health, as well as agriculture and natural resources components of the project, respectively, during the Phase I. Similarly during Phase II, 3,302, 2,102, 7,362 and 5,271 have received benefits from the community empowerment, market and enterprise development, nutrition and health, as well as agriculture and natural resources components, respectively. As discussed above and summarised under Table 9 the project has covered a total of about 9,050 and 7,373 households in Phase I and Phase II implementation periods, respectively. This makes the total number beneficiaries in both phases about 16,423 households or 85,178 people. From this total number of households 7,195 were female headed while 9,318 reported male headed. Based on this about 43.3% of beneficiary households were female headed. This high proportion of female headed households (FHH) is the result of the targeting criteria adopted by the project to address poverty and marginalization among women in rural areas.

Table 9: Total number of beneficiary households and population

| Woreda | | BSF FAO beneficiary HHs ^a | | | BSF FAO Beneficiary Population ^b | CFI population ^c | % of BSF beneficiary from CFI population ^d |
|----------|--------|--------------------------------------|--------|--------|---|-----------------------------|---|
| | | Male | Female | Total | | | |
| Phase I | Tigray | 1,210 | 348 | 1,468 | 8,867 | 139,245 | 6% |
| | Amhara | 4,122 | 3,460 | 7,582 | 42,838 | 111,213 | 39% |
| | Total | 5,332 | 3,808 | 9,050 | 51,705 | 250,458 | 21% |
| Phase II | Tigray | 1,971 | 1,332 | 3,303 | 14,996 | 139,245 | 11% |
| | Amhara | 2,015 | 2,055 | 4,070 | 18,478 | 111,213 | 17% |
| | Total | 3,986 | 3,387 | 7,373 | 33,473 | 250,458 | 13% |
| Both | Tigray | 3,181 | 1,680 | 4,771 | 23,862 | 139,245 | 17% |
| | Amhara | 6,137 | 5,515 | 11,652 | 61,316 | 111,213 | 55% |
| | Total | 9,318 | 7,195 | 16,423 | 85,178 | 250,458 | 34% |

Source: WOARD, as of January 2011.

a = Calculated from the sum of beneficiaries of market and enterprise, and agriculture and natural resources components.

b = Computed from multiplication of household number and average family size in each region reported under Table 5.

c = Population affected by chronic food insecurity. These figures are calculated from data under Table 4 which is constructed based on data from the project woredas. Since PSNP case load has been unchanged since the start of the programme in this woreda we have considered the same figures for both phases. Moreover, the same population is considered to be CFI. Thus, we have not summed up Phase I & II to get data for both phases.

d = percentage of BSF FAO beneficiaries calculated from the total population affected by chronic food insecurity.

Another interesting aspect of the beneficiary data analysis is comparing project coverage with the total number of people affected by chronic food insecurity (CFI). In this analysis the number of CFI households in each woreda is taken from woreda records indicating the number of people supported by the PSNP in 2010. Based on these data in the entire project woredas about 250,458 people had been affected by food insecurity and subjected to assistances from the PSNP. Hence, the BSF FAO project covered about 34% (17% in Tigray and 55% in Amhara) of the total population affected by chronic food insecurity in the last ten years during the implementation of the two project phases. This coverage can be considered encouraging given the resource limitation and various implementation challenges indicated in the 2005 Phase I evaluation report and in this impact assessment. However, given the depth and breadth of poverty and vulnerability many of the informants of this evaluation argue that the coverage of BSF FAO was low.

4. Assessment of BSF project concept and relevance

4.1 *The project objectives and national policies and programmes*

The project developmental goal

The development objective of the BSF FAO project is ***‘Improving Nutrition and Household Food Security in Northern Shewa and Southern Tigray, Ethiopia.’*** This development objective is consistent and responsive to the different development strategies and policies of Ethiopia. According to the 2006-2010 poverty reduction strategy of the country popularly referred as Plan for Accelerated and Sustainable Development to End Poverty (PASDEP) ensuring food security was one of the development strategies considered by the government.

The Federal Food Security Strategy (FSS) which was first issued in 1996 and latter updated in 2002 indicates the need to give emphasis to chronically food insecure, moisture deficit and pastoral areas. The FSS has the following essential elements:

1. Rapid expansion of agricultural production, marketing and credit
2. Due emphasis to pastoral areas
3. Promotion of micro and small-scale enterprises

The New Coalition for Food Security Programme document is the first comprehensive document that provided guidance and commitment of stakeholders for implementing the Federal Food Security Strategy into a programme framework. According to this document the three food security programme areas include PSNP, Other Food Security Programmes (OFSP) and voluntary resettlement. As explained in the PSNP’s Implementation Manual (PIM) the then OFSP and the current Household Asset Building Programme (HABP) are instrumental to ensure graduation of households from food insecurity through credit and training provisions to chronically food insecure PSNP households.

The BSF FAO project by and large can be regarded as part of the OFSP (or HABP) as it has supported the national food security programme in providing household asset building and income generation opportunities for its target beneficiaries. As most of the BSF beneficiaries are very poor and chronically food insecure, the project has supported the national food security strategy / programme particularly in promoting graduation out of food insecurity.

The BSF FAO project operated in moisture deficit woredas with environmentally fragile and ecologically degraded areas. Moreover it gave due emphasis to the expansion of agricultural production, marketing, credit and micro enterprise development.

The project intermediate objectives

The BSF FAO project had four intermediate objectives. These objectives are consistently in support of various development strategies of the country to reduce rural poverty and ensure food security. The review of the relevance of these objectives to the countries development programmes, strategies and policies is presented as follows.

Community empowerment

Community empowerment component of the project can be seen as a strategy and as an end by itself. Over the past five years the government has been strongly promoting community participation in local development endeavours within the context of the second cycle of poverty reduction strategy (PASDEP 2006-2010). The document acknowledges the need for removing gender disparity and ensuring gender equality and women’s empowerment as a key way forward to be successful in accelerating growth, human development and in the eradication of poverty. Community participation has received a lot of attention in the areas of education, local governance, planning, implementation, monitoring

and evaluation of education, health care services, local infrastructure development. For instance it envisaged to significantly increased female participation at all levels of the educational system. To unleash the potential of Ethiopian women, PASDEP foresaw liberating women from low-productivity tasks, and increasing their participation in the work force and social and political processes of the country. Apart from this the decentralization and good governance directions of the government are based on the principle of ensuring grassroots participation to bring social, economic and political empowerment.

BSF FAO project has been promoting community empowerment through ensuring participation and building their capacities. According to the project proposal, efforts were to be made to make the community action planning (CAP) process part and parcel of mainstreamed practice. The CAP process is in line with Participatory Community-based Watershed Development approach being promoted in natural resources conservation by the Ministry of Agriculture and Rural Development (MoARD). The CAP and the watershed approach have commonalities in terms of ensuring community participation in problem identification, solution planning, implementation, monitoring and evaluation. The main difference in practice is that BSF FAO promoted the CAP process and brought resources through community designed micro-projects regardless of the sector. In the case of the watershed management approach, major emphasis has been given to natural resource conservation work through PSNP. In the course of BSF FAO project implementation the CAP process has filled the gaps observed in the watershed approach. On top of this the CAP findings and problems that could not be addressed through BSF FAO project have been shared with different stakeholders for their actions. As an example, CAP findings were used in Tigray Region to strengthen the watershed plans and were shared with other NGOs and bilaterally funded projects such as the Ethiopian Red Cross Society and German Technical Cooperation (GTZ). According to Hintalo Wujirat Woreda Food Security Task Force (WFSTF) the experience gained from the CAP process supported by BSF FAO helped the woreda to develop participatory projects.

Market and Micro-enterprise development

Small and micro-enterprise development is widely considered by the GoE as the strategy of poverty reduction among non-agricultural and urban population. In particular this strategy has demonstrated its potential for poverty reduction in urban areas by building skills, providing business start-up capital, creating market linkages, and providing working spaces for jobless youth and women. This experience has been transferred to rural areas during the PASDEP period through youth and women's packages designed and developed by the government. These packages created opportunities for rural youth and women who are often landless and have no reliable livelihood sources. Likewise BSF FAO has been promoting the micro-enterprise development activities for landless youth, women household heads and other vulnerable groups (PLWH and people with disabilities) with the aim of creating employment opportunity in rural areas. Particular attention was given for these target groups to acquire off-farm business skills, working capital in the form of credit, and linking their products with potential markets. This indicates the perfect alignment of the BSF project with the government strategy for reducing poverty among landless youth and women of rural Ethiopia.

Nutrition and health

Malnutrition is a social indicator of poverty in Ethiopia. As indicated above, about 47% and 11% under five children are affected by chronic and acute malnutrition, respectively (DHS, 2005). Infectious and communicable diseases account for about 60-80 % of all diseases⁴. At the beginning of PASDEP which is 2004/05 only about 35% of the rural population had access to potable water sources⁵. As a result of this, PASDEP gave due emphasis to development

4 MoH (2006) *Health and health related indicators 2004/2005*, Addis Ababa

5 According to MoFED (2010), Growth and Transformation Plan (2010/11-2014/15) potable water supply coverage within the range of 1.5 km distance has reached 68% for rural areas in 2009/10.

undertakings that improves nutritional status and health wellbeing of the rural community. Among other expansion of primary health care through health extensions system and increasing of access to potable water supply and sanitary facilities obtained high attention in the document as well as in practice over the last five years.

BSF FAO project also gave attention to strengthening health and nutritional knowledge and practices among its target communities through strengthening the health extension system, and promoting production and consumption nutritious food. It also gave emphasis to the expansion of facilities such as potable water supply and sanitation. These situations make the project responsive and contributory to the country's health sector development.

Natural resources and agriculture

Different development policies and strategies put agriculture as a prime mover of the Ethiopian economy. In the last one and half decades the Government has given high priority to combating food insecurity and poverty in the country. It considers agriculture as the necessary starting point for initiating structural transformation of the economy. Therefore, the Agricultural Development Led Industrialization (ADLI) has been pursued as the major policy framework for development since 1991. ADLI forms the basis of the Food Security Strategy (FSS), as well as the PASDEP and is viewed as the engine for poverty reduction in Ethiopia. ADLI focuses on the development of the rural sector. The adoption of ADLI presupposes productivity enhancement of smallholder agriculture and industrialization based on utilization of domestic raw materials via adopting labour-intensive technology. The strategy also focuses on the development of large-scale private commercial farms. The essential elements of the strategy framework include development and optimal use of both labour and land as a primary source for economic development. Market-led agricultural development i.e. demand led agricultural development as opposed to supply oriented agricultural development, is integral to this goal.

As quoted in the BSF FAO exit phase project proposal, the agriculture sector objective during the PASDEP period is to "accelerate transformation of small holder subsistence agriculture to market oriented agriculture." Basic principles underlying the strategy include:

1. Adoption of a labour-intensive strategy,
2. Proper utilization of agricultural land,
3. Improving farmer's capacity and
4. Coordinated development approach.

Agriculture sector development in the area of human resource development had the target of training of 42, 622 DAs to overcome the then severe shortage of agricultural development agents, construction of 5,493 farmers training centres, intensive modular training of 3,282,120 farmers and short term training of 10,393,380 farmers within the five years. Specific agricultural development plans included: soil fertility management, small-scale irrigation, crop protection, utilization of improved seeds, and improving production and productivity of livestock and undertaking natural resource management.

In light of this BSF FAO has provided practical supports to the realization of agricultural development objective of PASDEP by promoting productive agricultural technologies including improved seeds and small scale irrigation schemes, on the job training of development agents, training of farmers, supplying and construction of facilities at farmer training centres, and supporting training of farmers on improved farming and soil fertility management.

4.2 Assessment of project logical model

The logical model or logical frame work analysis (LFA) of the project was based on FAO's definition of food security which is "Food security exists when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food which meets their dietary needs, and food preferences for an active and healthy life (FAO, 2003)."

Furthermore, at least three out of four project immediate objectives are reflecting dimensions of food security including food availability, access and utilization. First, the agriculture and natural resources component (immediate objective) addresses enhancing food availability at household level by increasing production and productivity of the agriculture through promotion of technologies and transfer of knowledge. Secondly, the market and enterprise development component ensures access to food by households through enhancing income from various off-farm and farm-based business engagements. Thirdly, the nutrition and health aspect of the project enhances consumption of nutritious food and the biological utilization of food through actions that enhance health services and behaviours, and appropriate dietary intake practices.

Analysis of the project logic vis-à-vis the above internationally accepted definition of food security the project design is up to the standard and relevant to the local contexts. This has enabled the project actors to easily understand the project objectives and strategies in the course of implementation.

Apart from this it is found to be important to comment on the quality of the project objective statements and key indicators. Appropriate statement of project objectives and formulation of indicators are important factors determining the quality of design and ease of project implementation, monitoring and evaluation activities. While acknowledging the relevance of the project development objective and immediate objectives, the evaluation team has observed some limitations in the quality and clarity of the project objectives statements and indicators.

As presented in the BSF proposal the development objective of the project is 'Improving Nutrition and Household Food Security in Northern Shewa and Southern Tigray, Ethiopia.' When this statement is examined using a SMART (**S**pecific, **M**easurable, **A**chievable, **R**ealistic and **T**ime bound) principle of project design a lot can be learned for future design improvement.

Specificity: The development objective is very specific in its focus which is improving food security and nutritional situation. It is also specific and clear about its geographic focus. Further it indicates households are the unit of analysis for food security. However, it is not clear about the unit of analysis for the nutritional improvement. From this statement one cannot be sure about the target groups for nutritional interventions. Such statements can lead to lack of focus and dilution of efforts which ultimately result in wrong targeting and absence of deep impact. This leads to the conclusion that the development objective of this project lacks specificity.

Measurability: So long as the focus of the project is on household food security and improvement in nutritional status of specific groups (which are not indicated in this development goal) the impacts of the project can be measured. There are already well developed and globally accepted indicators to measure food and nutritional status. Therefore, the development objective of BSF can be regarded as a measurable objective.

Realistic and achievable: Although the time frame is not indicated in this objective statement, from the document one can understand that some degree of improvement can be

realized in food security and nutritional situations of the target groups. So the development objective is realistic and achievable for the specific target group.

Time bound: As indicated above, this objective is not time bound. Thus, from the current statement it is not possible to understand when this objective is envisaged to be achieved. This situation could easily lead to confusion and loss of track by planners and implementers of the project. After all, proper project implementation is proper understanding of the project objectives and logic. Based on this analysis the project objective statement missed to be time bound.

Indicators are the second important element of a project logic next of objective statements. Indicators are qualitative or quantitative criteria and are used to check whether proposed changes have occurred. They are instruments for measuring beginning and ending situations envisaged to be changed or affected by the project. As a standard, all hierarchical objective statements should have indicators. However, the impact assessment team did not come across in the project document indicators for the development objective of the project. This is a missing element in the design of the project logic. This practice obviously reduces accountability and responsiveness of a project to the target groups, donors and host country government and makes the measurement of impact ambiguous.

Apart from this all the four immediate objectives of BSF project have indicators that can to some extent show direction and magnitude of envisaged changes due to the project. However, each objective has an unmanageably large number of indicators ranging from four to seven. This might have emanated from the desire to know more about the situations than indeed measuring changes. The result of having large number of indicators is investing time and financial resources for non-utilizable data and application of poor indicators that have only a very remote link with the project objectives.

Most of the indicators at immediate objectives level are found to be compounds of more than one data element. In the means of verification column of the LFA none of these indicators were having defined formulation strategy. Such a practice could lead to confusion and sub-standard use of indicators during formulation and number crunching. As far as indicator formulation is concerned, different agencies have different approaches. Some put directions and targets within the indicators and other do not. Indicating targets for changes is important whether they are embedded within the indicator statement or in a separate format. In the case of the BSF FAO project, some indicators are with targets some are not. The framing of expected results was not improved after the baseline survey was completed.

To comment on the quality of indicators and improve future project design the IA team made a review on a few indicators under the immediate objective three; nutrition and health improved, with the following seven indicators:

1. Daily food intake increased
2. Health status and survival rate improved
3. Rate of malnutrition reduced by 50 %
4. Potential health Service coverage from the current 64% reach 100%
5. Rate of water born diseases reduced from the current 70-60% to 40-30%
6. IMR reduced from the current 97/1000 to 45/1000
7. The spread of HIV/AIDS halted and impact mitigated

Different agencies suggest different approaches for judging the quality of indicators. For the sake of this report the following four criteria are applied to examine the quality of some of the indicators of BSF FAO project.

Comprehensibility: the indicators should be worded simply and clearly so that people involved in the project will be able to understand them.

Relevant: The indicators should be directly linked to the project objectives, and to the appropriate levels in the hierarchy.

Technically feasible: The indicators should be capable of being assessed (or 'measured' if they are quantitative).

Reliable: The indicators should be verifiable and (relatively) objective; i.e., conclusions based on them should be the same if they are assessed by different people at different times and under different circumstances.

Table 10: Review of project indicators

| Indicators | Comprehensibility | Relevant | Technically feasible: | Reliable |
|---|--|---|--|---|
| Daily food intake increased | Simple but not clear. It is not know the what aspect of food intake to be measured. Not specific about whose food intake. The unit of analysis was not defined (e.g. HH level, of vulnerable groups, etc) | Seems relevant | Can be feasible if well defined. It can also be complicated and time taking if it requires inventory of food intake. | Since the indicator and its formulation is not clear difficult to comment on its reliability. |
| Health status and survival rate improved | This is multi-directional: health status and survival rate. Whose health status and survival rate is referred? No unit of analysis. Thus lacks specificity. It rather tends to be objective than indicator. | No comment. | Formulation method and data elements are not clear. | Same as above. |
| Rate of malnutrition reduced by 50 % | Simple but the unit of analysis is not defined. Whom are we referring to? Which type of malnutrition are we referring? | Very relevant for the project development objective than this immediate objective. | Technically feasible a there are widely accepted measurements for malnutrition. | The existing standards are reliable. |
| Potential health Service coverage from the current 64% reach100% | Simple and comprehensive although there is a need for defining the concept under 'potential health service' | Given the depth and coverage of the programme this indicator might not be sensitive to the project intervention. Quality of service can be improved but it is as such unlikely to affect the coverage. | Technically feasible but it requires definition of concept and formulation of the indicator | If the technical feasibility criteria is fulfilled the indicator could be reliable |
| Rate of water born diseases reduced from the current 70-60% to 40-30% | Simple and clear. Targets trigger actors what to do. | Very relevant as water born diseases are important factors of malnutrition | Technically feasible and well developed formulations are already out there. | Very reliable and possible to get realist results across time and space. |
| IMR reduced from the current97/1000 to45/1000 | Simple and clear. | Relevant to the context and development objective of the project. It also helps to measure the contribution towards MDG. However, this less likely be regarded as indicator for this immediate objective. | Technically feasible if internationally accept formulation is applied | Very reliable. |
| The spread of HIV/AIDS halted and impact mitigated | Not simple and clear as project indicator. Tends to be an objective statement than an indicator. It is also multi-dimensional (halted and impact mitigated). It is not clear weather this indicator requires qualitative or quantitative data. | Relevant to the context in rural Ethiopia and MDG | It seems technically difficult to consider this as an indicator. | No comment as it lacks clarity. |

The following can be summarised from the analysis of immediate objective three indicators:

- Most indicators seem simple but lack clarity in concepts and formulations.
- Most of these indicators are relevant to the context, project objective and MDGs. However, some indicators tend to be less sensitive to changes as a result of the project interventions. Likewise there is range of impact indicators that should be under the development goal of the project than the immediate objectives, e.g. 'rates of malnutrition'.
- Most of the indicators are tending to be technically feasible as there are already well developed measurement methods in the field. However, due to lack of conceptual clarity and formulation the results may have low level reliability.
- Therefore, future design of such a project should be managed with a very good understanding of indicator formulation criteria (the one mentioned in this report or others) and operational contexts. Particularly reformulation and target setting for indicators might be required by preparing a comprehensive and standalone M&E plan. This M&E plan should have indicator formulation, detailed means of verifications, operational definitions, frequency of data collection and reporting as well roles of stakeholders in the M&E.

5. BSF FAO Project Impact Assessment Findings

5.1 *Project Outcomes*

The overall objective of the BSF FAO project is to improve household food security as well as nutritional well-being of the beneficiary communities in the intervention Woredas of North Showa and South-Eastern Tigray Zones. BSF FAO project intends to contribute to household food and nutritional security through providing required inputs, knowledge and services and ensuring sustainable crop and livestock production in the area. Efforts made so far have shown progress in this regard. The project has supported considerable numbers of poor households including female households (FHHs), landless, oxenless, jobless youths and other vulnerable groups (HIV infected individuals and persons with physical disabilities) to actively engage in food production and income generating activities. This has improved the life and livelihood situation of beneficiaries. As a result, the families especially the most vulnerable members like women and children have got access to diverse and nutritious food. Vegetable consumption is becoming more common, which was very rare or even nonexistent for most families prior to this project. Despite this, household food insecurity is still among the most overriding concern in the project areas. This is because BSF FAO project coverage is limited while poverty is deep rooted and the intervention woredas are exposed to recurring shocks, mainly resulted from drought.

BSF FAO project focused on four major intervention areas that include community empowerment, market and enterprise development, health and nutrition, agriculture and natural resource management. The following sections report on the findings of the IA vis-à-vis the project outcomes that would eventually lead to impacts.

5.1.1 *Community Empowerment*

Under community empowerment component, the project has promoted the development and adoption of community action planning (CAP) tools, prepared profile of communities describing food and nutrition security and established community development fund (CDF) in the operational woredas.

Community action planning

During the Phase I project, a CAP guideline was developed, translated into local languages and distributed to the different departments of woredas and regions. Building on this experience the Phase II project further strengthened the community participation and capabilities to implement and manage development process by initiating the preparation of a project implementation manual which included project administration, financial procedures, project monitoring and evaluation among others. Later the project has updated CAP and CDF manuals (FAO, 2009 - BENEFICIARY ASSESSMENT FINAL REPORT: July 2009).

As part of this, the project provided a range of capacity building trainings for woreda experts and officials, development agents (DA), and community leaders. The most significant trainings that were frequently acknowledged by the trainees and woreda officials, were in the area of CAP, gender, CDF management and project cycle management. The following quote from Hintalo Wujirat Woreda Food Security staff illustrates the outcomes of the capacity building trainings provided at different levels.

“Strong capacity building is very vital for local development. If people are capacitated they can identify their problems clearly, plan/prioritize on solutions. Then during implementation they can be effective. ... All sector offices have obtained training on CAP in two rounds during the pilot phase and the exit phase. Later, these trainings have helped the sector offices to design and prepare appropriate micro-project proposals. So it has solved the limitation of project design among woreda offices.”
Hintalo Wujirat Woreda Office of Agriculture and Rural Development, Food Security and Early Warning Work Process Staff

In the implementation of the BSF FAO project, a special focus was given to gender awareness creation to address women empowerment. Women were trained and provided with credit to engage in income generation and improved farming. The involvement of woreda women's affairs offices in the CAP process ensured strong leadership supports to the BSF FAO supported micro-projects for disadvantaged women in the target areas.

The impact assessment team asked different woreda authorities regarding the training support they obtained on gender issues. All the visited woreda food security task force members acknowledge that they obtained trainings on gender awareness. For instance, the head of Ederta Woreda Office of Women's Affair said the following about the involvement of BSF FAO project in promoting gender issues and empowerment of women.

“We received ToT training on gender. We cascaded similar trainings for the community along with other woreda sector offices. After this, we observed women involving in roles that were traditionally labelled as men's roles. E.g. women are involving in drip irrigation. Women also diversified their sources of earning and able to increase their income and this is improving women's position in the household and within the community. Hence, I can say the project has contributed to gender equality. Unlike other 'NGOs', we have a strong relationship with BSF FAO. The focus given to poor women and female headed households makes the project unique as compared to other 'NGOs' working in the woreda. But, the project has limited coverage as it is working only in 6 out of 17 kebeles in the woreda.” – Alem Milegnin Head of Women's Affair Office, Edertta Woreda

BSF FAO project has contributed to the woreda institutional and community capacity improvement. The capacity building initiatives have enabled woredas to systematically participate community members in local development through the application of CAP. This has created an opportunity for the community to identify project ideas, prioritize needs, and prepare project plans. The contribution of these trainings in local development process is explained by North Showa Office of Agriculture and Rural Development as follows:

“Those woreda staff trained by BSF are better in terms of providing quality trainings and generating valuable project ideas. Likewise, the kebele administrators and community leaders took trainings by safety net, FAO and others can generate good project ideas that are very useful for their areas.” Head of North Shoa Office of Agriculture and Rural Development.

The community empowerment component of BSF FAO was implemented with the intention of making CAP a mainstreamed practice within woredas. In this regard, skills have been developed and a onetime CAP exercises were conducted in each of the target community. The results of CAP are being used not only by BSF FAO for project planning and implementation but also by other different projects such as PSNP and NGO initiatives. Deputy head of BoARD explained the contribution of the project as follows:

“Community action planning process has gone beyond the project boundary and started to influence watershed based development planning process and enhanced community participation. It has also positively contributed to other woreda socio-economic development planning and implementation in the area.” Tigray BoARD.

However, mainstreaming CAP in the woreda development approach is far from reality. The project could have blended the CAP process with the watershed management approach of the government planning system to ensure its continued application. Moreover, most of the instructional informants of the qualitative interviews indicated that the role of kebele CAP team in M&E of project progresses and achievements has been very limited. This role is mainly handled by woreda food security task force (WFSTF). They also acknowledge that often the CAP outcomes are not going beyond planning and targeting exercise.

“CAP has a training manual. It explains the roles and responsibilities of kebele and woreda CAP teams. CAP teams focus on the planning side. After that the implementation is the responsibility of the WFSTF. Given the roles of the different sector offices the WFSTF is responsible for monitoring and evaluation of the BSF FAO activities. The roles and responsibility of the CAP teams indicated in the manual were adequate for planning purpose only. But there is a need to improve it to include monitoring and evaluation activities for the CAP team. We know the role of the CAP teams in M&E is low because the task is taken up by FSFT and beneficiaries.” Hintalo Wujirat Woreda Office of Agriculture and Rural Development, Food Security and Early Warning Work Process Staff

Community Development Fund Management and Access to Credit

The establishment of community development fund (CDF) has expanded opportunities for poor households to get access to financial services in the form of savings and credit. The project promoted all its micro-enterprise and agricultural development interventions through credit arrangement. Based on self-reported responses nearly all beneficiary households (99% for Phase 1 and 95% Phase 2) had obtained credit from BSF FAO funds at the time of the IA survey.

Table 11: Percentage of households accessed credit from BSF FAO

| Tigray | | | Amhara | | | Both | | |
|---------|----------|-------|---------|----------|-------|---------|----------|-------|
| Phase I | Phase II | Total | Phase I | Phase II | Total | Phase I | Phase II | Total |
| 95.5 | 98.3 | 96.9 | 93.8 | 99.1 | 96.5 | 94.6 | 98.7 | 96.7 |

The operationalization of CDF in the project requires the involvement of multi-layer entities and cascaded process. The CDF resources are released to beneficiaries from BFS FAO after lengthy bureaucratic procedure (Jemal 2009). The following are the steps for this procedure:

- Preparation and appraisal of micro-project by the community with the support of development agents (DA) and woreda experts.
- Appraisal and approval of micro-projects by the woreda task force coordinating the implementation of the project.
- Signing of letter of agreement (LoA) between kebele and the woreda task force
- The LoA is sent to the Project Management Unit (PMU) under MoRAD.
- With the facilitation of PMU the fund is released to the woreda office of finance and economic development (WOFED). The fund release is step-wise i.e. in tranches of 30, 50 and 20%.⁶ Next tranches are held until the first tranches are completed and reported on.
- WOFED releases credit funds to cooperatives based on the above proportions.

⁶ This proportion has been improved to 30, 60 and 10% since the beginning of 2010. However, because long life of the project is completed with the application 30, 50 and 20% we have maintained to cite this throughout this report. Most of the qualitative respondents also commented on the earlier tranches they commonly worked with.

- Cooperatives disburse credits to target beneficiaries.

These steps ensure local institutions to own the management of the CDF. This arrangement safeguards misuse of credit funds for any other purposes outside of the LoA. However, the lengthy process takes a longer time to release funds to beneficiaries. The intermediary at woredas level, WOFED, has delayed the fund release in almost all project woredas. Even though field coordinators are recruited and assigned to coordinate the project, they have no signatory role for financial matters to speed-up the disbursement of credit funds (Jemal, 2009). In addition to tranche release of credit funds from BSF FAO, another limitation reported was the size of credit funds which are insufficient to meet local credit demands. The BSF FAO Project Coordinator in Menz Gera woreda indicated the procedural constraint in the BSF FAO credit arrangement as follows:

“The BSF FAO 30:50:20 fund release procedure has affected our credit provisioning performance as compared to the local demand. Due to our internal regulation we could not respond in a timely way to the credit demanded by our clients. There were also some delays until the resource reaches the final beneficiaries because the resource is often given in kind, not in cash.”

In the household survey we asked beneficiary households if they had started to repay the credit and the proportion already paid back. The results of these interviews is summarized in Table 12 and indicate that about 60% and 52% of credit beneficiaries in Tigray and Amhara have started to repay their debts, respectively. At the project level the proportion of households started to repay their loans is high for the Phase I beneficiaries (67%) as most of the loans are matured compared to the Phase II beneficiaries (36%).

Table 12: Loan repayment in BSF FAO

| BSF FAO beneficiary status | | N | Started repayment, % | Mean repayment rate, % |
|----------------------------|----------|-----|----------------------|------------------------|
| Tigray | Phase I | 110 | 72.7 | 76.8 |
| | Phase II | 120 | 39.2 | 34.6 |
| | Total | 230 | 56.0 | 58.2 |
| Amhara | Phase I | 113 | 61.1 | 69.4 |
| | Phase II | 111 | 33.3 | 17.0 |
| | Total | 224 | 47.2 | 42.9 |
| Both | Phase I | 223 | 66.8 | 73.0 |
| | Phase II | 231 | 36.4 | 24.6 |
| | Total | 454 | 51.6 | 50.0 |

Further in the IA survey questionnaire we asked households what proportion of their loans have already been repaid. Self reported repayment rates on loans is summarise in Table 11 above. Based on this, the repayment rates are estimated at 73% and 24% by Phase I and Phase II beneficiaries, respectively. Since most loans are not matured for Phase II beneficiaries it is not useful to comment on their loan repayment level. However, given the fact that at least four years are elapsed since the Phase I project is completed it is possible to comment on the repayment rate of this phase.

In general, a higher repayment rate ensures adherence to financial disciplines and availability of loan capital for the next community members waiting to receive credits. In Ethiopia often micro-finance institutions aspire to attain more than 95% of loan repayment rate. Likewise the recently completed ‘World Bank Food Security Project’ considered any given community successful in the management of CDF if they reach 85% of loan repayment rate. Communities were receiving subsequent funds when they met this level of repayment rate.

Based on this the current level of loan repayment among Phase I beneficiaries is encouraging although it lags behind the above mentioned standards. Further efforts are required to attain higher level of repayment rate and ensure sustainable rural financial services in the target areas. The responses from woreda and beneficiary level discussions in the different woredas indicated the following factors as a source of low repayment rate:

- Limited follow-up by woreda and kebele offices;
- Misconception among the community that at certain point the loans would be written-off or considered as freely distributed money;
- Limited capacity of cooperatives and kebele task forces;
- Longer return period required for most businesses and the short time (3 years) given to pay back loans;

In all of the woredas with different degrees the credit funds have started to revolve within the target communities among households who meet the project's beneficiary selection criteria. The following quote from the key informant interview (KII) with the project coordinator in Menz Gera Woreda exhibits the efforts made by BSF FAO to establish a revolving fund mechanism.

"At the beginning we provided three years credit to the beneficiaries. But most of them were able to repay the credit in a years time. About 75% of the credit [referring to the matured loans only] given out has already been repaid and re-distributed to other needy community members."

A case study with a Savings and Credit Cooperative

"The name of our organization is Dahnsa Saving and Credit Cooperative. It was established in 2004 with the support of BSF FAO. At the start we had 40 members. We are now about 200. BSF FAO gave us 107,000 Birr fund. We have now 250,000 Birr capital. Almost all members of the cooperative have taken loans and started different businesses. We have distributed about 200,000 Birr in the form of credit to our members. So far the repayment rate is almost 100%."

"Most of our members are business oriented people, so they can easily pay the loan and the interest. Almost all members are involved in trading activities on top of farming. They are involved in fattening, grain trading, etc. If a person takes 5,000 Birr he/she has to pay an interest of 50 Birr per month. This is not a lot of money for a business person. This interest rate was determined by members."

We have taken training from the cooperative promotion office of the woreda. BSF FAO also provided a three days training on cooperative management and record keeping for our executive members. The project covered the cost and the woreda staff facilitated the training."

"We have not faced major problems that compromise the existence of our cooperative. But we have fund shortage to provide credit and meet the needs of members."

Mekonen Tsegaye, Chairman of Dahnsa Savings and Credit Cooperative Hintalo Wujirate Woreda, Tigray

In summary the evaluation has indications of sustainability of CDF through the establishment of revolving credit funds within a given community. However, much has to be done in terms of promoting awareness among community members so that loans are paid back and ready for next users. The loan maturity period should be a bit relaxed to allow repayment by households in businesses requiring longer pay back period. Moreover, woreda and kebele

officials should increase their efforts in supporting the cooperatives and community task forces in the process of loan collection.

5.1.2 Market and Enterprise Development

The market and enterprise development component of BSF FAO has dealt with increasing income through enhancing engagement in micro-enterprises and the creation of market opportunities for local products from target beneficiaries. To this end, the project promoted off-farm and farm-based enterprises.

The farm-based income generation intervention overlaps with the agriculture and natural resource management (ANRM) component of the project. Therefore, we present the project outcomes related to farm-based enterprises under the ANRM component. This section has dealt with off-farm income generation enterprises only.

In the 2010 IA survey, households were asked to report on the type of off-farm activities they engaged in and made income. The result of the responses indicated in Table 13 shows variations in rates of off-farm engagements across the three sample groups. The majority of respondents reported engagement in one or two off-farm activities as a basic livelihood or supplementary income sources. Considerable proportions of beneficiary households, ranging from 34% to 47%, have no alternative income from off-farm activities. The four most commonly reported off-farm activities include temporary wage labour, trade, selling of local drinks and carpentry.

Table 13: Percentage of households by number of off-farm incomes sources

| Region | No. of off-farm engagements | BSF Status | | | Total |
|--------|-----------------------------|------------|----------|-----------------|-------|
| | | Phase I | Phase II | Non-beneficiary | |
| Tigray | 0 | 46.4 | 36.7 | 29.5 | 37.4 |
| | 1-2 | 53.6 | 60.8 | 68.8 | 61.1 |
| | 3-4 | 0.0 | 2.5 | 1.8 | 1.5 |
| Amhara | 0 | 46.9 | 31.5 | 40.2 | 39.6 |
| | 1-2 | 49.6 | 62.2 | 58.0 | 56.5 |
| | 3-4 | 3.5 | 6.3 | 1.8 | 3.9 |
| Both | 0 | 46.6 | 34.2 | 34.8 | 38.5 |
| | 1-2 | 51.6 | 61.5 | 63.4 | 58.8 |
| | 3-4 | 1.8 | 4.3 | 1.8 | 2.7 |
| | At least one | 53.4 | 65.8 | 65.2 | 61.5 |

The IA could not benefit from 2004 and the 2007 baseline surveys to quantitatively explain the change in off-farm employments over time. The 2004 baseline survey data presentation did not indicate percentage of households and income obtained from off-farm engagements. Likewise the 2007 baseline reported off-farm and farm-based incomes together. Moreover, the major income sources were not exhaustively included in the survey questionnaire. Comparison of beneficiary and non-beneficiary data on off-farm engagements from the 2010 IA survey could not reveal tangible achievements of BSF FAO project insofar as it is impossible to determine if non-beneficiaries had more off-farm sources of income to start with or whether the BSF project had no impact on diversification of off-farm income sources. Therefore, our description on the outcomes of BSF FAO will mainly be based on the qualitative data collected through KIIs, FGDs and household case studies.

The qualitative findings suggest that various outcomes were achieved in the course of developing markets and enterprises for poor and vulnerable households and individuals. These outcomes can be grouped as follows:

- Income diversification and intensification options created for poor and vulnerable groups.
- Market linkages facilitated to enhance the price share of producers.
- Project beneficiaries have got entrepreneurship skills training on financial management, business record keeping and business planning.
- Project beneficiaries obtained vocational trainings and started to make income.
- Target beneficiaries provided with working capital and inputs in soft loan terms in the form of start up capital.

Engagement in off-farm income generation activities

A sizable number of beneficiaries have been engaged in various income generation activities through the support provided by BSF FAO. Most of these beneficiaries reported the improvement in their livelihood status such as access to food and sending children to schools as a result of their involvement in off-farm activities. Based on the results of the household survey and qualitative assessment, these activities included metal and wood works, garmenting, weaving, knitting, bakery, grain milling and mat making. The following cases studies with BSF FAO beneficiaries exhibit how the project contributed to the improvement of poor and vulnerable individuals and households income.

Socially and Financially Successful Single Mother

"I am a single mother of two children. My husband left me and my children without any supporter. I used to feed my children using a little income I was making from selling of liquor. Life was too tough for us at that time. It was often very difficult to cover school expenses and feeding my children. It was four years ago that I heard about the BSF FAO's support for women like me. In 2007, I was trained by the project in tailoring for three months. I was not as such confident with my skill and ability to make income out of this business. I got a sewing machine from the project on a credit basis. After that I decided to get recognition from the people in this and neighbouring communities through my new job.



Figure 1: Genet at work

In the past during my struggle to feed my children I have taken credit from other sources for a few occasions. However, I always ended up consuming the credit money and remained indebted. This time the credit from BSF FAO was accompanied with adequate training on business skills and record keeping. The project gave me this sewing machine for Birr 1,180 and Birr 700 as working capital fund, in the form of credit. I have started to pay back my loans.

Now I have a regular income from my business. I am not facing any anxiety for what to feed and how to dress my children. Following this my business gave me an opportunity to be a recognized woman within the community. I have now started to build my own house to leave this rented place. After all these achievements, my thank goes to this organization (FAO). I cannot express my heartfelt thanks in words. I wish all my friends to get a similar chance."

Genet Moges from Menz Mama Woreda, North Shoa

A struggling Woman with Physical Disability

"As you see me, I am a person with disability. I used to generate some income through begging in the past. People used to discriminate against me due to my disability status. But now we [a group of people with disabilities] are organized in an association and able to get access to credit and closely discuss on our common problems.

"I got 1,000 birr credit from my association two years back. I am engaged in grain marketing using this money. Currently, I have about 3,000 birr in cash and 3 quintals of wheat grain at home. I am planning to repay all debts by next January. So far I am regularly paying the interest.

"I have two children. I am feeding different types of food items to my family? because I have better income now. We eat food like injera (Ethiopian bread) from barley, shiro (pea stew) and vegetables. We eat meat during holidays only. I am also planning to construct my own house."

Alganesh G/Egziabeher, Enderta Woreda

Alganesh has a disability in one of her legs. She cannot walk fast and stand for long. She is a member of Lemlem Serdi Association of People with Disabilities, organized and supported by BSF FAO. The association obtained a grant fund from BSF FAO to avail credit services for its members.

A young man changed business type and remained successful after a training from BSF FAO

"My name is Lemma Wolde, 25. I was trained by BSF FAO in mat making in 2004. After the training I did not find mat making as a profitable venture. Now I have changed that and started trading in different commodities like clothes and consumer goods in this shop.

"During the training I saved my pocket money from the project. This money helped me to start this business. The training helped me to acquire start up capital. I have not obtained credit from the project. The main thing I obtained from the project was my pocket money. I was poor and dependant on my parents. I am now self sufficient. The container shop is build by me. It cost me about 8,000 Birr. I do not know the capital level I have. I do keep records of accounts because FAO taught me. I am supporting the education of two of my brothers. I occasionally give clothes to my parents. I am also responsible to buy clothes for my other two brothers living with our parents."

Molale Town, Lalo Mama Woreda, North Shoa

Most Successful Business Man Landless and Young

"My name is Mekonen Tesfay. I am just married. I was almost idle after completing grade ten in 2001. Then for a year I struggled to support myself by an income from bicycle renting. Five years ago I was organized in a savings and credit cooperative by BSF FAO. I was selected by the project because I was a youth without land. Then in 2004 I got 5,000 birr loan from BSF FAO through the cooperative. I used this money to start grain trading and irrigation farming on rented land. I am still farming.

"The biggest change in my life is that I have peace and no anxiety for life. The main reason is because I am able to work and generate income. Peace means, this area is historically known for its beggary practices. People go up to Addis to beg and make money. Now this is changing. I am not going for begging. I have got the opportunity to work in my birth place. I have now a shop, small cafe, barber shop, scooter (bajaj) and grain store. I have constructed my own house. My bajaj is working in Mekele Town. My brother is responsible for managing it. I have adequate working capital. Our diet is good. We have started to consume vegetables. We are nearby a market. We can buy and consume a variety of food sources.

"I have totally paid back my loan. This money is circulating within our community." I am also supporting six people including my brothers, sisters and parents. For my parents I have bought a pair of oxen and seed for one time.

"I have 150,000 Birr cash saving at bank. In total my capital is about 500,000 Birr. This is seed money to continue my business more aggressively. My business will grow. I have adequate capital, and the skill and the know-how on business. I have started to use improved irrigation practices. Modernization is coming in my irrigation practice and life at home.

"I am a symbol for the success of the project. FAO's money is used for the betterment of our people. There are more people who need their supports. So this work should continue."
Hintalo Wujirat Woreda

From the above stories the following conclusions can be drawn.

- Most of the project beneficiaries were very poor, without adequate livelihood opportunities, and socially at a lower stratum.
- All the respondents obtained trainings on vocational and entrepreneurial skills which were highly essential for their successes.
- Savings from different sources including pocket money provided during the trainings were instrumental for the beneficiaries to enter and stay in business.
- The project was able to create local trainers for vocational training centres like the one located in Molale Town of Lalo Mama Woreda.
- Beneficiaries are enjoying social values they have in their communities due to the change in their income, asset wealth and skills.
- Most have reported improvement in their food consumption both in quantity and quality. Likewise they have either constructed or planed to construct new and improved houses.
- Parents are able to successfully support the education of their children.
- Respondents have also reported that their lives are without anxiety resulted from poverty and vulnerability.
- Young men were able to stretch their hands of support to their parents and young siblings.
- The entrepreneurs appreciate the support they obtained from BSF/ FAO. They also recommend the continuation of similar supports for their fellow community members.

5.1.3 Nutrition and Health Promotion

5.1.3.1 Access to health and nutrition services

The project intended to improve health and nutrition in the target communities. It specifically focused on maternal and child nutrition. To this end, various activities implemented include training, demonstration, school-based health and nutrition education, promotion of the use of micronutrient including iodized salt, construction of pit latrines, and safe drinking water supply.

A series of nutrition training was provided to health extension workers (HEW), voluntary community health workers and beneficiary women. Subjects addressed include appropriate infant and young child feeding, pre- and postnatal maternal care, and family planning. These trainings were complemented with demonstration of varied diet preparation from locally available food sources.

Discussions made in the community in both regions indicate that mothers have benefited much from the project interventions. Lactating and pregnant mothers have already started to practice appropriate child feeding practices. Colostrum feeding for infants, exclusive breast feeding for children under six months, and complementary feeding for children age of six months and above has widely improved in the project areas. According to woreda food security task forces and health professionals interviewed, the contribution of BFS FAO for these improvements is high. Wider scale community awareness creation activities were carried out through local radio in Tigray and health extension workers.

In addition, project beneficiary households were able to access more and diverse food through participating in different project interventions as well as increased income and food production. Specially, households participated in vegetable and livestock production, and other income generating activities noted improvement in their food intake both in terms of quantity and diversity.

5.1.3.2 School health and Nutrition Clubs

School health and nutrition clubs were organized in the project kebeles and given capacity building trainings, hand tools, vegetable seeds, water harvesting structures, drip irrigation equipment, treadle pumps, motor pumps and reference materials with the aim of promoting micronutrient rich food production. Nutrition education materials have been developed and distributed for use among students in grades 1-4. The school nutrition clubs have helped in creating awareness and knowledge on home gardening for the production of fruits and vegetables by children and parents. The school gardens in Tigray are now seen as a model centres for vegetable and fruit production.

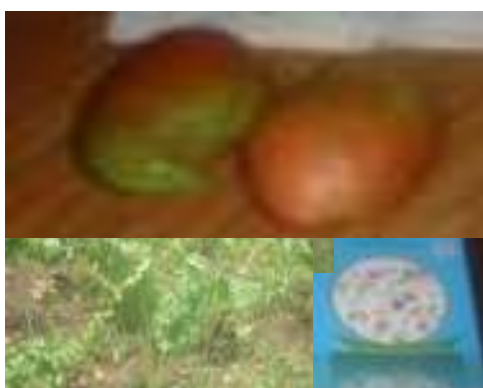


Figure 2: Fruits and vegetables produced at Hewan El. School

Hewane Elementary School is a living example. Hewane elementary school has been provided with water harvesting technologies, tools for gardening, seeds, training and education materials. The school is now producing variety of vegetables and fruits for local consumption. The garden is now a model not only for teaching purposes but also an example for surrounding communities. The school is getting sustainable means of income from the production.

5.1.3.3 Iodized salt distribution

Goiter is widespread in Ethiopia. Iodized salt is one of the most effective ways of increasing iodine consumption and reducing goiter. The project facilitated access to iodized salt to communities in Hintalo Wajirat and Enderta woredas which were widely known for iodine deficiency disorders. A series of awareness creation education events were organized. The project established a mechanism for the distribution of iodized salt through cooperatives and selected health centres at full cost including procurement price, operating expenses and profit margin for the cooperatives. The cooperatives, organized through BSF/FAO were provided with a loan to distribute the salt. The community as a whole buy the iodized salt with reasonable cost. In Enderta Woreda alone, according to the Woreda Health Office, over 70% of the community members have received the service. The qualitative data is confirmed by the results of the household survey that indicated 50.9 % and 77.5% of iodized salt utilization among Phase I and Phase II beneficiary households, respectively, at the time of this evaluation of Tigray.

In Tigray in general there has been a dramatic increase in iodized salt consumption (both in beneficiary and non beneficiary households). The achievement is the result of a broader effort by the public health authorities to promote iodized salt with the support of the BSF FAO project. . The use of iodized salt was initiated by the project as a result of 2007 exit phase baseline survey recommendation. The baseline survey revealed that Iodine deficiency disorder is one of the major public health problems that need to be addressed in the project areas, especially in Hintalo Wujirat of Tigray and Lalo Mama of Amhara.

Table 14: Percentage HH using iodized salt

| Items | Region | Phase I (2010) | | Phase II (2010) | | Phase II, (2007) | | Non-beneficiary | |
|---------------------------------|--------|----------------|------|-----------------|------|------------------|------|-----------------|------|
| | | N | % | N | % | N | % | N | % |
| Use of Iodized salt-Now | Tigray | 110 | 50.9 | 120 | 77.5 | - | - | 112 | 80.4 |
| Use of Iodized salt 5 years ago | Tigray | 109 | 4.6 | 120 | 6.7 | 188 | 22.3 | 111 | 9.9 |
| Use of Iodized salt-Now | Amhara | 113 | 8.0 | 111 | 1.8 | - | - | 112 | 2.7 |
| Use of Iodized salt 5 years ago | Amhara | 113 | 3.5 | 111 | 0.9 | 184 | 8.2 | 109 | 2.8 |

Like in Tigray, the use of iodized salt was very low (3.5%) five years ago in Amhara woredas. After five years of intervention by BSF FAO Project the practice is still very low in all three groups (Table 14). The % households reported to use iodized salt from the recall agree with 2007 baseline survey which were 22.3% in Tigray and 8.2% in Amhara. The consumption rates in North Showa are in fact not far from the national average of iodated salt usage which is 5 % both for urban and rural areas (National Nutrition Programme report 2010).

The improvement in iodized salt utilization in Tigray is a tremendous achievement. The selection of the implementing bodies and the distribution system devised are identified as the most important factors contributing to the achievement observed and hence this is one of the big lessons learned which should be scaled up in other areas.

According to the BSF FAO Phase II baseline report (2007), for instance in Menz Lalo and Menz Mama woredas total goiter rate of children (6-12 years) had >5% TGR which is considered as an indicative of a public health risk of adverse functional consequences. Moreover, based on the median urinary iodine level more than 67% of the population are under severe iodine deficiency (<2µg/dL). The project could have followed the same model used in Tigray to address the iodine deficiency in Amhara i.e. through the promotion of marketing and consumption of iodized salt. Therefore, the evaluation team considered this situation as a missed opportunity for enhancing health and nutritional wellbeing of the people in North Showa (Amhara).

5.1.3.4 Water supply, sanitation and hygiene

The project aimed to reduce water born diseases through expansion of water and sanitation facilities and improved practices. To realize this, a series of sanitation and hygiene trainings and extension education were provided for women and other community members in the project woredas. Access to potable water has been increased within communities where safe water was found to be a major health challenges. In the sample household survey of the IA, programme beneficiaries were asked about their drinking water sources currently and five years ago. The result of this data indicates that use of water from protected water sources such as tape water, caped springs and protected shallow wells has increased among BSF FAO Project beneficiaries (Table 15). This change is attributable to both BSF FAO and other programme interventions including the PSNP. Interestingly due to the project strategy and government policy with respect to rural water supply, the proportion of households reporting payment of water fees increased from about 30% to more than 55% over the last five years in Tigray but remain below 12% in Amhara. The situation in Tigray is found to be more sustainable as feelings of ownership have been created and cash resources are available for management and maintenance. Limited promotion on the part of woredas largely attributable to low user fee rates in Amhara.

Table 15: Percentage of households using protected drinking water sources and latrines

| Variables | Category | Region | Phase I (2010) | | Phase II (2010) | | Non-beneficiary | |
|--|--------------------|--------|----------------|------|-----------------|------|-----------------|------|
| | | | N | % | N. | % | N. | % |
| %HH use protected source of drinking water | Now | Tigray | 110 | 80.9 | 120 | 86.7 | 112 | 91.1 |
| | 5 yrs ago (recall) | Tigray | 110 | 44.5 | 120 | 55.0 | 112 | 46.4 |
| | Now | Amhara | 113 | 75.2 | 111 | 68.5 | 112 | 56.3 |
| | 5 yrs ago (recall) | Amhara | 113 | 46.9 | 111 | 44.1 | 112 | 43.8 |
| % HH pay water user's fee | Now | Tigray | 110 | 56.4 | 120 | 57.5 | 112 | 64.3 |
| | 5 yrs ago (recall) | Tigray | 110 | 30.0 | 120 | 30.8 | 112 | 28.6 |
| | Now | Amhara | 113 | 12.4 | 111 | 9.9 | 112 | 10.7 |
| | 5 yrs ago (recall) | Amhara | 113 | 8.0 | 111 | 7.2 | 112 | 12.5 |
| % HH use pit latrine, private | Now | Tigray | 105 | 79.1 | 120 | 75.8 | 112 | 77.7 |
| | 5 yrs ago (recall) | Tigray | 110 | 30.0 | 120 | 20.0 | 112 | 13.4 |
| | Now | Amhara | 113 | 85.8 | 111 | 82.0 | 112 | 50.9 |
| | 5 yrs ago (recall) | Amhara | 113 | 15.9 | 111 | 4.5 | 112 | 6.3 |

The project promoted production and distribution of slabs for latrine construction. Together with the effort of the government for universal coverage of sanitation through the health extension programme the project has made contributions to significantly increase latrine coverage in the project woredas. However persons interviewed indicated that the increasing cement price has negatively impacted on toilet slab supply. This suggests a need for addressing the situation through identifying alternative technological options and linking the slab producing cooperatives with the local cement factories and suppliers.

The improvement in safe water and toilet coverage and enhanced health practices has positively impacted on reduction of water born diseases. Woreda and community level discussions indicate diarrheal diseases among children have significantly reduced in the project woredas.

5.1.3.5 Breast Feeding Practice

Appropriate child feeding practice is one of the crucial elements in the prevention of micronutrient deficiency. Initiation of breastfeeding within one hour after birth, feeding whole colostrums, exclusive breastfeeding for six months, initiation of complementary feeding at six months and continuing breastfeeding up to two years are critical in child growth and development. Breastfeeding is a foundation practice for appropriate care and feeding of newborn infants. Improved breastfeeding in the neonatal period helps reduce mortality and benefit baby health, growth, and development in the first year and beyond. The result of household survey during this evaluation and in 2007 baseline survey showed universality (more than 97%) of breastfeeding among mothers in project areas. As observed from Table 16, all the mothers (100%) breast fed their children with slightly improvements noted against the 2007 baseline data.

Table 16: Breastfeeding practice among BSF FAO project beneficiary mothers

| Variables | | Region /Category | Phase I (2010) | | Phase II (2010) | | Non-beneficiary | | Phase II (2007) |
|--|--------|-------------------------------------|----------------|------|-----------------|------|-----------------|------|-----------------|
| | | | N | % | N | % | N | % | % |
| % ever breastfed children | | Tigray | 62 | 100 | 58 | 100 | 61 | 100 | 97.4 |
| | | Amhara | 56 | 100 | 52 | 100 | 44 | 100 | 100 |
| BF initiation within an hour after delivery | | Tigray | 60 | 63.3 | 58 | 44.8 | 60 | 50.0 | 35.6 |
| | | Amhara | 58 | 65.5 | 51 | 39.2 | 50 | 32.0 | 63.6 |
| Prelacteal feeding of other fluids during first three days | Tigray | None | 50 | 79.4 | 51 | 85.0 | 51 | 85.0 | 60.9 |
| | | Raw butter | 6 | 9.5 | 6 | 10.0 | 5 | 8.3 | 31.5 |
| | | Cow milk/honey or sugar water/water | 7 | 11.2 | 3 | 5.0 | 4 | 6.7 | 7.6 |
| | | Total | 63 | | 60 | | 60 | | |
| | Amhara | None | 31 | 54.4 | 15 | 28.8 | 16 | 32.0 | 34.8 |
| | | Raw butter | 17 | 29.8 | 23 | 44.2 | 20 | 40.0 | 49.6 |
| | | Cow milk/honey or sugar water/water | 9 | 15.9 | 14 | 26.9 | 14 | 28.0 | 15.3 |
| | | Total | 57 | | 52 | | 50 | | |

The comparison of baseline and final evaluation data on early initiation of breast feeding (within one hour) was not good enough to show improvement across all project areas. However, this indicator showed tangible improvement in the last five years in Tigray region. Although, there are widespread cultural taboos in North Showa that could have prevented appropriate breast feeding practices, the reasons for the decrease in early initiation of breastfeeding is not known yet from the data we collected. Therefore, this situation needs further investigation.

Colostrum is special breast milk that is secreted in the first 2–3 days after delivery. It is the most important food for the infant. It provides all the necessary tools for the infant to begin life. Particularly, it is known to contain antibodies and all nutrients needed for an infant (Baker *et al.*, 2006; WHO, 2009). However, when Phase II beneficiaries are compared across the regions, 15% of the mothers in Tigray and 71% mothers in Amhara are not feeding colostrums alone to their new born as recommended by WHO and instead give prelacteal foods. As in the case of early breast feeding initiation, the percent of households replied not to give prelacteal feeding in Tigray has increased (60.9 to 85%) and that of Amhara shown to decrease (34.8 to 28.8%). Prelacteal feeding is still practiced by majority of both beneficiaries and non-

beneficiaries in Amhara. The practice is less in Phase I (45.7%) than Phase II beneficiaries (71.1%) and non-beneficiaries (68%). This reveals that there is still a need for promotion of recommended child feeding practice in the area.

5.1.3.6 Household Dietary Diversity Score

The Household Dietary Diversity Score (HDDS) is a measure of the total number of different food groups eaten in the previous 24 hours by any household member at home, including food prepared at home but eaten outside, such as a snack. The tool inquired about 16 food groups which are then aggregated to twelve for analysis. The score is a simple sum of food groups consumed by any household member from the total of twelve (FAO 2007). In order to be comparable, data should be collected during the same time of year. In this case both the 2007 baseline and 2010 follow-up IA, households were surveyed during the hungry period (July-October), the months leading up to the main harvest.

Table 17: Household dietary diversity score (mean, CI at 95% and median)

| Regions | Phases | N | Mean \pm SE of mean | Min | Max | Median |
|---------------|---------------------------|------------|-----------------------------------|----------|-----------|----------|
| Tigray | <i>Phase II, 2007</i> | 191 | 4.28 \pm 0.07 | 2 | 7 | 4 |
| | <i>Phase I, 2010</i> | 110 | 5.49 \pm 0.14 | 1 | 9 | 5 |
| | <i>Phase II, 2010</i> | 120 | 5.56 \pm 0.15 | 1 | 10 | 6 |
| | <i>Both phases</i> | 230 | 5.53 \pm 0.10 | 1 | 10 | 5 |
| | <i>Non-beneficiary</i> | 112 | 5.8 \pm 0.15 | 2 | 11 | 6 |
| Amhara | <i>Phase II, 2007</i> | 196 | 3.82 \pm 0.06 | 2 | 6 | 4 |
| | <i>Phase I, 2010</i> | 113 | 6.16 \pm 0.15 | 3 | 9 | 6 |
| | <i>Phase II, 2010</i> | 111 | 5.75 \pm 0.13 | 2 | 10 | 6 |
| | <i>Both phases</i> | 224 | 5.95 \pm 0.10 | 2 | 10 | 6 |
| | <i>Non-beneficiary</i> | 112 | 5.1 \pm 0.10 | 1 | 8 | 5 |
| Total | <i>Phase II, 2007</i> | 387 | 4.05 \pm 0.05 | 2 | 7 | 4 |
| | <i>Phase I, 2010</i> | 223 | 5.83 \pm 0.10 | 1 | 9 | 6 |
| | <i>Phase II, 2010</i> | 231 | 5.65 \pm 0.10 | 1 | 10 | 6 |
| | <i>Both phases</i> | 454 | 5.74 \pm 0.07 | 1 | 10 | 6 |

Households were asked to report on which type of food groups they consumed over 24 hours prior to the interview time during the 2007 baseline and 2010 final evaluation surveys. The results of these responses are summarized and presented under Table 17 above. Based on this, the mean and median dietary diversity score for the households among the project beneficiaries has increased by two units from 4 (during the 2007 baseline) to 6 (at the time of this evaluation). The differences from baseline are statistically significant and this result is a good indication of improvement in access to food among the project beneficiaries. This improvement tends to be similar among Phase I and Phase II beneficiaries. It is also largely attributable to the improvement in income and increment in productivity and diversification of agricultural production due to promotion of income generating activities as well as the introduction of new crop varieties and expansion of irrigation by BSF FAO and other ongoing programmes.

5.1.3.7 Food Groups Consumed

As observed for most of the variables, however, beneficiaries show better consumption of some food groups than the non-beneficiaries, the difference is not significant. Cereals, legumes and spices, beverages (Tea and Coffee) and condiments are the three major food groups comprised the diet of the households (Table 18). Oil and fats, vegetables (not vitamin A rich) and sweets (sugar) are consumed by more than half of the beneficiary households.

Milk is consumed by more than 30 % of the HH while meat, egg and fish are the least consumed food groups. When compared with the baseline, the consumptions of the following food groups increased among beneficiaries: sweet; from 22% to 52%, milk; from 2%, to 26%, egg; from 0%, to 17.3%, vegetables, other than vitamin A rich; from 11%, to 67.5%, and Vitamin A rich vegetable; from 0%, to 41.6%,. The improvement is in a good agreement with both qualitative data from focus group discussion and quantitative data as well. A group of food containing spices, condiments and beverages seem to decrease may be due to sugar price inflation. In general vegetable and fruit consumption have improved in the last five years.

Table 18: Percentage of HHs consumed food groups

| | Food groups consumed by HH over 24 hr during the day and night before the survey day | Status of BSF FAO intervention | | | | | | Phase II, (2007) |
|----|--|--------------------------------|-------|-----------------|------|-------------------------|------|------------------|
| | | Phase I (2010) | | Phase II (2010) | | Non-beneficiary, (2010) | | |
| | | N | % | N | % | N | % | |
| 1 | Cereals | 223 | 100.0 | 230 | 99.6 | 223 | 99.6 | 100.0 |
| 2 | Vitamin A rich vegetables and tubers | 92 | 41.3 | 96 | 41.6 | 101 | 45.1 | 0.0 |
| 3 | White tubers and roots | 25 | 11.2 | 18 | 7.8 | 21 | 9.4 | 0.0 |
| 4 | Dark green leafy vegetables | 77 | 34.5 | 58 | 25.1 | 71 | 31.7 | 19.9 |
| 5 | Other vegetables | 143 | 64.1 | 156 | 67.5 | 143 | 63.8 | 11.0 |
| 6 | Vitamin A rich fruits | 6 | 2.7 | 4 | 1.7 | 3 | 1.3 | 0.0 |
| 7 | Other fruits | 38 | 17.0 | 36 | 15.6 | 41 | 18.3 | 15.7 |
| 8 | Organ meat /(iron rich) | 7 | 3.1 | 9 | 3.9 | 12 | 5.4 | 0.0 |
| 9 | Flesh meats | 16 | 7.2 | 21 | 9.1 | 19 | 8.5 | 2.7 |
| 10 | Eggs | 39 | 17.5 | 40 | 17.3 | 26 | 11.6 | 0.0 |
| 11 | Fish | 0 | 0.0 | 2 | .9 | 4 | 1.8 | 0.0 |
| 12 | Legumes, nuts and seeds | 215 | 96.4 | 211 | 91.3 | 194 | 86.6 | 97.5 |
| 13 | Milk and milk products | 73 | 32.7 | 60 | 26.0 | 30 | 13.4 | 2.0 |
| 14 | Oils and fats | 161 | 72.2 | 155 | 67.1 | 134 | 59.8 | 60.7 |
| 15 | Sweets | 121 | 54.3 | 122 | 52.8 | 140 | 62.5 | 22.1 |
| 16 | Red palm products | 11 | 4.9 | 5 | 2.2 | 4 | 1.8 | 0.0 |
| 17 | Spices, condiments & beverages | 207 | 92.8 | 217 | 93.9 | 199 | 88.8 | 98.2 |
| 18 | Meal outside home | 36 | 16.1 | 37 | 16.0 | 35 | 15.6 | Not recorded |
| 19 | Total number of HHs interviewed | 223 | | 231 | | 224 | | 387 |

5.1.3.8 Morbidity

Through the household survey, morbidity in under five children in 15 days prior to the survey was recorded. The distribution of illnesses, 15 days before the assessment, among the children has shown a general decline. For instance comparison of the 2007 baseline data and the results of this IA survey indicate a declined in child morbidity rate from 21% to 14% among Phase II beneficiary households (Table 19). This change shows a positive result of integrated intervention provided by the project as well the government. The qualitative information collected at household and community levels also show a similar result. According to the Head of Enderta district health office, 5 years back diarrhoea was the leading cause of morbidity and death in under-five children and now has dropped to 5th rank.

Table 19: Percentage of sick children in two weeks before the assessment

| Region | Phase I (2010) | | Phase II (2010) | | Non-beneficiary | | Phase II (2007) |
|--------|----------------|------|-----------------|------|-----------------|------|-----------------|
| | N | % | N | % | N | % | |
| Tigray | 110 | 16.4 | 120 | 12.5 | 112 | 14.3 | 21.3 |
| Amhara | 113 | 13.3 | 111 | 3.6 | 112 | 14.3 | 28.9 |

5.1.3.9 HIV and AIDS prevention and control

BSF FAO project has supported efforts on the prevention and mitigation of the impacts of HIV and AIDS as well as other communicable diseases in the project woredas. The interventions included organizing and creating economic opportunities for people living with HIV and AIDS (PLWHAs) and awareness promotion prevention and control of the pandemic.

PLWHAs were organized into cooperatives and engaged in iodized salt marketing and other income generating activities in Tigray woredas. This has helped the cooperative members to earn income. In addition, they have been linked with a salt supplying cooperative in Mekele to ensure sustained business.

The project along with Woreda Health Office has facilitated HEWs and voluntary community health workers trainings on community mobilization for mainstreaming HIV/AIDS (prevention and care and support) and gender in their regular activities. This has positively contributed to improve voluntary counselling and testing (VCT) seeking behaviour among the community members of reproductive age groups in North Showa.

Table 20: Percentage of HHs using preventive methods from HIV/AIDS & other venereal diseases

| Variables | Region | Phase I (2010) | | Phase II (2010) | | Non-beneficiary | |
|---|--------|----------------|------|-----------------|------|-----------------|------|
| | | N | % | N | % | N | % |
| Use of preventive methods for HIV/AIDS & other venereal diseases, now | Tigray | 110 | 51.8 | 120 | 60.0 | 112 | 58.9 |
| | Amhara | 113 | 93.8 | 111 | 91.9 | 112 | 89.3 |
| Use of preventive methods for HIV/AIDS & other venereal diseases, 5 yrs ago | Tigray | 109 | 28.4 | 120 | 29.2 | 111 | 30.6 |
| | Amhara | 113 | 43.4 | 110 | 34.5 | 109 | 45.0 |

The project also trained health extension workers in the target kebeles on prevention and control of HIV and AIDS. Some of the trained workers reported that the capacity building effort from BSF/FAO has helped them in educating community members on HIV and AIDS which is one of their regular activities.

As a result of this and the focus of the government on this pandemic, much behavioural improvement has been reported by the community with respect to the use of contraceptive methods, and prevention of sexually transmitted diseases (including HIV). The findings from the household survey indicated in Table 20 above suggest that prevention practices on HIV and AIDS as well other sexually transmitted diseases (STD) such as use of condoms, sex abstinence and limiting oneself to a single partner have improved dramatically among all survey respondent households over the last five year period.

5.1.3.10 Girls' Education

The girls' education intervention of BSF FAO project has been supported by a funding from Spanish and Catalonia. This intervention has a focus on girls' education in targeted schools (one elementary school per woreda). It provides tutorial supports for female students in grade one to four. They are also provided with snacks during their extra stay in the school. As part of the tutorial classes focused on their academic subject, the girls are also provided with nutrition education and home gardening. The program has tremendously improved the female students' academic record and decreased dropout and absenteeism, according to Mr Girmay of Enderta district education expert.

5.1.4 Agriculture and natural resource management

The agriculture and natural resource management component of the project intends to contribute to sustainable household food and nutrition security through improving crop and livestock production and productivity, rehabilitating the natural resource basis, and improving local government capacity to effectively reach out the community in extension service provisioning.

5.1.4.1 Crop production and productivity

Access to improved inputs and services for horticultural crops production: Horticultural crops offer significant value to human diet and contribute to the income of marginalized farm households. In the BSF FAO project target woredas, however, the contribution of horticultural crops to the diet and income of poor households had been minimal, despite the huge production potential. For instance, seven years back, the percentage of households growing potato was only 2.9% (2003 baseline survey). Among other reasons, lack of access to disease resistant and high yielding varieties and planting materials, poor agronomic practices, and limited knowledge and skills had prevented the expansion and productivity of horticultural crops.

Table 21: Access to technological inputs and adoption of good practices, % of households

| Component | Tigray | | | Amhara | | | Total | | |
|---|---------|----------|-----------------|---------|----------|-----------------|---------|----------|-----------------|
| | Phase I | Phase II | Non-beneficiary | Phase I | Phase II | Non-beneficiary | Phase I | Phase II | Non-beneficiary |
| N | 110 | 120 | 112 | 113 | 111 | 112 | 223 | 231 | 224 |
| Grown new crops (potato, apple, vegetables, etc.) | 31.8 | 21.7 | 19.6 | 36.3 | 40.5 | 35.7 | 34.1 | 30.7 | 27.7 |
| Used inorganic fertilizers | 74.6 | 71.7 | 64.3 | 77.9 | 66.7 | 46.4 | 76.3 | 69.3 | 55.4 |
| Used improved seeds | 34.6 | 24.2 | 21.4 | 38.9 | 46.9 | 25 | 36.8 | 35.1 | 23.2 |
| Used chemical insecticides | 6.4 | 2.5 | 5.4 | 4.4 | 8.1 | 2.7 | 5.4 | 5.2 | 4.1 |
| Used chemical herbicides | 11.82 | 6.7 | 8.9 | 8.9 | 8.1 | 0.9 | 10.3 | 7.4 | 4.9 |
| Applied IPM practices | 2.73 | 0 | 0.89 | 5.31 | 11.71 | 4.5 | 4.0 | 5.6 | 2.7 |

Realizing the immense potential that horticultural production offers to improving food security and nutrition, the BSF FAO project has been aggressively engaged in the promotion of vegetable, tuber and fruit crops production in the target areas. As depicted in Table 21 about one in three project beneficiary households (34% of phase I and 30% of phase II beneficiaries) in both regions have grown new horticultural crops in 2010 cropping season at the time of the impact assessment. This proportion is slightly higher among beneficiaries compared to comparison or non-beneficiary households. In Tigray, cultivation of horticultural crops is widespread among the beneficiary households compared to non-beneficiary households. In the Amhara region, however, the proportion of households reported having grown new horticultural crops such as potato were comparable between beneficiary and non-beneficiary households. This should not be surprising given the high divisible nature of the technology and dramatic effects potatoes have had on filling food gaps and generating the much needed income for beneficiary households within a short period of time.

Various seeds and seedlings such as carrot, potato, tomato, cabbage and highland fruits were supplied to the needy community in the operational woredas. The seeds/seedlings were provided through cooperatives to private and group based producers on a credit basis. The seeds and seedlings were brought from reliable sources including public research centres and private growers. Some of the improved crops like potato were introduced for the first time into the project areas of North Shewa. In addition, beneficiaries were given capacity building trainings on crop husbandry and marketing.

According to the respective Woreda Office of Agriculture and Rural Development (WOARD), the harvest from these crops was found encouraging in the project woredas. Based on a KII with Menz Gera WOARD, the harvest has satisfied local consumption need and contributed to vegetable market stabilization and even sold to neighbouring woredas. Over 220 tons of potato was harvested in 2009 alone from this woreda. Of this, the producers supplied 20 tons of potato seed to one of its neighbouring woredas. This shows that the local production has met local seed demand and gone beyond to contribute to food security in other woredas. The community level discussions indicate poor families have been benefiting in terms of dietary diversification and income generation. Currently many households are practicing potato growing as backyard agriculture on small plots both in rural areas and urban centres.

Despite this achievement, further expansion of horticulture is limited by post harvest management capacity, crop diseases and limited markets. Improving post harvest management capacities of farmers such as through storage facilities are important due to the perishable nature of vegetables and fruits. Though there were some efforts in some project woredas to improve farmers post harvest management skills such as in Menz Mama Woreda, there still remains much to do in this area. Market facilitation in view of matching production with market demand is vital so that producers benefit most out of the cultivation of horticultural crops. Hence, value chain analysis is required for potential horticultural crops to identify appropriate measures that ensure market integration. Attention needs to be given to diseases and pests affecting cabbage and potato production. In this respect, communities need to be acquainted with integrated pest management (IPM) practices that are technically sound, environmentally friendly and economically feasible strategies. Thus, creating strong linkages with agricultural research centres for the transfer of IMP technologies remains imperative.

Access to irrigated farming: The promotion of appropriate and efficient utilization of water resources for irrigation has been considered as one of the key priority intervention areas in the project woredas to address rainfall irregularity and recurrent drought. In an attempt to mitigate these effects, the BSF FAO project introduced motorized irrigation pumps to individual households; constructed small scale irrigation schemes for targeted communities; and promoted various water harvesting and conserving technologies. Development agents and beneficiaries were provided with capacity building trainings related to proper

management of irrigation water. Despite these efforts, however, the number of improved irrigation users in all the woredas remained low (Table 22). About 3% of the beneficiaries have owned and operated motorized irrigation pumps in both regions.

Although, the number of households who acquired motorized pumps as such was very small, it had made significant impacts on both owners and the community at large. Discussions at woreda and community levels indicate that households who have access to improved irrigation facilities and technologies not only increased their own agricultural production and productivity but have also derived a significant income through renting out pumps to fellow farmers at 40 ETB per hour. Households who owned motorized irrigation pumps, therefore, besides intensifying own household production through cultivation of the same piece of land three times per annum contributed to agricultural intensification and hence to improved agricultural production by providing services to fellow farmers. Also groups and individual users of the small-scale irrigation schemes constructed through the support of the project are able to generate sizeable harvest and income further signifying the role the project played to improving food security among the target beneficiaries. The impact of irrigation farming on improving food security and income of adopting households could be appreciated from the following case study.

Table 22: Use of Technological inputs and good practices by region and program participation, % of households

| Type of Practice adopted | Tigray | | | Amhara | | | Total | | |
|---------------------------|---------|----------|-----------------|---------|----------|-----------------|---------|----------|-----------------|
| | Phase I | Phase II | Non-beneficiary | Phase I | Phase II | Non-beneficiary | Phase I | Phase II | Non-beneficiary |
| N | 110 | 120 | 112 | 113 | 111 | 112 | 223 | 231 | 224 |
| Motorized irrigation pump | 2.7 | 3.3 | 0 | 2.7 | 1.8 | 0 | 2.7 | 2.6 | 0.0 |
| Pedal pump | 1.8 | 1.7 | 0.9 | 2.7 | 0.9 | 1.8 | 2.3 | 1.3 | 1.4 |
| Drip Irrigation | 1.8 | 0.8 | 0 | 5.3 | 0.9 | 0.9 | 3.6 | 0.8 | 0.5 |
| Improved plough share | 0 | 0 | 0 | 16.9 | 12.6 | 3.6 | 8.6 | 6.1 | 1.8 |

Case study – Motorized pump and livelihood: Story of a young small holder farmer

Bayiray Tesfaye is a young man of 28 years, married with one child in Hintalo Wujirat (Amida Woyane Tabia) of Tigray. Like many of his age mates, Bayiray is landless and used to derive his livelihood as a casual labourer. Upon the recommendations of the Food Security Task Force of his Kebele, Bayiray become a beneficiary of the BSF FAO project. In 2007 Bayiray took a loan from the Amida Woyane service cooperative (one of the cooperatives supported by the project through the provision of revolving fund) and acquired a motorized irrigation pump worth 4,500 ETB. Using his newly acquired motor pump and renting land from fellow farmers, Bayiray produced potato and onion in 2007. In that same year, he earned 17,000 ETB from the sale of potatoes and onions. Motivated by his achievements of the first year, Bayiray rented 2.5 ha of land and produced potatoes and onions in 2008. He earned 16, 000 ETB after paying for the land rent and other expenses. In subsequent years, Bayiray took additional loans from MART and intensified his agricultural production. He purchased one improved dairy cow that gives 13 litter of milk per day. He has repaid his loan. Bayiray owns a corrugated roofed house, a television set and other durable consumer goods. He has become a model farmer and awarded several medals from the woreda and the region for his exemplary deeds.

Despite this, there are outstanding concerns that need to be addressed to improve impacts and sustainability of the utilization of water resources for agricultural purposes. These include limited access to technologies by potential beneficiaries, defining water utilization by-laws between upstream and downstream groups, further improving community capacity for scheme/pump maintenance, and efficient utilization of the water resources.

Soil fertility management practices: Low and declining soil fertility has been identified by the community as one the major constraints contributing to low crop and livestock productivity. Hence, the promotion of improved soil fertility management practices have been considered vital for the envisaged improved crop and livestock productivity and hence the attainment of project objectives. Improved soil fertility management practices promoted by the project include the use of inorganic fertilizers, integrated soil fertility management practices that combine inorganic fertilizer use with animal manure and compost and promotion of crops such as legumes and trees that have conservational values. Of the promoted soil fertility management practices, inorganic fertilizer use has been found to be encouraging in both regions and among beneficiary and non-beneficiary households alike (Figure 3). Use of inorganic fertilizers, however, was slightly better among project beneficiaries.

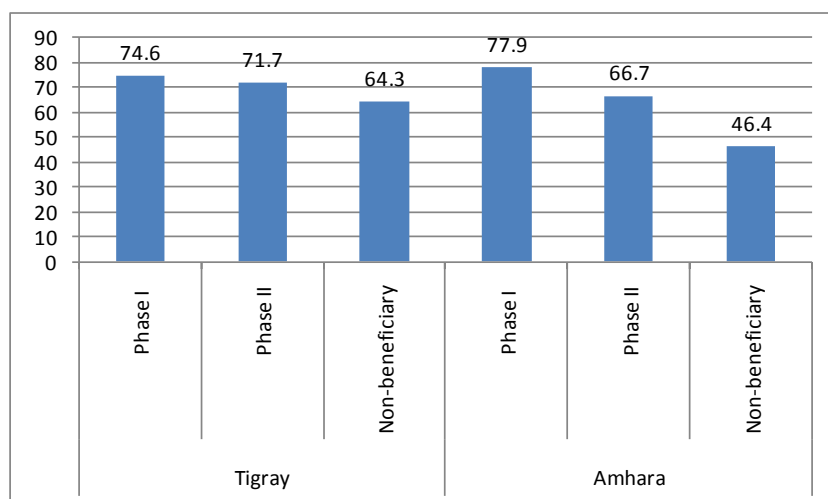


Figure 3: Percentage households currently applying organic fertilizer

5.1.4.2 Livestock production and productivity

The target areas are endowed with a huge number and diversity of livestock. And yet, the contribution of livestock to food security and income of households had remained marginal due to a host of interrelated factors. Among other, dependence on low yielding local livestock breeds, livestock diseases, poor quality and quantity of feed and limited access to improved livestock husbandry were identified as the major causes for the observed low livestock productivity in the target woreda. Low livestock productivity, therefore, was considered one of the challenges to be addressed by the project.

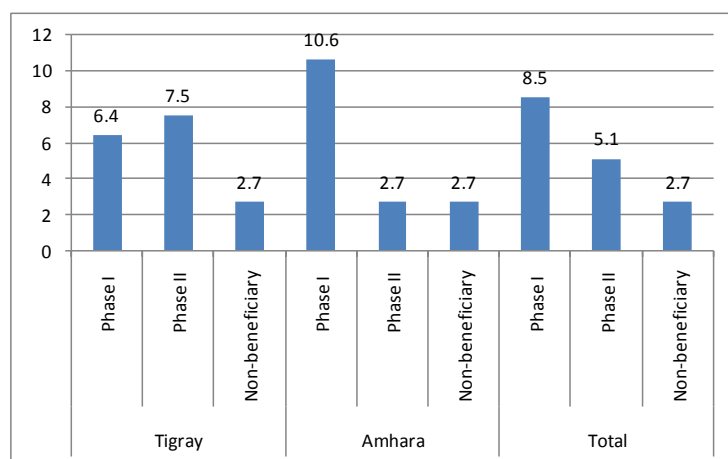


Figure 4: Percentage of households currently owning improved dairy cows

Project interventions in the livestock sector focused on innovative husbandry practices that consider the local potential and carrying capacity. These include dairy, small ruminant and poultry development. The project has achievements in promoting livestock development that contributed to improvements in household food and nutrition security in its operation areas.

Dairy development: The project has provided exotic and local breeds to individual beneficiaries and cooperatives to engage in

dairy farming. According to the findings of the 2007 baseline survey report, beneficiary households had no dairy cows five years ago. The proportion of households engaging in dairy production while improved is still however low: 8.5% of households for Phase I and 5.1% for Phase II (Figure 4) with adoption of dairy technology better among project beneficiaries than non-beneficiaries (2.7%). The BSF project along with WOARD has also provided dairy development trainings and milk handling equipment to the beneficiary groups in the form of loan. Artificial insemination (AI) services were also provided by the project to improve the productivity of the local breeds.

Households who obtained dairy cows through the project have benefited through accessing milk for their family consumption and income generation. Cooperative members in Entreat and other woredas who have been engaging in improved dairy husbandry through project support noted livelihood improvements as a result of access to nutritious food particularly for children drinking milk and through household income. The income thereof has helped them to buy food grain. The impact of dairy technology on adopting households is well illustrated by the following case study.

It is worth noting that discussions with communities revealed that households engaged in milk production in remote locations appears to have been better organized and formed cooperatives whereas households nearer to markets with high demand for milk preferred to operate individually. Milk producers in remote locations facing high transaction costs individually found it economical to organize into cooperatives thereby reduce transaction costs. Hence, better support should be offered to potential milk producers located far from major milk consumption centres. Moreover, regardless of the distance from market centres, cooperatives could be effective if they engage in value addition activities that enhance the utility and shelf-life of dairy products.

Small ruminants: Of the two project regions, the Amhara region is by far better positioned for small ruminant production. Realizing this, the BSF FAO project has dedicated a significant part of its resources for small ruminant production in its operational woredas in the Amhara region. The project made available improved and local goats and sheep to beneficiaries through cooperatives. The improved stocks were supplied from a government breeding centre and local market by selecting animals with good stand. Significant numbers of poor community members, youth and women are currently benefiting from small ruminant production. It has helped them to access food, cash to acquire grain and other productive inputs for farming. The following case study demonstrates the impact of engaging in small ruminant husbandry on household food security and income.

Case study – Small ruminant and livelihood: Story of a female headed household

W/ro Behan G/Hiwot is a 40 year old, female, leading a family of 8 members in Endirta woreda (Debri kushet) of the Tigray region in Ethiopia, consulted during the project impact assessment. She owned 5 timad (1.25 ha) of land. Though she owns land, like many of her neighbours in the village (kushet), she faced severe food shortages from May to October. She used to work as casual labourer and participate in the PSNP in an attempt to close the food gap. Even then, she recalled, life had been very difficult and her children were forced to quit school. In 2007. Upon the recommendation of the kebele food security task force, she became a beneficiary of the BSF FAO project. Upon consultations of the DAs in her Kebele, she decided to purchase 5 heads of sheep (four female and one male) worth 1,000 ETB. In a few years, the sheep reproduced and now she has 18 heads of animal. She sells a few heads every year to purchase agricultural inputs such as chemical fertilizers and improved seeds. Using the improved inputs she purchased through the sale of sheep, she is now able to use her land more productively. Food shortages have become the issue of the past. Like some of the well-to-do in her village, she enjoyed the New Year, X-mass and Ester holidays slaughtering sheep from her flock. All her children are now in school.

Poultry: Poultry production was promoted on individual beneficiary basis or through groups organized in the form of a cooperative. A poultry cooperative was organized and engaged in improved poultry production in Menz Gera woreda. The group was linked with Kombolcha and Mekele poultry multiplication centres to get chicken stock. Members were given necessary capacity building including trainings and tools such as an incubator and warming machine. The association is currently generating income through egg and chicken selling.

The group has faced shortages of power supply to properly carry out its functions. This has hampered the hatching process. Currently, the association is bringing day old chickens from the Kombolcha poultry multiplication centre. The government has promised to provide power but this has not happened so far. Thus strict follow up is required by the woreda council and the project in the remaining life time of the BSF FAO project.

In addition, individual beneficiaries have acquired egg laying type chickens in all woredas with the exception of Menz Mama. As noted in Table 23 below, project beneficiaries have had somewhat better access to improved poultry than non beneficiaries. Often, the poultry are obtained in the form of loan combined with small ruminant rearing and fattening. They are found to be a quick and regular income sources for beneficiary families.

Table 23: Adoption of Improved Livestock Technologies by sample households by region and program participation, % of households

| Item | Tigray | | | Amhara | | | Total | | |
|------------------------------------|---------|----------|-----------------|---------|----------|-----------------|---------|----------|-----------------|
| | Phase I | Phase II | Non-beneficiary | Phase I | Phase II | Non-beneficiary | Phase I | Phase II | Non-beneficiary |
| N | 110 | 120 | 112 | 113 | 111 | 112 | 223 | 231 | 224 |
| Improved forage and fodder species | 17.3 | 14.2 | 8 | 33.6 | 18.9 | 8.9 | 25.6 | 16.5 | 8.5 |
| Zero grazing | 23.6 | 18.3 | 11.6 | 23 | 12.6 | 8.9 | 23.3 | 15.6 | 10.3 |
| Dairy cow | 6.4 | 7.5 | 2.7 | 10.6 | 2.7 | 2.7 | 8.5 | 5.1 | 2.7 |
| Poultry | 12.7 | 14.2 | 12.5 | 11.5 | 8.1 | 1.8 | 23.3 | 15.6 | 10.3 |

Livestock feed: Improving livestock feeding systems is vital for a profitable and environmentally sound livestock production system. The project has introduced the production of backyard improved fodder trees and grasses. Also, cut and carry system was promoted for dairy and small ruminant production. Grazing sites were protected to allow indigenous grasses and shrubs to regenerate and thrive for cut-and-carry system. As depicted in Table 23, the adoption of both improved forage and zero grazing technologies is more pronounced among project beneficiaries compared to non-beneficiaries. In this regard, about 25.6% and 16.5% of Phase I and Phase II beneficiaries have started to grow improved forage and fodder species at the time of this evaluation. Similarly, about 23% and 16% of Phase I and Phase II beneficiaries adopted zero grazing. On the other hand only 10% and 8.5% of non-beneficiaries adopted zero grazing and improved forage production, respectively. This difference between beneficiary and non-beneficiary household is mainly attributable to BSF FAO efforts in facilitating provision of planting materials and trainings for DAs.

Case study – Multiple Technologies and livelihood: Story of a poor farmer who used to be a daily labourer

Priest Alemayehu W/Semayat is an old man of 65 years managing 8 family members some of whom are his grandchildren in Menz Gera district, North Shewa, Amhara Region. Priest Alemayehu W/Semayat and his family were leading a miserable life often going hungry and poorly clothed. He had an ox which was sold for purchasing grain for the family. Then after, he was forced to work as a daily labourer to feed his family at old age. Priest Alemayehu joined the project in 2003. In that same year,

he acquired 5 heads of sheep on credit through a revolving fund availed by the BSF FAO project. In subsequent years, Priest Alemayehu participated in other project activities including, horticulture (potato, leafy vegetables and apple), water harvesting, bee keeping and improved stove production. Alemayehu is now food secure. He has 40 heads of sheep, a pair of oxen, 3 local cows, 2 horses and 2 donkeys. He has constructed a 7 rooms iron roofed house at the woreda town. Some of these rooms are rented and others are used by his children attending high school.

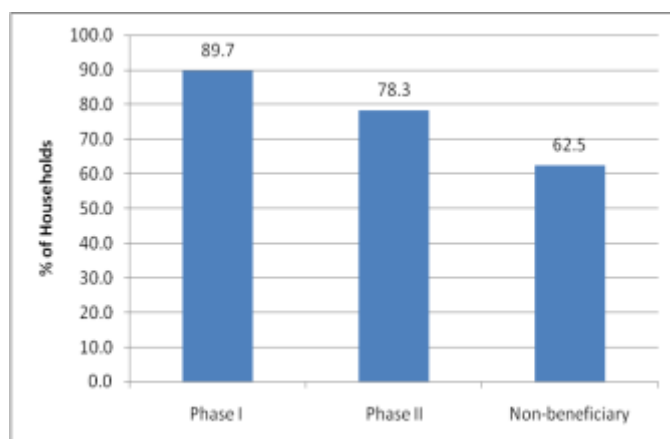


Figure 5: Percentage of households with access to vet. services

Demand for livestock feed greatly outstrips production in all target woredas. Recurring droughts and the long habit of open land grazing practice are key factors undermining pasture availability. Also, supplementary feeds are in short supply, and this needs due attention to ensure maximum impact from the livestock interventions.

Vet services: The project supported provision of vet services in targeted woredas. Selected community members were trained on community based animal health care (CBAHC) to provide vet service at community level. The project

facilitated the provision of vet materials, drugs and services. Figure 5, depicts the proportion of households accessing veterinary services, in the last 12 months prior to the study. Use of veterinary services, is quite common among the study sample. . Yet significantly more project beneficiaries accessed the services than non-beneficiaries. Despite the better access, however, the quality of the services is reported to be compromised by limited availability of drugs. This is particularly important with regard to the newly introduced exotic dairy breed and poultry that need close monitoring and intensive health care.

Market linkage: This is key element in market oriented livestock and crop production system. So far, training has been given to beneficiaries and woreda staff in market skills. However, more efforts need to be expended to ensure market integration so that a significant share of the income generated accrues to the livestock and vegetable producers.

5.1.4.3 Natural resource conservations

The depth and extent of natural resource degradation has been an overriding concern in the BSF FAO project woredas. There has been a multitude of interventions by government and non-government organizations (NGO) targeted at reversing natural resource degradation in the target areas. Most of the earlier interventions in the area of natural resources focused on the construction of physical soil conservation structures such as stone and soil bunds. The BSF project, unlike its predecessors, focused on demonstration of innovative approaches and practices that linked conservation with economic benefits such as fodder production, woodlots and beekeeping to ensure sustainability. The major activities in this regard include demonstration of improved soil and water conservation structures, woodlot plantations, area closure and the promotion of fuel efficient stoves.

The extent of adoption of soil and water conservation (SWC) practices by sample households is depicted in Table 24. In general, the use of biological and physical conservation measures tend to be high across the different groups of sample households. As indicated in this table,

the adoption these SWC practices is marginally high among project beneficiaries than with non-beneficiaries.

Table 24: Proportion of households using improved soil and water management practices

| Component | Tigray | | | Amhara | | | Total | | |
|---------------------|---------|----------|-----------------|---------|----------|-----------------|---------|----------|-----------------|
| | Phase I | Phase II | Non-beneficiary | Phase I | Phase II | Non-beneficiary | Phase I | Phase II | Non-beneficiary |
| N | 110 | 120 | 112 | 113 | 111 | 112 | 223 | 231 | 224 |
| Biological SWC | 74.6 | 80.8 | 76.8 | 74.3 | 91.0 | 62.5 | 74.4 | 85.7 | 69.6 |
| Physical SWC | 89.1 | 90.0 | 93.8 | 84.1 | 93.7 | 75.9 | 86.5 | 91.8 | 84.8 |
| Gully stabilization | 77.3 | 79.2 | 76.8 | 64.6 | 82.9 | 60.7 | 70.8 | 81.0 | 68.8 |
| Water harvesting | 65.5 | 70.8 | 70.5 | 36.3 | 53.2 | 51.8 | 50.7 | 62.3 | 61.2 |
| Area Closure | 49.1 | 48.3 | 55.4 | 26.6 | 46.9 | 35.7 | 37.7 | 47.6 | 45.5 |

During the exit phase the BSF FAO project has given due attention to the economic use of protected areas while major conservation works were handled through PSNP. The evaluation team has seen this as a best strategic choice of investment areas because already the lion share of PSNP resources are going to conservation of natural resources. Moreover, earlier watershed based conservation works of BSF FAO have continued to be a demonstration site for effective environmental rehabilitation initiative.

Woodlot: Four youth groups were organized and established woodlots in selected watershed in Menz Gera. BSF FAO has provided them with trainings, and seeds and seedlings with economic values (eucalyptus and fodder trees). Beneficiaries of this scheme are landless youth without adequate livelihood sources. Currently, each of them has planted up to 5000-6000 seedlings. This will bring significant income for the groups in 3-4 years. According to woreda food security task force (WFSTF) in Menz Mama and Menz Gera this project initiative has reduce delinquency and theft as these young people are getting employment opportunity and future hope for better income.

Area closure: Area closures were also delineated in specific micro-watersheds and linked with apiculture and cut-and-carry system for livestock feeding. Community discussions were carried out to ensure continuity of these protected areas. Often dairy and beekeeping associations are linked with area closure promoted either by the BSF FAO project or the PSNP so that user groups are involved to ensure sustainable land management.

Fuel efficient stove: Mostly women were organized in the form of cooperatives and engaged in fuel efficient stove production and marketing in three project woredas (Hintalo Wujirat, Menze Gera and Enderta). The BSF FAO project has provided the cooperatives with capacity building training and start-up capital including moulds and working capital. The cooperatives have produced and sold a significant number of stoves to the community members. According to discussions held with WOARDs, the technology has significantly contributed to better health for women and natural resources conservation. The improved stoves can save fuel wood consumption by over two-third compared to the traditional stoves. According to the results of the household survey that incorporated question on the type of stove households using for cooking purpose at the time of the interview and five years ago, significant proportion of community members is currently utilizing the stoves. In use of improved stove alone or in combination of traditional stove has increased from 5.5% to 15.4% in Phase II households and from 4.5% to 24.2% in Phase II households. Comparatively high rate of improved stove adoption was reported in Amhara. In Amhara

target woredas, use of improved stove alone or in combination with traditional stove showed increments from 12.8% to 90.2% and from 3.6% to 85.6% among Phase I and Phase II beneficiary households. The improvement in the use of improved stoves shows that there is a high demand for the technology. This result is not entirely attributable to BSF FAO efforts as other projects such with the support of GTZ. However, the project has made significant contributions for this achievement as it can be explained by higher rate of adoption of the technology among beneficiaries in comparison with non- beneficiaries, specifically in Amhara. The main challenge reported by the WFSTF of the different woredas is escalation of cement price in the market. The WOARD has made an intervention in Hintalo Wujirat to improve access to cement by the cooperatives directly from Mesobo Cement Factory in the nearby area.

Table 25: Percentage of HHs using improved stoves

| Region | BSF / FAO Status | % yrs ago | | | % yrs ago | | |
|--------|------------------|---------------|----------------------|-------|---------------|----------------------|-------|
| | | Improved only | Improved & Tradition | Total | Improved only | Improved & Tradition | Total |
| Tigray | Phase I | 4.5 | 0.9 | 5.4 | 4.5 | 10.9 | 15.4 |
| | Phase II | 6.3 | 3.3 | 9.6 | 7.5 | 16.7 | 24.2 |
| | Non-beneficiary | 2.7 | 1.8 | 4.5 | 8 | 18.8 | 26.8 |
| | Total | 3.5 | 2 | 5.5 | 6.7 | 15.5 | 22.2 |
| Amhara | Phase I | 9.3 | 3.5 | 12.8 | 28.3 | 61.9 | 90.2 |
| | Phase II | 2.7 | 0.9 | 3.6 | 14.4 | 71.2 | 85.6 |
| | Non-beneficiary | 6.3 | 1.8 | 8.1 | 8 | 26.8 | 34.8 |
| | Total | 6.1 | 2.1 | 8.2 | 17 | 53.3 | 70.3 |

5.1.4.4 Improving capacity of extension service

Table 26: Household access to agricultural and health extension services by region and program participation, % of households reporting access

| Service type and quality | Tigray | | | Amhara | | |
|--|---------|----------|-----------------|---------|----------|-----------------|
| | Phase I | Phase II | Non-beneficiary | Phase I | Phase II | Non-beneficiary |
| Accessed agricultural extension services this year | 100.0 | 97.5 | 95.5 | 97.3 | 98.2 | 85.7 |
| Quality of agricultural extension services this year compared with 5 years ago | | | | | | |
| Worse | 3.6 | 2.5 | 0.9 | 0.9 | 1.8 | 3.6 |
| The same | 1.8 | 2.5 | 3.6 | 1.8 | 1.8 | 10.7 |
| Better | 94.5 | 95.0 | 95.5 | 97.3 | 96.4 | 85.7 |
| Accessed health services this year | 100.0 | 99.2 | 97.3 | 99.1 | 100.0 | 92.9 |
| Quality of health services this year compared with 5 years ago | | | | | | |
| Worse | 3.6 | 1.7 | 6.3 | 0.0 | 0.0 | 0.0 |
| The same | 3.6 | 2.5 | 3.6 | 0.9 | | 12.5 |
| Better | 92.7 | 95.8 | 90.2 | 99.8 | 100.0 | 87.5 |

Improving the capacity of the extension service was considered key to enhance production and productivity of farming households. To this end, the BSF FAO project has provided a series of capacity building trainings to woreda experts and DAs, The capacity of Farmer Training Centres (FTCs) was also augmented through the provision of tools, equipment and facilities. At the same time, the project has provided various crop and livestock production

inputs and services to communities in the project woredas. As depicted in Table 25, this has increased both physical access and quality of services provided to households in the project operational woredas.

5.2 Project impacts

While the household survey documents showed a number of quantitative changes in the above indicators for beneficiaries, the degree to which the changes observed can be attributed to the BSF/FAO project is difficult to assess given the fact that a large number of other safety net and food security related interventions were going on during the same period in the same woredas. The assessment team has, however, come to the conclusion that the project has contributed to a range of impacts on the lives and livelihoods of target beneficiaries. It has also some spill-over effects in the diffusion of agriculture technologies, and health and nutrition practices to non-project households and areas. In general, these impacts can be viewed as follows:

- Empowering communities and local institutions
- Improving household income and asset ownership
- Enhancing household food security
- Improving health and nutritional status
- Promoting good policy and programme practices
- Addressing gender and social exclusion issues

5.2.1 Community Capacity and Empowerment

Voiceless groups (FHH, jobless youth, people with disability, PLWHA) were able to voice their concerns to the community and officials through their organizations formed with the support of BSF FAO project. This has created economic and social empowerment among the target group.

Community participation and local ownership over development processes has been enhanced due to the application of CAP process. The project beneficiaries are organized in cooperative and business groups. Through these community-based organizations people were able to participate in identifying their development needs and implement interventions both individually and in groups.

Different capacity building supports from BSF FAO have enhanced service giving capacity of institutions at woreda, kebele and community levels. Woreda experts received trainings from the project are providing better supports in facilitation of development process, provision of technical advises and preparation and proposal projects.

Due to a series of project supported capacity buildings for woreda and kebele staff, community participation in the local development process is improving. On top of this the involvement of different sector offices in the CAP process has improved the coordination, complementarily and shared learning practices among woreda offices. This has helped the offices to effectively address gender issues in project planning and implementation including targeting of jobless young females and FHH. It has also improved gender roles within the target communities particularly in engaging women in productive activities that enhanced the decision making at household level.

Likewise DAs and HEW have obtained new knowledge and skills in different areas including agricultural production, health and nutrition and community mobilization. These also provided an opportunity for these kebele level workers to provide services to the people regardless of their participation in BSF FAO. For instance community health workers (CHW) attended

community health and nutrition trainings directly by the project and HEWs trained by the project have started to promote healthy practices in their communities.

The project created CDF schemes managed by cooperatives. The CDF opened up a new rural financial services operated by the community. These cooperatives are promoting savings and provision of credits to their members. These activities in turn are helping people to expand agricultural production and income for beneficiaries through facilitating input and output markets and access to investment capital.

5.2.2 Household income and asset

Participants' income and asset ownership have increased due to the participation in on- and off-farm livelihood activities supported by BSF FAO. Households involved in business activities are able to generate income and this has helped them to create household assets and increase access to food.

As indicated above creation of household assets is an important dimension of the project impact. Although the IA survey made an attempt to collect a variety of asset data (livestock, farm tools and consumer durables, housing characteristics, etc), the results indicate that livestock assets including oxen and goat/sheep ownership are the most sensitive to measure change over time and between household categories. These two types of livestock were selected for this analyse due to the fact that most rural households are acquiring them to accumulate wealth.

The results of livestock ownership for different categories of households as indicated in Figure 6 and Figure 7 suggest that project beneficiaries are better off across time and in comparison with non-beneficiary households. Phase II beneficiaries in Tigray have improved their average oxen ownership from 0.28 in 2007 to 0.96 in 2010. Similarly in Amhara this group of households increased their oxen ownership from 0.61 to 1.43 during the time between 2007 and 2010. In both regions, Phase I beneficiaries have better oxen ownership: 1.09 in Tigray and 1.43 in Amhara. The non-project beneficiaries currently own low (0.81 in Tigray and 0.66 in Amhara) mean number oxen compared two groups the beneficiaries. The overall improvement in mean oxen ownership means not only increasing household assets but also improving performance in agriculture for the fact these households have improved access to traction power for cultivation of their farms. It also means timely accomplishment of farming activities to get better harvest and there by contribute to household food security.

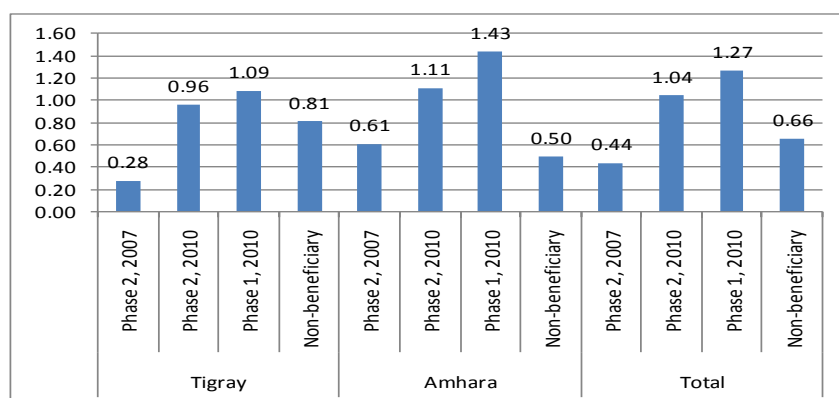


Figure 6: Mean number oxen owned per household

As shown in Figure 7 below, there has similarly been an improvement among BSF FAO beneficiary households in terms of goat and sheep ownership. In Tigray and Amhara regions goat/sheep ownership increased from 0.65 to 2.2 and from 3.02 to 10.39 among Phase II beneficiaries, respectively. Like the case of oxen currently project

beneficiaries have better ownership of goat/sheep then non-beneficiaries. Based on the IA survey (2010) currently, in Tigray, non-beneficiaries have 0.33 goat/sheep per household while Phase I and Phase II beneficiaries have 1.56 and 2.2 goats/sheep, respectively.

Similarly the data from Amhara indicate the current ownership of goat/sheep to be 3.20, 10.39 and 12.62 among non-beneficiaries, Phase I and Phase II beneficiaries respectively.

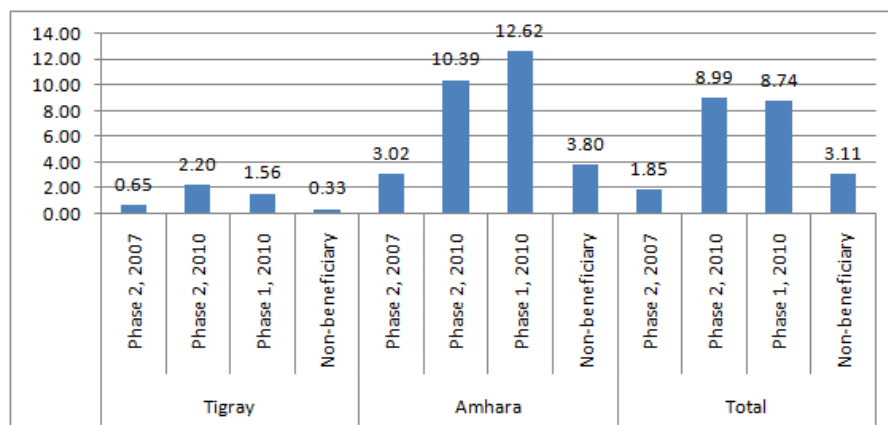


Figure 7: Mean number goat/sheep owned per household

These types of livestock are a key wealth accumulation strategy for poor households emerging out of poverty. They are also important sources of short maturing and regular sources of income for these people. They are sold to cover

households withstand shocks in times of crisis. Therefore, an increment in the ownership of goat/sheep is an improvement in access to income and food security for households. However, the grazing and browsing demand of these animals is also a cause for environmental stress unless they are properly reared and protected from excessively open grazing.

regular household expenses and to help

5.2.3 Enhanced Household food security

The project has contributed to the enhancement of food security through building capacity of marginalized households, provision of productive inputs and demonstration of improved agricultural and natural resource conservation practices. Table 26 shows the perception of respondents on the food security situation at household and kebele levels. In Tigray, 73% both Phase I and Phase II beneficiaries reported improvement in their food situations over the last five years. Likewise in Amhara 67% of Phase I and 75% of Phase II beneficiaries reported similar improvements in food security situations. This self reported improvement is a little lower, 68% in Tigray and 21% in Amhara, for non-beneficiaries.

Table 27: Household perception of the food security situation over the last five years, % of households

| Perceived Situation of Food Security | | Tigray | | | Amhara | | | Total | | |
|--------------------------------------|-----------------|---------|----------|-----------------|---------|----------|-----------------|---------|----------|-----------------|
| | | Phase I | Phase II | Non-beneficiary | Phase I | Phase II | Non-beneficiary | Phase I | Phase II | Non-beneficiary |
| N | | 110 | 120 | 112 | 113 | 111 | 112 | 223 | 231 | 224 |
| Kebele Level | Improved | 74.5 | 78.3 | 71.4 | 63.7 | 67.6 | 18.8 | 69.0 | 73.2 | 45.1 |
| | Stayed the same | 9.1 | 8.3 | 14.3 | 23.9 | 28.8 | 49.1 | 16.6 | 18.2 | 31.7 |
| | Worsened | 16.4 | 13.3 | 14.3 | 12.4 | 3.6 | 30.4 | 14.4 | 8.6 | 22.4 |
| | Not stated | 0 | 0 | 0 | 0 | 0 | 1.8 | 0.0 | 0.0 | 0.9 |
| Household Level | Improved | 72.7 | 73.3 | 67.9 | 67.3 | 74.8 | 20.5 | 70.0 | 74.0 | 44.2 |
| | Stayed the same | 10 | 13.3 | 15.2 | 19.5 | 18 | 31.3 | 14.8 | 15.6 | 23.3 |
| | Worsened | 17.3 | 13.3 | 17 | 13.3 | 7.2 | 45.5 | 15.3 | 10.4 | 31.3 |
| | Not stated | 0 | 0 | 0 | 0 | 0 | 2.7 | 0.0 | 0.0 | 1.4 |

The reasons for the improved food security situation are numerous (Table 27). According to the self-reported responses of sample households, project efforts including motivation of households (57%), the promotion of improved agricultural technologies (48%) such as vegetables and livestock production, and off-farm engagements (37%) have significantly contributed to improvements in food security. Besides, improving food security and income of beneficiary households, vegetable production has contributed to local food market stabilization through satisfying local consumption demand. Also, income from off-farm activities contributed to secure access to food for the chronically food insecure and jobless women and youth.

Table 28: Reasons for improvements in household food security situation, % of households reporting

| Reasons for Improvement | Tigray | | | Amhara | | | Total | | |
|----------------------------------|---------|----------|-----------------|---------|----------|-----------------|---------|----------|-----------------|
| | Phase I | Phase II | Non-beneficiary | Phase I | Phase II | Non-beneficiary | Phase I | Phase II | Non-beneficiary |
| N | 110 | 120 | 112 | 113 | 111 | 112 | 223 | 231 | 224 |
| Intensified own effort | 56.4 | 47.6 | 62.3 | 61.5 | 32.1 | 52.1 | 59.0 | 40.2 | 57.2 |
| Used improved agricultural tech. | 39.8 | 45.2 | 54.3 | 50.6 | 22.3 | 42.5 | 45.3 | 34.2 | 48.4 |
| Reduction of post-harvest losses | 40.1 | 17 | 32.7 | 31.6 | 21.4 | 28.6 | 35.8 | 19.1 | 30.7 |
| Involved in off-farm business | 28.9 | 31.8 | 36.8 | 34.6 | 19.6 | 30.4 | 31.8 | 25.9 | 33.6 |
| Improved infrastructure | 26.6 | 21.7 | 30.0 | 26.8 | 15.6 | 24.2 | 26.7 | 18.8 | 27.1 |
| Favourable climate | 22.7 | 16.1 | 19.7 | 26 | 11.6 | 19.2 | 24.4 | 13.9 | 19.5 |
| Other | 10.8 | 10.1 | 15.7 | 12.1 | 3.6 | 10.5 | 11.5 | 7.0 | 13.1 |

Table 29: Reasons for absence of improvement in households, % of HHs

| Region | Reason | Phase I | Phase II | Non-beneficiary | Total |
|--------|----------------------|---------|----------|-----------------|-------|
| Tigray | Unfavourable climate | 24.5 | 19.2 | 25.9 | 23.1 |
| | Own poor performance | 16.4 | 16.7 | 16.1 | 16.4 |
| | Lack of inputs | 2.7 | 0.8 | 2.7 | 2.0 |
| Amhara | Unfavourable climate | 16.8 | 6.3 | 50.0 | 24.4 |
| | Own poor performance | 3.5 | 0.9 | 33.0 | 12.5 |
| | Lack of inputs | 0.9 | 1.8 | 12.5 | 5.1 |
| Both | Unfavourable climate | 20.6 | 13.0 | 37.9 | 23.7 |
| | Own poor performance | 9.9 | 9.1 | 24.6 | 14.5 |
| | Lack of inputs | 1.8 | 1.3 | 7.6 | 3.5 |

On the other hand, further interrogation of the IA survey data revealed unfavourable climate and poor personal performance mentioned by 24% and 17% sample households as the reasons for absence of improvement in food security situation (Table 28). These indicate that at least about one in four households are being constrained by climate change to improve their food security situation despite personal efforts and external supports including BSF FAO. In general, the effect of climate change is relatively low (21% for Phase I and 13% for Phase II) among BSF Beneficiary households (39%) compared to non-beneficiaries. This suggests that the project contributed to the mitigation of the impact of climate change by building households resilience to shocks such as droughts. This can be further explained by the works of BSF FAO including:

- Expansion of off-farm engagement which has low chance to be affected by climate change,
- Application irrigation technologies (particularly potato and other vegetables) to overcome shortage and poor temporal distribution of precipitation, and
- Adoption of crops that withstand drought compared to the traditional varieties.

Climate change mitigation centred interventions should continue to be the top priority for the people in the project operational woredas to improve their food security situation.

We further asked the sample households the months they experienced food shortage in the past 12 months with the aim of understanding the level of food insecurity. The self-reported number of food shortage months reported under Table 29 indicates minor variation across the different sample groups. As noted in this table Phase I beneficiaries and non-beneficiaries in Tigray experienced 3.1 months of food shortage in the last 12 months. Phase II beneficiaries have faced 2.6 months of food shortage which is a little below the other two groups of households. Contrary to Tigray, in Amhara we have observed noticeable differences in mean number of food shortage months between project beneficiaries and non-beneficiaries. Beneficiaries have shorter duration of food gap (2 months) compared to non-beneficiaries (4.8) months.

Table 30: Mean number of months of food shortage per year and percentage of households experiencing no food shortage

| | | Mean Number of Food Shortage Months | % of households without food shortage |
|--------|-----------------|-------------------------------------|---------------------------------------|
| Tigray | Phase I | 3.1 | 28% |
| | Phase II | 2.6 | 40% |
| | Non-beneficiary | 3.1 | 23% |
| Amhara | Phase I | 1.9 | 62% |
| | Phase II | 2.0 | 56% |
| | Non-beneficiary | 4.8 | 4% |
| Total | Phase I | 2.5 | 45% |
| | Phase II | 2.4 | 48% |
| | Non-beneficiary | 3.9 | 13% |

When the same dataset is interrogated further in Tigray 28% of Phase I and 40% Phase II beneficiaries remained without food shortage all throughout the year. In Amhara about 62% and 56% of Phase I and phase II beneficiaries respectively reported to pass the last 12 months without experiencing a food shortage. For both regions the proportion of households without food gap is low among non-beneficiaries in both regions compared to the beneficiary households. In aggregate, from 45% to 48% of BSF FAO beneficiaries households at the project level did not face food any shortage in the last 12 months, while only 13% of non-beneficiaries experienced the same.

The interpretation of self reported improvement in food security situations and number of food shortage months per year indicates the existence of a general improvement in the food security situation among BFS FAO beneficiaries. However, households are still facing food shortages for a period ranging from 3 months in Tigray to 2 months in Amhara. The mean number of food shortage months and proportion of households facing is high among non-project beneficiaries. Finally, it is also important to note that the majority of these households who are experiencing food shortages are also receiving PSNP food/cash transfers for not less than six months a year.

In summary, the IA team concluded that the project positively contributed to households resilience to climate change induced shocks mainly drought. In particular, potato producers in North Showa and irrigation technology users in Tigray were able to withstand food shortages during the drought year of 2009/10. Others liquidated some of the asset, mainly small ruminants, created using the project to meet their food shortage during such crisis.

5.2.4 Improved Nutritional status

The impact assessment examined the contribution of BSF FAO to the improvement of nutritional status of children and women among project beneficiaries and non-beneficiaries. The following sections describe the outcome of the anthropometry survey results in comparison with the earlier baseline surveys conducted by the project.

Nutritional status of children

Protein Energy Malnutrition (PEM): a deficiency of protein, energy or both, can develop in young children due to shortage of food resources or when parents mistakenly provide food that lack adequate energy or protein. Children have high food energy needs for their size (per kg body weight). They also have higher protein requirements per calorie (or kJ). Therefore, they are more at risk of protein deficiency than adults (Whitney & Rolfes, 2008). Childhood illnesses also play an important role in the nutritional status of children.

The nutritional status of children (Table 30) is determined using the international reference as defined by the U.S. National Centre for Health Statistics (NCHS), recommended by WHO and the U.S Centres for Disease Control and Prevention (CDC). In the IA survey children that fall below -2 Z-score were considered as malnourished. In this assessment, the non-beneficiaries data which were supposed to reflect the contrast of beneficiaries fails to give plausible results for different reasons. Therefore, in this report only Phase II beneficiaries are compared with the 2007 baseline data. The assessment team is unable to associate the nutritional status of Phase I beneficiaries with other available data such as the 2004 baseline due methodological and targeting group differences⁷. The results of the anthropometric measurements of this IA survey as well as the 2004 and 2007 baseline surveys are summarized under Table 30.

Table 31: Nutritional status of children in the project operation areas

| Nutritional indices < -2Z score | Region | Phase I (2010) | | Phase II (2010) | | Phase II 2007 % | Non-beneficiary (2010) | | 2004 BLS % | Spanis h, 2008 % | DHS, 2005 % |
|---------------------------------|--------|----------------|------|-----------------|------|-----------------|------------------------|------|------------|------------------|-------------|
| | | N | % | N | % | | N | % | | | |
| Stunted | Tigray | 74 | 54.1 | 70 | 48.6 | 53.7 | 73 | 47.9 | 47.0 | 54.2 | 41.0 |
| | Amhara | 72 | 31.9 | 61 | 49.2 | 54.2 | 54 | 29.6 | 46.3 | 63.6 | 57.0 |
| Under-weight | Tigray | 79 | 45.6 | 70 | 30.0 | 39.8 | 73 | 32.9 | 43.1 | 45.8 | 41.9 |
| | Amhara | 72 | 33.3 | 61 | 31.1 | 40.2 | 54 | 27.8 | 43.6 | 47.7 | 48.9 |
| Wasted | Tigray | 74 | 20.3 | 70 | 8.6 | 4.7 | 73 | 11.0 | 11.7 | 15.3 | 11.6 |
| | Amhara | 72 | 15.3 | 61 | 8.2 | 10.6 | 54 | 20.4 | 9.9 | 15.9 | 14.2 |

Stunting (height for age) is a good indicator of past nutritional and health disorders that result in growth retardation in children. The causes of stunting are complex including genetic factors, intra-uterine growth retardation, delayed growth from multiple infectious diseases, or insufficient nutrition. Small size is an adaptation to these growth retardation factors. It cannot

⁷ The 2004 baseline was done at community level using 30X30 cluster sampling. This was done without making distinction between beneficiaries and non-beneficiaries or between most vulnerable and relatively stable households. Therefore this makes comparison of the existing anthropometry data with this baseline unjustifiable. However, for the sake of readers making their own comparison we have summarized the results of the 2004 baseline under the above table.

be equated with malnutrition (Truswell, 2003). But it has little use for program monitoring, as height progresses slowly in humans (Mouray, 2008). The prevalence of stunting among Phase II beneficiaries in this assessment is found to be 48.6% and 49.2% in Tigray and Amhara respectively. When compared with 2007 baseline (nearly 54% for both regions) the prevalence of stunting has improved by about 5 percentage points.

Underweight (Weight-for-age) is a good basic indicator that combines ponderal and statural growth and is useful in the monitoring of program performance although it is sensitive to slight variations, e.g. weight changes, (Mouray A., 2008). Both stunted and wasted children do not weigh as much normal children of the same age. Weight-for-age is thus a composite index, which reflects both wasting and stunting, or any combination of both. In practice about 80% of the variation in weigh-for-age is related to stunting and so do about 20% to wasting (Smart, 2005). The prevalence of underweight has shown reduction in both regions from 40% in 2007 to 30% in 2010.

Weight-for-height (Wasting) is a good indicator of weight loss due to recent inadequate food intake or infection or both, regardless of age. However, weight is influenced by variables that may alter the interpretation of results. Weight is not always accurately measured and it requires that two measurements be accurately recorded, which is not easy (Mouray A., 2008). In this assessment prevalence of wasting has doubled in Tigray and improved by two units in Amhara when compared with the 2007 baseline data. This result indicates the latest nutritional problem in the study households may be resulted from household food shortages associated with the previous year drought.

In spite of increases in the price of food and other consumption items in the past years in the world in general and in the study area in particular (IFPRI, 2009) and localised loss of harvest to droughts, the improvement in nutritional status of children is of great achievement. In addition, one can appreciate the result as the target groups were socioeconomically the most marginalized segment of the community when they came into the project.

The result from child anthropometry is consistent with HDDS and other qualitative data. Apart from this, the focus group discussions made among beneficiaries, non – beneficiaries, elders and implementing bodies also show the impact of the project not only among beneficiaries but also in non-beneficiaries in creating nutrition and health awareness.

Nutritional status of women

The nutritional status of reproductive age group women in the project areas and non-beneficiaries were calculated using Body Mass Index (BMI). BMI is an indicator of the nutritional status of adults reflecting chronic energy deficiency (Shetty and James, 1994). In this study, a BMI < 18.5 for non pregnant, non lactating women 15-49 years was categorized as underweight or chronic energy deficient. If a household contained more than one eligible woman, a random selection was made for measurement. Households without eligible women were not excluded from the overall sample.

Table 32: BMI, Percentage of thin reproductive age women

| Region | Phase I (2010) | | Phase II (2010) | | Non-beneficiary | | Phase II (2007) |
|--------|-------------------|------|--------------------|------|-----------------|------|--------------------|
| | N | % | N | % | N | % | |
| Tigray | 92 | 35.9 | 97 | 25.8 | 90 | 32.2 | 24.7 |
| Amhara | 103 | 22.3 | 102 | 7.8 | 102 | 11.8 | 31.7 |

Over the 2007 baseline and 2010 evaluation intervals there was only a slight improvement in chronic energy deficiency (BMI<18.5) among reproductive age women in the project operational woredas. The prevalence of thinness has greatly improved from the 2007 baseline in Amhara among Phase II beneficiaries. However, there seems to remain the same in Tigray. Since BMI is largely an indication of acute malnutrition it can show major variation within short period of time if there are factors that affect health and nutritional wellbeing of adult women.

5.2.5 Policy and programme related good practice

The project has organized poor people with disabilities and affected by HIV and AIDS to overcome their social and economic problems. Most of these people reported to be direct support participants of PSNP as the only source of support outside of begging. This experience has proved that direct support beneficiaries of PSNP can be capacitated to fill their food gaps and graduate from PSNP if access to economic resources and means are ensured.

The involvement of woreda youth, sports and social affairs offices in the implementation of BSF FAO project in support of the people with disabilities created institutional linkages for handling social protection issues traditionally managed by the agricultural sector through PSNP.

BSF FAO project has complemented the PSNP and this has positively contributed to graduation from chronic food insecurity. As stated by the woreda food security task forces BSF FAO beneficiaries are and will be the first to graduate from the PSNP. This is mainly because most of the beneficiaries showed their potential to build household assets that will help them to produce food or income to buy food and withstand modest shocks.

The project contributed to the preparation of household asset building package menu in Amhara region. Particularly the small ruminant production promoted by the BSF FAO project was cited as a best practice in the regional household asset building programme guidelines.

Girls' educational support which included tutorials and snacks have shown significant value in promoting performance and participation of girls in primary schools. Woredas have continued to support tutorials and have expanded to other non-BSF FAO kebeles. However lack of budget for snacks will definitely affect the results.

5.2.6 Targeting, gender and social inclusion issues

More than 50% of project beneficiaries, in most places, are women. The evaluation results indicate that the project has positively contributed to gender equality in the following ways:

- Community perception has significantly improved;
- Women are increasingly involved in roles that were traditionally labelled as men's roles (E.g. women are involving in drip irrigation);
- Women have diversified their sources of earning and have been able to increase their income and decision making on household resources;
- The educational performance of girls has improved and dropout has reduced in project pilot schools;
- Woreda women's affairs offices are able to perform better in providing economic opportunities for women and to promote gender awareness at woreda, kebele and community levels due to the capacity building provided to them by the BSF FAO.

Jobless and desperate youths and disabled people were able to be organized and engaged in productive activities to support their livelihoods. The project has proved that these social categories can be turned into productive and disciplined citizens. Amongst other positive benefits, delinquencies such as forest destruction, theft, physical attack and robbery were reduced due to attitudinal change and engagement of youths in productive activities.

5.3 Sustainability of the Project Outcomes and Impacts

- Community participation in development processes has contributed to enhanced local ownership of the project services and benefits. These have been the basis for sustainability of micro-projects supported by the BSF FAO.
- Local government capacity to deliver services has been improved through trainings and material provisions. Woreda offices have demonstrated capacity and initiative to sustain their extension supports to BSF FAO project initiatives.
- Most beneficiaries were very poor and had no adequate livelihood opportunities before they participated in the BSF FAO project. So they are very committed to build on the project benefits they are actually or potential enjoying.
- Financial service giving capacity of cooperatives is enhanced by the project. The project has put in place revolving funds with the aim to ensure sustainable rural financial services. Mature credit recollection to reach more community members is improving over time. However, a lot needs to be done by the target woredas in loan collection and re-disbursement by providing incentives to beneficiaries, cooperative leaders and making them accountable.
- In some cases market linkage initiatives scored good results. For example, iodized salt distribution, as well as milk and vegetable production are being linked with input and output markets. However, further value chain based intervention is required for product development and market linkages of potential crop and livestock products.
- Technologies promoted were simple to be managed by the beneficiaries. In most cases the technologies (e.g. potato) are divisible to propagate within and across communities.

6. Strengths, limitations and challenges

The BSF FAO project demonstrated strengths while at the same time facing constraints and challenges.

Strengths:

- The BSF/FAO project has had its own full time staffs at PMU and woreda level making close follow up on the project implementation. Other sectors at woreda level have been closely involved in the projects overall implementation processes.
- The project planning process was community based and participatory, and focussed on local needs.
- Targeting of beneficiaries was participatory and involved community members and administrative entities at kebele and sub-kebele levels.
- Greater proportion (80%) beneficiaries of BSF FAO beneficiaries were PSNP participants, at the time of this IA. This programme overlap is in line with the national FSP graduation model to reduce the number households affected by chronic food insecurity.

Limitations and Challenges:

- Scaling up of best practices to national level was not considered as element of the project logic at the design stage.
- Coverage of the project was reported too limited compared the scale of food insecurity and malnutrition in the target areas.
- Tranche fund release (30%, 50%, and 20%) was not convenient for some activities such as credit disbursement.
- Lengthy approval processes for LoAs and disbursements of funds contributed to a slow paced implementation of the project. Particularly the delay in fund disbursement from WOFED to cooperatives was the most important one to mention in this regard.
- Loan recollection rate from beneficiaries is reported to be low compared to existing different standards in the country. There are cases that beneficiaries with the capacity to repay their debt remained silent since they were not strongly asked by the concerned bodies. This is one of the challenges to reach out more beneficiaries with the revolving fund mechanism established by the project.
- Regions and zones have played a limited role in the project. Obviously woredas have got more autonomy due to the decentralization policy of the country. However, the entities at regional and zonal levels are still responsible to coordinate, monitor and provide technical supports to woredas on the different development and humanitarian programmes. However, these entities frequently reported weak linkages between the PMU and them as one of the challenges. This has caused misunderstandings with respect to the project efforts, limiting the sharing of the experiences to other areas by concerned bodies at regional and zonal levels.
- Rapid staff turnover, repeated restructuring of woreda offices, and frequent change of PMU staff had been challenges on the performance of BSF FAO project.
- Climatic shocks such as recurring droughts and untimely rainfall are the key challenges for the community in sustaining project promoted agricultural interventions.

7. Conclusions and Recommendations

7.1 Conclusions

1. The BSF FAO project followed a multi-stakeholder and multi-sectoral approach for addressing food security and nutritional challenges among very poor and vulnerable groups. The results of this IA indicate positive and effective contributions of the project in addressing food insecurity and malnutrition using such an approach.
2. The project logic is relevant to the context of the project operational areas, government strategies and MDGs. In this regard the second phase of the project showed major improvement compared to the first phase. However, the formulation of project objectives and indicators (Phase II) lack standardization and clarity to ensure a proper understanding and application by key stakeholders in the course implementation, monitoring and evaluation.
3. Most of the interventions positively impacted or have potential to have impact on the beneficiary lives and livelihoods. However, given the widespread poverty and food insecurity, the scale of the project could reach limited size of communities and beneficiaries.
4. The project interventions together with other ongoing programmes such as the PSNP, health extension services, and agricultural extension services have positively contributed to the improvement in food security among disadvantaged and most vulnerable segments of the targeted communities. It created and expanded local service provision capacity in the areas of rural financial, agricultural extension, health care, and social protection services for the poor.
5. Community based micro-project preparation using the CAP process was empowering. This approach has contributed to the sustainability of project interventions. In the CAP cycle, the participation of community members in the identification and implementation of micro-projects was found to be strong. However, as the implementation progresses, the role of community members in M&E was seen to reduce. This is mainly due to lack of a clear guidance on M&E within community action plans.
6. The soft loan arrangement including low interest rate, absence of rules on minimum size of loan and no requirement for collateral makes the credit service attractive to the target groups which are very poor and vulnerable.
7. In general, project grants provided to the community in the form of revolving fund as a source of credit for entrepreneurs is operating well. However, there is lack of aggressive action for recollection of matured loans by the community, cooperatives, woredas/ kebele officials. This has a greater potential for the disruption in the sustainability of revolving fund scheme.
8. The project contributed to the attainment of the objective of national food security programme through enhancing household asset building, income and food production. Particularly, it contributed to the graduation of some PSNP beneficiaries from chronic food insecurity.
9. The dietary diversity of the beneficiaries has shown some improvement at least in part due to intensive trainings and improvement in agricultural production and income opportunities supported through BSF/FAO.
10. Breast feeding practices, as well as iodine and vegetable consumption have improved among project beneficiaries due to the relentless efforts of implementers and awareness creation provided. However, there is still widespread sub-optimal breast feeding practice in North Showa.
11. There is a general improvement in the nutrition status of community members as measured by child anthropometry over the last five years. However, the findings of

the IA survey revealed that there is still high level of malnutrition in the project communities as compared to the national average. No discernable impact of the BSF/FAO project is observed on anthropometric measures of malnutrition⁸.

12. The project approach in tackling health and nutritional problems of the target communities through school nutrition and health clubs is an encouraging practice to create nutritionally well aware citizens of tomorrow.
13. The project promoted new agricultural technologies and model natural resource management practices. These model interventions have helped woredas to learn from and expand to other kebeles.

7.2 Recommendations

The project has created model approaches in nutrition, household income and asset building, as well as agriculture and natural resources management. These achievements should not only be limited to the current geographic boundaries and beneficiaries. Therefore, the IA team has organized its recommendations in two categories:

- Wrapping-up current BSF FAO project
- Way forward beyond BSF FAO project

The following sections describe the detail recommendations under these categories.

7.2.1 Wrapping-up current BSF FAO project

Both the qualitative and quantitative findings inform the positive contributions of BSF FAO to the enhancement of food and nutritional security among the target beneficiaries. There is also a spill-over effect of the project interventions to improve the wellbeing of non-beneficiaries. In order these benefits are sustained and the project exit is smooth, the IA team recommends the following to happen in the remaining months of the project:

1. Conduct an inventory of the status of CDF being managed by cooperatives and business groups, and provide the results to woreda administrations for their follow-up. The inventory may include but not limited to the following: loan status by beneficiary and cooperative, financial and legal status of cooperatives, and constraints and solutions for loan collection and re-disbursement.
2. Loan capital shortage to meet credit demands of the community is common in many of the places. For these the project initiative in mobilizing local savings through rural saving and credit cooperatives and effective recollection of matured loans remains vital. To this end, cooperatives managing such funds from BSF FAO should be fully encouraged and made accountable. There should be a formal and revised agreement between woreda finance office and cooperatives in promoting loan repayment and collection.
3. Finalize the legalization of cooperatives and business groups and ensure linkages with other financial and extension service providers. This may include facilitating basic cooperatives to be members of existing cooperative unions.
4. Provide a refresher or introductory trainings on project approaches so that woreda staff updated their knowledge on CAP, gender and CDF management.
5. Organize the project guidelines and manuals on CAP, gender and CDF management as a pack and hand over them to the relevant federal, regional and woreda level institutions so these reference materials are considered as government resources and applied for different development purposes.

⁸ Although malnutrition rates drop amongst the 2007 BSF FAO beneficiary cohort between 2007 and 2010.

7.2.2 Way forward beyond BSF FAO project

In general, given the depth of poverty and vulnerability in rural Ethiopia there is still a need to implement multi-sectorial projects and programmes that integrate both food security and nutrition. The IA team further recommends the following the implementation such projects with technical and financial supports from FAO and other donors including the Belgium Government:

1. Future project designs should incorporate appropriate formulation of hierarchical objectives and indicators. Objective statements and indicators should be evaluated against acceptable principles such as SMART for objectives.
2. Preparation of a separate monitoring and evaluation plan (guide), other than the design document and LFA, is recommended to guide project M&E operations at different levels.
3. For future similar interventions with limited resources and coverage of beneficiaries, designing and implementing scaling up strategy remains vital to widen the scope of the impact. The scaling-up action should be considered as one of the immediate objectives to ensure resource allocation and stakeholders commitment.
4. Market development interventions should be clearly defined based on a comprehensive value chain assessment of potential products for similar projects in the future.
5. The study findings suggest that climate change is the major phenomenon compromising development interventions and peoples' efforts to ensure food security. Therefore, future interventions should be deliberately calibrated to mitigate the impact of climate change on food security through building households' resilience and promoting potential technologies and strategies.
6. Adoption of appropriate nutritional practices for improved nutritional status among children and women require sustained and longer-term efforts. Therefore, more has to be done to break cultural taboos and resistances to appropriate feeding practices of infants and young children. Particularly such interventions are imperative in the North Showa areas.

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Annexes

Annex 1: Qualitative assessment tools

I. Checklist list for beneficiary FGD

Note

Two focus group discussions will be conducted per woreda. The first group will be organized from Phase I beneficiaries and the second group from Phase II beneficiaries.

Background

1. Tell us about your community. What are problems that you face here?
2. What are the factors within the community that reduce household access to food and child well-being?
3. What types of changes have happened in your community in the last 10 years?
(consider using timeline)
 - a. Probe for negative and positive changes
4. What types of factors do you think are driving these changes?
 - a. Probe for how the community's self-help groups, leaders, government, and/or external factors have been responsible for negative and positive changes.
5. What organizations (governmental, non-governmental, community-based organizations) are working in your community?
 - a. Probe for the contributions of each organization
6. Tell us how you (the beneficiary of the BSF project) first become involved in the project? (probe further about targeting criteria and effectiveness)

I. Component 1, Community Empowerment

The Community Score Card is a monitoring and evaluation approach that enables beneficiary community members to assess service providers and to rate their services/performance using a grading system in the form of scores. It reveals some of the knowledge gaps of the community members themselves too so that strategies would be found to fill those gaps. The CSC will be applied in the IA of BSF project with the aim to measure and describe the change in the quality of key services affected by the project. The following steps will be applied in assessing the performance of BSF affected services.

1. Identify maximum of two service providers that are most important to the informants and supported by BSF through discussion with the community members.
2. Discuss what roles these service providers have in the livelihood (health, education, food security and nutrition) or the respondents.
3. Follow the following steps in measuring the performance of each community identified services.
 - 3.1 Ask community members to list indicators to explain the performance and community satisfaction on the service under consideration. Make a consensus with the participants to choose most important five performance indicators from the list.

- 3.2 Prepare a matrix of indicators and performance scores on a flip chart. Lay the flip chart in the middle of the participant seating round. The format can be prepared in advance of this meeting leaving space for indicators to be filled during the discussion.
- 3.3 Facilitate community members to provide score for each indicator that measures the current performance or satisfaction level of the community. In this regard each of the community members will be provided with one piece of bean seed per indicator. Ask each of participants to put the bean seeds at hand under appropriate score (good, average or poor) for each indicator. Please apply the matrix indicated below as illustration.
- 3.4 Calculate the total score as follows and record the result on the flip chart:
 - Total score = $[3 \times (\text{good cases}) + 2 \times (\text{average cases}) + 1 \times (\text{poor cases})] / \text{number of participants provided the scores}$
 - Total scores can be interpreted as follows
 - < 1.5 = poor
 - $1.51 - 2.5$ = average
 - > 2.51 = good
- 3.5 Repeat step 3.3 and 3.4 for the situation of the service five year back. If the service was not available put 0.
4. Hold discussion with the community FGD participants to give you some insights on the trends in the quality of service and the role of BSF project.
 - 4.1 Ask participants to explain reasons for poor or good current performance of the service in relation with each indicator.
 - 4.2 Probe further using the following questions?
 - 4.2.1 Why the quality service has been improved or worsened over the last five years vis-a-vis the each indicator?
 - 4.2.2 Are you aware of the involvements of BSF project in the changes in the quality of service? What were the involvements of BSF?
 - 4.2.3 What were the roles and responsibilities (participation) of men and women in this community in the change in the service quality over time?
 - 4.2.4 Probe what needs to be done to improve or sustain the improvement of the service.
- 5 Community participation
 - 5.1 How is the community participation in developing and implementing local development? Probe participation of community-based organization, women, men and children in local development issues?
 - 5.2 What has been changed in the community decision making in local development issues in the last five years?
 - 5.3 What were the roles of BSF project in promoting participation of women and men in local development agendas?

Woreda: _____ Date: _____

Kebele: _____ Gott: _____

Name and type of service: _____

| Indicator | Scores, now | | | | Scores, five years before | | | | Reasons for current poor or good status | Reason for the difference in the score |
|-----------------------------------|-------------|---------|------|-------|---------------------------|---------|------|-------|---|--|
| | Good | Average | Poor | Total | Good | Average | Poor | Total | | |
| Water smell | | | | | | | | | | |
| Presence of impurities | | | | | | | | | | |
| Presence of disease | | | | | | | | | | |
| No of people in community | | | | | | | | | | |
| Period of water existence | | | | | | | | | | |
| No. of latrine facility available | | | | | | | | | | |

Name of facilitator: _____

II. Component 2, Rural Micro-enterprises

1. What are the micro-enterprises you have been engaged in as a result of BSF support? What about before BSF started operations in your community?
2. What supports have been provided by the project to establish and operate the enterprises?
3. What has changed since the BSF programme began in terms of livelihoods? (e.g. *food security, educational enrolment, health status of women and children, income, housing conditions, social position*)
4. How much change has occurred since the programme began? (Number of food shortage months; proportion of beneficiaries with adequate food access throughout the year; wealth/asset status; social position in the community). *Please collect these information before and after BSF?*
5. Who experienced the change most and least? (with particular reference to differential gender benefits).
6. How and why did the change occur or not?
7. What other factors have contributed to change in the programme areas? How much of the change can be attributed to the BSF programme itself rather than to these other external factors?
8. What made the BSF programme more/less effective? How could the approach to supporting chronically food insecure households be improved in the future?
9. How do you explain the possibility of getting continued benefits from the BSF promoted interventions after BSF is phased out? What needs to be done to sustain benefits at household and community levels?
10. How is BSF related to PSNP and OFSP/HABP to ensure graduation of BSF households from food insecurity (PSNP)?

III. Component 3, Health and nutrition

1. What interventions have been implemented by BSF in the area to improve health and nutritional status of community members?
2. What key supports (facility building, equipment and apparatus delivery, training/skill transfer/awareness creation, provision of home garden seeds) were provided by the project in areas of health & nutrition?
3. What supports were provided to students and school clubs in areas of nutrition, home garden micronutrient rich vegetables seeds and gardening skills (training)?
4. How do you rate the efficiency of health facilities and their effectiveness since the intervention of BSF programs
5. What has been changed in environmental sanitation (e.g., toilet and garbage disposal), personal hygiene and access to safe water since the BSF project implementation (last 5 years)?
6. In what ways did the BSF project contribute to the changes in health conditions of your community? (Probe how, through which sector offices, and what activities conducted and benefits achieved?)
7. What has been changed in infant and young child feeding practice, adolescent girls, reproductive age women in last five years? Is there a dietary change?
8. In what ways did the BSF project contributed to nutritional and dietary practices?
9. How do you explain the possibility of getting continued benefits from the BSF promoted interventions after BSF is phased out? What needs to be done to sustain benefits at household and community levels?

IV. Component 4, Agriculture and natural resources

1. What are the agricultural and natural resource interventions (enterprises/technologies) you have been engaged as a result of BSF support? What about before BSF started operations in your community?
2. What supports (material, financial, technical advice) have been provided by the project to establish and operate the agricultural enterprises?
3. What has changed since the BSF programme began in terms of livelihoods as a result of the agricultural and natural resource interventions? (e.g. *food security, educational enrolment, health status of women and children, income, housing conditions, social position, etc. Please probe for community and household level positive and negative changes*).
4. How much change has occurred since the programme began? (Number of food shortage months; proportion of beneficiaries with adequate food access throughout the year; livestock ownership by type and number; crop yield per hectare, milk yield per cow, social position in the community). *Please collect the information before and after BSF?*
5. Who experienced the change most and least? (with particular reference to differential gender benefits)
6. How and why did the change occur or not? (Improved access to crop, livestock and natural resources technologies by farmers including access to credit, small scale irrigation, improved seeds, fertilizer, pesticide, improved dairy cows, forage etc. number of demonstrations conducted, access to agricultural extension)
7. What other factors have contributed to change in the programme areas? (Investigate whether there is improvement/deterioration in input and output marketing, infrastructure, etc.). How much of the change can be attributed to the BSF programme itself rather than to these other external factors?
8. What made the BSF programme more/less effective? How could the approach to supporting chronically food insecure households be improved in the future?

9. How do you explain the sustainability of the benefits from BSF promoted agricultural and natural resources management interventions.

II. Check list for HH case study

Name: _____ Woreda: _____ PA: _____

1. Would you tell us about your family composition?

| Name | Relation to HH Head | Age | Gender | Educational status | Degree of involvement and benefits from BSF |
|------|---------------------|-----|--------|--------------------|---|
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

2. Tell us how you (the beneficiary of the BSF project) first become involved in the project? In what project activities have you been involved?
3. From your own perspective, describe the most significant changes in your and your family livelihoods brought about as a result of your involvement in the BSF project?
4. Why do you consider this change significant to you and your family? Who experienced the change most and least? (with particular reference to intra-household differences based on gender and age)
5. How much of the change can be attributed to the BSF programme itself rather than to these other external factors?
6. What other factors have contributed to the most significant changes you mentioned?
7. Would you think you could nurture the benefits from the project once BSF phased out? What needs to be done to sustain the gains?
8. Is/was your household receiving benefits from PSNP and OFSP/HABP (household package loan)? Are you public works or direct support participant? If you are not currently receiving any of these programmes what are the reasons?
9. How is BSF related to PSNP and OFSP/HABP to ensure your graduation from food insecurity (PSNP)?
10. Did your dietary habit change in the last 5 years? If yes, what was the contribution of BSF for the change? (Use of protein rich foods (meat, milk, egg), oil consumption, vegetables, fruits, legumes?) How do you explain the most significant changes on the well being of children, women and the household in general?

III. Group Interview Checklist for Woreda/ Kebele Food Security Task Force (WFSTF)

General

1. What can you tell us about the objectives of BSF? How this goes in line with the woreda development plan?
2. Could you explain for us the major project activities (components) of BFS in your woreda?
3. What strategies were used to implement each component (or major activity)? How effective were these strategies (targeting, implementation arrangement, local capacity building and community participation) in terms of improving livelihoods of the target households? How BSF approach was compatible with existing food security programmes mainly PSNP and HABP? (Please probe further on *improving food security (availability), household income (access to food), household asset building, and nutritional status of children.*)
4. How effective was the targeting strategy of each component of the project? Who benefited and who did not? Why?
5. How each of the activities (components) contributes to the improvement of livelihoods of the target households?
6. How BSF interventions are aligned with food security programmes (PSNP, OFSP, HABP) to realize the food security objective of the woreda/region/? (Please probe further in relation with graduation from PSNP?)
7. How BSF project is liked with other NGO and GO relief and development interventions. Has there been any vulnerability and risk reduction interventions in the woreda and BSF operational kebeles? How these affected (+/-) BSF outcomes and impacts.

Intermediate Objective 1: Community empowerment

1. How the project implemented community action planning (CAP) process? How this process impacted woreda development planning and implementation? What are the typical changes or improvements as a result of CAP process supported by the BSF project?

Intermediate Objective 2: Market and Enterprise Development

1. What type and how many rural micro enterprises (RME) were established or supported by BSF Project? What type of supports was provided by the Project, woreda offices (specify) and other relevant actors?
2. Who are the target group (clients) of RMEs supported by BSF Project? What were the targeting (beneficiary selection) criteria? What could have been done differently to better target poor and vulnerable group of the community?
3. What type of business activities or business support services was provided by RMEs for their clients? How efficient, adequate, timely and cost effective are these services? Do you see any missing links/ elements/ gaps in the business support provision? What is the plan by the project to fill these gaps?
4. What are the tangible impacts of the RMEs on the livelihoods of the clients? Can you tell us some outstanding success stories in improving the situation of poor and vulnerable groups targeted by RMEs? What are the key factors for such success?

5. How sustainable are the RMEs? (*Probe financial sustainability (profitability, loan repayment rate, members saving), institutional linkages and networking (extension, legal, financial), legal status, policy support, management/organization structure, auditing and accountability*).
6. What would happen to the RMEs once the BSF support halt? What preparation should be or has been made towards this? By whom?

Intermediate Objective 3: Health and Nutrition

1. What are the key health and nutrition interventions promoted with the support of BSF? Who are the beneficiaries? How wide is the coverage of interventions? Were there any excluded groups? Why?
2. What did the project contribute in promotion of sanitation, hygiene, potable water, mitigation of HIV spread, and immunization?
3. What types of strategies are used to mitigation micronutrient deficiencies (micronutrient rich foods growing and consumption, dietary habit change, use of iodized salt)?
4. What are the major nutritional interventions supported by the project? How many of the packages implemented? Activities and methods used to implement? Who are the target groups?
5. How do you see the overall benefit of the project to the target communities in terms of food security, nutritional security, dietary diversity, care and feeding practices, nutrition communication and education? What actions have been taken or planned to scale-up the lessons from the project by the Woreda?
6. Which of the interventions overlap/align with NNP? Is there a gap supplemented by the BSF program? How?
7. What would happen to BSF supported health and nutrition interventions once the project support is stopped? What preparation should be or has been made towards this? By whom?

Intermediate Objective 4: Agriculture and Natural Resources

Natural Resources

1. What are the key interventions promoted by BSF Project to rehabilitate natural resources base? What strategies were employed to implement natural resources rehabilitation interventions? What were the roles of community members/institutions, woreda offices, the Project and any other stakeholders? What is unique about BSF Project's natural resources rehabilitation interventions in terms of the how to do aspect?
2. How wide was the coverage of natural resources rehabilitation interventions? Who were the target groups?
3. What are the perceived and actual benefits of the natural resources rehabilitation interventions for the target groups? Can you tell as key success (best practices) stories about these? What actions have been taken by the woreda to scale-up the best practices? (*Probe from the perspective of improving livelihoods of the target group and future production potential created*).
4. How sustainable are the natural resources rehabilitation interventions supported by BSF Project? (*Probe institutional linkages and networking (extension, legal, financial), legal status, ownership regime, management/organization structure, policy support*).

Agriculture

1. What are the key agricultural interventions promoted by BSF Project to enhance food, nutrition and income security of the target groups? What strategies were

employed to implement agricultural interventions? What were the roles of community members/institutions, woreda offices, the Project, input suppliers and any other stakeholders? What is unique about BSF Project's agricultural interventions in terms of the how to do aspect?

2. How many households (by gender) were involved in agricultural interventions? Who were the target groups?
5. What are the perceived and actual benefits (impacts) of the agricultural interventions for the target groups? Can you tell as key success (best practices) stories about these? What actions have been taken by the woreda to scale-up the best practices? *(Probe from the perspective of improving livelihoods of the target group and future production potential created).*
3. How sustainable are the agricultural interventions supported by BSF Project? *(Probe extension support, productivity, income, input and output marketing, consumption, policy support).*

IV. Interview Checklist of Community Organization Case Study

Note: Record name, year of establishment, size of members by gender or other socioeconomic characteristics of constituents or members.

1. What are the objectives of this organization / group (cooperative, simple producers or business groups)? What are the activities performed to achieve this objectives?
2. What are the typical socioeconomic characteristics of the constituents of the organization / group? What are the roles of women in membership, labour contribution and leadership positions?
3. How and when was the organization/group formed?
4. Who had supported for the formation of the organization/ group? What was the role of BFS in the formation of the group?
5. Who has been providing supports to strengthen the organization/ group? What supports have you received in recent years from different actors? What was the role of BSF in strengthening and capacitating the organization / group to meet the service demands of the members? How these project efforts supported the organization / group to the services demands of the members or constituents/?
6. What services are being provided by the group? How effective and capable is the organization to meet the service demands of its constituent? How effectively and fairly benefits are being shared among members in general and with women in particular?
7. What are the most significant changes in the livelihood and social positions of the constituents (men and women) as a result of the supports from the organization or the group? What are they key contributions of the organization to wards the livelihood improvement on non-members?
8. What situations have helped or retained the organization /group in promoting livelihood and social position of men and women?
9. How sustainable is the organization and its benefits/services being shared among constituents?
10. What needs to be improved to meet the objectives and plans of the organization or group? Who should be responsible for what improvement area?

Annex 2: Household Survey Questionnaire

PART ONE: HOUSEHOLD QUESTIONNAIRE

/3/4u?}cw nK SÖÄp/

Instructions /SSJÁ

Note for follow up survey, a sample of both beneficiary houses and non-beneficiary households (selected from PSNP beneficiary lists in non-BSF kebeles) will be interviewed. If lists allow, the impact survey should sample from two distinct cohorts – households that entered the programme in 2003 (phase I) and households that entered the programme in 2007 (phase II).

Note: the questionnaire to follow is derived from the original questionnaire used for the BSF baseline survey 2007. For comparability, efforts are made to maintain the original questions wherever relevant and possible.

1. Before the household is interviewed, make sure that for beneficiary households, the head of the HH is in the beneficiary lists.
/3/4}ÖnT>-< nK SÖÄI 3/4T>VL" < 3/4}S[Ö" < u?}Ww BSF/FAO ýaËÿf }ÖnT>-< S'Ñw ¬eØ c=•` /" <::
2. Respondent preferably be the HH head/spouse. If this is not possible, it could be addressed to another HH member knowledgeable in the overall characteristics of the HH. }ÖÄm 3/4u?}cw >v" ^/ T" ^ SJ" >Kuf "MJ' eKu?}cu < uÄ" w 3/4T>Ä" < p SJ" Ä•` uqM::
3. The enumerators (a team of 2) will work at household level –asking the questions, filling in the questionnaire, weighing, measuring and doing the physical examination. The supervisor will control the overall field operation and data quality.

MODULE 1: IDENTIFICATION/ SKÁ

Part A: HH identification/3/4u?}cw SKÁ

| | | Name | Code |
|-----|---|---|------|
| 101 | Region/!MM/ | | --- |
| 102 | Woreda/"[Ç/ | | |
| 103 | Kebele/kuK?/ | | |
| 104 | Name of Household Head / 3/4u?}cu < yLò eU/ | | |
| 105 | Sex of HH head/ 3/4u?}cu < yLò eq/ | 1= Male ""É 2= Female c?f | |
| 106 | Name of respondent/3/4}ÖÄm" < eU/ | | |
| 107 | Sex of respondent /3/4}ÖÄm" < eq/ | 1= Male ""É 2= Female c?f | |
| 108 | Status of BSF FAO intervention | 1= Phase I (2003-2006) beneficiary 2= Phase II (2007-2010) beneficiary 3= Non-beneficiary | |

Part B: Interview Details

| | | Name | Signature | | | | | | |
|-----|---|---|-----------|-------|------|--|--|--|--|
| 109 | Enumerator/ÖÄm/ | | | | | | | | |
| 110 | Date of interview (E.C) /3/4nK SÖÄp k"/ | <table border="1"> <thead> <tr> <th>Day</th> <th>Month</th> <th>Year</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td></td> </tr> </tbody> </table> | Day | Month | Year | | | | |
| Day | Month | Year | | | | | | | |
| | | | | | | | | | |
| 111 | Supervisor/3/4q x J/ | | | | | | | | |

MODULE 2: HOUSEHOLD ROSTER / ¾u?}cw ›vLf ```

[illegible]

MODULE 3: HOUSING, UTILITIES & FACILITIES

| | 2 | | 3 | 4 |
|-----|--|---|---------------|----------------|
| | | | Now/ today | 5 years ago |
| 301 | What is the roofing material (for the main house)? ¾a"" < u? f x^ ¾}c^uf | 1=Corrugated iron sheet/q`qa 2=Thatch or grass/X` "ÄU oÖ?T/ 3=Wood and mud/"Úf 4=Mud and stone ßn" É"ÖÃ 5=Reed and bamboo/ gUuq 6=Others (specify) K?L "K (ÄÑKê) | | |
| 302 | What is the floor material (for the main house)? ¾a"" < u? f "KM ¾}c^uf | 1=Earth/δ`/ 2=Cow dung/ ¾Ywf Y<uf 3=Cement /c = T> " / 4=Tiles/¾ýLe + j " x ò/ 5=Bricks/Ö < w/ 6=Other (specify /K?L "K (ÄÑKê) | | |
| 303 | What is the wall material (for the main house)? ¾a"" < u? f Ó`ÓÇ ¾}c^uf | 1=Wood & mud/ "Úf" ßn 2=Wood & thatch/ "Úf" ¾oÖ?T ðe` 3=Reed & bamboo gUuq 4=Stone & mud /É"ÖÃ" ßn/ 5=Stone & cement/ É"ÖÃ" c = T> " / 6=Hollow blocks/ jôf wKAÿ? f/ 7=Bricks/ Ö < w/ 8=Other (specify K?L "K (ÄÑKê) | | |
| 304 | No of rooms in the HH /¾iöM w³f? | | ----- | ----- |
| 305 | What is your main source of DRINKING WATER? ¾SÖØ " < H u"" f Y¾f qÑ—L:G < | 1=Tap inside house/¾u? f " < eØ vD"vD 2=Tap in compound (private)¾ÖM vD"vD (uÓu = " < eØ) 3=Tap in compound (shared)¾Ö^ vD"vD (uÓu = " < eØ) 4=Tap outside compound (shared YÖu = " < ß ¾Ö^ vD"vD) 5=Protected well/spring¾}Öuk Ñ < ÉÖÉ/¾ÑAKu} U"ß/Ñ < ÉÖÉ 6=Unprotected well/spring ÁM}Öuk Ñ < ÉÖÉ/ÁMÑAKu} U"ß/Ñ < ÉÖÉ 7=River, lake or pond""' & Y< _ "ÄU NÄp 8=Other (specify) K?L "K (ÄÑKê) | | |
| 306 | How long does it take you to fetch drinking water, and come back? (Record hours and minutes) ¾SÖØ " < H "Ä T> Ñ~uf xq KSH@É" KSSKe U" ÁÍM Ñ> ?? ÄðÍM; | _____hours/d`f & _____ minutes/Åmn | ---:--- | ---:--- |
| 307 | Do you pay water user fees? " < H KTÖ-Ñ"²w ÄYöLK <; | 1=Yes - 0=No ¾KU | | |
| 308 | What kind of toilet does the household use? ¾UfÖks < uf i" f u? f U" ,Ä' f '"" <; | 1=Flush toilet, private " < H SMkmÁ ÁK"" < Kw%o/¾ÖM 2=Flush toilet, shared " < H SMkmÁ ÁK"" < KÖ^ 3=Pit latrine, private Ñ < ÉÖÉ ¾ÖM 4=Pit latrine, shared Ñ < ÉÖÉ ¾Ö^ 5=Container ¾T> SÖØ Ö" 6=Field/Forests T@Ç "ÄU Ý" 7=Others(specify) K?L "K (ÄÑKê) | | |
| 309 | What do you use for cooking? KUÓw TwcÁ ¾UfÖks < uf U"É '"" <; | 1=Mainly collected firewood1 vw³— " < ¾}cucu ^"Úf 2=Mainly purchased firewood vw³— " < ¾}Ñ³ ^"Úf 3=Charcoal YcM 4=Kerosine Ò`/LUv 5=Buthane Gas u < qÖ` 6=Electricity ¿K?;f]j 7=Leaves/dung cakes, etc. pÖM'Y<uf" ¾SXcK < f 8=Other (specify K?L "K (ÄÑKê) | | |
| 310 | Type of cooking for firewood, dung and charcoal | 1=Traditional ./vIL® Ñ < M%o 2=Improved to save energy./²S"® UÉÍ | | |

| | | | |
|--------------------|-----------------|--|--|
| ¾UÉÍ / Ñ<M%oo ~Ä'f | 3=Both / G<K~"U | | |
|--------------------|-----------------|--|--|

MODULE 4I: HOUSEHOLD ASSETS & PRODUCTION (Part A: Asset Ownership/"w[f)

| 401 | | 402 | 403 | 404 | 405 | 406 | 407 | 408 |
|---------|---|--|---|---------------|---|---|-----|-----|
| Item No | Asset | Presently | | | Current value per piece in Birr vG<'< "pf Á"ÆªÖ | Reasons for increase or decrease in asset KSÚSVKSk'c< 3ªªª" U,"Á," (ÆÉ w%oo) | | |
| | | Does the HH own [ASSET]? u?}Wu< ^'2=l" °"ed f/"w[," ,K< f? 1=Yes ~- 0=No ¾KU (>>next item) | How many does the HH own? Quantity u?}cu< U" ÁIM ,K" <? ulØ` vG<'< "pf | ÿ5 ~Sf uðf | | 6.1 | 6.2 | 6.3 |
| | Oxen u | | | | | | | |
| | Milk cow, local ¾"}f LV/¾,N` ~ <eØ/ | | | | | | | |
| | Milk cow, improved¾"}f LV/¾" < B/¾}ÇkK< | | | | | | | |
| | Sheep/goat/uÖ ~ÄÜ õ¾M/ | | | | | | | |
| | Chicken/poultry local Êa (¾,N` ~ <eØ) | | | | | | | |
| | Chicken/poultry improved Êa (¾" < B/¾}ÇkK<) | | | | | | | |
| | Horses, donkeys, mule /¾ÖT ÿwf | | | | | | | |
| | Camels/ ÖSKA, | | | | | | | |
| | Traditional Beehive vIL© ¾"w kö | | | | | | | |
| | Modern Beehive ²S"© ¾"w kö /ÇKA'> ÁK" </ | | | | | | | |
| | Sickle /TßÉ/ | | | | | | | |
| | Axe/SØ[u=Á/ | | | | | | | |
| | Pick axe/Tqð]Á/ | | | | | | | |
| | Plough/T[h/ | | | | | | | |
| | Wheelbarrow/v L vKÖT/ | | | | | | | |
| | Sprayer/ÿ?T> "M S`ÿ/ | | | | | | | |
| | Pump/uUý/ | | | | | | | |
| | Radio/ ÊÄ/ | | | | | | | |
| | Bed nets/ÑAu` / | | | | | | | |
| | Bank saving/¾v"i lÖv Áw} ` / | | | | | | | |
| | MFI saving/¾TÄja óÄ""e lÖv Áw} ` / | | | | | | | |
| | Private well/water reservoir/¾ÖM ~H Ñ<ÉÑ<É/Tq]Á | | | | | | | |
| | chicken house¾Êa ~ vq u?f | | | | | | | |
| | grain storage structure¾~IMÖ}^ | | | | | | | |
| | sewing/knitting machine ¾Mwe eð f/¾ØMõ Sÿ = " | | | | | | | |
| | Television ,K?y=i" | | | | | | | |
| | cell phone VvÄM | | | | | | | |
| | Other (specify)/K?L "K ÄÑKê | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

Codes: Differences in asset ownership

- 1 = We were forced to sell the asset to buy food
- 2 = We were forced to exchange the asset for food
- 3 = We were forced to sell the asset to pay for health expenses
- 4 = We were forced to sell the asset to pay for education expenses
- 5 = We had to sell the asset to meet social obligations (e.g. wedding)
- 6 = We used the asset in a social occasion (e.g. wedding gift))
- 7 = We sold the asset for another reason (specify):

- 8 = The asset was stolen
- 9 = Livestock died or was slaughtered
- 10 = Livestock was sold as an income-generating activity
- 11 = Livestock reproduced
- 12 = We bought this asset through the support from BSF
- 13 = We bought this assets through other

programme supports

14 = Someone gave us this asset for free

15 = Other (specify): _____

MODULE 4II: PRODUCTION & HARVEST (For crop area and amounts harvested please record answer in the unit of locally measurement & change to international units. KS_f cWM u"vu = " < ¾T> ÖkS < f" SKÿ = Á uSÖkU "Á eq"Ç`É SKÿ = Á kÃ`

| 1 | 2 | 3 | 4 | 5 |
|-----|---|------------------------------------|--|---|
| | Productive asset/¾TU[%o Gwf | Local Unit ¾ÿvu = SKÿ = Á eU | Amount w ³ f uÿvu = SKÿ = Á | |
| 409 | How much land for agricultural cultivation do you OWN? KÓw` " Y^~ ¾Á³D+` < xq~ U" ÁIM ' " < ; | | | |
| 410 | How much land did you CULTIVATE in total during the last year? (all plots only count once, even though two harvest are possible) vKð` < U` f ²S" U" ÁIM S_f LÃ S[~ | | | |
| 411 | How much of your land do you irrigate? U" ÁIK < " S_f uSe• ÁTK < ? | | | |

| 412 | 413 | 414 | 415 | 416 | 417 | 418 | 419 |
|------|---|-----------------|------------------|--|-----------------|--------------------|--|
| CROP | How much area? did you cultivate with [CROP] during the last year? vKð` < S f uU" ÁIM xq LÃ ²\ | | | How much did you harvest [CROP] in total during the last year? vKð` < S f ¾}Ñ- U` f | | | How does this compare with your harvest of theses crops 5 years ago |
| | Amount w ³ f | Unit SKÿ = Á | Hectare H@iq` | Amount w ³ f | Unit SKÿ = Á | Quintal ÿ < "qM | 1=Much worse u×U ¾ÿó 2=Worse SØö 3=The same K` < Ø ¾K` < U 4=Better }hiKA_M 5=much better u×U }hiKA_M |
| | Barley/Ñwe/ | | | | | | |
| | Wheat e"È/ | | | | | | |
| | Teff /Ö?ô/ | | | | | | |
| | Maize / uqKA | | | | | | |
| | Sorghum / TiL/ | | | | | | |
| | Other cereals | | | | | | |
| | Faba Beans vol | | | | | | |
| | Field peas }` | | | | | | |
| | Grass pea ÖÁ | | | | | | |
| | Chick pea /i"w^/ | | | | | | |
| | Lentils Ue` | | | | | | |
| | Others Pulses K?KA: Ø^Ø _-/ | | | | | | |
| | Linseed }Mv | | | | | | |
| | Nueg ' < Ö | | | | | | |
| | Sun/Saf flower c < ô | | | | | | |
| | Oil seeds /¾pvf □ IKA/ | | | | | | |
| | Potato/É"~ | | | | | | |
| | Root crops /e^ea/ | | | | | | |
| | Onion kÃ i"ÿ < ` f | | | | | | |
| | Garlic /'ß i"ÿ < ` f | | | | | | |
| | Carrot "af | | | | | | |
| | Cabbage / ÖS" | | | | | | |
| | Other vegetables K?KA: "K < | | | | | | |
| | fruit (specify) ô^ô (ÃÑKê) | | | | | | |
| | animal forage/feed ¾~"ed f S• | | | | | | |
| | Other, specify | | | | | | |
| | Other, specify | | | | | | |
| | Mil k ``}f | | | | uK = f` | | |
| | Eggs ~"ILM | | | | ulØ` | | |
| | Honey/T` | | | | uÿ = KA | | |

MODULE 4III: Non-Farm Incomes

What is your main income/ $\ddot{O}w`" < \beta \frac{3}{4}J' < K?KA, a" a" \frac{3}{4}\tilde{N}u = U''\grave{a}, U''\acute{E}"+ < ?$

| 420 | | 421 | 422 |
|---------------|---|---|---|
| Sr.No }.l. | Source of income (see code below) $\frac{3}{4}\tilde{N}u = U''\beta$ | Birr per month $\frac{3}{4}\tilde{N}u =$ (uw`) | Annual (last 12 months) Birr $\frac{3}{4}Sf\tilde{N}u =$ (uw`) |
| 1 | Trade "ÓÉ | | |
| 2 | Quarrying É"ÒÄ/g ^a $\frac{3}{4}SdcK < f'' \cdot \emptyset, Sg\emptyset$ | | |
| 3 | Tailor $\frac{3}{4}Mwe\ e\hat{o}f$ | | |
| 4 | Maintenance/mechanic $\frac{3}{4}\emptyset\tilde{N}"/S''' > \hat{i} Y^{\wedge}$ | | |
| 5 | Carpentry $\frac{3}{4}, "Ö = ' f Y^{\wedge}$ | | |
| 6 | Knitting $g < ^w/\emptyset M\hat{o} Y^{\wedge}$ | | |
| 7 | Weaving/ $\frac{3}{4}iS'' Y^{\wedge}$ | | |
| 8 | Other crafts (Potter, metal works, leather works, etc.) $K?KA\epsilon \frac{3}{4}^{\circ}\hat{A} \emptyset uw (i\hat{i}L/p\emptyset p \times / \frac{3}{4}qC) Y^{\wedge}-\epsilon$ | | |
| 9 | Temporary wage labour $\tilde{N} > ?\hat{A}^{\odot} \frac{3}{4}\tilde{N} < Mu f Y^{\wedge}$ | | |
| 10 | Making/selling local drinks $\flat[o/\hat{O}L T'' < \times f'' Sg\emptyset$ | | |
| 11 | Permanent employee $sT > \hat{A}S'' \cdot /p\emptyset` Y^{\wedge}$ | | |
| 12 | Selling food $U\hat{O}w T^2\hat{O}\hat{E}f'' Sg\emptyset$ | | |
| 13 | Others, Specify $K?L \tilde{A}\tilde{N}K\hat{e}$ | | |
| 14 | Others, Specify $K?L \tilde{A}\tilde{N}K\hat{e}$ | | |
| 15 | Others, Specify $K?L \tilde{A}\tilde{N}K\hat{e}$ | | |

MODULE 4IV: Use of technological inputs and good practices this year / ¾, i•KAÍ = Óvf“
SM"U }Vja-›ÖnkU (Multiple answers are possible)

| 1 | 2 | | | 3 |
|-----|---|---|-----------------|---------------|
| No | Input /Ów„/ | Types and amount of inputs used uØpU LÃ ¾ªK < ¯Ã„/´ ¯Ã-/ | 1= Yes 0= No | Answers Me |
| 423 | Fertilizer /TÇu]Á/ | | 1= Yes 0= No | |
| 424 | Improved seeds /U` Ø ²`/ | | 1= Yes 0= No | |
| 425 | Have you cultivated/grown any new crops in the last 5 years? | 1. Cereals, Specify | 1= Yes 0= No | |
| | | 2. Cereals, Specify | | |
| | | 3. Potato | | |
| | | 4. Other vegetables | | |
| | | 5. Fruits | | |
| | | 6. Pulses, Specify | | |
| | | 7. Oil crops, specify | | |
| 426 | Improved forage and fodder species introduced in the last 5 years?? | | 1= Yes 0= No | |
| 427 | Improved livestock / ¾}hhK < “ ¾}ÇkK < ~"edf/ | 1. Dairy cow ¾“}f LV | 1= Yes 0= No | |
| | | 2. Poultry Êa | | |
| | | 3. Sheep uÓ | | |
| | | 4. Goat õ¾M | | |
| 428 | Pesticide & herbicide }vÃ/[U TØðÁ | 1. Any chemical pesticide i[-}vÃ | 1= Yes 0= No | |
| | | 2. Any chemical herbicides i[-[U | | |
| | | 3. Integrated pesticide management ¾}k"Ë ¾}vÃ SŸLŸÁ (ÃÑKê) | | |
| 429 | Improved tools/¾}hhK < SX]Á- | 1. Motorized irrigation pump uV}´ ¾T>W^ ¾“ < H ûUý | 1= Yes 0= No | |
| | | 2. Pedal pump u"İ/Ó´ ¾T>W^ ¾“ < H ûUý | | |
| | | 3. Drip Irrigation ¾Öwq Se• | | |
| | | 4. Improved plough share ¾}hhK T[h | | |
| | | 5. Chemical sprayer for crop ¾i[-}vÃ SÉG'> f S`Ÿ | | |
| | | 6. Chemical sprayer for livestock | | |
| | | 7. Milk Processing | | |
| | | 8. Honey Processing | | |
| | | 9. Improved thrasher | | |
| | | 10. Other, specify | | |
| 430 | Which of the following do you practice on your private land? | 1. Physical Soil and water conservation structures ¾,ð`"´´ < H Øun/ ¾^`Ÿ" Y^ | 1= Yes 0= No | |
| | | 2. Biological Soil and water conservation structures ¾,ð`"´´ < H Øun/ d` SfŸM | | |
| | | 3. Gully stabilization x[x`" SŸLŸM | | |
| | | 4. Water harvesting ´´ < H Tq` | | |
| | | 5. Zero grazing Ÿw„"´´ea SkKw | | |
| | | 6. Other promoted by BSF | | |
| 431 | Which of the following do you practice on communal land? | 1. Physical Soil and water conservation structures ¾,ð`"´´ < H Øun/ ¾^`Ÿ" Y^ | 1= Yes 0= No | |
| | | 2. Biological Soil and water conservation structures ¾,ð`"´´ < H Øun/ d` SfŸM | | |
| | | 3. Gully stabilization x[x`" SŸLŸM | | |
| | | 4. Water harvesting ´´ < H Tq` | | |
| | | 5. Area Closure | | |
| | | 6. Other promoted by BSF? | | |

MODULE 5: Household Food Security ¼UÓw ¢ef" G<'@q

| 1 | 2 | 3 |
|-----|--|---|
| | | SMe |
| 501 | In general, how do you think that the current food situation in <u>your kebele</u> compared with five years ago? wÖnLÄ c=qÄ ¼UÓw G<'@q ukuK? - Ý5`Sf uðf Ý'u[" < G<'@q Ö` c='ñ` U" SiLM; | 1=Improved }hiKA`M 2=Stayed the same K` < Ø ¼K` < U 3=Worsened ¼Ýó ` < /}vwfM/ |
| 502 | In general, how do you think that <u>your current household</u> food situation compared with five years ago? wÖnLÄ c=qÄ ¼UÓw G<'@q uu?}cw- Ý5`Sf uðf Ý'u[" < G<'@q Ö` c='ñ` U" SiLM; | 1=Improved }hiKA`M 2=Stayed the same K` < Ø ¼K` < U 3=Worsened ¼Ýó ` < /}vwfM/ |
| 503 | If IMPROVED, what do you think is the reasons for this change? (Multiple responses are possible) ¼UÓw ¢ef"" < }hiKA`M ÝJ' & ShhM" ÁSÖ < U;"Á," U"É"++ <; (Ý,"É uLÄ SMe Ä%oLM) | Select all that apply 1. Favorable climate ›S^ ¼,¼` G<'@q 2. Availability of improved in agricultural inputs (seeds, tools, irrigation equipment, oxen) ¼Öw` " Öw," SN-f 3. Involved in business (trade, knitting, agricultural processing, etc.) Ñu= uT> ÁeÑ-< u= 'e Y^- uSd}ð 4. Used Improved agricultural practices (integrated pest management, row planting/spacing, soil and water conservation, etc.) ¼}hhK < ¼Öw` " ›W^a" }Öv® uTÉ[Ö 5. Reduction of post-harvest losses ¼U` f w;"f uSk'e 6. Intensified own effort ¼ÖM Ø[f" uTÖ"Ý` 7. Improved Infrastructure ¼SW[} MTf › < q a` ShhM 8. Other: Specify _____ |
| 504 | If DETERIORATED, what do you think is the reasons for this change? ¼UÓw ¢ef"" < Ö` }vwfM ÝJ' & KÖ\ U;"Á," U"É"++ <; | Select all that apply 1. Unfavorable climate ¼,¼` G<'@q ` < }eTT> ÁKSJ" 2. Lack or shortage of production improvement inputs ¼Öw` " Öw," ^Ø[f 3. Own poor managing capacity ¼ÖM ›ÁÁ' É;Sf 4. Others: Specify _____ |
| 505 | Does your household have sufficient food all your round? u?}cw- `S~" S<K< um ¼J' UÓw ›K` <; | 0= No ¼KU 1= Yes ›- |
| 506 | If no, in which months does your household not have sufficient food in the last 12 months? u?}cw- `S~" S<K< um ¼J' UÓw ÝK?K` < & ¼UÓw ^Ø[f ¼T> ÁÖØS` < u¼f™± `^f ` <; | 1. August 2010 'Nc? 2002 2. July 2010 NUK? 2002 3. June 2010 c'@ 2002 4. May 2010 Ö"x f 2002 5. April 2010 T> Á' Á 2002 6. March 2010 SÖu= f 2002 7. February 2010 ¼"+ f 2002 8. January 2010 Ø` 2002 9. December 2009 qlde 2002 10. November 2009 IÇ` 2002 11. October 2009 ØpUf 2002 12. September 2009 SeÝ[U 2002 |
| 507 | What are the major problems encountered during farm operation? u^`h Y^ H> Äf ¼T> ÁÖØS< a" a" Öa` U"É"++ <; | Possible Answers ›T^ß SMf: Last 12 months vKn f 12 `^f Five years ago Ý5`Sf uðf 1. Shortage of oxen ¼u_ ^Ø[f 2. Shortage of Rain ¼' "w ^Ø[f 3. Insects, Pests and Weeds ¼}vÄ;[U Ö` |

| | | | | |
|-----|--|--|--|--|
| | (Ÿ, "É uLĀ SMe Ā%oLM) | 4. Shortage of Seed ¾²` ^Ø[f | | |
| | | 5. Shortage of Fertilizer ¾TÇu]Ā ^Ø[f | | |
| | | 6. Shortage of Labor ¾Ñ<Muf W^}— ^Ø[f | | |
| | | 7. Low price of Produce ¾ªÖ S` <Āp | | |
| | | 8. Absence of Feed for Oxen ¾u _ S• ^Ø[f | | |
| | | 9. Others: Specify K?L ĀÑKê | | |
| 508 | Which of the following can you say was true for your household at any point in time during the last 12 months (these are things the HH wish it would not have had to do) vKñ f 12 ``^fÿ²=l uq, Ÿ}²²\ f ``e-'' ĀU u?}cw-'' ¾T>SKŸq+'' < ¾f™‡ "†'' <; | 1. sold productive assets, tools | | |
| | | 2. consume seed stock | | |
| | | 3. ate food normally we do not eat (wild food) | | |
| | | 4. sought daily work outside farm | | |
| | | 5. migrated to find work | | |
| | | 6. borrowed cash or grain | | |
| | | 7. ate fewer meals per day | | |
| | | 8. reduced quantity of food per meal | | |
| | | 9. sold cultural items | | |
| | | 10. sold animals | | |
| | | 11. sold household effects (utensils, etc) | | |
| | | 12. sold firewood | | |
| | | 13. made and sold of charcoal | | |
| | | 14. rented out land | | |
| | | 15. withdrew children from school | | |
| | | 16. distressed migration | | |
| | | | | |

MODULE 6: PROGRAM PARTICIPATION

A. Credit

| 1 | 2 | 3 |
|------|---|---|
| Q.ID | Question Items | Response Options |
| 601 | Has your household received support from SF/FAO? u?}cw- ŸBSF/FAO ÉÒð ›Ñ~ ~M; | 0= No ›LÑ-U (If no, questions relating to BSF program will be skipped) 1= Yes ›Ñ~ ~M |
| | Did you or a member of your household receive any training from the BSF project? ^e- ``ÄU ¾w}cw- ›vM uBSF/FAO ýaËif YMÖ" ``eÄªM; | 0= No ¾KU 1= Yes ›- |
| 602 | Did you or a member of your household receive CREDIT from the BSF project? ^e- ``ÄU ¾w}cw- ›vM ŸBSF/FAO ýaËif wÉ` ``eÄªM; | 0= No ¾KU 1= Yes ›- |
| 603 | Have you already repaid some of the credit? ¾wÉ` ¾} ``c' SÖ" ŸöKªM; | 0= No ¾KU 1= Yes ›- |
| | How much percentage has been repaid in total? (in birr) vÖnLÄ U" ÁIK < " ŸöKªM; | -----% |
| 604 | Have you received credit from any other sources over the last 5 years? vKñf 5` Sqf (Ÿ¾f—` < U U"ß) wÉ` ›Ñ~} `` < Á` < nK <; | 0= No ¾KU 1= Yes ›- |
| 605 | What were the sources of credit? (Multiple answers are possible) wÉ` ÁÑ- < f Ÿ¾f '`` <; (Ÿ`É uLÄ SMe Ä%LM) | 1.Bank /v"/ 2.Credit association /¾lÖv Tlu`/ 3.Private lender /¾ÖM ›uÇ/ 4.Neighbour/Friend /ÑA[u?f/ÖÄ—/ 5.Cooperative /Tlu^f/ 6.NGO/CBO /S"ÖYq® ÁMJ' < É`İ„/ 7.Micro-finance institution /Ønp" ¾Ñ"²w }sTf/ 8.Other (specify) K?L "K ÄÑKê |

B. Cash/Food Assistance

| | | |
|-----|--|--|
| 606 | Has any household member participated in PUBLIC WORKS FOR CASH/FOOD in the last 6 month? Ÿu?}Wu < `` < eØ vKñf 6 ``^f `` < eØ Ñ"²w/`IM uT > ÄeÑ` I`v® Y^ LÄ ¾}d}ð ›K; | 0= No ¾KU 1= Yes ›- |
| 607 | Has the HH received free cash or food over the last 6 month? u?}Wu < vKñf 6 ``^f 'í ¾Ñ"²w ``ÄU ¾UÓw ``Çq ›Ö`...M? | 0= No ¾KU 1= Yes ›- |
| 608 | What other programs are you or members of your household participating in? (Multiple answers are possible) ^e- ``ÄU ¾w}cw- ›vM ŸK?KA< ýaËi„< ÉÒð ›Ñ~}ªM; (Ÿ`É uLÄ SMe Ä%LM) | 1. Safety Net Program 2. Household Credit Package (through cooperatives or MFIs) 3. EOS Program – Enhanced Outreach Strategy 4. CBN Program – Community based nutrition 5. Not participating in any other program 6.Others, Specify |

C. Public Service Benefits

| | | |
|-----|---|---|
| 609 | Have you benefited from veterinary services this year? ¾`"edf IiU" ›ÑMÓKAf }ÖnT > '-f? | 0= No ¾KU 1= Yes ›- |
| 610 | How do the services compare with 5 years ago? ¾`"edf IiU" ›ÑMÓKA ~ Ÿ5 `Sf uðf Ÿ'u[" < Ö` c='ñ` U" ÄSeLM? | 1=Much worse u×U ¾Ÿö 2=Worse SÖö 3=The same K` < Ø ¾K` < U 4=Better }hiKAªM 5=much better u×U }hiKAªM |
| 611 | Have you benefited from gricultural extension services this year? ¾Ów` " ›?;e,"i" ›ÑMÓKAf }ÖnT > '-f? | 0= No ¾KU 1= Yes ›- |
| 612 | How do the services compare with 5 years ago? | 1=Much worse u×U ¾Ÿö 2=Worse SÖö |

| | | |
|-----|---|---|
| | 3=The same K" < Ø ¼K" < U 4=Better }hiKA,M 5=much better u x U }hiKA,M | |
| 613 | Have you benefited from health services this year? ¼Ö?" »?je,"i" »ÑMÓKA f }ÖnT> '-f? | 0= No ¾KU 1= Yes »- |
| 614 | How do the services compare with 5 years ago? ¼Ö?" »?je,"i" »ÑMÓKA ~ Ý5 "Sf uòf Ý'u[" < Ö` c='ñ` U" ÃSeLM? | 1=Much worse u x U ¾Ýó 2=Worse SØö 3=The same K" < Ø ¼K" < U 4=Better }hiKA,M 5=much better u x U }hiKA,M |

MODULE 7 : Self-Assessment of Wellbeing ¾%S GMg¥

D. SELF-ASSESSMENT

How would you describe the situation of your household now?

Choose the category in column 31 that best fits the respondents' answers. Then say, 'So would you agree that at this time your household is (read category description)?' If they do not agree, discuss further and identify the category they agree with. When they agree circle the corresponding code for 'Now'.

Then ask: At the same time (same month) last year, was your household situation better, the same, or worse? Repeat the questions if necessary, read the category that best fits the respondents' description of their situation a year ago, and when they agree circle the code under 'The same time last year'.

Repeat for '2 years ago', '4-5 years ago', and '10 years ago'.

| Self-Assessment Categories | How would you describe the situation of your household ? | | | | |
|---|--|--|--|--|--|
| | Now (2008) (circle one) | This month last year (2007) (circle one) | This month 2 years ago (2006) (circle one) | About 4-5 years ago (2003–04) (circle one) | About 10 years ago (1998) (circle one) |
| (31) | (32) | (33) | (34) | (35) | (36) |
| Household was not yet formed at that time | | 0 | 0 | 0 | 0 |
| DOING WELL Able to meet household needs by your own efforts, and <u>making some extra</u> for saving and investment (e.g. buying livestock or improving housing) | 1 | 1 | 1 | 1 | 1 |
| DOING JUST OKAY Able to meet household needs, but with <u>nothing extra</u> to save or invest | 2 | 2 | 2 | 2 | 2 |
| STRUGGLING Managing to meet household needs, but only by <u>depleting productive assets</u> and / or sometimes receiving support from community or government | 3 | 3 | 3 | 3 | 3 |
| UNABLE TO MEET HOUSEHOLD NEEDS Highly <u>dependent on support</u> from community or government | 4 | 4 | 4 | 4 | 4 |

MODULE 7: Section I: Self-assessment of wellbeing

How would you describe the situation of your household now?

Choose the category in column 701 that best fits the respondents' answers. Then say, 'So would you agree that at this time

your household is (read category description)?' If they do not agree, discuss further and identify the category they agree with. When they agree circle the corresponding code for 'Now'.

Then ask: At the same time (same month) last year, was your household situation better, the same, or

worse? Repeat the questions if necessary, read the category that best fits the respondents' description of their situation a year ago, and when they agree circle the code under 'The same time last year'. Repeat for '2 years ago', '4-5 years ago', and '10 years ago'.

| 701 | 702 | 703 | 704 | 705 | 706 |
|---|--|---|---|---|---|
| Self-Assessment Categories | How would you describe the situation of your household ? | | | | |
| | Now (2010) (circle one) | This month last year (2009) (circle one) | This month 2 years ago (2008) (circle one) | About 4-5 years ago (2005–06) (circle one) | About 10 years ago (2000) (circle one) |
| 1. Household was not yet formed at that time | | 0 | 0 | 0 | 0 |
| 2. DOING WELL Able to meet household needs by your own efforts, and making some extra for saving and investment (e.g. buying livestock or improving housing) | 1 | 1 | 1 | 1 | 1 |
| 3. DOING JUST OKAY Able to meet household needs, but with <u>nothing</u> extra to save or invest | 2 | 2 | 2 | 2 | 2 |
| 4. STRUGGLING Managing to meet household needs, but only by <u>depleting productive assets</u> and / or sometimes receiving support from community or government | 3 | 3 | 3 | 3 | 3 |
| 5. UNABLE TO MEET HOUSEHOLD NEEDS Highly <u>dependent on support</u> from community or government | 4 | 4 | 4 | 4 | 4 |

If the respondent is not the mother, ensure that the respondent knows the breastfeeding practices between birth and now / }ÖÁm 0λ" f "MJ' eKM] ŸS" KÉ ĒUa 0 eŸ.G < "É[e ÁK" < " ¾U0 0"p SJ' < " }ÖÖ0

| 1 | 2 | | 3 | 4 |
|-----|--|--|--|---|
| | <p>“ØÁo-‡” SĖS]Á Kf”i ØØKAU KfMp ›p`w</p> | | <p>Youngest child f”g < Mĭ</p> <p>Age = ... month</p> | <p>Oldest child †A# < Mĭ</p> <p>Age = ...month</p> |
| 801 | Name/YU/ | | | |
| 802 | ID-number (<i>check with module 2</i>) /SKÁ/ | RESPONSE OPTIONS/ħ ºŁ-čřĩ | <input type="text"/> | <input type="text"/> |
| 803 | Where was [NAME] born? Mĭ ¾}”KĂ” < ¾ f ”’ < ? | 1=At home-assisted with Traditional birth attendant /uu? f ”’ < eØ uMUÉ ,ªLĭ=/ 2=At home-assisted with Health Professional /uu? f ”’ < eØ-uWKÖ’ vKS < Á/ 3=Health post //uÖ?” Ÿ?L/ 4=Health center / uÖ?” vu = Á/ 5=Public hospital /JeúqM/ 6=Private clinic ¾ÓM ĵK = ’ > ĵ 7=Other place (specify)----- | | |
| 804 | Does [NAME] have a VACCINATION CARD /? (Ask to see it) Mĭ ¾ĵfvf ”’ É ›K” < ? | 1=Yes/-”/ 0=No /,ÄÄKU/ 2=Vaccinated, card not found/}Ÿfx ”’ É ÄM}Ñ– 9=Don’t know/L” < pU/ | | |
| 805 | How many times in the last 6 months has the child’s weight or height been recorded on the growth card? vKñ f 6 ”^f ¾Mĭ ĵwÄf øøºISf U” ÁIM Ñ > ?? }Kĵ...M? | | ----- | ----- |
| 806 | Observe BCG scar on the upper arm. Does the scar exist? ułĭ LÄ ¾ĵfvf UMĵf ›K” < ? | 1=Yes/-”/ 0=No /,ÄÄKU/ | | |
| 807 | Has [NAME] received deworming medicine in last 6 months? Mĭ vKñ f 6 ”^f ”’ < eØ ¾JÉ fLM ŠEH’ > f ”eÇDM? | 1=Yes/-”/ 0=No /,ÄÄKU/ 9=Don’t know/L” < pU/ | | |
| 808 | Has [NAME] received VITAMIN A in the last 6 months? (<i>Show capsule</i>) Mĭ vKñ f 6 ”^f ¾zÄqT > ”’ ħ ”ĵwM ”eÇDM; | 1=Yes/-”/ 0=No /,ÄÄKU/ 9=Don’t know/L” < pU/ | | |
| 809 | Has [NAME] been sick in the last 2 weeks? Mĭ vKñ f 2 XU”qf qP”u’; | 1=Yes/-”/ 0=No /,ÄÄKU/ | | |
| 810 | Did [NAME] have [ILLNESS]? Mĭ Ÿ}Ökc < f ”’ < eØ qV ’u’; <i>Ask all questions for one illness, then for the next illness/ ¾,”Æ” uiq ØÁo ŸÚ[c < u%EL K?L” < ” ÄkØK <</i> | 1=Yes/-”/ 0=No /,ÄÄKU/ <i>10a</i> Diarrhea / }pT¼ <i>10b</i> Malaria /”v <i>10c</i> Cold/ Pneumonia Ñ < ”ó”/ w’ É | | |
| 811 | During the illness, the [NAME] breastfed how often? Mĭ uISU ”pf Ö < f U” ÁIM ÄÖv ’u’; | 1=Less f”i 2=Same K” < Ø ¾4KU 3=More w² < ÄÖvM 4=Isn’t breastfed Ö < f ,ÄÖvU 9=Don’t remember/ /Leq” < eU/ | | |
| 812 | During the illness, was [NAME] offered less, about the same, or more than usual to drink? Mĭ uISU ”pf ¾T > Öx `Ñ` U” ÁIM Ä”eÉ ’u’; | 1=Less f”i 2=Same K” < Ø ¾4KU 3=More w² < ÄÖvM 4=Isn’t breastfed Ö < f ,ÄÖvU 9=Don’t remember/ /Leq” < eU/ | | |

MODULE 9: NUTRITION PRACTICE / ¾ SÒÑw MUÉ

↳ SÒÑw MUÉ (For all children 6- 59 months) /Y6-59 ... LK < f MD: ¾T > Ö¾p

Record the average of 3 measurements/

Record the average of 3 measurements / $\langle f_{\text{eff}} \tilde{N} \rangle = ?$ $K_j \{ I, T \} - \langle \dots \rangle_{\text{eff}} /$

Part A) 24 hr and 7-day diet Recall /የ 24ና የ 7 ቀን የምግብ ትወስኃ/

(Ask mother; Recalling may start from the current time & then back for the last 24 h)/ ይኸንን ጥያቄ የምትሰጥበት ሰዓት ወይም የቤተሰብን ምግብ ዝግጅት የሚወክል መሆን አለባት፡ ለትወክሉ እንደሚኖር አሁን ካለችበት ሰዓት ወደ ኃላ መገደብ ይቀላል፡፡

Now I would like to ask you about the types of foods that you or anyone else in your household ate specifically the last 24 hour and during the last week. Please, tell me by accurately recalling/ አሁን የምትገኝበት የቤተሰብ አባል ባለፉት 24 ሰዓት ውስጥና ባለፉት 7 ቀናት ውስጥ የተመጣ በትን ምግብ ዓይነትና ስንት ጊዜ እንደተመጣ ቡ እንድትነግርኝ ነው፡፡ በደንብ አስታወሽኝ ንገረኝ፡፡

Ask the two columns separately. For 24 hr recall try to ask what was eaten at each meal time and list them on the left side of the table and sort them based on the food groups. /ሁለቱንም ጥያቄዎች ለየብቻ ጠይቅ፡፡ የ24 ሰዓቱን ስትጠይቅ በእያንዳንዱ የምግብ ሰዓት የተመጣ በትን በጥያቄው በሰተጣራ አስፍርና እንደየምግቡ ምድብ ለያቸው
Column 3: Read the list of foods. Place a “1” in the box if anyone in the household ate the food in question; or place a “0” in the box if no one in the household ate the food./ለዚህ ረድፍ ለተመጣ በት ምግብ “1”ን ላልተመጣ በት ምግብ ደግሞ “0”ን በተሰጠው ቦታ ላይ ያፍ፡፡

Column 4: Read the list of foods and write number of times the food is eaten by the household in the last 7 days. ባለፉት 7 ቀናት ውስጥ መጀመሪያ የተመጣ በትን ቀጥሎም ስንት ጊዜ እንደተመጣ በት በመገደብ በተሰጠው ቦታ ያፍ፡፡

| 1 | 2 | | 3 | 4 |
|--------------------|---|--|--|--|
| Sr.N o. }.l. | FOOD / $\frac{3}{4}$ ሀዕው ሽፋ | Description/መግለጫ | During the last day and night/ባለፉት 24 ሰዓት ውስጥ (0 or 1) | Number of times in the last week/ ባለፉት 7 ቀናት ውስጥ (0 - 7) |
| 100 1 | CEREALS/የአገዳ እህሎች | Teff, corn/maize, rice, barley, oats, wheat, sorghum, finger millet or any other grains or foods made from these (e.g. Ambasha, injera, bread, biscuits, noodles, “Qitta”, porridge, “Atimit” or other grain products) | | |
| 100 2 | VITAMIN A RICH VEGETABLES AND TUBERS /በቫይታሚን ኤ የበለፀጉ አትክልቶችና ሥራሥሮች | Pumpkin, carrots, squash, or yellow/orange flesh sweet potatoes or other locally available vitamin-A rich vegetables (e.g. red sweet pepper) | | |
| 100 3 | WHITE TUBERS AND ROOTS/ ነጣ ያሉ ሥራሥሮች | White potatoes, white yams, white cassava, or other foods made from roots | | |
| 100 4 | DARK GREEN LEAFY VEGETABLES/ ጠቆር ያለ አረንጓዴ ቅጠል ያላቸው አትክልቶች | Dark green/leafy vegetables, including wild ones + locally available vitamin-A rich leaves such as amaranth, Cassava leaves, Kale, Spinach etc. | | |
| 100 5 | OTHER VEGETABLES ሌሎች አትክልቶች | other vegetables (e.g. tomato, onion, eggplant) , including wild vegetables | | |
| 100 6 | VITAMIN A RICH FRUITS /በቫይታሚን ኤ የበለፀጉ ፍራፍሬዎች | Ripe mangoes, cantaloupe, apricots (fresh or dried), Ripe papaya, dried peaches + other locally available vitamin A-rich fruits | | |
| 100 7 | OTHER FRUITS ሌሎች ፍራፍሬዎች | other fruits, including wild fruits (e.g., Qulqual), | | |
| 100 8 | ORGAN MEAT /(IRON RICH)/ በብረት ሜድን በለፀጉ የሆድ ዕቃዎች | Liver, Kidney, Heart or other organ meats or blood-based foods (e.g., “Dulet”) | | |
| 100 9 | FLESH MEATS /ሥጋ | beef, pork, lamb, goat, wild game, chicken, “koke, zhigra”, or other birds | | |
| 101 0 | EGGS/ዕንቁላል | chicken, duck, guinea hen or any other egg | | |
| 101 1 | FISH/አሣ | fresh or dried fish or shellfish | | |
| 101 2 | LEGUMES, NUTS AND SEEDS/ ጥራጥሬዎች | beans, peas, lentils, nuts, seeds or foods made from these (“Shiro”) | | |
| 101 3 | MILK AND MILK PRODUCTS/ወተትና የወተት ወጠቶች | Milk, cheese, yogurt or other milk products | | |
| 101 | OILS AND FATS | oil, fats or butter added to food or used for | | |

| | | | | |
|------|--|---|--|---|
| 4 | ዘይትና ቅባት ያላቸው ምግቦች | cooking, oil seeds and foods made from oil seeds e.g “suf fitfit” –traditional food from safflower /sun flower | | |
| 1015 | RED PALM PRODUCTS ከቀይ ተምር የተዘጋጁ ምግቦች | red palm oil, palm nut or palm nut pulp sauce | | |
| 1016 | SWEETS/ ጣፋጮች | sugar, honey, sweetened soda or sugary foods such as chocolates, candies, cookies and cakes | | |
| 1017 | SPICES, CONDIMENTS, BEVERAGES/ ቅመሞቻቸውም በናና ሻይ | spices(black pepper, salt), condiments (soy sauce, hot sauce), coffee, tea, | | |
| 1018 | Meal outside home/ ወጭ ስለመጣ ብ | Did you or anyone in your household eat anything (meal or snack) outside of the home yesterday? ትናንት ከቤተሰቡ ከቤት ወጭ የተመጣ በ ሰው አለ? | | - |

| | | | Now/ today | 5 years ago |
|------|---|--|------------|-------------|
| 1019 | Do you use Iodized salt? ላይድድ ሳልፍ = “ ሳልፍ < ሳልፍ < ሳልፍ < ; | 0= No ጃፋፋ 1= Yes ጃ- 9=I don't know ሳልፍ < ፆፆ/ | | |
| 1020 | Do you use any preventive method for HIV/AIDS & other venereal disease? HIV/AIDS “ K?KA< ሳልፍ ሳልፍ ሳልፍ ሳልፍ ሳልፍ < ; | 0= No ጃፋፋ 1= Yes ጃ- | | |