

**Federal Democratic Republic of Ethiopia
Southern Nations Nationalities and Peoples Regional Government**

**THE DEVELOPMENT STUDY ON
THE STRENGTHENING AGRICULTURAL
MARKETING SYSTEM
IN SOUTHERN NATIONS NATIONALITIES
AND PEOPLES REGION
IN
THE FEDERAL DEMOCRATIC REPUBLIC OF
ETHIOPIA**

**FINAL REPORT
MAIN REPORT**

November 2012

JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)

OVERSEAS MERCHANDISE INSPECTION CO., LTD.

NIPPON KOEI CO., LTD.

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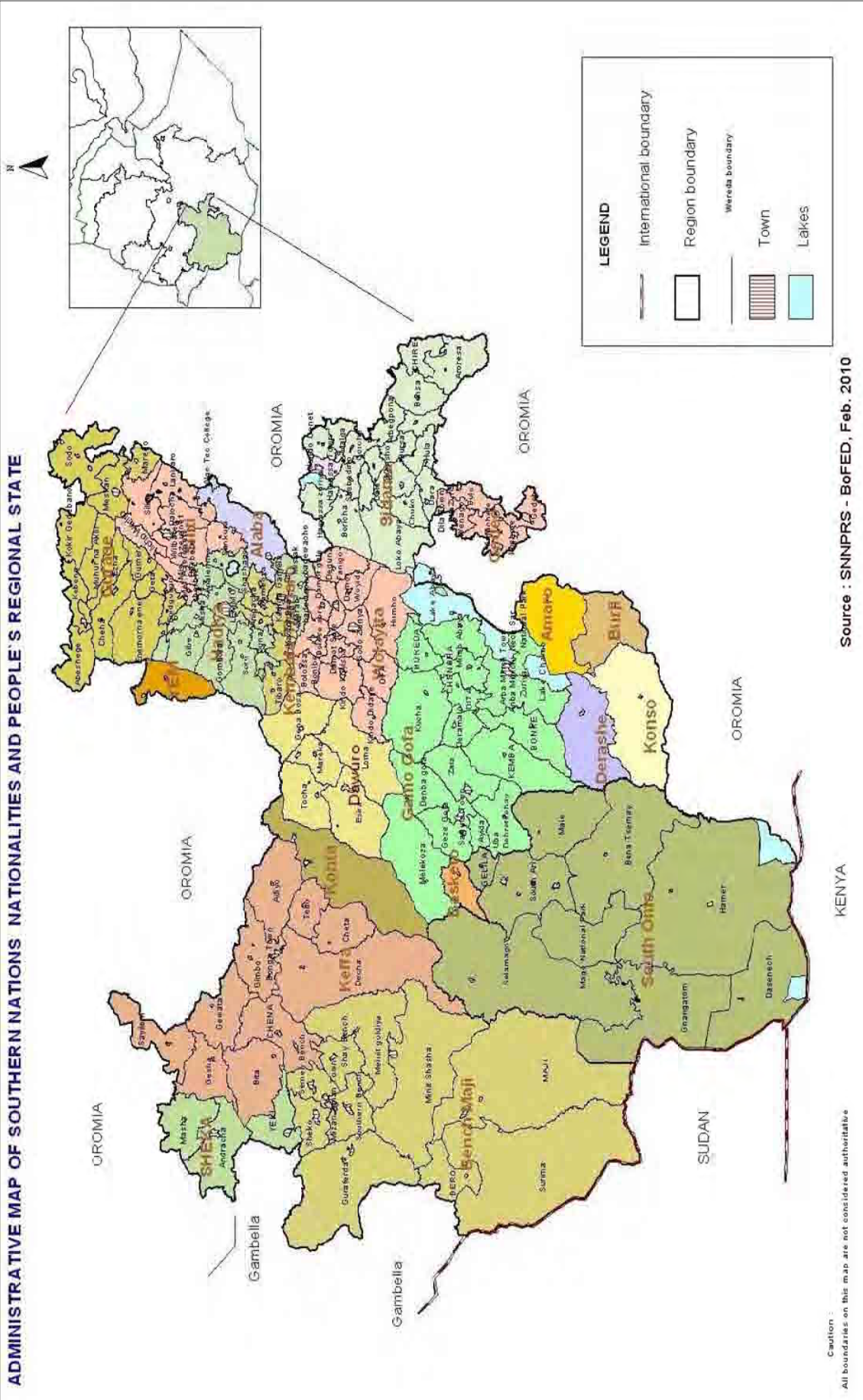
Composition of Final Report

MAIN REPORT

APPENDICES

The Study Area

ADMINISTRATIVE MAP OF SOUTHERN NATIONS NATIONALITIES AND PEOPLE'S REGIONAL STATE



Caution : All boundaries on this map are not considered authoritative

Source : SNNPRS - BoFED, Feb. 2010

PHOTOS-1 : AMIS ACTIVITY & CAPACITY BUILDING



Target Woredas received PC & Printer for AMIS



WoMC staff receive PC training for AMIS



Price bulletin board was installed at target woredas



Farmers watch the board at PP06 market center



Training program to P4P woreda and Cooperatives



Study team provided sample box to P4P Coop.



Capacity development to BoMC staff by sites visits



Vice President and Bureau head visited PP sites

PHOTOS-2 : VALUE ADDING ACTIVITY



Fruit harvester for mango, developed by JICA team



Demonstration of a fruits transportation cart



Avocado collection center provided by JICA team



Collective marketing of avocado



Fresh cassava cutting machine working on a farm



Clean, small chips of cassava, under sun-drying



Ginger washing facility. Pressure hose is working



Ginger sun-drying yard after washed

PHOTOS-3 : MARKET INFRASTRUCTURE



A typical local market under a dry season



A local market changes to a wet land under rain.



Bean marketing center constructed by Study team



Farmers and traders deal with Haricot Bean



Typical 100ton warehouse owned by Coop.



Office houses are used as warehouses



Modern 500ton warehouse built by Study team



Traffic line and pallets are arranged

Executive Summary

1. Background and Objectives of the Study

1.1 Background of the Study

The Government of the Federal Democratic Republic of Ethiopia (GoE) set a strategy to establish effective agricultural market systems to improve food security and to promote commercialization of agriculture in the Plan for Accelerated and Sustained Development to End Poverty (PASDEP). Southern Nations Nationalities and Peoples Regional State (SNNPR) has the third largest crop production area in the country and is also known as the major producer/supplier of fruits, vegetables and root crops. Per capita consumption of cereal products has been increased about 40% in the last 10 years in the country, and consumption demand for vegetables and fruits is also increasing. Hence, the importance of agricultural marketing system improvement in SNNPR is high in consideration of the PASDEP strategy for establishing effective agricultural market systems and the trend of diversification of dietary habit.

In this connection, the Bureau of Agriculture and Rural Development (BoARD) in SNNPR established the Agricultural Marketing Agency in the bureau in 2006 in order to manage the works for upgrading of agricultural marketing systems in SNNPR in an integrated fashion, and the agency started the marketing support, establishment of regional market information system, and capacity building of officials and stakeholders. Under these circumstances, GoE requested the Government of Japan to implement the Development Study on Strengthening Agricultural Marketing System in SNNPR.

1.2 Objectives of the Study

Overall goal of the Study

- 1) To improve value of agricultural products in SNNPR.
- 2) To improve food security situation through improvement of agricultural marketing system in SNNPR.

Objectives of the Study

- 1) To formulate master plan in order to design efficient and fair agricultural marketing system in SNNPR.
- 2) To carry out capacity development for Ethiopian counterpart personnel as well as farmers, agricultural cooperatives, agricultural cooperative unions, and traders in the course of the Study.

1.3 Study Areas and Target Crops

Study Areas

The Study area is covered by all areas in SNNPR. Sites for pilot projects are selected from 8 zones and 3 special woredas.

Target Crops

- 1) Cereals : Maize, Teff, Wheat
- 2) Pulses : Field pea, Haricot bean, Horse bean
- 3) Vegetables : Cabbage, Green pepper, Red pepper
- 4) Fruits : Avocado, Banana, Mango, Papaya
- 5) Root crops : Cassava, Enset, Sweet potato, Taro
- 6) Other crops : Sugar cane, Spices such as ginger, turmeric and others.

1.4 Counterpart Organization

Agricultural Marketing Process, Cooperative Development Process, and Extension Service Process of Bureau of Agriculture and Rural Development (BoARD) was the counterpart organization. BoARD was reorganized into two bureaus, namely Bureau of Agriculture (BoA) and Bureau of Marketing and Cooperative (BoMC) in October 2010. The Minutes of Meeting was exchanged in December 2010 to confirm that BoMC (Agricultural Marketing Process and Cooperative Development Process) and Extension Service Process of BoA are the counterpart organization to the Study team.

1.5 Scope of the Study

Study Schedule

Phase 1 : Jan. 2010 – Nov. 2010

Field survey to grasp the actual situations, Analysis and identification of problems/issues, and possible countermeasures, Formulation of tentative master plan, and Pilot Project (PP) plans

Phase 2 : Jan. 2011 – Nov. 2012

Implementation and evaluation of the PPs, Finalization of the Master Plan, Compilation of training materials and extension tools

Formulation of the Master Plan

The Study aimed to formulate the 5 years development plan comprises the practical action plans in the areas of four components; (i) agricultural marketing institution, (ii) marketing infrastructure, (iii) market information, and (iv) value addition. To plan the practical plans, the ideas of countermeasures were verified through the implementation of pilot projects in the Phase 2.

2. Agricultural Marketing Policy and Other Donors' Activities

2.1 Agricultural Marketing Policy

(1) Agricultural Marketing Strategy of Ministry of Agriculture and Rural Development (MoARD)

MoARD made up the 'Agricultural Marketing Strategy' in 2005. The policy focuses on increasing the volume and quality of produces both for export and domestic market and envisages the establishment of an efficient market in which all actors can benefit. The policy has the following objectives and strategies.

- 1) Strengthening the capability and procedure for inputs demand forecasting
- 2) Creating an efficient agricultural input and output exchange
- 3) Organizing the marketing system basing on quality standards
- 4) Expanding and strengthening marketing infrastructure
- 5) Strengthening financial capacity and insurance coverage
- 6) Ensuring the prevalence of marketing rules and regulation
- 7) Establishing a market information system

The policy further explains responsibilities of implementing agencies at both federal and regional level. What is observed in the documents, however, is that there are no action plans that explicitly indicate the implementation time frame.

(2) Regional Agricultural Marketing Strategy of BoARD-SNNPR

In September 2009, BoARD published the 'Regional Agricultural and Rural Development Strategic Plan (2010-2015)'. The plan covers 6 target agricultural products that are identified as strategic commodities, namely coffee, pulses, oilseeds, cereals, spices and fruits/vegetables. The plan indicates the strategic goals of each target products to be reached by 2015. However, there are no concrete/practical action plans nor methodologies to attain the planned strategic goals.

(3) Development Corridors Plan in SNNPR

SNNPR government set up a task force of relevant bureaus to formulate the 'Development Corridors Plan in SNNPR' in 2008. The plan aims at establishing agro-industry clusters of target crops/products at each development zones. As per the implementation strategy for this, development centers are responsible for promoting efforts by various intervention actors; including private, NGOs and public enterprises. However, it is still at the conceptional phase and there are no concrete/clear action plans.

2.2 Other Donors' Activities

(1) IFAD/ Agricultural Marketing Improvement Programme (AMIP)

AMIP is 7-years' program commenced from 2006 till 2013. AMIP's activities include training farmers in post-harvest management, improved access and utilization of market information, grades and standards, organization, enterprises management, and the impact of HIV/AIDS on agricultural marketing. In SNNPR, AMIP selected 40 target woredas and trainings were given to AMIP farmers groups. AMIP farmers groups are able to apply the credit with their business plan. However, the lack of adaptable technology for farmers in the trainings and high interest rate of the credit limit the farmers' actual challenges.

The Study team demonstrated the practical ginger washing method to AMIP farmers groups in the pilot project, and provided information of appropriate technology for value-addition which would be adaptable by the AMIP farmers groups; such as fruits harvesting tools and cassava cutter.

(2) WFP / Purchase for Progress (P4P)

P4P is a local procurement program to purchase cereals/pulses from farmers groups. It is provisional program for 5-years period (2008 - 2013). P4P aims to increase an income of smallholder farmers as well as to facilitate their understanding on quality demand of the market. WFP selected the cooperative unions for P4P based on their financial/operational capacity and past achievements. As of August 2012, 16 Unions (9 in SNNPR, 4 in Oromia, 2 in Amhara and 1 in Addis Ababa) participate in P4P. WFP uses the own quality standards for purchasing. WFP distributed cleaning equipment to 15 Unions to enhance their capacity to fulfill the quality standards. Sasakawa Africa Association conducted the training on the machine operation.

WFP undertakes the training on post-harvest technologies for the P4P participating unions. However, the training mainly focused on theoretical aspects and provided little knowledge and skills which the trainees could apply immediately in their workplaces. The Study team confirmed that cooperatives lacked knowledge and skills on post-harvest technologies. Cognizant of this, the Study team and WFP decided that the Study team would implement the technical training as PP02/08, which would provide practical skills. Accordingly, PP02/08 developed the training materials and provided the training for 9 unions and 19 primary cooperatives.

(3) World Bank /Agriculture Growth Program (AGP)

AGP has commenced the operation in Oct. 2010. In SNNPR, 19 woredas have been selected with specific target commodities of each woreda. Market and Agri-business Development project of AGP by funding of USAID (5-years' project from Dec. 2011) has deployed ACIDI/VOCA (NGO) to implement various projects in 19 target woredas in SNNPR and started its activities. The target commodities are limited to 4 products only; coffee, maize, teff and wheat.

AGP has plans to construct 7 market facilities in 6 selected woredas in 2012 for various agricultural products. Governmental staffs (regional, zonal and woreda) are supposed to extend technical assistance and supervision. However, these staffs have almost no experience in construction work of

market facility. The Study team provided information (drawings, bill of quantities, specifications) on market facility/warehouse construction to AGP office. The team also provided to all zonal and woreda staff involved in AGP construction the lecture training in the workshop in Mar. 2012.

(4) JICA One Village One Product (OVOP) Promotion Project

OVOP project started in March 2010 with 4 years period. It aims to support farmers who are difficult to access to the technology / fund / information for value addition of agricultural produce. It has been challenging a) to build OVOP promotion systems to be operated by regional and federal governments, b) to create the model cases of rural development through development of village products. SNNPR is the site for the model case creation. To create a village product and its selling outlets, OVOP project takes an approach that combine farmers group and individual/company who is capable to provide technical and marketing support to the farmers group.

The Study team made frequent information exchanges with OVOP project. The Study team provided the on-site explanation to OVOP farmers groups about ginger washing & drying facility and method of washing works based on the experiences obtained in the pilot project. The team also provided the advice on washing facility designing to the OVOP groups.

3. Present Condition of the Study Area and Problems/Issues

3.1 Target Crops

(1) Cereals

Since cereal production in the country cannot meet the domestic demand, all the production is basically used for domestic consumption. Quality Standards Authority of Ethiopia, WFP and Ethiopia Commodity Exchange (ECX) have its own quality standards for cereals. However, those standards are not used. Only in the transactions that WFP or ECX are involved in, respective quality standards are applied. WFP and ECX use respective quality standards. If quality is bad, such cereals will be rejected. P4P participating cooperative unions should disseminate quality control and refining technology to the member cooperatives. In addition, cooperatives' capacity for collective business (i.e. collection, cleaning and marketing) should be enhanced.

Most warehouses of cooperatives, either owned or leased, are improper for long-term storage of cereals because of mud-floor/walls with no ventilation and day-lighting, and holding capacity is small. It is necessary to promote proper warehouse designing for long-term storage and warehouse management technology.

(2) Pulses

Red haricot bean is a bean mainly produced in SNNPR and majority of production are marketed to Kenya. Same as the case of cereals, quality standards are not used and visual check and touching is common way of determining the quality. Exporters have cleaning machines normally. For color sorting of dried beans, no machine is used and many workers separate discolored beans manually before the shipment.

Farmers normally sell surplus (fresh or dried) at local marketplaces. Farmers often have a limited access to current market prices and local traders have a better position in pricing. Local marketplaces are open-air with no basic infrastructure as market. It is necessary to improve the poor conditions in marketplaces; at least some roofed area and proper drainage system are required. Same as the case of cereals, it is necessary to enhance the capacity of cooperatives in quality control and refining technology, and their capacity of collective business operation.

(3) Vegetables

Perishable vegetables

Vegetable consumption is very limited in Ethiopian food culture. Indispensable vegetables are red pepper, green pepper and onion, and these are all used as additives. Vegetable production is very limited as compared to food crops production; some say that the areas for vegetables cultivation are less than 1%. Most vegetables are grown for home consumption purpose and farmers sell surplus at local marketplaces. Tomatoes are cultivated for sales purpose around the city (Hawassa) area, but the production scale is limited. To improve the efficiency of marketing, scale of shipments needs to be increased by collective work of tomato farmers. In addition, farmers do not have proper transportation boxes to reduce damage of perishable vegetables during harvesting/transportation. Local marketplaces are the selling place for surplus products for farmers. Poor conditions in marketplaces hinder efficient transactions, especially on rainy days. Perishable vegetables (difficult to preserve freshness) are displayed under direct sunlight. It is very necessary to improve the poor conditions in marketplaces.

Red pepper

SNNPR is the largest producer of red pepper in the country and red pepper is a very important cash crop. In order to maintain the competitiveness with other regions, quality improvement and/or differentiation is necessary. To attain a better price by quality improvement, marketing channels should be differentiated. In addition, a certain volume is often required from buyer side, and farmers are required to work as a group for quality improvement.

Facilities, management system and rule/regulations of important marketplaces in pepper collection such as Alaba Kulito should be improved.

Research work on red pepper post-harvest processing is very weak. Research on loss assessment and improvement of traditional storage method, appropriate moisture contents to keep good color and good shape, improved drying method and so on should be undertaken.

(4) Fruits

Made efforts to promote production and to improve quality (introduce improved varieties) seem to have been so insignificant. Commercial production of fruits is very limited. The majority of fruits are produced (hard to say it is cultivated; pick fruits of naturally grown trees) by small-scale farmers who have some trees in the backyard or in a part of farmland. Almost all fruits are domestically consumed and very limited quantities are exported to overseas. Some attempts of banana exporting from Arba Minch to the Middle East have been made, but it is not yet a stable business. Eating of fruits is observed as a common matter in big cities since quite a number of fruit stands are seen and fresh fruit juices are popular drinks.

No management of height of mango/avocado trees. Due to high trees and probably due to cheap price, way of harvesting and handling are very rough – climbing trees and beating with sticks to make fruits fall off. Rough harvesting causes mechanical damage, and it brings the large losses in distribution channels. It is necessary to improve farmer's awareness of quality, and improve harvesting/handling practices by introducing appropriate tools/containers. A better truck transport technique (cheap and durable containers, etc.) also need to be introduced for long-distance transportation to the north.

The low price in the peak season is an important issue for mango. A mangoes demand of Africa Juice is supposed that only large demand in the country. Supplier side (unions, coops, WoMCs and BoMC) should make an effort to build a stable business connection and BoMC should take an initiative in it.

A variety of fruits are gathered at local marketplaces and shipped to urban markets. Poor conditions in the important marketplaces should be improved; at least a proper drainage system and some roofed areas.

(5) Root Crops

Root crops are mainly cultivated for home consumption purpose in small farm plots; except Enset which is the staple foods in some areas. Farmers carry harvest fresh roots down the mountains and sell them at local marketplaces. Prices of fresh root crops are very cheap at around less than 1 Birr/kg. Transaction and commercialization of root crops are at a primitive stage in general.

Value-added products of root crops are dried cassava and processed Enset (kocho and bula), but there is no preserved food or confectionery of root crops in Ethiopia. The consumption of dried cassava is gradually increasing in recent years in the urban markets since the people start to know that cassava flour is suited for mixing with teff flour for injera. Dried cassava can be drew attention of small scale farmers as their income source.

(6) Other Crops

Sugarcane

Sugarcane is cultivated for sales purpose. Value-additions such as making juice, brown sugar or alcoholic beverage are not practices. Relatively large-scale sugarcane farmers in Wonde Genet area in Shidama sell their sugarcane in standing and harvesting works are done by traders. It is expected that simple value-additions such as juice and brown sugar processing are introduced in the production areas for income generation and rural economic development in the future.

Ginger

SNNPR is the biggest producer of ginger in the country and dried ginger is an important export crop. Ginger is customarily sun-dried on the ground without washing. It is required to support the adaptation of appropriate washing tools/facilities which suit the local conditions by farmers. To change the current practice of drying, it is absolutely necessary for farmers to get better prices (incentive) worth doing extra work. It is also necessary to build up an assured business relation between farmers and quality-conscious buyers in which farmers' incentive are realized.

3.2 Crosscutting Issues

(1) Agricultural Market Information Services (AMIS)

A number of organizations collect and disseminate market price information in the country. Only ECX among them disseminates real-time information through the mobile SMS & IRV Services, however, it is mostly limited to coffee now. Hence, real-time price information service is lacking in almost all cash crops.

BoARD/BoMC is responsible for setting the mechanisms of AMIS in the region and its operation. However, the mechanism of AMIS has not yet been installed at all and current AMIS activity is very poor. Other than 'very poor communication services in rural areas' which is out of the BoMC's control, problems and issues on AMIS to be solved by BoMC are as follows:

- Non-systematic and un-organized work systems, Lack of blueprint of AMIS
- Poor resources for AMIS work in WoMCs
- Insufficient awareness of purpose of AMIS, No utilization of collected information
- Allocation of operating budget of WoMCs

(2) Marketing Infrastructure / Facility

Road Development and Transportation

Since establishment of SNNPR in 1993, road extension and road density have been improving steadily and going on at present according to the Regional Road Plan 2010/11-2014/15, but it's still insufficient. The main marketing routs in SNNPR of 1) Hawassa rout, 2) Hosana - Arba Minch route and 3) Jima

route have been asphalt paved and started functioning as trunk bloodstream. Moreover, community roads are also extending by woredas' budget or donors such as AGP.

Motorization in rural areas is still quite preliminary. Three-wheeled vehicle called "bajaji" and horse and carriage are still common in towns in SNNPR, and most people still use their feet or donkey to go to local markets from their residence in the rural areas. It is necessary to develop a public transportation system to deliver local agricultural commodities to the market. In this context, it is concerned that road extension in blind panic becomes an over investment.

Local Marketplaces

There are about 670 marketplaces in SNNPR, but marketplaces with roofs and proper drainage are quite seldom seen. Well organized local markets are also very few. There are so many things that have to be solved; such as having a functional flow lines, drainages, water supply, toilets, garbage collection, etc. The hygiene issue and commodity handling, especially on rainy days, are growing into a serious problem. However, no countermeasures have yet taken by the local authority due to lack of finance and appropriate management system.

Warehouse

Warehouses of cooperatives are mostly constructed with mud wall and earth floor, one entrance and no ventilation opening and no sun-lighting. Storage capacity is small. Cooperatives often rent offices or houses which are not suite for storing products and losses happen. It is necessary to promote the proper warehouse management to cooperatives; starting from the understanding the importance of separate storing of farms products and chemicals/fertilizers, then to disseminate the knowledge and technology of warehouse management by training.

(3) Farmers' Organization / Agricultural Cooperative

In SNNPR, farmers' livelihoods are mostly dependent on farming nevertheless; their participation in commercial transaction of farming produce is extremely limited. Their exposure to marketing information is minimum, thus their bargaining power against traders is almost nil.

Although cooperatives are highly expected to play a major role in livelihood improvement of smallholder farmers through collective marketing, lack of organizational and technical capacity as well as members' low commitment to their cooperatives make it very difficult for cooperatives to fulfill what they are expected to achieve.

BoMC is responsible for registration, inspection and support of all cooperatives in the region through its four-tiered structure covering regional level to kebele level. Currently, the number of agricultural primary cooperatives registered in the region is about 1,200. In spite of political slogans for the development of cooperative societies, BoMC has neither a clear organizational structure nor a practical strategy on how it should support cooperatives in its capacity and organizational development. Further, frequent revision and modifications in some policies strongly related to interest and development of cooperatives have not only become an impediment to their steady growth but also made it difficult for them to manage and operate the organization with a long-term vision and strategy. Government and NGOs have been providing various training for both cooperative unions and primary cooperatives (PCs) to activate cooperative business. However, the number of PCs targeted by each training program is generally very small. Moreover, most training has been one-off covering a few topics at a time, focusing on theoretical issues, adopting conventional teacher-student learning method for adult learners, same members are always selected for any training program, etc. As a result, very few interventions have produced any tangible results.

(4) Agro (food) Processing

Food culture influences and agro (food) processing of fruits/vegetables is scarcely performed. The rural villages with processing raw materials have no electric supply, no water service, and are far from consumers as well as suppliers of consumables in urban cities, and on top of this, communication service is very poor. Thus, in general, rural villages lack in the fundamental conditions to perform agro-processing business. In the next 10 years, electric supply may be improved by on-going dam construction, but the good sites for agro-processing business in the rural areas must still be limited.

The undeveloped supporting industries such as manufacturing of packaging materials hinder the development of agro (food) processing business regardless of the size of the business. A certain quality for labels/packages is required for jam and juice to compete against the imported products at urban outlets, but current quality level has not yet reached that level.

Flouring/powdering processes are traditionally practiced. The most popular one is pepper powder production (red pepper based mixed spice powder). Households have their own recipe, and purchase the various ingredients and clean/mix them at home, and then flour at mills in towns. There are private businesses producing branded pepper powder. However, traditional food processing with vegetables/fruits is almost nil, and the food culture is considered as one of factors for undeveloped food processing businesses in the country.

(5) ECX

The transactions of coffee, sesame and white haricot bean through the ECX have been active and increasing. However, the ECX transaction of grains have not activated yet. Since the merit of grains transaction in the ECX system is unclear, local traders feel no necessity to use the ECX.

Effective capacity enhancement and public relation activities to show both sellers and buyers (farmers/cooperatives/traders/flour millers) the visible merits are necessary in order to promote the ECX transaction of grains.

3.3 Classification of Crops by Distribution Systems

Target crops were classified from the viewpoint of the present modes of distribution systems in SNNPR in order to study the appropriate development goals and countermeasures. Furthermore, the positions of crops were analyzed as shown in a figure below.

Table Classification of Crops by Modes of Distribution Systems

	Distribution range	Preservation	Distribution loss	Process	Price fluctuation	Added value	Quality control
Cereals	Wide	Long	Medium	Process	Less high	Low potential	Good
Pulses	Less wide	Long	Medium	Half process	Less high	Potential	Good
Vegetables	Small	Short	Large	No process	High	High potential	Bad
Fruits	Less wide	Medium short	Large	No process	High	High potential	Bad
Root crops	Less wide	Medium long	Medium	Half process	Low	Potential	Bad
Others	Wide	Medium long	Medium	Half process	Low	Potential	Moderate

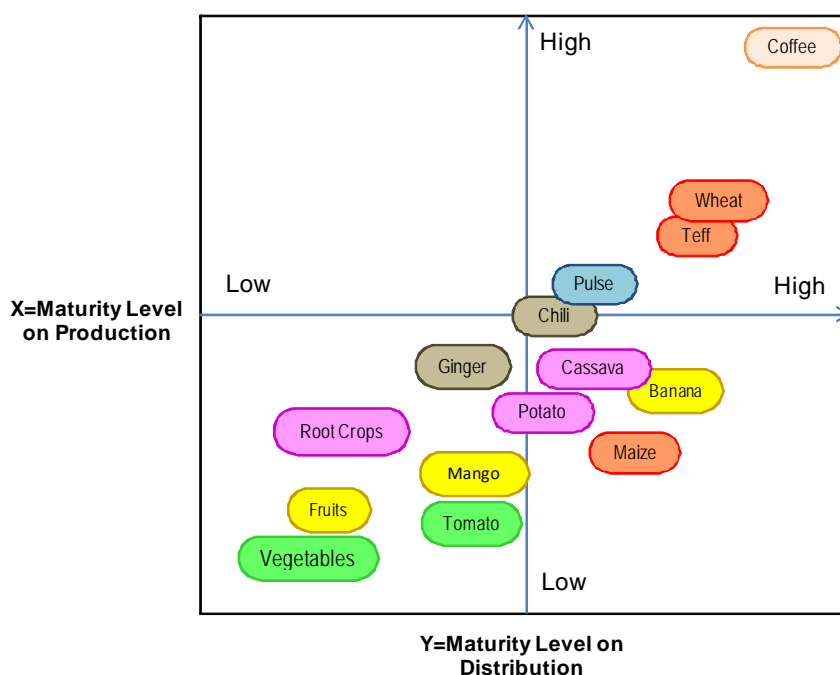


Figure Maturity Level between Production and Distribution (Conceptual figure)

3.4 Zonal Characteristic by Crop

- Cereals** : The northeast area is a wealthy production area of cereals such as maize, wheat, barley and teff. Wheat is positively marketed; on the other hand, maize is grown for mainly self consumption. It is remarkable that maize production volume is the largest in Sidama zone.
- Pulses** : Production and sales volume are the largest in Keffa zone. Bench Maji zone and South Omo zone distribute large volumes (2000-3000 ton/year) and sales ratios were greater than 50%. Chick peas are regarded as a cash crop in Gamo Gofa zone and 65% of production is marketed. Accordingly, the southwest could be potential areas for pulses.
- Vegetables:** Ethiopian cabbages are grown for mainly self-consumption and about 10% of production is marketed. In contrast, red peppers are grown for sale, with 60% to 75% of production goes to the market. In particular, production and sales of red pepper in Guraghe zone, Silitie zone and Alaba special woreda are remarkable. Regarding tomato, Sidama zone and Gamo Gofa zone are active in market supply, 55% and 37% respectively.
- Fruits** : Fruits are grown actively in Gamo Gofa zone. The most popular fruit is banana of which the sales ratio reaches 58%. Sidama zone is the second highest banana production area in volume but the first in sales ratio at 71%, and the sales ratio of avocados reaches 60%.
- Root crops:** The major production areas are Gamo Gofa zone and Wolayita zone. It is not suitable to produce cereals at sloping land of low-middle elevations in Wolayita zone; therefore root crops are positively grown instead.

3.5 Zonal Characteristic by Crop Marketing

The strategic cash crops of each area can be pointed out by comparing the sales ratios of the crops.

Northern area : Red pepper is produced as cash crop in Guraghe zone, Silitie zone and Hadiya zone. The sales of surplus cereals (mostly teff and wheat) reach nearly 50%. Although the volume is low, fruit production and sales are popular in Guraghe zone and Kembata Tembaro zone.

Central area : Root crops of Wolayita zone and vegetables (tomatoes in particular) and fruits (avocado and banana) in Sidama zone are cash crops. Sales ratio of root crops in Gedeo zone stands out. Surplus of cereals, particularly teff, are sold in this area.

Western area : Production and sales of pulses in Keffa zone stand out in SNNPR, but sales ratios of crops are generally low in Dawro zone, Keffa zone and Sheka zone. Sales ratios of crops in Bench Maji zone are higher overall, particular root crops and fruits.

Southern area : Gamo Gofa zone is popular in the production and sales of fruits and vegetables. Chick peas are also produced as cash crops. Fruits and vegetables are produced and sold in South Omo zone but pepper and potato are more remarkable.

3.6 Issues and Needs by Crop and Area

Major issues and needs of planning components for each crop/area are summarized as follows.

Table Issues and Needs by Crop and Area

Crops	Area	Maturity Level of Marketing	Issues	Needs			
				(1) Information	(2) Value-added	(3) Infrastructure	(4) Institutions
Cereals	<North> Guraghe Silitie	Advanced	Some cooperative unions have successfully started collection and processing of wheat. However, the problems of improper storage for preservation and quality control have not yet been solved, in general. In terms of maize and teff, the post-harvest handling is done manually, as it is with wheat, and cleaning is seldom carried out. Since WFP has started purchasing local cereals as a trial, the cooperative unions make efforts to collect cereals from the members and to clean them to meet the demand of WFP's standard. However, the collection and the quality control of local cereals are still immature.	⊙	⊙	△	○
Pulses	<North, West> Keffa Bench Maji South Omo	Intermediate	There are local marketplaces dealing in pulses in Sidama zone, and those pulses are exported to Djibouti and Kenya through Nazaret and Moyale. However, due to un-developed collective marketing in large scale bulk, the individual farmers sell their surplus respectively and earn petty cash without using the bargaining power of group sales. Some unions have started cleaning of pulses using machinery provided by WFP to improve the quality. Awareness of quality control should be encouraged.	⊙	○	⊙	○
Vegetables	<Central> Sidama Gamo Gofa	Primary	Vegetables are grown for self-consumption and small amounts of surplus are sold in local marketplaces. It is primarily local production for local consumption. The facilities of the local marketplaces are not well designed and the buying and selling conditions are very poor. Tomatoes are sold in local marketplaces near the cities, but the scale of the production is small. In order to improve the efficiency of the distribution and marketing, it is necessary to introduce a group sales system and increase the sales volumes. It is notable that suitable containers for fragile tomatoes are not disseminated.	⊙	△	⊙	○

Crops	Area	Maturity Level of Marketing	Issues	Needs			
				(1) Information	(2) Value-added	(3) Infrastructure	(4) Institutions
	Red pepper <North> Silitie Guraghe Alaba S.W.	Primary	SNNPR is the largest production region of red peppers and it is one of the significant cash crops. In order to secure competitiveness to the other regions, quality improvement and a differentiation strategy are necessary.	◎	◎	△	○
Fruits	<Central> Gamo Gofa Sidama Wolayita K. Tembaro Hadiya	Arba Minch: Intermediate Other areas: Primary	<p>Most fruits are grown in backyard gardens and the management of growing, harvesting and post-harvest handling are not properly carried out.</p> <p>An exception is Arba Minch, where the local marketplaces in the fruit production areas are functioning as collection points, but the conditions of transactions are very poor in general. The minimum requirements for drainage systems and roofs should be taken into consideration. Due to the low unit price, freight handling is very rough. It is necessary to improve awareness of quality assurances, dissemination of proper handling by proper containers and careful harvesting.</p> <p>In the case of avocado, much loss occurs in long distance physical distribution.</p> <p>The low price in the peak season is the important issue for mangos, therefore the development of domestic markets is required. A new juice factory in Oromia region is planning to purchase mangos as raw material from SNNPR's major production area, and that is expected to resolve the problem of low prices. The issue to be considered now is to formulate the bulk handling system of quality mango to meet the heavy demand of the factory.</p> <p>Bananas in Arba Minch are grown in irrigated fields and USAID/AITEP helps to promote the export of bananas. However, the collection in the production area and the preservation of quality in transit are issues to be solved.</p>	◎	◎	○	△
Root crops	<Central, South> Wolayita Bench Maji South Omo	Primary	<p>The growing of root crops is popular in the center and south of SNNPR, where elevations are between low and middle high, but most root crops are grown for self-consumption. The producers carry the root crops down the mountains and sell them at the local marketplaces. Transactions of root crops are primitive in general. It is remarkable that cassava has become popular as bulking filler of the local staple diet "enjera" made of teff, therefore cassava has become a potential cash crop for small scale farmers.</p> <p>The production of onion and garlic in the west part of SNNPR are not large but the sales ratios reach 50% to 70%. Although most of them are consumed in the local areas, some goes to Addis Ababa through Gima town.</p>	◎	◎	○	△
Others	Ginger <Central> Wolayita K. Tembaro	Intermediate	SNNPR is the biggest supplier of ginger in Ethiopia. Ginger is a significant cash crop and it is distributed in raw and/or in dry form. Dry ginger is a potential export crop so that the quality improvement of the drying process at the farmlands is a critical issue.	◎	◎	○	△

4. Master Plan

4.1 Scope and Methodology of Formulation of the Master Plan

(1) Scope of the Master Plan

- 1) Duration : 5-years begins after completion of the Study, from 2013 to 2017.
- 2) Target Crops : Cereals, Pulses, Vegetables, Fruits, Root crops, Others (spices, etc.).
- 3) Target Sites : All around the SNNPR. Key areas of production, distribution and consumption are prioritized.
- 4) Stakeholders: Beneficiaries are all players in the marketing systems; including producers, cooperatives, traders, processors, market operators and consumers. Responsible/implementing bodies of action plans are producers, cooperatives, traders or governmental organizations.
- 5) Planning Components : (i) Agricultural marketing institution/system, (ii) Agricultural marketing infrastructure, (iii) Agricultural market information, and (iv) High value-added commodities.

(2) Planning Procedure

Based on the results of the field study, tentative Master Plan (strategies and action plans) were formulated in accordance with the issues and needs of crops/areas. The formulated action plans were verified by the pilot projects. The results of pilot projects were fed back to the planning process to rethink and revise the tentative Master Plan, and then the Master Plan was finalized.

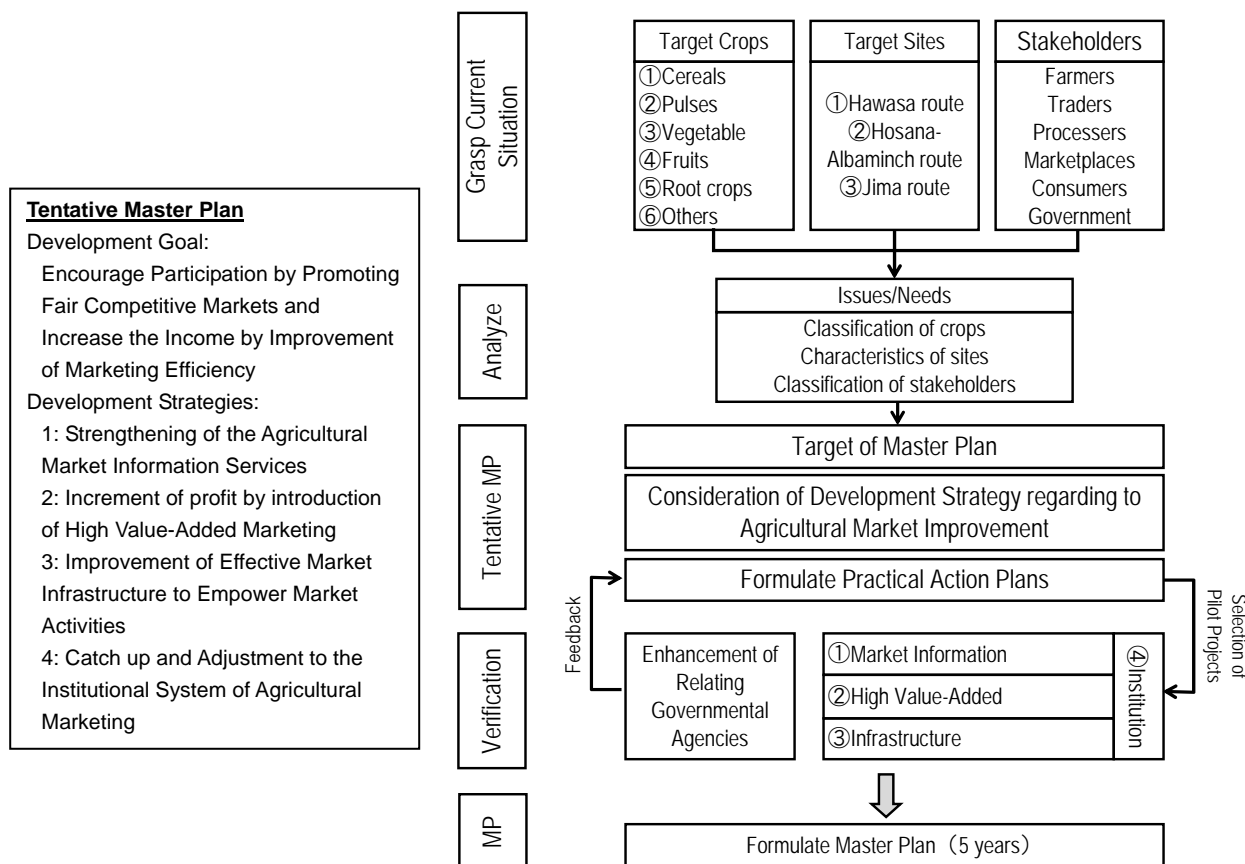


Figure Planning Procedure of the Master Plan

(3) Pilot Projects (Verification Study)

The purposes of pilot projects in the Study are summarized in the following four points.

- 1) To verify the adequacy of strategies and action plans of the tentative master plan
- 2) To verify the feasibility and effectiveness of the proposed action plans
- 3) To secure the sustainability through capacity development of stakeholders
- 4) To provide on-the-job training to counterparts in the implementation of pilot projects

The pilot projects ideas/plans were prepared in consideration of the four requirements; 1) visible effects are expected within one-and-a-half year's period, 2) prospective implementing bodies exist or possible to identify, 3) applicable to other areas in SNNPR, and it can be a model case and 4) self-sustaining development is expected.

Project ideas/plans were integrated and narrowed down. After consideration of the balances of crops and sites, the limitation of human resources and projects budget, finally, 10 pilot projects were selected. Moreover, the projects were composed to have a mutually-supportive relationship on some target crops to synchronize the efforts, in accordance to the key concept (holistic approach) of the tentative master plan.

Table 10 Pilot Projects Implemented to Verify the Tentative Master Plan

Basic Strategies	Strategies	Target Crops	Project Sites	Project No. & Title
Strengthening of AMIS	Strengthening of AMIS	H. bean, Ginger	5 Zones 1 Sp. woreda	01 Strengthening of the Agricultural Market Information Service
Increment of profit by introduction of High Value-Added Marketing	Postharvest handling & Quality improvement	Wheat, Maize, Beans	9 Unions in 6 Zones and 1 Sp. woreda	02 Capacity development of quality control of cereals and pulses for cooperative unions (Collaboration with WFP/P4P)
	Harvesting & Postharvest handling	Avocado, Mango	Sidama, Gamo Gofa, Wolayita	03 Improvement of harvesting and handling practices of Mango/Avocado
	Processing & marketing	Cassava	Wolayita, Gamo Gofa	04 Improvement of dried cassava quality and market development project
	Quality improvement & marketing	Ginger	K. Tembaro, Wolayita	05 Production of "clean" dried-ginger and establishment of linkages with buyers
Improvement of Effective Market Infrastructure to Empower Market Activities	Marketplace	H. bean	Sidama	06 Local market improvement project in haricot bean producing areas
	Marketplace	Ginger	K. Tembaro	07 Local market improvement project in ginger producing areas
	Warehouse	Maize, Wheat, H. bean	K. Tembaro	08 Standard warehouse construction and its ideal management
Catch up and Adjustment to the Institutional System of Agricultural Marketing	Quality standard	Wheat	Sidama	09 Comparison test for ECX and Non-ECX wheat
	Enhancement of BoMC, BoA			10 Empowerment of civil servants' understanding of market improvement through monitoring the Pilot projects

H. bean : Haricot bean

Lessons Learnt in the Pilot Projects

1) Strengthening of the Agricultural Market Information Services (AMIS)

PP01 explored how to build a systematic and user-focused AMIS system under the poor communication services in the rural area by connecting 14 WoMCs and BoMC. To be more precise, "AMIS with SMS and bulletin boards" (using mobile SMS, the only usable communication tool

among 14 WoMCs; for prompt data transmission to other WoMCs and BoMC, and using price bulletin boards in the marketplaces to disseminate real-time price information to users) was designed and executed as a trial experiment.

PP01 revealed that current mobile network/SMS service is not highly reliable; because network failures often hinder the immediate sending/receiving SMS messages. Also there were missing SMS messages. It is hard to expect a drastic improvement of communication services in the rural areas over the next five years. Therefore, it is concluded that an expansion of “AMIS with SMS and bulletin boards” into other important crops is a core strategy of AMIS development.

Most users of price bulletin board (farmers and traders) appreciated the price posing service as useful. 14 WoMC C/Ps showed their wishes to continue the AMIS activity and add another crops in it. However, BoMC could not arrange the operating budget of WoMCs and the services were stopped. AMIS needs the alignment work with same understandings of the purpose among WoMCs, and BoMC has to fully be involved in budget and staff allocation at WoMCs.

2) Increment of Profit by Introduction of High Value-Added Marketing

PP02/08 provided the quality control of cereals/pulses and warehouse management for the WFP/P4P participating cooperative unions and primary cooperatives. The participants in the training programs appreciated the simple and understandable training by using the picture-card type teaching material prepared in Amharic. BoMC has to work on continuing the collaboration with WFP/P4P for further implementation of the training program to other cooperatives since BoMC must not be able to allocate the budget.

In the three projects worked on fruits (PP03), cassava (PP04) and ginger (PP05), effectiveness of the developed equipment/tools were clarified. It became apparent that a new technology for value-addition will no be practiced by farmers without tangible profits. The market linkage/development is also very important for rural farmers who are far from the urban markets, and support of BoMC, ZoMC and WoMC are essential. Credit provision support which is necessary for farmers to buy equipment/tools (i.e. to start new business) is poor.

3) Improvement of Effective Market Infrastructure to Empower Market Activities

2 pilot projects (PP06, 07) for improvement of open-air marketplaces constructed the new facilities with roofs and concrete floor in order to improve business conditions of haricot bean and ginger, and supported the managing bodies (town municipalities) in order to attain the proper market management. It was the first-time to construct market facility for specific farm products in SNNPR other than coffee primary marketing center. All stakeholders such as farmers, management bodies and traders showed high appreciation of the facilities and its management.

A holistic approach was applied by implementing the AMIS (PP01), Value-addition (PP02, PP05) and Improvement of market infrastructure (PP06, 07) for ginger and haricot bean. Similar holistic approach focusing on a specific product shall be practiced in other areas in SNNPR.

At present, AGP shows its interest in extending budget for construction of market facilities in SNNPR. Collaboration with AGP is very important for market facility development.

PP08 constructed the model warehouse, and then conducted the training program of warehouse management for the cooperatives. There are cooperatives which have made improvements on ventilation, cleaning, use of stack cards for record keeping, etc. after the training. Merits of the picture-card type teaching materials (easy teaching and easy understanding, it can be used without electricity) are confirmed.

4) Catch up and Adjustment to the Institutional System of Agricultural Marketing

The comparison test of flour recoveries between ECX standard wheat and non-ECX standard wheat was conducted as PP09. The test data showed that the flour recovery of ECX wheat is 4.0% higher than non-ECX wheat. The expected result was obtained, but the higher management of ECX did not show interest in the test data.

The PP10 aimed to review and analyze the progress and results of the other pilot projects. It was expected that the counterparts would be able to develop their capacity for survey, analysis, reporting, and presentation through the implementation process of PP10. This type of capacity development has been practiced in many Asian countries and its effectiveness has been verified; however, it was not functioning in SNNPR.

4.2 Master Plan

4.2.1 Development Goal

The development goal of the Master Plan is set as “Encourage Participation by Promoting Fair Competitive Markets and Increase the Income by Improvement of Marketing Efficiency.”

4.2.2 Perception of Current Conditions for the Formulation of the Master Plan

- 1) Collection facilities of farm produce in rural areas and distribution facilities (wholesale markets) in urban areas are both underdeveloped. Consumers’ demand for quality produce is still at a lower level and it is hard to get better prices worth the efforts farmers make for quality improvement. There is no mutual trust between farmers and local traders. To improve the agricultural marketing system, many issues need to be improved at a time and many stakeholders to be involved.
- 2) Farmers cooperatives are engaged in distribution of fertilizer/seeds, but few cooperatives have are engaged in marketing of farm produce. Also, few farmers are involved in a group business such as sales of their farm produce, thus most farmers lack the practical experiences of business.
- 3) An annual budget of local government is generally small. Therefore the agricultural development plans generally lack action plans. Government doesn’t have subsidy schemes in order to implement the policy.
- 4) Most of regional officials lack experiences in planning and implementation of development project.
- 5) Most of farmers are not market-oriented but just sell surplus from own consumption.
- 6) A number of donors fund various programs/projects, but few supports the development and dissemination of appropriate technology.
- 7) Little coordination or collaboration among projects/programs.
- 8) Little attention/support has been given to private traders, who are the main actors in the marketing system, for the establishment of fair and efficient marketing system.
- 9) The enforcement of metrological standard rules is very important for fair business practice. However, few efforts have been made in this area.
- 10) Statistical data of agricultural production, which is indispensable for planning, are collected by CSA and regional government. However, data have large differences and are not very credible.

4.2.3 Guiding Principal for the Formulation of Development Strategy

- 1) The improvement of the agricultural marketing system requires uplifting of the whole system with the involvement and collaboration of as many stakeholders as possible. A holistic approach is adopted to synchronize all efforts to improve the AMIS, Value-addition, Market infrastructure and facility, as well as to enhance the capacity of the government offices so as to achieve an

ultimate objective.

- 2) Four main components are determined as the basic strategies; namely [1] Strengthening of the Agricultural Market Information Services, [2] Increment of Profit by Introduction of High Value-added Marketing, [3] Improvement of Effective Market Infrastructure to Empower Market Activities, and [4] Catch-up and Adjustment to the Institutional System of Agricultural Marketing.
- 3) The development strategy should be concrete and realistic with due consideration of available human resources and budget in SNNPR.
- 4) Prepare tangible projects and implementation plans assuming the collaboration with development partners such as IFAD/AMIP, WFP/P4P and World Bank/AGP.
- 5) Utilize lessons learnt obtained through the implementation of pilot projects.

4.2.4 Development Strategy

(1) Basic Strategy 1: Strengthening of the Agricultural Market Information Services (AMIS)

BoMC is responsible for setting the mechanism of AMIS in the region as well as its operation and monitoring. However, the current AMIS operation is not systematic/organized and very weak. In principle, government market information services should aim to provide useful market information to farmers and other market actors.

Strategy 1-1: Stepwise expansion of “AMIS with SMS and bulletin boards” into other important crops

Strategy 1-2: Utilization of collected price data

- Impose a duty of periodical delivery of collected price data to the related offices
- Dissemination of collected price data by radio and newspaper
- Dissemination of collected price data by through the BoMC website
- Future linkages with other AMIS

Strategy 1-3: Utilization of the existing information resources

- Obtain Addis Ababa market information from Oromia marketing agency
- Utilize the ECX information

(2) Basic Strategy 2: Increment of Profit by Introduction of High Value-Added Marketing

Traditional subsistence farming is dominant and commercialized farming that targets the market demand/requirements is still less developed in SNNPR. Farmers’ post-harvest works and quality control is limited and traders carry out cleaning/sorting/grading works. Qualities of agricultural products are generally low since low quality requirements in the country, and the room for quality improvements is large from a technical standpoint.

Although the quality requirements in the country are low, there are some quality conscious buyers such as WFP, supermarkets in big cities (wealth urban consumers) and so on. Quality conscious buyers are limited but they will increase in the future along with the economic development and expansion of city dwellers. Therefore, supportive measures to promote the challenges of quality improvement and value addition should be provided to farmers and traders.

Quality improvement and value addition means that someone does some additional work. No one will carry out additional work unless he/she gets tangible profits worth doing it. In the current situation in SNNPR, farmers (including cooperatives) have no capability to build a business linkage with only a few quality conscious buyers by themselves, and farmers and cooperatives can not be a implementing body of quality improvement without support. In addition, it must be necessary to tackle as a group to

fulfill a buyer's quantitative demand; a certain volume of produce is always required.

The Master Plan will focus on the crops that 'quality conscious buyers are identified or prospective and, value addition by locally-available appropriate technology is feasible.'

Strategy 2-1: Improvement of harvesting and handling method of fruits and vegetables

- Mango and Avocado: Reduction of losses by popularizing the developed harvesting tool
- Tomato: Modernization of vegetable shipment to urban markets

Strategy 2-2: Acceleration and Strengthen participation in the Quality Oriented Markets
(Dissemination of Quality control skills)

Strategy 2-3: Development of Value-Added Activities in the Producing Areas

- Promotion of fruits processing by private enterprise attraction
- Quality control of traditional processed foods
- Milling service of cereals, pulses and spices (Grain mill)
- Improvement of sun-drying of cereals and pulses
- Extension of dried cassava processing and market linkages and its market development by expansion of consumption
- Improvement of post-harvest technology for Red pepper
- Promotion of high quality dried ginger production
- Study on improvement of postharvest processing for Turmeric

Strategy 2-4: Strengthening the Marketability of Specialized and Superior Products/Varieties

Strategy 2-5: Acceleration of Collective Marketing

(3) Basic Strategy 3: Improvement of Effective Market Infrastructure to Empower Market Activities

Basic market infrastructure such as roads, marketplaces and warehouses are still in poor condition in SNNPR. These negative conditions prevent utilization of high production potential. Since roads and marketplaces are the basic infrastructure, their improvements are critical. In order to reduce losses during storage and to enhance food crops distribution reflect the demand and supply balance, improvement of warehouses conditions and its operation are to be promoted. As a consequence of these improvements, producers' profits are expected to grow and food security is also expected to improve.

Strategy 3-1: Improvement of Trunk Roads and Access Roads to Woreda Marketplace and Access Roads to Local Marketplaces

Strategy 3-2: Improvement of Market Infrastructure at Woreda Marketplaces in Target Areas

Strategy 3-3: Improvement of Hawassa City Marketplace Infrastructure

Strategy 3-4 :Development of New Agricultural Warehouse and Improvement of Existing Warehouse for Effective Use

Strategy 3-5: Promotion of Agricultural Products Sales at Roadside Infrastructure

(4) Basic Strategy 4: Catch up and Adjustment to the Institutional System of Agricultural; Marketing

Enforcement of a supporting system and operational capability of the local government is therefore the key strategy to be considered since the agricultural marketing system is perceived as a government's indirect measure by supporting private commercial trade. In particular, BoMC has to play a central role in involving many actors in order to accomplish the aims of basic Strategy 1-3 by conducting

practical action plans. Therefore their implementing capacities are the key to fulfilling this aim. The necessary strategies for solving the issues on the system will be as follows.

Strategy 4-1: Acceleration of Coordination among Agricultural Marketing Stakeholders

Strategy 4-2: Publicity and Maintenance of Specification/Metrological Standard

Strategy 4-3: Strengthening of Supporting System for Cooperatives/Unions

- Capacity Enhancement of Grain Cooperatives in Collective Marketing

- Development of Cooperative Support System in BoMC

Strategy 4-4: Capacity Development of BoMC Staffs

5. Projects Plan

5.1 Policy for Preparation of Projects Plan

The projects plan are formulated mainly based on the concept of ‘continuation’, ‘enlargement of target areas’, and ‘application to other crops’ of the 10 pilot projects with the following policies.

- 1) Practical projects plan reflecting the results and lessons learnt of the pilot projects
- 2) Securing necessary funds for implementation and collaboration with other donor agencies especially with AGP of World Bank and P4P of WFP
- 3) Holistic and comprehensive approach
- 4) Focusing on production areas (maximization of potentials of target crops and areas)
- 5) Approach to producers for tangible increment of their profits
- 6) Adaptation of appropriate technologies
- 7) Project within an applicable amount of budget

5.2 Plan for Agricultural Market Information Service (AMIS) Development

Project No. 1: Project on the Strengthening of Agricultural Market Information Service

This project is to install the job systems for AMIS in the Marketing and Cooperative administration. Following 6 components are planned in line with the Basic Strategy 1.

Component 1: Stepwise expansion of “AMIS with SMS and bulletin boards” into 6 target crops and 82 WoMCs

Component 2: Delivery of collected price data to the related offices in SNNPR

Component 3: Dissemination of collected price data by radios and newspaper

Component 4: Dissemination of collected price data by BoMC website

Component 5: Obtain Addis Ababa market information from Oromia Marketing Agency

Component 6: Obtain ECX auction price of sesame

These 6 components are implemented by coordinated fashion as one program. Component 2 to 6 are implemented according to the stepwise expansion of “AMIS with SMS and bulletin boards”. Before starting AMIS for new crops, Ginger AMIS and Haricot bean AMIS (PP01) should be restarted. In addition, precondition for the project implementation; i.e. securing the project budget funds and additional AMIS staff of BoMC should be solved in the 1st year (2013).

Project Period : 2013 - 2017 (5 years)

Target Crop/Product : Mango, Avocado, Red pepper, Sesame, Wheat, Maize

Project Site : 82 woredas

5.3 Plan for Promotion of High Value-Added Marketing

5 programs and 1 planning activity are proposed for 6 crops.

(1) Fruits loss mitigation program

Project No. 2: Follow-up Support of the PP03 Target Groups

BoMC/WoMC/kebele community organizer carry out site monitoring and advisory support at the 3 sites of PP03 to promote effective use of provided tools and continue attempt at collective marketing by the primary cooperatives.

Project Period : 2013 - 2014 (2012/13 and 2013/14 harvest seasons)

Target Crop/Product : Mango, Avocado

Project Site : Mango- Mirab Abaya woreda (Gamo Gofa zone), Boloso Bombe woreda (Wolayita zone)
Avocado- Dale woreda (Sidama zone)

Project No. 3: Project on the Popularization of Fruit Harvesting Tools

This project aims to popularize the harvesting tool developed by PP03 in the selected 18 woreda. To create farmers demands for the tool, the project a) explains and demonstrates the benefits of using tool, b) posts posters in the villages, and c) provides free tools to key farmers. The project targets to create a situation that “the new tool becomes a commercially-available product like a sickle or hoe in local markets in fruits producing areas”, and promote the commercial manufacturing of the tools. In addition, the project supports the market-linkage building with quality-seeking buyers.

Project Period : 2013 - 2017 (5 years, 4 harvest seasons)

Target Crop/Product : Mango, Avocado

Project Site : 18 woredas in 6 zones (Gamo Gofa, Wolayita, Kembata Tembaro, Sidama, Gedeo, and Bench Maji)

Project No. 4: Support for the Materialization of Mango Sales to Africa Juice Company

Build the stable business connection between Africa Juice Company and two fruit handling unions in SNNPR. BoMC shall take a lead role in building business connection, and support the unions and primary cooperatives.

Project Period : 2013 - 2017 (5 years)

Target Crop/Product : Mango

Project Site : Goma Gofa zone, Wolayita zone

(2) Vegetable shipment modernization program

Project No. 5: Project on the Improvement of Tomato Marketing to Urban Market

Phase 1: Establishment of Model Cases

To promote the farmers’ challenge for damage protection of tomato fruits during harvesting and transportation, the project attempts to establish models of tomato shipping improvement by producers groups in the irrigated tomato production area around Hawassa city. The project targets to establish 2 model groups.

Project Period : 2013 - 2016 (4 years, 2 harvest seasons)

Target Crop/Product : Tomato

Project Site : Sidama zone

Project No. 6: Project on the Improvement of Tomato Marketing to Urban Market

Phase 2: Preparation and Operation of the Initial Cost Support Scheme

Formulate and operate the initial cost support scheme for handling equipment such as plastic boxes, to promote the farmers' challenge to mitigate tomato fruits damage occurs in the harvesting work and transportation as well as collective marketing.

Project Period : 2016 - 2018 (24 months)

Target Crop/Product : Tomato

Project Site : Sidama zone

(3) Quality control skills dissemination program

Project No. 7: Capacity Enhancement of Cooperatives in Grain & Pulses Quality Control and Warehouse Management

Effective training method and teaching materials on quality control and warehouse management have been prepared in the PP02. This project intends to implement the cascade system trainings for 65 non-trained cooperatives under the WFP/P4P participating unions.

Project Period : 2013 - 2017 (5 years)

Target Crop/Product : Cereals, Pulses

Project Site : 19 woredas in 5 zones (Wolayita, Hadiya,, Kembata Tembaro, Guraghe, Silitie) and Alaba special woreda

(4) High quality dried cassava promotion program

Project No. 8: Follow-up Support of the PP04 Target Groups

Dried cassava processing and marketing by small-scale farmers groups were attempted in the pilot project (PP04). BoMC/ZoMC/WoMC shall continue the support of targets groups (12 farmers groups in 2 woredas, especially the groups in Offa woreda).

Project Period : 2013 - 2014 (2 years)

Target Crop/Product : Cassava

Project Site : Kindo Koysha woreda and Offa woreda in Wolayita zone

Project No. 9: Support for the Extension of High Quality Dried Cassava Producing Business

Farmers' groups in cassava production areas in Wolayita zone and Gamo Gofa zone wish to challenge the dried cassava processing and marketing. BoMC/ZoMC/WoMC provides support for farmers' groups for technical training, market linkage building and getting a loan for initial inputs.

Project Period : 2013 - 2015 (3 years)

Target Crop/Product : Cassava

Project Site : Wolayita zone and Gamo Gofa zone

Project No. 10: Sales Promotion of High Quality Dried Cassava

Consumers' demand for high quality and small-size dried cassava was verified in Hawassa in the PP04. In order to promote the high quality dried cassava production, BoMC shall work on market development in large consuming area such as Addis Ababa.

Project Period : 2013 - 2015 (3 years)

Target Crop/Product : High quality dried cassava

Project Site : Addis Ababa, Nazaret

(5) High quality dried ginger promotion program

Project No. 11: Follow-up Support of the PP05 Target Groups

The pilot project (PP05) supported the production of “clean dried ginger” by 2 farmers/traders groups. BoMC/WoMC carry out the site monitoring and advisory support for these 2 groups in the next two seasons (2012/13 and 2013/14) to sustain and to strengthen their businesses.

Project Period : 2012 - 2014 (2012/13 and 2013/14 harvest season)

Target Crop/Product : Ginger

Project Site : Hadaro Tunto woreda (Kembata Tembaro zone)
Boloso Bombe woreda (Wolayita zone)

Project No. 12: Project on the Incubation of Ginger Washing & Drying Business

Support other farmers/traders groups in ginger production area for entering into a ginger washing & drying business of similar scale of the PP05. The project aims to support the 2 groups per season during 3 seasons (from 2014/15 to 2016/17); in total of 6 groups. In the last 2016/17 season, a method which interest groups make application for the support (bottom-up mode) shall be attempted.

Project Period : 2013 - 2017 (5 years, 3 harvest seasons)

Target Crop/Product : Ginger

Project Site : Wolayita zone and Kembata Tembaro zone

(6) Planning of Post-harvest improvement of Turmeric

Project No. 13: Planning of post-harvest improvement of Turmeric

Conduct a research study on current post-harvest processing and turmeric collection to clarify the necessity to change current post-harvest practice from the viewpoint of ‘market-oriented’, and explore the applicable technology; include the ‘soaking + jet-washing method’. In the case the applicable technology is identified, think of an introduction strategy and formulate a support scheme/project.

Project Period : 2013 (1 year)

Target Crop/Product : Turmeric

Project Site : Yeki woreda (Sheka zone)

5.4 Plan for Agricultural Products Market Infrastructure Development

Following 4 programs are proposed.

(1) Woreda Marketplace Improvement Program

Project No. 14: PP06 Haricot Bean Market Infrastructure Support Project

BoMC monitors and verifies the management of the market facility for haricot bean constructed at Belila Marketplace of Boricha woreda by the PP06 in order to reflect the result and support to other market facilities to be constructed by the projects.

Project Period : 2013 - 2017 (5 years)

Target Crop/Product : Haricot bean

Project Site : Belila town (Boricha woreda, Sidama zone)

Project No. 15: Haricot Bean Market Infrastructure Development

Construct new haricot bean market facilities and support their management in 8 woredas where the PP01 AMIS had been executed, except for Boricha woreda where the facility has been constructed by the PP06.

Project Period : 2013 - 2017 (5 years)

Target Crop/Product : Haricot bean
Project Site : 8 woredas
East Badawacho, West Badawacho (Hadiya zone),
Damot Gale, Sodo Zuria (Wolayita zone), Amaro, Burji (Segen zone),
Alaba special woreda

Project No. 16: PP07 Ginger Market Infrastructure Support Project

BoMC monitors and verifies the management of the market facility for ginger whether the advantages are still continuing or not, and supports the management to make a good sample for other market facilities to be introduced.

Project Period : 2013 - 2017 (5 years)
Target Crop/Product : Ginger
Project Site : Hadaro town (Hadaro Tunto woreda, Kembata Tembaro zone)

Project No. 17: Ginger Market Infrastructure Development

Construct new ginger market facilities and support their management in 4 woredas where the PP01 AMIS had been executed, except for Hadaro Tunto woreda where the facility has been constructed by the PP07.

Project Period : 2013 - 2016 (4 years)
Target Crop/Product : Ginger
Project Site : 4 woredas
Boloso Sore, Boloso Bombe, Kindo Koysha (Wolayita zone)
Tembaro (Kembata Tembaro zone)

Project No. 18: Market Infrastructure Development for Rural Agricultural Product Project

This project is proposed to extend market infrastructure for agricultural products other than haricot bean and ginger. BoMC acts positive involvement for a construction of market facility by AGP in terms of technical and management aspects.

Project Period : 2013 - 2017 (5 years)
Target Crop/Product : Important cash crop/product of each woreda
Project Site : 13 woredas of AGP's target woredas
Wondo Genet, Melega, Gereche (Sidama zone), Esera (Dawro zone),
Enmor Ener, Endagegn (Guaghe zone), Meserak Azernet (Silitie zone),
Debub Bench (Bench Maji zone), Debub Ari, Semi Ari (South Omo zone)
Chenna (Keffa zone), Yen special woreda, Basketo special woreda

(2) Improvement of Hawassa City Marketplace Infrastructure Program

Market facility building in Hawassa city has been initiated with AGP funds. No project plan is proposed in this program.

(3) Agricultural Warehouse Construction and Existing Warehouse Improvement Program

Project No. 19: Promotion of Standard Agricultural Warehouse

BoMC provides the standard design of 500 tons warehouse and know-how on procurement of contractor that were gained by the pilot project (PP08) and other technical advice to support the construction of new warehouses.

Project Period : 2013 - 2017 (5 years)

Target Crop/Product : Cereals, Pulses
Project Site : 6 zones (Guraghe, Silitie, Kembata Tembaro, Wolayita, Hadiya, Sidama) and Alaba special woreda

Project No. 20: Existing Agricultural Warehouse Improvement Project

BoMC provides primary cooperatives with technical guidance and material support for improvement of existing warehouses for their effective use.

Project Period : 2014 - 2017 (4 years)
Target Crop/Product : Cereals, Pulses
Project Site : 5 zones (Wolayita, Hadiya, Kembata Tembaro, Guraghe, Silitie) and Alaba special woreda

(4) Promotion of Rural Products Sales at Roadside Infrastructure Program

Project No. 21: Roadside Rural Promotion Center (RRPC) Development

To encourage and activate rural economy and interaction between regional people and people from other regions through constructed RRPC on main road sides.

Project Period : 2013 - 2017 (5 years)
Target Crop/Product : To be determined
Project Site : To be determined

5.5 Plan for Capacity Strengthening of Cooperatives / Unions

Following 2 projects are proposed.

Project No. 22: Capacity Enhancement of Grain Cooperatives in Collective Marketing

The project implements the comprehensive training program for 9 unions and 84 primary cooperatives, which participate in WFP/P4P. Further, through the implementation of this project, BoMC and its line offices will establish and develop a functional system to carry on the project activities after the set project period.

Project Period : 2013 - 2017 (5 years)
Target Crop/Product : Cereals, Pulses
Project Site : 6 zones (Sidama, Silitie, Hadiya, Guraghe, Wolayita, Kembata Tembaro) and Alaba special woreda

Project No. 23: Capacity Enhancement of Cooperatives in Non-grain Commodity Marketing

The Study has identified 5 cash crops (mango, avocado, ginger, cassava and pepper) with comparative advantage. The project implements the comprehensive training program for 26 primary cooperatives, which are engaged in or have an interest to be engaged in collective marketing of these identified crops. In the end, it aims to establish a system within BoMC to effectively support cooperatives at a start of new business.

Project Period : 2013 - 2016 (4 years)
Target Crop/Product : Ginger, Mango, Avocado, Cassava, Red pepper
Project Site : 7 zones (Wolayita, Kembata Tembaro, Sidama, Silitie, Guraghe, Gamo Gofa, South Omo) and Alaba special woreda

The strategies, target areas and target crops of those 23 projects plans are summarized in the in the next figure.

6. Recommendations

The roles of the government agencies for the improvement of agricultural marketing system are to formulate policies which encourage actors to perform their transactions in a fair and efficient manner, allocate necessary funds and implement activities for realization of such policies.

As being described, there a number of development issues which are likely to hamper the improvement of agricultural marketing systems in SNNPR. To put it simply, the issues are shortage of human and financial resources, underdeveloped social infrastructure and information network and low technology adaptation. BoMC are expected to play a leading role in promoting and implementing the proposed projects and activities described in the report.

In addition, the SNNPR government and BoMC are strongly encouraged to implement the following points.

1. Monitoring and follow-up of the pilot projects by BoMC staff
2. BoMC's strong initiative in securing the project budget through collaboration with development partners
3. Capacity strengthening of primary cooperatives and cooperative unions
4. Creation and strengthening of market linkage between producers and traders
5. Creation of subsidy system for new entrepreneurs
6. Creation and strengthening of credit facilities and credit guarantee system
7. Provision of assistance for private traders for fair and efficient marketing system operation

The Development Study on
the Strengthening Agricultural Marketing System
in Southern Nations Nationalities and Peoples Region
in
the Federal Democratic Republic of Ethiopia

FINAL REPORT
MAIN REPORT

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Abbreviations

ADLI	Agricultural Development-led Industrialization
AGP	Agricultural Growth Program
AISCO	Agricultural Input Supply Cooperation
AMIP	Agricultural Marketing Improvement Program
AMIS	Agricultural Market Information Service
ATEP	Agribusiness and Trade Expansion Activity
ATVET	Agricultural Technical and Vocational Education and Training
BoA	Bureau of Agriculture
BoARD	Bureau of Agriculture and Rural Development
BoFED	Bureau of Finance and Economic Development
BoMC	Bureau of Marketing and Cooperative
BoTI	Bureau of Trade and Industry
C/P	Counterpart organization / Counterpart personnel
CSA	Central Statistical Agency
CU	Cooperative Union
DA	Development Agent
ECX	Ethiopia Commodity Exchange
EGTE	Ethiopian Grain Trade Enterprise
EHDA	Ethiopia Horticulture Development Agency
ETC	Ethiopian Telecommunications Corporation
FFW	Food for Work
FTC	Farmers Training Center
GTP	Growth and Transformation Plan
IFAD	International Fund for Agricultural Development
LINKS	Livestock Information Network and Knowledge Exchange
M/M	Minutes of Meeting
MERET	Managing Environmental Resources to Enable Transitions to more Sustainable Livelihoods
MoARD	Ministry of Agriculture and Rural Development
MoTI	Ministry of Trade and Industry
MSEDA	Micro and Small Enterprise Development Agency
OJT	On-the-job-training
OVOP	One Village One Product
P4P	Purchase for Progress
PASDEP	Plan for Accelerated and Sustained Development to End Poverty
PC	Primary Cooperative
PDA	Personal Digital Assistant
PP	Pilot Project
PSNP	Productive Safety Net Program
QSAE	Quality Standards Authority of Ethiopia
RFCF	Regional Farmers' Cooperative Federation
RFF	Rural Finance Fund
RRA	SNNPR Road Authority

RRPC	Roadside Rural Promotion Center
RSDP	Road Sector Development Program
S/W	Scope of Work
SACCOS	Saving and Credit Cooperatives
SDPRP	Sustainable Development and Poverty Reduction Program
SMS	Short Message Service
SNNPR	Southern Nations Nationalities and Peoples Region
SW or S.W.	Special Woreda
TAMPA	Tigray Agricultural Marketing Promotion Agency
TOT	Training of Trainer
TVET	Technical and Vocational Education and Training
VAM	Vulnerability Analysis and Mapping
WFP	World Food Program
WoA	Woreda office of Agricultural
WoARD	Woreda office of Agricultural and Rural Development
WoMC	Woreda office of Marketing and Cooperative
ZoA	Zonal office of Agricultural
ZoARD	Zonal office of Agricultural and Rural Development
ZoMC	Zonal office of Marketing and Cooperative

Unit

ETB or Birr	Ethiopia Birr	EC or E.C.	Ethiopia Calendar
m ²	Square meter	kg	Kilogram
km ²	Square kilometer	Qt or qt	100 kg
ha	Hectares (10,000 m ²)	ton	Metric ton (1,000 kg)

Exchange rate as of November 2012

(Source : JICA)

US\$ 1.00 = J¥ 79.65

ETB 1.00 = J¥ 4.445

Chapter 1 Introduction

1.1 Background of the Study

In Ethiopia, millions of people have been suffering from chronic food shortages every year and improvement of food security is a longstanding issue to be solved by the Government of the Federal Democratic Republic of Ethiopia (GoE). GoE set a strategy to establish effective agricultural market systems to improve food security and to promote commercialization of agriculture in the Plan for Accelerated and Sustained Development to End Poverty (PASDEP). For that purpose, improvement of the trading systems for farm products, enhancement of quality management, establishment of market information systems, capacity development of stakeholders (traders, cooperatives/unions), enhancement of agricultural cooperatives have been addressed.

In April, 2008, the Ethiopia Commodity Exchange (ECX) started a modern auction trading by using the commodity standards with 5 agricultural products; namely maize, haricot bean, wheat, pea bean and coffee. The ECX aimed 1) to promote fair and transparent trading, 2) to improve physical distribution systems (warehouses, transport contract, etc.), 3) to mitigate business risks by introducing quality standards and certification system, and 4) to distribute useful market information. It was also planned to increase the trade centers and handling commodities.

Southern Nations Nationalities and Peoples Regional State (SNNPR) has the third largest crop production area in the country and is also known as the major producer/supplier of fruits, vegetables and root crops. Per capita consumption of cereal products has been increased about 40% in the last 10 years in the country, and consumption demand for vegetables and fruits is also increasing. Hence, the importance of agricultural marketing system improvement in SNNPR is high in consideration of the PASDEP strategy for establishing effective agricultural market systems and the trend of diversification of dietary habit.

In this connection, the Bureau of Agriculture and Rural Development (BoARD) in SNNPR established the Agricultural Marketing Agency in the bureau in 2006 in order to manage the works for upgrading of agricultural marketing systems in SNNPR in an integrated fashion, and the agency started the marketing support, establishment of regional market information system, and capacity building of officials and stakeholders. However, there were many remaining issues to be tackled such as upgrading of agricultural marketing infrastructure and institution, enhancement of supportive services for farmers, capacity building of stakeholders, etc.

Under these circumstances, GoE requested the Government of Japan (GoJ) to implement a development study to improve agricultural marketing in SNNPR. JICA carried out the preparatory study in March 2009. Based on the results of the study, GoJ decided to conduct the Development Study on Strengthening Agricultural Marketing System in SNNPR, and the Scope of Work (S/W) for

the development study was concluded in September, 2009 (refer to Attachment 1 and 2).

1.2 Objectives of the Study

1.2.1 Overall goal of the Study

- (1) To improve value of agricultural products in SNNPR.
- (2) To improve food security situation through improvement of agricultural marketing system in SNNPR.

1.2.2 Objectives of the Study

- (1) To formulate master plan in order to design efficient and fair agricultural marketing system in SNNPR.
- (2) To carry out capacity development for Ethiopian counterpart personnel as well as farmers, agricultural cooperatives, agricultural cooperative unions, and traders in the course of the Study.

1.3 Study Areas and Target Crops

1.3.1 Study Areas

- (1) The Study area is covered by all areas in SNNPR.
- (2) Sites for verification study (pilot projects) are selected in the course of the Study from following 8 zones and 3 special woredas.
Guraghe zone, Hadiya zone, Kembata Tembaro zone, Sidama zone, Gedeo zone, Wolayita zone, Gamo Gofa zone, Siltie zone, Alaba special woreda, Amaro special woreda, and Burji special woreda ¹.

1.3.2 Target Crops

- | | | |
|----------------|---|---|
| 1) Cereals | : | Maize, Teff, Wheat |
| 2) Pulses | : | Field peas, Haricot beans, Horse beans |
| 3) Vegetables | : | Cabbage, Green peppers, Red peppers |
| 4) Fruits | : | Avocados, Bananas, Mangoes, Papayas |
| 5) Root crops | : | Cassava, Enset, Sweet potatoes, Taro |
| 6) Other crops | : | Sugar cane, Spices such as ginger, turmeric and others. |

1.4 Counterpart Organization and Steering Committee

1.4.1 Counterpart Organizations

Agricultural Marketing Process, Cooperative Development Process, and Extension Service Process of Bureau of Agriculture and Rural Development (BoARD) was the counterpart organization.

¹ Amaro and Burji special woredas were merged to form a new zone (Segen zone) with other two woredas in Dec. 2011.

BoARD was reorganized into two bureaus, namely Bureau of Agriculture (BoA) and Bureau of Marketing and Cooperative (BoMC) in October 2010. Based on the result of the reorganization, the Minutes of Meeting (M/M) was exchanged in December 2010 to confirm that BoMC (Agricultural Marketing Process and Cooperative Development Process) and Extension Service Process of BoA are the counterpart organization to the study team. (refer to Attachment 3).

1.4.2 Steering Committee

The structure of the steering committee of Ethiopian side was changed based the result of reorganization of BoA and establishment of BoMC. The members are as follows.

Ethiopian side

1. Head of BoA (chairperson)
2. Head of BoMC
3. Agricultural Marketing Process, BoMC
4. Cooperative Process, BoMC
5. Extension Service Process, BoA
6. Early Warning and Food Security Process, BoA
7. Bureau of Finance and Economic Development
8. Regional Road Authorities, SNNPR
9. Other organizations concerned and designated by the chairperson

Japanese side

1. Japanese Study team
2. JICA Ethiopia office

1.5 Scope of the Study

1.5.1 Study Schedule

The entire study schedule is shown in the following figure. The Study was implemented in the period of 35 months; from Jan. 2010 to Nov. 2012.

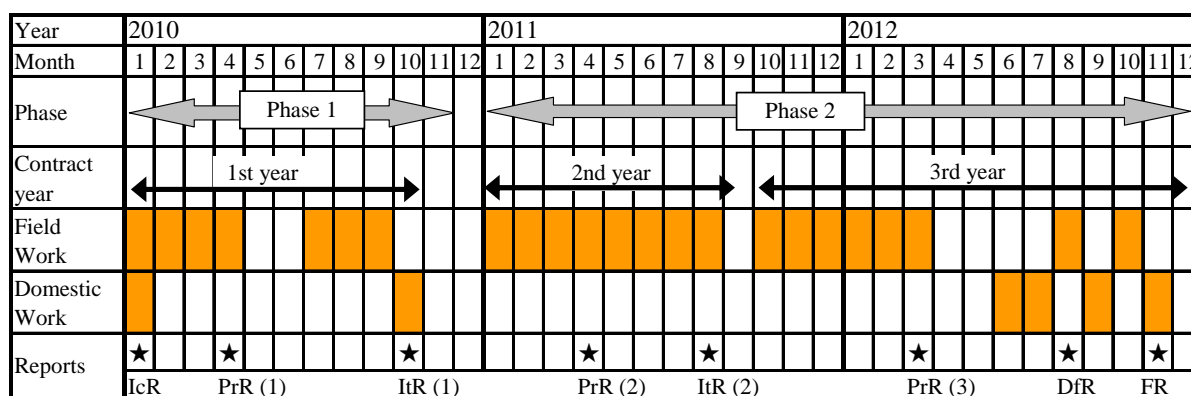


Figure 1-1 Overall Study Schedule

1.5.2 Formulation of the Master Plan

The Study aimed to formulate the development strategies and project plans of four major components of agricultural marketing development; namely (i) agricultural marketing institution, (ii) marketing infrastructure, (iii) market information, and (iv) value addition (quality improvement).

To plan the practical strategies/plans, actual situations were studied in details to identify the problems/issues, and then development strategies/plans were drafted in the Phase 1. The ideas of development were verified through implementation of verification study (pilot projects) in the Phase 2. Based on the results of the pilot projects and lessons learnt, 5 years development plan (2013-2017) comprises the practical action plans in the areas of above four components has been formulated.

1.6 Study Progress

1.6.1 Phase 1

(1) First Field Work in the 1st year (Jan. – Apr. 2010)

- 1) Explanation and discussion of the Inception Report to the Steering Committee (refer to Appendix D).
- 2) Collection and analysis of existing data and materials on agriculture in SNNPR.
- 3) Field survey to grasp the actual situations of agriculture production, postharvest and marketing.
- 4) Preparation of Progress Report (1) and submission to BoARD.

(2) Second Field Work in the 1st year (Jul. – Sep. 2010)

- 1) Explanation and discussion of the Progress Report (1) to the Steering Committee (refer to Appendix D).
- 2) Analysis and identification of problems/issues on improvement of agricultural marketing systems, and possible countermeasures.
- 3) Formulation of tentative master plan, Pilot Project (PP) plans and capacity development program: 10 projects were selected out of 20 project ideas after thorough discussion with BoARD and JICA Ethiopia office. Then 10 PP plans which include capacity development (training) program were documented.
- 4) Discussion with ECX about implementation of comparison test of ECX wheat and non-ECX wheat as a PP.
- 5) Preparation of draft Interim Report (1) which includes provisional PP plans, and explanation and discussion to the Steering Committee in Sep. 2011 (refer to Appendix D).

1.6.2 Phase 2

(1) Field Work in the 2nd year (Jan. – Aug. 2011)

- 1) Explanation and discussion of the Interim Report (1) which includes the PP plans and tentative strategies of master plan to the Steering Committee (refer to Appendix D).

- 2) Determination of responsible counterpart personnel for each PP.
- 3) Started the implementation of 10 PPs.
- 4) Implementation of the baseline survey by subcontract.
- 5) Preparation of Progress Report (2) by compilation of the progress of PPs, and explanation and discussion to the Steering Committee in April 2011 (refer to Appendix D).
- 6) Facilitated the collaboration with projects of other donors (WFP/P4P, World Bank/AGP, IFAD/AMIP).
- 7) Implementation of the comparison test of ECX wheat and non-ECX wheat.
- 8) Preparation of the principles in project planning.
- 9) Preparation of Interim Report (2) by compilation of the results of the field works in the 2nd year, and explanation and discussion to the Steering Committee in Aug. 2011 (refer to Appendix D).

(2) First Field Work in the 3rd year (Oct. 2011 – Mar. 2012)

- 1) Continuous implementation of 10 PPs including capacity development (training) program.
- 2) Internal evaluation of PPs to clarify the results and lessons learnt.
- 3) Technical proposal to ECX: The result of the comparison test of ECX wheat and non-ECX wheat was analyzed and submitted to the ECX HQ, and utilization of the result data for activating an ECX auction for wheat was proposed by the Study team.
- 4) Finalization of the basic policy for formulation of Master Plan, and preparation of provisional project plans based on the results of the pilot projects and lessons learnt.
- 5) Preparation of Progress Report (3), and explanation and discussion to the BoMC in Mar. 2012.
- 6) Compilation of training materials and extension tools (drawings, posters, etc.).

(3) Second Field Work in the 3rd year (Aug. 2011 and Oct. 2012)

- 1) Explanation and discussion of the Draft Final Report to BoMC.
- 2) Workshop seminar on the Master Plan to the target donors/NGOs (refer to Appendix D).²
- 3) Hand-over of equipment/facilities of PPs and equipment for the Study to BoMC.

1.6.3 Counterpart training in Japan

As a part of the technical transfer to the counterpart organization, two times of counterpart training in Japan were conducted; 1st training was in Oct. 2010 and 2nd training was in May 2012 (refer to Appendix C).

1.7 Composition of the Report

The report consists of two separate volumes. Main Report (volume 1) comprises Chapter 1 to 7, and Appendices (volume 2) comprise Appendix A to D.

² The seminar was scheduled on Aug. 2010 initially. However, it was postponed until Oct. 2012 due to the prime minister's passing.

Chapter 1 has given the study introduction including its background, objectives and general framework of the study. Chapter 2 describes the SNNPR in brief. In the Chapter 3, present conditions of production, postharvest and marketing of target crops and related sectors are described. Problems and development issues identified in the study are summarized in Chapter 4.

In the Chapter 5, procedure to formulate the Master Plan is explained at the beginning. Development goal and development approach (a holistic approach to synchronize efforts to improve value-addition, marketing infrastructure, information service, and capacity of government offices) are discussed next. Then, development strategies of four major components; [1] Strengthening of agricultural market information service, [2] Increment of profit by introduction of high value-added marketing, [3] Improvement of effective market infrastructure to empower market activities, and [4] Catch-up and adjustment to the institutional system of agricultural marketing are described. Based on the development strategies given in Chapter 5, practical project plans to expand the PPs to other areas and/or to other commercially-important crops are proposed as the Master Plan in Chapter 6. Chapter 7 gives thought-provoking recommendation on the execution of proposed project plans.

Appendix A describes the contents and results/lessons learnt of 10 pilot projects in detail. Training materials, facility/equipment drawings, extension tools, newsletters prepared and/or used in the pilot projects are annexed in Appendix B. Appendix C shows about the contents, schedule, participants and output of the counterpart trainings in Japan. Appendix D shows the minutes of the steering committee meetings.

Chapter 2 Overview of the Country and SNNPR

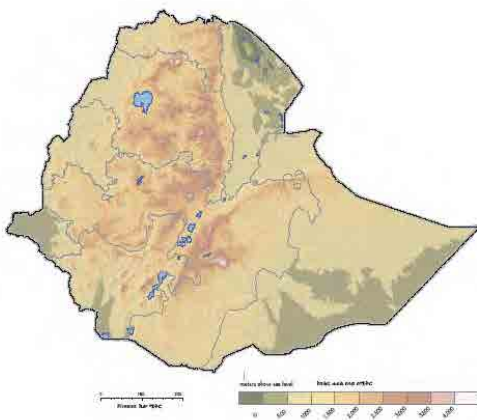
2.1 Agro-ecological Features and Socio-Economic Situation

2.1.1 Agro-ecological Features

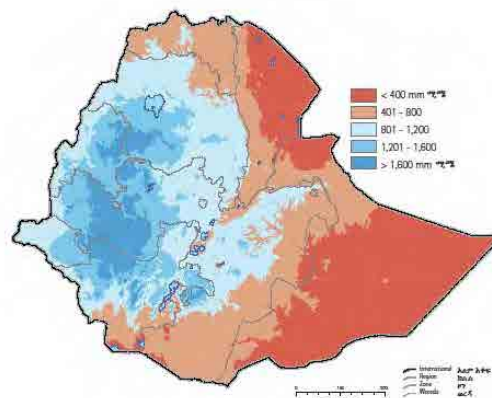
Ethiopia is located between 3.28-11.49 degrees north latitude and 33.00-47.52 degrees east longitude. The country is an inland state surrounded by Eritrea to the north, Djibouti to the North East, Somalia to the East, Kenya to the South and Sudan to the West. The total area of the country is about 1,104,300 km². As shown in picture-1, the country has a big variation in elevation (ranges from 110 m below sea level in the Danakil Depression to 4620 m above sea level at Ethiopia's highest mountain; Ras Dashen), and it brings highly-diverse climatic condition in the country. According to the Koeppen climate division, northern mountainous areas belong to *Temperate winter little rainy climate*, southern areas belong to *Temperate humidity climate*, lowlands in south and west belong to *Tropical savanna climate*, Afar and Somali belong to between *Semiarid climate* to *Desert climate*.

Regarding the rainfall in the country, as picture-2 shows, in general, the western highlands have particularly high rainfall, averaging more than 1200 mm annually in many areas. To the contrary, most of the eastern lowland areas of Afar and Somali have few rainfalls, even below 400 mm annually.

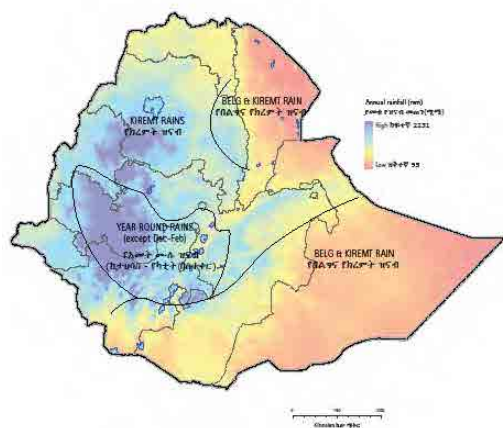
In Ethiopia, crop production depends on annual rainfall pattern. As picture-3 shows, there are two major rain seasons which are called *Meher* and *Belg*. *Meher* refers to the long rainy season, roughly from June to September, and *Belg* refers to the short rainy season from March to May. Most areas in the country have both the *Meher* and *Belg* rainy seasons but its starting time varies. In the north, *Meher* tends to fall earlier, around the end of June, while in the south, it starts as late as October. Crop production in the highland areas is largely associated with the *Meher* rains.



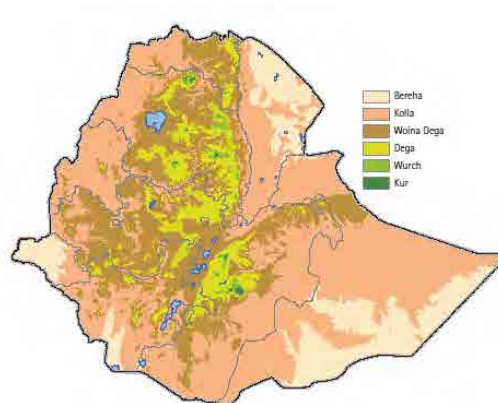
1. Elevation



2. Annual Rainfall



3. Rainfall pattern



4. Agro-ecological Zoning

Source: CSA, EDRI, IFPRI; Atlas of the Ethiopian Rural Economy

Figure 2.1-1 Natural Condition in Ethiopia

Agro-ecological zones in Ethiopia are determined by the elevation. There are 6 main zonal divisions as below. The important areas of crop production are mainly 3 zones out of 6, namely, *Kolla*, *Woina Dega* and *Dega*. Especially for grain production, *Woina Dega* and *Dega* are the main areas where wheat, teff and maize are produced.

Table 2.1-1 Agro-ecological Zoning in Ethiopia

	Zones	Elevation	Crop production
1	Bereha	Lowlands	< 500 m.a.s.l Very limited (in the arid east), Root crops and Maize (in the humid west)
2	<u>Kolla</u>		
3	<u>Woina Dega</u>	Highlands	1500 < 2300 m.a.s.l Wheat, Teff, Barley, Maize, Sorghum, Chickpea
4	<u>Dega</u>		
5	Wurch		
6	Kur		
		2300 < 3200 m.a.s.l	Barley, Wheat, Oilseeds, Pulses
		3200 < 3700 m.a.s.l	Barley
		3700 m.a.s.l <	Grazing animals

Source: Data from CSA, EDRI, IFPRI; Atlas of the Ethiopian Rural Economy

m.a.s.l = meters above sea level

SNNPR

SNNPR is located in the southern and south-western part of the country. It lies between 4.43-8.53 degrees north latitude and 34.88-39.14 degrees east longitude; being bordered by Kenya in the South, the Sudan in the South West, Gambella region in the North West and surrounded by the Oromia region in the North West, North and East. The total area of the region is about 110,932 km² (about 10% of the nation); the basic natural condition data of the region are shown as below.

Table 2.1-2 Basic Natural Condition Data of SNNPR

No.	Zone / Special woreda	Total area (km ²)	Mean annual temperature (°C)	Mean annual rainfall (mm)	Elevation (m)
	Region	110,931.9	7.5 - >27.5	400 - 2200	376 - 3500
1	Guraghe	5,932.0	7.5 - 25.0	801 - 1400	1001 - 3500
2	Silitie	2,537.5	10.1 - 22.5	801 - 1200	1501 - 3500
3	Hadiya	3,850.2	12.6 - 27.5	801 - 1400	501 - 3000
4	Kembata Tembaro	1,523.6	12.6 - 27.5	1001 - 1400	501 - 3000
5	Wolayita	4,471.3	15.1 - 27.5	801 - 1600	501 - 3000
6	Sidama	6,972.1	10.1 - 25.0	801 - 1600	1001 - 3500
7	Gedeo	1,347.0	12.6 - 22.5	1001 - 1800	1501 - 3000
8	Gamo Gofa	12,581.4	10.1 - 27.5	801 - 1800	501 - 3500
9	Dawro	4,436.7	15.1 - 27.5	1201 - 1800	501 - 3000
10	Keffa	10,602.7	10.1 - >27.5	1001 - 2200	501 - 3500
11	Sheka	2,134.3	15.1 - 25.0	1800 - 2200	1001 - 3000
12	Bench Maji	19,965.8	15.1 - >27.5	400 - 2000	< 500 - 2500
13	South Omo	23,535.0	10.1 - >27.5	400 - 1600	376 - 3500
14	Alaba Sp. woreda	855.0	17.6 - 22.5	601 - 1200	1501 - 2500
15	Yem Sp. woreda	724.5	15.1 - 22.5	801 - 1400	501 - 3000
16	Konta Sp. woreda	2,196.8	15.1 - 27.5	1401 - 1800	501 - 3000
17	Basketo Sp. woreda	407.5	17.6 - 27.5	1401 - 1600	501 - 2000
18	Amaro Sp. woreda *	1,597.2	12.6 - 25.0	801 - 1000	501 - 3000
19	Burji Sp. woreda *	1,374.6	15.1 - 27.5	801 - 1000	501 - 2500
20	Derashe Sp. woreda *	1,532.4	15.1 - 27.5	601 - 1600	501 - 2500
21	Konso Sp. woreda *	2,354.3	17.6 - 27.5	601 - 1200	501 - 2000

Note : 4 special woredas (Amaro, Burji, Derashe and Konso Sp. woredas) were merged to form a new zone called Segen zone in Dec. 2011. As of August 2012, there are 14 zones and 4 special woredas in SNNPR.

Source: Regional Statistical Abstract (1999 EC/2006-07)

The region has 5 agro-ecological zones as below; namely *Kefil Bereha*, *Kolla*, *Woina Dega*, *Dega*, and *Wurch* which are found between 350 up to 4200 m.a.s.l. Most parts of the region, about 80% lies in *Kolla* and *Woina Dega*; thus as shown in below table, variety of crops are cultivated in the region.

Table 2.1-3 Agro-ecological Zones in SNNPR

No.	Zones	Area		Mean annual temperature	Elevation	Adaptable Crops
1	Kefil Bereha	9,540 km ²	8.6 %	>27.5 °C	376 - 500 m	- Millet, Maize, Sorghum, Rice - Cowpea, Sunflower, Safflower, Sesame - Cotton, Sweet potato, Cassava, Sugarcane
2	Kolla	54,246 km ²	48.9 %	22.5-27.5 °C	500 - 1300 m	- Millet, Maize, Sorghum, Rice - Haricot bean, Cowpea, Sunflower, Safflower, Sesame - Cotton, Sweet potato, Cassava, Sugarcane, Chili, Citrus, Coffee
3	Woina Dega	37,606 km ²	33.9 %	17.5-22.5 °C	1300 - 2200 m	- Millet, Maize, Sorghum, Rice, Wheat, Teff, Barley, Oat - Cowpea, Sunflower, Haricot bean, Chickpea, Lentil, Niger seed, Faba bean, Faba pea - Sweet potato, Chili, Citrus, Coffee, Tea, Potato, Enset

No.	Zones	Area		Mean annual temperature	Elevation	Adaptable Crops
4	Dega	9,318 km ²	8.4 %	12.5-17.5 °C	2200 - 3000 m	- Wheat, Teff, Barley, Oat - Sunflower, Chickpea, Lentil, Niger seed, Beans, Peas, Linseed, Rapeseed - Potato, Enset, Pyrethrum
5	Wurch	222 km ²	0.2 %	7.5-12.5 °C	3000 - 3500 m	- Barley, Oat - Faba pea, Faba bean, Linseed, Rapeseed - Potato, Enset, Pyrethrum

Source: Climate & Agroclimatic resource of Ethiopia (NMSA 1996)

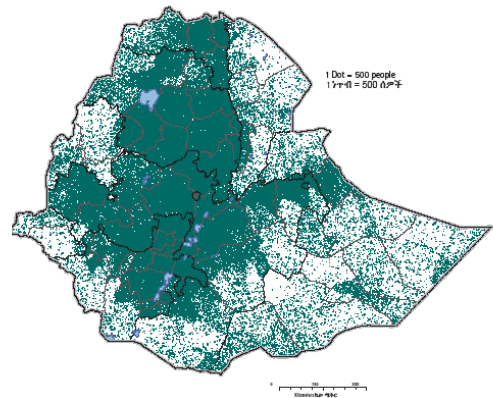
2.1.2 Socio-economic Situation

(1) Demographic situation ¹

The country consists of 9 regional states and 2 special administrations. According to the World Development Indicators Database, the total population of the country is about 80,713,434 (2008), with an annual population growth rate of about 3 % for the last two decades.

Geographic Area	1995-2000			2001-2005		
	Rural	Urban	Total	Rural	Urban	Total
National	2.74	4.28	2.92	2.57	4.10	2.73
Tigray	2.5	4.8	2.85	2.3	4.5	2.67
Afar	2.2	3.8	2.39	2.0	4.1	2.20
Amhara	2.6	4.8	2.86	2.5	4.4	2.67
Oromia	2.8	5.1	3.09	2.6	4.7	2.87
Somali	2.3	4.5	2.58	2.3	4.5	2.63
Benishangul Gumuz	2.5	4.7	2.57	2.4	4.4	2.54
SNNP	3.1	5.3	3.26	2.8	4.8	2.92
Gamela	2.2	4.7	2.62	2.2	4.4	2.57
Haran	2.5	4.2	3.50	2.6	3.8	3.49
Addis Ababa	--	2.9	2.90	--	2.8	2.80
Dire Dawa	2.2	4.8	4.00	2.3	4.3	3.80

Population Growth Rate (%) by Regions



Population Dot Map (1 dot = 500 people)

Source: CSA, EDRI, IFPRI; Atlas of the Ethiopian Rural Economy

Figure 2.1-2 Situation of National Population

SNNPR

SNNPR consists of 13 zones, 8 special woredas, 126 woredas and 3,678 rural kebeles. For urban areas there are 22 town administrations and 114 certified towns with municipal city status with 238 urban kebeles.² Total population of the region is 15,760,743 (of which about 50.2% is female and about 91% is living in rural areas), and it is counted as about 20% of the national population and the third largest region after Oromia and Amhara.

The regional population is characterized by a young age structure. The proportion of children under the age 15 is about 45% of the regional population, and aged 65 above is only 2.2%. Age group 15-64

¹ All the figures of this section come from World Development Indicators Database, September 2009.

² Data source : Southern Nations, Nationalities and Peoples' Regional State Regional Statistical Abstract (1999 E.C/ 2006-07), Bureau of Finance and Economic Development (BoFED), June 2007. 4 special woredas (Amaro, Burji, Derashe and Konso Sp. woredas) were merged to form a new zone called Segen zone in Dec. 2011. As of August 2012, there are 14 zones and 4 special woredas in SNNPR.

years is 52.8%. The average number of persons per household is about 4.6. The average population density is 142 persons per km².

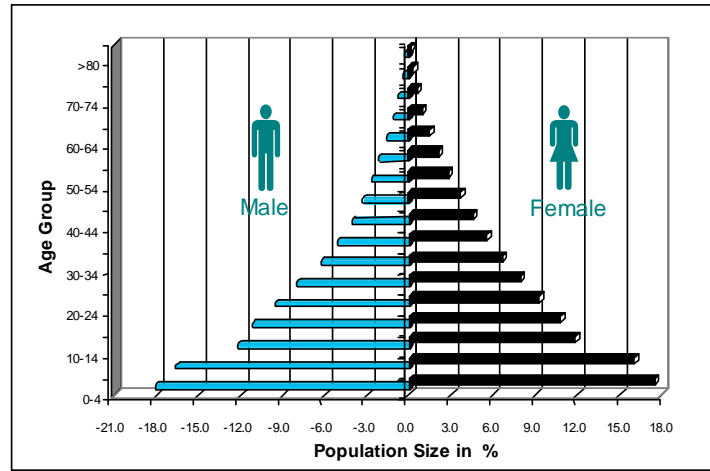
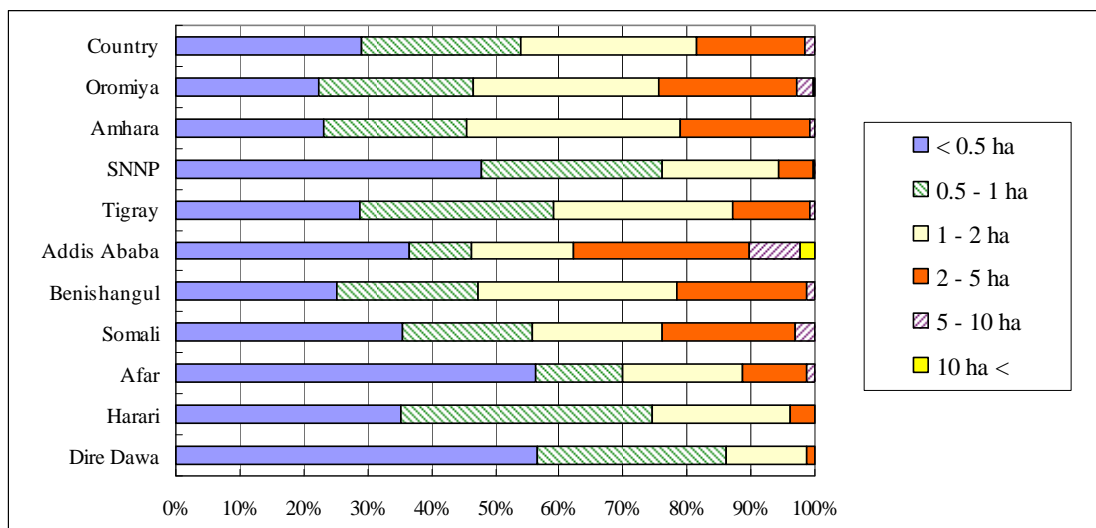


Figure 2.1-3 Population Pyramid of SNNPR

(2) Agricultural Land Tenure

Land in Ethiopia is the common property of the nation and cannot be owned by individual farmers. However, land is allocated to households for an undetermined period and can be rented out and eventually passed on to heirs.

The smallholders on average hold 1.03 ha per household and produce 95% of the country’s total crop production. As shown in Figure 2.2-3, about 82% of farm households use less than 2 ha farm land, and about 17% use 2-5 ha, and only 1.5% use more than 5 ha in 2005/06. Currently, the smallholders’ land is further fragmented due to population growth (In 1975, the average land area per farm household was 1.91 ha).



Source: CSA "Agriculture Sample Survey 2005/06"

Figure 2.1-4 Agricultural Land Holdings by Regions

SNNPR

Agricultural land holdings in the region are very small and highly fragmented. According to CSA data, nearly 50% of farm households in the region hold land below 0.5 ha. This fragmented small holding per household is mainly attributed to high population pressure in the region.

Table 2.1-4 Agricultural Land Holdings in SNNPR

Classification	% of farm household
Less than 0.1 ha	9.2%
0.1-0.5 ha	46.0%
0.51-1.0 ha	26.6%
1.1 -2.0 ha	14.7%
More than 2.0 ha	4.7%

Source: 2001 CSA Agricultural Survey Households Having Land

(3) Economic Situation

The GNP at the year 2008 was 26.49 billion US\$ and its growth rate has been about 11% for the last 3 years. GNI per capita is 280 US\$ (2008) and it comes to 870 US\$ by GNI per capita PPP (purchasing power parity) bases. Within the GNP, the agricultural sector contributes 43% of the total figure and also 85% of the population is engaged in that sector. Thus, Ethiopia's economy is illustrated to be highly dependent on agriculture and primary sector.

The inflation trend in the last 6 years is shown as below. The drought of the year 2003 had severe impact on the Ethiopian economy and the inflation rate of the year 2004 was lowered. However, inflation rate kept rising year by year. In the year 2008, it was high at 29%; increased 1.7 times more than the previous year.

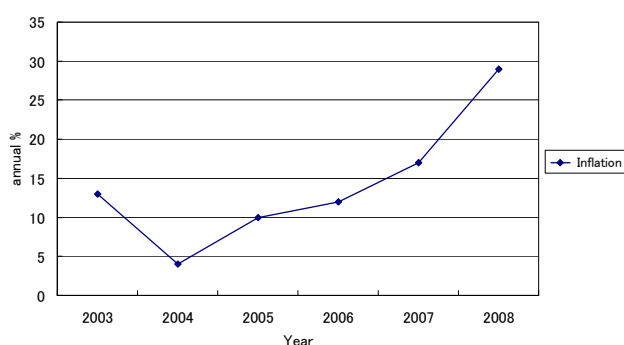


Figure 2.1-5 Inflation Trend (2003-08)

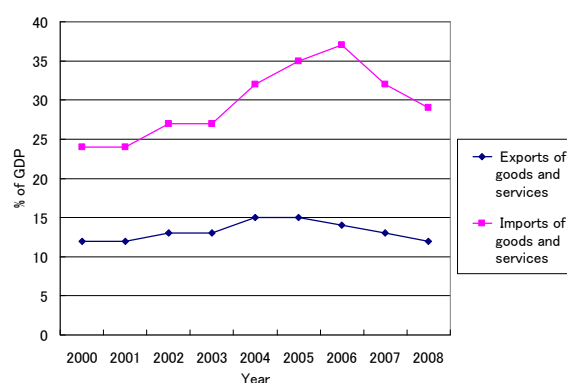


Figure 2.1-6 Export & Import of goods and services Trend (2000-08)

The ratio of export and import of goods and services per GDP is shown as above. The ratio of export is lower than the ratio of imports, and it remained in a range of 13% to 15% for last 10 years. The main export goods are coffee and oil seeds. However those goods are very easily to be influenced by the international market situation and weather conditions.

2.2 Overview of Crop Production

2.2.1 Crop Production in the Country

Agriculture is the mainstay of the Ethiopian economy; about 85% of the total population depends on agriculture. The economic growth of the country is highly dependant on the agricultural sector, which accounts for 43% of the GNP and 60% of total export earnings. However, traditional agriculture of peasant farming is still predominant in the country. The majority of the smallholders practices a mixed farming involving crop production and animal husbandry; with a higher focus on crop production.

Crop production is a major component of Ethiopian agriculture and majority of the nation population makes livelihoods from it. Crop farming also plays an important role socioeconomically; as the major source of food, industrial raw materials and export earnings. Crop production is mostly handled by smallholders (smallholders produce 95% of the production) and characterized by its traditional practices and reliance on rainfall. Usage of inputs and modern technology is limited and productivity is still at low level, thus farm household incomes are also low.

Cereals (maize, sorghum, wheat, barely and teff) is the dominant crop in Ethiopia. Pulses, oil seeds, root crops, vegetables and perennial crops (coffee, fruits, etc.) are also grown at varying levels, and have a significant place in the livelihood of the people.

The major crop producing areas are in the western parts of the country that cover Benshangul Gumuz, Gambella, western part of Oromia, Amhara, SNNPR and Tigray regions. Following table shows crop production by region.

Table 2.2-1 Crop Production by Region

Region	Total production (ton)					
	Cereals	Pulses	Oilseed	Vegetables	Root crops	Perennial crops
Oromia	7,178,940	774,526	284,998	224,901	517,958	782,290
Amhara	4,545,031	913,909	213,250	79,354	309,865	134,269
SNNP	1,246,267	182,173	5,181	274,158	350,964	934,029
Tigray	1,041,527	83,622	109,823	16,186	18,874	4,890
Benishangul Gumuz	232,013	8,951	35,474	2,897	7,720	8,789
Somali	163,550	860	3,248	34	4,910	7,112
Afar	41,827	28	695	486	1,196	686
Gambella	24,078	222	140	841	2,118	631
Harari	13,099	21	2,783	0	0	0
Dire Dawa	10,073	318	114	0	0	0
Ethiopia Total	14,496,406	1,964,630	655,705	598,857	1,213,605	1,872,695

Source: CSA "Agricultural Sample Survey 2008/09 (2001 EC) Vol. VII (Bulletin 446)"

Oromia, Amhara and SNNPR are the major crop producing regions of the country. These three regions

accounts for 91.2% of the total crop production. Their contribution to the production of cereals, pulses, vegetables and perennial crops are 89.5%, 95.2%, 96.6% and 98.8% respectively. SNNPR has significant contributions in vegetables and perennial crops production.

Crop productions of smallholders are more for home consumption purpose and sales ratios are limited. Based on the data of crop utilization shown in below table, in case of the staple food crops (cereals and pulses) about 60-65% of productions are consumed by farm households and only 15-20% are marketed. Vegetables and root crops are marketed about 16-19%. Oil seeds and perennial crops are produced more for sales purpose; about 37-52% of productions are marketed.

Table 2.2-2 Crop Utilization

Crops	Total Production (ton)	Percent (%) utilized for					
		Household consumption	Sale	Seed	Wages in kind	Animal Feed	Others
Cereals	14,496,406	65.59	15.75	13.84	1.25	0.57	3.00
Pulses	1,964,630	60.90	21.03	15.11	0.75	0.33	1.88
Oil seeds	655,704	32.89	51.84	12.40	1.42	0.10	1.35
Vegetables	598,857	77.67	18.93	1.15	0.36	0.11	1.78
Root crops	1,213,604	71.88	16.33	9.76	0.30	0.53	1.19
Perennial crops	1,872,695	57.60	37.42	0.92	0.60	0.77	2.69

Source: CSA "Agricultural Sample Survey 2008/09 (2001 EC) Vol. VII (Bulletin 446)"

2.2.2 Crop Production in SNNPR

Blessed by the diverse climatic condition, variety of products such as coffee, maize, wheat, teff, pulses, oil seeds, enset, root crops, fruits, vegetables and spices are produced in the region. In addition to that, coffee production accounts for 40% of national production, and spice production is also significant.

As illustrated in Table 2.2-1, SNNPR has a considerable portion of the national crop production. Regarding cereals and pulses, the production shares of SNNPR are 8.6% and 9.3% respectively. In the case of vegetables and perennial crops like coffee, fruits and enset, the region accounts for the largest portion of the national production; 45.6% and 49.9% respectively.

Diverse farming types and cropping systems are practiced in the region upon varied natural conditions. Multiple cropping systems are commonly practiced to maximize per-area production. The most prevailing systems are double cropping, inter-cropping, relay cropping and crop rotation. Among cereals maize, teff, wheat, barely and sorghum are major ones in the region. Pulses, oil seeds, fruits, vegetables and spices are also cultivated in various part of the region. Coffee is the most important cash crop grown in the country as well as in the region. Crop production volumes in SNNPR by zone are shown in the following table.

Table 2.2-3 Crop Production in SNNPR by Zones

Zone / Special woreda	Total Production (ton)					
	Cereals	Pulses	Oilseed	Vegetables	Root crops	Perennial crops
Guraghe	146,928	13,440	1,279	39,746	15,637	26,689
Siltie	131,310	10,277	108	51,030	771	8,174
Hadiya	174,440	13,170	985	31,751	8,885	64,280
Kembata Tembaro	44,776	6,051	128	10,071	25,884	32,618
Wolayita	59,745	18,094	31	9,579	60,380	51,016
Sidama	123,033	15,555	38	53,944	14,984	388,869
Gedeo	11,376	4,405	31	12,030	4,339	56,228
Gamo Gofa	133,150	16,049	435	9,304	93,712	92,302
Dawro	23,249	9,594	240	4,043	25,479	21,352
Keffa	114,060	38,372	256	12,867	25,414	81,972
Sheka	18,883	2,913	3	2,119	7,726	28,837
Bench Maji	54,914	7,989	69	7,517	31,774	36,826
South Omo	50,619	8,687	728	1,688	10,270	9,916
Alaba	57,609	1,173	59	23,258	1,509	1,316
Yem	18,889	2,874	172	1,297	2,311	4,046
Konta	11,795	3,372	20	584	15,820	5,134
Basketo	3,173	532	577	130	3,923	2,344
Amaro	7,713	1,688	0	1,840	284	15,306
Burji	4,517	1,610	4	456	156	653
Derashe	24,396	3,044	0	782	1,386	1,758
Konso	31,694	3,286	21	124	321	4,393
SNNPR Total	1,246,269	182,175	5,184	274,160	350,965	934,029

Source: CSA "Agricultural Sample Survey 2008/09 (2001 EC) Vol. VII (Bulletin 446)"

In SNNPR, Hadiya is known for its grains production, where production of wheat, maize, teff and pulses exceed local consumption and widely marketed within and outside the region.

In the eastern part of the region, Sidama and Gedeo are known for their mixed cropping of coffee, enset, root crops, fruits and vegetables. Sidama and Gedeo are famous for their specialty Sidama coffee and Yirga Chefe coffee types.

In the northern part of the region, there is surplus production of maize, wheat and teff. The production volume of vegetables such as Ethiopian cabbage and green pepper is significant in these areas, and vegetables are even distributed to Addis Ababa and Shashemene markets.

The central part of the region produces surplus root crops such as taro and sweet potato. Some of these products are distributed to Addis Ababa markets. Irish potato is widely grown in the region and Kembata Tembaro, Hadiya, Guraghe, Siltie, and Wolayita zones have a significant share.

The western parts of the region are famous for the production of forest coffee and forest honey. The coffee of these areas is sold as Keffa and Jima type coffee.

SNNPR is known for its fruits production. Banana, avocado, mango, pineapple and papaya have a big

market share in the country. Especially the banana from the Arba Minch area dominates the urban markets in the country; such as Addis Ababa, Nazereth, Shashemene, Hawassa, etc.

Enset is a staple food and indispensable item in the diets of the mid and highland areas of the region. Sidama, Gedeo, Keffa, Sheka, Dawro zones, as well as Amaro and Konta special woredas are more involved in enset production. The processed products of enset, 'kocho' and 'bulla' are also marketed within and outside the region.

2.3 Agricultural Education and Extension

2.3.1 Agricultural Higher Education

At least 19 universities/colleges have agricultural undergraduate programs and 7 universities have postgraduate programs in the country. For the year 2007/08, 14,535 students (of which, 2,865 are females) were enrolled in undergraduate programs and 686 (of which, 72 are females) were in postgraduate programs, as table shown below.

Table 2.3-1 Agricultural Education Institutions in Ethiopia

<Undergraduate Program>

	Name of University / College	Faculty / Department	Nos. of student	Ratio of Female Students
1	ADDIS ABABA	Veterinary Medicine	383	21%
2	ARBA MINCH *	Agriculture	208	22%
3	BAHIR DAR	Agriculture and Environmental Sciences	978	17%
4	DILLA *	Agriculture	237	20%
5	GONDAR	Veterinary Medicine	264	19%
6	HARAMAYA	Veterinary Medicine, Business and Economics (Cooperative), College of Agriculture	3,460	17%
7	HAWASSA *	Business and Economics (Cooperatives), College of Agriculture Technology (Agricultural Engineering and Management), Veterinary, Wondo Ganet College of Forestry	3,180	22%
8	JIMMA	Agriculture and Veterinary Medicine	1,439	21%
9	AMBO UNIVERSITY COLLEGE	Cooperatives. Plant Science, Animal Science, Rural Development, Marketing	1,092	21%
10	MEKELLE	FSANR (Natural Resource Economics and Management etc.), FVS (Veterinary)	1,774	18%
11	WOLLEGA	College of Agriculture & Rural Development	193	18%
12	MADA WALABU	Agriculture and Natural Resource	248	21%
13	DEBRE MARKOS	Agriculture and Natural Resource	189	17%
14	WOLAITA SODO *	Agriculture	187	21%
15	AXUM	Agriculture and Rural Development	217	26%
16	DEBRE BIRHAN	Agriculture and Rural Development	92	25%
17	JIJIGA	Agriculture	155	18%
18	MIZAN/TEPI *	Agriculture	102	24%
19	SAMARA	Agriculture	137	31%
	Total		14,535	20%

<Postgraduate Program>

	Name of the University / College	Faculty / Department	Total	Ratio of Female Students
1	ADDIS ABABA	Veterinary Medicine	98	9%
2	BAHIR DAR	Agriculture and Environmental Sciences	43	2%
3	HARAMAYA	College of Agriculture	195	5%
4	HAWASSA *	College of Agriculture	195	23%
		Wondo Ganet College of Forestry	31	0%
5	JIMMA	Agriculture and Veterinary Medicine	18	11%
6	AMBO UNIVERSITY COLLEGE	Cooperative Management	34	6%
		Crop Protection	10	20%
7	MEKELLE	FDANR	62	2%
	Total		686	10%

Note : 5 institutions with * mark are located in SNNPR.

Source: Education Statistics Annual Abstract 2000 E.C. (2007/08), Ministry of Education

2.3.2 Agricultural Technical and Vocational Education and Training (ATVET)

Technical and Vocational Education and Training (TVET) is a governmental training program where after grade-10 and above, youngsters have technical and vocational training in various fields, including agricultural. There are 25 Agricultural TVET (ATVET) institutions located all over the nation under the supervision of the Ministry of Agriculture and Rural Development (MoARD) and each regional agricultural bureau. According to data from Ministry of Education, about 10% of all TVET students were enrolled in ATVET, and in year 2007/08, 25,033 students were in ATVET and of which 16.4% were female.

The program contents of ATVET are; 1) Animal Science, 2) Plant Science, 3) Natural Science, 4) Animal Health and 5) Cooperatives, consisting of 2 years classroom lectures and 8 months field study, and provide diploma. After graduation from ATVET, students are normally recruited by regional agricultural bureaus as Development Agents (DAs) and deployed to kebeles and/or Farmers Training Centers (FTCs) to give technical training and support to farmers.

In SNNPR, there are 3 ATVET and about 4,500 students take respective courses as follows.

Table 2.3-2 Number of Students at ATVET in SNNPR

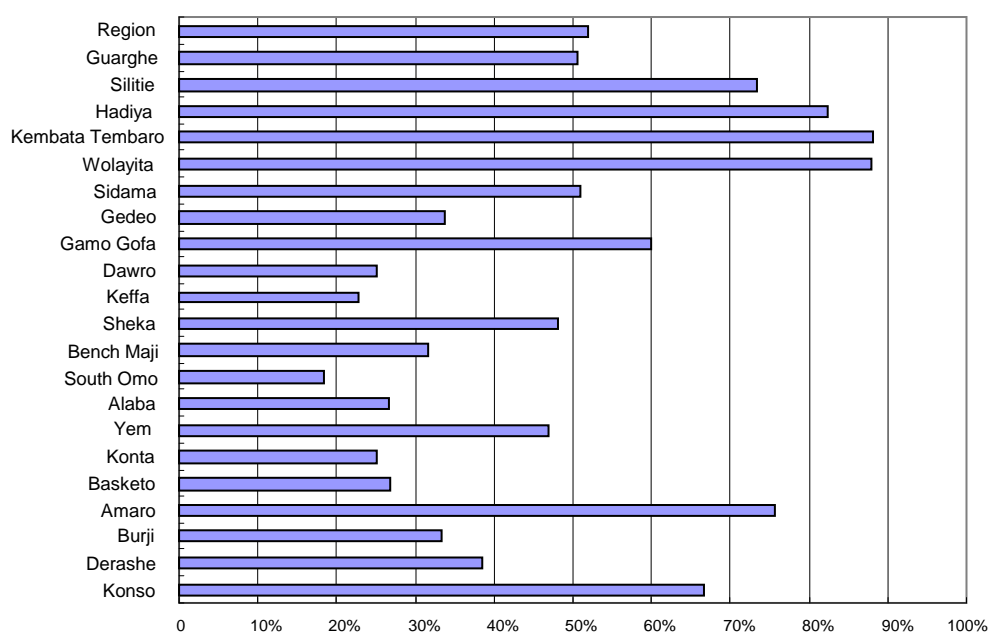
Name of ATVET	Department									Total		
	Animal Science			Plant Science			Natural Resource			Total		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
DILLA	381	106	487	463	94	557	454	42	496	1,298	242	1,540
MIZAN	485	119	604	531	61	592	601	45	646	1,617	225	1,842
WOLAYTA	336	73	409	370	55	425	289	35	324	995	163	1,158
Total	1,202	298	1,500	1,364	210	1,574	1,344	122	1,466	3,910	630	4,540

Source: Education Statistics Annual Abstract 2000 E.C. (2007/08), Ministry of Education

2.3.3 Farmers Training Center (FTC)

FTCs are set by each regional agricultural bureaus and monitored by its extension service department. The roles of FTCs are 1) To give regular extension service to local farmers, 2) To give training/guidance on improved agricultural practices, and 3) To exchange necessary information. Normally each FTC has 3 DAs in the fields of 1) Animal Science, 2) Natural Resource and 3) Plant Science.

In case of SNNPR, the average of coverage rate of FTC's establishment was 52 % in 2010. There were large differences in the coverage; from less than 20% (South Omo) to nearly 90% (Kembata Tembaro, Wolayita). The number of DAs in 2006/07 was about 12,800 and DA/farmers ratio was 1:199 as shown in below table. The DA/farmers ratio reduced to 1/3 in 5 years period.



Source: JICA Study team. Data obtained from Agri. Extension Service Core Process, BoARD-SNNPR (2010)

Figure 2.3-1 FTC coverage ratio in SNNPR by Zone

Table 2.3-3 Number of DA and DA to farmers ratio in SNNPR

Year	2001/2002	2002/2003	2003/2004	2004/2005	2005/2006	2006/2007
Number of DAs	3,583	3,559	8,286	10,370	10,664	12,801
DA: Farmers Ratio	1:600	1:682	1:302	1:233	1:233	1:199

Source: Basic Information and Performance of Agriculture and Rural Development Bureau, April 2010

2.4 Agricultural Administrative Organizations

2.4.1 Ministry of Agriculture and Rural Development (MoARD)

The Ministry of Agriculture and Rural Development (MoARD) is one of the 17 ministries³ in the Federal Government of Ethiopia. The Ministry aims to promote a market-oriented modern agricultural system; conserve, develop and use natural resources sustainably; put in place a modern agricultural marketing system; build a capacity for disaster prevention and preparedness and empower women and youths in development so that they can therefore benefit. The vision and mission of the MoARD are stated as follows:

Vision : To have well-developed agriculture that uses modern technology and to have a development community which are free from poverty.

Mission : To do away with the problem of food insecurity and to enable the rural community get rid of poverty through enhancing the productivity of human resources, changing the outlook of the society, sustain ably implementing human labor & natural resources, especially land and water, generating, introducing and promoting technologies, and setting up a market-led agricultural system.

Based on the result of the 4th national election in May 2010, the 3rd Meles regime was inaugurated in October 2010. In this circumstance, MoARD was reorganized as Ministry of Agriculture and the rural development section of MoARD was transferred to other Ministries. The regulatory authority to BoARD of SNNPR under MoARD; the Marketing Department in the previous MoARD was transferred to Ministry of Trade.

2.4.2 Bureau of Agriculture (BoA), SNNPR

Based on the reorganization of federal government enforced by the 3rd Meles regime, SNNPR government reorganized BoARD; the counterpart agency of the JICA Study, into the 2 new bureaus, namely, Bureau of Agriculture (BoA) and Bureau of Marketing and Cooperative (BoMC).

The BoMC is newly established by previous Agricultural Marketing Core Process and Cooperative Development Agency from the BoARD, and it is expected to deal with market-oriented agriculture more efficiently by strengthening agricultural cooperatives and farmers organizations with various capacity building programs. Meanwhile, the main function of BoA is now more focused on enhancing agricultural production and technical innovation as a whole.

This reorganization is related to the new federal government policy called Growth and Transformation Plan (GTP). The establishment of BoMC is quite a unique movement that cannot be seen anywhere else in the country. Therefore, the future trends of this attempt by the SNNPR government was received much attention from others. The main changed points of organizational structures are as follows. BoA organization structure is shown in Figure 2.4-1.

³ As of March 2010

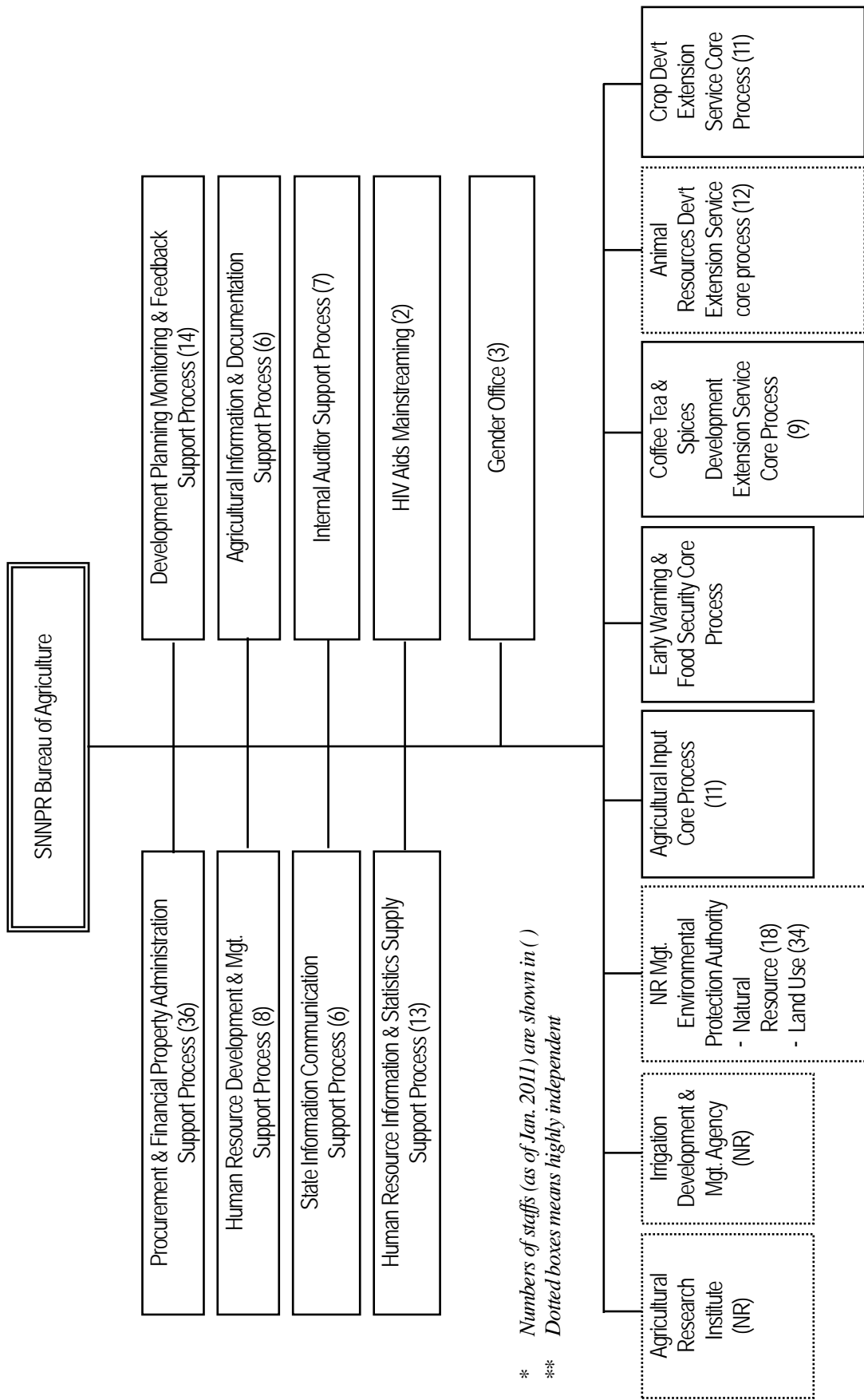
- 1) Newly established section : HIV Aids Main Streaming
- 2) Abolished section : Rural Finance Funding Service
- 3) Changed sections :
 - i. Agricultural Extension Service Core Process was divided into the following 3 sections according to the targeted commodities.
 - a) Coffee Tea & Spices Development Extension Service Core Process
 - b) Animal Resources Development Extension Service Core Process
 - c) Crop Development Extension Service Core Process
 - ii. Natural Resource Management & Conservation Core Process was promoted to the Authority.
 - iii. Public Relation Department was divided into the following 2 sections for providing detailed information more effectively.
 - a) State Information Communication Support Process
 - b) Human Resource Information & Statistics Supply Support Process
 - iv. Audit Department changed its name to the Internal Auditor Support Process. The work contents are the same.
 - v. Cooperative Development Agency and Agricultural Marketing Core Process formed the BoMC as mentioned earlier.
- 4) Number of the staff : 173 (at the Bureau, as of January 2011) . Total numbers of stuffs in SNNPR covering Bureau, Zone, Woreda, Kebele and DA is approximately 19,500 personnel.
- 5) Budget : 97,716,229 Birr (July 2010 - June 2011).

2.4.3 Bureau of Marketing and Cooperative (BoMC), SNNPR

The BoMC is newly established, consolidating previous Agricultural Marketing Core Process and Cooperative Development Agency from the BoARD. The outline of the BoMC is as follows. BoMC organization structure is shown in Figure 2.4-2.

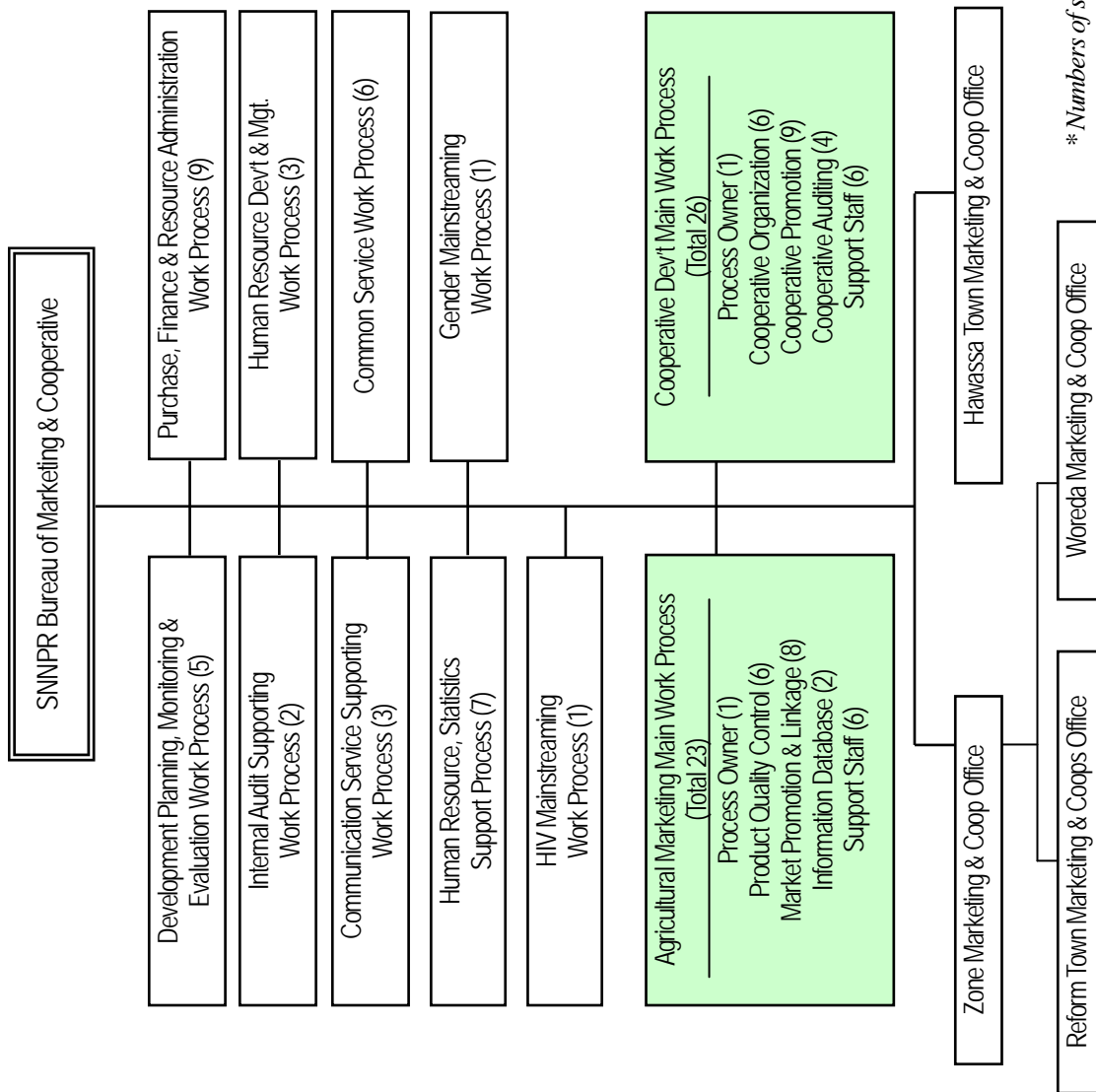
- 1) Agricultural Marketing Core Process at the BoARD is now called as Agricultural Marketing Main Work Process. Numbers of professional staff (process owner and experts) have been increase from 8 to 17 (as of Aug. 2012). Work fields of experts are categorized into 3; namely Product Quality Control, Market Promotion & Linkage and Information Database.
- 2) Cooperative Development Agency at the BoARD is now called as Cooperative Development Main Work Process. Numbers of professional staff is 20 with three work fields; namely Cooperative Organization, Cooperative Promotion and Cooperative Auditing.
- 3) Number of the staff :86 (at the Bureau, as of Aug. 2012)
- 4) Budget : Total 6,651,492.94 Birr (November 2010 - June 2011, as of January, 2011).

As BoMC is newly established, Zonal offices (ZoMCs) and Woreda offices (WoMCs) are established, and many of ZoMCs and WoMCs moved to new offices. However, minimum requirements to the office facility are not fulfilled yet at many WoMCs due to budget limitation.



* Numbers of staffs (as of Jan. 2011) are shown in ()
 *** Dotted boxes means highly independent

Figure 2.4-1 Organization Structure of Bureau of Agriculture



* Numbers of staffs (as of Aug. 2012) are shown in ()

Figure 2.4-2 Organization Structure of Bureau of Marketing and Cooperative

2.5 Agricultural Marketing Policy

2.5.1 Agricultural Marketing Strategy of MoARD

MoARD made up the 'Agricultural Marketing Strategy' in 2005 that aims to enhance rapid and sustainable agricultural development. The policy focused on increasing the volume and quality of produces both for export and domestic market; and demand effective agricultural input technology for provision market. Moreover, the policy envisages the establishment of an efficient market in which all actors (producers, traders and consumers) can benefit. The policy has the following objectives and strategies.

- (1) Strengthening the capability and procedure for inputs demand forecasting
 - Strengthening demand forecasting capability
 - Enhancing forecasting capability by providing manual and training
 - Providing awareness creating training for input to producers and suppliers
 - Strengthening forecasting procedure
- (2) Creating an efficient agricultural input and output exchange
 - Strengthening the supply procedure at the federal level for inputs demanded by the regions and other beneficiaries
 - Strengthening the supply capacity of domestic products including seed multiplication
 - Strengthening the supply capacity of importing agricultural inputs including allocation of foreign exchange and information dissemination on required types and quantity of various inputs to importers
 - Improving the assembly of agricultural produce supplied to the market by reducing the marketing chain through collective marketing
 - Creating linkage among market actors
 - Strengthening contract production and sales among producers and buyers
 - Expanding and strengthening the auction marketing system
 - Expanding and strengthening the warehouse receipt and inventory credit system
- (3) Organizing the marketing system basing on quality standards
 - Issuing quality standards
 - Establishing an input quality standard and inspection system
 - Establishing a product quality standard inspection system
 - Establishing a certification system for agricultural inputs
 - Establishing a quality certification system for export agricultural products
 - Promoting the expansion of agricultural products export (preparation of printed and audio-visual materials, samples, participation in exhibitions)
- (4) Expanding and strengthening marketing infrastructure
 - Expanding roads
 - Strengthening and expanding warehouses
 - Strengthening and expanding transportation services

- (5) Strengthening financial capacity and insurance coverage
 - Strengthening credit services to both farmers and merchants
 - Capacity building supports to rural banks
 - Strengthening the relation and connections among rural banks and cooperatives
- (6) Ensuring the prevalence of marketing rules and regulation
 - Evaluation and necessary modification on those current regulations and directives
 - Proclamation of hide and skins marketing
 - Regulations on the quality and standards of agricultural products
 - Directives on contractual production and marketing agreements
 - Implementation regulations on warehouse receipt and inventory credit system
 - Directives on market centers' establishment and administration
 - Organizing awareness creation forum on the new rules and directives modified and issued to producers, traders, consumers and government implementing bodies
- (7) Establishing a market information system
 - Establishment of an agricultural information system including all agricultural products and inputs which interconnect kebele, district, regional and federal levels and international levels
 - Provision for training regarding benefits and utilization awareness creation
 - Information collection for agricultural marketing such as supply, demand, price, place, commercial laws and regulation of importing countries, quality standard criteria, character of buyers, international and bilateral agreements, etc

Considering the existing weak position of the above mentioned issues, federal policy further explains responsibilities of implementing agencies at both federal and regional levels; such demarcation of duties and responsibilities, assumed by the ministry to realize efficient and effective implementation of the policy and strategy measures at all levels. What is observed in the documents, however, is that there are no action plans that explicitly indicate the implementation time frame.

2.5.2 Regional Agricultural Marketing Strategy of BoARD-SNNPR

In September 2009, BoARD-SNNPR published the 'Regional Agricultural and Rural Development Strategic Plan' covering the duration of 2010 to 2015. The plan covers 6 target agricultural products that are identified as strategic commodities, namely: coffee, pulses, oilseeds, cereals, spices and fruits & vegetables.

The strategic plan clearly indicates the target crops and those strategic goals to be reached by 2015 (table below). However, like that of the national strategic plan paper, there are no concrete/practical action plans nor methodologies to attain the strategic goals are planned.

Table 2.5-1 SNNPR Agricultural and Rural Development Strategic Plan - Target products, Strategic goal and Activities plan

Target crops and Strategic goal	Activities Plan
<p>[Coffee] Production prediction in 2009: 113,010 ton Strategic production goal in 2015: 471,269 ton (282,761 ton by wet-process and 188,508 ton by dry-process)</p>	<ul style="list-style-type: none"> • Support producers, cooperatives and traders in quality and quantity • Establish procedure for storage and credit to support coffee traders and cooperatives • Provide up-to-data market information • Facilitate establishment of warehouses that are conducive to keep the coffee quality for longer time span • Provide information on safe handling of produce during collection, transportation and storage • Work for fair marketing system and price premium for quality • Establish coffee quality testing centers • Encourage establishment of new coffee processing industries • Prepare, popularize and enforce legal framework • Support and monitor coffee industry of washing/drying to operate at their full capacity • Facilitate credit for cooperatives • Identify problems through study and suggest ameliorative ideas • Promotion by using mass media and web sites • Issue quality accreditation certificate
<p>[Pulses] Production prediction in 2009: 120,498 ton Strategic production goal in 2015: 201,548 ton To increase the supply to markets by 55%</p>	<ul style="list-style-type: none"> • Support producers, cooperatives and traders in quality and quantity • Provide up-to-data market information • Facilitate establishment of warehouses that are conducive to keep the products quality for longer time span • Provide information on safe handling of produce during collection, transportation and storage • Work for fair and smooth marketing system and price premium for quality • Prepare, popularize and enforce legal framework • Facilitate credit for cooperatives • Identify problems through study and suggest ameliorative ideas • Promotion on mass media and web pages • Establish marketing centers • Issue quality accreditation certificate
<p>[Oilseeds] Production prediction in 2009: 18,277 ton Strategic production goal in 2015: 22,775 ton</p>	<p>Same as pulses</p>
<p>[Cereals] Production prediction in 2009: 1,257,123 ton Strategic production goal in 2015: 2,141,596 ton</p>	<p>Same as pulses and;</p> <ul style="list-style-type: none"> • Facilitate introduction of grain cleaning equipment • Grade products based on quality and market needs
<p>[Spices] Production prediction in 2009: 425,873 ton Strategic production goal in 2015: 533,167 ton</p>	<p>Same as pulses and;</p> <ul style="list-style-type: none"> • Facilitate introduction of cleaning equipment • Grade products based on quality and market needs
<p>[Fruits and Vegetables] Production prediction in 2009: 1,161,014 ton Strategic production goal in 2015: 3,821,043 ton</p>	<p>Same as pulses</p>

Source: Study Team, summarized from BoARD 5 years development Plan

2.5.3 Development Corridors Plan in SNNPR

The SNNPR government set up a task force to finalize the ‘Development Corridors Plan in SNNPR’ in 2008. The task force constitutes professional experts drawn from the relevant bureaus namely; BoARD, Bureau of Finance and Economic Development (BoFED), Bureau of Trade & Industry (BoTI), Bureau of Water Resources, Mining & Energy Agency, Bureau of Works & Urban Development and Bureau of Investment.

The development corridors plan aimed at establishing agro-industry clusters of target commodities at each development zones (corridors). As per the implementation strategy for this, development centers are responsible for promoting/facilitating integration of development efforts by various intervention actors; including private, NGOs and public enterprises. This plan seems to be an ambitious and new development approach.

As shown in the following table, the plan clearly specified the target crops/products and processing industries to be promoted at each corridor. However, it is still at the conceptional phase and there are no concrete/clear action plans.

Table 2.5-2 Development Corridors Plan

Corridor and Zone	Development center to be established (city/town - zone)	Main target commodity	Sub target commodity	Industries to be promoted/invited
1 Sidama, Gedeo, Amaro ▪Eastern coffee Zone ▪Eastern highland Zone	Wonago - Gedeo Hasassa - Sidama Bensa - Sidama	Coffee	Fruit Pulse Vegetables Sugarcane	Edible oil Manufacturer Sugar mill (small scale)
2 Arba Minch, Konso, Omorante ▪Abaya Chamo lakes & high land Zone	Geresse - Gamo Gofa	Fruit Fishery	Highland fruits	Dry fruit
3 Abaya, Chamo, Sodo, Alaba, Shashamene, Nazreth, AA ▪Central cereal Zone	Arba Minch - Gamo Gofa	---	Cereals	Edible oil Vegetable processing (Tomato sauce)
4 Tepi, Masha, Gambella ▪Western Zone 1 ▪Western Zone 2 ▪Western Zone 3	Bench - Bench Maji Masha - Sheka Gimbo - Keffa	Non-timber forest products	Spices Honey & wax	Tomato sauce Turmeric paint factory
5 Bonga, Mizan, SouthSudan ▪Central Omo-Gibe zone	Tercha - Dawro	Spice	Fruits Oil crops	Avocado oil, ginger oil & eucalyptus oil factory
6 Central Gamo Gofa, Wolayita, AA ▪Upper rift valley	Kebet - Siltie	Pepper Pulses	Fruits	
7 Hadiya, Siltie, Gurage ▪Nothorn highland 1 ▪Nothorn highland 2	Agena - Guraghe Hosana - Hadiya	Wheat	Fruits Enset Root crops	Food processing factory Flour mill Biscuit factory
8 Keffa, Konta, Dawro, Wolayita, Alaba, ▪Central dev't zone 1 ▪Central dev't zone 2 ▪Central dev't zone 3	Sodo - Wolayita Shinshicho - Sawla – Gamo Gofa	Pulses	Sugar beet Fruits Cotton Oilseeds Spices Groundnuts	Cereal processing Edible oil Turmeric processing
9 Pastoralist corridor	Jinka - South Omo	Animal husbandry Cotton	Fruits	Omo dam construction

Source: Study Team, summarized from the Corridor Development Plan

2.6 Other donors' activities and collaboration in the Study

2.6.1 International Fund for Agricultural Development (IFAD)

IFAD has supported Ethiopian investment in poverty reduction program through financing for a total of 190 million US\$ for various projects since 1980. IFAD's strategy in Ethiopia focuses on supporting investment programs on sustainable household food security and on the incomes of rural poor people, particularly small-scale farmers and herders, and women in all categories. The objectives can specifically be listed as follows:

- 1) Promoting improved agricultural and livestock production technologies
- 2) Increasing access of rural households to reliable financial services
- 3) Developing small-scale irrigation schemes owned and managed by farmers and herders
- 4) Enhancing effective delivery of social services

One of on-going IFAD program in Ethiopia is the Agricultural Marketing Improvement Programme (AMIP). AMIP's activities include training farmers in post-harvest management, improved access to and use of market information, grades and standards, organization, enterprises management, and the impact of HIV/AIDS on agricultural marketing. AMIP is a 7-years' program commenced from 2006 till 2013.

In SNNPR, AMIP selected 40 target woredas out of total 134 woredas (including 8 special woredas) for the implementation of the project. IFAD set the selection criteria as follows;

- 1) Potential producers of agricultural produces and potential suppliers
- 2) Infrastructure availability (road accessibility)
- 3) Well staffed; DA and FTC
- 4) Well organized and staffed woreda marketing agency office
- 5) Irrigation land availability
- 6) Strong cooperative societies in the woreda

Target woredas and targeted commodities of AMIP are shown in the table below.

Table 2.6-1 Target woredas and Crops of IFAD/AMIP

	Zone / Special woreda	Target Woredas	Target commodities of AMIP woredas												
			Coffee	Spices	Cereals	Pulses	Fruits & veges	Honey	Butter	Kocho	Hide & skin	Sheep fattening	Pumpkin seed	Cassava	Oilseeds
1	Kembata	Doyogena			X	X									
2	Tembaro	Hadero Tunto	X	X											
3	Hadiya	Gibe	X						X						
4		Lemu			X	X									
5		Misha			X	X									
6		Soro			X										
7	Wolayita	Boloso Bombe	X	X											
8		Boloso Sore	X	X											
9		Damot Gale	X			X									
10		Sodo Zuria	X			X									

	Zone / Special woreda	Target Woredas	Target commodities of AMIP woredas												
			Coffee	Spices	Cereals	Pulses	Fruits & veges	Honey	Butter	Kocho	Hide & skin	Sheep fattening	Pumpkin seed	Cassava	Oilseeds
11	Sidama	Aleta Wondo	X				X								
12		Bensa	X						X						
13		Dale	X				X								
14		Dara	X				X								
15		Shebedino	X					X							
16	Gamo	Arba Minch					X			X					
17		Boreda			X		X								
18	Gofa	Denba Gofa				X			X						
19		Mello	X						X					X	
20	Dawro	Mareka			X										
21	Gurage	Abeshige		X	X										
22		Gumer			X		X								
23		Meskan		X	X										
24		Sodo			X						X				
25	Silitie	Lanfro		X	X										
26		Silitie		X	X										
27	Benchi	Debub Bench	X	X											
28	Maji	Sheko	X					X							
29	Gedio	Wonago	X							X					
30		Yirgacheffe	X							X					
31	South	Debube Ari	X	X											
32	Omo	Malle	X									X			
33	Sheka	Yeki	X	X											
34	Keffa	Chenna	X			X									
35		Gimbo	X					X							
36		Tello				X						X			
37	Derashe Sp. Wereda		X		X										
38	Amaro Sp. Wereda		X		X										
39	Burji Sp. Wereda				X	X									
40	Konso Sp. Wereda					X							X		
	Total number of woredas		23	10	15	10	6	4	3	2	2	1	1	1	1

Cereals : Maize, Barely, Wheat, Teff,

Spices : Turmeric, Ginger, Korerima, Pepper

Pulses : Haricot bean, Bean, Pea, Groundnut

Oil Seed : Sesame

Fruits & Vegetables : Mango, Avocado, Banana, Pineapple, Tomato, Vegetables

Source: Study Team from IFAD/ AMIP data

Collaboration with IFAD/AMIP in the Study

Trainings of post-harvest management, marketing and others were provided to AMIP farmers groups. However, the lack of adaptable technologies for farmers in the trainings and high interest rate of the credit limit the actual challenges for marketing improvement by trained groups.

The JICA Study collaborated with IFAD/AMIP in the implementation of pilot project (Production of “clean” dried-ginger and establishment of linkages with buyers: PP05). In particular, practical ginger washing method was demonstrated to the AMIP farmers groups in Hadaro Tunto woreda and Boloso Bomber woreda. In addition, information of appropriate technology for quality improvement / value addition which would be adaptable by the AMIP farmers groups; such as fruits harvesting tools and cassava cutter, was given to the IFAD/AMIP.

2.6.2 World Food Programme (WFP)

WFP has been implementing various food assistance projects in Ethiopia over decades. Among these projects, two are closely related to the objective of the Study: one is Purchase for Progress (P4P) and the other is Managing Environmental Resources to Enable Transitions to more Sustainable Livelihoods (MERET).

(1) P4P (Purchase for Progress)

In Ethiopia, WFP locally procures some of food commodities for its food assistance projects. Between 2003 and 2008 WFP purchased 573,593 ton of cereals, pulses, blended foods¹ and salt, valued at US\$146.5 million in total. The volume of procurement at each tender is generally too large for small traders, agricultural cooperatives and cooperative unions to participate.

In view of this, in September 2008, WFP launched a new local procurement program called P4P, in which cereals and pulses would be purchased from farmers groups. P4P is provisional project for 5 years period (2008-2013). After 5 years, the project will be evaluated to decide the further continuation or not. This program aims to increase an income of smallholder farmers as well as to facilitate their understanding on quality demand of the market. Farmers who participate in this program are those having less than 2 ha of land. It is not possible, however, for WFP to purchase crops directly from a number of smallholder farmers. Thus, WFP decided to purchase produces through cooperative unions and small traders. WFP selected the cooperative unions for the program based on their financial and operational capacity and past achievements.

15 Unions were selected as candidate suppliers in 2008, and then 1 Union in SNNPR has joined additionally in 2010. As of August 2012, total of 16 Unions (9 in SNNPR, 4 in Oromia, 2 in Amhara and 1 in Addis Ababa) participate in P4P.

In SNNPR, WFP planned to procure 2,200 ton of haricot beans and 3,900 ton of maize from 8 selected cooperative unions in 2010. However, it managed to procure only 1,789 ton of haricot beans and 2,650 ton of maize due to delay in the start of procurement process and limited capacity of the cooperative unions.

WFP uses the own quality standards when purchasing cereals and pulses. WFP distributed equipment and machines as shown in the following table to the 15 selected Unions in four regions in order for those Unions to enhance their capacity to fulfill its quality requirement. Under the contract with WFP, Sasakawa Africa Association conducted the training on the equipment and machine operation in August 2010, inviting storekeepers and staffs of the Unions.

¹ One of Blended Food is mixed flour of roasted corn and maize, so called FAMIX. This FAMIX is produced locally in Ethiopia by 7 to 8 private food processing companies monopolistically. Each company processes around 5000 ton of cereals for FAMIX production per year.

Table 2.6-2 Equipment distributed to WFP/P4P's Participating Unions

	Items	Qty
1	Probes or Spears	15
2	Portable Sample Divider	15
3	Forceps	15
4	Moisture Meter	75
5	Weighing Scale (digital triple beam balance, 2000g x 0.1g)	75
6	Fumigation Sheet (18m x 12m)	12
7	Knapsack Sprayer (12 -15 liter capacity)	15
8	Portable Bag Stitching Machine	15
9	Set of Sieves for Maize, Wheat, Sorghum, Haricot Beans and Horse Beans	15
10	Multicrop Grain Cleaner (1 ton/hr capacity, locally made by Selam Technical & Vocational Center)	20
11	Manual Maize Sheller (small size, locally made by Selam Technical & Vocational Center)	550
12	Maize Sheller (1.5 ton/hr capacity, locally made by Selam Technical & Vocational Center)	28

Source: WFP Ethiopia office

Collaboration with WFP/P4P in the Study

Along with the training on equipment/machine operation above, WFP undertakes the training on post-harvest technologies for the P4P participating Unions. However, the training mainly focused on theoretical aspects and provided little knowledge and skills which the trainees could apply immediately in their workplaces. Thus, it was considered necessary to review both contents and materials of training to make the training more effective. Further, through its study, the Study Team confirmed that storekeepers of cooperatives lacked knowledge and skills on the post-harvest technologies necessary to properly execute their duties. Cognizant of above, through the consultation, the Study Team and WFP decided that in the framework of P4P, the Study Team would implement the post-harvest technology training as PP02/08, which would provide simple and practical skills for participants. Accordingly, PP02/08 developed training materials including picture cards and posters, with which the training was organized for the P4P participating Unions and 19 primary cooperatives which were the members of these Unions.

(2) Managing Environmental Resources to Enable Transitions to more Sustainable Livelihoods (MERET)

In addition to an emergency food assistance program, WFP implements a Food-For-Work (FFW) program in Ethiopia. FFW is one of food assistance programs in which beneficiaries receive food against labor contribution in public works. The effects of FFW has been often questioned that it covers various types of public works, thus hardly generate any tangible impacts. In view of this, MERET was designed to focus on reforestation and watershed management. The watershed management includes embankment, water harvesting, rural infrastructure development/maintenance and income generation components.

The Study Team initially sought the collaboration with MERET office. However, the concrete collaboration was not realized because the request of the targeted woredas of MERET program was mainly the donation of the equipment and materials such as truck.

2.6.3 Agriculture Growth Program (AGP) - World Bank

AGP was scheduled to commence in June, 2010 but actual operation has been slightly delayed. In SNNPR, 19 woredas have already been nominated as implementation target places. According to the pre-appraisal mission report of February 2010, the total project cost of AGP reaches 250 million USD and 87.5 USD will be allocated to SNNPR.

Table 2.6-3 Summary, Project costs by Component and Funding channel (draft)

Component	Funding Source (Unit: Million US\$)			Share (%)
	Pooled	Parallel	Total	
1. Agricultural Production & Commercialization	67	45	112	45
1.1 Institutional Strengthening and Development	34	0	34	14
1.2 Scaling up of Best Practices	27	0	27	11
1.3 Market and Agri-business Development	6	45	41	20
2. Rural Infrastructure Development	117	0	117	47
2.1 Small-scale Rural Infrastructure Development & Management	70	0	70	28
2.2 Small-scale Market Infrastructure Development & Management	41	0	41	16
3. Project Management, Monitoring & Evaluation	16	5	21	8
3.1 Project Management	14	0	14	6
3.2 Monitoring & Evaluation	2	5	7	3
TOTAL	200	50	250	100

Note: Funding source: Pooled is from World Bank and parallel is from USAID.

Source: World Bank Ethiopia office

The selection criteria of 19 woredas in SNNPR are;

- Non food safety-net woreda
- Good access to markets (road and telecommunication)
- Natural resource environment (rain fall distribution, soil fertility, potential of the area, types of crops grown)
- Institutional capacity (public staff numbers and skill base, institutional plurality of service providers, financial services, cooperatives and farmers' groups)
- Willingness and commitment of zones to participate in the programme

Name of the selected woredas and their target agricultural commodities are as in following table.

Table 2.6-4 List of AGP woredas and Target commodities

	Zone	Woreda	Population	Target commodity priority
1	Sidama	Wondo Genet	153,283	Maize, Haricot beans, Potato, Barley, Livestock
2		Melega	114,030	
3		Gereche	139,780	
4	Silitie	Mierab Azernet	59,844	Barely, Wheat, Pepper, Garlic, Apple
5		Meserak Azernet	50,722	
6	Guraghe	Enemor Ener	167,745	Wheat, Teff, Coffee, Maize
7		Endagegn	53,103	
8	South Omo	Semi Ari	212,389	Coffee, Haricot beans, Maize, Koromima Groundnuts, Mango, Fattening
9		Debub Ari	67,798	
10	Dawro	Esera	53,075	Field pea, Coffee, Koromima, Pepper, Apiary, Fattening
11	Keffa	Chena	157,085	Haricot beans, Koremima, Coffee, Sorghum, Teff, Wheat, Apple, Fattening
12		Decha	128,853	
13	Bench Maji	Semen Bench	109,287	Pea, Koremima, Maize, Teff, Wheat, Ginger, Apiary
14		Debub Bench	87,182	Coffee, Sorghum, Maize, Koremima, Mango, Avocado, Banana, Apiary, Silk
15	Gedeo	Bule	108,519	Barley, Enset, Garlic, Maize, Peas, Apple, Fattening
16		Gedeb	146,732	
17	Special Woredas	Konta	92,703	Coffee, Maize, Pea, Teff, Haricot beans, Barely,
18		Yem	80,647	Teff, Maize, Barely, Wheat, Pea, Groundnuts
19		Basket	56,678	Teff, Maize, Koromima, Coffee

Note : Koromima = Ethiopian cardamom (*Aframomum korerima*)

Source : AGP

The project planning/selection is demand-driven and bottom-up approach; planning by local communities or farmers' groups at sub-kebele or kebele level. Government staff (regional, zonal and woreda) extends technical assistance and/or supervision to selected projects except parallel funding projects². AGP implements many projects in the selected woredas at kebele/sub-kebele level step-by-step, and all kebeles in the selected woredas would participate a project in the end.

The Market and Agri-business Development project of AGP by the funding of USAID employs local NGO, named ACDI/VOCA to implement various projects in 19 woredas in SNNPR. This project is 5 years project and started its activities in December 2011. ACDI/VOCA opened their office in July 2012 in Hawassa and started the projects implementation. The target commodity is limited to 4 products only; coffee, maize, teff and wheat.

Collaboration with AGP in the Study

The Study Team implemented the pilot project to construct a modern warehouse in Kembata Tembaro zone, a market facility construction for haricot bean in Shidama zone and for ginger in Kembata Tembaro zone in 2011. Those pilot projects also covered the ideal management training in warehouse management for the agricultural cooperatives and unions and marketplace management for the municipalities.

² For example, for feeder road construction, road authority of the region and local administration (woreda/kebele) will supervise it. For irrigation project, natural resources process and staffs of BoA, ZoA/WoA will be in charge.

On the other hand, AGP has a similar plan to construct 7 market facilities in 6 selected woredas in 2012 for various agricultural products. As mentioned above, governmental staffs (regional, zonal and woreda) are supposed to extend technical assistance and supervision to each construction of AGP project. However, these technical staffs have almost no experience in the actual construction work of a market facility or a warehouse.

The Study Team has provided data/information on the construction of various market facilities and a warehouse, such as drawings, bill of quantities, specifications to AGP office. The Study Team also provided a workshop on the experience of the construction of market facilities to all woredas and zones involved in AGP construction in March 2012. The workshop covered following aspects:

- 1) Management aspect
- 2) Technical aspect
- 3) Experience sharing by the management committee of Belila market facility
- 4) Site visit to the Belila market facility on the market day

All participants to this workshop expressed their appreciation on the concrete and practical training arranged by the Study Team.

The Study Team member visited the AGP construction site of a market facility in Chorso town, Gedeb woreda in August 2012 and found following conditions:

- 1) The site is located on a sloped ground but the layout was not designed to meet the actual slope. The design of a market facility in a staircase pattern must be arranged to the actual slope of the site.
- 2) The layout for the entrance and exit of the market facility is too narrow.
- 3) The clearance between 2 structures is narrow.

All above points were strongly explained in the training program at Balila site but it may take several experiences for those engineers to fully understand the proper planning. AGP will construct similar market facility in remaining 13 woredas in SNNPR, The Study Team expect them to improve the engineering skill through the actual work.

2.6.4 JICA One Village One Product (OVOP) Promotion Project

JICA OVOP Promotion project started in March 2010 with 4 years period until May 2014. It aims to support farmers who are difficult to access to the technology / fund / information for value addition of agricultural produce. It has been challenging a) to build OVOP promotion systems to be operated by regional and federal governments, b) to create the model cases of rural development through development of village products. SNNPR is the site for the model case creation.

To create a village product and its selling outlets, OVOP project takes an approach that combine farmers group and someone (individual or company, they are called “OVOP partners”) who is capable to provide technical support and marketing support to the farmers group.

As of August 2012, OVOP project supports 14 farmers groups in SNNPR. Their location, group name, target business type (target products) and OVOP partner are summarized as follows.

Table 2.6-5 Farmers groups, Business type and OVOP partners of OVOP project

Location (woreda)	Group name	Target Business Type (Target Products)	OVOP partner	
			Technical support	Marketing support
Andracha	Edget-Beandinnet	Enset processing (Kocho, Bula)	MoA, Sodo Rural Technology Center, BoA/ZoA	
	Bullo-Benaniye			
	Kumbekacha-Budin	Honey	Bezamar	Bezamar
Arbaminch Zuria	Hare	Banana paper	Tesfaye	Tesfaye
	Fikir Mahiber	Hot pepper processing (Dataa)	ECOPIA	ECOPIA
	Kurshete	Mango processing (Jam)	ECOPIA	ECOPIA
Bolosso Bombe	Magera	Ginger washing & drying	BoMC	BoMC
	Yedget Budin			
	Firafire-Limat	Mango processing (Jam)	ECOPIA	ECOPIA
Geta	Edget Behibret	Bamboo craft	Technology Research & Transfer Center, Ethiopian Tourist & Trading Enterprise, FEMSEDA	WOC
	Y.W.L.Mahiber	Barley processing	MoA, BoA	WOC
	Yisreshe-Ekassaye	Koseret (spice) drying	MoA, BoA	
Lanfuro	Limat Bedget	Red pepper drying	Melkasa Agricultural Research Center	
	Lemlem	Honey	MoA, BoA	

WOC : Woreda OVOP committee

Source: OVOP project (Aug. 2012)

Collaboration with OVOP project in the Study

Frequent information exchanges were made between two JICA projects. Regarding the technical support, the Study Team provided the on-site explanation to OVOP farmers groups in Boloso Bombe woreda about the ginger washing & drying facility established by the pilot project (PP05) and method of washing works based on the experiences obtained in the pilot project. In addition, the team provided the advice on washing facility designing; mainly facility layout plan to the same OVOP groups.

Chapter 3 Present Condition of the Study Area

3.1 Production, Marketing and Postharvest handling of the Target crops

3.1.1 Cereal Crops

(1) Cereal production in Ethiopia

The major food crop for household consumption in Ethiopia is cereals, but the production in Ethiopia does not fulfill the country's demand and currently the import of cereals is unavoidable. Maize, teff, wheat, barley and sorghum are the major cereals in Ethiopia, and millet, oat and rice are also produced.

For the leading crops, maize is cultivated in wider agro-ecology zones, mainly in temperate zone ('Wonadega'). Teff, wheat, sorghum and barely are also grown in this zone. Wheat, barely, oil seeds and pulses are mainly cultivated in 2300-3200 masl ('Dega'). As sorghum and millet are drought resistant, these crops are the main crops in the semi-arid lowlands.

The main harvest of Ethiopian crops mostly comes from planting in the major rainy season (Meher). The harvesting volume from the minor rainy season (Belg) is only 5-10% of annual production. However, about 75% of maize produced in SNNPR comes from planting during the Belg.

The major production areas of cereals are Oromia and Amhara regions, which account for 82% of production and about 79% of market volume of cereals of the country. Especially, Oromia alone has a share of about 50% of production and about 49% of market volume in the country.

Table 3.1-1 Cereals Production and Market volume in Ethiopia

Region	Production		Sales	Market Volume	
	ton	%	%	ton	%
1. Oromia	8,797,243	49.5%	14.74%	1,296,714	48.5%
2. Amhara	5,702,436	32.1%	14.48%	825,713	30.9%
3. SNNPR	1,480,151	8.3%	21.96%	325,041	12.2%
4. Tigray	1,309,359	7.4%	12.50%	163,670	6.1%
5. Benishangul-Gumuz	306,431	1.7%	13.92%	42,655	1.6%
6. Somali	105,970	0.6%	12.16%	12,886	0.5%
7. Others	59,771	0.3%	12.13%	7,250	0.3%
Ethiopia Total	17,761,361	100.0%	15.06%	2,673,929	100.0%

Source: CSA, Crop Production Forecast Sample Survey 2011/12 (2004 EC), (Bulletin 532)

(2) Cereals production in SNNPR

SNNPR is the third biggest cereal producer of the country. Its share is about 8% of production and about 12% of market volume. Production and market volume of cereals in SNNPR are shown in the following table.

Table 3.1-2 Cereals Production and Market volume in SNNPR

Kinds	Production		Sales	Market Volume	
	ton	%	%	ton	%
1. Maize	556,547	37.7%	12.83%	71,405	21.8%
2. Teff	296,760	20.1%	42.03%	124,728	38.1%
3. Wheat	244,603	16.6%	28.33%	69,296	21.2%
4. Barley	198,213	13.4%	19.42%	38,493	11.8%
5. Sorghum	175,126	11.9%	13.09%	22,924	7.0%
6. Millet	4,267	0.3%	6.73%	287	0.1%
7. Oats "Aja"	289	0.0%	7.95%	23	0.0%
SNNPR Total	1,475,805	100.0%	21.96%	327,156	100.0%

Source: CSA, Crop Production Forecast Sample Survey 2011/12 (2004 EC), (Bulletin 532)

Teff has the highest sales rate of 38.1% for cereals and the next biggest sales rates follow with maize and wheat at 21.8% and 21.2%. Other cereals are produced mainly for captive consumption. Sales rates for millet and oats are almost zero.

(3) Mode of marketing

Mostly, smallholder farmers sell surplus cereals (maize and wheat) to traders at weekly marketplaces, or to village traders. Although traders pay less for those cereals with low quality, they don't increase prices even if quality is good. Hence, farmers make no extra effort to improve quality, such as by wind-cleaning.

Generally, the marketing channel for cereals consists of many marketing actors. The marketing actors are producers (farmers, cooperatives, cooperative unions, private farms, public farms), collectors, assemblers, farmers/marketing agents, brokers, wholesalers, retailers, importers/exporters, Ethiopian Grain Trade Enterprise (EGTE), Ethiopian Commodity Exchange (ECX), consumers, etc. These marketing actors are many and have different categories. Interstate wholesalers play important roles in the marketing channel. They purchase the surplus cereals from farmers, cooperatives, cooperative unions, traders (collectors) and wholesalers in the producing areas and supply them to Addis Ababa central markets and sometimes to the food deficit areas. Wholesalers in surplus producing areas tend to ship the cereals that local collectors purchased from farmers, cooperatives, cooperative unions, to the remote marketplaces. Wholesalers in food deficit areas tend to purchase the cereals from Addis Ababa and other main marketplaces and sell to the local retailers and consumers in deficit areas.

In the northern part of the SNNPR, freight cost is low due to relatively better road conditions. In most cases, cereals in the northern grain belt zone are brought to the markets of Addis Ababa, Sheshamane, Jimma, Sodo, Hosana and other nearest markets.

The marketing channel is diverse and complex. Many and multi-layered distributors are mediated in

the marketing channel. The main channel is: Producer → Trader (collector) → Wholesaler → Retailer → Consumer. In the case of interstate trading, i.e remote cereals purchase, brokers sometimes act as intermediates in the marketing channel. The marketing channel flow of cereals and pulses is shown in the following figure.

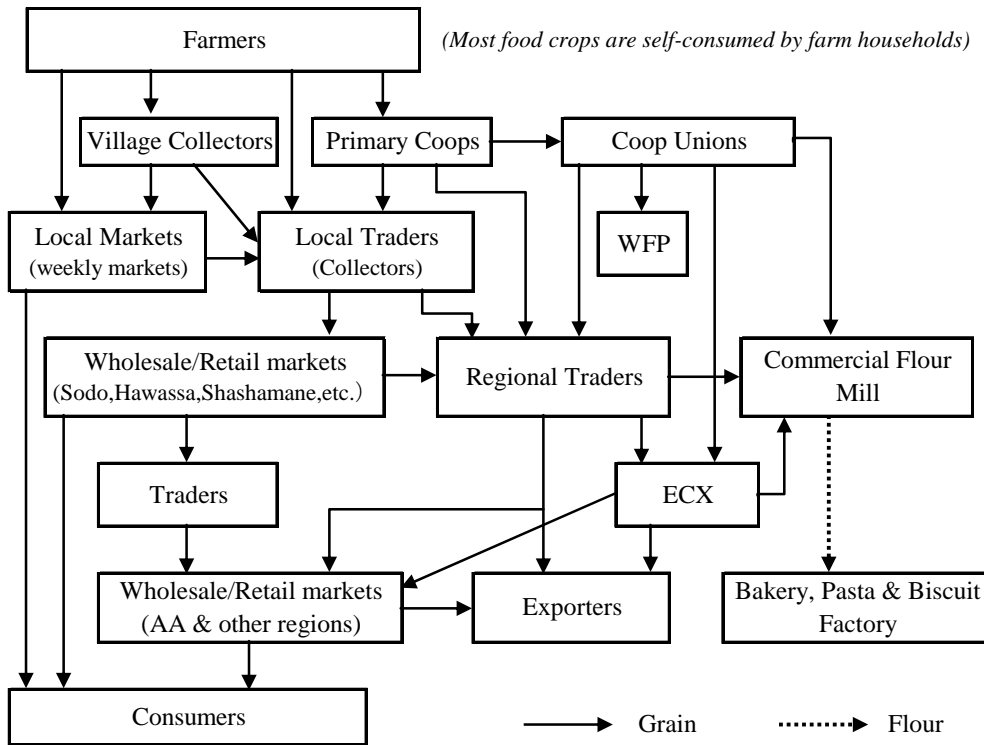


Figure 3.1-1 Marketing channel for Cereals and Pulses in SNNPR

Quality Standards Authority of Ethiopia (QSAE), World Food Program (WFP) and ECX have their own quality standards for cereals. However, generally, such standards are not followed in the internal commodity transactions. Only in the transactions which WFP or ECX are involved in, respective quality standards are applied. Prices of cereals in the domestic transactions are decided by visual check and touch.

Licha Hadiya Cooperative Union in Hadiya zone has a large-scale wheat milling factory and purchases material wheat from the union members. Also, they refine wheat collected from member farmers by their selecting machines and sell them to domestic traders. The number of cooperatives (cooperative unions) which have sufficient capacity to do this type of business is limited. Generally smallholder farmers sell surplus grains to traders or cooperatives individually. In the case of cooperatives, there are two types: the cooperatives that participate in the WFP’s P4P program clean (sort) and pack grains according to the WFP standard; the other cooperatives simply collect in order to increase the shipping volume, thus, they don’t refine after collection of grains. On the other hand, as regards traders, big traders possess their own selecting machines while small custom millers in a town conduct selecting work by using small cleaning machines or by hand before selling to consumers.

After harvesting, grains are normally stored in bags at farmers' houses. No moisture check or pest control is done. Although some farmers own storage for maize, few such storages are equipped with mousetrap. As a whole, farmers have little knowledge or skills in post-harvest technology. It is needed to enhance their knowledge and skills.

Most cooperatives have little knowledge on warehouse management. Few coops conduct FIFO (First-in First-out). Their knowledge on ventilation, pest control and fumigation for warehouses is extremely limited. It is absolutely necessary to improve the knowledge and skills of coops in post-harvest processing technology, including warehouse management.

(4) Production, Marketing and Postharvest handling of major cereals

1) Maize

Maize has the biggest share of Ethiopian cereal crops production. As shown in the below table, total production of maize in Ethiopia is 4,986,132 ton. The main producing areas of maize are the highlands, 1500-2200m above sea level. The Oromia region is the major producer of maize (2,880,600 ton) and accounts for 57.8% of the total production of the country. SNNPR is the third biggest producer of maize in the country; its production is 556,547 ton, which is 11.2% of national production. Production and market volume by zone/special woreda are shown as below.

Table 3.1-3 Maize Production and Market volume in Ethiopia and in SNNPR

Region	Production		Sales	Market Volume	
	ton	%	%	ton	%
1. Oromia	2,880,600	57.8%	10.4%	299,582	56.9%
2. Amhara	1,214,807	24.4%	10.5%	127,555	24.2%
3. SNNP	556,547	11.2%	12.8%	71,238	13.5%
4. Tigray	149,853	3.0%	6.5%	9,740	1.9%
5. Others	184,325	3.7%	9.9%	18,248	3.5%
Ethiopia Total	4,986,132	100.0%	10.6%	526,364	100.0%
Top 10 Main Production Zones/Special woredas					
1. Silitie	96,980	17.4%	5.5%	5,334	7.8%
2. Gamo Gofa	77,182	13.9%	13.9%	10,728	15.8%
3. Keffa	60,648	10.9%	26.0%	15,768	23.2%
4. Guraghe	56,095	10.1%	7.1%	3,983	5.8%
5. Sidama	53,723	9.7%	11.9%	6,393	9.4%
6. Alaba	46,975	8.4%	5.9%	2,772	4.1%
7. South Omo	42,009	7.5%	25.4%	10,670	15.7%
8. Hadiya	26,801	4.8%	5.9%	1,581	2.3%
9. Konso	19,113	3.4%	8.5%	1,625	2.4%
10. Benchi Maji	17,292	3.1%	18.5%	3,199	4.7%
11. Others	59,729	10.7%	10.1%	6,033	8.9%
SNNPR Total	556,547	100.0%	12.8%	68,086	100.0%

Source: CSA, Crop Production Forecast Sample Survey 2011/12 (2004EC), (Bulletin 532)

Because agriculture depends on rain water, many crops are planted during rainy seasons. In areas

where there is belg production, usually maize is sown, starting from late February and March. In some places maize and sorghum are sown in April and May. In some areas, where there is bimodal rainfall in one year, double-cropping is largely practiced. Even so, there is annual variation, but 90-95% of food crops are mostly produced in the Meher and 5-10% in the Belg rainy seasons.

The production zones in SNNPR are mainly in the central and the northern parts of the region. Sidama, Guraghe, Gamo Gofa, Silitie and Hadiya are the major production areas in SNNPR. In SNNPR, maize is produced in most of the zones; about 75% of maize is produced in the Belg season.

The sales volume of maize is small; most of the production (about 90%) is grown for captive consumption. Regarding marketing, farmers bring cereals by donkey, horse or cart to the nearest marketplaces and collection points. As farmers have no warehouse for storage, they sell the surplus cereals at the market shortly after threshing. The major selling area is main local marketplaces. In the areas with good road conditions, traders collect cereals from local markets and collection points and bring them to Addis Ababa and other big marketplaces by truck.

The selling prices per 100kg are: farm gate: 150-220 Birr, wholesale in Addis Ababa : 260 Birr, retail: 280 Birr. If a big market is far, the farm gate price becomes lower. For example, in the case of Keffa zone, the market price is 175 Birr/100kg. Transportation fee to Addis Ababa by ISUZU truck is 80 Birr/100kg. The commission fee for middlemen is 5 Birr/100kg. Therefore, the wholesaler price at Addis Ababa is 260 Birr/100kg.



Local collecting point for maize



Maize at market

The maize retail price trend is shown below. This figure represents BoTI retail prices data by month from Nov. 2009 to Sept. 2010 at 6 major markets in SNNPR except western parts. Higher prices were recorded from November to February and lower ones from June to September. Regarding the towns, the annual mean prices of Arba Minch and Hawassa were 325 Birr and 324 Birr per 100kg, respectively. The lowest annual mean price 264 Birr/100kg was obtained at Halaba.

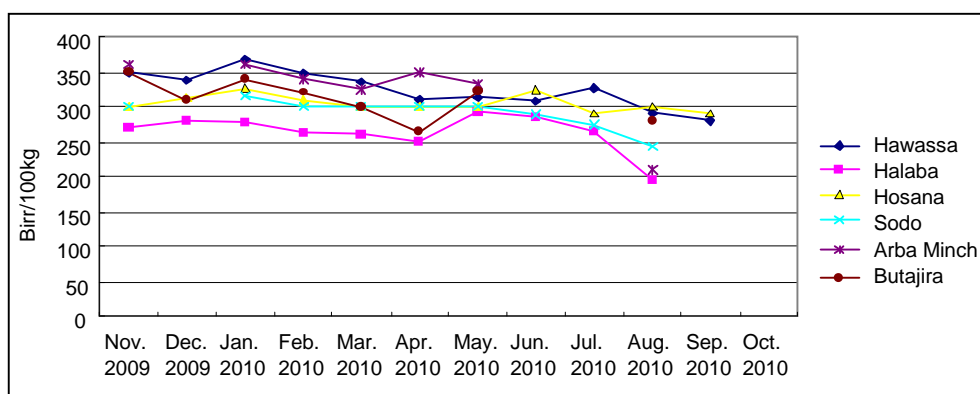


Figure 3.1-2 Maize retail price trend

Regarding post-harvest processing of maize, farmers do little processing with machines to improve quality. The scene of throwing maize into the air for wind-cleaning is most common throughout Ethiopia. However, grain size grading and impurity separation by machine are seldom seen for improving the quality. Some exporters, big traders, food processors and cooperative unions are already using high-capacity cleaners, gravity separators, size graders and aspirators, etc. but extension of mechanical processing poses some difficulty for starting use by farmers, cooperatives, small traders and wholesalers.

2) Teff

Production and market volume by zone/special woreda are shown below.

Table 3.1-4 Teff Production and Market volume in Ethiopia and in SNNPR

Region	Production		Sales	Market Volume	
	ton	%	%	ton	%
1. Oromia	1,671,805	48.0%	23.1%	386,187	44.5%
2. Amhara	1,279,110	36.7%	24.1%	308,266	35.5%
3. SNNP	296,760	8.5%	42.0%	124,639	14.4%
4. Tigray	209,507	6.0%	19.3%	40,435	4.7%
5. Others	26,306	0.8%	30.4%	7,997	0.9%
Ethiopia Total	3,483,488	100.0%	27.7%	867,524	100.0%
Top 10 Main Production Zones/Special woredas					
1. Hadiya	50,642	17.1%	51.2%	25,929	20.8%
2. Gamo Gofa	46,475	15.7%	44.7%	20,774	16.7%
3. Guraghe	42,297	14.3%	47.8%	20,218	16.2%
4. Keffa	32,706	11.0%	26.8%	8,765	7.0%
5. Wolayita	24,790	8.4%	56.6%	14,031	11.3%
6. Dawro	15,868	5.3%	19.5%	3,094	2.5%
7. Alaba	12,538	4.2%	77.5%	9,717	7.8%
8. Silitie	12,402	4.2%	53.3%	6,610	5.3%
9. Kembata Tembaro	9,971	3.4%	46.1%	4,597	3.7%
10. Bench Maji	8,873	3.0%	44.9%	3,984	3.2%
11. Others	40,198	13.5%	27.2%	6,920	5.6%
SNNPR Total	296,760	100.0%	42.0%	124,639	100.0%

Source: CSA, Crop Production Forecast Sample Survey 2011/12 (2004EC), (Bulletin 532)

Teff ranks second in the Ethiopian cereal crop production. Teff is one of the most important crops in Ethiopia as the ingredient in the Ethiopian traditional staple food “Injera”. Teff is most widely grown in the temperate and cool highlands, and is not suitable for cultivation in arid areas.

As seen in the above table, the total production in Ethiopia is 3,483,488 ton. The major producing regions are Oromia and Amhara, where the two regions surpass the others. About 85% of total production in the country, that is 2,950,915 ton, is produced in the two regions. About 23% of their production, that is a market volume of 694,453 ton, is traded in the country. The share of market volume is 80% in the country.

SNNPR is fourth in rank in the production of teff. Hadiya, Gamo Gofa, Guraghe, Keffa and Wolayita zones are major production areas in the region. In SNNPR, except Keffa and Dawro, roughly 50% of the production is traded in the markets.

Teff is a rain-fed crop like other cereals. Despite some differences by region, the planting is done during the rainy season where the soil has good moisture content. Sowing of teff is done mostly in the second half of August. The harvest season is from November - January. In some places black teff 'bunign' is grown during belg season.

The main markets of teff are Addis Ababa , Shashemene and other big markets. The farm gate price of white teff is 550-600 Birr/100kg. The wholesale and retail prices in Addis Ababa market are as per the table presented on the right side. The very white variety can be sold for a higher price. In SNNPR, the retail price in Hawassa market is 10 Birr/kg for white teff and 8 Birr/kg for brown teff.

Teff retail price trend is shown in Fig. 3.1-3. This figure represents BoTI retail price data by month from Nov. 2009 to Sept. 2010 at 6 major markets in SNNPR except western parts.

The price of white teff shows slight variation by season for each town. Hawassa town has the highest prices, more than Birr 1,000/100kg over the months of November to January. In principle, teff prices should have been low at this time, since this is the time for harvesting and storing the crop. However, farmers mainly keep it as a cash crop and it is stored for longer periods without any damage by insects or disease. The prices at Hawassa fluctuated between Birr 900 and 996/100kg for the period between February to September, with an annual mean price of Birr 984/100kg, followed by Arba Minch and W. Sodo towns, with annual mean prices of Birr 894 and 867/100kg, respectively. Teff prices for Alaba and Butajira are lower because Alaba has a lower population and Butajira is surrounded by an area of high potential teff production.

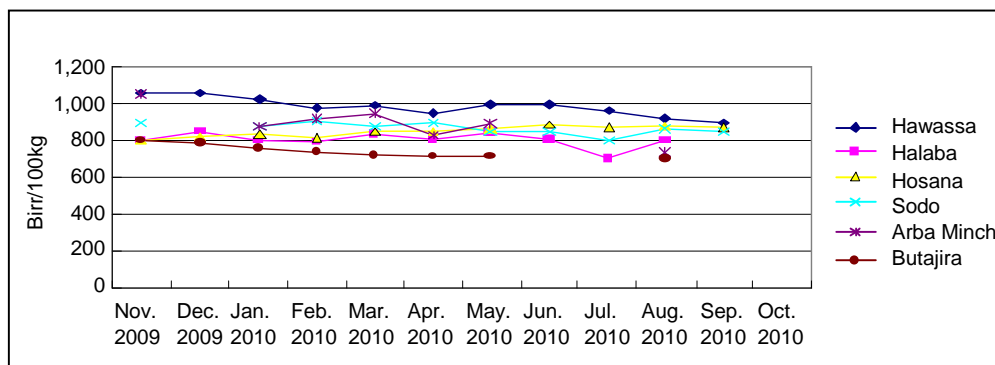


Figure 3.1-3 Teff retail price trend

The actual situation of post-harvest processing of teff is that some farmers are just starting to use local-made teff threshers. But most teff processing is done manually. After reaping by sickle, teff is sun-dried and piled up in the farmyard for storage. Later, it is usually threshed by using 6-10 oxen in an open farmyard.



Threshing by oxen



Drying teff before threshing

Regarding the quality standard of teff, there is only the Ethiopian Standard as per attached table. In case of the market transaction, this standard is not adopted at present. The actual decision of traders is normally made whether it is clean or not, by visual checking.

Table 3.1-5 Ethiopian Standard of teff and maize

Cereal type	Test items	Impurity mixed/Insect damage (%)				Testing method
		Grade 1	Grade 2	Grade 3	Grade 4	
Teff (very white)	Foreign matter	1.5	2.5	3.5	5.0	ES ISO 5223
	Stone	0.6	0.6	0.6	0.6	ES ISO 5223
Teff (white)	Foreign matter	1.5	2.5	3.5	5.0	ES ISO 5223
	Stone	0.6	0.6	0.6	0.6	ES ISO 5223
Teff (brown)	Foreign matter	1.5	2.5	3.5	5.0	ES ISO 5223
	Stone	0.6	0.6	0.6	0.6	ES ISO 5223
Teff (mixed)	Foreign matter	1.5	2.5	3.5	5.0	ES ISO 5223
	Stone	0.6	0.6	0.6	0.6	ES ISO 5223

Cereal type	Test items	Impurity mixed/Insect damage (%)				Testing method
		Grade 1	Grade 2	Grade 3	Grade 4	
Maize	Broken kernel	2.0	3.0	4.0	5.0	ES ISO 5223
	Foreign matter	0.5	1.0	1.5	2.0	ES ISO 5223
	Insect damage	3.0	5.0	7.0	10.0	
	Disease damage	0.5	1.5	2.0	3.0	
	Immature	1.0	2.0	4.0	6.0	

Source: (1) Ethiopian Standard (Teff), ES671:2001. (2) Ethiopian Standard (Maize), ES679:2001.

Because the small household farmers have no storage, they tend to sell the surplus teff to the market immediately after threshing. The sale target is the trader or the nearest market. They carry the bagged teff (about 100kg/bag) to the market or the nearest roadside of a main road by putting it on a donkey's back /horseback or donkey cart.

In SNNPR, traders collect teff at production areas and marketplaces, and transport it to Addis Ababa , Shashemene and other big markets, as well as to the nearest marketplaces.

3) Wheat

Wheat is fourth in Ethiopian cereal crops production; it is also one of the important crops in Ethiopia, but production is not enough to meet the country's demand. The deficit of production is imported. Wheat is produced in the highlands. Wheat has many varieties (soft, hard and durum). Durum wheat is very popular for the production of macaroni and pasta. In Ethiopia, production of durum wheat is low because of its low selling price compared with its unit production per ha.

Table 3.1-6 Wheat Production and Market volume in Ethiopia and in SNNPR

Region	Production		Sales	Market Volume	
	ton	%	%	ton	%
1. Oromia	1,583,213	55.4%	19.6%	310,310	58.4%
2. Amhara	824,862	28.9%	10.4%	85,786	16.2%
3. SNNP	244,603	8.6%	33.9%	82,920	15.6%
4. Tigray	192,508	6.7%	21.5%	41,389	7.8%
5. Others	10,500	0.4%	25.7%	10,753	2.0%
Ethiopia Total	2,855,686	100.0%	18.6%	531,158	100.0%
Top 10 Main Production Zones/Special woredas					
1. Hadiya	66,212	27.1%	42.9%	28,405	37.9%
2. Silitie	44,140	18.0%	42.4%	18,715	24.9%
3. Guraghe	28,249	11.5%	27.3%	7,712	10.3%
4. Kembata Tembaro	22,157	9.1%	23.8%	5,273	7.0%
5. Alaba	8,131	3.3%	51.2%	4,163	5.5%
6. South Omo	7,944	3.2%	21.9%	1,740	2.3%
7. Yem	6,488	2.7%	16.0%	1,038	1.4%
8. Sidama	4,343	1.8%	29.2%	1,268	1.7%
9. Dawro	3,682	1.5%	17.2%	633	0.8%

Region	Production		Sales	Market Volume	
	ton	%	%	ton	%
10. Benchi Maji	1,941	0.8%	14.9%	289	0.4%
11. Others	51,316	21.0%	11.3%	5,799	7.7%
SNNPR Total	244,603	100.0%	30.7%	75,036	100.0%

Source: CSA, Crop Production Forecast Sample Survey 2011/12 (2004EC), (Bulletin 532)

Production and market volume by region as well as by zone/special woreda are shown as above. Total production in the country is 2,855,686 ton, and the major production areas are Oromia and Amhara regions. These two regions accounted for 84.3% of the production and 74.6% of market volume of the country. The Oromia region wheat production and market volume are 55.4% and 58.4% respectively.

The SNNPR is the third biggest wheat producing region of the country. Major production zones are Hadiya, Silitie, Guraghe and Kembata Tembaro. Sales rates of Hadiya, Silitie zones and Alaba special woreda are more than 40%. Other zones are less than 30%, which means mainly used for captive consumption.

Regarding marketing, farmers bring cereals by donkey-back, horseback and cart to the nearest markets or the collection points in the zone. The main sales places for wheat are local markets.

Wheat selling price per 100kg are: farm gate; 250 Birr, wholesale in Addis Ababa ; 420 Birr, retail; 440 Birr. In SNNPR, the retail price at Hawassa market is 6 Birr/kg for soft wheat. Wheat retail price trend is shown below. This figure represents BoTI retail price data by month from Nov. 2009 to Sept. 2010 at 6 major markets of SNNPR (except western parts).

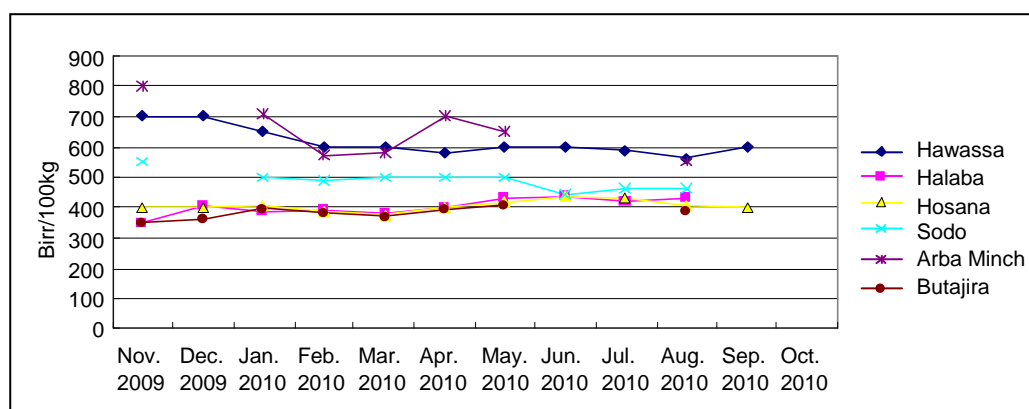


Figure 3.1-4 Wheat retail price trend

This figure shows the retail prices of white wheat Grade 1 of Ethiopian Standard. As shown in the figure, the retail prices in Arba Minch and Hawassa is higher than the other towns, which exceed 600 Birr/100kg. This is mainly because these towns are far from major wheat production areas. On the

other hand, all others have lower mean prices, below 500 Birr/100kg, the lowest being 378 Birr/100kg for Butajira. These marketing centers are fairly surrounded by major wheat production areas. The seasonal mean prices were highest in November, just before harvesting time.

The actual situation for post-harvest processing of wheat is the same as teff. Farmers have no mechanical machinery like wheat threshers, cleaners, dryers, graders, etc. All work for wheat processing is carried out manually.

In SNNPR, the traders collect wheat at production areas and marketplaces, and transport it to Addis Ababa , Shashemene, Arba Minch and other big marketplaces.

3.1.2 Pulses

(1) Pulses production in Ethiopia

The second biggest food crop for household consumption in Ethiopia is pulses, but production in Ethiopia is not so much, 1,953,200 ton in the country. Various types of pulses are produced in the regions. The major varieties of pulses produced in Ethiopia are haricot bean, horse bean, field peas, chick peas and lentils. Local varieties like vetch, fenugreek and gibto are also produced for traditional cuisines, but these varieties are produced only in specified areas and sold to the local market because of the small selling volume.

Table 3.1-7 Pulses production and Market volume in Ethiopia

Region	Production		Sales	Market Volume	
	ton	%	%	ton	%
1. Oromia	847,725	43.4%	24.96%	211,592	48.4%
2. Amhara	763,322	39.1%	21.50%	164,114	37.5%
3. SNNPR	272,418	13.9%	17.56%	47,837	10.9%
4. Tigray	51,532	2.6%	19.79%	10,198	2.3%
5. Benishangul-Gumuz	16,200	0.8%	20.31%	3,290	0.8%
6. Somali	859	0.0%	40.29%	346	0.1%
7. Others	1,144	0.1%	6.83%	78	0.0%
Ethiopia Total	1,953,200	100.0%	21.03%	437,456	100.0%

Source: CSA, Crop Production Forecast Sample Survey 2011/12 (2004EC), (Bulletin 532)

Pulses are grown across the country with most of the national contribution coming from the central and eastern woredas of Oromia and Amhara regions. Only two regions count for a share of about 83% in production and about 86% in market volume in the country. SNNPR is the third biggest pulses producer with production of 272,418 ton and a market volume of 47,837 ton.

(2) Pulses production in SNNPR

In SNNPR, the main producing zones are the western and northern parts of the region like Keffa,

Wolayita, Sidama, Guraghe and Hadiya zones. The table below shows the pulses production and market volumes in SNNPR. As seen from the table, major production pulses are 3 varieties of haricot bean, horse bean and field peas and chick pea is follows. The production of the above three varieties counts for 97% share in the country.

Table 3.1-8 Pulses production and Market volume in SNNPR

Kinds	Production		Sales	Market Volume	
	ton	%	%	ton	%
1. Haricot bean	106,279	39.0%	13.88%	14,752	30.9%
2. Horse bean	104,256	38.3%	18.22%	18,995	39.8%
3. Field Peas	54,134	19.9%	22.59%	12,229	25.6%
4. Chick Pea	7,081	2.6%	22.94%	1,624	3.4%
5. Lentil	364	0.1%	22.64%	82	0.2%
6. Soy bean	304	0.1%	6.33%	19	0.0%
SNNPR Total	272,418	100.0%	17.56%	47,702	100.0%

Source: CSA, Crop Production Forecast Sample Survey 2011/12 (2004EC), (Bulletin 532)

(3) Mode of marketing

The mode of marketing of pulses is nearly the same as cereals except the flour portion.

There are two business routes of domestic market and export for pulses. White haricot beans for export have been obliged to go through ECX auction since 2010, like coffee. Traders clean white haricot beans either by using their own large-scale cleaning machine or by hiring many workers for manual cleaning in order to meet ECX standard specifications, then bring them to the ECX warehouses or participate in the auction. The production of white haricot beans is small in SNNPR and most of red haricot beans produced in SNNPR are exported to the neighboring country of Kenya. In this case, the business does not go through ECX auction. Exporters normally use a large cleaning machine to meet the quality requirement specified in the contract. WFP directly procures pulses from cooperative unions through P4P program.

The issues to be addressed for the improvement of pulses marketing are the same as those of cereals. The quality standard is not adapted in the domestic transactions except those of WFP and ECX. Quality check is only done by sight and touch. Before selling to consumers or overseas market, big traders remove impurities from pulses by using machines or hiring a large number of workers.

Marketplaces where farmers sell surplus pulses to village collectors/traders have no facilities or buildings to be protected from rain or harsh sunshine. Table scales of traders are often not accurate and it is normal for traders to buy produce from farmers at very low prices. PP06 “Local Market Improvement Project in Haricot Bean Producing Area” was very much appreciated by farmers, traders and government officials. This improved facility for specific farm products successfully contributed to the significant improvement of market transactions in the aspects of efficiency and fairness. A price

bulletin board installed by PP01 at the PP06 market facility received overwhelming support from farmers and the local administration.

Bean flour milling is mostly done by small-scale grind mills at each kebele, and no large-scale commercial milling. It is common that most housewives make only the quantity of bean flour needed at grindings mills in the town, because only a small amount of bean flour will be consumed.

(4) Production, Marketing and Postharvest handling of the major pulses

1) Horse Bean (Faba bean)

Production and market volume of horse bean by region and by zone/special woreda in SNNPR are shown below. Horse bean is one of the main agricultural crops in Ethiopia but production is not so large, 697,801 ton in the country. The major production areas are Amhara and Oromia, which have production and market volumes of 82.4% and 81.5% respectively in the country.

In SNNPR, the production is 104,056 tons, which is the third in the country and it increased by 1.5 times in 2011/12 compared with 2008/09. The major production zone is Keffa, with production of 21,151 tons, which is 20.3% of regional production. The market volume of Keffa is 4,484 tons, and accounts for 24.7% of the regional sales volume.

Table 3.1-9 Horse bean Production and Market volume in Ethiopia and in SNNPR

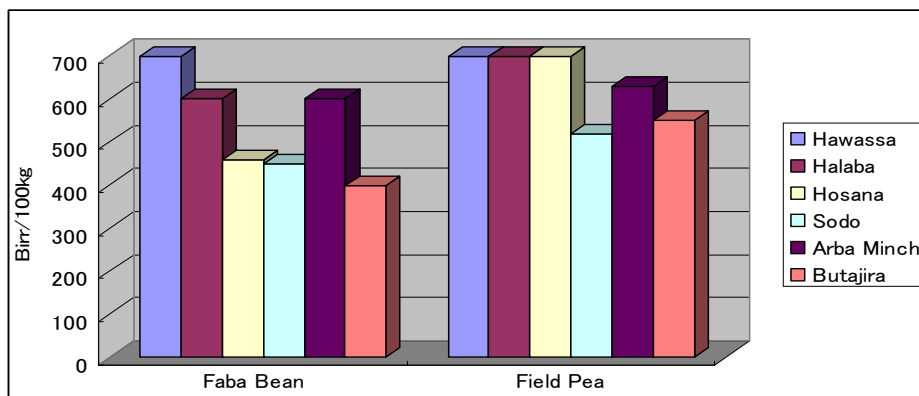
Region	Production		Sales	Market Volume	
	ton	%	%	ton	%
1. Oromia	324,478	46.5%	16.6%	53,863	44.6%
2. Amhara	250,284	35.9%	17.8%	44,551	36.9%
3. SNNP	104,056	14.9%	18.2%	18,938	15.7%
4. Tigray	17,563	2.5%	18.4%	3,232	2.7%
5. Others	1,420	0.2%	18.2%	258	0.2%
Ethiopia Total	697,801	100.0%	17.3%	120,842	100.0%
Top 10 Main Production Zones/Special woredas					
1. Keffa	21,151	20.3%	21.2%	4,484	24.7%
2. Hadiya	13,134	12.6%	23.3%	3,060	16.9%
3. Guraghe	10,948	10.5%	6.7%	734	4.0%
4. Sidama	9,383	9.0%	23.2%	2,177	12.0%
5. Dawro	7,627	7.3%	19.2%	1,464	8.1%
6. Kembata Tembaro	7,065	6.8%	12.9%	911	5.0%
7. Benchi Maji	6,428	6.2%	32.5%	2,089	11.5%
8. Silitie	5,902	5.7%	8.4%	496	2.7%
9. South Omo	5,237	5.0%	8.5%	445	2.5%
10. Gamo Gofa	4,358	4.2%	15.0%	654	3.6%
11. Others	12,823	12.3%	12.7%	1,629	9.0%
SNNPR Total	104,056	100.0%	18.2%	18,143	100.0%

Source: CSA, Crop Production Forecast Sample Survey 2011/12 (2004EC), (Bulletin 532)

The selling prices per 100kg of horse beans are: farm gate; 450-500 Birr, wholesale in Addis Ababa;

600 Birr, retail; 620 Birr. In SNNPR, the retail price in Hawassa market is 6 Birr/kg. But the quality of horse bean traded in the market is not so high; the size is irregular and even some different colors mixed together.

Retail mean prices of horse bean (faba bean) and field pea are shown in the figure below. This figure represents BoTI mean retail price data from November 2009 to June 2010 at 6 major markets in SNNPR. Horse bean has differs widely (400 - 700 Birr/100kg) in mean retail prices among the towns. But field pea has little difference (520 - 700 Birr/100kg) in mean retail prices as shown in the figure.



Note: Faba bean = horse bean

Figure 3.1-5 Mean retail prices of Horse bean and Field pea

Post-harvest processing of horse beans is the same as other crops, where threshing and separation of impurities is done manually.

2) Haricot Bean

Production and market volume of haricot bean by region and by zone/special woreda in SNNPR are shown in the table below. Haricot beans are one of the main agricultural crops in Ethiopia but the production is not so large, 340,282 ton in the country. The major production area is Oromia, which covers 50% of production and about 50% of market volume in the country. SNNPR is the second biggest producer in the country, havng 106,279 ton of production. The major production areas in SNNPR are Sidama zone, Wolayita zone and Gamo Gofa zone. The total of those 3-zones production is 76,652 ton and covers 71% of the regional production. Haricot beans are widely produced in many zones in SNNPR. However, sales volume for other production zones did not exceed 600 ton, which means for captive consumption.

The Haricot bean has many varieties and its size and color varies. The most popular one is the red haricot bean, which is exported to Kenya and others through exporters. The white haricot bean is limited to transaction only through ECX by law, which is mostly transacted for export.

The selling price per 100kg of haricot beans are: farm gate; 500 Birr, wholesale in Addis Ababa; 600 Birr, retail; 650 Birr. In SNNPR, the retail price in Hawassa market is 7.5 Birr/kg.

Post-harvest processing of haricot beans is the same as other crops, where threshing and separation of impurities is done manually.

Table 3.1-10 Haricot beans Production and Market volume in Ethiopia and in SNNPR

Region	Production		Sales	Market Volume	
	ton	%	%	ton	%
1. Oromia	169,645	49.9%	18.3%	31,045	49.3%
2. SNNP	106,279	31.2%	13.9%	14,773	23.5%
3. Amhara	51,056	15.0%	29.8%	15,215	24.2%
4. Benishangul-Gumuz	8,903	2.6%	13.4%	1,193	1.9%
5. Others	4,399	1.3%	15.9%	699	1.1%
Ethiopia Total	340,282	100.0%	19.7%	62,925	100.0%
Top 10 Main Production Zones/Special woredas					
1. Sidama	34,292	32.3%	15.1%	5,178	37.2%
2. Wolayita	30,360	28.6%	11.1%	3,370	24.2%
3. Gamo Gofa	12,000	11.3%	11.0%	1,320	9.5%
4. Keffa	5,044	4.7%	11.2%	565	4.1%
5. Benchi Maji	3,466	3.3%	11.1%	385	2.8%
6. Hadiya	2,933	2.8%	11.1%	326	2.3%
7. Konso	2,682	2.5%	4.4%	118	0.8%
8. Burji	2,438	2.3%	8.4%	205	1.5%
9. Alaba	2,380	2.2%	16.3%	388	2.8%
10. Dawro	2,067	1.9%	15.0%	310	2.2%
11. Others	8,617	8.1%	20.5%	1,766	12.7%
SNNPR Total	106,279	100.0%	13.9%	13,931	100.0%

Source: CSA, Crop Production Forecast Sample Survey 2011/12 (2004EC), (Bulletin 532)

3) Field Peas

Production and marketed volume of field peas by region and by zone/special woreda in SNNPR are shown in the following table. Field pea is one of the main agricultural crops in Ethiopia but the production is not so large, 257,032 ton in the country. The major production areas are Amhara and Oromiya, the two regions accounted for about 77% of production and about 75% of market volume in the country. In SNNPR, the production is 54,012 ton, putting the region in third place in the country.

The major production zone in SNNPR is Keffa but field pea is widely produced in many zones in SNNPR. Market volume in Keffa is 3,546 ton and in others less than 2,000 ton.

The selling prices per 100kg of field peas are: farm gate: 500 Birr, wholesale in Addis Ababa: 550 Birr, retail: 570 Birr. In SNNPR, the retail price in Hawassa market is 7 Birr/kg.

Post-harvest processing of field peas is the same as other crops, where threshing and separation of impurities is done manually and the mechanical processing of threshing and separation of field peas is very rare.

Table 3.1-11 Field peas Production and Market volume in Ethiopia and in SNNPR

Region	Production		Sales	Market Volume	
	ton	%	%	ton	%
1. Oromia	106,648	41.5%	20.2%	21,543	40.6%
2. Amhara	91,326	35.5%	20.2%	18,448	34.7%
3. SNNP	54,012	21.0%	22.6%	12,207	23.0%
4. Tigray	4,331	1.7%	17.6%	762	1.4%
5. Others	715	0.3%	22.6%	162	0.3%
Ethiopia Total	257,032	100.0%	20.4%	53,121	100.0%
Top 10 Main Production Zones/Special woredas					
1. Keffa	14,533	26.9%	24.4%	3,546	26.6%
2. Dawro	6,750	12.5%	27.6%	1,863	14.0%
3. Hadiya	3,723	6.9%	32.4%	1,206	9.0%
4. Silitie	3,530	6.5%	11.2%	395	3.0%
5. South Omo	2,960	5.5%	54.1%	1,601	12.0%
6. Sheka	2,823	5.2%	24.2%	683	5.1%
7. Benchi Maji	2,220	4.1%	34.1%	757	5.7%
8. Wolayita	1,629	3.0%	10.1%	165	1.2%
9. Yem	1,464	2.7%	15.0%	220	1.6%
10. Kembata Tembaro	1,090	2.0%	16.3%	178	1.3%
11. Others	13,290	24.6%	20.5%	2,724	20.4%
SNNPR Total	54,012	100.0%	22.6%	13,338	100.0%

Source: CSA, Crop Production Forecast Sample Survey 2011/12 (2004EC), (Bulletin 532)

3.1.3 Vegetables ¹

(1) Overview of production and consumption

Vegetable consumption is very limited in Ethiopian food culture; especially in terms of varieties. Indispensable vegetables are red pepper, green pepper and onion, and these are all used as additives. The next important vegetables in the daily diet are Ethiopian cabbage and tomatoes. In addition, head cabbage, carrot, leak, long bean, beet root and pumpkin are consumed in different volumes. In Addis Ababa, more variety of vegetables are available in the markets such as Chinese cabbage, cucumber, egg plant, cherry tomato, etc.

Vegetable production is very limited as compared to food crops production. In terms of cultivation area in the country, the area under cultivation is really quite small; some say that less than one percent.

¹ Red pepper (*Capsicum*, used as dried powder) is categorized as a vegetable in the S/W and this report follows the S/W categorization, although it sometimes categorized as spice. Fresh ginger and root crops such as potato and sweet potato are not categorized as vegetable in Ethiopia. Carrot, onion and beet root are sometimes categorized as root crops.

Currently, most vegetables are grown for home consumption. Some quantity of tomatoes and green pepper are exported to Djibouti in fresh form, but export to European countries by air is very minor. Red pepper is exported in the form of oleoresin and ground powder. Demand for higher quality vegetables by domestic consumers is still very limited.

(2) Vegetable production in SNNPR

SNNPR is the major vegetable producing state in the country, accounting for 46 % in production and market supply of vegetables.

Table 3.1-12 Vegetable* Production and Marketed volume in Ethiopia

Region	Production		For sales	Marketed volume	
	ton	%	%	ton	%
SNNPR	274,158	46%	18.98	52,035	46%
Amhara	79,354	13%	16.75	13,292	12%
Tigray	16,186	3%	25.79	4,174	4%
Oromia	224,901	38%	18.81	42,304	38%
Gambela	841	0.1%	20.31	171	0.2%
Afar	486	0.1%	36.17	176	0.2%
Ethiopia Total	595,926	100%		112,152	100%

* Include lettuce, Ethiopian cabbage, head cabbage, tomato, green pepper, red pepper, Swiss chard.

CSA, Agricultural Sample Survey 2008/09 (2001 E.C.), Vol. VII (Bulletin 446)

Production and marketed volume of vegetables in SNNPR are shown in the following table. Red pepper and onion show higher sales rates than others. Other perishable vegetables are produced mainly for home consumption. Marketed volume of some vegetables is very limited; less than 1000 ton in the whole region.

Table 3.1-13 Vegetable Production and Marketed volume in SNNPR

Kinds	Production (ton)	% for Sales	Marketed volume (ton)
Ethiopian cabbage	184,232	12%	21,463
Head cabbage	4,003	19%	760
Tomato	6,539	26%	1,717
Green pepper	11,645	20%	2,289
Red pepper	67,412	64%	43,326
Beetroot	3,417	17%	575
Carrot	946	18%	175
Onion	8,573	41%	3,533
Garlic	1,870	27%	514

CSA, Agricultural Sample Survey 2008/09 (2001 E.C.), Vol. VII (Bulletin 446, SNNPR summary)

(3) Mode of marketing in SNNPR

Perishable vegetables are locally-produced for local consumption, and the major mode of perishable vegetable marketing is short-distance. As for relatively long distance marketing, some Ethiopian

cabbages and tomatoes are marketed in the southern direction (Moyale and Yavelo) from Sidama area, but volume is not very big. Under the category of sort-distance marketing, the flows of vegetables to Addis Ababa and Shinamene from the north part of the region are high. So far, significant assembly marketplaces for perishable vegetables have not yet emerged in SNNPR.

Similar to other agricultural products, farmers sell vegetables at marketplaces in most cases. Consumers' purchasing place for vegetables is also marketplaces. In Hawassa town, there are quite a number of shops which sell popular vegetables such as potato, onion, head cabbage, etc. There are two green-grocery shops being operated by vegetable export company (farm) and a variety of good quality vegetables are available. In general, marketing channels for vegetables are illustrated as below.

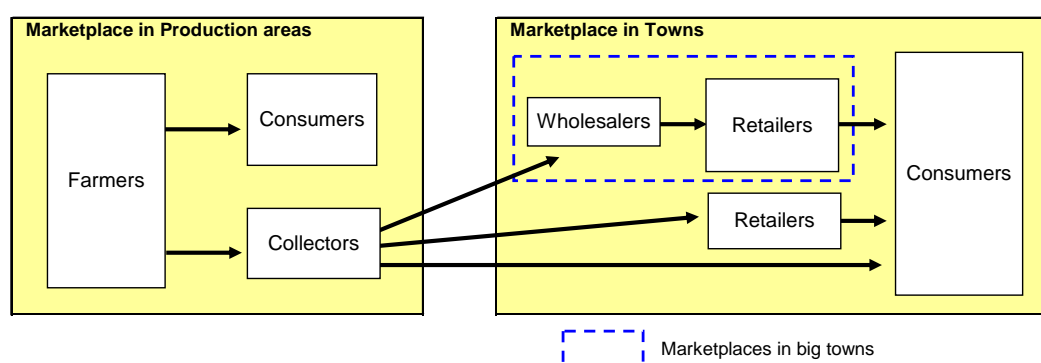


Figure 3.1-6 Marketing channels of Vegetables in SNNPR

(4) Production, Marketing and Postharvest handling of the target vegetables

1) Cabbage (Ethiopian cabbage and Head cabbage)

Production and marketed volume by zone/special woreda are shown as below. Marketed rate (% for sales by producers) of cabbages is low at 12% for Ethiopian cabbage and 15% for head cabbage in SNNPR. Marketing channels are as illustrated above. Most marketed cabbages are sold by farmers at marketplaces to consumers and local collectors, and local collectors sell them at marketplaces in towns. Relatively long distance marketing is limited. Some Ethiopian cabbages are marketed in the southern direction (Moyale and Yavelo) from Sidama area.

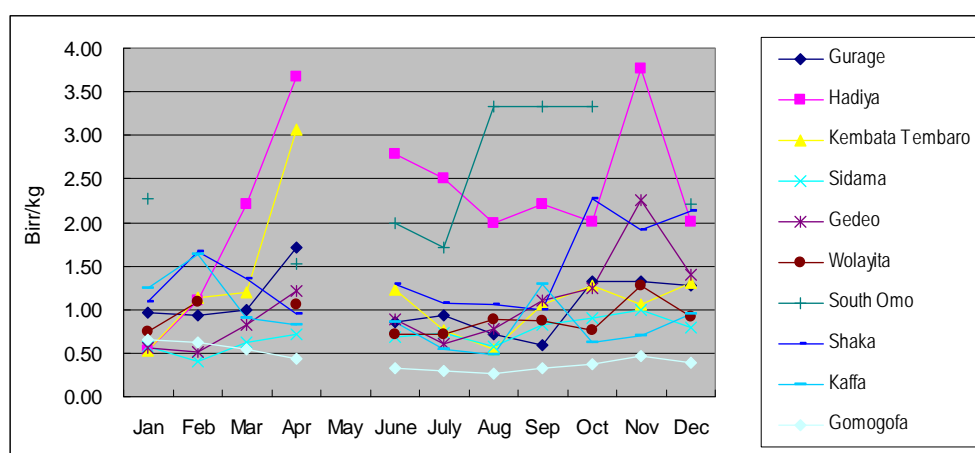
Table 3.1-14 Cabbage Production and Marketed volume in SNNPR

Zone / Special woreda	Ethiopian cabbage			Head cabbage		
	Production (ton)	% for Sales	Marketed volume (ton)	Production (ton)	% for Sales	Marketed volume (ton)
Sidama	48,907	13%	6,568			
Hadiya	27,178	12%	3,188	561	14%	81
Silitie	25,037	11%	2,842	1,025	18%	180
Guraghe	17,624	8%	1,403	1,195	8%	91
Gedeo	11,138	14%	1,506			
Alaba Special woreda	9,591	7%	683	245	4%	9
Keffa	8,977	10%	871			
Kembata Tembaro	7,680	10%	752	509	10%	49

Zone / Special woreda	Ethiopian cabbage			Head cabbage		
	Production (ton)	% for Sales	Marketed volume (ton)	Production (ton)	% for Sales	Marketed volume (ton)
Wolayita	6,645	11%	706			
Gamo Gofa	5,791	13%	779	279	40%	111
Bench Maji	4,028	11%	443			
Dawro	3,961	7%	279	17	7%	1
Amaro Special woreda	1,831	24%	442			
South Omo	1,579	19%	294			
Sheka	1,232	5%	62	156	34%	53
Yem Special woreda	1,140	17%	196			
Derashe Special woreda	782	7%	58			
Burji Special woreda	446	21%	95			
Konta Special woreda	428	13%	54			
Konso Special woreda	124	6%	7			
Basket Special woreda	114	19%	22	16	45%	7
SNNPR Total	184,232	12%	21,249	4,003	15%	582

CSA, Agricultural Sample Survey 2008/09 (2001 E.C.), Vol. VII (Bulletin 446)

Cabbages are a product for local production for local consumption. Therefore, prices must be formed based on the supply-demand situation at each locality. According the CSA producers' price data of 2009, price levels differs by zone. Prices in Hadiya were higher than other places and it may have been influenced by the prices from the Addis Ababa market. High prices in April may have been because of the fast. Prices of vegetables are usually high during the fasting period since the demand increases. There is another cabbage known as "Guraghe cabbage" and the price is a little higher than Ethiopian cabbage.



CSA, Monthly Producer's Price 2008/09

Figure 3.1-7 Monthly prices of Ethiopian cabbage (Jan.-Dec. 2009) in SNNPR

No container (wooden box or bag) is used for head cabbage transportation by truck. Loading and unloading handling is very rough. It is assumed that varieties with tolerance to rough handling (i.e. high in hardness) are grown in Ethiopia. In case of Ethiopia cabbage, cleaning, sorting and bundling

works are done by retailers in the marketplace.



Cabbage sales in Hawassa marketplace



Unloading at wholesale shop in Addis Ababa



Sorting and bundling work by retailer in Hawassa marketplace

2) Green pepper (*Capsicum*)

SNNPR accounts for 18% of green pepper production in the nation, and 22% of the total marketed volume.

Table 3.1-15 Green pepper Production and Marketed volume in Ethiopia

Region	Production		For sales	Marketed volume	
	ton	%	%	ton	%
Oromia	31,900	48%	13%	4,026	39%
SNNPR	11,645	18%	20%	2,289	22%
Amhara	11,573	18%	11%	1,227	12%
Tigray	9,623	15%	28%	2,675	26%
Benshangul-Gumuz	809	1.2%	10%	80	0.8%
Gambela	303	0.5%	9%	27	0.3%
Somale	19	0.0%	33%	6	0.1%
Ethiopia Total	65,873	100%	100%	10,331	61%

CSA, Agricultural Sample Survey 2008/09 (2001 E.C.), Vol. VII (Bulletin 446)

Production and marketed volume by zone/special woreda are shown below. Sidama, Bench Maji, Keffa and Wolayita zones are the major production areas in SNNPR. Sidama zone has a very large

share of production (39%) and in marketed volume (51%).

Table 3.1-16 Green pepper Production and Marketed volume in SNNPR

Zone / Special woreda	Production		For sales	Marketed volume	
	ton	%	%	ton	%
Sidama	4,534	39%	31%	1,397	51%
Bench Maji	1,729	15%	20%	342	12%
Keffa	1,546	13%	22%	339	12%
Wolayita	1,247	11%	20%	247	9%
Gedeo	788	7%	9%	74	2.7%
Gamo Gofa	483	4%	31%	148	5.4%
Hadiya	329	2.8%	11%	35	1.3%
Sheka	247	2.1%	8%	19	0.7%
Kembata Tembaro	211	1.8%	16%	34	1.2%
Guraghe	148	1.3%	10%	15	0.5%
Konta Special woreda	135	1.2%	30%	41	1.5%
South Omo	106	0.9%	43%	45	1.6%
Yem Special woreda	101	0.9%	14%	14	0.5%
Dawro	42	0.4%	11%	5	0.2%
SNNPR Total	11,645	100%	24%	2,757	100%

CSA, Agricultural Sample Survey 2008/09 (2001 E.C.), Vol. VII (Bulletin 446)

Green pepper is one of the indispensable vegetables and most farmers grow some green pepper. The purchasing volume of consumers at one time is small; sometimes just a few pieces. Demand for green pepper becomes very high during the fasting period and the price is also high.

Marketing channels are as above-illustrated in the previous section. No specific features or problems are seen in postharvest handling. There is a kind of traditional green pepper sauce, and some people have begun to produce it for sales purpose.

3) Red pepper (*Capsicum*)

SNNPR has the largest red pepper production in the nation, and the ratio of sale is very high (64%) as compared to other regions. Hence, SNNPR's red pepper makes up about 60% of the marketed volume.

Table 3.1-17 Red pepper Production and Marketed volume in Ethiopia

Region	Production		For sales	Marketed volume	
	ton	%	%	ton	%
SNNPR	67,412	37%	64%	43,326	59%
Oromia	58,136	32%	32%	18,382	25%
Amhara	53,047	29%	20%	10,599	14%
Tigray	2,543	1.4%	21%	531	0.7%
Benshangul-Gumuz	1,893	1.0%	16%	297	0.4%
Other regions	373	0.2%	26%	95	0.1%
Ethiopia Total	183,403	100%	40%	73,230	100%

CSA, Agricultural Sample Survey 2008/09 (2001 E.C.), Vol. VII (Bulletin 446)



Figure 3.1-8 Red pepper production area in SNNPR

Production and marketed volume by zone/special woreda are shown below. Adjoining three zones; Guraghe zone, Siltie zone and Alaba special woreda are the main production area. 90% of total marketed volume is produced in this area.

Marako and Alaba are famous production areas. Mareko in Guraghe zone is known nationwide as the birthplace and production place of the *Mareko Fana* variety, which has superior quality in dark-red color and taste. *Mareko Fana* is always traded at a higher price than other varieties.

Table 3.1-18 Red pepper Production and Marketed volume in SNNPR

Zone / Special woreda	Production		% for Sales	Marketed volume	
	(ton)	(%)		(ton)	(%)
Siltie	24,685	37%	77%	19,092	40%
Guraghe	20,463	30%	61%	12,402	26%
Alaba Special woreda	13,421	20%	87%	11,692	25%
Keffa	2,343	3%	55%	1,296	3%
Hadiya	1,969	3%	75%	1,472	3%
Bench Maji	1,761	3%	27%	479	1%
Wolayita	1,687	3%	51%	858	2%
Others	1,083	2%	34%	367	1%
SNNPR Total	67,412	100%	71%	47,660	100%

CSA, Agricultural Sample Survey 2008/09 (2001 E.C.), Vol. VII (Bulletin 446)

In the main production area, there are 4 – 5 important marketplaces for pepper assembly such as Alaba Kulito, Dalocha, Enseno, Butajira and Koshe. Farmers carry dried pepper to these marketplaces to sell to local traders or buyers from cities such as Addis Ababa, Nazareth, Mekele (Tigray), etc. It is not so common for local traders to go around buying dried pepper at farm gates. Instead there are numbers of village marketplaces and small-scale traders (often farmer traders) buying pepper to sell at important marketplaces.

Some farmers contact wholesale traders in cities by mobile phone to get price information, and then decide the time of sales and expected selling price. In Alaba special woreda, no farmers' group/cooperative is engaged in pepper marketing. NGO (SOSO Sahel Ethiopia) has been supporting three primary cooperatives in Siltie, Mareko and Hawassa Zuria to launch the red pepper ("Berbere") processing and marketing business at each location. Two cooperatives in Siltie and Mareko were observed in July 2010 and it is observed that they are still far from self-standing business operations,

especially in terms of marketing.

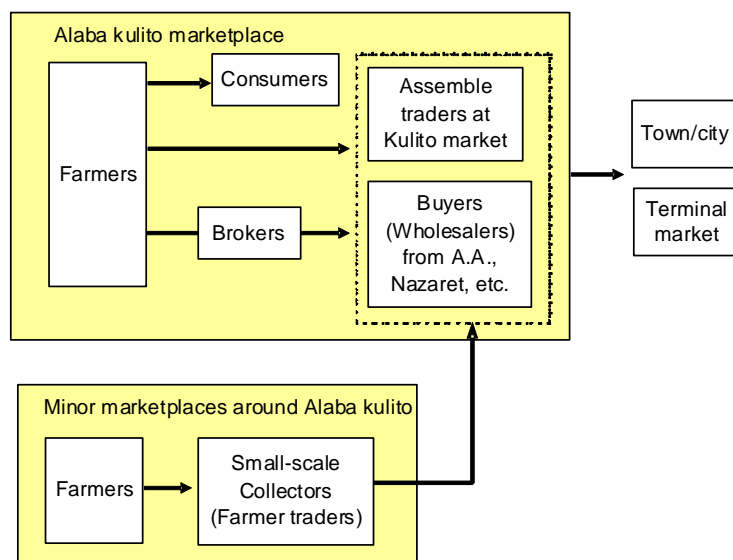


Figure 3.1-9 Marketing channel - Red pepper in Alaba marketplace

Regarding the transactions in the marketplaces, Alaba Kulito marketplace has some unique features: a) There are many buyers from cities, b) Large-scale transactions start from late evening and c) There are many brokers. It seems that this uniqueness derive from the farmers’ low knowledge/awareness and/or cultural traits in Alaba.

Red pepper is used as a coloring agent. Red pepper was exported in the form of oleoresin by Ethiopia Spice Extraction Factory (ESEF), but ESEF has stopped oleoresin production due to low oleoresin quality (low color value) deriving from the grown variety in the country.

Table 3.1-19 Summary of Information on Postharvest and Sales activities by farmers

Items	Methods
Variety	Melka Zala, Mareko Fana
Yield (after drying)	Av. 800 kg/ha, Max. 2000 kg/ha, Target 1200 kg/ha (Alaba) (about 15kg/bag)
Drying	On the ground by direct sun. Plastic sheets are not used.
Moisture check	Visual and by touching
Storage	Long period : Independent storage made by bamboo, etc. Short period : Sisal bags in house
Sales	Sold at marketplaces by individuals, Cash business, No collective marketing
Cleaning, selection before selling	None
Others	Production area largely increased; In Alaba S.W. : 500ha (10 years ago) to 13,500ha (now)

JICA Study team

To keep the whole-shape (to prevent breakage) as well as a good red color, an adequate level of moisture content should be maintained. Therefore, farmers and traders sometime spray some water to adjust the moisture. In Alaba, farmers use a store made of local materials, and they said that dried pepper can be stored for a long period (1 year) without serious damage by mold or mice.

There must be rooms to improve the traditional method of drying and storing to improve the farm gate quality of dried red pepper. However, research works on postharvest improvements, such as identifying the appropriate moisture contents to keep good color and whole shape, etc. are not challenged.



Pepper storage made of local materials (Alaba Special woreda)



Storage condition of local buyer's store at Alaba market

According to information obtained from local traders at Alaba kulito marketplace, the following grades are customarily used. Differences in buying price for local traders between the grades are 2 – 3 Birr/kg, and the difference between the grades is stable regardless of the price level/fluctuation.

Grade 1 :	All pepper in a sack are whole-shape (full size) and entirely dark red in color. Adequate moisture content.
Grade 2 :	All pepper in a sack are whole-shape (full size). Some peppers are partly discolored. Adequate moisture content.
Grade 3 :	Mixed state

* Grading systems used in other marketplaces and Addis Ababa market were not yet checked.

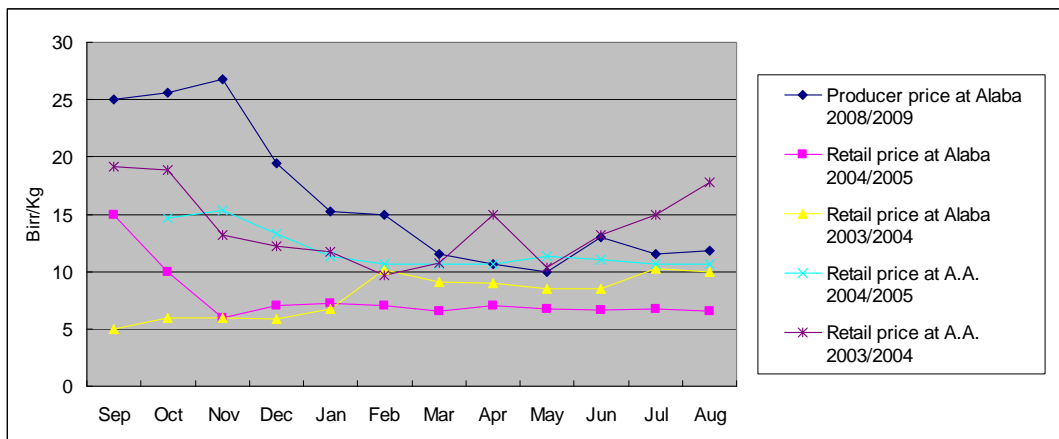
Local traders check the moisture level by touching when they buy. Standard weight per bag is known, and heavy bags are emptied to check. Currently, cleaning and grading works are mostly done by the traders, not by farmers.



Cleaning and grading works at Addis Ababa



Wholesaler in Hawassa marketplace



Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
				>>>>	>>>>			XXXX	XXXX	XXXX	
				>>>> Planting							
				xxxxx Harvesting							

Source : CSA Monthly producer's prices reports, Jan.-Dec. 2009, Marketing process of Alaba WoARD

Figure 3.1-10 Monthly prices of Red pepper and Cropping calendar

As shown in the above figures, red pepper prices likely fluctuated seasonally. In general, demand for red pepper is constant and prices are determined by supply situation to the cities; especially to Addis Ababa. According to the Marketing process of Alaba special woreda, usually the price starts decreasing in Sep. – Dec. Also, they said that a bumper harvest in other regions resulted in the low prices in SNNPR last year. The Producer price at Alaba marketplace is 26-27 Birr/kg as at March 2009.

4) Tomato

Production and marketed volume by zone/special woreda are shown below. Marketed rate (% for sales) of tomato is 32% as region. Gamo Gofa has the largest marketed volume in SNNPR but it is assumed that most outlets are local consumption. Production scale in Hadiya, Kempata Tembaro and Sidama zones are still limited, and there are no big tomato assembly marketplaces for shipping to

cities such as Addis Ababa and Nazareth. Some tomatoes are marketed in the southern direction (Moyale and Yavelo) from Sidama area.

Table 3.1-20 Tomato Production and Marketed volume in SNNPR

Zone / Special woreda	Production		% for Sales	Marketed volume (ton)	
	(ton)	(%)		(ton)	(%)
Gamo Gofa	2,716	42%	37%	1,005	48%
Hadiya	1,665	25%	29%	479	23%
Kembata Tembaro	1,197	18%	23%	279	13%
Sidama	503	8%	55%	276	13%
Others	460	7%	12%	55	3%
SNNPR Total	6,539	100%	32%	2,095	100%

CSA, Agricultural Sample Survey 2008/09 (2001 E.C.), Vol. VII (Bulletin 446)

Commercial production of tomato is practiced around Addis Ababa. The most famous places are Meki-Ziway area in Oromia region; where tomatoes and other vegetables are grown by irrigation. Meki-Ziway tomatoes are marketed to the Hawassa market, too. Wondo Gonet in Sidama zone is another major tomato supplier to the Hawassa market.

Different varieties are used in the Meki-Ziway area and Wondo Gonet area. Wondo Gonet tomatoes have thicker skin and are more tolerant to rough handling. There is a 2 Birr/kg difference in price in Hawassa market (Wondo Gonet tomatoes = 3 Birr/kg, Meki-Ziway tomatoes = 5 Birr/kg). Transportation of tomatoes from Wondo Gonet are all made by donkey carts. It takes about 5-6 hours and tomatoes in wooden boxes get heated. Donkey transportation costs 30 Birr/cart, and Truck hiring cost is 1,500 Birr/truck (7 ton). Unit costs of transportation are almost same (0.25 Birr/kg = 30 Birr/120kg for donkey cart, 0.22 Birr/kg for truck). However, shipment volume of each farmer is too small to hire a truck, and farmers' efforts for collective marketing have not yet taken place.



Over-filled tomatoes (Hawassa market)



Better handling (Wholesaler in Addis)

As shown in the above photo, over-filling of tomatoes in wooden boxes often lead to the damages. Stackable boxes can reduce such damages. Locally-made plastic boxes (shown in right photo) are

stackable but the price is higher (140 Birr/box) than wooden boxes. In recent years, used plastic boxes (stackable, about 50 Birr/box, made in Europe) are becoming popular in Hawassa city; used to carry various items. This used plastic box is less durable than locally-made plastic box but price is only 1/3. It is expected that this cheap plastic boxes begin to be used to ship perishable tomato to urban markets.

3.1.4 Fruits

(1) Overview of production and consumption

Fruits production is very limited compared with food crops production like vegetables. Attention that has been given to fruit production is comparatively lower than food crops. Made efforts to promote production and to improve quality (introduce improved varieties) seem to have been so insignificant. Commercial production of fruits is very limited. Although there are state farms (mostly procuring citrus), the majority of fruits are produced by small-scale farmers who have some trees in the backyard or in a part of farmland.

Currently, almost all fruits are domestically consumed. Some quantity of fruits such as avocado, pineapple, banana, guava, etc. are exported to Djibouti, but no export to overseas countries. Fruits are luxury grocery items; not indispensable food items. Eating of fruits is observed as a common matter in big cities since quite a number of fruit stands are seen and fresh fruit juices are popular drinks. However, demand for higher quality fruits (i.e. readiness to pay more money for good looking fruits) by consumers is uncertain.

The results of the “Survey on quality needs and buying behavior of fresh fruits in Hawassa, JICA Study Team, Aug. 2010” revealed that; about 80% of consumers purchase fruits one to two/three times in a week and most consumed fruits are banana, mango, orange and avocado in that order. Important points to check at the time of purchasing fruits are color and ripeness for mango and ripeness and damage for avocado. Regarding the consumers’ satisfaction in quality, 30 to 40% of respondents were unsatisfied in avocado quality and 10 to 20% were unsatisfied in mango quality. Many respondents answered that they can pay some premium (some Birr per kg) for large and good looking mangos. This result suggests that there are needs for better quality of fruits among urban consumers.

(2) Fruits production in SNNPR

SNNPR is the major fruits producer in the country. According to the CSA statistics (2008/09), SNNPR has large shares in production of avocado, banana and pineapple. Banana is commercially produced in Arba Minch, and pineapple is in Sidama. Pineapple state farm in Gojeb (Keffa zone) has been turned into maize production recently.

Table 3.1-21 Fruits Production and Marketed volume in Ethiopia and in SNNPR

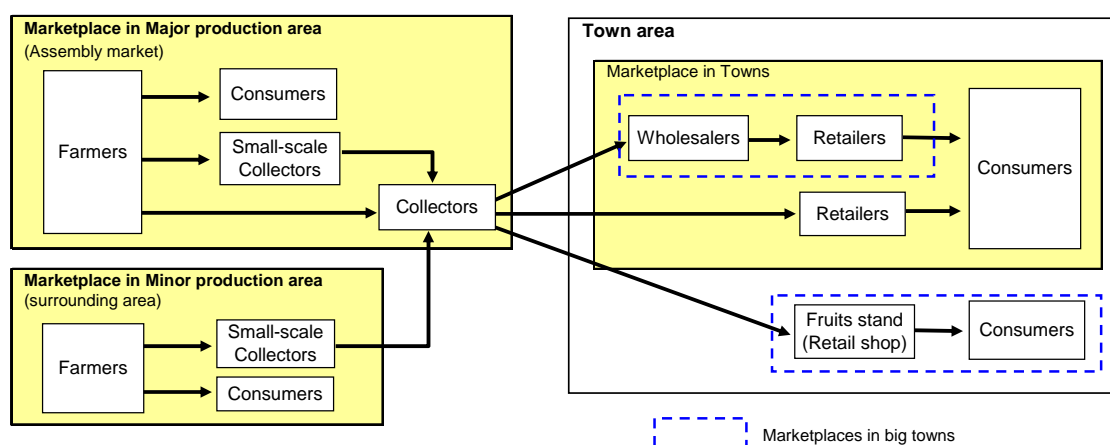
	Nation	SNNPR				Target fruits
	Production (ton)	Production (ton)	Share in national production	% for Sales	Marketed volume (ton)	
Avocado	32,452	22,986	71%	46%	10,504	X
Banana	194,333	130,834	67%	50%	65,208	X
Mango	44,158	13,720	31%	39%	5,282	X
Papaya	44,003	18,274	42%	18%	3,202	X
Pineapple	153	128 *	84%	53%	67 *	
Guava	1,947	394	20%	33%	131	
Lemon	4,871	1,494	31%	63%	943	
Orange	29,341	8,422	29%	42%	3,550	

* Compared to data from Sidama ZoARD, this figure was too small.

CSA, Agricultural Sample Survey 2008/09 (2001 E.C.), Vol. VII (Bulletin 446)

(3) Mode of marketing in SNNPR

Marketing channels of fruits are illustrated as below. Farmers sell fruits at marketplaces nearby like other crops. Different points from the case of vegetables are: a) there are important assembly marketplaces in the production areas, b) there are quite a number of permanent-type retail shops in large towns, c) fruits are marketed longer distance than perishable vegetables and d) in general, ratio for sales by farmers are higher than vegetables.



* Banana has a process for ripening, and the marketing channel is little different in town area.

Figure 3.1-11 Marketing channels - Fruits

In Arba Minch, a lot of banana are commercially produced by farmers and mode of marketing is little different from other areas and other fruits.

- Collections are made at road-side collection points instead of marketplaces.
- Primary cooperatives and Union are engaged in marketing of banana and mango. Primary coops buy fruits from member farmers, and ship them directly to buyers (wholesalers) in Addis Ababa, Nazareth, Mekele (Tigray), etc.

Banana needs a process of ripening and it is made at consumption places by wholesalers. In Hawassa, there is no large-scale banana wholesaler and ripening is done by fruit stands.

The following table shows the ratio of losses (unsold fruits) at retail shops in Hawassa. Mango has larger losses in there four kinds of fruits. Out of 11 shops surveyed, 3 shops answered there is unsold fruits “everyday” and 8 shops answered “sometimes”.

Table 3.1-22 Incidence of Losses at Retail shops

	Loss (Unsold) ratio					Total
	0 – 5 %	6 – 10 %	11 – 20 %	21 – 30%	31 – 40%	
Mango	1	2	1	3	2	9
Avocado	3	4	1	2		10
Banana	3	5	2			10
Pineapple			3	1		4

(Unit : Nos. of shops)

Survey on quality needs and buying behavior of fresh fruits in Hawassa, Aug. 2010, JICA Study Team

(4) Production, Marketing and Postharvest handling of the target fruits

1) Avocado

Production and marketed volume by zone/special woreda are shown as below. Almost all avocados are produced by small-scale farmers who have some trees in the backyard or in a part of farmland. Wondo Genet in Sidama zone (one of major production center) has avocado trees in total 175 ha land and about 2800 ton of annual production. Even such production center, average number of trees per household is 3 – 5 and maximum number is 15-20 trees. In Wondo Genet, a private company (ELFORA) owns 9 ha of avocado farm. This firm does not buy fruits from farmers. One feature of avocado production in Wondo Genet is application of furrow irrigation. 32 ha out of 175 is under irrigation. They say that yield is higher than non-irrigated field, but harvest season is same.

Table 3.1-23 Avocado Production and Marketed volume in SNNPR

Zone / Special woreda	Production		% for Sales	Marketed volume	
	(ton)	(%)		(ton)	(%)
Wolayita	6,115	27%	48%	2,946	28%
Sidama	4,690	20%	60%	2,819	27%
Hadiya	3,613	16%	36%	1,317	13%
Gedeo	2,911	13%	42%	1,212	12%
Kembata Tembaro	2,430	11%	40%	975	9%
Guraghe	831	4%	39%	326	3%
Bench Maji	540	2%	59%	320	3%
Others	1,856	8%	31%	570	5%
SNNPR Total	22,986	100%	46%	10,484	100%

CSA, Agricultural Sample Survey 2008/09 (2001 E.C.), Vol. VII (Bulletin 446)

Marketing channels are as above-illustrated in the previous section. There are important assembly

marketplaces for avocado; such as Boditi and Areka (Wolayita zone), Wondo Genet and Aleta Wondo (Sidama zone) and Hadaro (K.T. zone). In assembly marketplaces, ripe and small fruits are removed before transporting to cities. Sacks are used for handling. No particular measures are taken to protect fruits from physical damages during harvesting and transporting, and large volume (it is said to be about 50%) of losses are generated. Main reason for non-protection of fruits from physical damages is lack of mind to try preventing the damages in farmers and local traders; especially in farmers.

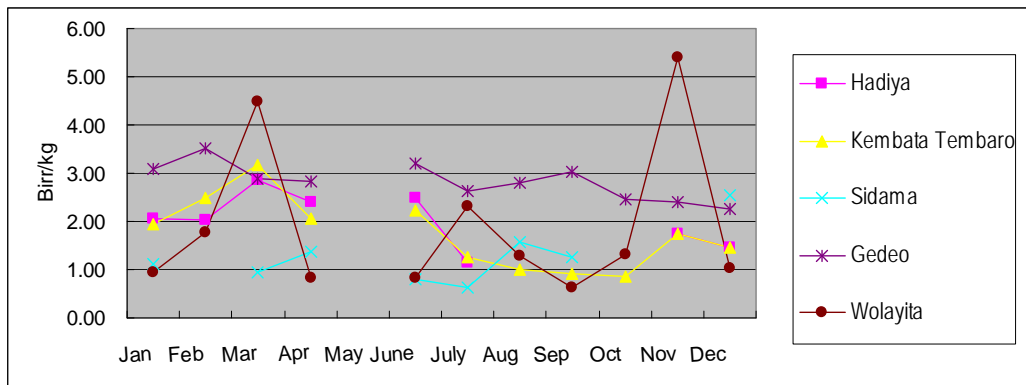


Separating small & ripe fruits (Hadaro market)



Avocado collection (Hadaro market)

A cheap price during peak harvest season is the most serious problem for farmers. Following figure shows that price variation of producers' prices are 2 to 3 times.



Source : SA Monthly producers' prices reports, Jan. – Dec. 2009

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Rainfall pattern in Sidama area			+++	+++	+++	++	+++	+++	+++	++++		
Sidama zone (Wonde Genet)												
Sidama zone (Chuko, Dara)												

Source: Hearing from WoMCs Harvesting time High harvesting time

Figure 3.1-12 Producer's prices (2009) and Harvest seasons of Avocado

Control of fruiting time by husbandry measures is impossible. Regarding the use of cold storage, economical feasibility is uncertain. However, cold storage should be located in/around the cities where

power supply is better and near to the consumers; and it should be operated by a business body that has adequate capability and financial power; not in rural area or by farmers organization. It is commonly known that appropriate cold storage temperature of avocado is 7°C and maximum storage period is around 30-35 days. However, responses to cold condition vary by variety/maturity, so that suitable storage conditions for local varieties should be verified by the research.

Avocados are exported to Djibouti. It is reported that selection, grading and packing works were all done at Djibouti. An efficient and assured system of collecting good fruits needs to be created. To attain export of fruits to Europe, it is essential to provide direct supports to private businesses.

2) Mango

Production and marketed volume by zone/special woreda are shown as below. Gamo Gofa zone and Wolayita zone are the main producers in SNNPR. Same with the case of avocado, most mangoes are produced by small farm households who have some trees in backyards or in a part of farmland.

Table 3.1-24 Mango Production and Marketed volume in SNNPR

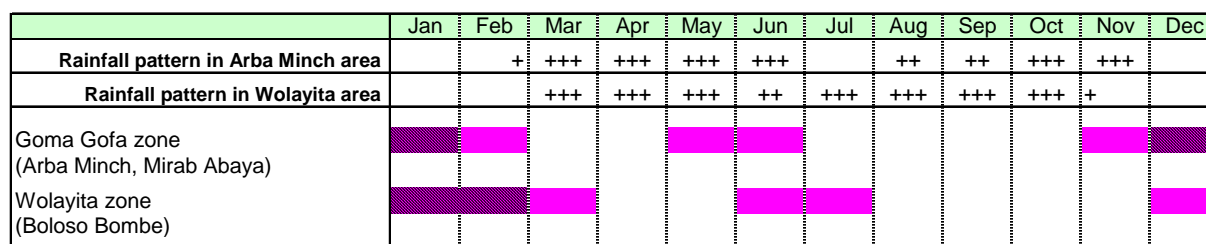
Zone / Special woreda	Production		% for Sales	Marketed volume	
	(ton)	(%)		(ton)	(%)
Gamo Gofa	6,794	50%	42%	2,846	51%
Wolayita	3,326	24%	44%	1,456	26%
Bench Maji	868	6%	31%	271	5%
Kembata Tembaro	840	6%	51%	428	8%
Sheka	711	5%	15%	105	2%
South Omo	455	3%	35%	158	3%
Amaro Special Woreda	214	2%	51%	109	2%
Others	513	4%	42%	215	4%
SNNPR Total	13,720	100%	41%	5,586	100%

CSA, Agricultural Sample Survey 2008/09 (2001 E.C.), Vol. VII (Bulletin 446)

Marketing channels are as above-illustrated in the previous section. Mangoes in Arba Minch are collected by similar way as banana – gathered at roadside collection points and shipped mainly to Addis Ababa and Nazareth. Ocholo Lante Tenkir Primary Coop. at Lante in Gamo Gofa zone has been working on mango marketing to ETFRUIT (Addis Ababa and Nazareth) but no good results have been attained².

The variety of “yellow-small-full of fiber” is widely produced, and producer’s price becomes very cheap during peak harvest times; such as 1 Birr for 3 pieces (about 1 Birr/kg) at Arba Minch (highest price is 0.75 Birr for 1 piece).

² As of 2010



Source: Hearing from WoMCs, Umo Lante Coop. Harvesting time High harvesting time

Figure 3.1-13 Harvest seasons of Mango

Ripening is done by storing green mangoes in a wooden box at each fruit-stand in Hawassa. No chamber method is observed.



Damaged mangoes (Hawassa market)



Wooden boxes are used for truck transport
Boxes are loaded with the side at bottom

There are a lot of losses due to mechanical damage and over ripening. Most of these losses occur at the retail level. Mango trees are naturally grown and are not pruned. Almost all farmers harvest fruits by climbing and hitting fruits with sticks. No simple harvesting tools (poles) has yet been introduced or invented in Ethiopia.

Table 3.1-25 Harvesting methods of farmers - Mango

Methods used for harvesting	Boloso Bombe woreda		Dilla Zuria woreda	
	Nos. of respondent	%	Nos. of respondent	%
By climbing and picking	20	33%	31	52%
By hitting fruits with stick	16	27%	17	28%
By climbing and picking + By hitting fruits with stick	20	33%	10	17%
By using special tools	2	3%	1	2%
By using locally made tool (Hingete)	2	3%	1	2%
Total	60	100%	60	100%

A Baseline Survey Report – Mango production and marketing constraints and opportunities in Boloso Bombe and Dilla Zuria woredas, Nov. 2009, BMC / SNV

It must be hard to find an economical feasibility in use of cold storage to prolong the shelf-life for such cheap commodities. Also, there must be no inevitability for farmers to handle with care (to add

cost for handling) under cheap price situation. Unfortunately, this mango variety has no exportable quality. Necessary countermeasure to be explored must be the creation of new demands/ outlets to absorb the bumper supply in the country; not storage of fresh fruits.

New mango demand of Africa Juice

Africa Juice Tibila S.C. in Awash valley in Oromia opened a new juice processing factory for export on Sep. 2010. Africa Juice entered into agreements with two cooperative unions (Damota union and GamoGofa union) in SNNPR in Aug. 2010 to procure a very large volume of material mangoes (“yellow-small-full of fiber” type) at Arba Minch and Boloso bombe areas. According the Damota union, contract price (negotiable) was 1.30 Birr/kg for union’s selling price to the company at site, 1.10 Birr/kg for primary coops and 0.90 Birr/kg for farmers. Quality requirements were Brix 12%, over 60 g per fruit and good looking.

In the fruits season of 2010/11, mainly Gamo Gofa union shipped to the company and the union faced the loss problem (payment problem) which was caused by the company’s failures in truck arrangement and in giving advance notice to the union. In addition, although this was also caused by the company’s poor capability, quality requirements (especially about maturity) were not clearly informed (understood) to the union and primary cooperatives/farmers. Then the company seemed not so happy with the quality of shipped mangoes.

Although it was unconfirmed whether these problems were the cause or not, mango purchase by the company was not performed for 2011/12 season.

Procurement of material is very important job for all food processing business. As seen in the careless/insufficient way of material procurement in the 2010/11 season, it is hard to say that business capability of Africa Juice is high. However, mango demand of Africa Juice is the only large demand in the country. Supplier side (unions, coops, WoMCs and BoMC) should make efforts to build stable business connection and to fulfill buyer’s quality and quantitative requirements.

High value “Apple mango”

“Apple mango” has been introduced in some years ago in many zones, but the fruits are not yet marketed. Apple mangoes from Awash valley in Oromiya region were sold at 17 Birr/kg (retail, July 2010) in Addis Ababa. Different ways of marketing from the way of “yellow-small-full of fiber” mangoes as well as a better method of harvesting and handling need to be determined and extended.

3) Banana

Production and marketed volume by zone/special woreda are shown as below. Banana is grown in all zones in SNNPR. Gamo Gofa (Arba Minch) and Sidam zone are two major production area.

Table 3.1-26 Banana Production and Marketed volume in SNNPR

Zone / Special woreda	Production		% for Sales	Marketed volume	
	(ton)	(%)		(ton)	(%)
Gamo Gofa	57,916	44%	58%	33,533	46%
Sidama	22,782	17%	71%	16,232	22%
Wolayita	8,516	7%	57%	4,815	7%
Kembata Tembaro	7,975	6%	54%	4,289	6%
Hadiya	7,604	6%	46%	3,490	5%
Bench Maji	6,300	5%	43%	2,732	4%
Keffa	4,446	3.4%	33%	1,478	2.0%
Dawro	3,223	2.5%	33%	1,071	1.5%
South Omo	3,134	2.4%	43%	1,358	1.9%
Gedeo	1,501	1.1%	30%	445	0.6%
Sheka	1,364	1.0%	40%	542	0.7%
Konta Special Woreda	1,271	1.0%	45%	572	0.8%
Amaro Special Woreda	1,247	1.0%	64%	803	1.1%
Konso Special Woreda	989	0.8%	63%	627	0.9%
Guraghe	840	0.6%	43%	360	0.5%
Basket Special Woreda	651	0.5%	59%	382	0.5%
Silitie	460	0.4%	27%	122	0.2%
Yem Special Woreda	296	0.2%	50%	147	0.2%
Alaba Special Woreda	151	0.1%	8%	12	0.0%
Derashe Special Woreda	90	0.1%	61%	55	0.1%
Burji Special Woreda	78	0.1%	55%	43	0.1%
SNNPR Total	130,834	100%	56%	73,110	100%

CSA, Agricultural Sample Survey 2008/09 (2001 E.C.), Vol. VII (Bulletin 446)

As presented above, the mode of production and marketing in Arba Minch is different from other areas. Differences are summarized as follows.

Table 3.1-27 Differences in the Mode of production and marketing

	Arba Minch	Other areas
Production	Irrigation and Rain-fed Commercial purpose	Rain-fed Home consumption, Sell surplus
Variety	Cavendish, Dwarf Cavendish	Mostly local
Farmers' selling place	Roadside collection points Cooperative warehouse	Marketplaces
Marketing coop.	Union and primary coops.	Nil

Arba Minch bananas are marketed to Addis Ababa, Nazareth, Mekele, etc. by cooperatives and traders. There is a primary cooperative that deploys an agent for sales at Addis Ababa. The wholesaler in Addis Ababa deploys an agent for collection at Arba Minch.



Roadside collection point (Arba Minch)



Banana transactions at marketplace (Hadaro)

Ripening is done by storing green banana in a chamber (2 days) or by rapping green banana in a wooden box by newspaper. Many losses (damages) occur in the ripening process due to the physical damages/impacts given on fruits during harvesting and transporting.



Ripening in a chamber (Addis Ababa)



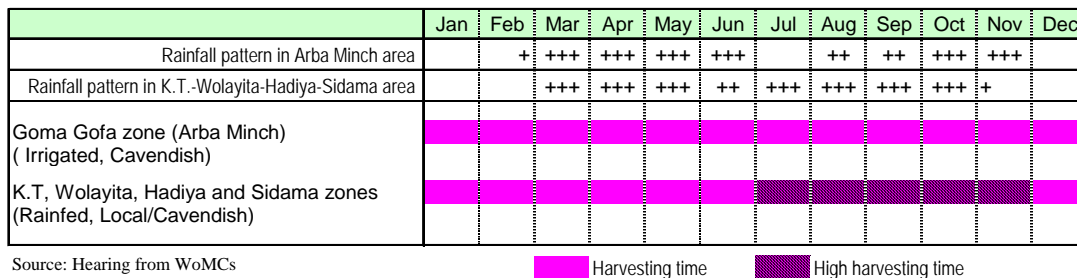
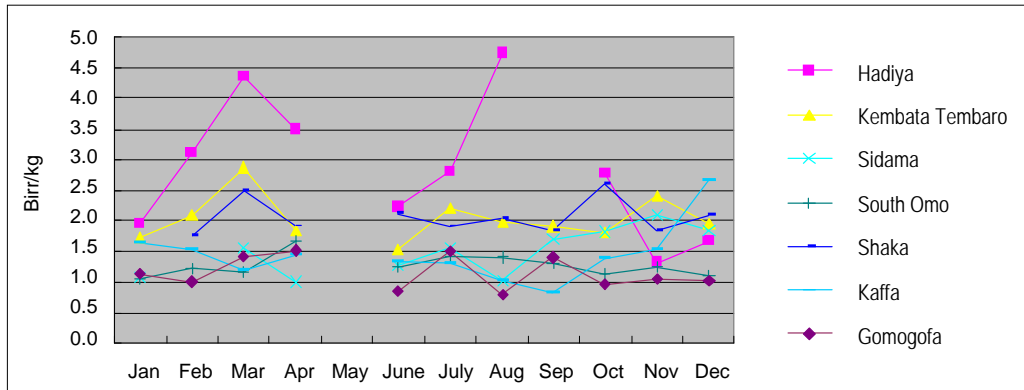
Ripening in a wooden box (Hawssa)

The price structure of Arba Minch/Addis Ababa trade is as follows. Truck transport cost is 0.3 Birr/kg for ordinary Isuzu (5000kg load). Compared to mango and avocado, producers' prices have less variation.

Table 3.1-28 Price structure of Banana (Arba Minch to Addis Ababa)

Transaction	Place	Price	Unit
Farmer → Wholesaler	At collection point in Arba Minch	2.40 Birr/kg	bunch
Wholesaler → Retailers	At wholesaler shop in Addis Ababa	3.10 Birr/kg	bunch
Retailer → Consumers	At retail shop in Addis Ababa	6 – 7 Birr/kg	kg

Source: JICA Study Team, Hearing from wholesaler in Addis Ababa on 12 March, 2010



Source : CSA Monthly producers' prices reports, Jan. – Dec. 2009

Figure 3.1-14 Producer's prices (2009) and Harvest seasons of Banana

Agribusiness and Trade Expansion program (ATEP) – USAID

ATEP tried to foster the export business and support the commercial growers (businessmen) to be exporters. In SNNPR, Arba Minch/banana was one of the target area/commodity. Following supports were made in 2010.

- Support of commercial production: Provided drip irrigation equipment.
- Market linkage (investment promotion): Invited international fruits company “Chiquita” to Arba Minch banana area.
- Study tour to Cameroon: Sent growers to Cameroon to show the banana export business.

With the cooperation of “Chiquita” company, it was planned to conduct the first-time trial banana shipment (4 to 6 containers) to the middle-east in October 2010. It was reported that some participating growers in Arba Minch were selected, but afterward no succeeding or success story was heard.

Banana export by Gamo Gofa Union with support of Ethiopia Horticulture Development Agency

Governmental organization of Ethiopia Horticulture Development Agency (EHDA), which was established in 2008 to facilitate and help commercial horticulture exporting companies and to increase the foreign exchange earning from horticulture industry, supported the Gamo Gofa Union in Arba Minch to initiate banana export to Saudi Arabia in the late 2011 and March 2012. Results of the banana exports are shown in below table. SNNPR-BoMC also supported (facilitated) the contracting and packing work of the union and primary cooperative on site.

Table 3.1-29 Results of Banana export by Gamo Gofa Union

	Time	Banana supplier	Shipper (exporter)	Exported volume	Shipped to:
1	Dec. 2011	Gamo Gofa Union	Gamo Gofa Union	1 container (200 QT)	Saudi Arabia
2	Mar. 2012	Kanchama primary coop.	Gamo Gofa Union	10 containers (2000 QT)	Saudi Arabia

Source : Hearing from SNNPR-BoMC

Packing works were carried out at Arba Minch. Packing work process is; 1) 1st washing (soak banana in water in basin), 2) 2nd washing (wash by hand in basin), 3) hang to dry for several minutes, 4) Pack in plastic bag and carton box. No chemical (anti-fungus) treatment was applied.

Packing materials (carton boxes and plastic bags) and equipment for washing were arranged by EHDA.

4) Papaya

Production and marketed volume by zone/special woreda are shown as below. Papaya is grown in many zones of SNNPR, but production and marketed volume is rather small. Ratio of sales by farmers is low compared with other fruits.

Table 3.1-30 Papaya Production and Marketed volume in SNNPR

Zone / Special woreda	Production		% for Sales	Marketed volume	
	(ton)	(%)		(ton)	(%)
Konso Special Woreda	2,937	16%	29%	853	22%
Bench Maji	2,716	15%	11%	307	8%
Wolayita	1,993	11%	21%	413	11%
Gamo Gofa	1,960	11%	21%	403	10%
Guraghe	1,792	10%	29%	524	14%
Sidama	1,109	6%	43%	478	12%
South Omo	984	5%	24%	238	6%
Silitie	789	4.3%	13%	99	2.6%
Keffa	758	4.1%	12%	87	2.3%
Dawro	705	3.9%	5%	33	0.9%
Konta Special Woreda	675	3.7%	16%	108	2.8%
Sheka	630	3.4%	1.3%	8	0.2%
Kembata Tembaro	467	2.6%	27%	125	3.2%
Amaro Special Woreda	390	2.1%	29%	115	3.0%
Hadiya	242	1.3%	15%	36	0.9%
Others	128	0.7%	23%	30	0.8%
SNNPR Total	18,274	100%	21%	3,858	100%

CSA, Agricultural Sample Survey 2008/09 (2001 E.C.), Vol. VII (Bulletin 446)

Mode of marketing is assumed to be similar to the perishable vegetables. In Wondo Genet in Sidama zone, wooden boxes and sacks are used for transportation.

3.1.5 Root Crops

(1) Enset

The table below shows the production area of Enset is limited to 2 regions in Ethiopia, particularly in SNNPR. Enset is tolerant of dryness and has high production yield. The production area spread over SNNPR and Sidama Zone is the highest area of production. The sales ratio is also high in Sidama and Gedeo Zones, which exceeds 10%. In other areas than Sidama and Gedeo, Enset is for self-consumption for most farmers.

Table 3.1-31 Enset Production and Marketed volume in Ethiopia and in SNNPR

	Production		For sales	Marketed volume	
	ton	%	%	ton	%
Ethiopia	825,350	100.0	8.75	72,218	100.0
Tigray	NA	--	NA	N/A	--
Amhara	NA	--	NA	NA	--
Oromia	229,748	27.30	8.88	20,401	28.25
SNNPR	595,602	72.59	8.61	51,281	71.75
Top 9 Production Zone/Special woreda in SNNPR					
1. Sidama	335,338	56.3	11.11	37,256	67.81
2. Keffa	89,377	15.0	7.02	6,274	11.42
3. Gedeo	30,283	5.1	11.55	3,497	6.37
4. Hadiya	29,007	4.9	7.21	2,091	3.81
5. Gamo Gofa	16,473	2.8	8.03	1,322	2.41
6. Dawro	16,040	2.7	5.53	887	1.61
7. Sheka	15,220	2.6	8.67	1,319	2.40
8. Kenbata Tembaro	12,386	2.1	10.0	1,238	2.25
9. Gurage	10,800	1.8	4.98	537	0.98
10. Walayta	10,257	1.7	5.00	512	0.93

Note: The percentage of For Sale in 2004E.C. was not available, 2001 E.C. used.

Source: CSA, Agricultural Sample Survey 2011/12 (2004 E.C.), Bulletin 532

Almost all parts of Enset is utilizable. The leaves are used for wrapping of agricultural products, the bulb of branches are raw materials for Kocho and their fibers are utilized for rope or mat making materials. The tuber is directly consumed and/or a raw material for Kocho. Enset-starch, so called Bula, is recovered from the bulb liquid matter. Kocho is produced through fermentation process and the fermentation process takes place underground for 2 to 8 weeks, depending on the temperature in the ground and consumers' tast.

The processing of Enset completely draws on manual labor. A drum-type peeling machine of edible leaves was developed but the fiber portion of leaves get into tangled with the drum when the machine has not completed yet. A scraper type peeling machine seems to be more suitable than the drum type but the machine cost will be high, and not affordable to ordinary farmers. As the selling prices of Bula are high, a manual squeezer of Bula was developed but it has not been accepted by farmers yet.



Peeling work using feet and hands. Foot presses a leaf then peels off the edible portion. Outer parts of leaves are utilized for making fiber ropes.



Drum type peeling machine driven by an engine. Drum cannot control peeling off the edible portion only, but with outer fibers.



Retailers of Kocho use a large knife for cutting large fibers contaminated before selling repeatedly.



Hawassa University has developed multi-knives rotating cutter for Kocho fibers but is not finalized yet.

Farmers normally carry their surplus Kocho to surrounding marketplaces by donkeys or on their shoulders for sale. Most Kocho and Bula are consumed locally but some products have steady markets in Addis Ababa, especially those grown in Sidama and Gedeo. Traders collect Kocho and Bula in these local markets and transport them by trucks to urban consumers.

Marketing prices of Kocho are for 50kg unit; Farm-gate is 170 Birr, wholesale is 180 Birr and 200 Birr for consumers (4 Birr per 1 kg) in Sidama, depending on the quality and taste.

The processing and marketing for Kocho and Bula are made by traditional manual methods and processing machines/equipment; cheap and simple ones have not been developed yet. The harvesting amount of Enset is rather stable and the price fluctuation for Kocho and Bula is small.

(2) Sweet Potato

Oromia and SNNPR have a high proportion of Sweet potato production in Ethiopia. Gamo Gofa and Wolayita are major producing areas in SNNPR but most of produced Sweet potato is for self-consumption. Sales ratio of Sweet potato is high in Sidama and Basket. Due to the low prices of Sweet potato and high transportation cost, there is almost no supply to Addis Ababa from SNNPR. Sweet potato sold by farmers is consumed locally. Transportation from farm to local market places is normally by donkeys or donkey-carts, then trucks are used to local urban markets nearby.

Table 3.1-32 Sweet Potato Production and Marketed volume in Ethiopia and in SNNPR

	Production		For sales	Marketed volume	
	ton	%	%	ton	%
Ethiopia	682,281	100.00	11.27	76,893	100.0
Tigray	N/A	-	-	-	-
Amhara	2,136	0.31	19.20	410	1.0
Oromia	248,114	36.37	12.05	29,898	39.0
SNNPR	421,935	61.83	10.86	45,822	60.0
Others	10,096	1.47	--	--	--
Top 9 Production Zone/Special woreda in SNNPR					
1. Wolayita	136,952	33.20	1.46	1,999	4.0
2. Sidama	133,045	32.25	25.26	33,607	70.0
3. Gamo Gofa	108,551	26.31	8.08	8,771.0	18.0
4. Kembata Tembaro	9,218	2.23	4.24	391	1.0
5. South Omo	7,206	1.75	17.61	1,269	3.0
6. Basket	5,844	1.42	20.28	1,185	2.0
7. Gedeo	3,387	0.82	8.32	867	2.0
8. Keffa	2,406	0.58	8.30	200	0.1
9. Amaro SW	2,315	0.56	8.30	192	0.1
10. Others	3,636	0.86	2.0	72	0

Note: The percentage of For Sale in 2004E.C. was not available, 2001 E.C. used.

Source: CSA, Agricultural Sample Survey 2011/12 (2004 E.C.), Bulletin 532

Preparation of Sweet potato is only by boiling. Value adding-processes such as sweets or candy-making are not practiced in Ethiopia. After maturing, Sweet potato is sometime left under ground for storage for certain periods.

Marketing prices of Sweet potato are for 1 kg; Farm-gate is 0.70 Birr, wholesale is 0.8-0/9 Birr and 1.0 Birr for consumers in Sidama depending on the quality and season.

(3) Taro

Taro production takes place in SNNPR, and mostly in Western parts of SNNPR, as Taro prefers warm and wet land. Valley bottoms in such the Western Zones in SNNPR are the main producing areas of Taro.

Table 3.1-33 Taro Production and Marketed volume in Ethiopia and in SNNPR

	Production		For sales	Marketed Volume	
	ton	%	%	ton	%
Ethiopia	300,324	100.00	4.89	14,686	100.00
Tigray	-		-	-	--
Amhara	-		-	-	--
Oromia	36,983	12.3	2.8	1,036	7.0
SNNPR	263,136	87.6	5.36	14,104	93.0
Top 10 Production Zone//Special woreda in SNNPR					
1. Wolayita	62,295	23.8	4.91	3,059	24.3
2. Bench Maji	35,167	13.4	6.78	2,384	18.9
3. Dawro	27,462	10.5	2.51	689	5.5
4. Gamo Gofa	25,153	9.6	6.5	1,635	13.0
5. Keffa	22,954	8.8	4.56	1,047	8.3
6. Kembata Tembaro	21,579	8.2	5.47	1,180	9.4
7. Konta	19,299	7.4	5.01	967	7.7
8. Hadiya	14,238	5.4	5.0	712	5.7
9. South Omo	10,989	4.2	5.0	549	4.4
10. Others	22,739	8.7	5.0	1,137	8.1

Note: The percentage of For Sale in 2004E.C. was not available, 2001 E.C. used.

Source: CSA, Agricultural Sample Survey 2008/09 (2001 E.C.), Vol. VII (Bulletin 446)

Like Sweet potato, Taro is cheap and mainly consumed locally with almost no long distance sales, due to high transportation cost and low selling prices and vice versa. The preparation of Taro is only by boiling. No value adding process is in practice, as is the case with Sweet potato.

The price levels of Taro are also same as Sweet potato, i.e. for 1 kg, Farm-gate is 0.70 Birr, wholesale is 0.8-0/9 Birr and around 1.0 Birr for consumers in Sidama depending on the season.

(4) Cassava

Cassava is also one the target crops specified in S/W agreement. However, no production or sales data is available in CSA data base. According to Experts at BoARD, the production area is duplicated with Sweet potato in SNNPR and the price is almost the same (1 Birr/1 kg for consumers).

The production and consumption of Cassava is extremely low in Ethiopia when compared with neighboring countries, but the production of Cassava is gradually increasing because Ethiopians have found the suitability of cassava flour used with Teff flour for cooking Injera.

The production data of Cassava in SNNPR for 2009 by BoARD shows 184,348 ton, and 51% of this amount, 94,858 ton is produced in Wolayita Zone. Most cassava produced is self-consumed by producing farmers but about 10 to 20% of total production is sold to markets in the form of dried cassava for cash. Dried cassava is mainly consumed by urban consumers as a weighting agent for Teff

for Injera cooking. Normally 10 to 20% of Injera by weight is cassava, but some poorer houses mix dried cassava with Teff flour up to 50% in Injera by weight, because the price of dried cassava is less than half of that for Teff flour.

In the value chain from production, drying, processing, flouring and cooking, the following issues should be improved:

- 1) Farmers do not have proper drying tools and they chop raw cassava into large pieces of around 3 cm without peeling off the outer skins, then spread them on the ground for sun-drying. The quality of dried cassava varies and adherence of soil or mold generation is observed.
- 2) Local consumption of dried cassava in production areas is quite low because people there are aware of its being unsanitary. Low quality dried cassava is normally shipped to Addis Abeba then crushed into cassava flour as an ingredient of Injela.
- 3) Cassava traders in Sodo city deal constantly with about 50 ton per month but they do not control the quality at all to meet with consumers' demands. The market development by those traders is limited. Any measures to maintain the advantage of their position as a pioneer of dried cassava marketing has not been undertaken in spite of recent production activities in other regions, such as Tigray and Amhara.
- 4) Consumers in some dried cassava production areas such as Kindo Koysga Woreda in Walayta Zone purchase dried cassava for home consumption.
- 5) Farmers carry dried cassava to local markets and sell it to traders and consumers directly. The prices of dried cassava fluctuate in accordance with the fluctuation of teff and maize.
- 6) Traders for dried cassava in Sodo city handle about 50 ton of dried cassava every month (there are 10 dried cassava traders in Sodo). They do not control the quality at all therefore, they cannot develop new dried cassava markets for human consumption.
- 7) Compared with neighboring countries, the per capita consumption of cassava in Ethiopia is very low. Consumers also have little awareness of dried cassava as an ingredient in Injela. The market demand for clean and hygienic dried cassava is high.
- 8) After peeling off the outer skin and chopping it into small pieces, the drying speed is accelerated, quality is improved and the selling price is increased. However, the number of farmers who produce small and clean dried cassava is limited, as it is hard for farmers to chop it into small pieces by knife.
- 9) The farmers' need for a simple cassava chopping machine and plastic sheets for sun-drying is very high; administrative assistance for this situation is effective and efficient.



Large size dried cassava, chopped by hand, being sun-dried on a plastic sheet.



Farmers transport products using a donkey cart to middlemen living around the local market.



Cassava storage owned by middlemen surrounding the periodical market in Offa woreda, Walayta Zone.



Inside the storage. They are not concerned about the quality.

The table below shows production data prepared by Extension Core Process of BoARD, SNNPR for reference; however, information on the sales ratio and marketed volume are not available.

Table 3.1-34 Cassava Production in SNNPR

	Planting areas (ha)	Production (ton)	Production (%)	Yield (ton/ha)
1. Wolayita	8,042	94,858	51.43	11.8
2. Gamo Gofa	4,283	33,373	18.09	7.8
3. Dawro	1,374	28,717	15.57	20.9
4. Bench Maji	754	14,307	7.76	19.0
5. South Omo	676	5,408	2.93	8.0
6. Guraghe	471	4,239	2.30	9.0
7. Basket S. Woreda	210	3,150	1.71	15.9
8. Kembata Tembaro	21	406	0.22	19.3
9. Others	0	0	0.00	0
SNNPR Total	15,831	184,348	100.00	15.96

Note: Production data prepared by BoARD always shows very high figures as compared with CSA's.

Source: BoARD, SNPR

3.1.6 Other Crops

(1) Sugarcane

Three large scale sugar mills produce soft sugar (granulated sugar) in Ethiopia. These large sugar mills formerly owned by Government are located at Wonji, Matahara and Fincha in Oromia region. The raw materials of sugar are supplied mainly by large state or commercial firms in Oromia.

Sugarcane produced by small-scale farmers is not used by large sugar mills in Oromia but mainly consumed by individual consumers. However, there is neither simple juice making roll machine; which are very common in Asian countries where sugarcane is available, nor boiling sugar juice for making brown lump sugar; Ethiopians simply chew sugarcane directly.

Table 3.1-35 Sugarcane Production and Marketed volume in Ethiopia and in SNNPR

	Production		For sales	Marketing Volume	
	ton	%	%	ton	%
Ethiopia	559,404	100	39.44	220,629	100.00
Tigray	-		-	-	--
Amhara	102,338	18.29	60.13	61,536	27.89
Oromia	212,991	38.07	42.38	90,266	40.91
SNNPR	243,047	43.45	38.63	93,889	42.56
Top 9 Production Zone/Special woreda in SNNPR					
1. Sidama	108,891	47.45	57.6%	62,721	57.20
2. Hadiya	28,653	12.49	42.3%	12,106	11.04
3. Wolayita	19,160	8.35	32.6%	6,254	5.70
4. Gedeo	14,413	6.28	54.1%	7,792	7.11
5. Keffa	13,903	6.06	16.9%	2,355	2.15
6. Bench Maji	13,846	6.03	36.0%	4,986	4.55
7. Kembata Tembaro	12,034	5.24	39.6%	4,765	4.35
8. Gamo Gofa	8,213	3.58	54.1%	4,440	4.05
9. Amaro Special	5,455	2.38	58.7%	3,202	2.92
10. Others		5.91	--	--	--

Note: Commercial production by large scale state farms for supplying sugar mills are not counted in above data.

Source: CSA, Agricultural Sample Survey 2008/09 (2001 E.C.), Vol. VII (Bulletin 446)

Sugarcane is distinct from other crops produced by small-scale farmers, namely because sugarcane is a market oriented product and a large portion of produce is supplied to markets. Sidama is the largest sugarcane producing Zone and its sales portion is over 50% of total production.

In Sidama zone, Wonde Genet Woreda is the main sugarcane producing area where streams supply irrigation water so the sugarcane harvest can be carried out throughout the year. There is no seasonality for sugarcane in Sidama. Farmers harvest sugarcane three times from the same root before replanting. The growing period of sugarcane after harvest is 11 to 12 months.

Small-scale producers sell their surplus at market places nearby. Commercial farmers of sugarcane sell

to traders in the form of standing crops. Traders, after agreeing to the deal with the farmers, arrange workers for the harvest at the farmer's land. After harvest, sugarcane is piled up in the form of long stems at collecting points along the road, then loaded up onto a truck for transportation to Addis Ababa, Nazret, Moyale, etc.

Farmers know the number of sugarcane roots on his farm and their quality before the traders come for the negotiation of purchase. Traders count the number of sugarcane at the farm for negotiation. Selling prices differ on the quality from 2 to 5 Birr per long stem. Farmers can get earnings around 150,000Birr from his one (1) hector of sugarcane farm if the quality is good.

The leaves at the sugarcane farm left over by the traders are used by the farmers for animal feed.

Selling prices in Hawassa area per 2.5meter long stem is 1.0 Birr for farm-gate, 1.50 Birr for whole sellers and 2.0 Birr for consumers. There are street venders selling cut sugarcane at around 25 cm in length in Hawassa town.



Collecting points of sugarcane. Traders arrange transportation.



Farmers use donkey carts for transportation from the fields to local marketplaces.

(2) Spices: Ginger

Various kinds of spices such as red pepper³, ginger, turmeric, pepper, korerima, cardamom, coriander, etc. are grown in SNNPR. Among those spices, ginger and red pepper are two most important spices from the viewpoints of production volume and farmers' income source.

1) Production of Ginger

SNNPR has 99 % share in the national production (Export Products Promotion Agency, Spices of Export Value from SNNPR, 2004). Production data (2008/2009) by zone are shown as below. Ginger is produced an adjacent area of K.T. zone and Wolayita zone.

³ Rep pepper is classified in vegetable group according to the S/W of the Study.

Table 3.1-36 Ginger Production in SNNPR (2008/2009)

Zone	Production		Yield
	ha	ton	ton/ha
Wolayita	9,783	90,833	9.3
Kembata Tembaro	6,494	93,376	14.4
Dawro	2,331	34,140	14.6
Hadiya	270	3,240	12.0
Sheka	520	7,800	15.0
Gamo Gofa	148	1,407	9.5
Total	19,546	230,796	11.8

Source : Extension process, BoARD SNNPR

The following table shows the ginger production in these three seasons (2006–2009) in K.T. zone. The cultivation areas were constant but production decreased every year at all 3 woredas. The reason for this yield declining was unconfirmed.

Table 3.1-37 Ginger Production in Kembata Tembaro zone (2006/2007 – 2008/2009)

Woreda	Cultivated area (ha)			Annual production (ton)			Yield (ton/ha)		
	2006/07	2007/08	2008/09	2006/07	2007/08	2008/09	2006/07	2007/08	2008/09
Kacha Bira	2,306	2,233	2,360	59,956	52,694	33,040	26.0	23.6	14.0
Hadaro Tunto	3,812	3,790	3,986	71,436	53,060	51,021	18.7	14.0	12.8
Tembaro	2,149	2,200	1,913	25,788	27,500	20,081	12.0	12.5	10.5
Total	8,267	8,223	8,259	157,180	133,254	104,141	19.0	16.2	12.6

* Annual productions are fresh-base. Source : Kembata Tembaro ZoARD.

In Kembata Tembaro zone and Wolayita zone, ginger planting starts from late December. Ginger are marketed in the form of fresh or dried by farmers, and harvesting time is different by the form. For the fresh sales, gingers are harvested 7 months after planting. For the dried sales, usually farmers wait for some more months to attain maximum yield and harvest at 9 - 12 months after planting. Farmers harvest gingers according as the market price.

Two varieties referred as "Volvo" and "Aregema" are used in this area. "Volvo" is a new variety which has bigger size and higher yield than "Aregema". "Aregema" is the variety of long-time used in the area which is smaller in size and in yield, but local people prefer it for home consumption. Drying yield (weight-base) is 25% for "Volvo" and 33% for "Aregema".

Common way of farmers' marketing is to sell at marketplaces in their locality for both fresh and dried ginger. Hadaro marketplace in K.T. zone is a key assembly center of ginger for both dried and fresh in the area. Ginger of Wolayita zone are also partly supplied to Hadaro marketplace. There are other marketplaces such as Shinshich, Mudula and Tunto in K.T. zone. Shinshich marketplace is important for fresh ginger collection. In Wolayita zone, Akeka marketplace is a key assembly center.

In Hadaro town, there are about 10 registered local collectors who buy dried ginger from farmers and small-scale collectors and sell to buyers in Addis Ababa. As shown in the photo below (on the right), there are many farmers who sell small amount of ginger to have some cash to buy daily necessities. There are small-scale collectors who buy those small-heaps of dried ginger to assemble to large volume. Marketing channels are illustrated as below.

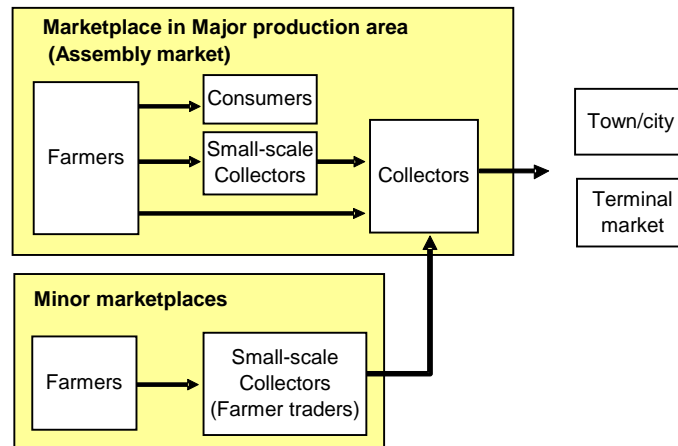


Figure 3.1-15 Marketing channels of Ginger (fresh/dried) in K.T. zone



Collection by local traders (Hadaro marketplace)



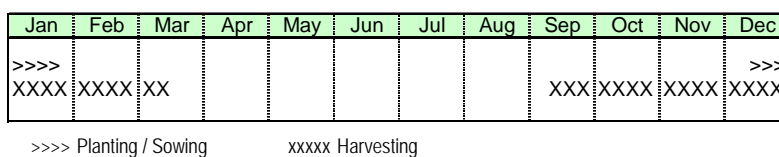
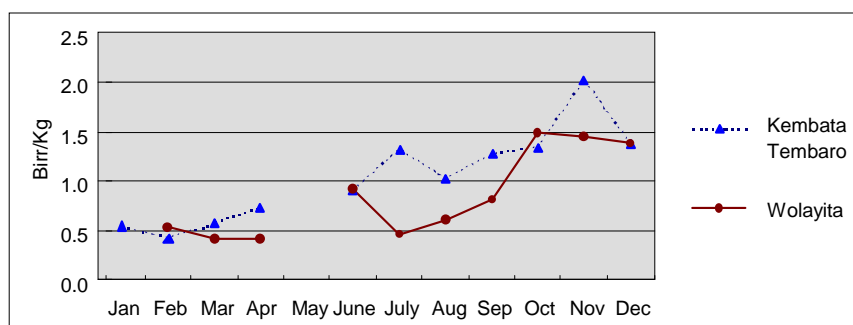
Selling small volume (Hadaro marketplace)

In Kambata Tembaro zone, Ambaricho Farmers Cooperative Union and 11 primary cooperatives tried (or had an idea to try) to take part in ginger marketing in 2010, but nothing happened.

Because no numeric information is available so far, it is hard to grasp the state of dried ginger consumption/demand. The outlets in the country are; a) domestic consumption as food (tea, spices mix), b) exporters to Middle East and c) oleoresin extraction factories such as Ethiopia Spice Extraction Factory (ESEF) and KASSK Spices and Herbs Extraction Factory. There are no big buyers of dried ginger in SNNPR. Big buyers are mostly in Addis Ababa. It is reported that there are only about ten large exporters of dried ginger in the country. It is commonly said that the Middle East market requires higher quality. (A survey of exporters and oleoresin extraction factories shall be carried out by the study team.)

Annual fluctuation of producer's price of fresh ginger in 2009 is shown as below. In 2009, the price gradually rose from February and showed the highest price in November. Correlation between the price movement and harvest time (i.e. supply volume) is hard to see, and explanation for this price movement must be that prices are influenced by the demand-side situation.

Regarding the dried ginger price, continuous price data has not yet been found. Therefore, price movements as well as influencing factors on prices are uncertain as of now. However, it is assumed that the dried ginger prices are greatly influenced by the demand-side situation as some traders said at Hadaro market. Probably the situation of exports business is the largest influencing factor on the producer's price.



Source : CSA Monthly producers' prices reports, Jan. – Dec. 2009

Figure 3.1-16 Producer's price of Fresh ginger (2009) and Cropping calendar

Regarding the long-run price movement, the prices for both fresh and dried ginger have been decreasing since 2003/2004. The prices largely dropped in 2006/2007.

Table 3.1-38 Ginger price during 2003/2004 – 2007/2008 at Hadaro market

Year	Dried	Fresh	Computed marginal price of dried ginger	
			25% *	33% *
2003/2004	130 – 180	27 – 30	108 – 120	82 – 91
2004/2005	100 – 130	20 – 25	80 – 100	61 – 76
2005/2006	80 – 110	15 – 20	60 – 80	45 – 61
2006/2007	40 – 60	10 – 15	40 – 60	30 – 45
2007/2008	45 – 75	12 – 17	48 – 68	36 – 52

Unit : Birr per 17kg (feresulla) * Adopt the drying yield of 25% for "Volvo" and 33% for "Aregema"

Source : K.T. ZoARD, Ginger production and marketing, March 2010

Post harvest processing of dried ginger

Almost all ginger is dried on the ground without using any sheets. Ginger are just spread in the empty places even on the roadside, and left without any care. In case of drying at roadside, animals and people often walk on the ginger. Current drying practice is not good enough produce a product for human consumption from a hygienic viewpoint.

In Kambata Tembaro zone, AMIP/IFAD implemented the training activities to improve the postharvest handling of ginger in 2009-2010. AMIP training taught farmers to use a simple wood-made stand for drying and to wash fresh ginger before drying. However, AMIP could not taught practical / tangible washing methods (tools) in the training. The photo below (in the right) shows the effort made by the WoARD staff and some farmers to find/introduce practical tool for washing, but obviously it needs a lot of improvement.

The washing method should be designed based on the conditions of available water sources. Also, it should be designed as a washing place (simple facility) to be used by farmers or to be operated by farmers' group; not as a tool for individual farmers.



Drying on the road in town



Washing tool fabricated by WoARD staff and farmers

The challenge to produce “clean dried ginger” has just started on a small-scale. According to the Kambata Tembaro ZoARD, doubled price (90-100 Birr/17kg for washed, 45-50 Birr/17kg for unwashed) was achieved last season and ZoARD arranged the buyers.

The linkage with big buyers in Addis Ababa is still weak/none. Actually, experts of Kambata Tembaro ZoARD mentioned that “we don’t know who are the actual customers receiving the ginger product” in their recent report (Ginger production and marketing, March 2010). To change the current practice of ginger drying, it is essential to provide better prices to farmers doing extra works, in other words, it is essential to built up an assured mechanism (business relation) between the producers and local traders/exporters/oleoresin extraction factories.

In Hadaro Tunto woreda, woreda administration banned dry ginger on the ground without using any sheets. By this measure, many farms and local traders in/around Hadaro town started to use bamboo

mats and plastic sheets.

A private company (exporter to Yemen) built the ginger processing place (washing and artificial drying) at Hadaro in 2010. However, no operation took place in 2010/11 season and 2011/12 season.



Newly built facility



Butch-type dryers

3.2. Post-harvest processing and Value addition

3.2.1 Cereals and Pulse Sector

When value-addition and quality improvement of farm crops such as cereals and pulses in SNNPR are discussed, “quality standard”, “flour mill” and “food processing” are three important key words to be considered. The present situation of implementation and understanding the position of value-addition and quality improvement in SNNPR are considered as below.

(1) Present situation of quality control

After harvesting, farmers undertake drying, threshing and cleaning of produce. Most farmers dry their produce in the sun before threshing. In their farm or farmyard, they pile up or spread produce directly on the ground without removing straw or stems. Later, threshing is done by using oxen or donkeys or beaten with wooden or bamboo sticks. In case of maize, threshing is manually done by using a bamboo tube or a maize sheller designed by the agricultural rural technology center to remove grains from cob. Recently a locally-made maize sheller with petrol engine has become more available to farmers.

It is said that farmers, village collectors and traders are little aware of the importance of quality control of farm products. They know the word, “quality”, but only a few traders and farmers know what quality control actually means, and what is effective and efficient for improving quality and meeting the quality standard.

Farmers persist in the point that they want to sell as much agricultural product as possible, even if some defects and foreign matter are mixed in. Even if farmers clean, separate and remove the defects, immature grains, foreign matter, husks from the products and make them into the cleaned, even sized and good-looking products before selling, they cannot find buyers who will buy at higher prices. Therefore, they are apt to sell all the products by mixing impurities, immature grains, different colored grains and husks without any hesitation.

Traders and village collectors buy products at almost uniform prices, even if products are mixed with immature grains, damaged grains and impurities. Sometimes grains of different varieties are mixed together or products have high moisture contents; nevertheless, they hardly pay any attention to the quality of the products which they are going to purchase. After purchase, they mix all products together to dry them in the sun to remove extra moisture. Then, they pack and weigh the products to sell to big traders or exporters.

Furthermore, since farmers have little knowledge of the negative effects of agrochemical residue or chemicals, they seldom keep their produce away from chemicals to avoid contamination. Cooperatives and Unions store the cereals together with fertilizer and chemicals in the warehouse, where they have no partition to separate them from the harmful substances.

A large-scale flour mill has only 2 kinds of product, Grade 1 and 2 for their flour quality. At present the number of consumers demanding products from such large scale mills is not growing. This condition is expected to continue even if the mill produces better and higher quality flour. If there is no necessity for high quality product, strict material inspection is not required. Custom mills are operated to fulfill home consumption; they do grinding after cleaning the materials that are bought. They do not need any material inspection at all because it's for home consumption.

(2) New movement of quality control

There are some transactions that require a quality standard for materials in the marketing system of farm crops. These are the transactions of ECX, Export and WFP. It is essential to implement quality inspection of materials for such transactions and businesses. There are many inspection criteria such as moisture content, broken kernel, other grain, impurity, color contrast, insect/disease damage, fungi damage for cereals and pulses, and soft/hard/durum classification for wheat. Usually, real inspection equipment and instruments are very rare in Ethiopia, except laboratory for ECX, QSAE and WFP. At present, most flour mills conduct only visual checks for raw material inspection when purchasing wheat.

1) ECX transaction:

ECX transact not only coffee but also wheat, maize, haricot beans, pea beans and sesame. ECX has their specific quality standards, respectively. They implement the grade inspections for each sample before auction, which are visual check and instrument check. The refining processing by separator and grader is normal for improving the grade of ECX standard.

2) Export transaction:

In Ethiopia, there are Ethiopian Standards for the quality inspection of most agricultural crops. In the case of the export of agricultural crops, such quality standards must be cleared. The exporters must have the knowledge and experience for international quality standard of agricultural crops and accurate weight inspection.

When agricultural products are exported, a quality certificate from QSAE is essential for exporters. Export regulations for agricultural products in Ethiopia require the certificate of ES Grade and the certificate of Factory Inspection from QSAE for export. Agricultural products must be cleaned by cleaning/refining machines at factories which are inspected and certified by QSAE every year. This regulation is required to get permission for agricultural products to pass the Ethiopian Standard (ES) and fulfill specified grade of the agricultural products. Therefore, exporters including EGTE must themselves possess the processing machinery for agricultural products with high performance. In the case of a pulse exporter for Kenya, they receive the QSAE inspection after cleaning them by their own pulse cleaners.

3) WFP transaction:

As described in Chapter 2.6.2, WFP started the P4P (Purchase for Progress; the program of direct purchase of farm products from smallholder farmers) in December, 2009. In SNNPR, it started in July, 2010. The quality inspection is mandatory for the P4P purchasing. Cooperative unions must implement the cleaning process of agricultural products to pass the WFP standard. As the contracted volume is large in the case of WFP, the mechanical separation/processing is necessary to fulfill the standard requirement within the shortest time.

Initially, a total of 15 cooperative unions in Ethiopia were targeted, out of which eight cooperative unions were from SNNPR. WFP/P4P provided machines and equipment such as maize sheller, grain cleaner, portable bag stitching machine, fumigation sheet, knapsack sprayer and inspection instruments to these 15 unions in October, 2011 for WFP quality standard to be observed. In 2011, one more union joined P4P. Currently, nine unions are targeted in SNNPR.

(3) Situation of flour mills

Previously, the majority of large-scale flour mills (commercial mills) for large demand customers were run by public organizations. Recently, the number of large-scale commercial flour mills which are owned by the private sector is increasing in big cities. On the other hand, in the rural towns there are many custom mills to grind wheat, barley, teff etc. for household consumption. These custom mills charge some fee for the services they are rendering. According to CSA statistic data, there are 2,328 custom flour mills in SNNPR.

There are two places in Hawassa, where about 20 custom mills gather in certain places near the market and do business by grinding grains. Some of them can grind pulses and dried red pepper. Raw grinding materials such as teff, sorghum, maize, rice and barley can be procured at the custom mills or can be brought to the mills after purchase at the market. The grinding charge is 15 Birr/100kg at mill of consumers' cooperative and 30 Birr/100kg at private mills. Usually, the raw materials are cleaned before grinding by grain-cleaning persons, who carry out the sieve-cleaning business manually beside/in the grind mills. The cleaning charge is 10 Birr/100kg for teff. In the case of teff milling, it is normal to grind 100kg of teff mixed with 10-15kg of rice and other grain/oilseed/spices. The capacity of a grinding mill driven by an electric motor is 10-30 minutes/100kg for teff. The total grinding quantity of one grinding mill (in case of 2-3 stone mills) is average 4-5 tons/day, which varies by the number of grinding mill machines and the operating hours.

This kind of custom mill can surely be found in any rural town in Ethiopia. The teff flours differ from the various mixing rates and kinds of mixing grains in the teff material, to change the original taste for each family. Under the circumstances, it seems that the commercial flour milling system, except for wheat, is not yet ready in Ethiopia.

In the case of wheat, the wheat material for flour mills, which is produced in SNNPR and at Arsi and

Bale in Oromia region, are procured from traders, wholesalers and ECX. The product (flour) is sold as the ingredient for bread, macaroni/pasta and biscuits, etc. Some private large-scale flour mills and one public flour mill are operating in SNNPR and their products are supplied not only to big consumers but also to their own macaroni-pasta factories and biscuit factories. The below pictures show the biscuit manufacturing factory in Hawassa.



Biscuit manufacturing line



Tunnel oven for biscuit

Licha Hediya Farmers Cooperative Union is an example of enterprise that has implemented value addition and quality control of agricultural products. Licha Hediya union is one of the cooperative unions in Hosana city, and it has constructed a full-scale flour mill of maximum 80 ton/day capacity whose facilities consist of 8 units of roller mills and 2 units of large-sized gyro-sifters made in China. The flour mill started operation in May, 2009. The below pictures show the processing facilities of the flour mill of Licha Hediya union.



Large-scale roller mill



Large-size gyro-sifter

The flour mill produces 2 kinds of flour (Grade 1 & 2) and wheat bran. After packaging into 5, 10, 25 and 50kg-bags, the flour is directly sold to the retailers in Hosana, Addis Ababa, Jima and Nazaret at a cheaper price. The wheat bran is sold to the dairy farmers as livestock feed. The Union also sells the flour directly to big consumers like bakeries, universities, hospitals and prisons at a low price. The Union is planning to establish its own food complex and livestock feed processing plant.

(4) FAMIX/CSB and RUTF

There are 8 private sector producers of FAMIX/CSB in Ethiopia. FAMIX/CSB is roasted corn (maize) and soya bean flour blended with vitamins and minerals. They monopolize the manufacture and sell the processed food of FAMIX/CSB to WFP and UNICEF. The below pictures show the FAMIX/CSB manufacturing facilities of a private company in Addis Ababa.



Receiving/cleaning/roasting line



Grinding/blend/packaging line

One of the above producers also started the production of RUTF (Ready-to-Use Therapeutic Food) by facilitating investment in the production processes at the factory in Addis Ababa. All equipment in the factory were procured from abroad and the packing materials and ingredients like vitamins and minerals are also imported from foreign countries. Only groundnuts used for raw material is produced in Ethiopia. The building structure and the layout of the facilities of the factory are designed to meet the HACCP specification because RUTF is a special processed food and its standard of hygiene is very strict.

There are new movements in food processing in Ethiopia assisted by donor sector programs such as WFP and UNICEF. If the private sectors participate in the post-harvest processing and food processing industry, it will gradually increase the influence of awareness creation against quality improvement of traders as well as farmers. Accordingly, quality improvement of agricultural products shall be promoted and targeted to meet the requirements of both domestic processors and exporters.

3.2.2 Fruits and Vegetables Sector

(1) Industrial-scale Fruits & Vegetables Processing

There is scarcely a traditional processed food made from fruits and vegetables in the country. The fruits and vegetables processing industry in the country is undeveloped. It was reported that there were only 5 fruits and vegetables processing factories in the country as of 2007. The following table shows the name, location and major products of these 5 factories as well as another 6 factories/businesses identified in the study as of now.

Table 3.2-1 Identified Fruits and Vegetables Processing Factory/business

Factory name	Location	Ownership	Products	Others
5 factories existed in 2007				
ELFORA Melge Wendo Food Processing Factory *1	Melge Wendo, SNNPR	Private (Agro-Industries PLC)	Tomato paste, Peeled tomato for mainly army	25 ton per day (24 hrs.)
Merti Processing Factory	Merti, Oromia	State owned (Upper Awash Agro Industry)	Tomato paste, Orange marmalade	
Awash Winery *2	Addis Ababa	State owned	Wine	5.2 million liters per year (2007/2008)
Green Star Food Company	Dezre Zeit, Oromia	Private	Canned vegetable	
Gonder Food Processing Factory	Gonder, Amhara	Private	Tomato paste	
6 factories/businesses identified in the study				
Estifanos Hailu Melaku	Addis Ababa	private	?	
Greeners plc	Addis Ababa	private	Processed veg. & fruits	
Nasir Giragn Orange Factory	Addis Ababa	Private	Orange juice	
Nesru Kelil Orange Factory	Addis Ababa	private	Orange juice	
Rekia Negash Orange Juice Factory	Addis Ababa	private	Orange juice	
Shalkan Foods Beverage Plc	?	private	Processed veg. & fruits	

*1 : Melge Wendo Food Processing Factory was formerly state-owned.

*2 : Comprises 3 wine factories, namely Lideta, Mekanisa and Addis Ketama.

Source : JICA Study Team, prepared based on "Elias Abebe, Technical Assessment on Viability of Integrated Fruits Processing in Ethiopia, July 2007"

There is only one factory in SNNPR; ELFORA Melge Wendo Food Processing Factory in Melge Wendo, Sidama Zone. This factory was state-owned before. Currently, the factory produces canned tomato paste and peeled tomatoes for the army. Some of the difficulties the factory has been facing are as follow:

- Material for simple steel can is not available in the country, high cost of importing from Europe.
- Difficult to procure fresh tomatoes at stable price throughout the year. Tomato processing usually stops during Dec. - May since tomato prices go over the marginal price (1.60 Birr/kg) during this period. To assure a stable supply, the factory has been trying to enter a contract with the Union (Duro Langanu Farmers Union) in Arisi, Oromia region.
- The factory's quality requirement differs from traders' requirement; the factory purchases red-color (matured) tomatoes, but traders do not buy red-color tomato.

(2) Cottage-scale Fruits & Vegetables Processing

As stated previously, there is no tradition to make processed food from fruits and vegetables in Ethiopia. Therefore, small-scale food processing is also underdeveloped. So far, the study identifies

only one case of small-scale processing of traditional food; that is green pepper sauce production in Hawassa and Wolayita.

In the area of small-scale fruits processing, a company called ECOPIA (Ethiopia Products of Ethiopia) has been working with farmers' groups in SNNPR. Outlines of ECOPIA's activities are as follow:

ECOPIA is a private limited company (Plc) founded in 2005 and headquartered in Addis Abeba. CEO and manager are German resident Ethiopian women. ECOPIA's working field is organic products. Ecopia is a private company but they define themselves as a "social company". On the company website, it says that "our goal is to provide opportunities for two million Ethiopian farmers to generate income in food processing and participate in improving the food security and rural development in Ethiopia."

Current products line : Total 54 products. Fruits and vegetable based products are as follows.

- Organic jam : Mango, Guave, Pineapple, Plum, Papaya, Orange, etc. and Mixed
- Dried fruits (sun dry) : Pineapple, Plum
- Juice : Pineapple, Apple, etc.
- Compote (fruit cuts preserved in sugar syrup) : Apple, Mango, Pineapple, Plum
- Syrup (beverage) : Apple, Mango, Pineapple, Plum
- Wine : under product development
- Pickles : Green bean, Carrot
- Others : Honey, Packed spices and herbs, Tea (lemongrass, wild thyme, etc.)
 - * Organic but not certified.
 - * Traceability code system (hand written the code on each product) has been introduced recently.

In addition to the processed products, ECOPIA does sales of fresh fruits. Major outlets of products: supermarkets, hotels

Method of fruit processing:

ECOPIA has its own processing facilities (rented houses) at Chench and Chuko. ECOIPA provides training on fruit processing to quite a number of farmers at each place of the facility, and then employs some good persons as staff to do the processing works.

Processing method is simple as home-kitchen production level; it is small scale and no machinery is used.

The facility at Chench and Chuko are just ordinary houses, not specially designed for food processing and it needs further modifications to improve the hygienic level.

To procure raw materials for processing and for sales of fresh fruits, ECOPIA partners (exchanges the Memorandum of Understanding) with farmers cooperatives/associations.

To conduct training, ECOPIA partners (outsources) with international NGOs such as World Vision and SNV as well as local universities.

Working places in SNNPR and status (as of October 2010)

Place	Handling fruits	State of activities / establishing value chain
Chench, Gamo Gofa zone	Apple, Plum	Processing facility and staff are in place. Partnership with Chench High Land Farmers Primary Cooperative has been formed.
Chuko, Sidama zone	Pineapple	Processing facility and staff are in place. Formation of partnership with Teso, Gambella and Dibicha Pineapple Cooperative is under way.
Lante, Gamo Gofa zone	Mango	Processing training for farmers was conducted. (25 farmers attended. Additional training may take place.)

* There are working places in Asosa, Benishangul-Gumuz region; handling mango, etc.

One of the major obstacles for development of the small-scale food processing business is the undeveloped supporting industries in the country such as manufacturing of packaging materials. There is one glass bottle factory in the country, but the minimum lot is too large for small business. ECOPIA uses recycled glass bottles for jam products since imported bottles make shop prices too high for the domestic markets.

One Village One Product (OVOP) Promotion Project (JICA Technical Cooperation Project)

OVOP project was started in March 2010. It aims to support farmers who are difficult to access to the technology / fund / information for value addition of agricultural produce. It has been challenging to create the model cases of rural development through development of village products. SNNPR is the site for the model case creation.

To create a village product and its selling outlets, OVOP project takes an approach that combine farmers group and someone (individual or company, they are called “OVOP partners”) who is capable to provide technical support and marketing support to the farmers group.

In the area of fruit and vegetables processing, OVOP project has been working on mango/avocado processing (jam or juice processing) with several farmers groups and with ECOPIA as OVOP partner; in Arba Minch (Gamo Gofa zone) and Boloso Bombe (Wolayita zone).

(3) Promotion of Agro-processing by SNNPR Bureau of Trade and Industry (BoTI)

SNNPRS Government is implementing the Regional Enterprise Development Program (REDP) to alleviate poverty and unemployment in the region, in particular in urban areas. This program focuses on four areas; namely 1) Textile and garment, 2) Metal and wood work, 3) Agro-processing, and 4) Handicraft.

Micro and Small Enterprise Development Agency (MSEDA) under the Regional Bureau of Trade and Industry is in charge of development of micro and small enterprises. MSEDA deploys 4 staff at each city and sub-city in 22 reform cities to undertake the promotion of micro and small enterprises. Among these experts, one is a bachelor degree and/or above holder and is responsible for promotion of agro-processing. Major tasks of these staff are organizing groups to provide training and to facilitate using soft-loan through Omo Micro Finance Institute.

Works made in the domain of agro-processing

Promotion and support of micro and small enterprises by MSEDA started recently, and it seems that grouping of beneficiaries has already been achieved to some degree. Regarding the training, the first training on agro-processing was carried out at Hawassa TVAT this year; with the cooperation of ECOPIA, SNV and Hawassa TVAT. 65 persons participated in the training, and theoretical and practical lessons on mainly fruits process (juice, wine, jam) were given by ECOPIA. Second agro-processing training is scheduled in August at Arba Minch TVAT.

In addition to the above, cluster development program is on-going in the region, and cluster-centers are under construction in 12 reform cities: in Hawassa, Aleta Wondo, Yirgalem, Welkite, Butajira, Hosana, Arba Minch, Sodo, Boditi, Alaba, Mizan Tefferi, and Tepi. Culster-centers are planned to have the function of incubation support and to provide processing facilities (space) to entrepreneurs for 5 years.

3.2.3 Local Manufacturer of Agricultural Processing Machines

(1) Overview

In general farmers in Ethiopia have only hatchets, soil tillers, plows pulled by of oxen for cultivation. Farmers who have donkey carts for transportation are limited. There are some cases where a water pump and chemical sprayer are owned by a few farmers or share use with other farmers; collaborative work is done to pool labor for some farm activities. The reason may be lack of a blacksmith in the rural area, or even if there are some blacksmiths, their skill is so limited that they cannot repair and maintain the improved and sophisticated farm equipment. Thus, the development of improved technology shall be supported to enhance the introduction of farm machinery to Ethiopia.

The development of agricultural machinery needs technological issues such as the knowledge to manage operation and maintenance by the users and financial support from the governmental side. In a series of agricultural works such as cultivation, planting, fertilizing, harvesting and post-harvest processing in Ethiopia, oxen cultivation are extended throughout the country. However, there are seldom cases where farmers use the machines for other fields except some large-scale farms. The cleaning works after post-harvesting is carried out by manual power or by using the wind power.

(2) Rural Technology Promotion Center

There are two Rural Technology Promotion Centers in SNNPR; at Mizan and Wolayita Sodo, which are run under the responsibility of the Input Core Process of BoARD in SNNPR. The purposes the centers are the introduction of new technology for agricultural machinery, its extension and promotion, monitoring and evaluation, improvement of the farm machinery and the manufacture and sales.

The centers have the action plans based on annual budget and development schedule of the Input Core Process of BoARD, and manufacture equipment and testing machines according to the instructions of the Input Process as follows.

Table 3.2-2 Annual R&D Plan of Rural Technology Promotion Center

Subjects		Progress made
1	Extension of Post-Harvest Processing Machinery	One part completed
2	R & D and extension of Enset processing machine	Completed (Sodo, Mizan)
3	Extension of improved technology for carts for oxen, horse, donkey, etc.	Completed (Sodo, Mizan)
4	Trial manufacture and performance test of turmeric peeler for sun-drying	Completed (Mizan)

Subjects		Progress made
5	Performance test of Corn sheller	Under testing (Mizan)
6	Technical extension of reduction method of post-harvest loss, especially for fruit	Not yet
7	Extension of improved technology for warehouse structure	Not yet
8	Improvement and extension of packaging materials	Not yet
9	Trial manufacture and performance test of cassava slicer	Not yet
10	Trial manufacture and performance test of mango cutter for harvesting equipment	Not yet

As of April 2010

Sodo Center is now manufacturing plow, water pump, enset squeezer, beehive, butter separator and water gate. Mizan Center is manufacturing enset squeezer, manual maize sheller, butter separator. In their warehouse, there are a lot of stock, like maize shellers (20 units), plows (500 pcs), water pumps (20 sets), beehives (50 sets), etc. together with the imported machines for demonstration and modification.

Table 3.2-3 Facility of Rural Technology Promotion Center (Sodo) - Metal workshop

Facility	Q'ty	Facility	Q'ty
Large lathe	2	Electric sander	1
Shearing machine (motor /manual)	Ea. 1	Hi-speed cutter	1
Bender	1	Arc welder	2
Rolling machine	2	Spot welder	1
Electric drill	2	Electric grinder	2
Electric saw (for metal)	1	Diesel generator	3
Turret lathe	1		

Table 3.2-4 Facility of Rural Technology Promotion Center (Sodo) - Woodwork workshop

Facility	Q'ty	Facility	Q'ty
Electric saw (for wood)	1	Electric drill	1
Electric plane	1	Electric ditcher	1
Electric sander	1	Lathe	1

If the centers are equipped with the facilities and skilled staff, simple post-harvest machinery would be easily manufactured. Because of staff shortages and a lack of budget, currently both centers are concentrated in the manufacturing only farm equipment. These centers produce their products on a contractual basis. However, if the sales of teff thresher and enset squeezer manufactured by the centers become popular, it is expected that the post-harvest processing technology will be extended to the coops and farmers.

(3) Local Agricultural Machinery

A private manufacturing company in Hawassa was visited to find out the type of post-harvest machineries produced, their performance and price. The vocational school in Addis Ababa, called

Selam is engaged in production of agricultural machinery. There is a sister company in Hawassa. Selam Hawassa manufactures agricultural machines such as teff thresher, multi-crop thresher, maize sheller, rice thresher, etc. It also manufactures construction equipment like stone crusher, cement mixer and renewable energy technologies like micro-hydro power. On top of these, they have Technical and a Vocational College which provides training in general mechanics and electrical installation. The below pictures show the workshop of Selam Hawassa.



Manufacture of various threshers



Maize Sheller

The price of teff thresher fitted with diesel engine is about 30,000 Birr. Its capacity is 300 kg/hour; that is equivalent to one work day 6-8 oxen threshing. This thresher is very suitable for the improvement of post-harvest processing and the protection of the soil mixture, oxen dung and foreign matter. The manufacturing of maize hammer mill, groundnut butter maker and enset squeezer are on trial.

The sales record of the company is summarized in the following table. The present supply record of Selam Hawassa is very small, as is obvious from the table.

Table 3.2-5 Sales record of Selam Hawassa

No.	Equipment	Capacity (qts/hour)	Selling Price (Birr)	Features	Supply record (units)	Customer's name
1	Maize Sheller (with cob)	50	n.a.			* Baco area
2	Maize Sheller (w/o cob)	25	27,600		9 units	* Private
3	Maize Sheller (w/o cob)	50	n.a.		1 unit	*Basketo Special Woreda
4	Teff Thresher	3	27,600	Driven by engine 9HP	7 units	* Private
5	Multi-crop mechanical Thresher		27,600	For teff, maize, millet, sorghum, rice. Please check for wheat and barley operation	7 units	* Private
6	Hand Sheller (Maize)			Different type and size		
7	Hold-on type Rice Thresher		10,315	Driven by Engine 3.5HP	9 units	* Private
8	Groundnut butter making machine		n.a.			
9	Ham mer Mill for Corn		n.a.			
10	Rice Milling Plant		\$25,000			* Somali Region
11	Pin Crusher		9,000		1 unit	* Private
12	Enset Scraper		n.a.			
13	Groundnut Sheller		n.a.			
15	Maize Cleaner/Winnower		n.a.			

There are some manufacturing workshops for small-scale agricultural machinery, other than Selam Hawassa in SNNPR. Because the demand is limited to a small amount, the built-to-order system is usual. It seems that the popularization of agricultural machinery is gradually being promoted according to the economical development of Ethiopia, in coordination with the Rural Technology Promotion Centers in SNNPR.

In addition, there are some cottage-industry type manufacturers of grain cleaners for cereals and pulses in SNNPR. They build to demand but generally the demand is low. One manufacturer in Sheshamane has been engaged in the production of teff cleaners for the last 6 years. Its customers are custom millers. It has constantly worked on the improvement of machines for better performance and easy operation. As a result, it has now a good reputation for the fine efficient cleaner. They also produce the large-scale cleaner of 80 tons/day for haricot beans on the make- to-order basis for exporters. This model is a copy machine of that of American manufacturer and it needs some more improvement.

It is expected that the demand on cleaning machines in SNNPR will be increasing. Thus, accordingly, the technical knowledge and skills of manufacturers is likely to improve through competition.

3.3 Agricultural Market Information Services (AMIS)

3.3.1 Existing Agricultural Market Information Services in the country

Quite a number of organizations such as the Central Statistical Agency (CSA), Early Warning Administration, World Food Program (WFP), Livestock Information Network and Knowledge System (LINKS), Ethiopian Grain Trade Enterprise (ETGT) and Ethiopia Commodity Exchange (ECX) collect and disseminate market price information. The CSA and Early Warning Administration are collecting prices of various commodities that cover almost the whole country. LINKS collects livestock prices and volume data in selected markets throughout the country. WFP/VAM¹ collects prices of major livelihood commodities through the WFP sub-offices. ECX disseminates ECX auction prices for the specific commodities (mainly coffee) by electric displays, ECX website, media and mobile SMS & IRV Service systems. Almost all the regional governments also collect agricultural market information through their regional market agencies or bureaus.

Except ECX, which started the mobile SMS & IRV Service systems on December 2010, none of those organizations disseminate real-time price information to farmers or other market actors. Market information activities undertaken by major organizations in the country are as below.

(1) Central Statistical Agency (CSA)

The CSA conducts two types of price surveys, namely: Monthly Retail Price of Goods and Services and Monthly Producers' Prices of Agricultural Products.

1) Monthly Average Retail Prices of Goods and Services

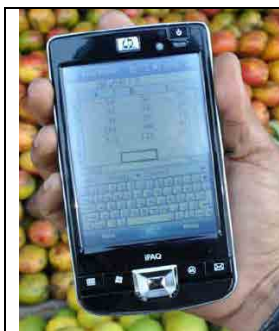
Collection of monthly retail price data was started in Addis Ababa in 1963. The number of enumeration areas was about 760 between 1986/87 and 1996/97, and it increased to 1420 in 1997/98. It was reduced to 446 in 1998. A further change in the size of enumeration areas has been made in 2001 in order to improve data quality. Accordingly, retail price data collection has been made to focus on 119 representative urban market places that represent 105 towns. Currently, The survey covers about 400 items including major agricultural and industrial goods and services.

Usually one enumerator is assigned to each marketplace. Since the prices of a large number of commodities need to be collected, data collection is carried out once a month; during 1st to 15th days of every month (European calendar). Prices are collected from retailers at various outlets (open markets, kiosks, groceries, butcheries, etc.). For each item a maximum of three price quotations are collected from three different retailers. An enumerator uses a PDA (personal digital assistant) and a kitchen balance (max. weighing capacity 10kg), and a PDA for data entry and transmission.

The PDA for data entry and transmission has been partly introduced by an EU/FAO project called

¹ VAM (Vulnerability Analysis and Mapping) is WFP's food security analysis work and it is carried out by 120 analysts around the world. VAM develops maps identifying food insecurity but also emerging vulnerability. To do this WFP uses the latest technologies such satellite imagery, Geographic Information Systems (GIS) or Personal Digital Assistants (PDA).

“Support to Food Security Information Systems in Ethiopia”. However, a traditional hard copy questionnaire is still used to check the entry errors.



PDA is a type of palm held mini-computer with a complete set of computer keyboard functions. Data is entered by a touch screen. Files are created, saved and retrieved like any other computer. The questionnaire format has been pre-loaded on the PDA. Excel PDA version software was customized for the application in price statistics, including data entry form, min-max validation tools to reduce data entry errors and introduction of Amharic fonts. A total of 138 PDAs are being deployed including back-ups by EU/FAO project.

Collected data from each enumeration area are submitted to CSA branch offices. A branch office does data entry, and then entered data of zonal level is sent to CSA head quarters for analysis and publication. A monthly report on “Monthly Average Retail Prices of Goods and Service” is published three months after the data collection.

2) Monthly Producers’ Prices of Agricultural Products

The CSA has been collecting the producers’ prices of agricultural products since 1981. Currently, the survey covers about 99 selected agricultural products; including cereals, pulses, oilseeds, vegetables and fruits, spices, livestock, animal products and others. Data collections are made monthly (once a month, during 1st to 15th days of European calendar) from farmer households or farmers’ cooperatives in the selected enumeration areas. The total numbers of enumeration areas (covered areas as at Dec. 2009) are 438.

For each agricultural product a maximum of three quantity and price quotations are collected from three different farmers or farmers’ cooperative. An enumerator uses a kitchen balance (max. weighing capacity 10kg) to actually measure weight of the items.

The processes for data transmission, data entry and analysis as well as publication of the monthly statistical report are similar to the case of the retail prices survey. The CSA has been providing zonal level producers’ prices since 1997.

3) Dissemination of Price data

In addition to the monthly reports, market price data are available online through CSA’s official website (www.csa.gov.et/consumerprice). The price database of 2007/2008 (2000 E.C.), 2008/2009 (2001E.C.) and 2009/2010 (2002 E.C.) are published, but response from the CSA’s website was very poor and, during March-April 2010, it was impossible to obtain data through the website.

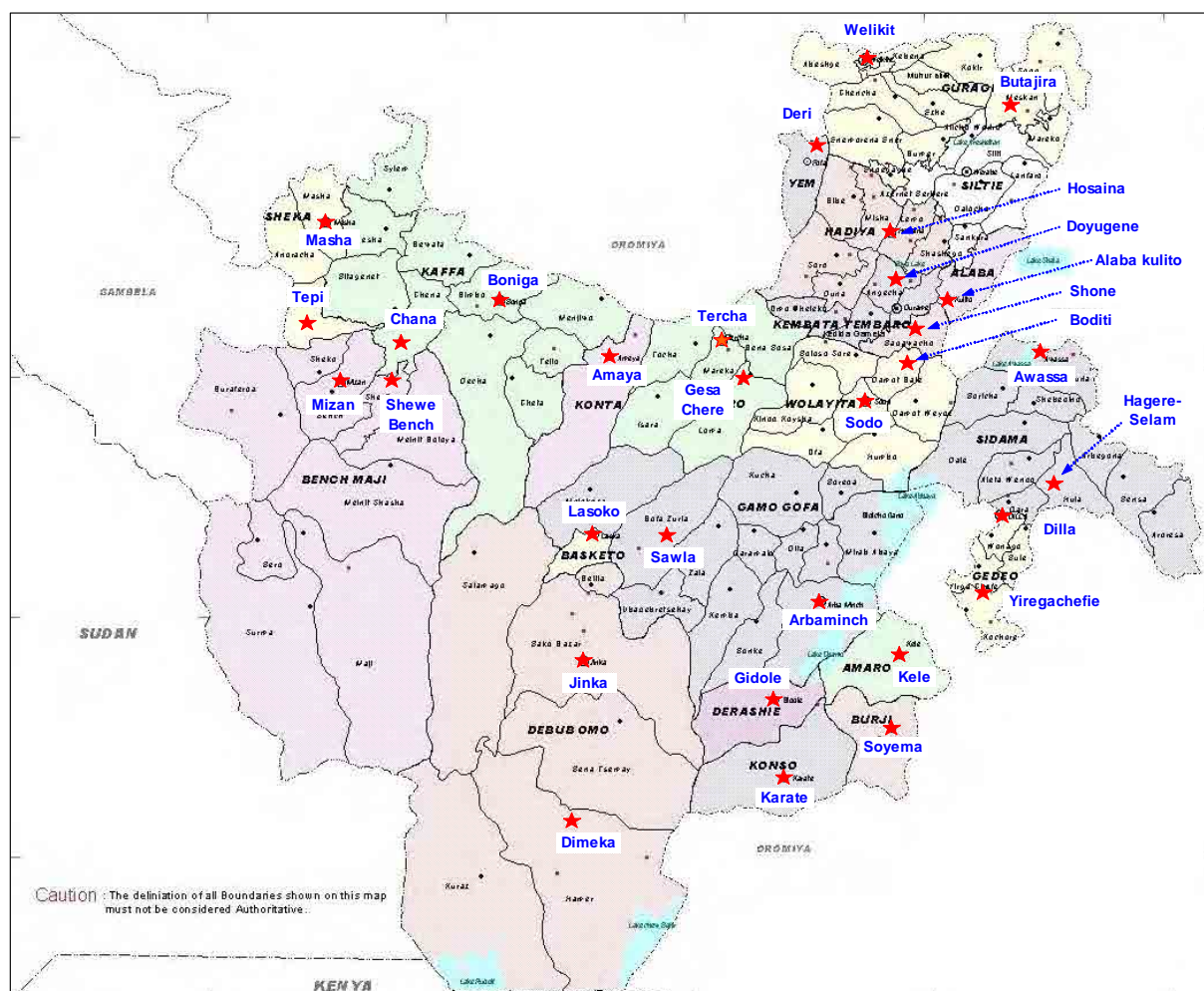
4) CSA’s data collection in SNNPR

Five branch offices, namely Hawassa branch, Arba Minch branch, Hosana branch, Sodo branch and Mizan branch conduct data collection at designated marketplaces in SNNPR. Number / location of enumeration areas / marketplaces are as follows.

Table 3.3-1 Number of enumeration areas for the CSA Producers' Price Survey in SNNPR

Zone/Special wordea	Number of enumeration areas	Zone/Special wordea	Number of enumeration areas
1. Kembata Tembaro	5	12. Sheka	3
2. Hadiya	4	13. Keffa	8
3. Wolayita	7	14. Alaba special woreda	2
4. Sidama	9	15. Yem special woreda	2
5. Gamo Gofa	11	16. Derashe special woreda	2
6. Dawro	5	17. Amaro special woreda	2
7. Gurag h e	8	18. Burji special woreda	2
8. Silitie	6	19. Konso special woreda	2
9. Bench Maji	8	20. Konta special woreda	2
10. Gedeo	4	21. Basket special woreda	2
11. South Omo	5	Total	99

Source : CSA Producers' process of agricultural products at zone level, Dec. 2009 (Bulletin 474)



* Total 31 marketplaces in SNNPR. None of price data at "Tercha" are shown in the monthly report of Oct. 2009.

Figure 3.3-1 Location of marketplaces for the CSA Retail Price Survey in SNNPR

(2) Ethiopian Grain Trade Enterprise (EGTE)

The EGTE collects prices of grains, pulses and oilseeds regularly and seasonally. Regular prices are collected from 22 market centers in the nation through branch and sub-stations network. It covers about 15 crops and prices are obtained every market-day of the week. Seasonal prices are collected from about 60 market sites after harvest time. Collected data are transmitted to HQ, and EGTE uses the data for its internal decision making purposes. Also, market price data are available through EGTE's website (www.egtemis.com/priceone.asp).

Table 3.3-2 Market centers for the Regular price collection by EGTE

Region	Market centers
Addis Ababa	Addis Ababa, Addis Ababa Zuria
Dire Dawa	Dire Dawa
Tigray	Mekele
Amhara	Bahir Dar, Gondar, Bitchena, Bure, Debre Berhan, Debre Markos, Dejen, Dessie
Oromia	Ambo, Nazareth, Assela, Shashemene, Jimma, Bale Robe, Fitcha, Nekemt, Woliso
SNNPR	Hosana
Harari	Harrar

Source : MoARD "A draft working document to establish national agricultural marketing information service in Ethiopia (June 2008), EGTE website

Table 3.3-3 Crops for Price information in the EGTE website

Cereals	Pulses	Oil seed crops
Teff (Mixed, Red, White)	Chick Pea	Lin Seed
Wheat (Mixed, White)	Field Pea Mixed	Niger Seed (<i>Guizotia abyssinica</i>)
Barley (Mixed, White)	White Pea Bean	Rape Seed
Sorghum (Mixed, Red, White)	Haricot Bean	Sesame Seed
Maize	Horse Bean	
White Maize	Lentil	
	Red Kidney Bean	

Source : EGTE website

(3) Ethiopia Commodity Exchange (ECX)

ECX handles only selected commodities: coffee, wheat, maize, white haricot bean and sesame; currently, coffee accounts for about 90% of trade under the ECX system. ECX posts the current prices and historical prices on their website (<http://www.ecx.com.et/>). Market bulletins have been issued since April 2008 and these bulletins are also posted on the website. Unfortunately, response from ECX website is often not good. The bulletins are prepared in English and in Amharic, and they show a) prices of spot trading, b) ECX prices compared to local markets, d) ECX prices compared to World markets and e) market commentary.

Electric displays in the marketplaces are used to disseminate the ECX prices. In addition, ECX started the mobile SMS & IRV Services to disseminate real-time information on December 2010. As of March 2011, SMS & IRV Services are mostly limited to coffee. Users of SMS Service should understand the commodity codes but descriptions are not yet easily obtainable. Thus the services are not yet a fully

practical tool for farmers.

(4) Early Warning Administration

The network of early warning administration in the country has been collecting prices of agricultural commodities since 1998 until now. The early warning administrations (chain of Disaster Prevention and Preparedness offices) were placed under the administrative chain of MoARD in 2007/08. At the regional level, price data collection is conducted by the Early Warning and Food Security Core Process under the BoARD.

Price data are collected just as one of various pieces of information for early warning. Collections are conducted weekly at selected marketplaces by the early warning process of WoARD. Collected data are delivered to the early warning process of ZoARD for summarizing/preliminary analysis, then it is sent to the core process of BoARD as hardcopy with other information for analysis. All information/data are compiled into the monthly report (include monthly average prices) by the region core process, and it is submitted to the federal office as well as regional bureaus such as education, health, etc.

According the MoARD's report², a software called "Price and Market Monitoring System" was developed for the early warning system, and WFP/VAM (Vulnerability Analysis and Mapping) made a review of the system and started capacity building of the Disaster Prevention and Preparedness offices in 2007. The website of the Disaster Prevention and Preparedness Commission still exists, but no information from recent years is posted on the website.

Price data collection for early warning in SNNPR

- Responsible party is the Early Warning Case Team, Early Warning and Food Security Core Process under the BoARD (as of Sep. 2010).
- Price data are collected at all woredas in SNNPR weekly, at representative marketplace(s) of each woreda; at one marketplace per woreda in most cases.
- Collected prices are retail prices. Items are as follow; no standard/grading system is used.

Cereals	: Teff (white, mixed), Wheat, Barley, Finger millet, Maize, Sorghum
Pulses	: Lentil, Grass pea, Field pea, Horse bean, Chick pea
Root crops & others	: Sweet potato, Potato, Taro, Kocho
Cash crops	: Items are not specified
Livestock	: Ox, Cow, Goat, Sheep, Camel, Donkey, Mule, Horse, Chicken

- Monthly report is delivered to BoA from ZoAs during the first week of each month.
- There are 6 to 7 staff members at woreda, and at zone.
- There is no exchange of information with the marketing process of BoARD/BoMC.

² MoARD, A draft working document to establish national agricultural marketing information service in Ethiopia (June 2008)

(5) World Food Program/VAM

WFP/VAM has collected market prices of staple foods, livestock and livestock products mainly through WFP sub-offices since April 2006 from about 50 market centers in the country. WFP Ethiopia prepares a monthly bulletin called “Ethiopia Monthly Market Watch” and disseminates it to concerned stakeholders by email.

In SNNPR, Hawassa sub-office collects price information from 14 market centers. Collections are made by 10 sub-office staff members when they visit the assigned area after hearing from traders, woreda officers, etc. Frequency of data collection is 1 to max. 4 times a month. No standards/grading system is used. Information on price rate and supply rate (high – low) is also surveyed.

Table 3.3-4 Market centers in SNNPR being covered by WFP data collection

Zone	Woreda	Market center	Items *
Dawro	Loma	Gessa	Barely, Maize, Wheat, Goat, Sheep, Butter
Gamo Gofa	Arba Minch Zuria	Sikele	Maize, Teff, Wheat, Banana, Goat, Sheep, Butter
	Kemba	Otollo	Barely, Maize, Wheat, Coriander, Goat, Sheep, Butter
	Gofa Zuria	Sawula	Maize, Teff, Haricot bean, Ginger, Coffee, Sheep
Gedeo	Wonago	Dilla	Maize, Wheat, Teff, Coffee, Goat, Sheep, Butter
Guraghe	Meskan	Enseno	Maize, Wheat, Haricot bean, Red pepper, Goat, Butter
Hadiya	Lemo	Hossiana	Maize, Wheat, Teff, Coffee, Red pepper, Goat, Sheep, Butter
K.Tembaro	Kacha Bira	Hadaro	Maize, Teff, Ginger, Coffee, Goat, Sheep, Butter
S. Omo	Hamar	Turmi	Maize, Sorghum, Goat, Sheep, Butter
Sidama	Aleta Wondo	Aleta wondo	Maize, Teff, Wheat, Goat, Sheep, Butter
	Hawassa Zuria	Hawassa town	Maize, Teff, Wheat, Coffee, Goat, Sheep, Butter
Silitie	Dalocha	Dalocha	Maize, Wheat, Haricot bean, Red pepper, Goat, Butter
Konso S.W.		Karat	Maize, Sorghum, Goat, Sheep, Butter
Wolayita	Sodo Zuria	Sodo	Maize, Teff, Wheat, Coffee, Avocado, Goat, Sheep, Butter

* Results of collection in March 2008. Source : WFP Hawassa sub-office

(6) Livestock Information Network and Knowledge System (LINKS)

LINKS is a sub-project for Enhanced Pastoral Livelihoods in East Africa within the Global Livestock Collaborative Research Support Program being implemented by Texas A&M University and funded by USAID. LINKS provides regular livestock prices and volume information on most of the major livestock markets in the pastoral regions of Ethiopia, Kenya and Tanzania, along with information on forage conditions, animal disease outbreak, water supply and conflicts.

LINKS has a total of 27 monitoring sites in Ethiopia; Afar (3 sites), Somali (3), Amhara (4), Tigray (3), SNNPR (4), Oromia (6), Dire Dawa (1) and Addis Ababa (3). Livestock prices are collected on every market day of the week by a trained livestock market monitor. LINKS has a grading system which consists of a combination of visual assessment of body condition (% of body fat) and classes.

The data are coded and transmitted directly to the national database using SMS. Most of the collected information is posted at their website (<http://links.tamu.edu/Pages/Public/Home.aspx>).

Table 3.3-5 Market centers in SNNPR being covered by LINKS for data collection

Zone	Market center
Wolayita	Boditi
Bench Maji	Mizan
South Omo	Jinka
Hadiya	Hosana

Source : MoARD “A draft working document to establish national agricultural marketing information service in Ethiopia (June 2008)

(7) Other Regional States

Since the introduction of decentralization, regions have started activities for agricultural market information service.

1) Tigray Region

It was observed that Tigray’s information system; operated by Tigray Agricultural Marketing Promotion Agency (TAMPA) with support from IFAD was the most well-established system among the regional AMIS as of February 2011. Weekly prices, long term prices and graphical prices and supply information for crops and livestock in different markets in Tigray region were posted on the website (<http://www.agrimartg.org>). Bulletins (Market link Tigray) were issued regularly 2 times per month. According the TAMPA’s data collection sheet for enumerators, prices for a total of 56 items were collected.

In April 2012, TAMPA website (<http://www.agrimartg.org>) was not accessible or didn’t exist. It seems that the domain service came to renewal time in March 2012 and it was not extended, although the exact reason is unknown.

2) Oromia Region

In the case of Oromia region, the Agricultural Marketing Agency is the responsible body. An outline of activities on market information services was as follows (as at February 2011).

- 19 marketplaces including 4 marketplaces in Addis Ababa were selected. Prices were being collected at 14 marketplaces. Price collection from 5 marketplaces would start soon.
- Collections covered a total of 81 items, and were made 2 times per week.
- Classification of items was made in detail; cereals/pulses were classified by type and some vegetable/spices were by origin of production.
- Type of prices collected were as follows:

Wholesale price (price of 100 kg (QT))
Retail price on Trucks
Retail price in Market places

X

Prices (Low, Medium and High)

- No quality standards/grading system were used.
- One enumerator at each marketplace was deployed. Enumerators belong to woreda administration.
- Collected data were transmitted by mobile phone (call to enumerators from the region office). Data were accumulated on Excel. No special software was used.
- To maintain the credibility of data, regional staff members visited the marketplaces (woreda) periodically.
- WoredaNet had been used for data transmission before, but problems with cost burden arose and its use was stopped.
- Website was under development for data transmission and data dissemination.

The website (www.oromiyaa.gov.et/) was accessible in the middle of 2011. But it is completely not accessible in/since April 2011.

3.3.2 Agricultural Marketing Directorate, MoARD

As of March 2010, Agricultural Marketing Directorate of MoARD had an idea to coordinate and streamline many different market information systems into an overall national system so that there would be an interface and communication between the systems. To determine the likely design and content of the national system, MoARD undertook a study with the participation of concerned stakeholders including CSA, EGTE, LINKS, WFP and Cooperative Agency.

According the available latest paper on agricultural marketing system development entitled “A draft working document to establish national agricultural marketing information service in Ethiopia (June 2008)”, institutional structure of national agricultural market information system was likely to be as follows.

- (1) System is run by MoARD while CSA plays an advisory role and publishes statistical data.
- (2) Roles of stakeholders of AMIS are as follows:
 - a) WoARD : A market monitoring unit with full-time experts will work for collection, transmitting, storage and dissemination of price data and supply/demand information on regular basis.
 - b) Regional Agricultural marketing Agency/BoARD : Responsible for setting rules/regulations of MIS operations, coordinating and monitoring, setting unified formats of commodity standard and measures/weights. Create database that mirrors and links with federal database. Disseminate information for regional users. Training of market monitors (enumerators) and supervising at operational levels.
 - c) MoARD : Establish and manage federal level AMIS. Store, process, analyze and disseminate domestic and international market information. Conduct customer needs assessment and provide market information to farmers, traders, processors, importer and exporters. Assess market potential. Analyze market shares, distribution channels, demand/supply, sales and

market development.

d) Collaborators : EGTE, CSA, DPPA, ECX, FAO, LINKS, etc.

IFAD/AMIP supported the MoARD on AMIS development. According to the information from the MoARD (as at March 2010), a Market Information Unit was formulated in MoARD, and MoARD would hire an international consultant to finalize the standard method of data collection (including coding system, quality standard/grading system for data collection) within year 2010.

Agricultural Marketing Directorate of MoARD was moved to MOT on October 2010.

3.3.3 AMIS operation by the SNNPR Regional Government

(1) History of AMIS installation before the Study

SNNPR BoARD (Marketing Agency) had an idea to establish a market information service which collects price information from 32 major marketplaces and distributes collected information through radio, fax and website. However, no concrete plan was prepared (to be precise, no written plan was prepared) which showed a detailed blueprint for a service/system and time frame/procedure for implementation. It was reported that the former owner of the marketing and input supply process had the following idea on services/functions to be established.

- Dissemination of previous week's prices in various marketplaces (including marketplaces outside of SNNPR such as Addis Ababa) by website, deliver to each woreda by fax/telephone, broadcast by radio and display at marketplaces.
- Dissemination of on-time price information by mobile phone, SMS text message and announcement at marketplaces.
- Database system by FAO's software "FAO-Agri-Market" (Microsoft access).
- Issue of quarterly/annual report, market analysis report.

To install the idea, in 2008, 15 marketplaces were selected to initiate the pilot operation of weekly retail price data collection. The guidelines on data collection method and various forms were prepared and training was conducted in May 2008 for zone/woreda level experts. Fax machines were also provided to some woredas. Broadband internet was installed in the office of the Marketing Agency which was located at the regional council.

Table 3.3-6 Selected 15 marketplaces in 2008

Zone & Special woreda	Marketplaces	Zone & Special woreda	Marketplaces
1. Kembata Tembaro	Durame	12. Sheka	Tepi
2. Hadiya	Hosana	13. Keffa	Bonga
3. Wolayita	Sodo	14. Alaba special woreda	Alaba
4. Sidama	Hawassa, Daye (Bensa)	15. Yem special woreda	---
5. Gamo Gofa	Arba Minch	16. Derashe special woreda	---
6. Dawro	---	17. Amaro special woreda	---

Zone & Special woreda	Marketplaces	Zone & Special woreda	Marketplaces
7. Guraghe	Butajira	18. Burji special woreda	---
8. Silitie	Werabe	19. Konso special woreda	---
9. Bench Maji	Mizan	20. Konta special woreda	---
10. Gedeo	Dilla, Wenago	21. Basket special woreda	---
11. South Omo	Jinka		

Source : JICA Preliminary study report 2009

The BPR started in 2008, and the Marketing Agency was downgraded to the Marketing and Input Supply Process and shifted its office to the BoARD. Many of the trained experts at zone/woreda level were moved/relocated; therefore, the initial operation of weekly retail price data collection at 15 marketplaces did not get on track.

The BoARD recruited two new graduates (experts) in 2009 who work for ‘database administration’ and AMIS. A new version of FAO’s database software “FAO-Agri-Market” was delivered to the marketing process by MoARD in 2009. A one hour demonstration was shown by the FAO expert but practical training on usage of the software to the BoARD experts has not yet been implemented. One of the new experts was sent to Tigray region to see the AMIS of Tigray region in Nov. 2009.

(2) State of AMIS operation and management system when the Study started in January 2010

Marketing and Input supply core process was divided into two processes; namely, into the Marketing core process and Input core process in Nov. 2009. Marketing core process had a total of 8 experts, and 1 expert (Database administration expert who was still fresh out of college; recruited in 2009) was fully engaged in the job of price data collection. Another 2 experts were partly engaged in data collection from ZoARDs to support new staff. Activities on market information service were as follows.

- Collect weekly price data from 14 zones/special woredas in the region.
- Send price data to regional office by fax, by telephone or by someone.
- Summarize gathered data (only crop commodities) in a table (Microsoft excels). It was expected to disseminate the collect data to all zone/special woreda periodically, although it was not practiced.

Table 3.3-7 Data collecting zones & special woredas

Zone & Special woreda	Data collecting	Zone & Special woreda	Data collecting
1. Kembata Tembaro	X	12. Sheka	X
2. Hadiya	X	13. Keffa	X
3. Wolayita	X	14. Alaba special woreda	X
4. Sidama	X	15. Yem special woreda	
5. Gamo Gofa	X	16. Derashe special woreda	
6. Dawro		17. Amaro special woreda	X
7. Guraghe	X	18. Burji special woreda	

Zone & Special woreda	Data collecting	Zone & Special woreda	Data collecting
8. Silitie	X	19. Konso special woreda	
9. Bench Maji	X	20. Konta special woreda	
10. Gedeo	X	21. Basket special woreda	
11. South Omo	X		

Table 3.3-8 Items of data collection

Crops and others	Cereals	Teff (white, mixed, red), Wheat (white, red), Maize
	Pulses	Haricot bean (white, red), Horse bean, Field pea
	Fruits	Banana, Mango, Avocado, Pineapple, Apple
	Spices	Red chili pepper, Cardamom, Ginger
	Others	Honey
Livestock	Ox	Ox (big, medium), Ox for plowing, Bull calf, Calf
	Cow	Lactating cow, Dry cow, Heifer, Calf
	Goat	Doe, Yeanling, Buck, Fattening goat, Kid
	Sheep	Ewe, Yeanling, Ram, Fattening sheep, Lamb
	Chicken	Cock, Layer, Pullet

Source : BoARD - SNNPR

(3) Observed problems/difficulties in the field works of the 1st year (Jan.-Apr. & Jul.-Sep. 2010)

To put it simply, AMIS (to be precise; data collection system) by the administrative chain of the market process was not systematic/organized; not regulated/disciplined. The core cause of this situation was an absence of blueprints and shortage of manpower.

1) Major Problems

- Delivery of data to BoARD from some ZoARDs are not prompt. There are some zones such as Hadiya, Keffa and Kembata Tembaro zones which seldom send the data to the region. Kembata Tembaro zone has only 2 experts in the marketing process, and they have declared they will stop collecting price data until additional staff is deployed.
- Items as well as forms for data collection and summary sheet have been revised recently. But still many zones/woredas use the old ones or their own forms. Therefore, there is no uniformity in data sheets.
- It was suggested to collect 5 data from different venders on each item. However, it is presumed that this rule is not adequately applied.
- Methods of data collection from woredas by ZoARDs are not the same. Some zonal offices such as Sidama ZoARD collects data from many woredas through the marketing process of WoARDs in the zone, while others such as Kembata Tembaro ZoARD does not use WoARDs to collect data; zonal expert collects from a marketplace in zonal town.
- Collected data by WoARDs are not utilized in most cases; just stored in a file.
- There is no activity (periodical monitoring) to assure the credibility of collected data.

2) Causes (Underlying problems)

- Usage of collected price data (priority target beneficiaries) is not clear. There is no clear/common understanding what to do with collected price data.
- There is no blueprint of AMIS systems; therefore jobs are not systematized /organized.
- Lack of manpower : Marketing and input supply processes were divided into Marketing process and Input supply process in Nov. 2009. Although the expected number of staff is 5 to 8 for zonal level, 6 to 7 for woreda level and 18 for regional level, actual numbers are very limited; 2 to 3 in most zone and woreda, and 8 for region. Many zones/woredas have no specifically-assigned staff on AMIS.

Table 3.3-9 Number of experts at Zone/special woreda Marketing Process (as at June 2010)

Zone & Special woreda	Experts at Marketing process	No. of woreda	No. of woreda which ZoARD collect price data *1	No. of woreda which has experts at Marketing process * 1	No. of woreda which has responsible expert for price data collection	No. of expert at woreda Marketing process		
						Av.	Inter mediate	Max .
1 Guraghe	3	13	12	13	12	3.6	3	6
2 Silitie	2	8	5	5	2	2.2	2	3
3 Hadiya *2		10						
4 Kembata Tembaro	3	7	7	7	7	2.9	3	4
5 Wolayita	3	12	9	10	8	3.5	3	5
6 Sidama	4	19	16	17	15	3.6	3	6
7 Gedeo	3	6	6	6	5	3.2	2.5	6
8 Gamo Gofa	4	15	3	4	2	2.3	1.5	5
9 Dawro	2	5	2	1	1	2	2	2
10 Keffa	1	10	3	3	1	2.3	2	4
11 Sheka	2	3	3	3	2	3	3	4
12 Bench Maji	3	10	8	8	5	2.3	2	4
13 South Omo	3	8	4	4	2	1.5	1	3
14 Alaba S.W	3				1			
15 Yem S.W	2				1			
16 Konta S.W	3				1			
17 Basket S.W	1				0			
18 Amaro S.W	3				1			
19 Burji S.W	3				1			
20 Derashe S.W	3				1			
21 Konso S.W	4				0			
Total	55	126	78	81	68			

Notes : *1 : excludes town administrations *2 : No reply made by Hadiya zone

Source : AMIS Baseline survey (June-July 2010), BoARD / JICA Study team

- Poor equipment : Resources for the work (PC, Printer, Fax, Office space) are not adequate, especially at newly established woredas.

BoARD was reformed to BoA and BoMC on October 2010, and WoARDs were also reformed to WoAs and WoMCs. A large number of WoMCs moved to new offices, and state of poor office equipment got worse (only desks and chairs) in many WoMCs.

- Shortage/lack of operating budget: WoARD/WoMC have no adequate operating budget for consumables (A4 paper, printer toners, etc.), for communication (mobile cards) and for transportation (bus fare, fuel). 14 WoMC C/Ps of PP01 reported that they faced lack of budget for consumable such as A4 papers, pins to post price information on the bulletin board.

Other difficulties

- Market day is not uniform, and quite a few marketplaces have market day on Saturday.
- Regional experts have no authority to command zonal and woreda export(s) directly.

3.3.4 Available resources for AMIS development

(1) Mobile telephone service and data communication service

Mobile telephones are an indispensable tool for any trade activities and it can be said that all traders who handle agricultural commodities have one. On the other hand, farmers' possession of mobile phones is still limited. However, many leader farmers of union/primary farmers cooperatives and kebeles are using mobiles.

In Ethiopia, mobile telephone service is monopolized by Ethiopian Telecommunications Corporation (ETC). ETC Hawassa branch and Walayita branch cover the SNNPR area. A mobile network has been developing along the main roads, and it is reported that most areas along the main roads in SNNPR have been covered by the network. Remote areas such as Sheka zone, Yem special zone, Amaro special zone and Basketo special woreda were not covered by the network as of Dec. 2009 (SNNPR Capacity Development Bureau data).

Two types of mobile internet services are available at present time; CDMA and EVDO, and users are increasing. The theoretical speed of data transmission is 128Kbps for CDMA, and 3Mbps for EVDO. Although the data transmission speed of CDMA is not so fast (a little better than the dial-up method), usage cost of CDMA is cheap (6 Birr/hour) and CDMA service covers wider range than EVDO service. EVDO modem (USB type) is required to use the service. Usage cost of EVDO is not cheap; 300 – 500 Birr/month for 1GB to 2GB data transmit. EVDO service is not available in many parts of rural area. Usable communication tools at 14 WoMC offices of PP01 were summarized as follows.

Table 3.3-10 Usable communication tools at PP01 Ginger WoMC (as of March 2011)

WoMC	Electricity	Land phone	Internet access		
			Dial up	Mobile internet	CDMA
Boloso Sore	Av	Av	Av	(Av)	Av
Boloso Bombe	Av	N.A.	N.A.	Av	N.A.
Kindo Koisha	Av	Av	Av	(Av)	N.A.
Hadaro Tunto	Av	??	??	(Av)	N.A.
Tembaro	N.A.	N.A.	N.A.	(Av)	N.A.

Av : Available, NA : Not available, (AV) : not confirmed by mobile, guess of WoMC C/P

* JICA Study Team did not possess a tool (Android mobile) to check the availability of mobile internet (EDGE service) in March 2011.

Table 3.3-11 Usable communication tools at PP01 Haricot bean WoMC (as of June 2011)

WoMC	Electricity	Land phone		Internet access		Fax machine
		in office	in compound	Mobile internet	CDMA service	
East Badawacho	Av	Av		Av	N/A	In compound, but not working
West Badawacho	N/A, but planned	N/A	N/A	?	Av	N/A
Damot Gale	Av	Av, but disconnected	N/A	Av	N/A	N/A
Sodo Zuria	Av	Av		Av	Av	N/A
Halaba	Av	Av		Av	?	N/A
Loka Abaya	Av	Wireless, but broken	N/A	N/A	N/A	N/A
Boricha	Av	N/A	N/A	Av	N/A	N/A
Burji	Av	Av		?	Av	N/A
Amaro	Av	Av		?	Av	N/A

Av : Available, N/A : Not available, Mobile internet = EDGE service

Available communication services in many woredas are very limited, and AMIS by Internet is not applicable now in SNNPR. Mobile phone service (voice and SMS) is the only tool usable for exchanging information among WoMC offices. However, the implementation of PP01 revealed that current mobile network/SMS service is not highly reliable, because network failures often hindered the immediate sending/receiving SMS messages (price information). Also there were missing SMS messages in spite of their having been transmitted.

(2) Radio stations

Debubu FM 100.9

Regional FM radio (Debubu FM 100.9) is operated by SNNPR Mass Media Organization (Bureau of Communication Affairs). Debubu FM 100.9 has a key station in Hawassa town and 7 sub-stations (Welkite, Bonga, Mizan, Waka, Arba Minch, Jinka, Daye), and it covers the whole area of SNNPR.

Debubu FM 100.9 broadcasts the price information including agricultural commodities at 13:00 p.m. and 16:00 p.m (each broadcasting period is 3 minutes) twice a week (i.e. @3 minutes x 2 times/day x 2 days/week). Price data are provided by the Bureau of Trade and Industry (Trade Promotion Core Process). Prices of other regions and Addis Ababa are not covered at the present time. They say that the BoTI obtains price data from consumer cooperatives and others.

It is assumed that there is a high possibility to upgrade the current program for price information; by adding more commodities/marketplaces, by increasing the frequency of broadcast. Each sub-station has time to broadcast the local programs. It must be possible to broadcast market information at each locality.

Community FM Radio Stations

There are three community FM radio stations in SNNPR; namely Kambata Community Radio

(Kambata Tembaro zone), Amaro Community Radio (Segen zone), Sidama Community Radio (Sidama zone). It has been confirmed that Kambata Community Radio will broadcast market information at no charge, whereas Amaro Community Radio will require at some charges. ZoMCs provide price information to Kambata and Sidama Community Radio on irregular basis respectively.

AM Radio Station

An Educational Radio Station is located in Sodo city. This radio station uses AM wave. It has been confirmed that price information can be broadcasted in the spare time of educational programs, with some charges.

(3) WoredaNet (Ethiopian Government Network)

WoredaNet is the government's network connecting all woreda, zonal, regional and federal government offices across the country. WoredaNet is a landline and satellite-based network designed with the primary objective to provide ICT services such as video conferencing, directory, messaging and Voice Over IP, and internet connectivity to the Federal, Regional and Woreda level government. The major objectives of the WoredaNet were as follows;

- To bridge the digital divide between urban and rural communities
- To provide knowledge and information to people
- To build organizational capacity at all levels of government
- To provide the lowest levels of government with accurate and timely information

WoredaNet uses both VSAT and landline links to connect to the internet and to other WoredaNet sites. Installation and commission of IT equipment and deployment of engineers for operation was made by the Ministry and Bureau of Capacity Building. Diesel generators were installed in non-electrified areas.

As at March 2010, they said that WoredaNet was installed in about 80% (104 woreda out of 134) of woredas in SNNPR. WoredaNet is the government network, and utilizing it for transmitting and receiving of market information by WoMC is basically possible. However, several difficulties were predicted through the observation of some WoredaNet sites in July 2010, such as:

- Use of internet connection is basically limited before/after normal working time. (It must be possible to use it during normal working time, if an arrangement is made between the bureaus.)
- If the responsible person of WoredaNet operation (key holding person) is not around, there is no way to use it.
- Available space to install a PC for AMIS in WoredaNet varies by location.

The SNNPR Finance bureau used WoredaNet to transfer financial data into their database system from woredas using their PCs installed in WoredaNet. However, this attempt was stopped after a very short-time due to the troublesome task of carrying many papers to WoredaNet everyday (heard from the finance bureau). Until now (March 2012), no agricultural administration in SNNPR utilizes the system.

3.4 Current Condition of Infrastructure for Agricultural Marketing

3.4.1 Road Conditions

There are two types of categorization for road networks that exist, in terms of ownership and management responsibility sharing between the federal government and regional governments. In addition, road networks under regional government involve unpaved roads and track roads - so called dry weather roads and community roads. The road network categories are classified as follows according to ownership and management responsibility.

Table 3.4-1 Road Network Categories and Responsibility

Type of Road		Responsible / Implementing				
		Federal Gov't	Regional Gov't	Woreda	Kebele	Others
All weather road	Asphalt paved (Ds1, Ds2)	⊙	⊙			
	Federal gravel paved (Ds3-Ds5)	⊙				
	Regional gravel paved (Ds6-Ds8)		⊙	⊙		
Dry weather road	Unpaved (Ds9)			⊙		
	Track road (Ds10)			⊙		
	Community road (Ds10)			⊙	⊙	

Source : JICA Study Team

The road development levels can be classified into 10 types, Ds1 to Ds10, according to the width and pavement types, as asphalt paved, tar broad, gravel metal and unpaved. Ds1 and Ds2 are asphalt paved and D3 to Ds8 are gravel paved and the other types are unpaved.

(1) National Plan for Road/transportation Development

In the early 1990s the road network in Ethiopia was limited to about 23,000 km, of which about 75% was counted as in poor condition. To cope with this situation, the government gave greater emphasis to improving the main road network and extending the regional road networks in order to meet the socio-economic development needs of the country. Consequently, the first phase of Road Sector Development Program (RSDP) was launched in 1997.

The first phase of the RSDP (1997-2002) was to create adequate capacity in the road sub-sector to facilitate and hasten the economic recovery process and improve the essential road networks to an acceptable condition. The second phase of RSDP was launched in March 2003. In this program, the government focused on network expansion, particularly the upgrading and construction of link roads to the deficiencies in access to potentially rich agricultural areas, and mobility in rural areas as a part of broad-based rural development strategy through the Ethiopian Rural Travel and Transport Program.

The third phase of RSDP has now been prepared in the context of the government's PASDEP. The

improvement works had been done through two phases, but the road/transport conditions are still poor, and it has left many problems as follows, which should be improved. These problems not only hamper the development of rural areas, but also cause high transportation costs and longer travelling time.

- Rural communities are isolated for significant periods of the year as they cannot access reliable all-weather roads. This situation indirectly affects their production and marketing of their agricultural products.
- People normally go to their farms on foot and the average distance is 5 to 6 km. Poor road conditions cause people difficulty in collecting water and fuel, marketing agricultural products and purchasing commodities and for livelihoods such as accessing markets, health care facilities and schools.
- Farmers have to sell their products in small lots in local markets at low prices and buy basic goods at high prices.
- Motor transportation is limited to inter-urban roads/routes, the service frequency is low and operating cost is high.
- Walking and non-motorized transport (head loading, back loading and animal modes) predominate the transport scene in rural areas.

Under these conditions, the following targets are set up by the end of 2009/10 under PASDEP.

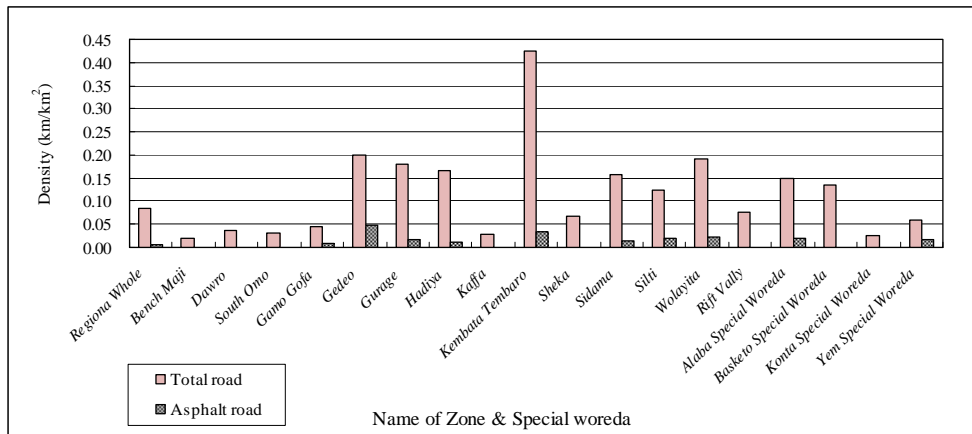
- Reduce the inhabited land area farther than 5 km from a road to 59%
- Reduce the inhabited land area farther than 2 km from a road to 81%
- Reduce average walking distance from a road to 3.2 hours
- Increase the road density to 54.1 km/1000 km² or 0.72 km/1000 people (including low class roads)
- Increase the rate of acceptable (good +fair roads) to 84% for all road types

(2) Present Situation of Road Networks in the Study Area

Since Ethiopia is a landlocked country, nearly 100% of the domestic product is transported by roads. The improvement of road conditions means improvement of the trading conditions of agricultural-products. The current road length in SNNPR is 16,574 km as of 2007/2008¹; it means the road density is 149 km/1000 km² or 1.1 km/1000 people. On the other hand, according to the Regional Road Plan 2010/11-2014/15 of SNNPR, the road density of Ds1 to Ds7 in the region shows 66 km/1000 km² or 0.63 km/1000 people and these figures are still below the target of the central government set as 54.1 km/1000 km² and 0.72 km/1000 people respectively.

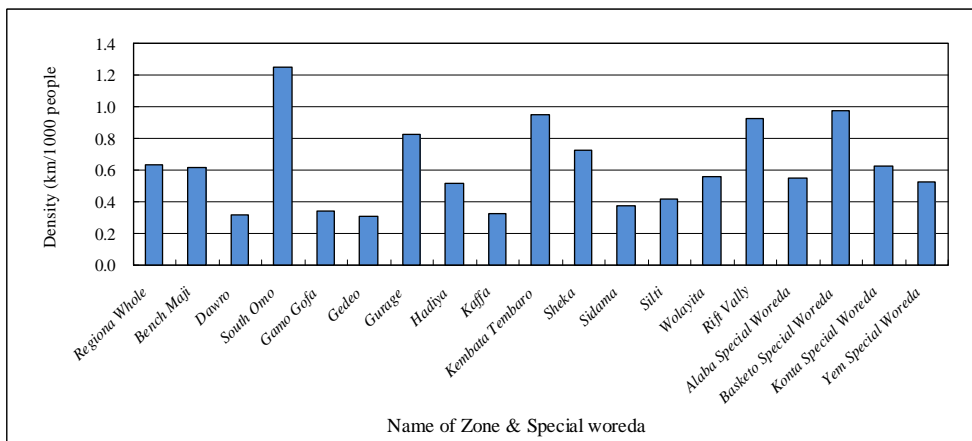
However, the road density per capita varies by woreda, high or low density areas are intermingled and some areas do not reach the target. Figure 3.4-1 and 3.4-2 below show such variation.

¹ Regional Statistical Abstract 2000 E.C (2007/08)



Source : JICA Study Team (based on Regional Road Plan 2010/11-2014/15)

Figure 3.4-1 Road Density per Area (km²) by Zone



Source : JICA Study Team (based on Regional Road Plan 2010/11-2014/15)

Figure 3.4-2 Road Density per 1000 people by Zone

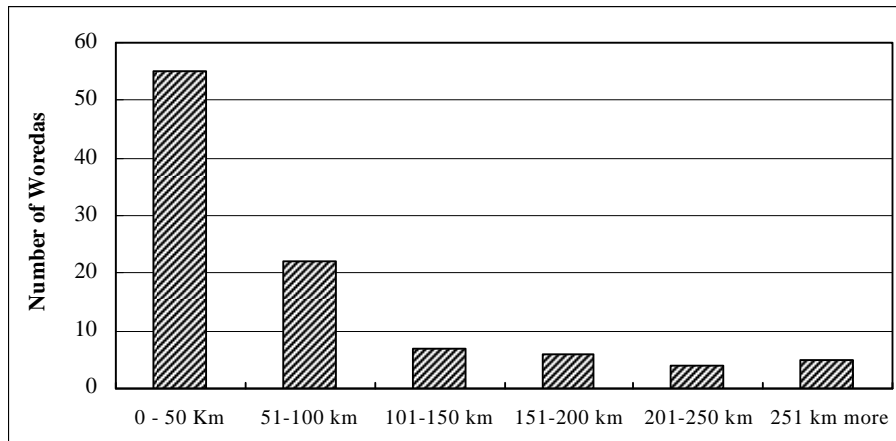
The all weather roads account for only 40% of total roads at 6,550 km. Moreover, according to a road network investigation conducted in 2002/2003 by the SNNPR Road Authority (RRA), more than 50% of total roads are categorized as under bad condition as shown in table below.

Table 3.4-2 Road Condition in SNNPR

Good	Fair	Bad	Extremely bad
4%	34%	35%	27%

Source : Road network investigation conducted in 2002/2003 by SNNPR RRA

There are 134 woredas in 14 zones plus 4 special woredas in SNNPR (as of 2012). Figure 3.4-3 presents distance between woreda town and its zone capital. 56% of them are within 50 km and 80% within 100 km, so, there seems no very serious problem on geographical distance between marketing distance between woreda and zone capitals.



Source : JICA Study Team (based on Regional Road Plan 2010/11-2014/15)

Figure 3.4-3 Distribution of Distance between Woreda and Zone capitals

However, out of 134 woredas, public transportation (bus service) between woreda town and zone capital is not available at 26 woredas (routes), and there are more than 200 km distance in 9 routes. In an extreme case, there is no public transportation for 603 km; between Gelila woreda and Jinka (capital of South Omo zone).

With these circumstances, the RRA has been implementing road development according to the Regional Road Plan 2010/11-2014/15 as discussed below, effectively with limited budget.

(3) Regional Road Plan 2010/11 -2014/15 in SNNPR

The RRA has been implementing regional road development in accordance with the Regional Road Plan 2010/11-2014/15 for 57 new road construction projects and 11 road rehabilitation projects of 1,578 km in total as shown in Table 3.4-3. The target density of the plan is set at 0.075 km/km².

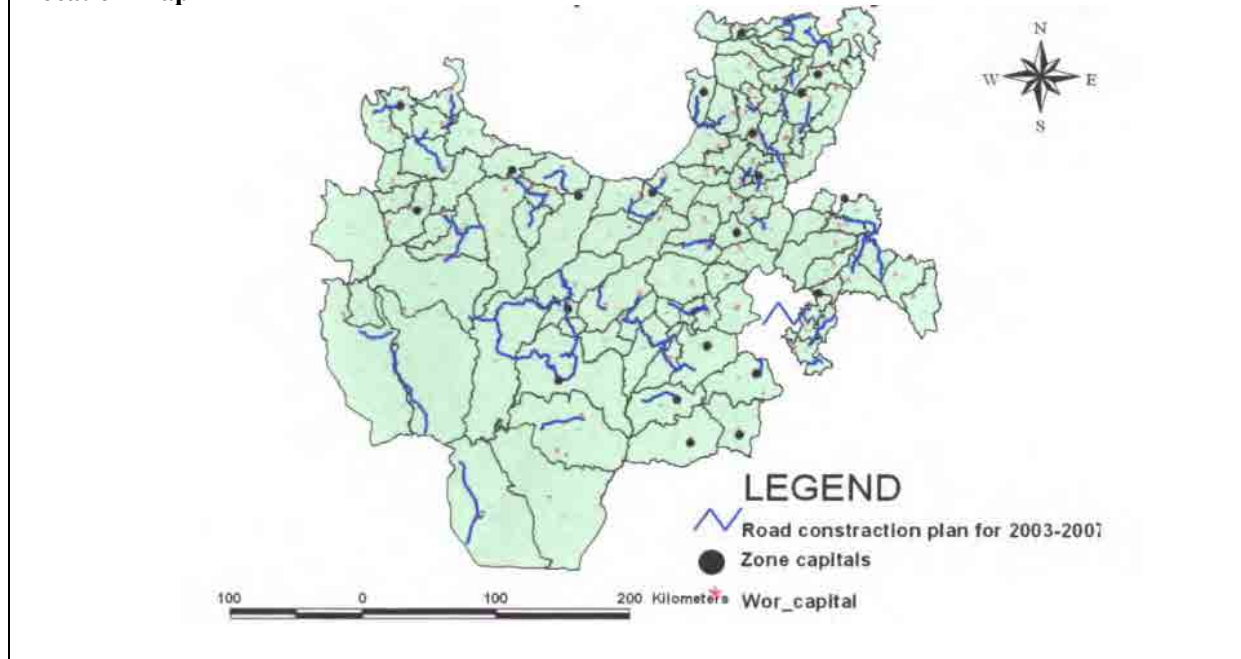
The plan is putting priority on the continuity of the previous 2009/10 construction and prioritizing future road development according to the following criteria:

- (1) Population pressure of woreda (40%)
- (2) Agricultural production potential (20%)
- (3) Economic growth (15%)
- (4) Extension of kebele and importance of road (10%)
- (5) Others (15%)

Table 3.4-3 Regional Road Plan 2010/11 -2014/15 of SNNPR

Zone / Special woreda	Proposed Road			Zone / Special woreda	Proposed Road		
	Length (km)	Road Type	Budget (mil ETB)		Length (km)	Road Type	Budget (mil ETB)
1 Bench Maji	163.0	Ds6	207.3	10 Sheka	26.0	Ds6	16.4
2 Dawro	32.0	Ds6	17.0	11 Sidama	103.5	Ds6	89.3
3 South Omo	251.0	Ds6 & Ds7	284.4	12 Silti	88.0	Ds6	66.3
4 Gamo Gofa	286.5	Ds6 & Ds7	288.6	13 Wolayita	68.0	Ds6 & Ds7	77.7
5 Gedeo	97.0	Ds6	98.2	14 Rift Vally	50.0	Ds6	26.6
6 Gurage	76.0	Ds6	65.7	15 Alaba S.W.	0.0	-	0.0
7 Hadiya	120.5	Ds6 & Ds7	119.1	16 Basketo S.W.	0.0	-	0.0
8 Keffa	132.5	Ds6 & Ds7	95.5	17 Konta S.W.	45.0	Ds6	63.0
9 K. Tembaro	20.0	Ds7	12.6	18 Yem S.W.	19.5	Ds6	27.3
Total					1,578.5		1,554.8

Location Map



Source: Regional Road Plan 2010/11-2014/15, SNNPR RRA

3.4.2 Agricultural Warehouse

(1) Situation of Warehouses in the Study Area

The number and capacity of the warehouse in SNNPR owned by local government, private sector and BoARD (for food security and input) are summarized below². The location of warehouses is unevenly distributed in the region.

² Warehouses owned/managed by cooperatives/unions and EGTE are not listed in the table.

Table 3.4-4 Situations of Agricultural Warehouses in SNNPR

Zone & Special woreda	Various Organizations		Private Company		Early Warning and Food Security				Agriculture Rural Dev.		Subtotal	
	nos.	Capacity (ton)	nos.	Capacity (ton)	Warehouse nos.	Capacity (ton)	Rub Hall nos.	Capacity (ton)	nos.	Capacity (ton)	nos.	Capacity (ton)
Guraghe	1	2,500			2	8,000	2	6,000			5	16,500
Silitie							2	3,000			2	3,000
Hadiya	4	8,700			2	20,000	3	12,500	2	3,500	11	44,700
Kembata Tembaro			6	6,900	3	15,000	1				10	21,900
Wolayita	3	13,000			4	16,000	2		25	117,000	34	146,000
Sidama	5	67,000	15	60,500	1	41,000	7	28,000	3	18,000	31	214,500
Gedeo											0	0
Gamo Gofa	8	51,000			10	59,000	4		7	39,000	29	149,000
Dawro					1	3,000	2		1	1,500	4	4,500
Keffa											0	0
Sheka											0	0
Bench Maji											0	0
South Omo											0	0
Alaba S. woreda	3	3,800					1				4	3,800
Yem S. woreda											0	0
Konta S. woreda											0	0
Basket S. woreda											0	0
Amaro S. woreda							1				1	0
Burji S. woreda							1				1	0
Derashe S. woreda							1				1	0
Konso S. woreda							2				2	0
Total	24	146,000	21	67,400	23	162,000	29	49,500	38	179,000	135	603,900

Various organizations include local government/municipalities.

Source: JICA Study Team (based on the information from BoARD)

According to the information from Marketing Process and Early Warning and Food Security of BoARD, the conditions of agricultural warehouses owned/used by cooperatives in SNNPR are in inferior condition in general. Deterioration of agricultural products occurs in such inferior warehouses even for short period storage. Numbers of available warehouses are also not sufficient. In addition, knowledge/skills of warehouse management should be trained for cooperative staffs to attain the proper operation of warehouses.

(2) Situation of Warehouses of Primary cooperatives

A warehouse sample survey of primary cooperatives was carried out to grasp the conditions and usage of warehouses by primary cooperatives. 8 cooperatives were selected among 62 cooperatives belong to Sidama Elto Farmers Cooperatives Union in Sidama zone. The selection was made based on the location (elevation) categories: i.e. highland, middle land and lowland.

Table 3.4-5 summarizes the results of the sample survey. The main usage is storage of fertilizer and seeds. Many cooperatives use their office or member's residence as warehouse. As shown in below photos, most of warehouses of primary cooperatives are made of wood and mud, and have only one entry door. Holding capacity varies from 35 to 200 ton. Some cooperatives own warehouse, and others seasonally rent warehouse for a short period.

Table 3.4-5 Warehouses of Primary cooperatives under Sidama Elto Union

Woreda	Primary Coop.	Type	Size LxWxH (m)	Holding Capacity (ton)	Door Size (m)	Major Commodity	Vent. +/-
Hulla (Highland)	Chironi	WM	6 x 5 x 2.65	50	0.8 x 1.7	Wt,Ba,Mz,Fb,Fp	+
		WM	7 x 8 x 2.7	90	1.2 x 1.9	>>	+
	Hanko Molcho	WM	6 x 15 x 2.9	160	1.1 x 1.8	>>	+
		WM	5 x 5 x 2.8	40	0.9 x 1.7	>>	+
	Abala	HB	12 x 7 x 4	200	1.8 x 2.5	>>	+
		HB	12 x 7 x 4	200	1.8 x 2.5	>>	+
CS+MW		12 x 6 x 2.7	115	1.3 x 1.8	Potato	+	
Boricha (Middle land)	Konsore A	WM	4 x 6 x 2.8	40	1.9 x 1.0	Mz, Hb	-
		WM	6 x 6 x 2.8	60	1.9 x 1.0	>>	-
		WM	6 x 6 x 2.8	60	1.9 x 0.9	>>	-
	Bonoya Chire	WM	4 x 6 x 2.6	35	1.0 x 2.0	Mz, Hb	+
		WM	5 x 6 x 2.6	45	1.0 x 2.0	>>	+
		WM	5 x 6 x 2.6	45	1.0 x 1.9	>>	+
	Shello Balela	WM	8 x 8 x 3	140	0.8 x 1.7	Mz, Hb	-
Lokka Abaya (Lowland)	Hantatena Akababiw	WM	9 x 6 x 3	100	1.9 x 1.9	Teff	+
		WM	9 x 6 x 3	100	1.9 x 1.9	Teff	+
	Hantatena Akababiw	WM	3 x 7 x 3	35	1.0 x 1.8	Teff	-

WM= Wood and mud, HB= Hollow block, CS= Corrugated sheet, MW= Meshed wire,
Wt= Wheat, Ba= Barley, Mz= Maize, Fb= Faba (horse) bean, Fp= Field pea, Hb= Haricot bean,
Vent.= Ventilation, + (equip), - (nil)

Source : Warehouse survey of primary cooperatives, JICA Study Team



Abala PC (Hulla woreda) has two warehouses with ventilation openings, built about 20 years ago, still under-utilized. The capacity is about 200 tons each.



Bonoya Chire PC (Boricha woreda) owns this warehouse. Stores maize and haricot bean.



Shello Balela PC (Boricha woreda) has rented this kind of warehouse from individuals.



Hantatena PC (Lokko Abaya woreda). Both 2 warehouses with 1 door and 6 windows that are rented from Kebele Municipality.

Photos : Warehouses of Primary cooperatives under Sidama Elto Union

(3) Problems and Issues on Agricultural Warehouse

Common problems of agricultural warehouses of cooperatives are summarized as follows:

- Most of warehouses are made of wood and mud, which are not suitable for a long-term storage of agricultural products.
- Most of warehouses have only one entry door, where it is difficult to practice a “first-in first-out system” for store management.
- Few warehouses have ventilation openings in wall.
- In some cases, office and ordinary house are used as warehouses of agricultural products.
- No usage of pallets or sheet on the floor when stacking bags of agricultural products.
- Fertilizer, agrochemicals and agricultural products are stored in a same warehouse; often without proper partition/division.
- Lack/limited knowledge of proper store management.
- Pest control (insects, birds, rodents and fungi) is not properly practiced.
- Lack of knowledge of fumigation.
- Many warehouses are too small to do fumigation.

3.4.3 Marketplaces

There are a lot of marketplaces in SNNPR and most of them are periodical market at open field; take place one or two times in a week. In viewpoint of facility situation, marketplaces in larger towns (zonal capitals and woreda principal towns) have some permanent/semi-permanent structures such as shops and stores. Village marketplaces are open-field and have no structure or have only mobile stalls. However, poor condition of infrastructure in marketplaces is more or less similar in all marketplaces in the region.

Marketplaces are very important for farmers to cash their farms products, to buy daily necessities and to interact socially with other people. Marketplaces in major production areas play a roll in assembling farm products and function as a starting point of distribution to urban markets.

In general, local administration is responsible about the management of marketplace. Actual management work performed by local administration is mainly allocation of spaces to vendors and collection of taxes. Cleaning of marketplace also performed but it is often insufficient.

(1) Present situation of Marketplaces in SNNPR

Results of the Market Inventory Survey

The Study Team conducted a market inventory survey in April 2010 to grasp the current situation of marketplaces in SNNPR. Figure 3.4-4 and Table 3.4-6 below show the results of survey. To classify the scale of marketplaces, following 3 categories were adopted in the survey.

Size category	Definitions
Zonal (Large)	: Marketplace where people of more than 7 woredas utilize (products from more than 7 woredas are traded)
Woreda (Medium)	: Marketplace where people of less than 7 woredas utilize
Local (Small)	: Small marketplace where people within a woreda (3-6 kebeles) utilize

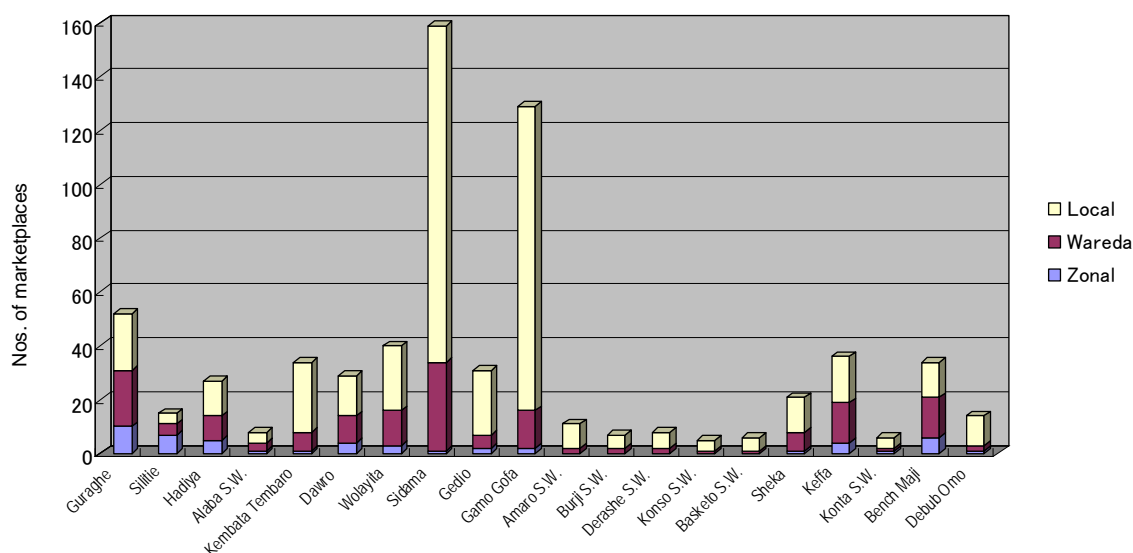


Figure 3.4-4 Numbers of Marketplaces by Size category in SNNPR

Table 3.4-6 Results of the Market Inventory Survey

Zone & Special woreda		Nos. of marketplaces				Major traded products to external area/within zone				
		Zonal	Woreda	Local	Total					
Eastern part of SNNPR										
1	Guraghe	10	21	21	52	Wheat	Maize	Irish potato	Fruits & veg.	Barely
2	Silitie	7	4	4	15	Wheat	Teff	Barely	Irish potato	Pepper
3	Hadiya	5	9	13	27	Wheat	Maize	Fruits & veg.	Barely	Teff
4	Alaba S.W.	1	3	4	8	Pepper	Maize	Haricot bean	Teff	
5	Kembata Tembaro	1	7	26	35	Wheat	Maize	Ginger	Fruits & veg.	Barely
6	Dawro	4	10	15	29	Maize	Ginger	Pulses	Wheat	Root crops
7	Wolayita	3	13	24	40	Maize	Ginger	Pulses	Fruits	Cassava
8	Sidama	1	33	125	159	Barely	Wheat	Maize	Kocho	Fruits & veg.
9	Gedio	2	5	24	31	Kocho	Fruits & veg.	Maize		
10	Gamo Gofa	2	14	113	129	Maize	Fruits	Root crops	Teff	Pulses
11	Amaro S.W.		2	9	11	Maize	Teff	Pulses		
12	Burji S.W.		2	5	7	Teff	Pulses	Maize		
13	Derashe S.W.		2	6	8	Sorghum	Teff	Maize		
14	Konso S.W.		1	4	5	Maize	Teff	Pulses		

Zone & Special woreda	Nos. of marketplaces				Major traded products to external area/within zone					
	Zonal	Woreda	Local	Total						
Western part of SNNPR										
15	Basketo S.W.		1	5	6	Teff	Maize	Spices		
16	Sheka	1	7	13	21	Maize	Kocho	Pulses	Fruits	Honey
17	Keffa	4	15	17	36	Maize	Wheat	Pulses	Teff	Honey
18	Konta S.W.	1	1	4	6	Maize	Pulses	Teff	Wheat	
19	Bench Maji	6	15	13	34	Maize	Rice	Root crops	Spices	Pulses
20	Debub Omo	1	2	11	13	Maize	Wheat	Sorghum	Fruits	
SNNPR Total		49	167	456	672					

Source: Market inventory survey in April 2010, JICA Study Team

Following features / findings were clarified in the survey.

- 1) As shown in above results, there are total of 672 marketplaces in the region; 49 of zonal (large) marketplaces, 167 of woreda (medium) and 456 of local (small). The numbers of marketplaces are varied by zones. Two zones (Sidama zone and Gamo Gofa zone) have particularly-large numbers of local (small) marketplaces; account for 42% of the total.
- 2) Marketplaces in zonal capital and woreda principal towns are mainly managed by the respective woreda municipality, whereas rural marketplaces are managed by the kebele administration.
- 3) The condition of infrastructure in marketplaces is more or less similar in all zonal and woreda level marketplaces of the region.
 - All marketplaces have some demarcated places for each group of commodities. There are separate places for close, industrial commodities, vegetables, grains and other items.
 - In almost all marketplaces there is no permanent shelter where people cannot sell and buy commodities without difficulties during rain and strong sunshine.
 - It is only in Tula and Hawassa marketplaces where the municipality has started constructing such a permanent shelter.
 - There are some storage facilities at marketplaces. Most of the storages are individually owned and conditions are poor; small size, poor ventilation, inconvenient for loading/unloading works.
 - Almost all marketplaces lack drainage structure, drinking water supply and toilet facilities.
 - In all woreda and zonal marketplaces, there are flour mills.
 - All zonal marketplaces are accessible by all weather roads. As for the woreda marketplaces, most of them can be accessed from zones and other woredas by all weather roads. However, all the local markets are accessible only by dry weather roads.
- 4) Daily net income of most small-scale traders is low. Perishable products are usually sold by women petty traders.
- 5) Improvements suggested by zonal and special woreda experts are: Market infrastructural development, post harvest handling and value addition, quality control and improvements, market center establishment, strengthening the market information system, improving and widening market linkage, market study and capacity building and awareness creation.

Population for each marketplace

Based on the CSA survey data (Ethiopia's Rural Facilities and Services, 2007/08, draft), the populations per marketplace were computed. The result shows that, as a whole region, there are about 8,000 people for one marketplace.

Table 3.4-7 Population per marketplace in SNNPR (2000 E.C. / 2007-08)

Zone & Special woreda	Major towns	Computed populations per marketplace
Guraghe	Welkite	6,000
Silitie	Werabe	16,000
Hadiya	Hosana	17,000
Kembata Tembaro	Durame	17,000
Wolayita	Sodo	6,000
Sidama	Hawassa	6,000
Gedeo	Dilla	10,000
Gamo Gofa	Arba Minch	10,000
Dawro	Tercha	8,000
Keffa	Bonga	12,000
Sheka	Masha	2,000
Bench Maji	Mizan Tefferi	16,000
South Omo	Jinka	22,000
Alaba special woreda	Alaba Kulito	N.A.
Yem special woreda	Fofa	12,000
Konta special woreda	Ameya	14,000
Basket special woreda	Laska	10,000
Amaro special woreda	Kelle	4,000
Burji special woreda	Soyama	8,000
Derashe special woreda	Gidole	16,000
Konso special woreda	Karat	32,000
SNNPR		8,000

Source: Data based on the first draft of Ethiopia's Rural Facilities and Services, CSA

(2) Problems and issues on Marketplace

Major issues are summarized as the following:

- Very poor hygiene conditions in the marketplace especially during rainy season.
- Very poor basic infrastructure and facilities in the markets.
- Easy to suffer damage by weather conditions such as rain.
- High losses of perishable farm products due to insufficient shelters, storage and water facilities.
- Insufficient access roads (farm-to-market roads) as all weather roads.



Marketplace in Hadaro: Covering with temporary plastic sheet to protect from sunlight and rainfall.



Same as on the left: Too crowded but sanitary facilities such as toilets and water service are poor.



Local marketplace during fine weather: Some exhibition shelves can be found while normal exhibition is the display of product directly on the ground.



Marketplace in rainy season: Muddy condition on flat areas without drainage.

3.4.4 Telecommunications

Upgrading and expanding the telecommunication network and services are essential to modernize the market and trade sector and bring about regional growth as well as greatly support the rural economy. For example, having basic telephone access in villages allows farmers to get information on prices and market needs for their crops and livestock products.

At the wider level, cheap and reliable domestic and international communications, including access to the Internet, is important not just for business persons and exporters, but also to carry out duties of government, support the teaching-learning process, keep personal or family ties.

(1) Situation of Telecommunications in the Country

The coverage of telecommunications in Ethiopia is among the lowest in the world, with approximately 5 lines per 1000 persons, and 87% of the rural population living more than 5 kms from the nearest telephone service facility. On the other hand, telecommunications are one of the areas where the greatest improvement has been made in the past few years. Ethiopia has made a huge investment in the basic multimedia backbone including the laying of fiber optic cables, and the introduction of satellite and radio communication technologies in the past 3 years have facilitated the school-net, woreda-net and agri-net programs. On the basis of the above situation, the following targets were set up by the end of 2009/10 under PASDEP.

Table 3.4-8 Telecommunications targets under PASDEP

Items	Baseline (2004/05)	Target indicator (2009/10)
% of population within 5 km of telecommunication service	13%	100%
Tele-density for fixed line	0.85	3.87
Tele-density for mobile	0.56	8.1
Number of Internet customers	17,375	193,100
Kebeles with telephone lines (at least 5 lines)	3,000	15,000

(2) Situation of Telecommunications in SNNPR

The situation of telecommunications in SNNPR is summarised below.

Table 3.4-9 Status of Telecommunication in SNNPR (as of Dec. 2009)

Zone & Special woreda	Zonal town	Fixed Line (Nos. of subscript)	Mobil (Nos. of subscript)	Tele-density for fixed line/100	Tele-density for mobile/100
Guraghe	Welkite	9,703	7,096	0.76	0.55
Silitie	Werabe	1,924	1,150	0.26	0.15
Hadiya	Hosana	6,593	974	0.53	0.08
Kembata Tembaro	Durame	3,811	1,000	0.56	0.15
Wolayita	Sodo	10,091	2,914	0.66	0.19
Sidama	Hawassa	18,291	35,279	0.57	1.09
Gedeo	Dilla	4,320	662	0.49	0.08
Gamo Gofa	Arba Minch	7,544	6,550	0.47	0.41
Dawro	Tercha	500	2,000	0.10	0.41
Keffa	Bonga	2,384	1,500	0.27	0.17
Sheka	Masha	2,541	0	1.27	0.00
Bench Maji	Mizan Tefferi	2,516	1,500	0.38	0.23
South Omo	Jinka	1,980	2,800	0.34	0.48
Alaba S. woreda	Alaba Kulito	1,444	906	0.62	0.39
Yem S. woreda	Fofa	363	0	0.45	0.00
Konta S. woreda	Ameya	355	1,400	0.39	1.53
Basket S. woreda	Laska	0	0	0.00	0.00
Amaro S. woreda	Kelle	436	0	0.29	0.00
Burji S. woreda	Soyama	426	768	0.75	1.36
Derashe S. woreda	Gidole	360	680	0.25	0.48
Konso S. woreda	Karat	355	370	0.15	0.16
Average		75,937	67,549	0.50	0.45

Source: Department of Capacity Building

3.4.5 Selling Facilities along the Trunk Roads

There are three main routes for trading from SNNPR to Addis Ababa, namely Hawassa route, Hossana-Arba Minch route and Jimma route. In the locations of the transportation hubs or specialty areas of the fruits production such as banana, mango, lemon and avocado, these fruits are directly sold by farmers living along the main road. However, sales are unstable due to the inconvenience of the selling conditions. In other words, the small-scale sellers spread out along the road, and parking space is also limited. In addition, the fruits sold are of uneven quality. On the other hand, since rest facilities are not improved along the abovementioned route, it is inconvenient for the passenger who travels a long distance. BoARD (BoMC) shows an interest in the implementation of the selling facilities. However, since there is no management body at the sites, the plan is not progressing.

3.5 Current State of Cooperatives Movement

3.5.1 Current State of Cooperatives in Ethiopia

A Cooperative is an autonomous association of persons united voluntarily to meet their common economic, social and cultural needs and aspirations through a jointly owned and democratically controlled enterprise.¹ The modern form of cooperatives started in Ethiopia during the ruling era of Emperor Haileselassie I. Since then it has gone through several modifications, and now its duty or definition was brought to fruition on Proclamation No. 147/1998 issued on December 29, 1998 which is fully consistent with the Universal Cooperative Principles and the ILO Recommendation 193.

In Ethiopia, more than 85% of the population is engaged in the agricultural sector and the sector makes of 43% of GDP. In this situation, for Ethiopia's economic growth strategy, it is considered to be important and crucial to develop the agriculture sector as the key to accelerate its economic development. For that purpose, several strategies and policies have been developed since the current regime came into power. Those are Agricultural Development-led Industrialization (ADLI) strategy, Sustainable Development and Poverty Reduction Program (SDPRP), Food Security Strategy (FSS), Plan for Accelerated and Sustained Development to End Poverty (PASDEP) and, most recently, Growth and Transformation Plan (GTP). For implementing these strategies and policies, cooperatives are expected to lead them to successful results by improving smallholders' productivity, promoting commercialization and creating job opportunities. Their expected roles are not limited to only the economic aspect; rather, it is expected to play more of a central role in contributing to social and community development and improvement.

(1) National Status

As shown in the table below, the total number of cooperative members is about 5.9 million nationwide as of June, 2009. This figure is about 7% of the total national population and Federal Cooperative Agency² estimates that about 33% of the total population indirectly benefits from the activities and /or services of the cooperatives. Among the members, the percentage of female members is about 16.46 %. For the last 3 years, the number of registered primary cooperatives and memberships are increased about 1.2-fold every year.

Table 3.5-1 The Nationwide Facts of Cooperatives

Items	In 2005/2006	In 2007/2008	June 2009
No. of Registered Primary Cooperatives	19,146	23,167	26,672
No. of Members (total)	3,911,934	4,668,564	5,899,761
Ratio of Female Members (%)	11	18	16.46
No. of Agriculture Primary Cooperatives	5,974	6,825	8,747
No. of Non Agricultural Primary Cooperatives	13,172	16,342	17,925
No. of Consumer Primary Cooperatives	82	230	1,058
No. of Saving and Credit Primary Cooperatives	4,178	5,235	5,845

¹ Status of Cooperatives in Ethiopia, Federal Cooperative Agency, April 2009

² Federal Cooperative Agency was officially established on May, 2002 as response of the national expectation toward cooperative movement in the Country by the Article 55 (1) of the Constitution of the Country.

Items	In 2005/2006	In 2007/2008	June 2009
No. of Cooperative Unions	121	162	174
No. of Multi-purpose Unions	91	102	107
No. of SACCOS Unions	6	33	38
Total Capital of Unions (Birr)		156,327,436	208,909,493
Annual Income from employment in primary cooperatives (Birr)		451,766,500	
Annual Income from employment in cooperatives unions (Birr)		81,152,500	
Income generated by cooperative bank (employment, Birr)		9,300,000	
Dividend distributed to cooperative members (part of economic return per year, Birr)	10,000,000	15,000,000	
Total Economic benefits of cooperative sector (estimate, Birr)		542,209,000	

Source: Status of Cooperatives in Ethiopia. Federal Cooperative Agency, April 2009

As shown in the following table, the number of agricultural cooperative unions and members account for a major share of the total figures. For primary cooperatives, the number of non agricultural cooperatives comes first (41.6% share) but for membership, agricultural cooperatives accounts for more than 80% of the total figures and it is definitely the majority.

Table 3.5-2 Number of Cooperatives and Members

1. Agricultural Cooperatives:					
	Level of coop	No.	Ratio	Members	Ratio
	Primary	8,747	32.8%	3,997,568	83.8%
	Union	131	75.3%	2,788	72.4%
2. Non Agricultural Cooperatives:					
	Level of coop	No.	Ratio	Members	Ratio
	Primary	11,098	41.6%	292,570	6.1%
	Union	5	2.9%	163	4.2%
3. Financial Cooperatives:					
	Level of coop	No.	Ratio	Members	Ratio
	Primary	6,827	25.6%	477,817	10.0%
	Union	38	21.8%	898	23.3%
	Total (Primary)	26,672	100%	4,767,955	100%
	Total (Union)	174	100%	3,849	100%
	Grand Total	26,846		4,771,804	

Source: Federal Development Agency (April, 2009)

(2) Expected Roles of Farmers' Cooperatives

The cooperative societies in Ethiopia are playing a multi-functional role both in rural and urban areas.³ Cooperatives' collective actions are expected to contribute to increasing bargaining power, competitiveness for smallholder farmers, business opportunities, access to financial resources and skills and capacities to improve the living standard of their members and society as a whole. Based on

³ Status of Cooperatives in Ethiopia, Federal Cooperative Agency, April 2009, P8

such aspirations, cooperatives are expected to perform the following activities:

- 1) Input supply services
- 2) Production
- 3) Output marketing
- 4) Credit supply services
- 5) Value addition
- 6) Financial services
- 7) Social services

For input supply services, multi-purpose cooperatives are playing a major role in rendering this service. The agricultural inputs, mainly fertilizer, are distributed to farmers through the network of cooperatives. In case of value addition, some cooperatives have already started engaging in such activities as, *Packed honey, Packed ground nuts, Flour mills, Sesame cleaning and Edible oil extraction.*

Along with multi-purpose cooperatives, savings and credit cooperatives (SACCOs) have increased in number year by year. According to the data of the Federal Cooperative Agency, the aggregate savings mobilized by SACCOs in both urban and rural areas in the year of 2006 was 986 million Birr and as of year 2008, the average of savings mobilized per individual members in rural SACCOs was 176.33 Birr and savings mobilized per one primary rural SACCOs was 12,761.00 Birr.

(3) Challenges Faced by Farmers' Cooperatives

In spite of high aspirations for cooperatives in rural development of the country, most face inherent constraints in every aspect of their operation and are unable to execute the expected roles and duties. The followings are some of the major problems identified by the Federal Cooperative Agency.

- Low member loyalty (low member participation) due to inadequately addressing of their needs and problems by their cooperative
- Lack of capital
- Poor entrepreneurship skills
- Lack of horizontal and vertical integration of cooperatives
- Poor project formulation and implementing capacity
- Lack of competent Managers, Promoters and Board of Directors
- Poor business development support in the area of value addition
- Weak legal, audit and inspection support
- Absence of reliable and up-to-date market information and networking problems with partners

Because most of these identified problems are interdependent, a holistic approach is required for the steady growth of cooperatives, including creation of legal, policy and fiscal framework conducive to their organizational development.

3.5.2 Current State of Cooperatives in SNNPR

In line with the federal policy, the SNNP Regional Government set up an agency to assist and advise farmers in the formation and operation of cooperatives and in 2007 issued Proclamation 111/2007 (Hereinafter the “Proclamation”), further elaborating Federal Proclamation 147/1998. Through a number of restructuring efforts, in 2010 BoMC was established with an aim to promote market-oriented agriculture by capacity development of cooperatives as well as by formulation and development of conducive regulatory framework.

(1) Number of Cooperatives in SNNPR

SNNPR stands 2nd next to Oromia region with respect to the number of cooperatives. The number of primary cooperatives in the region is about 6,000 as shown in the table below. Among them, the number of multi-purpose cooperatives has reached over 1,000. Their prime activity is the distribution of agricultural inputs; some are also engaged in collective sales of agricultural commodities, mainly grains.

Table 3.5-3 State of Primary Cooperatives in SNNPR (2000 E.C. / 2007-08)

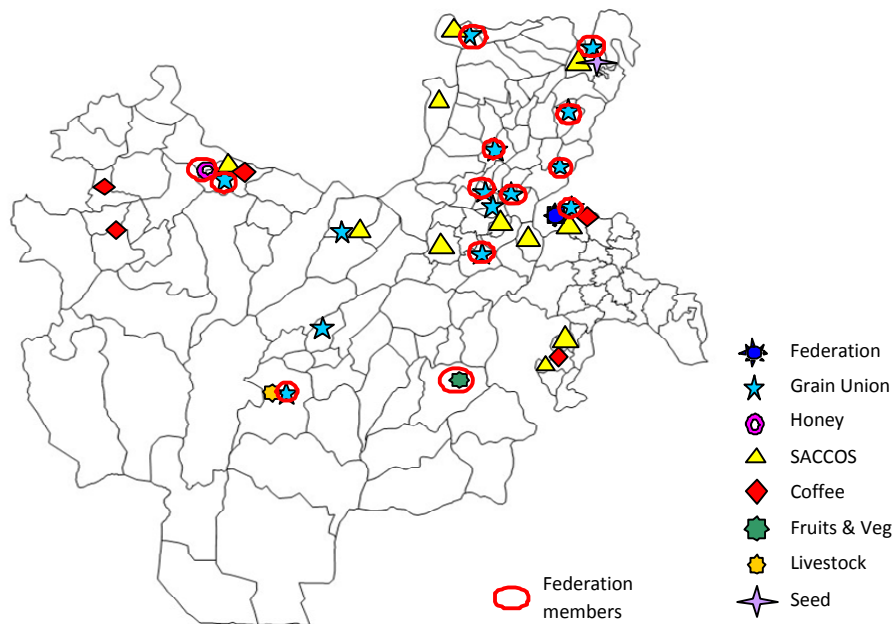
Type of Cooperative	No. of Cooperative	No of Members			Capital (Birr)
		Total	Male	Female	
Multi Purpose Coop.	1,025	835,100	752,773	82,327	157,074,040
Dairy Development Coop.	59	4,541	4,011	530	1,323,201
Saving & Credit Coop.	869	63,244	37,010	26,234	24,177,404.00
Consumers Coop.	52	3,444	2,562	882	1,512,278.00
Mining Coop.	9	467	445	22	150,636.00
Rural Electric Users Coop.	7	789	669	120	212,045.00
Handicraft Coop.	24	690	330	360	482,114.00
Housing Coop.	119	3,900	3,313	587	12,507,616.00
Services Coop.	20	818	509	309	643,972.00
Education & Training Coop.	5	289	218	71	257,373.00
Youth Association	3,310	105,347	90,669	14,678	2,473,540.00
Construction Coop.	13	290	279	11	265,688.00
Total	5,512	1,018,919	892,788	126,131	201,079,907

Source: Federal Cooperative Agency

34 Cooperative Unions (CUs), the 2nd level cooperative society, are operational in the region. Among 34 Unions, 41% are Grain Unions, 32% are SACCOS and 15% are Coffee Unions and the rest are Honey Union (1), Fruit and Vegetable Union (1), Livestock Union (1) and Seed Multiplication (1). As for location, unions are formed in almost all the zones except 6 special woredas namely, *Amaro*, *Burji*, *Konta*, *Basketeo*, *Konso* and *Derashe*, where not enough primary cooperatives which can form a union exist⁴. Table 3.5-4 is summary of the inventory study which covered CUs that are operating in the production and marketing of agricultural commodities targeted by the Study. Although most CUs are

⁴ To form a union, at least 2 primary cooperatives is required to be formed.

small in their capital, one union, Licha Hediya's Farmers CU, owns a flour mill factory and has been steadily expanding its business.



Source: JICA Study Team

Figure 3.5-1 Location of Unions and Federation in SNNPR

The region is the first in the country in organizing the 3rd level cooperative society. The Southern Region Farmers' Cooperative Federation (RFCF) was established and legally registered in 2008. As shown in Table 3.5-4, 13 cooperative unions are its members. The prime activity of RFCF is distribution of agricultural inputs, which is centrally imported by the Agricultural Input Supply Cooperation (AISCO), to primary coops (PCs) or woreda agricultural offices. In addition, it organizes the training programme for member cooperatives on an ad hoc basis. In the future, RFCF aims to export such commodities as haricot beans, sesame and ginger, particularly to Middle East countries.

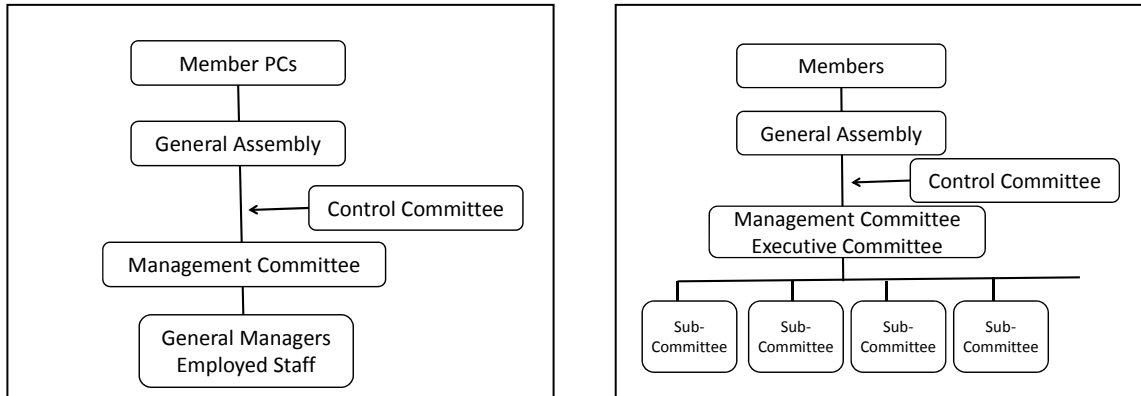
Table 3.5-4 Inventory Study Results on Cooperative Unions

Name	Type	Town	Zone	Estab.	No. of Staff	No. of Members (M/F)	No. of PC	Capital (million birr)	Latest Sales Volume (unit: Q)			Federation Membership
									Wheat	Maize	Teff	
Walcha Farmers Cooperative Union	Grain	Butajira	Garaghe	May 2003	9	7765 (M/6,747 F/1,018)	23	1.6	4,000	2,000	1,300	★
Admass Farmers Cooperative Union	Grain	Welkite	Garaghe	May 2003	12	24596 (M/21,827, F/2,769)	55	3.6	287	3,564	2,980	★
Melik Silite's Farmers Cooperative Union	Grain	Werabe	Silitie	March 2004	10	29960 (M/26,950, F/3,010)	54	3.6	4,451	2,000	NA	★
Lacha Hediya's Farmers Cooperative Union	Grain	Hosana	Hadiya	May 2002	30	89657 (M/73,268, F/16,389)	32	18	52,505	667	750	★
Matteiyoma Badewacho Farmers Cooperative Union	Grain	Shonei	Hadiya	February 2008	5	12374 (M/11,724, F/650)	10	0.6	NA	NA	105	
Ambericho Farmers Cooperative Union	Grain	Durame	Kembata Tembaro	June 2005	6	7113 (M/5,893, F/1,220)	21	1.7	7,000	5,000	2,500	★
Angacha Farmers Cooperative Union	Grain	Doyogena	Kembata Tembaro	May 2002	6	7944 (M/7,261, F/683)	9	1.5	10,000	3,000	NA	★
Damota Wolayita's Farmers Cooperative Union	Grain	Wolayita Sodo	Wolayita	February 2004	11	22780 (M/18,241, F/4,539)	63	5.3	NA	3,000	NA	★
Sidama Ealto Farmers Cooperative Union	Grain	Hawassa	Sidama	October 2003	11	8930 (M/8,444, F/486)	62	5.5	400	6,100	1,200	★
Esejpie Dieha Farmers Crop Marketing Union	Grain	Sewula	Gamo Gofa	October 2007	2	2611 (M/2,157, F/454)	15	2	No Sales	3,000	2,000	
Codefo Kaffa Farmers Cooperative Union	Grain	Bonga	Keffa	December 2007	3	5131 (M/4,139, F/892)	18	0.1	584	1,271	114	★
South Omo Grain	Grain	Jinka	South Omo	April 2005	4	12944 (M/12,834, F/110)	21	1.9	No Sales	4,500	NA	★
Manecheno Crop Producers Farmers Cooperative Union	Grain	Alaba Kulito	Alaba special woreda	December 2004	5	5580 (M/5,300, F/280)	17	1.5	NA	5,000	2,000	★
Ediget Farmers Seed Multiplication Marketing Cooperative Union	Seed Multiplication	Butajira	Garaghe	November 2009	9	875 (M/835, F/40)	13	0.3	NA	NA	NA	
Gamo Gofa Farmers Fruit & Vegetable Marketing Cooperative Union	Fruit & Vegetable	Arba Minch	Gamo Gofa	June 2005	13	1,329 (M/1,226 F/104)	15	0.5	Banana (37,000), Mango, Lemon, Apple, Pear, Plum, etc.			★
Oyissa Grain, Livestock & Livestock Products Marketing Cooperative Union	Grain & Livestock	Tercha	Dawro	September 2009	2	3,546 (M/3,273 F/273)	31	0.1	NA	NA	No Sales	
Kaffa Forest Honey Production & Marketing Cooperative Union	Honey	Bonga	Keffa	February 2007	4	1,658 (M/1,422 F/236)	7	0.2	Honey			★

Source: Created by the Study Team based on the Inventory Survey Results (March 2010)

(2) Operational and Managerial Set-up of Cooperatives

Since the cooperative is a legal entity formally registered by the concerned authority, its organizational structure, membership requirement, rights and responsibilities and others are clearly defined by the Proclamations. The organizational structure and duties of internal organs are some of those prescribed by the Proclamation in detail. The following figure shows the prescribed organizational structure of cooperatives. As shown below, there are differences in organizational set-up between those cooperatives with a hired manager and those without. Generally, CUs hire a manager while most PCs hire no manager due to financial constraints.



Union and Primary Cooperative with hired manager

Primary Cooperative without hired manager

Figure 3.5-2 Organizational chart prescribed by Proclamation

In any cooperative, all members consist of the general assembly, the supreme organ of a cooperative, which is entrusted to make a final decision on any matter related to the organization. The management committee comes under the general assembly. Its members are elected through the general assembly and can assume the position for not more than two consecutive terms of six years. The performance of the management committee is closely overseen by the control committee, which is also composed of the elected members, while the general assembly possesses overall authority over the management committee.

If a manager is hired, the daily operation of cooperatives is handled by the manager under the supervision of the management committee. On the other hand, those cooperatives without a hired manager are operated daily by an executive committee composed of the members of the management committee with the assistance of sub-committees such as a purchasing committee, a marketing committee, a loan committee and others. Other than a manager, CUs employ some more personnel to assist the manager for its day-to-day operation. Some of them are a secretary, accountant, cashier, storekeeper and others, who are employed in accordance with the volume and the nature of works. On the other hand, most PCs hire no administrative staff, except for an accountant in some PCs.

Although the general assembly and the management committee are vested with an absolute power to make decisions on all aspects of cooperative activities, the organizational success of cooperatives is

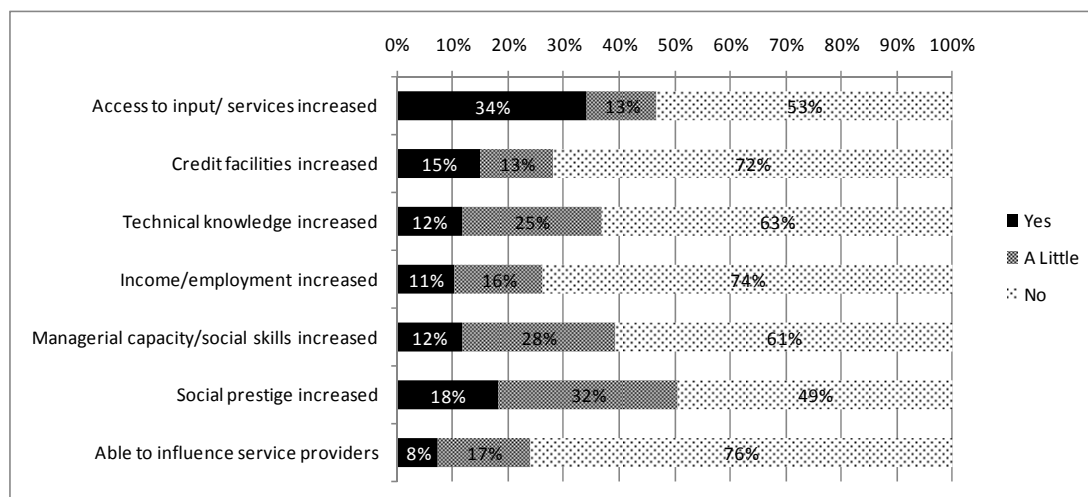
largely determined by the competency of those who handle daily business. As discussed above, a vast majority of PCs are run by elected members who have little experience in organizational and business management. In addition, the Proclamation requires that all the management committee members, including those in the executive committee, are subject to elections every three years. Besides, no one can serve more than two consecutive terms; that means that most PCs require constant training on basic skills and knowledge necessary for their operation and management. In the case of CUs, while all hire a general manager, not all of them have the financial capacity sufficient to have competent professionals in position. As practiced by some CUs, the introduction of an incentive system may help them to maintain a qualified manager, even if Unions are not able to pay attractive monthly salaries for the service of employed staff.

The Proclamation also stipulates the financial matters in relation to the cooperative management. The Proclamation obliges any cooperative to allocate 30% of its net profit to the reserve (Provision 43). The utilization of the remaining 70% is to be determined by the general assembly. While high dividends is surely a driving force for members to remain in the PC and for potential members to join, PCs are required to strike a balance between the dividend payment and the long-term investment to its development.

(3) Membership of Cooperatives

In SNNPR the number of PCs has been steadily increasing year by year. It is estimated that approximately 30% of rural households are members of agricultural PCs. BoMC assigns a community organizer at kebele level, who works under the supervision of WoMC. While they provide day-to-day assistance for PCs in their assigned locality, the organizers are engaged in awareness creation for farmers over the cooperative activities and its benefit. One community organizer in Sidama zone proudly confirmed that he had increased the number of PC members in his area by 80 within less than a year, resulting in membership rising from 420 to 500.

However, it seems that many farmers are not necessarily convinced of the benefits of cooperatives. The figure below shows the perception of farmers against agricultural cooperatives. In the Baseline Study undertaken by the JICA Study Team at the beginning of 2011, a total of 600 households were questioned. When asked about the benefits of cooperatives, as the Figure 3.5-3 indicates, they were more towards the negative side.



Source : JICA Study Team, Baseline Survey 2011

Figure 3.5-3 Perceived benefits of Agricultural cooperatives

Currently, many PCs are solely engaged in distribution of fertilizers and the number of those PCs working in agricultural commodity sales is rather small compared with the total number of agricultural PCs. Further, according to one CU manager, even those PCs which are involved in the collective sales of farming produce are able to purchase produce only from the very limited number of members due to serious financial constraints. Although the number of cooperative members has been reportedly increasing, activities of PCs are not as extensive as possible in making most farmers realize their benefits. Thus, as the study results show, many farmers don't find PCs very attractive for their livelihood improvement.

Participation of Women in Cooperatives

Women make up of only 12% of membership in PCs in SNNPR⁵. One of the main reasons for this is because most PCs register only one person from each household as a member. Since men are regarded as household heads in Ethiopia, they are the ones generally registered in PCs.

One exceptional case was observed in Sodo Zuria woreda in Wolayita zone. The woreda office had launched an official campaign for an increase in the number of women members in PCs starting from 2005/2006. PCs in woreda responded to this campaign positively and some amended their by-laws to set minimum a criterion of 25% for women's membership. In the case of the Gulegula PC, they started accepting both husband and wife from one household as members in order to observe the amended by-laws. Both husband and wife pay the membership fee separately and they sell commodities to the PC jointly and/or separately. The JICA Study Team met some members for discussion in which both men and women actively presented their views and opinions; this is extremely rare in rural Ethiopia. One of the members in discussion admitted the benefit of having women members, stating "Both of us work for the common goal. So, it is good to have women members."

The efforts of the woreda offices are reflected in the membership composition of Damota Wolayita Farmers Cooperative Union. Women consist of 20 % of total membership, much more than the average of 12%.

⁵ Source: Status of Cooperatives in Ethiopia, Federal Cooperative Agency, April 2009

3.5.3 Main Activities of Cooperatives

The major activities of cooperatives are two-fold. One is agricultural commodity transaction; purchase and sales of agricultural produces. The other is the facilitation of fertilizer distribution.

(1) Agricultural Commodities

1) Grain Transaction

Approximately 40% of CUs in SNNPR are grain unions and grain is a main commodity dealt with by cooperatives. The flow of grain transaction through cooperatives can be illustrated as Figure 3.5-4.

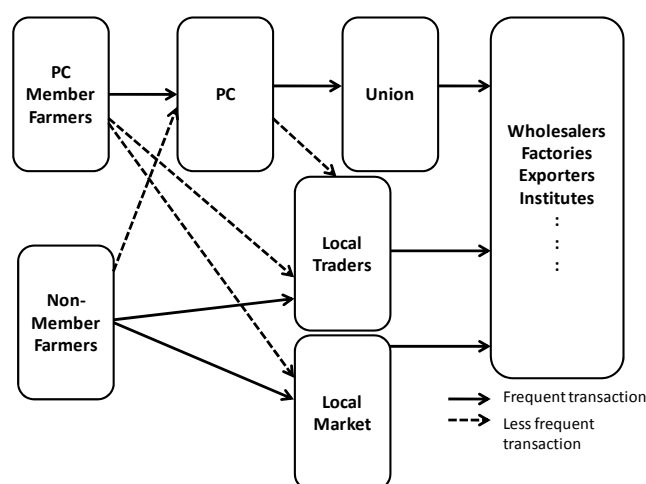


Figure 3.5-4 Grain Transaction through Cooperatives

Members as well as some non-members of PC sell their produce to the PC. Generally, PCs pay some birr⁶ more per quintal to farmers than local traders. As regards the quality of grain brought to PCs by farmers, Unions, government officials as well as PC themselves agreed that farmers had become more conscious about grain quality owing to the advice and training given to them. But at the same time they admitted grain quality needed to be much improved. Sometimes PCs are required to reject some grain brought by farmers because of its low quality. On the other hand, local traders accept grains regardless of their quality. If quality is low, they purchase it at a low price. Some of the reasons given by the PC officials and some member farmers why farmers preferred PCs to local traders are:

- PC pays generally better prices to farmers than local traders.
- Local traders often use a tampered scale to cheat the volume. That is why local traders are untrustworthy.
- In the case of members, they receive dividends at the end of the year based on the number of shares they have, as well as the volume of commodities they sold to PC.

Since most PCs receive a loan from the CU, in which they are members, for grain purchase, they

⁶ PCs contacted by the Study Team stated they usually paid around 5 - 10 birr more per quintal to the farmers than local traders.

mostly sell purchased grains to CUs. The frequency of the shipment of commodities from PCs to CUs differs from one PC to another. The availability and condition of the warehouse seem a major determinant to the number and frequency of the shipments. For example, one PC in Sidama zone expressed their frustration for lack of a warehouse. Because they possessed no warehouse for grains, they were required to send them to the union as often as every three to four days during harvest time. They complained that it deprived them of an opportunity to wait for a better price or to transact a large volume at a time.

CUs generally pay slightly better prices than local traders to PCs, especially if the grains brought by PCs are good quality. One CU manager stated that his union paid 30 – 40 birr more per quintal than the prevailing market price in the area if the quality of grain brought in by PCs was good. Another CU manager confirmed that it would be easy to find buyers if they can offer better quality grain in bulk. In such a case, according to him, the buyers would pay good prices which would sufficiently make up for the premium prices the CU had paid for PCs.

Grain cooperatives have been gradually expanding their operations. Nevertheless, their involvement in the transactions in SNNPR is still insignificant. Table 3.5-5 shows the volume of major grains transacted in SNNPR as well as that by the grain CUs.

Table 3.5-5 Volume of Grain marketed in SNNPR and by Unions

Commodities	Marketed Volume in SNNPR (ton)*	Traded Volume by Unions (ton)**	%
Maize	67,828	3,910	5.8%
Teff	88,288	1,395	1.6%
Wheat	61,477	7,923	12.9%

* CSA , Agricultural Sample Survey 2008/2009 (2001EC), Vol.VII (Bulletin 446)

** Created by the Study Team based on the Inventory Survey Results (March 2010)

Lack of sufficient capital and weak managerial capacities of both PCs & CUs are major hindrances for cooperatives to increase their transaction volume. However, in the case of wheat, 5,250 out of 7,923 tons transacted by the CUs was handled by one union. It strongly suggests huge potential for CUs to play a major role in grain marketing in the region.

2) Fruits Transaction

SNNPR has only one fruit CU. It is located in Gamo Gafa zone which is famous nationwide for its banana production. The main fruit marketed by Gamo Gofa CU is also banana while the CU tries to expand its commodities to some other fruits such as mango and apple.

As those CUs dealing with grains in the region, Gamo Gofa CU purchases the produce from its member PCs. The flow of transaction of banana through cooperatives can be illustrated as Figure 3.5-5.

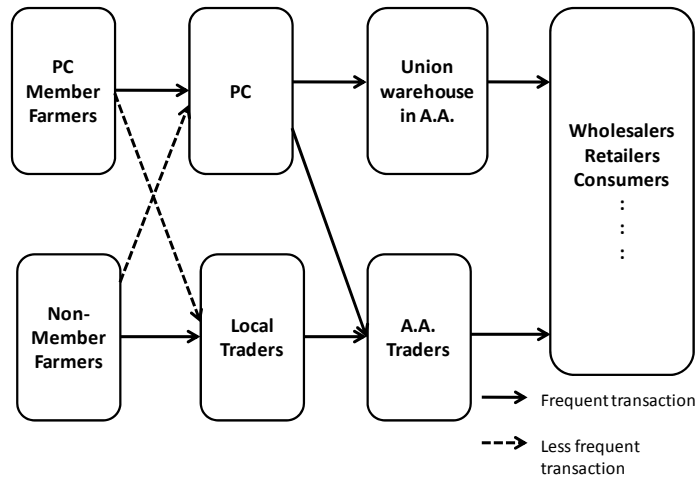


Figure 3.5-5 Banana Transaction through Cooperatives

According to the inventory survey conducted by the JICA Study Team in 2010, the CU reported that annual volume of banana transacted through the CU was 37,000 Qt, which accounted for approximately 10% of banana marketed in the zone.

As observed in any other part of the region, many farmers in Gamo Gofa zone complain about the way local traders do the business with them. Local traders allegedly manipulate a tampered scale and take advantage of weak negotiation power of farmers.

Unlike most counterparts in the region the banana farmers in Gamo Gofa have some experience in commercial activities because they have been engaged in commercial production of banana over twenty to thirty years. With assistance from a NGO, they managed to establish a direct contact with traders based in Addis Ababa. One woreda expert in the zone stated that after the establishment of PCs, farmers became able to directly negotiate with traders in Addis Ababa so as to fetch better prices than those offered by local traders. In addition, since the CU rented a warehouse in Addis Ababa in 2010, PCs started sending some of their produce directly to the CU warehouse. One PC with 54 members transacts the two to three full truck of banana every week and recently opened up a retail shop in Addis Ababa to sell their produce. However, members of this PC regrettably admitted that lack of skill and knowledge on business planning made it difficult for them to expand their operation and improve profitability as they wished. The CU is now exploring possibilities to expand its market to the northern part of the country as well as abroad, in particular Middle East countries.

Mango is another main fruit which is produced in this area. However, the involvement of the Gamo Gofa CU and its PCs in mango transaction has not been as active as banana transaction.

3) Ginger Transaction

SNNPR has a 99% share in the national ginger production and Kembata Tembaro and Wolayita zones are two main production zones in the region. Although ginger is regarded as an exportable commodity,

due to extremely poor post-harvest handling, the quality of ginger transacted in the local market is far below the world market standard. Thus, at present almost all ginger produced in the area seems to be domestically consumed.

In spite of the big volume of production in two zones, transaction volume of ginger through cooperatives is extremely small, in particular, those through CUs. A manager of Ambericho CU in Kembata Tembaro attributed a highly fluctuating ginger market and poor quality of ginger supplied by its PCs to its limited involvement in ginger marketing. It gave up four years ago its efforts to market dried ginger collected from PCs mainly due to these two reasons.

However, due to being encouraged by extremely good prices recorded in 2010/2011, Ambericho CU and Damota Wolayita CU in Wolayita zone started entering into the ginger business. In 2010 BoMC organized a matchmaking meeting in which exporters, traders and cooperatives were invited. Both Ambericho and Damota Wolayita CUs signed the Memorandum of Understanding with one of the exporters. Unfortunately, the exporter which had concluded the agreement with two CUs found quality and volume of ginger supplied by them very unsatisfactory. The CUs were able to collect and deliver to the exporter only part of what was ordered. In the case of Ambericho CU, what they managed to deliver was only 200 out of 1,000 Qt, which was ordered by the exporter. Because of low awareness of farmers over quality control, ginger was not properly dried, resulting in fungus and loss of value. Further, farmers were not convinced that prices offered were proportional to the efforts they were expected to exert. Poor communication between a CU and a PC, as well as a PC management and its members makes it very hard for this new venture to rightly take off.

(2) Distribution of Fertilizer

The other major activity of CUs is the distribution of fertilizer. The federal policy with regard to fertilizer procurement and distribution has been frequently revised over the last 20 years.

In the mid-2000's, CUs were allowed to participate in international bidding for fertilizer procurement. Accordingly, two unions in SNNPR were appointed by the then Cooperative Development Agency and procured fertilizer on behalf of all CUs in the region. In 2006 and 2007 the Licha Hadiya's CU imported 551,992 quintal of fertilizer with 183 million birr extended by the Commercial Bank of Ethiopia through the loan security support of the Regional Government. The profit obtained by the CU through this arrangement made a huge contribution to its establishment of a flour mill factory. In 2008 the Damota Wolayita CU undertook fertilizer import.

In 2009 CU was removed from fertilizer import. Instead the Agricultural Input Supply Cooperation (AISCO) was designated by the Federal Government as the sole agency for the procurement of fertilizer in the whole country. The Federal Government aimed at a further reduction in fertilizer prices through its bulk import. Simultaneously, the RFCF was established to undertake logistical arrangement of the fertilizer distribution in SNNPR.

The flow of fertilizer in 2009 is illustrated below. After receiving the fertilizer from AISCO, RFCF distributed it to CUs. Then, CUs shipped them to PCs for distribution to the farmers. The role of cooperatives in this context is simple facilitation of fertilizer distribution. CUs and PCs received three birr and eight birr per quintal for their facilitation. In 2010 this arrangement was again modified. RFCF shipped fertilizer directly to PCs, bypassing Unions. It further took away one of only a few financial sources from Unions.

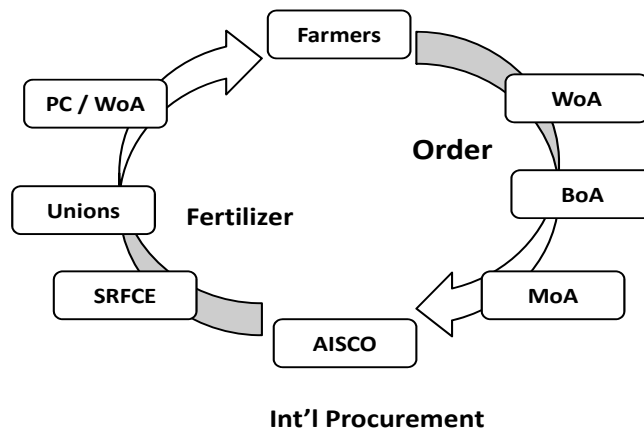


Figure 3.5-6 Flow-chart of Fertilizer Transaction in 2009

In any arrangement, PCs in collaboration with WoA and kebele administration were made responsible for the distribution of fertilizer to farmers. One union manager stated that the workload of PCs in this aspect was extremely heavy, disproportional to the margin they received, depriving them of time to work in other important businesses such as marketing.

3.5.4 Management and Finance of Unions and Cooperatives

(1) Auditing System of Cooperative Law

1) Checkpoints to evaluate the Feasibility of Cooperative Law

Both PCs and CUs are required to be subject to audit in accordance with the Proclamation regarding the cooperatives. The accountants of the PCs and CUs have to study bookkeeping and record daily sales and expenses. The financial statement consists of a profit-loss statement and balance sheet that should be aggregated at the end of the financial year, and the auditors sent from the “cooperative development main work process” check the detailed records. The procedures and required duties of the audit are clearly indicated in the guidelines of auditing; however, it is very hard to realize the audits of all PCs and CUs due to the shortage of human resources and a poor logistics system. Most PCs and some CUs are located in remote areas and thus miss opportunities to be subject to audit. The initial points to be discussed/ identified are listed below.

- a) Realistic audit schedule based on the existing resources should be formulated.
 - How many auditors are available in each zone?

- How many days do auditors need for one CU and/or one PC?
 - How much expense must be provided for allowances and transportation for each zone per year?
 - How many CUs and PCs can be realistically audited under the given conditions?
- b) Results of the audits should be reviewed.
- What is the audit's operation ratio in comparison with the original annual schedule?
 - What percent of PCs and CUs have been audited per year?
 - How many audits were completed by each auditor? (Review personal records of auditors.)
 - How did BoMC evaluate the quality of audit reports?
- c) Budget for the audits should be determined according to a realistic, concrete plan.
- Have necessary costs for audits including transportation and allowances been calculated?
 - Has necessary manpower for audits and salaries been calculated?
 - Has changing the payment system from fixed salary to merit-based pay been discussed?

2) Auditing Service Team in BoMC, SNNPR

Four auditors are assigned to cover the 41 CUs and 1 Federal CU. They completed less than half their assigned duty in the last fiscal year. The BoMC was disappointed by the results of their activities and encouraged the auditors to carry out more audits. Consequently, 19 Unions' audits out of 41 were completed in the first quarter of the fiscal year.

According to the auditors of BoMC, they have never completed annual audits of all target CUs and the Federal CU in past years due to the shortage of budget for transportation and per-diem. The time necessary to complete the audit process depends strongly on whether or not the target CUs utilize proper financial management. If the CU properly records the data, the audit can be completed within three days, but if the accounting records are not organized properly, it can take a week or even more to finalize the audit. Most CUs did not make financial statements consisting of a profit-loss statement and balance sheet; therefore the auditors had to create them instead.

The auditors suggest that the managers of CUs employ accountants who have the necessary financial knowledge. However, the salaries of skilled financial people are comparatively high and so it is hard for CUs to attract such talent at the salaries they can afford to offer. CUs have thus been trying to improve the capacities of bookkeepers to meet the demands of the audits.

The auditors of BoMC emphasized that their duty is only to audit the CUs and that checking the audit reports of the PCs of the woreda is beyond the scope of their duty. No double-check or evaluation system of the end-result's quality of financial statements between BoMC and WoMC is available.

3) Auditors in WoMC, SNNPR

In general, two to four auditors are stationed in each woreda. In the case of Boloso Bombe woreda, Wolayta zone, three auditors have covered the 63 registered PCs. The target number of audits in this

fiscal year is 39 PCs. The remaining 24 PCs will not be subject to audits because they are inactive. Although there are 29 PCs registered in Boricha woreda, Sidama zone, there are only eight or nine PCs that are targeted for audits. The others are inactive so audits are unnecessary. These kinds of inactive PCs probably exist in every woreda.

In cases where the PC does not make any activities, the auditors communicate with the “cooperative organizer” and let them give instructions to those coops. Two to three cooperative organizers are stationed in each woreda and one cooperative organizer is located in kebele disqualifying the inactive PCs from registration has also been considered recently.

There are not many multipurpose PCs in the woredas, and only one or two have been acting for profit making. Most agricultural PCs are specialized for provision of chemicals and improved seeds under the instruction of the governmental allocation system. The margins of the transaction are fixed by the official rate; therefore, it is not regarded as profit-making business but rather a service for the membership. Youth PCs and the credit PCs account for a large portion of the PCs. The auditors’ target is more on such unprofitable PCs than those that are profitable.

(2) Financial Management of PCs and Unions

Even if no audit is completed, PCs and CUs are required to aggregate financial statements for reporting business performance to the general assembly and board members every year. The transparency of business activities is crucial to operating multipurpose PCs and CUs in order to prevent corruption.

The performance of bookkeeping and accounting has improved in recent years through the assistance of BoMC/WoMC and NGOs. At a minimum, money-in and money-out is required to be recorded and aggregated at the end of the fiscal year. However, most PCs and CUs have no capacity to realize proper financial management. Their records of bookkeeping are kept in handwriting and have not been well utilized for the meetings of the general assembly. The immature financial management is one of the most serious issues that leaves the members in a credibility gap. A credibility problem among the members causes a collapse of PCs and CUs. Thus, the improvement of financial management is one of the most important keys to secure the development and the sustainability of PCs and CUs.

Regrettably, the time-series analyses of long-term actual performance have not been carried out. The accounting data has not been fully utilized to improve future business. The expert of the JICA study team tried to analyze the financial statements of the target PCs and CUs but realized that most PCs and CUs have not even fixed the accounting year. For example, in the case of Angacha Multipurpose CU that was the target of the pilot project (PP02 and PP08) in the Study, one accounting period was 2 years and 10 months, while another period was 1 year and 9 months.

Most PCs and CUs close the accounts as the auditors come. This is a critical problem not only for

secure transparency to the general assembly but also for making the time-series analyses. Most auditors in WoMC do not understand the importance of the accounting year and ignore the principle of the one-year period that should be 365 days. The first priority of the instruction to the auditors and PCs/CUs is to let them recognize the importance of the accounting year; otherwise no forward progress can be made in terms of financial management.

The weak points of the PCs' and Unions' financial management to be strengthened at this moment are stated as follows.

- a) Proper accounting year should be fixed based on the appropriate business period
 - Was the accounting year fixed in accordance with business periods such as harvesting seasons?
 - Was the accounting closed at the proper designated date?
- b) Particulars of the earnings and expenditures should be tidied up by using the proper item names
 - Does the bookkeeper record the item name based on the proper list of particulars?
 - Does the bookkeeper have the capability to tidy up and aggregate the monthly results of accounting?
- c) Results of the business activities should be reviewed based on time-series analyses.
 - Were sales and costs of sales compared with those of the previous year?
 - Were the reasons for fluctuations of sales and costs of sales identified?
 - Were the tendencies of business performance discussed?
- d) Sustainable business and risky, profitable business should be balanced.
 - Were budgets kept for sustainable services for members?
 - Was profitable business attempted with quick action?
- e) Business experience should be shared and discussed among the members.
- f) Long-term business plans should be formulated based on the realistic financial conditions.
 - What kinds of facilities and equipment should be installed in the future?
 - Which facility and equipment should have priority for purchase in accordance with business performance?
 - What is the cost for the necessary equipment?
 - What is the financial plan for purchasing necessary equipment?
- g) Personal computers should be utilized for accounting and financial management if they are available in the offices.

The JICA Study Team selected two CUs and four PCs from the target beneficiaries of the pilot projects and reviewed their financial statements. The selected CUs and PCs were nominated as the advanced

groups among the CUs and PCs, however, their financial managements were too primitive to analyze. Only one union out of six CUs/PCs fixed the accounting year and the others are not suitable for analysis.

Even in the most advanced multipurpose union among the six, the accountant does not use a computer to aggregate the ledger, and waits for an auditor from BoMC to arrange it. A computer donated by NGO for inventory is set up at the manager's room and is never used for accounting or business analysis. It seems the PCs have a long way to go in dealing with financial management in SNNPR.

(3) Financial Statement of Union

1) Sidama Elto Multipurpose Cooperative Union (PP01, PP02, PP08)

Profit and Loss Statement

Table 3.5-6 shows a sample case of a profit and loss statement for Sidama Elto CU. The activities of this union are to support the 62-member primary cooperatives deal with grains. Sidama Elto CU provides fertilizer and improved seeds to the members and non-members at lower prices than is available in the marketplaces. The union also deals with the grain business. The union purchases grain from members and/or traders and sells it to the market and/or WFP.

Since the union was established in 2003 and has launched the business in recent years, the business activities are still unstable. By observing their three-year performance, the following issues are raised.

- a) Operating income from main activity, cost of sales and total profit margin
 - Sales of fertilizer is decreasing
 - Sales of improved seed is rather stable but purchases have fluctuated
 - Grain business is expanding
 - Ending inventory (remaining stock) has increased to 10% of sales
 - Gross profit has been mostly stable for three years though the activities have changed
- b) General expenses
 - Personnel costs such as salaries and wages are increasing
 - Total general expenses in 2010 increased almost 140% from the previous year
- c) Operating income and non-operating income
 - Operating profits increased in 2009 but dropped in 2010
 - Non-operating profits increased rapidly in 2010, to 10 times that of the previous year
- d) Net profit or loss
 - Net profit has increased slightly in recent years
- e) Overall evaluation
 - Referring to the results of operating profit or loss, the main activities seem to be unstable and not planned according to given factors such as the number of target consumers.
 - Share of income from non-operating activities reached almost 30% of the total, therefore business diversification should be considered.
 - Fixed costs such as personnel costs, consumption costs, etc. have been increasing in

accordance with business expansion but they remain around 6-7% of the total cost.

- High costs such as procurement of fertilizer and improved seeds should be linked to demand, otherwise the stock and cost of inventory management will increase.

Table 3.5-6 Profit and Loss Statement of Sidama Elto CU

Items		2008 (2000EC)	2009 (2001EC)	2010 (2002EC)
1. Operating income				
1.1	Fertilizer	21,958,525	14,131,348	1,011,814
1.2	Improved seed	909,716	1,054,508	713,995
1.3	Grain	879,419	1,069,495	14,115,844
1.4	Others	9,836		313,754
1.0	Total sales income (=sum(1.1:1.4))	23,757,496	16,255,351	16,155,406
2. Cost of sales				
2.1	Fertilizer	21,348,866	13,179,662	764,626
2.2	Improved seed	845,282	1,385,601	458,400
2.3	Grain	666,753	2,022,655	13,381,921
2.4	Others			265,410
2.5	Total cost of sales in a fiscal year (=sum(2.1:2.4))	22,860,901	16,587,918	14,870,358
2.6	Beginning inventory	60,870	210,279	1,610,417
2.7	From previous year (=2.5+2.6)	22,921,771	16,798,197	16,480,774
2.8	Ending inventory	-210,279	-1,610,417	-1,505,761
2.0	Total cost of sales (total COGS)	22,711,492	15,187,780	14,975,013
3.0	Gross profit or loss (=1.0 – 2.0)	1,046,004	1,067,571	1,180,393
4. General (sales, administration) expenses				
4.1	Salaries	72,630	49,617	119,012
4.2	Wages	38,618	111,172	254,666
4.3	Travel expenses	512,123	74,948	140,030
4.4	Consumption goods	38,072	41,038	107,573
4.5	Machine & maintenance	5,045	7,102	18,761
4.6	Canvas for fertilizer	1,390		211,893
4.7	Commission	17,593	43,600	29,962
4.8	Warehouse and shop rents	36,750	18,000	55,300
4.9	Entertainment	5,315	7,103	43,820
4.10	Publication	1,735		3,495
4.11	Service depreciation for the year	5,972	9,154	37,598
4.12	Miscellaneous, tax	28,582	63,049	3,260
4.0	Total General (sales, administration) expenses	763,823	424,782	1,025,369
5.0	Operating profit or loss	282,181	642,789	155,023
6.0 Non-operating profit or loss				
6.1	Interest from loan	26,147	28,033	39,223
6.2	Renting, service margin & others	20,205	23,937	518,155
6.3	Registration	2,500	500	8,500
6.0	Total non-operating profit or loss	48,852	52,471	565,877
7.0	Net profit or loss for the Period (=5.0 + 6.0)	331,033	695,259	720,901

Source: Grain union in SNNPR

Balance Sheet

The balance sheet of Sidama Elto CU is indicated in Table 3.5-7. The issues to be highlighted are as follows.

a) Assets

- Receivable shares accounted for almost 50% of current assets in 2010.
- Stock is around 20% of current assets in 2010.
- Durable assets have increased from 44,541 Birr in 2008 to 1,101,446 Birr in 2010, which is 25 times larger, by receiving donations for construction of warehouses and

some machinery.

- Total assets reached 8,658,092 Birr in 2010, however most of them are receivables and donated assets.

b) Debt and Capital

- Payables to the Rural Financing Fund (RFF) reached 3,913,825 Birr in 2010, which is one fourth of the total sales income of the main activities.
- Dividends to the members, which accounts for 70% of the total net profit, was kept as a liability in 2010.

c) Overall Evaluation

- As long as the union can borrow money for purchasing for operations, their activities circulate sustainably but there is no clear strategy on securing a revolving fund after RFF has stopped their financing activities.
- Increasing receivables should be dealt with properly; otherwise cash flow will be short.

Table 3.5-7 Balance Sheet of Sidama Elto CU (case study)

ASSET		2008 (2000EC)	2009 (2001EC)	2010 (2002EC)
1. Current assets (Temporary assets)				
1.1	Cash in hand	69,375	26,135	15,654
1.2	Cash in bank	586,636	1,366,365	2,000,770
1.3	Cash in document	23,465	98,289	259,004
1.4	Receivables	1,874,344	1,815,864	3,729,942
1.5	Assets in store (stock)	210,279	1,610,417	1,505,761
1.6	Investment	40,000	40,000	100,000
1.0	Total current assets	2,804,098	4,957,070	7,611,131
2. Fixed assets				
2.1	Durable assets	44,541	522,053	1,101,446
2.2	Cum. Deductible service (depreciation)	-7,733	-16,887	-54,485
2.0	Total fixed assets (Durable asset, voucher)	36,808	505,166	1,046,961
3. Total Asset		2,840,906	5,462,236	8,658,092
DEBT and CAPITAL				
4. Liability				
4.1	Short-term liability			
4.1.1	Payable to RFF	913,825	1,913,825	3,913,825
4.1.2	Payable to Woredas	279,938	341,286	998,446
4.1.3	Payable to seed purchase	122,240	558,683	103,772
4.1.4	Other payables (social service, education and adv)	4,641	4,641	4,641
4.1.5	Salary from Gifts	48,400		
4.1.6	Unidentified deposit in bank	9,000	9,000	9,000
4.1.7	To be distributed to members (70%)	231,723	718,404	504,631
4.1.8	Total short-term payables	1,609,767	3,545,838	5,534,315
4.2	Total long-term payables	0	0	0
4.0	Total liability	1,609,767	3,545,838	5,534,315
5. Capital (Owners equity)				
5.1	Share	127,200	152,200	230,600
5.2	Expansion of activities	207,530	207,530	925,934
5.3	Reserve (Accumulated profit (loss))	208,950	417,528	633,799
5.4	Capital	687,458	1,139,139	1,333,445
5.0	Total owner's equity	1,231,139	1,916,398	3,123,778
6.0	Total debt and owner's equity	2,840,906	5,462,236	8,658,092

Source: Grain union in SNNPR

2) Angacha Cooperative Union (PP02, PP08)

The Angacha CU is the target of the pilot projects “Quality Control (PP02)” and “Warehouse Management (PP08)” in the Study. In principle, they do bookkeeping only. The financial statements such as the balance sheet and profit and loss statement are settled by the auditor from BoMC. There is no capacity to aggregate it. The manager and the bookkeeper recognize the importance of financial management, and expect the BoMC auditor to come to Angacha CU. They made phone calls and asked BoMC auditor to come many times but due to the budget shortage, the audits were not realized periodically. They were audited three times in total, in 1997 EC, 2000 EC and 2002 EC. The period of the accounting year was not properly fixed as shown in table below.

Table 3.5-8 Period of Accounting Year (Angacha Cooperative Union)

	Profit and Loss Statement		Balance Sheet
	Duration	Number of days	
1	~22/03/1997 E.C.	?	22/03/1997 E.C.
2	24/02/1998 E.C.~30/12/2000 E.C.	2 years 10 months 6 days	30/12/2000 E.C.
3	01/01/2001 E.C.~30/09/2002 E.C.	1 year 9 months	30/09/2002 E.C.

It is strange that no one has indicated the importance of fixing the accounting year. As mentioned previously, if the duration of the accounting year is not properly fixed, it is impossible to do time-series analysis. The accounting year should be designated according to the seasonal period of the harvest and tidied up monthly. The management and operation system of the auditing should be more systematic and more knowledgeable experts should review the results of the audits; otherwise, the data is worthless.

3) Boloso Bombe Multipurpose Primary Cooperative, Boloso Bombe woreda (PP05)

Boloso Bombe Multipurpose PC is the only PC that has tried to profit from business in Boloso Bombe woreda. Boloso Bombe PC is a member of Damota Union in Sodo town. Boloso Bombe PC is one of the two target group of the PP05, which is to promote the business of clean-dried ginger.

Boloso Bombe PC was established in 1963 and was renewed in 1992 under the present cooperative law. The number of members is 597 (574 men and 23 women) and the major commodities are coffee and ginger. The provision of improved seeds and fertilizer is executed as a service for membership and social contribution. They receive 8 Birr per 100kg for margin according to governmental instruction. Boloso Bombe PC receives 5 Birr and each kebele receives 3 Birr per 100kg. There are 20 kebeles in Boloso Bombe woreda.

The bookkeeper of Boloso Bombe PC records the daily earnings and expenditures but there is no capacity to aggregate the financial statement. The auditors of WoMC make the financial statement. Since the location of Boloso Bombe PC is right next to the WoMC office, the auditors often visit them and carry out the audit every year. However, the accounting year is not fixed properly. It seems that the one-year period fluctuates according to the convenience of the auditor as shown in table

below. The auditors might not understand the meaning of the accounting year and why it needs to be fixed to a period of one year.

Table 3.5-9 The Period of the Financial Statement (Bolosso Bombe Coop)

Profit and Loss Statement			Balance Sheet
	Duration	Number of days	
1	11/12/1999 E.C. ~ 28/11/2000 E.C.	353 days	28/11/2000 E.C.
2	12/12/2000 E.C. ~ 23/12/2001 E.C.	1 year + 11 days	23/12/2001 E.C.
3	23/12/2001 E.C. ~ 24/01/2003 E.C.	1 year + 32 days	24/01/2000 E.C.

4) Bona Multipurpose Primary Cooperative, Bona woreda, Sidama zone (PP02)

The Bona Multipurpose PC was established in 1967, and was restructured in 2001. It has 450 members, 410 men and 40 women. It is a member of Sidama Elto CU. The Bona PC is a target beneficiary of the PP02 “Quality Control” and PP08 “Warehouse Management”. The members of Bona PC participated in the joint training of PP02 and PP08 and received posters indicating how to manage the quality. The provided posters were displayed on the wall of the office.

The major commodities are coffee and grains. Coffee is the most important cash crop in this area, though the Study excludes coffee from the target crops.

In order to grasp the capability of business management, an expert in the JICA Study Team asked some questions about quantity, sales volume and profitability of the grains they handle. The order of grains in quantity dealing in weight is maize, teff, wheat, haricot bean, pea and bean. According to the chairman of the PC, the order of commodities in sales volume and profitability are as shown in Table 3.5-10, though some contradict the order as explained by verbal interview. It roughly indicates the characteristics of the commodities in recent business transactions. The PC diversifies the commodities and secures the profits. They have never analyzed their business by financial statement but recognized the importance of business management by quantity, sales and profit.

Table 3.5-10 Characteristics of Grain Business Transaction (Bona Coop)

	Quantity	Sales Volume	Profitability
Maize	1	2	6
Haricot Bean	4	1	4
Bean	6	4	3
Pea	5	3	2
Wheat	3	5	5
Teff	2	6	1

The Bona PC has twice received an audit. The names of the particulars are not well organized and it is hard to compare the items by time-series analysis. The auditor recommended to the Bona PC that they employ an accountant and they have done that this year. They are expected to unify the particulars by category. By arranging the unified particulars of sales and cost of goods sold, the analysis of profitability by commodity and management of inventory will be easier. The particulars

of general operating income and expenditure should be tidied up as well.

Since the accounting year of the financial statement was not well managed, it is impossible to compare the performances of previous years. It is not necessary to fix the starting date on the 1st of January, but a proper date should be chosen based on their harvesting calendar. An improvement in the financial management is strongly recommended.

5) Balila Multipurpose Primary Cooperative, Bolicha woreda, Sidama zone (PP02)

The Balila Multipurpose PC was established in 1991. The membership totals 500 (466 men, 34 women) and it is a member of the Sidama Elto CU. The Balila PC is the target of PP02 “Quality Control”, PP06 “Haricot Bean Marketplace Improvement”, and PP08 “Warehouse Management”.

Balila is the potential production area of haricot bean, and people intend to expand production of haricot bean as a major cash crop. The Balila PC reserved a space for constructing a marketplace for haricot bean. The warehouse is now under construction by using their budget savings of 300,000 Birr. The warehouse is one of the conditions of registration of the haricot bean business, therefore they attended the training of PP08 to learn proper store management.

They have used their savings for the warehouse construction, so they will use the loan from the Sidama Elto CU to purchase haricot bean from the members and non-members. The harvest conditions of haricot bean are good this year. As the contract for maize, which is a staple food for the local market, harvests once a year, the haricot bean is a rather speculative exportable cash crop to make a profit from, and it can be harvested twice a year. People expect good potential for haricot bean.

The Balila PC has received one audit in the past. Even if they go to WoMC in Bolicha, they seldom come to check the book records. The financial statement aggregated in 2001 EC has some mistakes and the Bolicha and JICA Study Team asked for explanations; however the auditor in charge had quit the job and was no longer available.

The accountant at the Balila PC does not have a high educational background but is an honest person with 20 years of experience. He checks the fluctuation of prices and the increases of expenditure and reports to the chairman often. Since the capacity of WoMC is not applicable, they realize that they have to manage it by themselves.

(4) Long-term Strategic Plan

Some of the CUs were trained on how to develop a long-term strategic plan by Self-Help (NGO). They should consider the prospects for future business and settle on concrete targets of volume for transaction and profit.

However, when looking at the contents of their targets, as is the case of Sidama Elto CU, they seem to be too high to realize; for example, the volume of transactions of grain in five years is set at four times that in 2010. Collaborative practical methods including an action schedule, revolving money and necessary personnel were not identified in the strategy. The strategy should be reviewed based on real conditions by using financial information.

Responding to market demand, some PCs and CUs have launched transactions of cooking oil and sugar. This kind of new business activity is regarded as secondary because it is not related to farming, but does represent a potentially profitable business. The Unions and PCs may diversify their activities according to the market situation. In any case, it is expected that they will benefit their members and contribute to the agricultural development in SNNPR.

3.5.5 Support for Cooperatives

Various supports have been extended by different actors to cooperatives, both CUs and PCs, for their capacity enhancement. This section focuses on the two major aspects for capacity development of cooperatives; one in technical enhancement and the other in financial support. Afterward, support extended from CUs to their PCs will be briefly described.

(1) Technical assistance

At present the main organizations which have implemented training programs for the grain cooperatives are BoMC, NGOs and WFP.

Bureau of Marketing and Cooperative

BoMC assumes a critical role in cooperative development in SNNPR. One of their prime responsibilities is to strengthen and upgrade the capacity of cooperatives so as to make them effective contributors to the social and economic development of a rural community. In view of this, BoMC has a four-tiered structure in place, namely BoMC, ZoMC, WoMC, and community organizers at kebele level.

The training program provided by BoMC and its line sector offices for cooperatives covers various subjects including book-keeping, cooperative marketing, cooperative laws and roles, quality control of produce and warehouse management. In principle, it practices the ToT approach in which BoMC, with support from ZoMC train WoMC and community organizers, who then train PCs and farmers. Due to the serious financial constraints encountered by BoMC, this principle is not strictly observed. Instead BoMC usually organizes the training in collaboration with development partners, NGOs and sometimes Unions. In such a case, BoMC / ZoMC staff members are requested to be trainers while the requesting organizations make necessary logistical and financial arrangements for the training, including the selection of the trainees. In other words, the training topics and trainees are decided, reflecting specific mandates and objectives of the requesting organization for such training, not

necessarily those of BoMC. The trainer's manuals have been prepared by the Federal Cooperative Agency. BoMC /ZoMC experts prepare their own materials in reference to these manuals in their delivering of training. The manuals are mostly theoretical and descriptive, thus, it is unlikely that cooperative members can apply what they learned in the training to their daily management and operation of the organization.

NGOs

A major NGO having a strong partnership with the grain cooperatives in SNNPR is Self-Help. It has targeted the four CUs in SNNPR, namely Sidama Elto, Melik Silitie, Walta and Ediget Seed Multiplication Cooperative Unions. The major types of assistance given to these CUs since the commencement of the project in 2004 are as follows⁷:

- Provision of training to cooperative member farmers on production, quality improvement and raising awareness on cooperative movement
- Technical assistance to PCs under the four Unions for the production of improved seeds
- Provision of matching funds for warehouse construction: union provided 200,000 birr while 400,000 birr was born by Self-Help
- Seed fund provision at the establishment of the union
- Market linkage creation
- 50% Credit guarantee when union applied for credit at Abyssinia Bank

The other major NGO involved in the assistance of cooperatives is VOCA. The project named "Agricultural Cooperatives in Ethiopia (ACE) program" was implemented between 1999 and 2006 with financial assistance from USAID. ACE focused on the cooperatives in the five zones of Sidama, Gideo, Guraghe, Hadiya and Kambata, which were regarded as agriculturally potential woredas. First, it provided government officials with a series for training, including cooperative movement, cooperative law, marketing, business management, quality control and inspection. The trainers were sent from the U.S. and in total more than 100 Americans came to SNNPR as trainers. Afterward the trained officials organized the training for the PC member farmers. Further, ACE assisted PCs in the formation of a union. As a result, six CUs were formed. They were given training by ACE in launching the new organizations. It has been more than five years since ACE was terminated. However, a number of cooperatives still acknowledge ACE's intervention.

WFP

One important donor organizing the training for the grain cooperatives in SNNPR is WFP. It has launched a new program called "Purchase for Progress (P4P)". The program aims to procure cereals and pulses directly from cooperatives. The training on quality control, warehouse management and WFP procurement scheme have been undertaken, targeting relevant government officials, CU staff and PC committee members. One union manager appreciated the P4P program, providing CUs with a

⁷ Some activities listed here were already terminated after fulfillment of their objectives.

rare opportunity to acquire knowledge on the international standard in grain marketing.

(2) Financial support

It is apparent that cooperatives could not be sustained without sufficient working capital. Cooperatives need to buy produce from their members as well as non-members during those times of the year when the products are available. An adequate amount of cash must be available at that time.

Up to 2010 the Rural Finance Fund (RFF) was almost the sole provider of credit to cooperatives. RFF was established in 2004 and operated by the Regional Government with an aim to channel low interest credit to the rural community. It required no collateral. The operational mechanism of RFF is shown below.

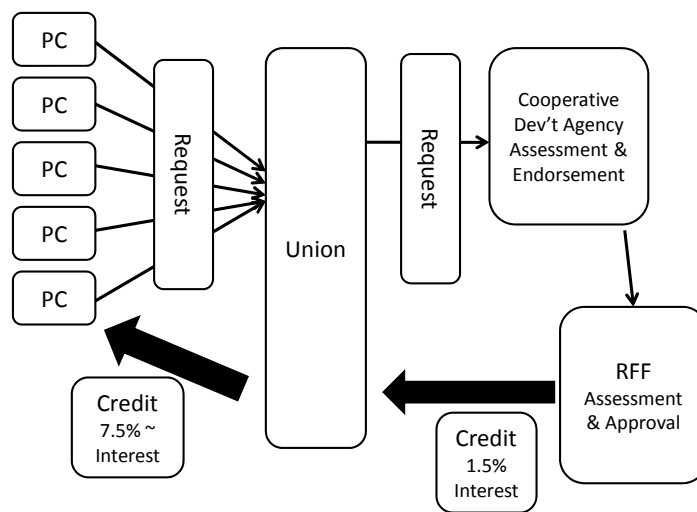


Figure 3.5-7 Operational mechanism of RFF

First, PCs submitted a credit request to CUs with their annual plan, which was assessed and evaluated by the CU's management committee. Second, Unions compiled the requests from PCs as well as their own requests, and then they sent a credit application to the then Cooperative Development Agency for endorsement. After final screening by RFF, credit was disbursed to CUs and then broken down and passed on to PCs. Credit given by RFF has been critically important for both PCs and CUs in their operation. The volume of grain which PCs purchased from farmers depended largely on the amount of credit they had received from Unions.

Moreover, RFF interest was kept extremely low, which was only 1.5% although its nominal interest was 7.5%. The loan agreement between RFF and Unions stipulated a union would pay back 1.5% of interest together with the principal while the remaining 6% was to be incorporated into the capital of a CU. Since it was made available to PCs by CUs with an interest of 7.5% or above, this difference in two interest rates helped Unions to improve their financial status. According to the former loan administrator of RFF, the repayment rate of CUs was extremely satisfactory although there was a serious repayment problem with credit given directly to farmers. In total, approximately 200 million

birr was annually channeled to the rural community from RFF.

RFF closed its operation at the end of 2010 and Omo Microfinance, the micro-finance institute in the SNNPR, was designated by the Regional Government to take over RFF. Because the major target of Omo Microfinance is not CUs or PCs but farmer groups, its interest rate is set around 18%, taking into consideration the high possibility of default. Although the interest rate of commercial banks is lower than that of Omo Microfinance, around 7 %, because of their collateral requirement, it would be difficult for most CUs to obtain credit from commercial banks. It is important to monitor how the closure of RFF affects cooperatives both financially and operationally.

(3) Support from CUs to PCs

As discussed above, CUs and their member PCs are jointly involved in commodity transactions, fertilizer distribution and loan procurement, thus, the technical and operational competency of PCs directly affect CUs' operation and, subsequently, profitability. Most CUs have little capacity and competency to provide any support for their member PCs. It is the case, however, that some CUs assist capacity development of PCs through the following activities.

Training Programme

The training on accounting, quality control and organizational management is organized for PCs. In this case, trainers are from a CU, BoMC or NGOs, which support concerned CU.

Employment of a manager

As discussed in 3.5.2, most PCs are not able to recruit a manager due to financial constraints. Thus, a CU hires a manager on behalf of member PCs.

3.6 Current State of ECX Operation

3.6.1 Outline of ECX

(1) Background of ECX's Establishment

The Ethiopian grain economy had been influenced by the dramatic market reform that occurred in the early 1990s in this as well as other industrial sectors. The restrictions on private trade and official prices and quotas that had been regulated by the planned economy were eliminated. The Agricultural Marketing Corporation (AMC), introduced in 1976 with World Bank support for the purpose of purchasing grain and distributing it to consumers, began downsizing. The AMC had purchased approximately 10% to 50% of the total grain produced from farmers at low prices as quotas; however, the economic reform demanded that the AMC change their functions and roles.

In 1992, the AMC closed all eight zonal offices and reduced the number of branch offices from 27 to 11. It also closed all but 80 of its 2013 grain purchase centers. At the same time, it was renamed the Ethiopian Grain Trade Enterprise (EGTE) with a new mandate of stabilizing prices and maintaining buffer stocks.

In 1999, further reforms involved merging the EGTE with the Ethiopian Oil Seeds and Pulses Export Corporation. Re-established as a public enterprise, the new organization was no longer required to stabilize grain prices, and its major objective was to achieve commercial profitability by focusing on exportable grain.

Most grain trade is entrusted with private actors in free markets. However, the free market mechanism for grain is not functioning as effectively as expected. There are cases in the markets where the pricing systems among actors are not transparent and unfair deals are made.

The Government arranged the concept of the market mechanism and prepared for the establishment of a commodity exchange. The Federal Negarit Gazeta, Proclamation of the Commodity Exchange No. 550/2007 and Proclamation of the Commodity Exchange Authority No. 551/2007 were issued on September 4, 2007, and those acts stated the rules of establishment of the Ethiopian Commodity Exchange (ECX).

The ECX commenced trading operations in April 2008. The ECX introduced a modern auction system following the strict standards and grading system. Registered traders bid in accordance to the quality information and the market prices were determined by the balance of demand and supply.

The ECX has been dealing with coffee, sesame, white haricot beans, maize and wheat; however, until now trading has only been active in coffee. An increase in the transaction volume of grain is expected in the future, but the performances of the dealings are not active except in sesame and white haricot beans.

(2) Objective of the ECX

The ECX is expected to be a marketplace where buyers and sellers come together to trade, assured of quality, delivery and payment. The vision of the ECX is to transform the Ethiopian economy by becoming a global commodity market of choice. The ECX’s mission is to connect all buyers and sellers in an efficient, reliable, and transparent market by harnessing innovation and technology, based on continuous learning, fairness, and commitment to excellence.

(3) Organization of the ECX

The organization chart of the ECX as illustrated in their website is shown below. In order to disseminate the modernized international marketing system, the development and research sections are fulfilled as well as the trading operation sections.

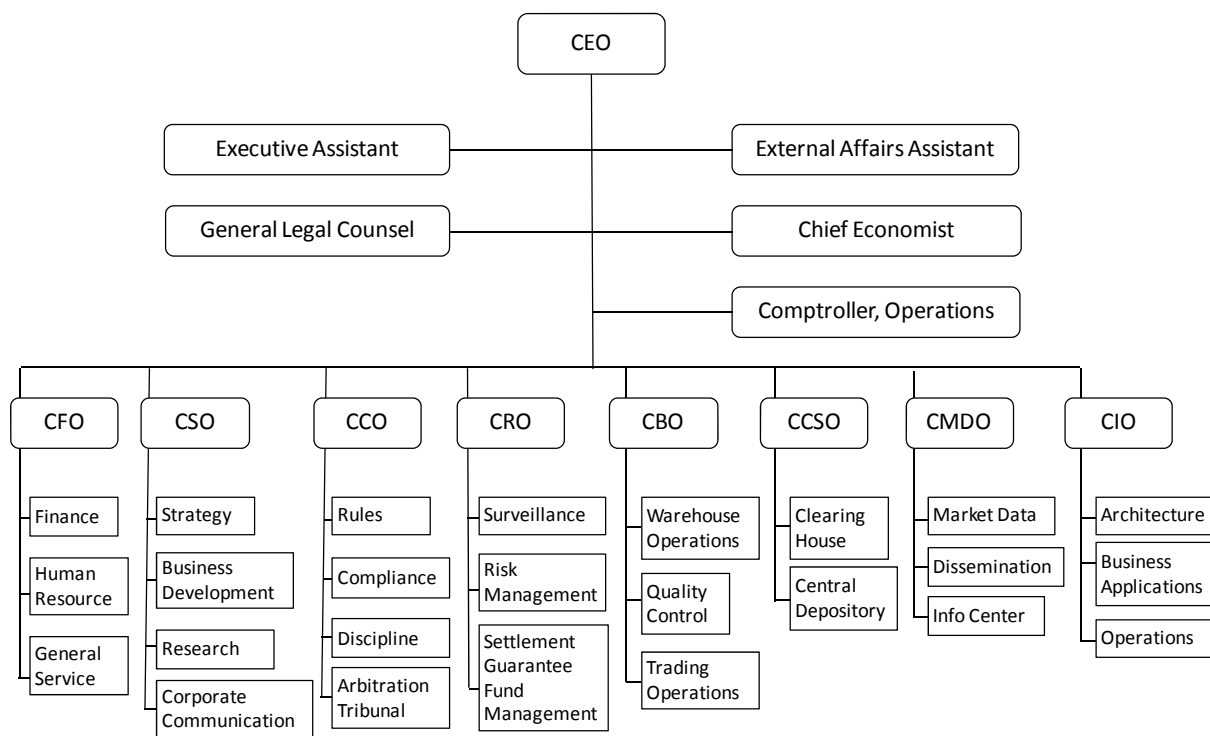


Figure 3.6-1 Organization Chart of the ECX

(4) Activities

1) Marketplace

The major activity of the ECX is the operation of the commodity exchange market. The ECX deals with coffee, oil seed, wheat, maize and pulse.

The ECX commenced the trading with grain in accordance with the first concept in April 2008, however there were not many quality grains to be traded in the ECX. The grain’s quality was too low to meet the designated standard. Most traders, both wholesalers and processors, prefer negotiating transactions in sight by themselves. The traders are unfamiliar with the new dealing system of ECX,

and there is a shortage of experts in quality control. In addition, insufficient sorting machines and inspection tools for matching the quality standard discourage the traders from becoming pioneers of the new system. It is not guaranteed that the cost for quality improvement will be covered by the selling price and the risk of transportation cost should be carried in case the auctions end in failure. The auctions at the ECX don't secure the high selling prices needed to cover the transportation costs, therefore the traders have hesitated to participate and instead just observe the market situations.

Table 3.6-1 shows the total volume and average price of the ECX auction since April 2008 until July 2012. The transactions of white haricot bean and sesame have been significant amount in/after 2010, whereas the transactions of wheat and maize, especially wheat, have been hovering at a very low level since the beginnings of the ECX auction.

Table 3.6-1 Volume and Average Price of Transaction of the ECX

Items	2008 Apr.-Dec.		2009 Jan.-Dec.		2010 Jan.-Dec.		2011 Jan.-Dec.		2012 Jan.-Jul.	
	Volume	Price	Volume	Price	Volume	Price	Volume	Price	Volume	Price
Haricot Bean	19,174	5,780	0	n.a.	18,599	7,250	42,988	8,740	47,388	8,390
Sesame	n.a.	n.a.	84	14,820	14,410	17,790	20,579	19,500	29,743	20,690
Wheat	675	5,800	0	n.a.	5	4,050	0	n.a.	0	n.a.
Maize	985	4,620	20	3,220	2,632	2,770	1,784	4,780	60	5,120

Unit : Volume (ton), Price (Birr/ton) Source: ECX website

On the other hand, the demand for coffee in the trading market has been very high; therefore, the ECX commenced trading of coffee in December 2008. Quality coffee for export was required and good quality control of the distribution process was crucial. The ECX repaired warehouses, constructed a few new warehouses specialized for green coffee bean, installed several inspection laboratories in the production areas and then strictly graded coffee by quality and origin. The volume of coffee transactions has been increasing.

The volume of transactions is greater in exports and seasonal fluctuations are observed, especially in unwashed coffee for export.

2) Warehouses

The ECX offers an integrated warehouse system from the receipt of commodities to the ultimate delivery on the basis of industry-accepted grades and standards for each traded commodity by type. Commodities are deposited in warehouses operated by the ECX in major surplus regions of the country.

ECX warehouses provide the following services:

- Sampling, grading, weighing and certifying of the grain and coffee shipped to each

- warehouse using equipment provided by the ECX according to ECX established standards
- Weighing, receiving and issuing Electronic Goods Received Notes that are recorded in the ECX automated system
- Recording incoming and outgoing grain and daily stock position reports
- Proper handling of the commodities at the warehouse (store layout stacking, bin number, inventory management)
- Reporting and formatting for up-to-date information exchange between the ECX and the area warehouses
- Maintaining the quality of received products

Locations and capacity sizes of the ECX warehouses are shown in Table 3.6-2. Most of the warehouses are rented from the EGTE, dating back to the planned economy regime, but some warehouses such as the coffee warehouses in Hawassa, Dilla and Bonga were newly constructed according to demand. The warehouses for sesame at the production areas were established for the future demand as well.

Table 3.6-2 Locations and Capacities of the ECX warehouses

No	Location	Commodity		Capacity Quintals	Distance From Addis Ababa (km)
		Coffee	Grain		
1	Addis Ababa (Yoseph)	x		100,000	-
2	Addis Ababa (Saris)	x	x	300,000	-
3	Dire Dawa	x		50,000	515
4	Nazareth		x	50,000	90
5	Bure		x	50,000	410
6	Nekempte		x	50,000	330
7	Humera		x	50,000	900
8	Hawassa	x		200,000	273
9	Jimma	x		170,000	346
10	Gonder		x	70,000	738
11	Humera		x	50,000	900

Source: ECX website

3) Extension and Education

The ECX has recognized that their role is not only in the provision of a marketplace but also in promoting quality improvement and efficient transactions of the commodities. It is not enough to entrust the free market to improve efficiency, quality and fairness. The ECX has an obligation to encourage stakeholders to improve market transactions through public relations and training seminars, to make stakeholders aware of the demand for modernized market mechanisms and to assist in reaching the international standard of business.

In order to disseminate a modernized transaction system, the ECX has implemented seminars and provided trainings for stakeholders by chance. The activities involving encouraging stakeholders have

become more important roles of the ECX. More collaboration with MoA, MoTI and MoFED is required, and in addition, the ECX relies on international donors to support the activities in technical and budgetary aspects.

The ECX has various experts on economics and management for administrative works; however, there is a shortage of technical experts working on grain handling who can develop the capacity of post-harvest technology in the real business. The lectures on quality improvement provided by the ECX are rather conceptual and there is no capacity to lead the technical and practical improvement of quality at the level of real business transactions.

3.6.2 Operations of the ECX in the SNNPR

In terms of coffee, the ECX is very active in the SNNPR. The coffee warehouses in Hawassa, Dilla, Bonga, Sodo and the laboratory have either been expanded or newly constructed. The preliminary inspection for the arrival of goods has been functioning well except at the newly constructed sites in Dilla and Sodo.

However, grain transactions through the ECX are still not active in the SNNPR even though the SNNPR is one of the significant grain production areas in Ethiopia. The wholesalers and middlemen acting in the wholesale market in Sheshamane, Oromia, which is located 50 km north of Hawassa, are not interested in the ECX. Wholesalers in Addis Ababa also trade outside the ECX. They feel no need to defer to the ECX for the transaction of local grains.

The grain warehouse in Sheshamane is rented from the EGTE, which is the former AMC that operated in the planned economy era. It was canceled since the commodities had not been collected there. The potential users of warehouses are agricultural cooperatives but they are not yet well organized, and it seems to take time to handle quality grains.

From the viewpoint of processors such as milling companies, the ECX is a rather unnecessary step in purchasing. Most processors have regular suppliers and they negotiate with them individually. Low quality and/or misplaced materials such as stone and trash are causes of trouble when milling, but since the priority of pricing is placed on the weighing system, the producers have little motivation to maintain high quality.

According to the milling companies, wheat is not distributed in most cases as such in the local markets, but rather as flour. The milling companies have acted as buffers of demand and supply.

One of the advanced cooperative unions, Licha Hediya union, in Hosana, SNNPR, has succeeded in creating a union to deal with wheat. Licha is a member of the founders of the ECX. However, they do not transact wheat through the ECX. They set up a milling facility by themselves that has been in use

since May 2009. The wheat collected from cooperative members is stocked in their own union's warehouse and it is milled in accordance with market demand. Selling value-added flour is more profitable than selling wheat as raw material.

From the producers' viewpoint, the negotiation transaction is suitable when the quality is low. In the case of the ECX, grains that could not reach the designated standard are simply rejected and there is no space to negotiate one by one. It is rather risky for the producers. Middlemen or wholesalers in local wholesale markets are more flexible than the ECX. Even if the quality is low, they accept it at a low price. At the same time, the traditional kick back systems to the person in charge of procurement discourage modern systematic transactions.

In addition, the top-down leaderships of the ECX sometimes create frictions with producers, traders and local governments. The desk theories of transaction's improvement are not always welcome from the individual actors, in reality. The theories of quality improvement and merits of auction explained by the ECX have not accomplished the practical theories verified by using the quantitative economic models, therefore the actors of the real markets cannot estimate the qualitative merit, which is profit, of the quality improvement and auction system. It is not enough to take action while expending time and costs.

3.7 Food Security Operation by SNNP Regional Government

3.7.1 Early Warning and Food Security Process of BoA

(1) Organizational Structure

Early Warning and Food Security Process; responsible administrative department for food security operation in SNNPR belonged to BoARD before the reorganization of BoARD made in October 2010. This process now belongs to BoA, and organizational structure and its duties are unchanged.

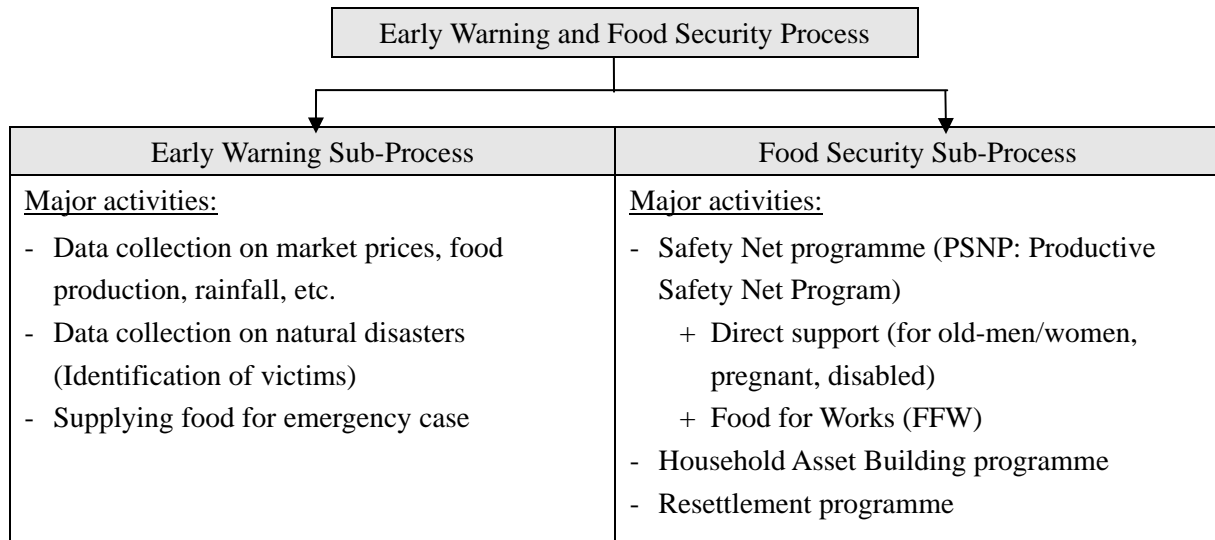


Figure 3.7-1 Organizational structure and Major activities of Early Warning and Food Security Process

Food Security Sub-Process has been implementing several safety-net programs. Outlines of the programs are as follows.

(2) Outlines of the Food Security Programs

1) Productive Safety Net Programme (PSNP)

Productive Safety Net Programme (PSNP) conducts several safety-net activities to households who are proved to be eligible for this programme by the community or kebele in food insecurity areas. Two types of safety-net programme arrange food assistance (sometime cash disbursement) to those households.

- Direct supports to vulnerable groups such as old-men/women, children, pregnant, disabled.
- Food for Works (FFW).

FFW supplies food or cash to eligible people who are mobilized to public works. Those eligible persons receive 3 kg or 10 Birr cash per person per day as their remuneration for the public works. The maximum remuneration to a person is limited to 5 days' works per month. For example, 4 persons per household can receive max. 60 kg of food or 200 Birr cash per month (3 kg/person x 5 days x 4 persons or 10 Birr x 5 days x 4 person/ households).

PSNP conducts this FFW programme for 6 months every year from January to June and PSNP basically disburses cash for the first 3 months and food for the later 3 months. The idea for this arrangement is that those eligible people will spend cash for purchasing local surplus food using their earnings. Their purchase will contribute to the stabilization of food prices during just after the harvest of grains produced in the Meher rainy season. On the other hand in April to June, normally food shortages are common in these food deficit areas and food prices increase, so PSNP supplies food instead of cash.

PSNP operation plan of 2010 estimated the eligible people in SNNPR accumulate up to 1.8 million and cash disbursement for the first 3 months would reach 225 million Birr and food supply over 63 thousands ton for the later 3 months. PSNP covers 11 zones and special woredas for more than 1,700 kebeles as target areas. The evaluation report on the effects of this huge PSNP project to agricultural production and marketing system in the area has not been made as yet.

PSNP arranges food supply for FFW operation in stead of cash disbursement in January to March i.e. first 3 months when the agricultural production is forecast to be very poor in former Meher rainy season and food prices will raise sharply in January to March. Early Warning Sub-Process makes such a prediction and arranges food disbursement.

The public works carried out by FFW cover the following sectors:

- Soil conservation works
- Rural road construction
- Water point development (spring water)
- School construction
- Farmers Training Center (FTC) construction
- Wooden bridge construction, etc.

2) Household Asset Building Program

This program was designed to encourage those eligible for FFW to graduate PSNP by their own asset building. This programme lends a maximum of 4,000 Birr to a household as seed money to start up some economic activity. The main packages of the programs are as follows;

- Livestock package
- Cattle fattening package
- Sheep fattening package
- Micro-irrigation
- Crop production
- Vegetable production
- Donkey cart
- Bee keeping
- Others

The payback period of this loan is within 4 years and PSNP expects borrowers to use their earnings through the economic activities for the repayment. However, the real payback ratio by borrowers is 1 to 2 %, only according to the Process. This program budget reached 120 million Birr in 2009 and 45 million Birr already disbursed up to March 2010.

A counterpart of Early Warning and Food Security Process to this JICA Study expressed his anticipated efficiency from this Study as Quality information, Price information and Grain surplus area information will be published and the system will be formed.

3) Resettlement Program

This program aims resettlement of people living in food insecurity areas to thinly populated districts. The program targets 78 woredas for resettlement to 12 receiving woredas which are mostly located in Western part of SNNPR such as Bench Maji zone. A total of 42,000 households have resettled from 2004 to 2008 but due to difficulty of providing arable land, the numbers of re-settlers are reduced nowadays. This programme provides re-settlers 2 ha of arable land, 1,000 m² of housing area, seed and farm tools and cash assistance for 30 Birr/month over 8 months per household.

The main issues for those re-settlers on agricultural marketing are difficulty in accessing traders and local market places for their surplus due to poor road condition. However, the number of re-settles deciding to return to their old home is low.

Chapter 4 Summary of Problems and Issues

4.1 Issues of Targeted Crops

4.1.1 Cereals

SNNPR is the third cereal producer in the country, but its production is mainly for home consumption purpose. Since cereal production in the country cannot meet the domestic demand, all the domestic production is basically used for domestic consumption.

QSAE, WFP and ECX have their own quality standards for cereals. However, such standards are not used in the internal commodity transactions. Only in the transactions that WFP or ECX are involved in, respective quality standards are applied. Qualities of cereals are decided by visual check and touch in the domestic transactions.

Dissemination of quality control and cleaning technology of cereals for WFP/P4P and ECX auction

As described above, the cereal transactions in which WFP and ECX are involved are required to follow respective quality standards. If quality is bad, such cereals will be rejected. The P4P targeted cooperative unions should disseminate quality control and refining technology for cereals to their member coops with an aim to promote efficient transactions.

Capacity enhancement in collection, cleaning and marketing business by cooperatives

It is necessary to provide cooperative unions, not only those participating in P4P but also those not participating, with support to enhance their technical capacity in quality control so as to promote efficiency in market transactions. Cooperative unions and primary cooperatives, which are to enter into the ECX auction, must understand the ECX specifications and undertake quality control measures of moisture adjustment and cleaning of cereals. As regards farmer members, they need to understand the quality requirement of cooperatives. If trading through the ECX auction becomes more common in the future, it will be necessary for even private traders to deal with cereals, which fulfill the required specifications, to be involved in the system.

Improper warehouse and quality control

Most warehouses of primary cooperatives and cooperative unions, either owned or leased, are improper for long-term storage of cereals because the holding capacity is small, mud-floor/walls with no openings for ventilation and day-lighting. It is necessary to promote proper warehouse designing suitable to long-term storage and warehouse management technology through the construction of a model warehouse. A selecting machine should be of great use in terms of promoting efficiency and securing uniformity for removal of those grains which lost their quality during storage, especially in the case of a large volume transaction of WFP or ECX.

4.1.2 Pulses

Facility improvement of marketplace

The marketplace in a production area is the collecting place of agricultural product. It is necessary for open marketplaces to be equipped with basic facilities such as drainage and roofing. In addition to improvement and development of marketplace facilities, it would be desirable to install a bulletin board for price information from other areas, which will greatly benefit farmers who have little access to up-to-date information.

Dissemination of quality control and cleaning technology of pulses for WFP/P4P and ECX auction

The pulses transactions in which WFP and ECX are involved are required to follow respective quality standards. If quality is bad, such pulses will be rejected. The P4P targeted cooperative unions should disseminate quality control and refining technology of pulses to their member coops with an aim to promote efficient transactions.

Capacity enhancement in collection, cleaning and marketing business by cooperatives

Same as the case of cereals, it is necessary to provide cooperative unions, not only those participating in the P4P but also those not participating, with support to enhance their technical capacity in quality control so as to promote efficiency in market transactions.

Improper warehouse and quality control

Most warehouses of primary cooperatives and cooperative unions, either owned or leased, have many issues to be improved. Though it is unnecessary to construct warehouses for cereals and pulses separately, it is important to implement the quality control of pulses by the warehouse facility and improvement of warehouse management technology the same as for cereals.

4.1.3 Vegetables

(1) Perishable vegetables

Promotion of vegetable production matched to urban demands

The vegetable kinds being produced and marketed by farmers, including commercial cultivation around the city area, are limited. On the other hand, the vegetable shops in Hawassa city, which have recently opened and are operated by export vegetable farm (company), supply a variety of good quality vegetables to consumers and they are prosperous.

In the urban areas, demands for vegetables will increase in both volume and varieties with further concentration of population and change in people's life-style. It is necessary to promote the expansion of vegetable production matched to the growth and change in vegetable demands of urban consumers.

Promotion of vegetable production for off-season supply

The current nature of vegetable production has strong seasonality, thus market prices also fluctuate seasonally. Conversely, it will profit if vegetables are produced in the off-season. To promote the

off-season vegetable production, supportive measures should be undertaken by the agricultural administration such as: 1) promote farmers' awareness, 2) introduce small-scale irrigation, 3) R&D of new cultivation technology and its extension to farmers, and 4) improvement of product quality (introduction of improved varieties, establishment of IPM systems, etc.).

Efficient collection and distribution to urban markets

In order to attain efficient collection and distribution of vegetables to urban markets, 1) enlargement in collection scale at production sites (group marketing by producers), 2) improvement of handling of products at the time of harvest and shipment to keep freshness and to reduce damage, and 3) improvement of transportation technique such as use of better containers, are required.

In the case of tomato in Wondo Gonet area (one of the major tomato supplier to Hawassa market), it must be possible to introduce a higher value but fragile variety by improving the farmers' harvesting, handling and transportation practices.

As is obvious, it is necessary to improve the marketing infrastructure such as roads and marketplaces to increase the efficiency of collection and distribution.

Most farmers do not have any boxes/containers to pack and carry farm products. Financial support (subsidy) must be indispensable to promote the use of better containers (durable and handy to stack) among farmers.

Local marketplaces are the selling place for surplus products for farmers. Poor conditions in marketplaces hinder efficient transactions, especially on rainy days. Perishable vegetables (difficult to preserve freshness) are displayed under direct sunlight. It is very necessary to improve the poor conditions in marketplaces; at least some roofed area and proper drainage system are required.

Strengthen the receiving and distributing function in the urban markets

In parallel to strengthening the efficiency of collection of products at production sites, it is necessary to strengthen the receiving and distributing function in the urban markets. If the exit is choked up, flow of products will never be efficient. For establishment of a properly designed wholesale market in the first place, supportive measures to private merchants are required to promote the development of facilities for wholesalers/retailers, large-scale grocery stores, introduction of reefer trucks, etc.

(2) Red pepper (*Capsicum*)

SNNPR is the largest producer of red pepper in the nation and red pepper is a very important cash crop. In order to maintain the competitiveness with other regions, quality improvement and/or differentiation is necessary. To attain a better price by quality improvement, target consumers/buyers should be precisely determined, and marketing channels should be differentiated. A certain volume is often required from the buyer side, and if farmers try to work on quality improvement, it is necessary to work as a group.

Facilities, management system and rule/regulations of important marketplaces in pepper collection should be improved. In particular, the management system and rule/regulations of Alaba Kulito marketplace needs to be improved from the aspect of efficient transactions, since “large-scale transaction starts from late evening” and “there are many brokers” at Alaba Kulito marketplace.

Provision for market information (prices in major production centers and Addis Ababa markets, crop situation of other regions, etc.) by agricultural administration to pepper producing areas in SNNPR is important. Research work on red pepper post-harvest processing is very weak. Research on loss assessment and improvement of traditional storage method, appropriate moisture contents to keep good color and good shape, improved drying method and so on should be undertaken.

4.1.4 Fruits

Introduction and cultivation of high commercial value varieties of Mango and Avocado

A large volume of mango and avocado are produced in SNNPR, and almost all fruit trees are grown wildly with no management. The mode of production is “collection”; it is not “cultivation”. In addition, no attention is paid to variety. “Yellow-small-full of fiber” type is the majority for mango, and unknown cross-breeds are the majority for avocado.

Apple mangoes from Awash valley in Oromiya region were sold at high price in Addis Ababa. However, many farmers in SNNPR do not know that there are high value mango varieties such as Apple mango; they do not know that asexual propagation is necessary to maintain the characteristic of the variety.

Considering these situations, what should be undertaken now is introduction and cultivation of high commercial value varieties. For this purpose, the agriculture bureau should do selection of varieties, grafted-seedling production and dissemination, and teach proper cultivation method to farmers. Moreover, it is necessary to import pruning shears and saws that are indispensable tools for proper cultivation management of fruits trees.

Improvement of farmers’ harvesting and handling practices for mango and avocado

As stated in above the sentences, mango and avocado trees are grown wildly with no management. Due to these being no custom of using tools (or no tools have been invented) for harvesting fruits, due to high tree height and probably due to the cheap price of fruits, farmers practices of harvesting and handling are very rough – climbing trees and beating with sticks to make fruits fall off. Rough handling by farmers causes mechanical damage, and it is one of the major causes of large losses in the distribution channels.

It is necessary to improve the farmer’s awareness of quality, and improve harvesting/handling practices by introducing appropriate tools.

Improvement of transport technique

Much loss occurs in the long distance distribution of fruits to the north regions. USAID/ATEP worked in Arba Minch to promote the export of bananas. However, quality preservation (protection from physical damage) during the harvest/collection in the fields and the land transit to packing houses were issues to be solved.

In addition to the improvement of farmer's harvesting/handling practices, better truck transport techniques (cheap and durable containers/boxes, and proper stacking/loading work) need to be introduced.

Improvement of poor conditions in marketplaces

A variety of fruits are gathered at local marketplaces and shipped to urban markets, except banana and mango, which are handled by some cooperatives in the Arba Minch area. At present, poor conditions in the marketplaces hinder efficient transactions. It is very necessary to introduce facilities in marketplaces; at least some roofed area and a proper drainage system.

Sales of mangoes to Africa Juice S.C.

The low price in the peak season has been an important issue for mango, and the emergence of large demand from Africa Juice Tibila S.C in 2010 was expected to mitigate the problem of low prices.

Africa Juice Company entered into agreements with two cooperative unions in Aug. 2010 to procure a large volume of mangoes. In the procurement in the 2010/11 season, there was the loss problem (payment problem) and dissatisfaction with fruits quality; these were mainly caused by the company's poor business operation. Although it was unconfirmed whether these problems were the cause or not, mango purchase by the company was not performed for the 2011/12 season.

As seen in the careless material procurement (failures in truck arrangement, communication with the union, and delivery of quality requirements) in the 2010/11 season, it is hard to say that the business capability of Africa Juice is high.

However, mango demand for Africa Juice is the only large demand in the country. Supplier side (unions, coops, WoMCs and BoMC) should make an effort to build a stable business connection and to fulfill buyer's quality and quantitative requirements. BoMC should take an initiative/lead in it.

4.1.5 Root Crops

In SNNPR, except Enset; a staple foods in some zones of SNNPR, roots crops are mainly cultivated for self-consumption in small farm plots. The producers carry the root crops down the mountains and sell them at local marketplaces whenever needed. Transaction and commercialization of roots crops are at a primitive stage in general. Value added products of root crops are dried cassava and processed Enset (kocho and bula) but there is no preserved food or confectionery of root crops in Ethiopia. The prices of roots crops are very cheap at around less than 1 Birr per 1 kg only.

(1) Cassava

As cassava is a tolerant crop against dry-weather, farmers traditionally planted cassava as emergency foods for a drought. Farmers plant cassava as a hedge on farm land as well. Dried cassava is also used as an industrial raw material. The variety, cultivation and post-harvest handling of cassava as an emergency plant, industrial raw materials or ordinary human consumptions should not be the same. However, such approaches to select appropriate variety for the consumers' needs are undeveloped. Most of farmers plant traditional variety of 3 years maturity type for food security purpose. Early maturity variety was just introduced by FAO and NGO.

The consumption of dried cassava is gradually increasing during recent years because it was found that the suitability of cassava flour with Teff flour for cooking Injera is acceptable in Ethiopia. Dried cassava drew the attention of small scale farmers as a cash crop; however the quality control of dried cassava is a major issue.

Following countermeasures should be strengthened;

- Promotion of early maturity type cassava as a cash crop
- Establishment of proper processing technique and equipment and its extension
- Securement of the delivery to the industry
- Assistance for improving the quality of dried cassava and better pricing
- Promotions and advertisements for dried cassava consumption

(2) Enset

Enset is a staple food in many areas in SNNPR. After traditional processing, enset becomes local foods called Kocho and Bula. Those processing works are done manually by village women. Many different types of tool were developed and introduced to the processing. A mechanical processing machine was experimentally developed but not materialized as yet.

Kocho and Bula are mostly consumed by farmers' households and surpluses are sold at marketplaces nearby. Some traders purchase such Kocho and Bula in those local marketplaces for sale in large cities such as AA. Numbers of farmers commercially producing Kocho and Bula are limited. It is unknown whether farmers in SNNPR will stick to this traditional enset production or will sift it to more commercial and profitable products such as maize, pulses and upland rice.

Kocho and Bula are traditional food in Ethiopia and their processing technologies have been developed, though very much traditional. The marketing channels from production areas to consuming areas also established already. Some private workshops have tried the development of simple peeling machine for enset but it seems to take a long period of time until a feasible machine is completed. Multi-knives type Kocho cutter, similar to the one which Hawassa University produced experimentally, will be able to serve farmers and retailers for their value addition.

(3) Sweet potato and Taro

The production of sweet potato and taro in SNNPR mainly takes place in Central and Western parts in the region, especially in the low and medium altitude areas which are not climatically suitable for the production of teff, wheat, maize, pulses and enset. The diet style of root crops is merely a boiling of fresh potatoes. No food processing of potatoes such as dried ones or snacks is practiced. There is almost no diet of sweet potato and taro by mixing with teff flour for Injera making.

Sweet potato and taro are mainly produced for own consumption and some surplus are sold in marketplaces nearby at relatively low prices. The direction to improve the marketing system of sweet potato and taro for farmers in SNNPR will be;

- Enlargement of markets by formulating production centers
- Effective marketing by introducing collective marketing system
- Introduction of different varieties in order to meet consumers' likes and demands
- Development and extension of food processing and marketing activities

4.1.6 Other Crops

(1) Sugarcane

Sugarcane is a market oriented product and its sales ratio is high, around 50%. However the farmers' income is low because farmers do not add to the value of sugarcane by processing such as making juice, brown sugar or alcoholic beverages. In addition, medium-large scale sugarcane farmers such as in Wondo Genet area, farmers leave the harvesting works of fresh sugarcane to collectors/middlemen, so it is difficult for farmers to increase their income level.

The direction to improve the marketing system of Sugarcane for farmers in SNNPR will be;

- Increment of farmers income through harvesting and marketing works by farmers themselves (strengthening farmers group activities)
- Introduction of effective marketing styles to existing small-scale commercialized farmers (encouragement of collective marketing and market development in others regions)
- Development of sugarcane processed products and its market development.

(2) Ginger

Improvement of dried ginger quality

SNNPR is the biggest producer of ginger in Ethiopia and dried ginger is an important export crop. Ginger is customarily sun-dried on the ground without washing. AMIP/IFAD conducted the technical training for farmers to produce "clean" dried-ginger in Kambata Tembaro zone and Wolayita zone. However, AMIP/IFAD could not teach practical washing methods (tools).

It is required to introduce and/or develop appropriate washing tools/facilities for ginger which suit the local conditions, to realize "clean" dried-ginger production by farmers.

Built linkages with quality conscious buyers

To change the current practice of drying, it is absolutely necessary for farmers to get better prices (incentive) worth doing extra work for. To promote “clean” dried-ginger production, it is necessary to build up an assured mechanism (business relation) between farmers and quality-conscious buyers in which farmers’ incentive are realized.

4.2 Crosscutting Issues

4.2.1 Agricultural Market Information Services (AMIS)

Lack of Real-time dissemination of Market Information to farmers and other market actors

A number of organizations such as CSA, Early Warning Administration, WFP, LINKS, ETGT, ECX collect and disseminate market price information in the country. Only ECX among those organizations disseminates real-time information through the mobile SMS & IRV Services. However, ECX’s mobile SMS & IRV Services are mostly limited to coffee. Hence, market information services which disseminate real-time price information to farmers and other market actors are still lacking in almost all cash crops.

Problems and issues to be solved on AMIS in SNNPR are as follows.

Non-systematic and un-organized work systems, Lack of blueprint of AMIS

BoARD/BoMC has been responsible for setting the mechanisms of AMIS in the region as well as its operation. However, the mechanism of AMIS has not yet been prepared at all. As of 2010 (1st year of the Study), AMIS operation (to be precise, the data collection system) by BoARD was not systematic or organized, and not well-managed, either. It was observed that there was no clear or common understanding of what to do or how to do it in BoARD.

The major cause of this poor state of AMIS was the lack of a documented blueprint to outline “what to do and how to do it”, i.e. a designed AMIS system and operational guidelines. As a matter of course, manpower and budget were not properly allocated.

Very poor communication services

Usable communication tools for AMIS are very limited in many WoMC, and AMIS by Internet is not applicable now in SNNPR. GMS Mobile phone service (voice and SMS) is the only tool usable for exchanging information among WoMC offices.

However, the implementation of PP01 revealed that current mobile network/SMS service is not highly reliable, because network failures often hindered the immediate sending/receiving SMS messages (price information). Also there were missing SMS messages in spite of having been transmitted.

Poor resources for AMIS work in WoMCs

Resources for the AMIS work (communication tools, office equipment and office space) are not adequate, especially at newly established woreda offices. A stable communication tool to transmit and

receive data between the marketing process offices is very important, but currently the only available tool in WoMCs is the land telephone.

Insufficient awareness of purpose of AMIS, No utilization of collected information

In principle, a government market information service should aim to provide market information to the actors in the market systems, such as farmers and traders. But in most cases, price data collected by WoARD/WoMC are filed but not utilized, and little information is disseminated to the actors. Data exchange among the agricultural administration offices is also not well practiced.

Allocation of operating budget of WoMCs

WoMC C/Ps of PP01 reported that they faced a lack of budget for consumables such as A4 paper, pins to post price information. All 14 WoMC C/Ps showed their wish to continue the “AMIS with SMS and bulletin board” in the review & evaluation meeting held on February 2011. However, BoMC did not arrange the operating budget (minimum 100-150 birr/WoMC/month for mobile card, Total 1850 Birr/month) and the AMIS has stopped.

The budget of WoMC offices is under management of woreda administration; BoMC has no direct authority to allocate budget to WoMC offices. For continuing PP01 activity and expanding it to other corps/woredas, it is absolutely necessary for BoMC, as the responsible body for AMIS operation in SNNPR, to work to allocate the operating budget of WoMC offices.

4.2.2 Marketing Facility / Infrastructure

Road Development and Transportation

Since establishment of SNNPR in 1993, road extension and road density have been improving steadily and going on at present according to the Regional Road Plan 2010/11-2014/15, but it's still insufficient. The main marketing routs in SNNPR of 1) Hawassa rout, 2) Hosana - Arba Minch route and 3) Jima route have been asphalt paved and started functioning as trunk bloodstream. Moreover, community roads are also extending by woredas' budget or donors such as AGP. Motorization in rural areas is still quite preliminary due to shortage of purchasing powers. Three-wheeled vehicle called “bajaji” and horse and carriage are still common in towns in SNNPR, and most people still use their feet or donkey to go to local markets from their residence in the rural area. Long distance traffic is also seldom seen in rural areas. It is crucial to develop a public transportation system to deliver local agricultural commodities to the market. In this context, it is concerned that road extension in blind panic becomes an over investment.

Local Marketplaces

There are about 670 marketplaces in SNNPR, but marketplaces with roofs and proper drainage are quite seldom seen. Well organized local markets are also very few. There are so many things that have to be solved; such as having a functional flow lines, drainages, water supply, toilets for users, garbage

collection, etc. The hygiene issue and commodity handling, especially on rainy days, are growing into a serious problem. However, no countermeasures have yet taken by the local authority due to lack of finance and appropriate management system.

Warehouse

Storage facilities of agricultural cooperatives have a lot of issues on functionality: they are mostly constructed with mud wall and earth floor, one entrance and no ventilation openings and no sun-lighting. Storage capacity is small. The poor cooperatives rent offices or residences for storage from local administration, and they are often not suitable for storing products and losses happen during storage. It is necessary to promote the practice of warehouse management to cooperatives; starting from the understanding the importance of separate storing of farms products and chemicals/fertilizers, then to disseminate the knowledge and technology of proper warehouse management by training.

4.2.3 Farmers Organization / Cooperatives and Unions

Institutional Problems of Government System

SNNPR has an official framework to support and regulate the activities of cooperative societies. The Proclamation stipulates roles and responsibilities of cooperative societies and BoMC is made responsible for registration, inspection and support of all cooperatives in the region through its four-tiered structure covering regional level to kebele level. Currently, the number of cooperatives registered in the region is close to 9,000, out of which about 1,200 are agricultural primary cooperatives (PCs). In spite of political slogans for the development of cooperative societies, BoMC has neither a clear organizational structure nor a practical strategy on how it should support cooperatives in its capacity and organizational development. Further, frequent revision and modifications in some policies strongly related to interest and development of cooperatives have not only become an impediment to their steady growth but also made it difficult for them to manage and operate the organization with a long-term vision and strategy.

Involvement of Cooperatives in Collective Marketing

Because of a campaign strongly promoted by the Regional Government for the formation of cooperatives, more than 150 PCs were newly established between 2007 and 2011. However, few PCs have sufficient capacities, both technical and managerial, to provide their members with various services stipulated in the Proclamation. The activity of many PCs is limited to the distribution of agricultural inputs. Some are dormant. Only a small fraction of PCs are involved in collective marketing and many of these PCs are exclusively engaged in grain marketing, mostly maize, wheat and haricot beans. With regard to grain transactions, cooperatives have developed the system in which cooperative unions (CUs) procure a credit for member PCs to purchase grains from their members and PCs sell them to the CU in return. Because Ethiopia is a food insecure country, most CUs agree that finding a buyer is rather easy as long as their grain meets a quality standard. Nevertheless, the volume of grain transacted through cooperatives is only a few percent of those marketed throughout the region

and those farmers benefitting from the grain marketing of cooperatives are also very small in number. Limited financial capacity of CUs, low quality of grain brought in by farmers due to poor and obsolete post-harvesting technologies, absence of proper storage in many PCs are some of the major hindrances preventing cooperatives from expanding their business. A number of farmers including most cooperative members end up selling low quality produce in local markets with low prices offered by local traders.

The number of PCs which are engaged in the transaction of agricultural produce other than grains is even fewer than those handling grains. Most SNNPR farmers are subsistent farmers and, thus, they are rarely engaged in cash crop production and marketing. One of the rare exceptions is banana farmers in Gamo Gofa zone. They came together to establish a PC with a clear objective to carry out collective marketing.

Major and fundamental constraints and problems which seriously hamper agriculture commercialization among smallholder farmers through cooperatives in SNNPR are as follows:

- Many PCs registered in SNNPR were established with strong initiative of government to assist the execution of particular policies such as the distribution of agricultural inputs. Thus, members rarely share common objectives which they can collectively work for. Many PCs are disintegrated and have no proper organizational mechanism or mutual understanding among members, which are essential for cooperative business to be successful.
- The operation and management of many cooperatives are unilaterally controlled by a small number of executive members with minimum participation of members. Because members have little trust in management, their participation in cooperative activities is minimal. For example, some CUs or PCs have made an attempt to start collective marketing of their produce in response to an intervention extended by outside partners, including government agencies and development partners. But many such attempts turned out to be failures, mainly because of disinterest of members who had never been involved or consulted in the decision-making process.
- Most smallholder farmers, including PC members, have little experience in a market economy. They have very limited knowledge of agricultural marketing system and pricing mechanisms. Thus, many are suspicious to be involved in collective marketing, whose concept is very unfamiliar to them.

In conjunction with lack of knowledge and skills in organizational management and business management, low commitment of members and little awareness of committee members on issues related to transparency and accountability pose serious constraints for cooperatives to start and successfully carry on a business.

Finance and Accounting

Cooperatives and Unions are requested to submit a financial statement (balance sheet or income statement) and business plan annually in accordance with the guidance of the Cooperative

Development Agency. However, almost none of the cooperatives have the capacity to prepare the financial statements; therefore the auditors of the WoMC have to prepare them instead of the cooperatives. No electric computer is available in accounting and financial analysis.

The accumulated accounting information hasn't been utilized for business management of cooperatives and unions. If an analysis like comparison among several years' statements were made, the strength and weakness of their business activities would be clarified and it would also be useful for their investment or financial loan planning. However, the employment of persons who have skill in accounting is difficult because of their high payment requirements.

The transparency of financing and accounting information is one of the most important matters for formulating, the mutual trust between implementation board and a member of the general assembly of the cooperatives. However, the board members cannot properly explain the business activities and their lack of basic knowledge of business brings a sense of distrust for each other.

Support to Cooperatives and Its Limitation

Government and NGOs have been providing various training for both CUs and PCs in order to enhance their capacity to activate cooperative business. However, the number of PCs targeted by each training program is generally very small compared with that of PCs operating in a whole region. Moreover, most training has been one-off and covered only a few topics at a time. As a result, very few interventions have produced any tangible results or succeeded in transformation of target cooperatives. The following is some of the perceived problems of training programs offered to cooperatives.

(Training Contents)

- Focusing on theoretical issues. Thus, it is difficult for participants to put what they learned into practice.
- Adopting conventional, teacher-student learning method for adult learners.
- Hardly responsive to the needs of participants without properly taking into consideration the conditions which PCs and their members are in.

(Training System)

- Despite the fact that many training programmes adopt the cascade training system in which ToT is conducted for WoMC staff, they seldom provide WoMC with adequate financial and material support for training delivery.
- The same PC members are always selected for any training programme organized by external partners, regardless of their positions in PC.
- Training participants hardly disseminate what they learned in the training to the other members. Thus, training hardly contributes to improvement of PC's organizational capacity.

4.2.4 Agro (food) Processing

Undeveloped state of support industries for food processing

The undeveloped state of support industries such as manufacturing of packaging materials hinders the development of agro (food) processing business regardless of the size of the business. ELFORA Melge Wendo Food Processing Factory in SNNPR produces canned tomato products, and the high cost of imported steel sheets for can making is one of their difficulties. There is only one glass container factory in the country, but the minimum size for placing an order is too large for small businesses. ECOPIA, a fruit processing business at cottage industry level but most probably the largest fruit processor in the country, uses recycled glass containers for jams and other products, because they're unable to make her own glass containers in the country and imported bottles make the product price too high for the domestic market. Similar quality for labels/packages is required for jam and juice to compete against the imported products at urban outlets, but current quality level has not yet reached that level.

Food culture – limited tradition of making processed foods

Flouring/powdering processes are traditionally practiced in the country. The most popular one is chili powder production (red pepper based mixed spice powder). Many households have their own recipe, and purchase the various ingredients and clean/mix them at home, and then flour at mills in towns. There are private businesses producing branded chili powder. However, traditional food processing with vegetables and fruits is almost nonexistent, and this food culture is considered as one of major reason for the undeveloped food processing businesses in the country.

4.3 Classification of Crops by Distribution Systems

The field study was conducted according to the type of crops, namely cereals, pulses, vegetables, fruits, root crops and others (spices, etc.). These crops are classified from the viewpoint of the present modes of distribution systems in SNNPR as shown in Table 4-1. By using this classification, the development goals can be set by maturity levels and suitable countermeasures can be prepared.

Table 4-1 Classification of Crops by Modes of Distribution Systems

	Distribution range	Preservation	Distribution loss	Process	Price fluctuation	Added value	Quality control
Cereals	Wide	Long	Medium	Process	Less high	Low potential	Good
Pulses	Less wide	Long	Medium	Half process	Less high	Potential	Good
Vegetables	Small	Short	Large	No process	High	High potential	Bad
Fruits	Less wide	Medium short	Large	No process	High	High potential	Bad
Root crops	Less wide	Medium long	Medium	Half process	Low	Potential	Bad
Others	Wide	Medium long	Medium	Half process	Low	Potential	Moderate

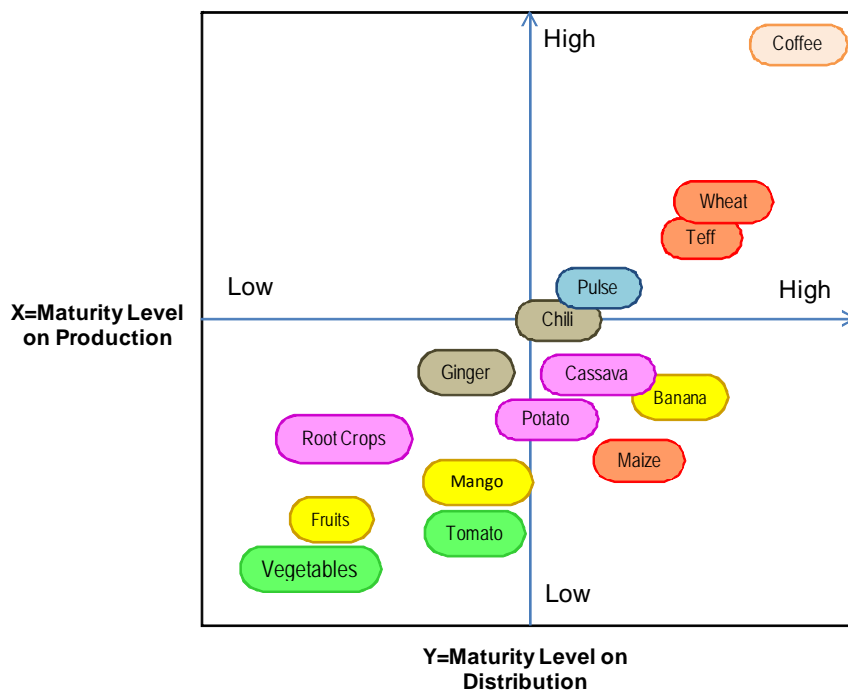
Source : JICA Study Team

Furthermore, the positions of crops were analyzed as shown in Figure 4-1. The horizontal axis is the degree of maturity on produce and the vertical axis is the degree of maturity on distribution. The targeted crops are plotted on the figure accordingly. The quadrants are expressed as (produce, distribution=x,y).

Leaf vegetables have low productivity and small scale distribution, therefore the coordinate point is (produce, distribution = low, low) in the lower left quadrant. Meanwhile, banana and maize are actively produced as potential commodities and production skills are advanced, but market mechanisms are not developed enough. Therefore the coordinate points are (produce, distribution = high, low) in the lower right quadrant.

Although the productivity of wheat has improved year by year, there is much room for improvement in postharvest technology and distribution systems, so the coordinate point is (produce, distribution = high, little high) in the upper right quadrant. Coffee is not targeted by this Master Plan Study but it is plotted (high, high) in the upper right quadrant.

Crops that succeed on distribution but have primitive production do not exist in principle.



Source: JICA Study Team

Figure 4-1 Conceptual Figure of Maturity Level between Production and Distribution

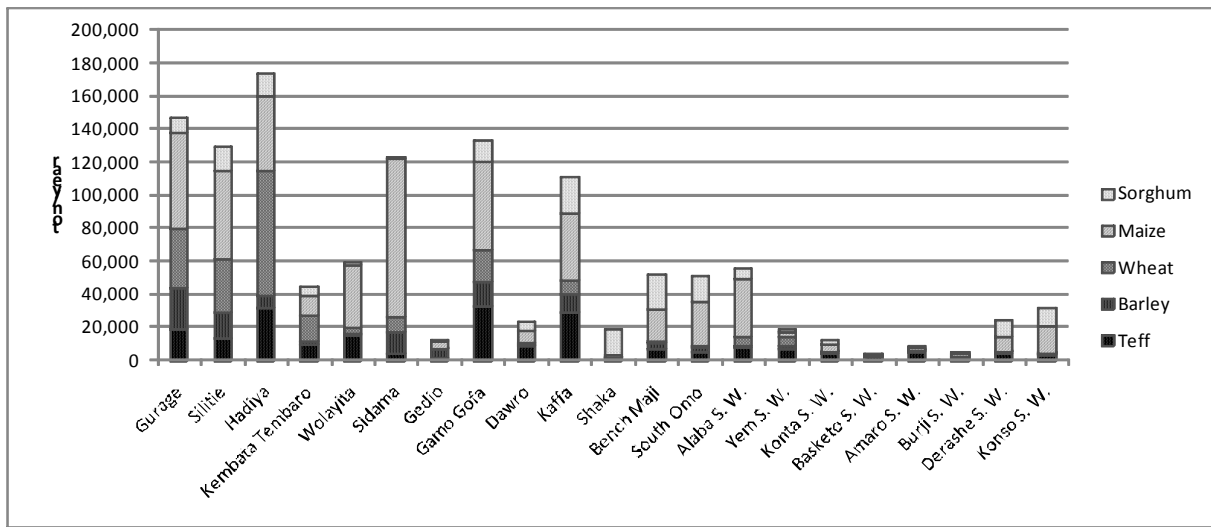
4.4 Zonal Characteristics

4.4.1 Zonal Characteristic by Crop

SNNPR is located in an area between 350-4200 m.a.s.l where the rainfall varies from 400-2200 mm/year. Therefore, it is possible to grow various types of crops in SNNPR. In this section, the production volumes and distribution volumes of the main target crops are compared by zones.

(1) Cereals

Figure 4-2 illustrates the production of the major cereals in 13 zones and 8 special woredas in SNNPR. The northeast area of SNNPR is a wealthy production area of cereals such as maize, wheat, barley and teff. It is remarkable that maize production volume is the largest in Sidama zone.



Source: CSA, Agricultural Sample Survey 2008/9, Vol. VII, Bulletin 446

Figure 4-2 Production Volumes of Major Cereals by Zones

The ratios of sales of cereal crops in each zone are shown in Table 4-2. Wheat production in the northeast area has a surplus, and farmers positively sell their produce to the market. On the other hand, maize is grown only for self-consumption and market conditions are still immature.

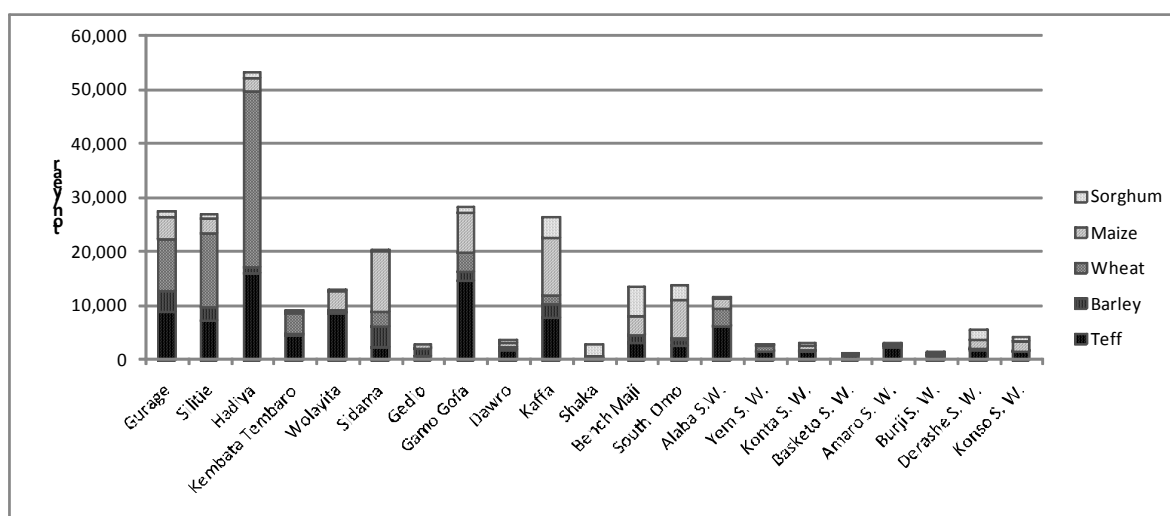
Table 4-2 Sales Ratios of Cereals by Producers by Zones (%)

Zone & Special woreda	Teff	Barley	Wheat	Maize	Sorghum
Guraghe	47.8	14.5	27.3	7.1	11.7
Silitie	53.3	15.3	42.4	5.5	5.3
Hadiya	51.2	14.9	42.9	5.9	7.3
Kembata Tembaro	46.1	7.9	23.8	3.6	6.1
Wolayita	56.6	13.2	14.9	9.5	3.9
Sidama	55.0	29.4	29.2	11.9	8.6
Gedeo	41.0	24.9	23.0	18.5	0.0
Gamo Gofa	44.7	11.7	18.0	13.9	8.6
Dawro	19.5	26.9	23.2	12.1	11.4
Keffa	26.8	21.7	21.9	26.0	17.9
Sheka	15.6	17.6	35.6	17.0	15.1
Bench Maji	44.9	36.5	21.6	18.5	25.2
South Omo	54.8	40.8	43.5	25.4	18.0
Alaba S.W.	77.5	18.1	51.2	5.9	3.6

Zone & Special woreda	Teff	Barley	Wheat	Maize	Sorghum
Yem S. W.	21.8	6.7	16.0	3.4	6.5
Konta S. W.	33.8	22.5	29.8	22.9	15.2
Basket S. W.	46.0	35.7	10.0	24.5	32.1
Amaro S. W.	46.4	33.8	14.8	7.7	9.3
Burji S. W.	44.7	22.0	23.2	9.3	20.0
Derashe S. W.	49.5	16.2	21.0	16.9	18.6
Konso S. W.	42.1	8.0	12.5	11.9	6.0

Source: CSA, Agricultural Sample Survey 2008/9, Vol VII, Bulletin 446

Figure 4-3 illustrates the estimated distribution volumes of cereals, which are computer by "Production volume" x "Sales ratio of farmers".

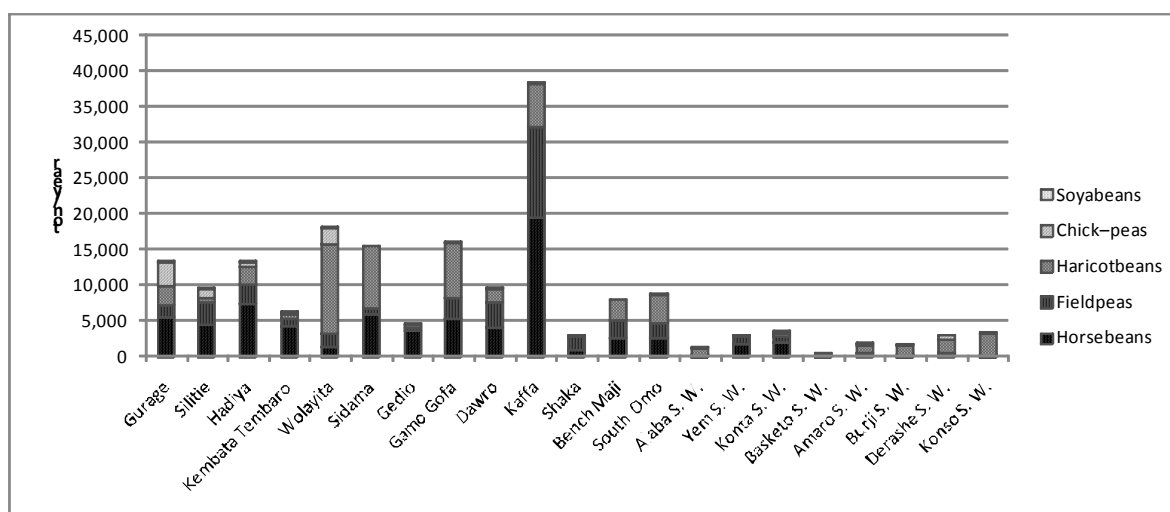


Source: CSA, Agricultural Sample Survey 2008/9, Vol. VII, Bulletin 446

Figure 4-3 Distribution Volumes of Cereals by Zones

(2) Pulses

The production and distribution volumes of pulses were compared similarly to that of cereals described above.



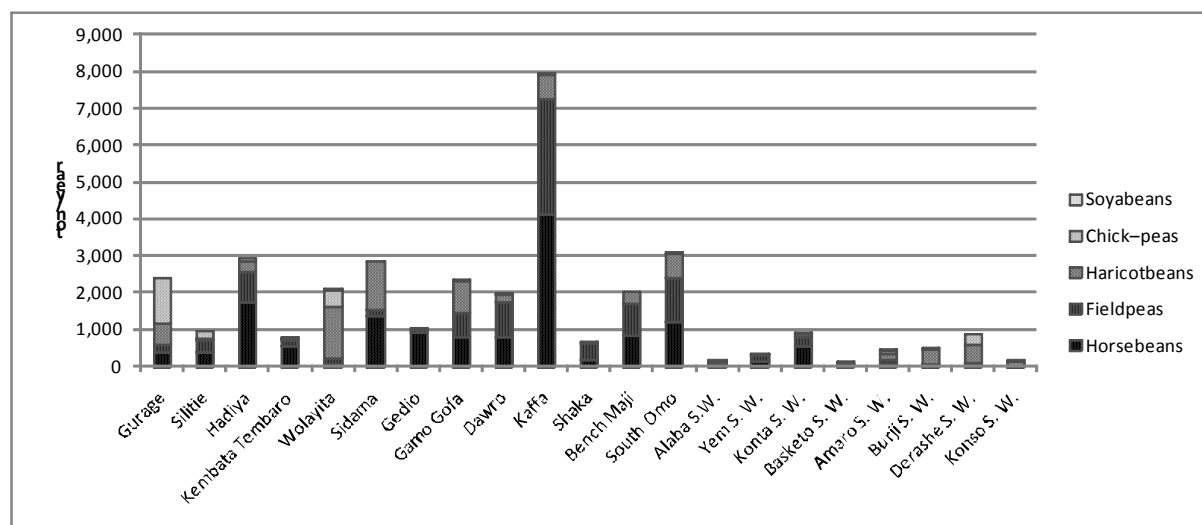
Source: CSA, Agricultural Sample Survey 2008/9, Vol. VII, Bulletin 446

Figure 4-4 Production Volumes of Pulses by Zones

Table 4-3 Sales Ratios of Pulses by Producers by Zones (%)

Zone & Special woreda	Horse beans	Field peas	Haricot beans	Chick-peas	Soy beans
Guraghe	6.7	12.6	22.1	37.1	0.0
Siltite	8.4	11.2	4.9	15.6	0.0
Hadiya	23.3	32.4	11.1	15.0	0.0
Kembata Tembaro	12.9	16.3	8.5	0.0	5.0
Wolayita	2.9	10.1	11.1	19.0	15.0
Sidama	23.2	21.0	15.1	0.0	0.0
Gedeo	26.2	19.4	3.8	0.0	0.0
Gamo Gofa	15.0	22.5	11.0	65.0	0.0
Dawro	19.2	27.6	10.1	12.5	0.0
Keffa	21.2	24.4	11.2	25.0	0.0
Sheka	18.9	24.2	0.4	0.0	0.0
Bench Maji	32.5	34.1	11.1	0.0	0.0
South Omo	49.4	54.1	16.3	0.0	35.0
Alaba S.W.	42.0	0.0	11.8	35.0	0.0
Yem S. W.	8.8	12.9	5.6	15.0	0.0
Konta S. W.	27.7	33.4	14.6	7.6	0.0
Basket S. W.	0.0	24.7	18.0	0.0	0.0
Amaro S. W.	32.3	29.7	20.7	29.7	10.0
Burji S. W.	26.2	26.0	32.0	28.1	0.0
Derashe S. W.	18.4	30.3	25.7	40.0	0.0
Konso S. W.	25.7	12.0	4.4	10.7	0.0

Source: CSA, Agricultural Sample Survey 2008/9, Vol. VII, Bulletin 446



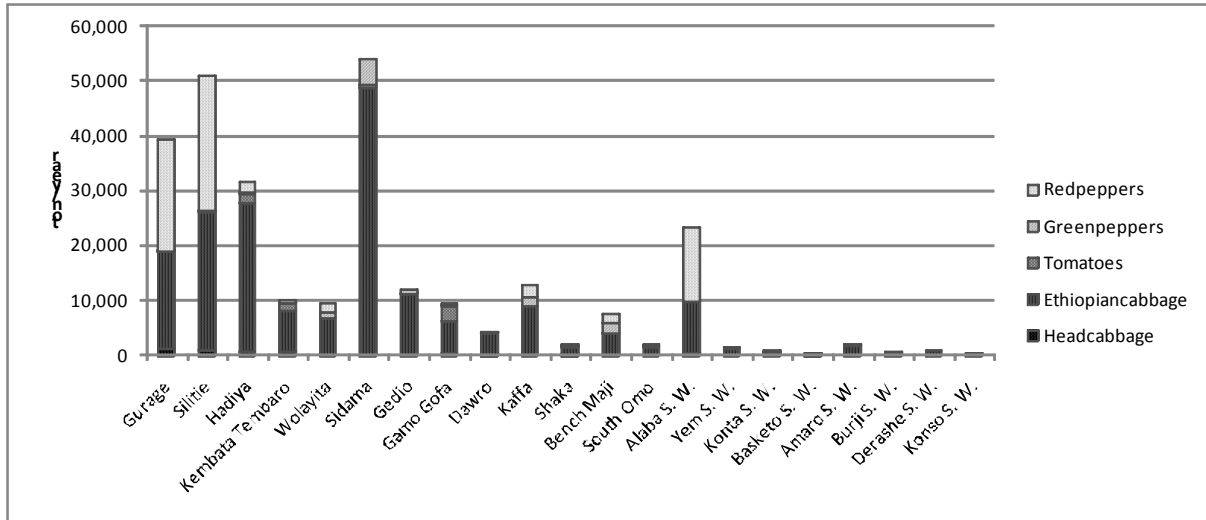
Source: CSA, Agricultural Sample Survey 2008/9, Vol. VII, Bulletin 446

Figure 4-5 Distribution Volumes of Pulses by Zones

Regarding pulses, production and sales volume are the largest in Keffa zone. The productions in Bench Maji zone and South Omo zone are not large but the distribution volumes reached 2000 - 3000 ton/year since the sales ratios were greater than 50%. In terms of chick peas, the production and distribution volume are too small to appear in the graph but the potential market is going to formulate in Gamo Gofa zone. Chick peas are regarded as a cash crop and 65% of production flow into the market. Accordingly, the southwest area could be potential areas for pulses.

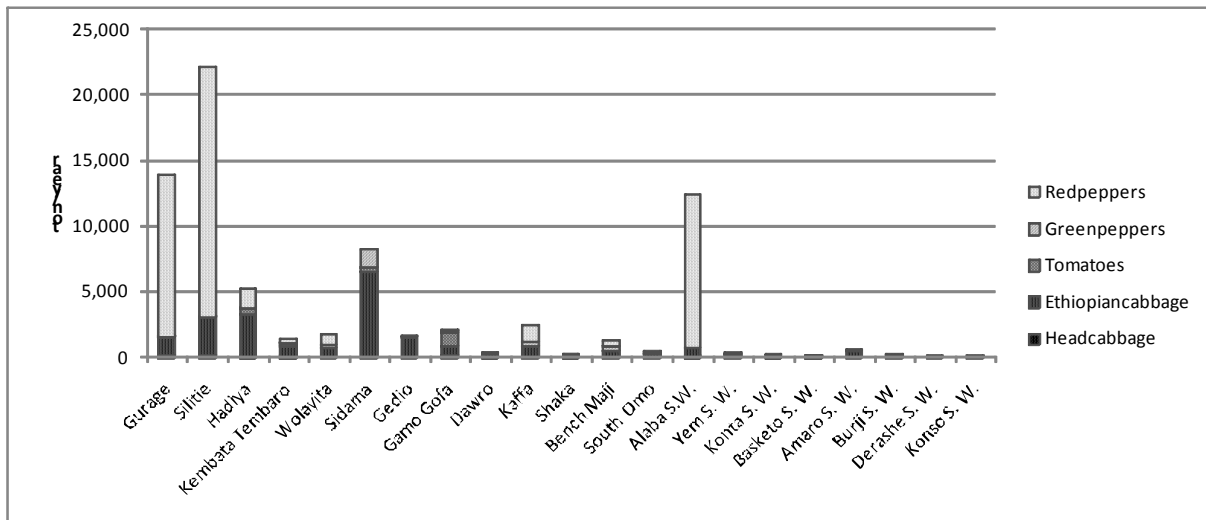
(3) Vegetables

Figure 4-6 and Figure 4-7 show the production volume and distribution volume of major vegetables in SNNPR.



Source: CSA, Agricultural Sample Survey 2008/9, Vol. VII, Bulletin 446

Figure 4-6 Production Volumes of Vegetables by Zones



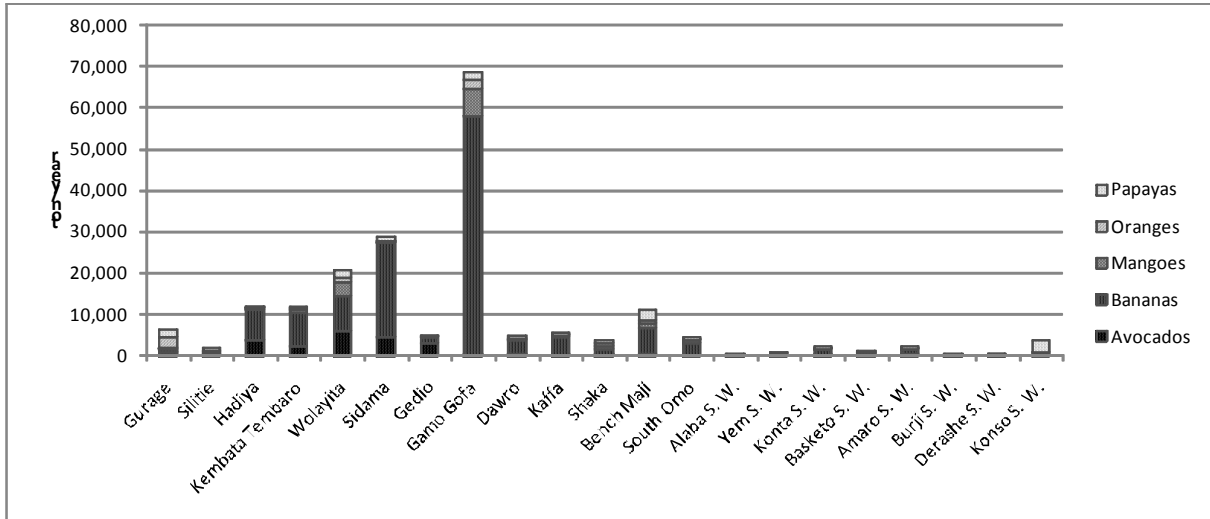
Source: CSA, Agricultural Sample Survey 2008/9, Vol. VII, Bulletin 446

Figure 4-7 Distribution Volumes of Vegetables by Zones

Ethiopian cabbages are grown for mainly self-consumption and about 10% of the production is traded in the market. In contrast, red peppers are grown as a cash crop for sale, with 60% to 75% of production going to the market. In particular, production and sales of red pepper in Gurage zone, Siltie zone and Alaba special woreda are remarkable. Regarding tomato, trade in Sidama zone and Gamo Gofa zone is active and 55% and 37% of production is sold to the market, respectively.

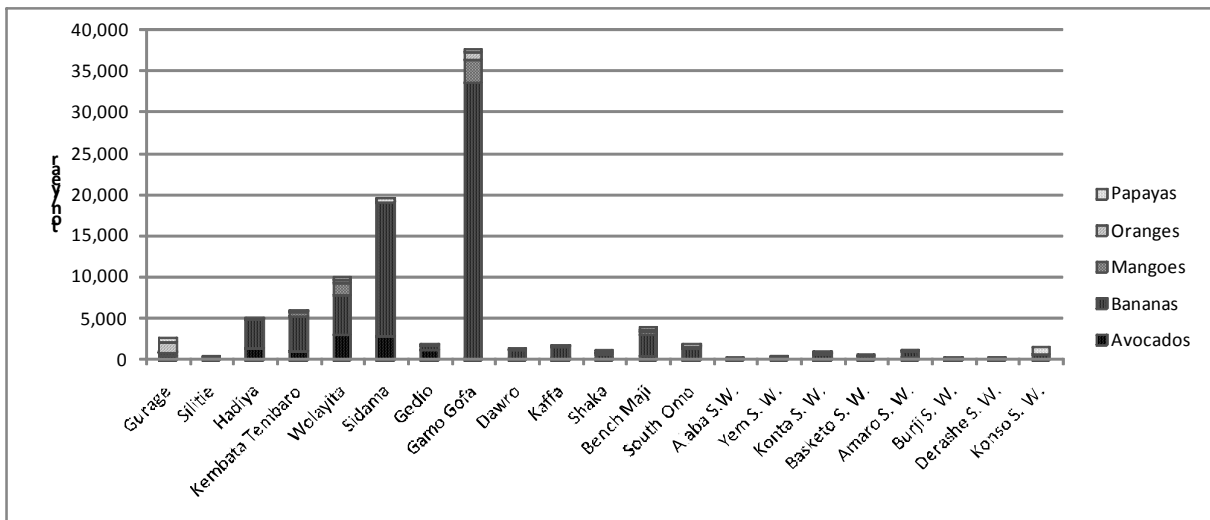
(4) Fruits

Figure 4-8 and Figure 4-9 illustrate the production volumes and distribution volumes, respectively. Fruits are grown actively in Gamo Gofa zone. The most popular fruit is banana of which the sales ratio reaches 58%. Sidama zone is the second highest banana production area in volume but the first in sales ratio, at 71%, and the sales ratio of avocados there reaches 60%.



Source: CSA, Agricultural Sample Survey 2008/9, Vol. VII, Bulletin 446

Figure 4-8 Production Volumes of Vegetables by Zones

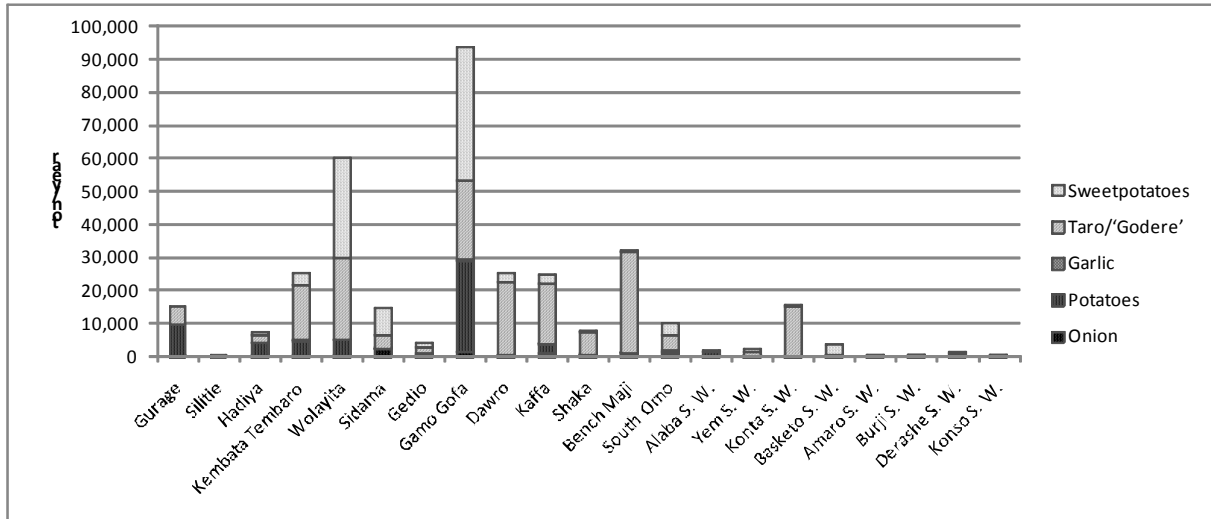


Source: CSA, Agricultural Sample Survey 2008/9, Vol. VII, Bulletin 446

Figure 4-9 Distribution Volumes of Vegetables by Zones

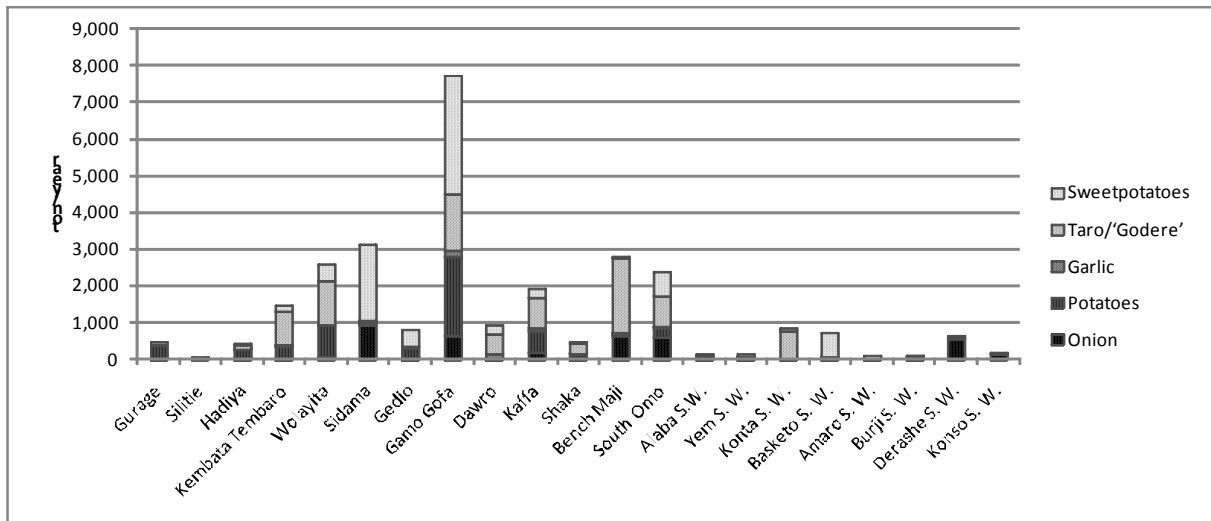
(5) Root Crops

The major production areas of root crops are Gamo Gofa zone and Wolayita zone. It is not suitable to produce cereals at sloping land of low-middle elevations in Wolayita zone; therefore root crops are positively grown instead.



Source: CSA, Agricultural Sample Survey 2008/9, Vol. VII, Bulletin 446

Figure 4-10 Production Volumes of Root Crops by Zones

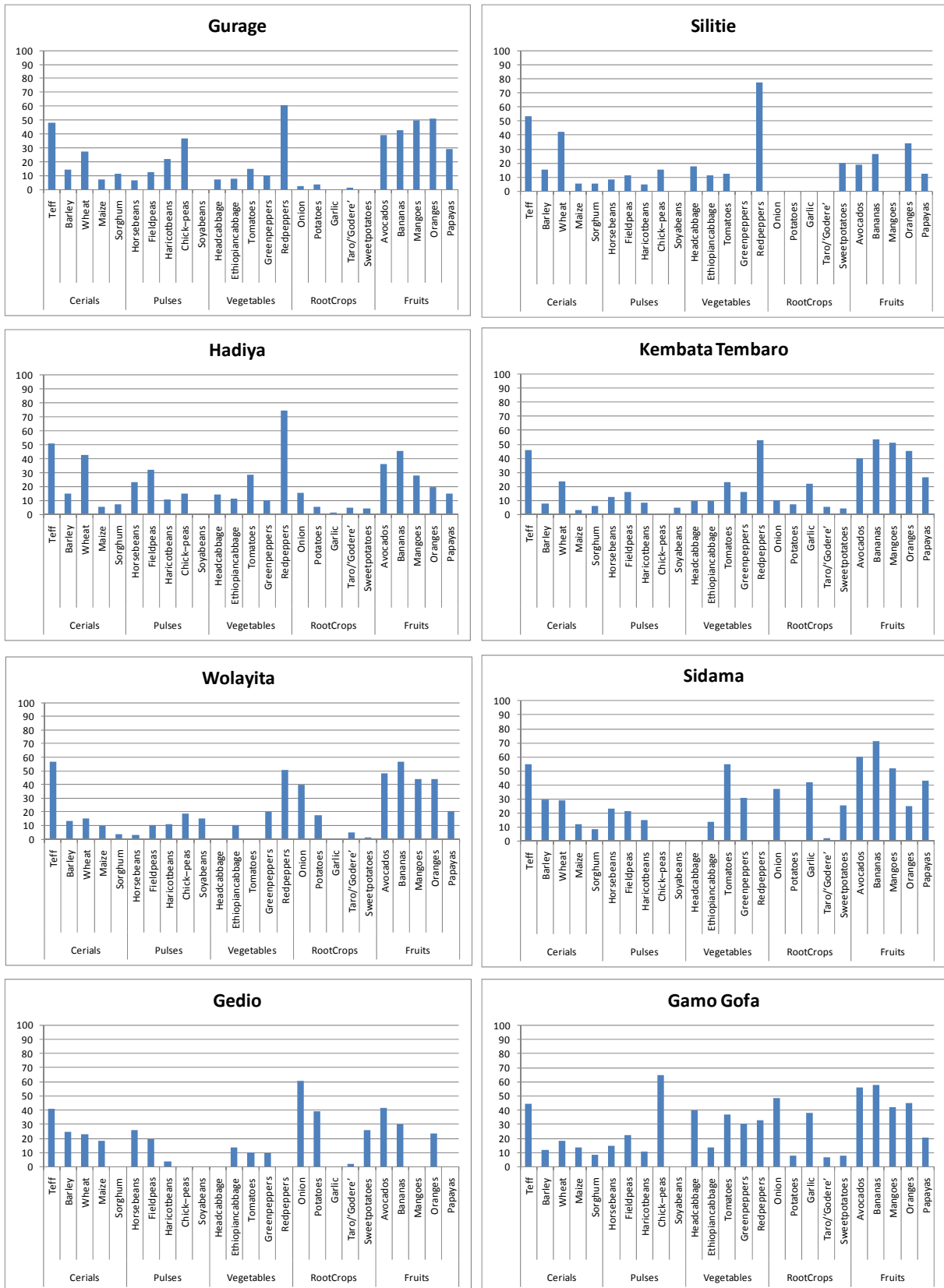


Source: CSA, Agricultural Sample Survey 2008/9, Vol. VII, Bulletin 446

Figure 4-11 Distribution Volumes of Root Crops by Zones

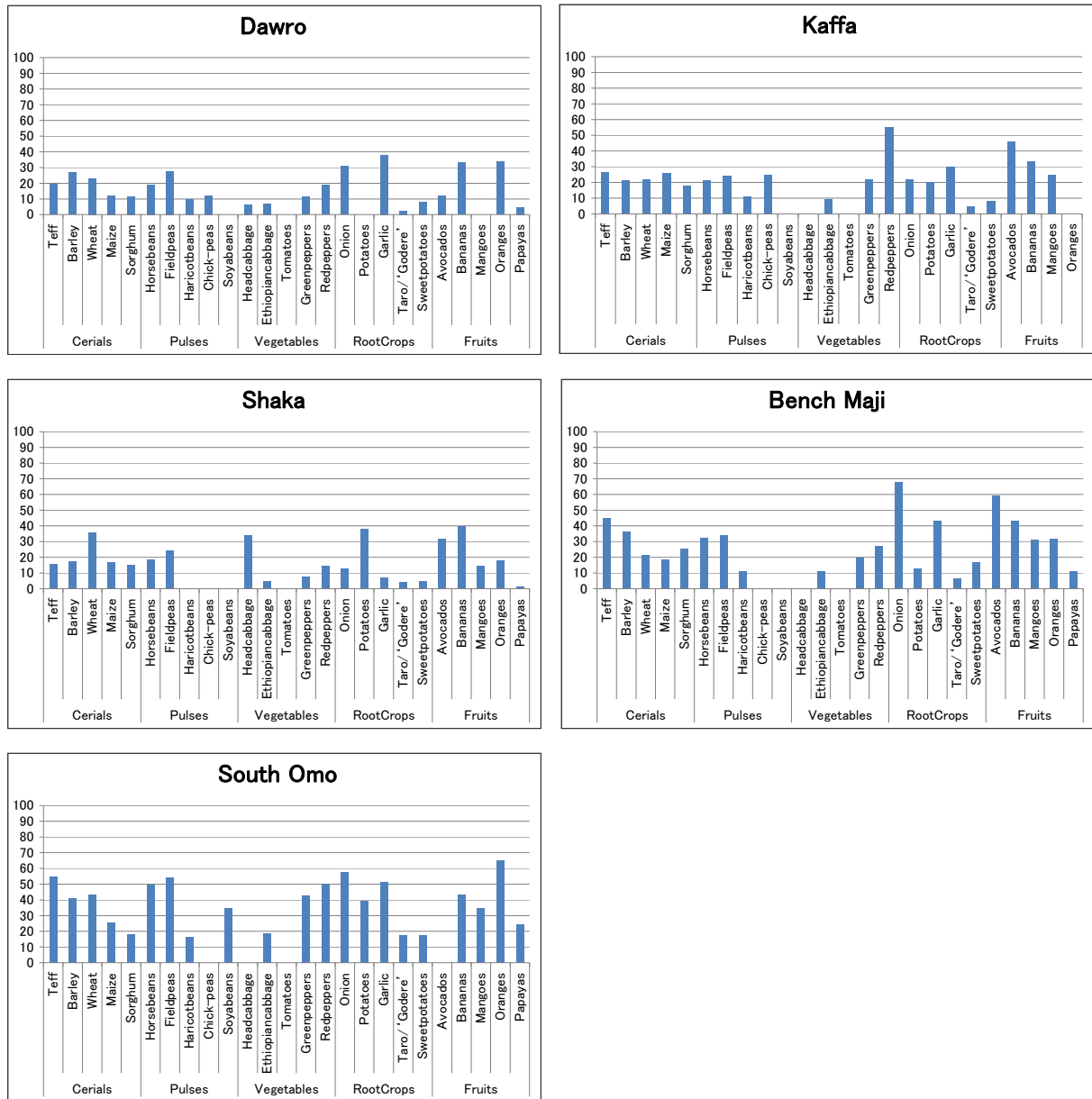
4.4.2 Zonal Characteristic by Crop Marketing

The bar graphs in Figure 4-12 illustrate the sales ratio of major crops in each zone. The strategic cash crops of each zone are pointed out by comparing the sales ratios of the crops.



Source: CSA, Agricultural Sample Survey 2008/9, Vol. VII, Bulletin 446

Figure 4-12 Potential Cash Crops in Each Zone (1/2)



Source: CSA, Agricultural Sample Survey 2008/9, Vol. VII, Bulletin 446

Figure 4-12 Potential Cash Crops in Each Zone (2/2)

1) Northern area of SNNPR

Red pepper is produced in Guraghe zone, Silitie zone and Hadiya zone in the northern area of SNNPR as a potential cash crop. The sales of surplus cereals, which are mostly teff and wheat, nearly reach 50%. Although the total volume is low in the northern area, fruit production and sales are popular in Guraghe zone and Kembata Tembaro zone.

2) Central area of SNNPR

Root crops of Wolayita zone and vegetables (tomatoes in particular) and fruits (avocados and bananas) in Sidama zone are promoted as cash crops. The sales ratio of root crops in Gedeo zone stands out.

Surpluses of cereals, particularly teff, are produced and are sold in the center of SNNPR as well.

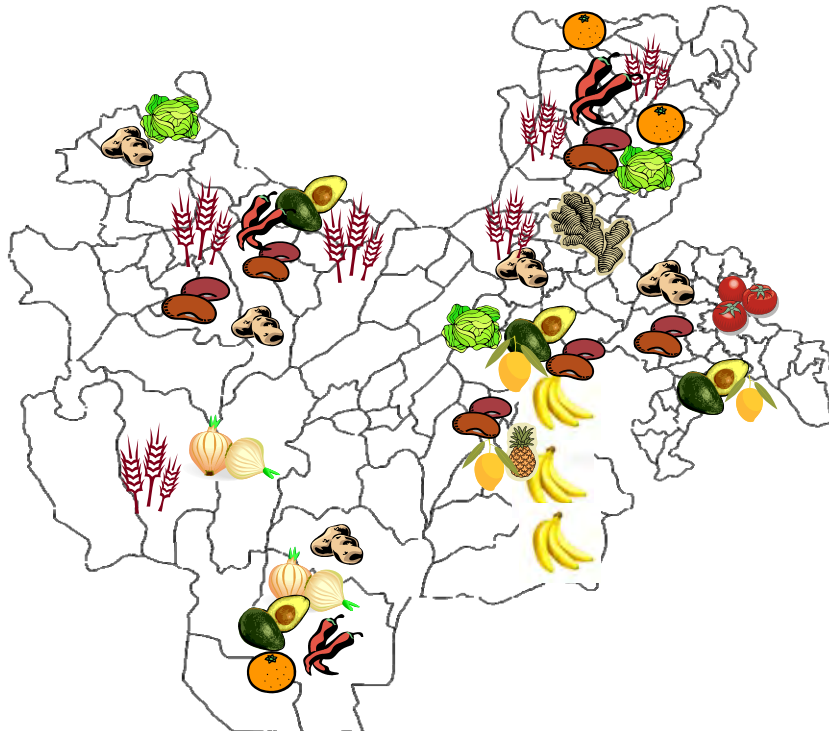
3) Western area of SNNPR

Though the production and sales volume of pulses in Keffa zone stand out in SNNPR, sales ratios of crops are generally low in Dawro zone, Keffa zone and Sheka zone. Sales ratios of crops in Bench Maji zone are higher overall, particular in sales of root crops, and fruits stand out as well.

4) Southern area of SNNPR

Gamo Gofa zone is popular in the production and sales of fruits and vegetables. Chick peas are also produced as strategic cash crops. Fruits and vegetables are produced and sold in South Omo zone but pepper and potato are more remarkable.

The above-mentioned zonal characteristics of crop production and sale are plotted in Figure 4-13 below.



Source: JICA Study Team

Figure 4-13 Conceptual Map : Strategic Cash Crops in SNNPR

4.5 Classification of Beneficiaries

(1) Farmers

Beneficiaries of the agricultural market improvements include farmers, traders, processors and consumers. A classification of farmers by state of their marketing activities is discussed as shown in Table 4-4.

Table 4-4 Classification of Farmers by Marketing Activities

	Home consumption	Cash crops growing	Participation in cooperatives	Group sales	Guidance to be given
Farmer type 1	○				← Increment of Production
Farmer type 2	○	○			← Promotion of group works
Farmer type 3	○	○	○		← Promotion of group sales
Farmer type 4	○	○	○	○	← Increment of profits

Required Skills and Technology	↑	↑	↑	↑
	Production	Post harvest tech. Value-added	Enhancement of groups	Market information Infrastructure

Farmer type 1	Farmers who grows crops only for self-consumption.
Farmer type 2	Farmers who produce cash crops to sell, but sales are limited. They carry their products to the local markets by themselves and/or sell to collectors/traders at farm gates. The farmers who sell mangoes at roadside; who carry potatoes/gingers/etc. on their backs to the local market are in this type.
Farmer type 3	Farmers who produce cash crops and participate in cooperatives as members. But, the activities of cooperative are purchasing of farm inputs (fertilizer, seeds) and/or micro-credit only, and no group sales of farm products is conducted. Producers of maize and pulses are in this type.
Farmer type 4	Farmers who produce cash crops and participate in cooperatives as members, and sell their products by group sales. Producers of wheat in Sodo/Wolayita zone; producers of banana in Arba Minch/Gamo Gofa zone who participate in group sales are regarded as this type.

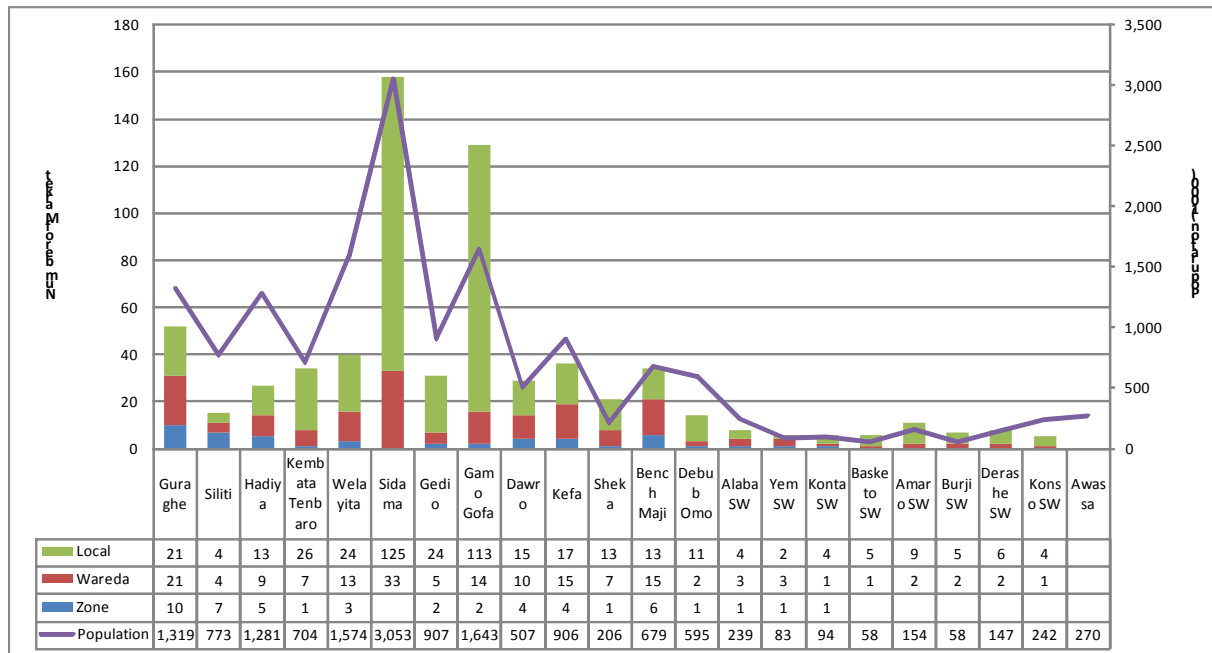
The necessary guidance for each type of farmers and the skills/technologies required for each activities are shown on the right side / below of Table 4-4. The Master Plan aims to improve marketing systems so that the farmers of type 1 are not regarded as targeted beneficiaries.

(2) Traders (Users of marketplace)

There are 2 types of traders at the local marketplace in SNNPR: those who are producers selling their own products, and those who are full-time traders. The traders use local marketplaces to buy/sell the commodities. Local marketplaces are open once or twice a week in most cases. There are some seasonal marketplaces for specific local production as well. The regular grocery stores dealing with all seasons' cereals do business near the local and woreda marketplaces, in general.

Figure 4-14 illustrates the number of marketplaces and population in each zone. The number of

marketplaces are proportional to the population, namely there are more than 100 marketplaces in Sidama zone and Gamo Gofa zone, respectively.



Source: BoARD, BoFED 2008

Figure 4-14 Number of Marketplaces and Populations by Zones

Management of the marketplace and facility/utility strongly influence the degree of fairness and efficiency of transactions in the marketplace. The priority for marketplace improvements is studied in view of kinds/volume of traded farms products, scale of marketplaces/users.

4.6 Issues and Needs by Crop and Area

The major planning components of agricultural marketing improvement are (i) market information, (ii) value addition, (iii) marketing infrastructure and (iv) institutions/systems of marketing.

Table 4-5 shows the summary of major issues and needs of planning components for each crop/area.

Table 4-5 Issues and Needs by Crop and Area

Crops	Area	Maturity Level of Marketing	Issues	Needs			
				(1) Information	(2) Value-added	(3) Infrastructure	(4) Institutions
Cereals	<North> Guraghe Silitie	Advanced	Some cooperative unions have successfully started collection and processing of wheat. However, the problems of improper storage for preservation and quality control have not yet been solved, in general. In terms of maize and teff, the post-harvest handling is done manually, as it is with wheat, and cleaning is seldom carried out. Since WFP has started purchasing local cereals as a trial, the cooperative unions make efforts to collect cereals from the members and to clean them to meet the demand of WFP's standard. However, the collection and the quality control of local cereals are still immature.	◎	◎	△	○
Pulses	<North, West> Keffa Bench Maji South Omo	Intermediate	There are local marketplaces dealing in pulses in Sidama zone, and those pulses are exported to Djibouti and Kenya through Nazaret and Moyale. However, due to un-developed collective marketing in large scale bulk, the individual farmers sell their surplus respectively and earn petty cash without using the bargaining power of group sales. Some unions have started cleaning of pulses using machinery provided by WFP to improve the quality. Awareness of quality control should be encouraged.	◎	○	◎	○
Vegetables	<Central> Sidama Gamo Gofa	Primary	Vegetables are grown for self-consumption and small amounts of surplus are sold in local marketplaces. It is primarily local production for local consumption. The facilities of the local marketplaces are not well designed and the buying and selling conditions are very poor. Tomatoes are sold in local marketplaces near the cities, but the scale of the production is small. In order to improve the efficiency of the distribution and marketing, it is necessary to introduce a group sales system and increase the sales volumes. It is notable that suitable containers for fragile tomatoes are not disseminated.	◎	△	◎	○
	Red pepper <North> Silitie Guraghe Alaba S.W.	Primary	SNNPR is the largest production region of red peppers and it is one of the significant cash crops. In order to secure competitiveness to the other regions, quality improvement and a differentiation strategy are necessary.	◎	◎	△	○

Crops	Area	Maturity Level of Marketing	Issues	Needs			
				(1) Information	(2) Value-added	(3) Infrastructure	(4) Institutions
Fruits	<Central> Gamo Gofa Sidama Wolayita K. Tembaro Hadiya	Arba Minch: Intermediate Other areas: Primary	<p>Most fruits are grown in backyard gardens and the management of growing, harvesting and post-harvest handling are not properly carried out.</p> <p>An exception is Arba Minch, where the local marketplaces in the fruit production areas are functioning as collection points, but the conditions of transactions are very poor in general. The minimum requirements for drainage systems and roofs should be taken into consideration. Due to the low unit price, freight handling is very rough. It is necessary to improve awareness of quality assurances, dissemination of proper handling by proper containers and careful harvesting.</p> <p>In the case of avocado, much loss occurs in long distance physical distribution.</p> <p>The low price in the peak season is the important issue for mangos, therefore the development of domestic markets is required. A new juice factory in Oromia region is planning to purchase mangos as raw material from SNNPR's major production area, and that is expected to resolve the problem of low prices. The issue to be considered now is to formulate the bulk handling system of quality mango to meet the heavy demand of the factory.</p> <p>Bananas in Arba Minch are grown in irrigated fields and USAID/AATEP helps to promote the export of bananas. However, the collection in the production area and the preservation of quality in transit are issues to be solved.</p>	◎	◎	○	△
Root crops	<Central, South> Wolayita Bench Maji South Omo	Primary	<p>The growing of root crops is popular in the center and south of SNNPR, where elevations are between low and middle high, but most root crops are grown for self-consumption. The producers carry the root crops down the mountains and sell them at the local marketplaces. Transactions of root crops are primitive in general. It is remarkable that cassava has become popular as bulking filler of the local staple diet "enjera" made of teff, therefore cassava has become a potential cash crop for small scale farmers.</p> <p>The production of onion and garlic in the west part of SNNPR are not large but the sales ratios reach 50% to 70%. Although most of them are consumed in the local areas, some goes to Addis Ababa through Gima town.</p>	◎	◎	○	△
Others	Ginger <Central> Wolayita K. Tembaro	Intermediate	<p>SNNPR is the biggest supplier of ginger in Ethiopia. Ginger is a significant cash crop and it is distributed in raw and/or in dry form. Dry ginger is a potential export crop so that the quality improvement of the drying process at the farmlands is a critical issue.</p>	◎	◎	○	△

Chapter 5 Master Plan

5.1 Principle and Methodology of Formulation of the Master Plan

5.1.1 Scope of the Master Plan

(1) Duration

The duration is for five years, begins after completion of the Study, from 2013 to 2017.

(2) Target Crops

The target crops are (i) cereals, (ii) pulses, (iii) vegetables, (iv) fruits, (v) root crops, (vi) others (spices, etc.). Coffee is excluded from the targets.

(3) Target Sites

The target sites are all around the SNNPR. Key areas of production, distribution and consumption are prioritized.

(4) Stakeholders

Beneficiaries are all players in the marketing systems; including producers, cooperatives/unions, traders, processors, consumers and market operators. Responsible/implementing bodies of action plans are producers, cooperative/unions, traders, or governmental organizations.

(5) Planning Components

The components of the Master Plan for Strengthening Agricultural Marketing System are (i) agricultural marketing institution/system, (ii) agricultural marketing infrastructure, (iii) agricultural market information, (iv) high value-added commodities.

5.1.2 Basic Policies of Planning

The Master Plan is formulated on the premise of understanding of the current situations of the agricultural marketing systems in SNNPR and those maturity degrees through the field studies. It consists of the concrete and practical action plans, and the results and lessons learnt obtained through the implementation of 10 pilot projects are reflected appropriately in the plans. The Master Plan should be a feasible and sustainable plan as a whole that encourages not only the governmental organizations but also stakeholders acting at the farmland and marketplace levels to participate continuously.

The basic policies of planning for improvement of the market and distribution system are as follows:

- 1) The Master Plan should fairly contribute to the broad market players, from farmers to consumers.
- 2) The Master Plan should focus on the efficiency of the market system, which contributes to a reduction in the intermediate distribution cost and an increment of profit.

5.1.3 Planning Procedure

The planning procedure of the Master Plan is shown in Figure 5-1 below.

Based on the results of the field study, the types of crops, types of beneficiaries and the zonal characteristics of SNNPR were categorized, and then development programs (strategies and action plans) were formulated by categories, in accordance with the respective issues and needs. In addition, the formulated action plans (tentative Master Plan) was verified by implementation of pilot projects for one and a half years. The results of pilot projects were fed back to the planning process to rethink and revise the tentative Master Plan, and then the Master Plan was finalized.

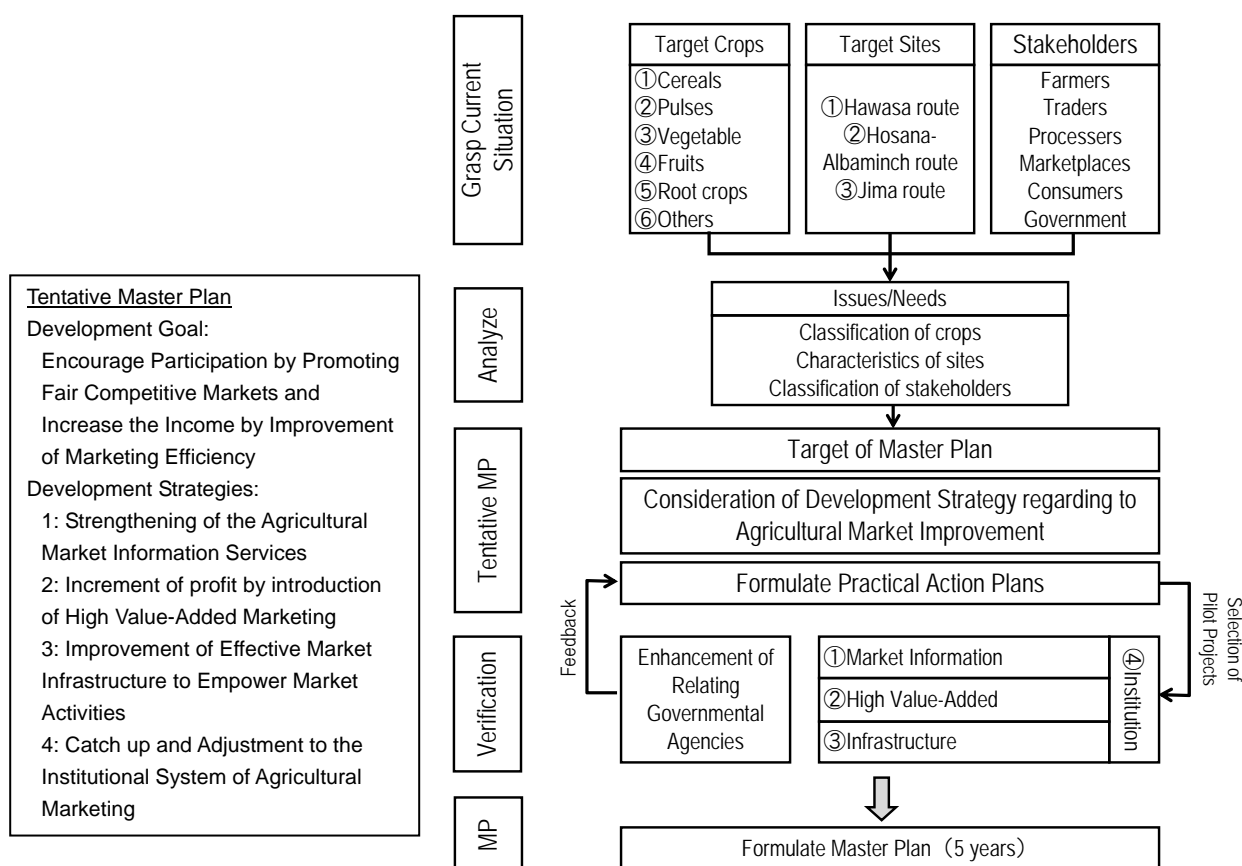


Figure 5-1 Planning procedure of the Master Plan

5.1.4 Pilot Projects (Verification Study)

(1) Purposes of the Pilot Projects

The purposes of the pilot projects are summarized in the following four points.

- (a) To verify the adequacy of the strategies and action plans of the tentative master plan
- (b) To verify the feasibility and effectiveness of the proposed action plans
- (c) To secure the sustainability of the master plan through capacity development of stakeholders
- (d) To provide on-the-job training to counterparts through the implementation of the pilot projects

(2) Procedures for Formulation of the Pilot Projects

The JICA Study Team prepared the outline of projects in line with the tentative strategies with counterparts, with the under-mentioned requirements in mind. And then present conditions of the project sites and willingness/commitment of prospective beneficiary groups (implementing bodies) as well as local offices were examined. The contents of the projects were adjusted according to the actual situations and detail activity plans were scheduled.

Requirements on the Implementation of the Pilot Projects

- Visible effects are expected within one-and-a-half year's period.
- Prospective implementing bodies exist or possible to identify/select.
- Widely applicable to other areas in SNNPR, and it can be a model case.
- Self-sustaining development as a business model is expected.

Initially 20 project ideas were provided, and then they were integrated and narrowed down. Finally, 10 pilot projects were selected after consideration of the balances of crops and sites, the limitation of human resources and the projects budget.

In addition, the pilot projects were designed to address the proposed development strategies inclusively. The projects were composed to have a mutually-supportive relationship on some target crops to synchronize the efforts to improve the Agricultural Market Information Service, Value-Addition, Market Infrastructure and Capacity of the government offices.

The project titles, target crops, target areas, and corresponding development strategies of each pilot projects are shown in Table 5-1.

(3) The Results of the Pilot Projects

The details of contents and results/lessons learnt of 10 pilot projects are shown in Appendix A (volume 2).

Table 5-1 10 Pilot Projects implemented to verify the Tentative Master Plan

Basic Strategies	Strategies	Target Crops						Target Sites	Project No. & Title
		Cereals	Pulse	Vege tables	Fruits	Roots crops	Other crops		
Strengthening of AMIS	Strengthening of AMIS		Haricot bean				Ginger	5 Zones 1 Special woreda	01 Strengthening of the Agricultural Market Information Service
	Postharvest handling & Quality improvement	Wheat Maize	Beans					9 Unions in 6 Zones and 1 Special woreda	02 Capacity development of quality control of cereals and pulses for cooperative unions (Collaboration with WFP/P4P)
Increment of profit by introduction of High Value-Added Marketing	Harvesting & Postharvest handling				Avocado Mango			Sidama, Gamo Gofa, Wolayita	03 Improvement of harvesting and handling practices of Mango / Avocado
	Processing & marketing					Cassava		Wolayita Gamo Gofa	04 Improvement of dried cassava quality and market development project
Improvement of Effective Market Infrastructure to Empower Market Activities	Quality improvement & marketing						Ginger	Kembata Tembaro, Wolayita	05 Production of "clean" dried-ginger and establishment of linkages with buyers
	Marketplace		Haricot bean					Sidama	06 Local market improvement project in haricot bean producing areas
Catch up and Adjustment to the Institutional System of Agricultural Marketing	Marketplace						Ginger	Kembata Tembaro	07 Local market improvement project in ginger producing areas
	Warehouse	Maize, Wheat	Haricot bean					Kembata Tembaro	08 Standard warehouse construction and its ideal management
	Quality standard	Wheat						Sidama	09 Comparison test for ECX and Non-ECX wheat
	Enhancement of BoMC, BoA								10 Empowerment of civil servants' understanding of market improvement through monitoring the Pilot projects

5.2 Master Plan

5.2.1 Development Goal

Although it is possible to grow many varieties of crops in SNNPR, most of them are produced for self-consumption. Coffee stands out as a cash crop, but the other crops sold in local marketplaces are the surplus of self-consumption crops used to earn extra petty cash. The agricultural productions of SNNPR have been restricted to the local markets in the small territories due to the large population and the shortage of skills for storing and post-harvest handling. However, it is observed that some of the farmers have been shifting their farm management from traditional crops to profitable crops in order to improve their economic conditions. Most agricultural cooperatives have engaged in credit services and group purchase of input, namely chemical fertilizers and improved seeds. Some of the advanced cooperatives, in particular grain cooperatives, have developed their business to encompass group sales and processing, and have been profitable, such as Licha Hadiya Agricultural Cooperative Union in Hadiya zone.

Based on the abovementioned recent tendencies, the Master Plan sets an upper goal of “Activating the Regional Economy through the Improvement of Agricultural Marketing.” In order to realize the objective, a fair market platform and an efficient market mechanism that encourages the farmers and the traders of SNNPR to participate in business activities should be introduced. Consequently, the development goal of the Master Plan is fixed as follows.

“Encourage Participation by Promoting Fair Competitive Markets and Increase the Income by Improvement of Marketing Efficiency.”

5.2.2 Perception of Current Conditions

- (1) The agricultural marketing system in Ethiopia has yet to be developed like that of other African countries. In Ethiopia, collection facilities for agricultural commodities in rural areas and distribution facilities (wholesale markets) in urban areas are both underdeveloped. In addition, the consumers’ demand for the quality is still at a lower level. While quality is requested from farmers, they are seldom rewarded with better prices proportional to the efforts they exert for better quality. Local traders who purchase and collect surplus produce in rural communities have a poor image because they allegedly deceive farmers with a tampered balance. There is no mutual trust between farmers and local traders. An improvement in the agricultural marketing system will be possible provided that all stakeholders are involved and collaborate to this end. Problems associated with the establishment and operation of agricultural marketing information service (AMIS), quality improvement of agricultural commodities and market infrastructure, as well as the capacity development of government offices, should be tackled simultaneously in a synchronized manner.
- (2) The Government of Ethiopia has been strongly supporting formation of cooperatives and their

activities. While engaged in distribution of agricultural inputs such as fertilizer and improved seeds, many cooperatives have very little experience in marketing of agricultural commodities. Additionally few farmers are involved in a group business in which members exert collective efforts to improve the quality of their produce and to undertake bulking sales so as to fetch a better price. Farmers lack practical experience of group business.

- (3) The annual budget of local governments is generally too small to allocate funds to implement new projects. Reflecting this, the agricultural development plans and poverty reduction strategies prepared and adopted by the local government generally do not well articulate a concrete action plan. The government doesn't use subsidy schemes for policy implementation in the improvement of the agricultural marketing system.
- (4) Most officials lack ability and experience in project planning and its implementation.
- (5) Most farmers do not make planting plans to meet the market demands but just sell surplus products from their own consumption.
- (6) Many consumers are interested in the prices but not good quality.
- (7) While a number of donors fund various development programs and projects, little support is given to the development and dissemination of technology appropriate to the prevailing conditions of this country.
- (8) Many projects focus on specific geographic areas targeting a few selected woredas and kebeles with little coordination or collaboration among each other.
- (9) Little attention has been given to private traders for the establishment of a fair and efficient agricultural marketing system, while they are the main actors in the agricultural commodity markets in the country.
- (10) The adoption and enforcement of a metrological standard system is one of the most critical issues in the promotion of the agricultural marketing system. However, few efforts have been made in this aspect.
- (11) Statistical data on agricultural production, which is indispensable for policy formulation, have been collected by a number of government agencies, including CSA. However, agricultural data seem less credible, resulting from inadequate skill in data collection and processing.

5.2.3 Guiding Principal for the Formulation of Development Strategy

Basing on the above mentioned perception of current conditions and reflecting the lessons learnt obtained through implementation of pilot projects, the formation of development strategy is set as follows:

- (1) The improvement of the agricultural marketing system requires uplifting of the whole system with the involvement and collaboration of as many stakeholders as possible. A holistic approach is adopted to synchronize all efforts to improve the AMIS, Value-addition, Market infrastructure and facility, as well as to enhance the capacity of the government offices so as to achieve an ultimate objective.

- (2) Four main components are determined as the basic strategies; namely [1] Strengthening of the Agricultural Market Information Services, [2] Increment of Profit by Introduction of High Value-added Marketing, [3] Improvement of Effective Market Infrastructure to Empower Market Activities, and [4] Catch-up and Adjustment to the Institutional System of Agricultural Marketing.
- (3) The development strategy should be concrete and realistic with due consideration of available human resources and budget in SNNPR.
- (4) Prepare tangible projects and implementation plans assuming the collaboration with development partners such as IFAD/AMIP, WFP/P4P and World Bank/AGP.
- (5) Utilize lessons learnt obtained through the implementation of pilot projects.

5.2.4 Development Strategy

Figure 5-2 illustrates the concept of the master plan on agricultural market development and how the four basic strategies are able to function together in a holistic approach.

The master plan comprises an outer frame that is the necessary governmental works to formulate a fair competitive market, and an inner frame that is the efficient business activities to increase profit. When the outer frame and inner frame function as a whole, the regional economy is activated, and issues of food security can be resolved. The strategy on infrastructure is plotted in the middle of the two frames because it functions as both public infrastructure and profit making.

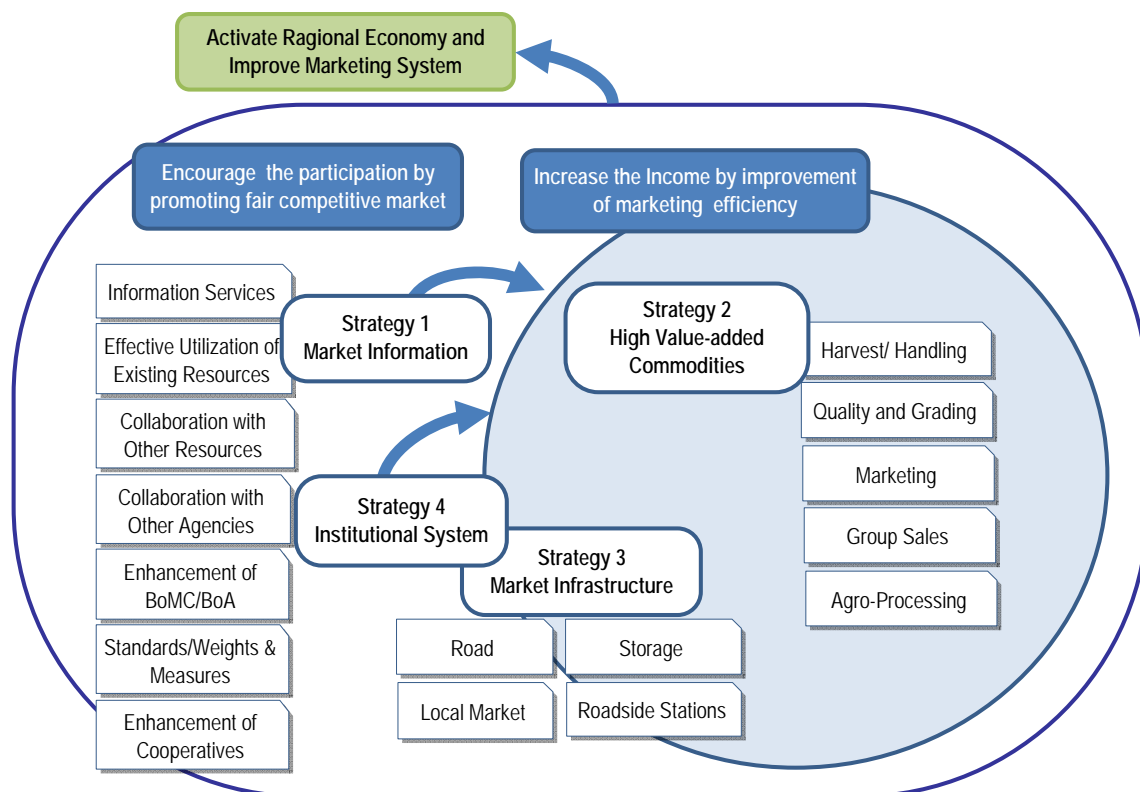


Figure 5-2 Conceptual Figure of the Master Plan

The contents of the four basic strategies and their sub-strategies that incorporate the results of the pilot projects are described in the following section.

5.2.5 Basic Strategy 1: Strengthening of the Agricultural Market Information Services (AMIS)

A number of organizations such as the CSA, Early Warning Administration, WFP, EGTE, ECX, regional governments and others collect and disseminate market price information in the country and in SNNPR. However, except ECX which have started the mobile SMS & IRV Service systems in late 2010, no organizations disseminate real-time price information to farmers and other market actors.

BoMC is responsible for setting the mechanism of AMIS in the region as well as its operation and monitoring. However, the current AMIS operation (to be precise, the data collection system) is not systematic/organized and it is observed that there is no clear and common understanding of why collect price data. As is obvious, current AMIS is very weak. In principle, government market information services should aim to provide useful market information to farmers and other market actors. But as with other price data collectors in the country, no information is disseminated to farmers. Data delivery to the related government offices is also not well practiced.

The major cause of this poor state of AMIS is the lack of a documented blueprint for AMIS systems.

Strategy 1-1: Stepwise expansion of “AMIS with SMS and bulletin boards” into other important crops

Under the situation mentioned in above, strategy on AMIS development was provisionally set as follows;

User-focused AMIS:

Principle mission of AMIS is to provide useful market information to users (farmers and market actors).

Strengthen the fundamental functions of AMIS:

Establish a mechanism to execute ‘price data collection – transmission – delivery to users – data storage’ systematically and unfailingly.

Commodity-wise development:

Develop commodity-wise AMIS step-by-step on important commercial products which are in high need of price information.

The pilot project (PP01) explored how to materialize the above-mentioned vital functions under the poor communication services in the rural area with 14 WoMCs and BoMC for ginger and haricot bean. To be more precise, “AMIS with SMS and bulletin boards” (using mobile SMS, the only usable communication tool among 14 WoMCs; for prompt data transmission to other WoMCs and BoMC, and using price bulletin boards being installed in the marketplaces to disseminate real-time price

information to users) was designed and executed as a trial experiment.

The implementation of PP01 revealed that current mobile network/SMS service is not highly reliable; because network failures often hinder the immediate sending/receiving SMS messages. Also there were missing SMS messages in spite of being transmitted. It is hard to expect that ADSL Internet service or mobile data communication services (CDMA, EDGE) to become available in many woredas over the next five years.

Therefore, Stepwise expansion of “AMIS with SMS and bulletin boards” into other important crops is set as a core strategy of AMIS development for the next 5 years in conclusion.

BoMC has selected 6 crops for the next target. There is overlapping in target woredas, and the actual number of the target woredas is 82. 13 woredas of PP01 are included in 82, therefore new woredas to install the AMIS job system (installation of office equipment and bulletin board, give job instruction and training) is 69.

Table 5-2 Target crops and zones/woredas for AMIS expansion

Target crops	Zone / Special woreda	Number of target woredas	PP01 woredas	New woredas
Mango	Gamo Gofa, Wolayita, Kembata Tembaro, South Omo	7	4	3
Red pepper	Alaba SP woreda, Silitie, Guraghe, Keffa, Sidama	7	1	6
Sesame	South Omo, Gamo Gofa, Basket SP woreda, Bench Maji	8	0	8
Avocado	Sidama, Gedoe, Wolayita, Kembata Tembaro, Bench Maji, Sheka	20	5	15
Wheat	Sidama, Hadiya, Kembata Tembaro, Dawro, Gedee, Gamo Gofa, Keffa, Silitie	18	0	18
Maize	Sidama, Alaba SP woreda, Hadiya, Kembata Tembaro, Wolayita, Dawro, Konta SP woreda, Gamo Gofa, South Omo, Silitie, Guraghe, Keffa, Sheka, Bench Maji, Segen, Gedee	42	8	34
Total		102	18	84

Note : There are woredas that will deal with several target crops. Woreda names for each target crop are shown in the project sheet (No. 1) in Chapter 6.

Based on the lessons learnt in the PP01 implementation, stepwise expansion of “AMIS with SMS and bulletin boards” into the 6 target crops is planned with the following principles.

- 1) Stepwise expansion will start at crop with fewer target WoMCs. 69 WoMCs require installing AMIS job system including installation of equipment. Among 6 crops, maize has the largest number of target WoMCs (34) and 15 out of 34 WoMCs have another target crop(s). Therefore, as shown in the next table, by starting at crop with fewer target WoMCs (i.e. mango, red pepper,) installation of the job system in maize WoMCs will progress concurrently and gradually.

Table 5-3 Way of stepwise expansion of AMIS in 6 crops

Target crops	New woredas	Mango	Red pepper	Sesame	Avocado	Wheat	Maize
Mango	3	3					
Red pepper	6		6				
Sesame	8			8			
Avocado	15				15		
Wheat	18					18	
Maize	34	1	5	2	3	4	19
Total	84	84					

Install the system in 3 WoMCs for mango = Finish 1 WoMC for maize,

Install the system in 6 WoMC for red pepper = Finish another 5 WoMCs for maize.

- 2) When complete the stepwise expansion, including the ginger and haricot bean, AMIS systems of 8 crops with 83 WoMCs will be established.

These 83 WoMCs will work on 1 to 3 crops respectively. 5 WoMCs (Alaba Sp woreda, Hadaro Tunto, Boloso Bombe, Boloso Sore, Damot Gale) will work on 3 crops, 23 WoMCs will work on 2 crops, and 55 WoMCs will work on 1 crop.

In the case of 83 WoMCs send 1 SMS a week to the designated WoMCs for each crop, Damot Gale WoMC receives 68 SMS a week; the largest number of SMS reception in 83 WoMCs. Maize WoMCs receive many SMS; 8 WoMCs receive about 60 SMS/week and 14 WoMCs receive about 50 SMS/week.

Based on the observation in the PP01, it is considered that more than 50 SMS/week must be too many to handle properly without a mess for WoMC staff. Therefore, for maize and avocado, the number of WoMCs which collect data and send SMS should be narrowed down to about half (half is receiving only) according to the importance for index price.

- 3) It was once considered to use a ZoMC as a compiling & relaying point in data flows to reduce the aggregate work volume of data handling to be made by WoMCs. However, considering the other finding in PP01 implementation that “It is not expected in SNNPR government offices that other staff substitutes AMIS work when a responsible person is busy / absent”, it is judged that it is too risky to give the role of data relaying to ZoMC since when a relaying point stops, all data flows to WoMCs stop.
- 4) Meanwhile, as described in the Strategy 1-2 below, impose a duty on WoMCs to send SMS to ZoMC, and include the deployment of equipment (PC and mobile) to ZoMC offices in the plan.
- 5) Not only for installing AMIS job system in each target WoMCs, it is absolutely necessary to strengthen the capacity of BoMC in terms of manpower and budget/financing to expand AMIS into other crops. At least one person who is capable of day-to-day data handling job and delivery of data to concerned offices is necessary.
- 6) Operating expense of target WoMCs such as consumables (A4 paper, printer toner, etc.) and bus/fuel fee to marketplace shall be acquired by BoMC.

- 7) Computer skill of WoMC staff is not so high. The same as PP01, PC training to WoMC staff shall be provided by BoMC expert.

Needless to add, as a responsible agent of AMIS operation, strong BoMC leadership must be in place with the allocation of necessary budget and the provision of continuous support for wereda offices.

Strategy 1-2: Utilization of collected price data

Impose a duty of periodical delivery of collected price data to the related offices

In the PP01, no instruction was given to WoMC on dissemination of collected data to other offices. As a result, only limited numbers of WoMCs delivered the collected data periodically to offices. To assure the utilization (dissemination) of the collected data, the following duties should be given to each office.

- ✓ Each WoMC shall send SMS to ZoMC.
- ✓ Each WoMC shall summarize collected data monthly and submit it to related offices in woreda.
- ✓ Each ZoMC shall summarize received data monthly and submit it to related offices in zone.
- ✓ BoMC shall summarize received data monthly and submit it to related offices in region.

Dissemination of collected price data by radio and newspaper

Although it was planned, broadcasting of the collected price information by radio(s) did not take place in the PP01 since the volume of information to offer for broadcasting was very limited. However, the feasibility of disseminating price information by FM100.9 and newspaper of SNNPR Mass Media Organization has been confirmed. Feasibility of Kembata Community Radio in Durame also has been confirmed. Although they said that it is not free of charge, Kore Community Radio in Amaro and Education Radio in Sodo are possible means of price dissemination.

To begin with, disseminate the collected price data by using the free of charge radios and newspaper; BoMC will periodically provide price information to Mass Media Organization in Hawassa, and Kembata Tembaro ZoMC will provide information to Kembata Community Radio in Durame.

Dissemination of collected price data by through the BoMC website

During the period of PP01, a frame of the BoMC homepage was developed with BoMC's initiative and it has been released on the web (www.snnprbomc.gov.et) but all contents (pages) are still under construction.

Dissemination of information through the BoMC homepage will not work for farmers and local traders at present. However, it can be incorporated as an auxiliary activity of the plan.

Future linkages with other AMIS

Although it seems that the federal government still has a dream of linking (integration and sharing of a database) each regional AMIS, a concrete action is not visible.

Since the WoMC offices have no Internet access, FAO-Agri-Market (database software) is not usable.

Therefore, Store the collected price data with Microsoft Excel/Access to assure the future linkages with other AMIS.

Strategy 1-3: Utilization of the existing information resources

Obtain Addis Ababa market information from Oromia marketing agency

Oromiya Marketing Agency has been collecting price data in the marketplaces in Addis Ababa. They planned to install an on-time data dissemination system via website in March 2011. The website (www.oromiyaa.gov.et/) was once accessible in 2011, but it has been completely not accessible until now. Therefore, build a collaborative relationship to exchange the market information with Oromia marketing agency and get information periodically by email or by other means. BoMC shall deliver obtained information to WoMCs by SMS.

Utilize the ECX information

ECX started mobile SMS and IVR Services in late 2010, and ECX auction prices of sesame are disseminated with these services. BoMC and sesame WoMCs shall get information by use of these services, then post it or disseminate it to other offices.

5.2.6 Basic strategy 2: Increment of Profit by Introduction of High Value-Added Marketing

About 85% of the total population of SNNPR depends on agriculture and traditional subsistence farming is dominant. Commercialized farming that targets the market demand/requirements is still less developed. Farmers' post-harvest works and quality control is limited and traders carry out cleaning/sorting/grading works of harvested products to convert them into commercial goods.

The quality of agricultural products seen in the marketplaces and in the distribution channels are generally low compared to the products seen in other East African countries against a background of the low quality requirements in the country, and the room for quality improvements is large from a technical standpoint.

Although the quality requirements in the country are generally low, there are some quality conscious buyers such as WFP, supermarkets in Addis Ababa and other big cities (wealth urban consumers) and so on. Even in Hawassa city, vegetable shops of export farms do a brisk business.

In the current situation, quality conscious buyers (quality demand) are limited but they will increase in the future along with the economic development and expansion of city dwellers. Therefore, supportive measures to promote the challenges of quality improvement and value addition should be provided to farmers and traders.¹

Quality improvement and value addition means that someone does some additional work. No one will

¹ Although various improvements in cultivation are necessary to improve the quality of farm produce, such improvements are not mentioned in this report since the field of the study is limited to post-harvest and marketing.

carry out additional work unless he/she gets tangible profits worth doing it. In the current situation in SNNPR, farmers (including cooperatives) have no capability to build a business linkage with only a few quality conscious buyers by themselves, and farmers and cooperatives can not be a implementing body of quality improvement without someone's (government/donor/NGO) marketing support. In addition, it must be necessary to tackle as a group to fulfill a buyer's quantitative demand; a certain volume of produce is always required.

The five-year Master Plan (2013-2017) will focus on the target crops that -- “Quality conscious buyers are identified or prospective. In addition, from a technical viewpoint, value addition is feasible by locally-available technology or by importing appropriate technology.”

Circumstances of production, post-harvest processing and marketing as well as technical contents of value addition vary by crops. Therefore, the plans for ‘Introduction of high value-added marketing’ shall be prepared crop-by-crop.

Strategy 2-1: Improvement of harvesting and handling method of fruits and vegetables

Consumers' quality demand is not so high yet. Purchasing power of many consumers is not high, and it is observed that they merely affirm current quality as “as usual / ordinary” since they do not know high quality (high value) fruits and vegetables.

With the low quality demand of consumers and low quality mind (awareness) of farmers, it is ordinary to handle fruits and vegetable very roughly in the harvesting and distribution process.

Farmers use bags to carry every farm product since they have no other choice. At present, it is unrealistic to expect them to use imported containers and packaging materials to protect fruits and vegetables from damage. Therefore, a lot of quantitative and qualitative losses occur in the distribution channels and harvesting works for perishable fruits and vegetables.

Mango and Avocado : Reduction of losses by popularizing the developed harvesting tool

Current harvesting method is “climb trees and hit fruits to make them drop” and many fruits are physically damaged. Even a simple harvesting tool has not been invented / introduced.

To improve current harvesting and handling practices of mango and avocado, the pilot project (PP03) worked on the development and dissemination of appropriate harvesting and handling methods/tools.

As a result, a harvesting tool that is easily-manufactured and cheap was designed and its effectiveness to reduce physical damages was verified. Also, it is confirmed in the PP03 that farmers group can share-use tools, and that the support on market-linkage with quality-seeking buyer is very effective in giving incentive to improve quality by use of tools.

Thus, popularize the developed fruit harvesting tool in the major mango/avocado producing woredas in SNNPR for the purpose of reducing harvesting losses (= increase fruits volume for sales) and improving the quality of fruits for sales (= increase fruits price for sales).

Based on the information obtained in the PP03 implementation, a plan for popularization of fruit harvesting tools is planned with the following principles and points of concern.

- 1) Tools to popularize are “Harvesting tool” and “Plastic box” as core items. Transportation tools; 2-wheel push cart for plastic box and donkey cart; are to be incorporated into items of free of charge provision to farmers groups only when they challenge the collective marketing. Kind and quantity of carts should be determined base on site condition such as location/distribution of fruits fields, distances to collection points and road conditions.
- 2) The final goal of the popularization should be “a new tool becomes a commercially-available product like a sickle and hoe in local markets in fruits producing areas”, and best efforts should be made to make the commercial manufacturing take place; at/by local workshops in fruits producing areas.

To be more precise, technical support such as provision of molds for bending / shaping to assure the uniformity of tool shape. In addition, business risk in making a new product for sales when farmer’s demand is not very sure should be mitigated by giving support such as provisions of free materials for initial production.

- 3) Harvesting fruits with the tools requires more time than “climb trees and hit fruits to make them drop”. To give incentive to use the tools (i.e. incentive for quality improvement) to farmers, market-linkage with quality-seeking buyer is very effective in giving incentive to improve quality by use of tools; therefore, market-linkage support should be provided as much as possible although it is dependent on the situation of each village.
- 4) Ordinary extension methods shall be applied to create farmers demands for the tools; i.e. a) explanation and demonstration of benefit to use the tool by community organizers in kebele and WoMC staff, b) posting posters in the villages, and c) provide free tools to key farmers.
However, there are questions about these methods, which are i) Can demonstrations and use of tool by key farmers create demand of other farmers?, ii) How many free tools need to be distributed to create wide demand in villages? Therefore, the process of verifying extension methods and appropriate number of free tools should be included in the plan.
- 5) Dissemination of information and promotion of harvesting tools through local traders who buy fruits from farmers should be in the plan.
- 6) Regarding mango fruits, supply of mangoes to Africa Juice Company is considered to mitigate the problem of low prices in the peak harvest time. Supplier side (unions, coops, WoMCs and BoMC) should make efforts to build stable business connection with the company by fulfilling company’s quality and quantitative requirements. BoMC should take a lead role in it.

BoMC has selected 28 candidate woredas, and 18 target woredas has been selected for the Project on the Popularization of Fruit Harvesting Tools (Project No.3) with the condition that maximum number of target woredas is 4 (including the PP03 woredas) for each zone. The selected 18 target woredas are shown in the Table 5-4.

Note that BoMC should consider appropriateness or reselection of the lowest priority woreda of Wolayita zone, Sidama zone, and Kembata Tembaro zone from the viewpoint of matching with target woredas for the Project on the Strengthening of AMIS (Project No.1).

Table 5-4 Target woredas for Popularization of Fruit Harvesting Tools

Zone	Woreda	Mango	Avocado	Priority *	PP03 target	2013/14	2014/15	2015/16	2016/17
Gamo Gofa	1 Arbaminch Zuria	X		1		X			
	2 Mirab Abaya	X		2	☆	X			
	3 Denba Goffa	x		3			X		
Wolayita	4 Bolosso Bombe	X	X	1	☆		X		
	5 Boloso Sore	X	X	2			X		
	6 Damot Gale		X	3				X	
	7 Damot Fulassa		x	4				X	
Kembata Tembaro	8 HadaroTunto Zuria	X	X	1			X		
	9 Kacha Bira		X	2			X		
	10 Kedida Gamela		x	3				X	
Sidama	11 Wondogenet		X	1		X			
	12 Dale		X	2	☆		X		
	13 Aleta Wondo		X	3		X			
	14 Hawassa Zuria		x	4				X	
Gedeo	15 Dilla Zuria		X	1				X	
	16 Wonago		X	2				X	
Bench Maji	17 Semen (North) Bench	x	X	1					X
	18 Debub (South) Bench	x	X	2					X

* Priority was given by BoMC expert (PP03 leader)

X : Target woredas for Project on the Strengthening of AMIS (Project No.1)

Popularization of harvesting tools in the 18 woredas shall be carried out step-by-step.

Number of target woredas for the 1st year shall be limited to verify the extension methods and appropriate number of free tools at first (see sentence 4) above). Number of target woredas is two for each fruit, and they should be in the same zone to compare the effectiveness, also to make management work easier.

Avocado: Wondogenet and Aleta Wondo in Sidam zone; not far from Hawassa and convenient to manage.

Mango: Mirab Abaya and Arbaminch Zuria in Gamo Gofa zone; cooperatives practice collective sales of mangoes in both woredas.

The target woredas in PP03, namely Boloso Bombe and Dale, are taken as the target for 2nd year. Because the usage of the tools by the target farmers groups in the project period was low, and it is better to observe the facilitation work of the WoMCs at first.

Number of target woredas after the 2nd year shall be limited to 6 woredas/year at a maximum because of the limited capacity of BoMC. Target woredas are selected (assorted) to mitigate volume of management work of BoMC.

Monitoring and follow-up work will increase year after year. Target woredas for the last year shall be only 2 woredas in Bench Maji zone in far-distant. A monitoring system to be performed by WoMC should be built in each target woreda.

Tomato : Modernization of vegetable shipment to urban markets

Wooden boxes are used to transport tomatoes from tomato producing areas near Hawassa city to Hawassa market. Wooden boxes are possessed by traders; not by farmers. Two methods of transportation; donkey cart and truck are used to ship tomato to Hawassa market. Per kg rate of transport charges are almost the same as truck and donkey cart; however, most farmers can not use truck transport services since their tomato volume are not large enough. In Hawassa marketplace, wooden boxes are used for handling, and damage caused by overfilling is seen.

Wondo Genet is one major tomato supply area to Hawassa market. Another major supply area is Meki-Ziway area in Oromiya region. Tomato variety of Meki-Ziway area is different from the one in Wondo Genet; it has thinner skin/softer and it has better market price.

It is considered that nature of tomato to ship to urban markets will change ‘from hard to soft’ and ‘from green matured fruits to red ripen fruits’ (i.e. become more perishable) in response to consumers’ preference and market price. Damage protection of tomato fruits during harvesting work and transportation will become more important from now on.

Recently the plastic boxes that are stackable, cheaper than wooden box (about 50 birr/box) and not very deep (22cm) are becoming popular in Hawassa city, and they are used to carry various commodities. Although the durability is less, this plastic box is better than wooden box for tomato transportation with its functions and price.

Under these situations, farmers’ challenge for damage protection of tomato fruits during harvesting work and transportation should be promoted. To be precise, promote the changes of a) from wooden boxes to stackable plastic boxes, b) from donkey carts to truck transportation, and c) from individual sales to collective shipping (inevitable to use a truck transport service).

At first, establish a model of the challenge by farmers group(s), and then introduce an initial cost support scheme for purchasing the plastic boxes to promote the use of the plastic boxes in tomato shipment to urban markets.

Strategy 2-2: Acceleration and Strengthen participation in the Quality Oriented Markets (Dissemination of Quality control skills)

Agricultural production in SNNPR cannot meet the local demand, but areas of food surplus and shortage are fragmented and mixed. Federal government and donor agencies such as WFP provide food assistance to those food shortage areas every year. Activities for providing regional surplus food to other shortage regions for economic vitalization and food security have been started. The activity of WFP/P4P to purchase surplus grains/beans directly from agricultural cooperative and the auction of

ECX for modernization of marketing system are expected as the first steps for such activities.

However, business methods for grain and bean transactions in SNNPR follow the traditional style and do not apply the standards for business negotiation. WFP provided machines and equipment and technical training to those unions participating in P4P in order to improve the quality. But WFP still faces difficulty in accepting the products supplied by the unions. ECX also faces the same difficulty in accepting reliable suppliers who can meet the ECX standards for grains and beans. The ECX auction system for the domestic market is almost idle. ECX says there are no reliable suppliers, and suppliers say that there are no advantages or merits for entering the ECX auction.

It can be anticipated that quality markets and business negotiations based on the quality standards will be common in Ethiopia in the future. Both producers and consumers will require a fair and efficient marketing system. In this context, producers and traders both are required to understand the specification and to gain quality control skills. P4P of the WFP and ECX auction mean the start of a quality oriented market in Ethiopia. It is important to strengthen the quality control capability of primary cooperatives and cooperative unions participating in P4P and to accelerate their entry into ECX auction. But the ECX does not conduct direct technical assistance to the suppliers. In order to accelerate and expand modern agricultural transactions, WFP and ECX are expected to collaborate with each other for this purpose.

Quality control techniques and warehouse management skills are both undeveloped in Ethiopia. Primary cooperatives and cooperative unions are not aware of post-harvest losses being caused during improper storing. Some warehouses are not provided with ventilation windows, but they store grains and beans for a certain period of time under high humidity and temperature without ventilation. Molds are generated on products by humidity coming from the dirt floor without any sheets. It is not rare for grains, fertilizers and chemicals to be mixed up in a small storage without any partition. It is important to extend technical training on post-harvest handling and also warehouse management skills to all stakeholders.

The training programs implemented in the pilot project (PP02/08) for WoMCs, primary cooperatives and cooperative unions should be continued and extended. ECX and WFP should collaborate in extension and expansion of the training work to stakeholders for efficient, effective and practical approaches.

Strategy 2-3: Development of Value-Added Activities in the Producing Areas

Promotion of fruits processing by private enterprise attraction

In SNNPR, food culture influences and agro-processing (food processing) which uses fruits and vegetables as materials is scarcely performed. The rural villages with processing raw materials have no electric supply and no water service, and are far from buyers/consumers as well as suppliers of consumables in urban cities, and on top of this, communication service is very poor. Thus, rural villages lack in the fundamental conditions to perform agro-processing business.

Under such poor conditions, JICA OVOP Promotion project has been attempting to create a farmers group business of mango jam processing in Arba Minch with an approach that combines farmers group and a private company (ECOPIA) who is capable of provide technical support and marketing support to the farmers group. It is the approach that farmers provide only mangoes and some labour, and ECOPIA provides all others for mango jam processing and marketing. In the present situation, this approach is judged to be an only possible way to promote the agro-production processing business in rural villages.

In the next 10 years, electric supply in many rural areas may be improved by on-going dam construction but water situation must remain as it is. Hence, the good sites for agro-processing business (a site with electricity, water, raw materials, near to urban city) in the rural areas will still be limited. Urban areas which are not very far from villages of fruits production have better conditions for the processing business.

In order to begin a fruits processing business, one has to clear the following steps – acquire processing knowledge/skill, fund-raising, procure equipment/tools/packaging materials, product development, and build sales outlets, and it is too hard for farmers now.

It is very reasonable to support a private company/person to launch his agro-processing business in urban area or village with good conditions to promote a fruits processing in SNNPR, rather than to support farmers.

Micro and Small Enterprise Development Agency (MSEDA) under the BoTI is in charge of development of micro and small enterprises, and cluster development program is on-going in the region. BoMC should work with MSEDA to promote fruits processing by private enterprise attraction. BoMC will be able to provide linkage service with farmers groups to have a stable raw material supply. Fund-raising is always a problem for starting a business, and it is advisable to prepare a subsidy system for seed money/initial investment.

Quality control of traditional processed foods

Kocho and Bula made from Enset are traditional foods in Ethiopia, mainly in SNNPR. The processing work is carried out manually by village women and sold to local markets if there is any surplus available other than that for home consumption. The number of households who engage in commercial work for Enset processing is limited. Mechanical processing machines such as peeling-off machines for edible leaves and cutting instruments for large fibers mixed in Kocho were experimentally developed, but have not materialized as yet.

Although a simple machine for Enset processing can be developed, the investment and operation cost would not be feasible due to relatively low selling prices for such traditionally processed food. The 5-years master plan from 2013 will not cover these developing activities on traditional food processing.

Milling service of cereals, pulses and spices (Grain mill)

Milling work for cereals, pulses and spices uses traditional stone-mills. An electric motor or a diesel engine drives such a stone-mill. The stone-mill consumes a lot of power and makes the working environment worse by scattering flour and dust. Nowadays, most milling service shops in Kenya, Uganda and Tanzania use hammer mills made of light steel plates instead. The same direction of such changes will be followed in Ethiopia in the near future. It is recommended that agricultural research centers in Ethiopia make a proto-type hammer mill and study the suitability of the performance for Ethiopian food processing. The issue of modernization of stone-mills is not included in the 5-years master plan.

Improvement of sun-drying of cereals and pulses

In order to improve sun-drying efficiency, avoiding the adherence of mud and the mixing of stones, vinyl sheets should be used for sun-drying after threshing. Drying work is carried on in the dry season and drying is easy, but measuring moisture content after drying depends on the feeling of hand grasping or by biting. The use of moisture meters is very rare.

It is necessary to extend mechanical moisture measuring to meet quality markets such as P4P and ECX. The use of moisture meters should be extended to primary cooperatives. Since this activity has already been started by WFP or NGOs, the 5-years master plan will not include this project.

Extension of dried cassava processing and market linkages and its market development by expansion of consumption

The pilot project (PP04) demonstrated the performance and efficiency of a simple raw cassava cutting machine and plastic sheets for sun drying. The market linkage between Hawassa city as a consuming area and Kindo Koysa woreda as a producing area has been established by BoMC/WoMC. This type of agro-processing with appropriate technologies for value addition and income generation to small scale farmers should be strengthened and disseminate in SNNPR by the government.

Improvement of post-harvest technology for Red pepper

Good color and good shape must be able to be maintained by improving the traditional drying and storage method. Research on mechanism of discoloring and preventive measures should be attempted.

Promotion of high quality dried ginger production

The pilot project (PP05) challenged the development of practical washing methods and verified the feasibility of producing “clean dried ginger”. By seeing the ginger washing & drying business of PP05, one farmers group duplicated the project facility and started the production of “clean dried ginger” by their own capital.

By using the PP05 as a model case, the challenges of other farmers/traders groups to produce “clean dried ginger” should be promoted in Kembata Tembaro zone and Wolayita zone; i.e. support the

challenge of farmers/traders groups to start a ginger washing & drying business.

Based on the information gained in the PP05 implementation, a plan for Extension of High Quality Dried Ginger Producing Business is planned with the following principles and points of concern.

- 1) Support an establishment of the similar washing equipment/facility as the Hadaro site of PP05. Business owner (beneficiary) shall bear all other costs for drying shelf making, warehouse, fence, etc.
- 2) River water and portable high-pressure washing machine (electric operation) is used for washing. Thus, facility site should be near river and possible to bring electric supply in the site.
- 3) Fund for raw material purchase should be raised by business owner (beneficiary). No financial support scheme will be planned.
- 4) In case of support a farmer's cooperative, possibility of forming a JV or working as subcontractor with cooperative union or private business should be explored to mitigate a risk of failure in business operation/management.
- 5) Expected outlets of high quality dried ginger are overseas. Domestic demand/outlets have not yet been studied. However, domestic demand for high quality dried ginger must exist since the ordinary consumers do not know that ginger is dried on the ground without hygienic control (or there was no choice other than buying dirty dried ginger). BoMC should work on identification and creation of domestic outlets by differential marketing.
- 6) No clear information about the quality requirements/specification of dried ginger of overseas buyers is possessed by federal and regional official. Governmental agency (MoTI or BoMC) should collect following information to present local traders/farmers and WoMC/ZoMC a target specification.
 - Requirements of overseas buyers: Quality and Product types.
 - Standards of dried ginger products which are stipulated by ginger export countries such as India and Nigeria.
 - Commodity specifications being used in the international ginger trade.

Especially, it is advisable to clarify the demanded product types (whole or pieces, with peel or peeled) and those specifications immediately since it strongly affects the way of washing.

Study on improvement of postharvest processing for Turmeric

Powder is the form of final product of turmeric. Root cutting, washing, and drying are the necessary post-harvest processing to be made at production sites. In the case of Japan, peeling and slicing are also practiced.

Carry out the research study on current post-harvest processing and turmeric collection in the production villages to explore the adaptable new technology; include the feasibility of using the 'soaking + jet-washing method' which was used for ginger washing in PP05, and then prepare a support policy/plan.

Strategy 2-4: Strengthening the Marketability of Specialized and Superior Products/Varieties

SNNPR has various agro-ecologies, characterized by different altitudes and climatic conditions. Therefore, varieties of crops are cultivated and, meanwhile, there is major producing areas crop-by-crop. Moreover, there are specialized or superior products/varieties where production in SNNPR is dominant in the country, or being produced only in SNNPR, or famous for good quality. For example, banana in Arba Minch, red pepper (Mareko Fana variety) in Butajira, taro and haricot bean in Wolayita, ginger, kocho (enset), and spices.

The marketing situations of these specialized/superior products are not same. Red pepper (Mareko Fana) is traded at premium price in Addis Ababa markets. Banana of Arba Minch has distribution channels to major cities in the country. Kocho is produced by housewives for mainly home consumption and surplus is sold at markets nearby. Farm households who do kocho processing for sales purpose are limited. Cassava is still new crop and FAO/NGO has been working on its extension from the standpoint of food security and crop diversification. Cassava powder has a large potential demand as filler in teff flour but low quality of dried cassava chips is one hindering factor.

Including the specialized/superior products, mode of crops production is 'product-out'; produce as parent did and sell surplus at marketplaces nearby. Currently most farmers have no means to get information about users' needs / consumers' preferences in big cities like Addis Ababa. Therefore, it is not surprising that farmers have no way of thinking of 'market-in' (market-oriented) and no way to exercise it. However, government agencies (BoMC/ZoMC/WoMC) also do not exercise it. For example, although export promotion of haricot bean is told, there is no practical support for farmers and traders.

Currently most farmers have no means to get information of users' needs. Therefore, government agencies (BoMC) should support the 'market-in' for the sake of farmers. It must be hard for BoMC to challenge the overseas markets, and at first, BoMC should work on domestic markets.

In particular, select promising crops, carry out a market survey (needs survey, traders survey), and feed back the buyer's needs and consumers' preferences to farmers and local traders. Conduct match-making support to connect potential buyers and farmers/local traders to materialize sales. It must be necessary to provide supports of inputs (seed/seedling), husbandry skill/knowledge, and post-harvest technology.

As a shipper in production area, local traders should be utilized (supported). Cooperative business, in most cases, is operated by farmers who have less experience in trade, and risk of failure is high. To really materialize the sales of products, knowledge/experiences/capital which local traders have should be utilized.

Cassava, ginger, fruits (mango, avocado), etc. are raised as specialized/superior products which BoMC should try to strengthen the marketability with viewpoint of 'market-in'.

- 1) Good quality cassava powder has a large potential demand as filler in teff flour. Cultivation is simple and easy, and it suits the warm climate of SNNPR. To make cassava powder (dried cassava) a new specialized product, market cultivation and production promotion should be tackled.
- 2) Domestic demand/outlets of high quality dried ginger must exist since the ordinary consumers do not know that ginger is dried on the ground without hygienic control (or there was no choice other than buying dirty dried ginger). BoMC should work on identification and creation of domestic outlets as well as production promotion and linkage support with domestic buyers for export purpose.
- 3) Regarding mango fruits, supply of mangoes to Africa Juice Company is considered to mitigate the problem of low prices in the peak harvest time. Supplier side (unions, coops, WoMCs and BoMC) should make efforts to build stable business connection with the company by fulfilling company's quality and quantitative requirements. BoMC should take a lead role in it.

Strategy 2-5: Acceleration of Collective Marketing

Many agricultural cooperatives and cooperative unions are found in SNNPR. However, their main activities are limited to the provision of agricultural inputs such as fertilizer, chemicals and seeds to their members and their marketing activities are not well established. It is reported that in the case of individual sales negotiations between farmers and traders at farm gate or at local marketplace, farmers' bargaining power is often weak.

“Strengthen bargaining power by aggregating the commodity volume (by bulk sale)” is theoretically correct. However, in reality, farmers prefer to sell their farm products individually. In addition, it is hard to get a large increment in unit price by simple bulk sale that is enough to stop individual sales.

Therefore, encouraging farmers to work on a simple bulk sale of farm products is useless. Support for promotion of collective marketing should be provided only if there is an inevitability of collective marketing. Specifically, the following cases are assumed.

- In case farmers challenge a value addition:
Nobody does value addition without additional income to meet the additional work. In addition, it is necessary to sell a value-added product by differentiating from an ordinary product. In SNNPR, in most cases, it is required to sell a value-added product directly to the quality conscious buyers in cities, and it is impossible for individual farmer to find such buyers and create business relation.
- In case it's difficult to sell product in/around village:
The places that are too far from the local marketplaces or rural road condition to main roads is very bad and no local traders come in.
- In case farmer can not sell large volume by himself.

At present, quality conscious buyers of agricultural commodities in Ethiopia are limited. Therefore,

in case farmers attempt a value addition, market linkage support also should be provided to farmers group or primary cooperative.

5.2.7 Basic Strategy 3: Improvement of Effective Market Infrastructure to Empower Market Activities

Basic market infrastructure such as roads, marketplaces and warehouses are still in poor condition in SNNPR. These negative conditions prevent utilization of high production potential. Since roads and marketplaces are the basic infrastructure, their improvements are critical. In order to reduce losses during storage and to enhance food crops distribution reflect the demand and supply balance, improvement of warehouses conditions and its operation are to be promoted. As a consequence of these improvements, producers' profits are expected to grow and food security is also expected to improve.

Strategy 3-1: Improvement of Trunk Roads and Access Roads to Woreda Marketplace and Access Roads to Local Marketplaces

The trunk roads in SNNPR have been improving within a limited budget since its establishment in 1993 by showing that total length of 4,024 km in 1993 to 9,488 km in 2009 and road density of 0.036 km/km² in 1993 to 0.066 km/km² or 0.28 km/1000people to 0.63 km/1000people. As discussed in Chapter 3.4, the road density per area varies by woreda remarkable high or low density areas are intermingled but that per capita varies by woreda less differences as shown in Figure 3.4-1. It proves that road development have been done rather detachedly in the Region according to actual condition.

The SNNPR Road Authority (RRA) has been implementing regional road development in accordance with the Regional Road Plan (RRP) 2010/11-2014/15 for 57 new road constructions and 11 road rehabilitation of 1,578 km in total as shown in the Table 3.4.3. The target density of the plan is set at 0.075 km/km². RRA made the criteria for prioritizing the implementation of the projects by considering population pressure, agricultural potential, environmental awareness, and government request etc. RRP can be evaluated as well balanced plan because priority is given to less road developed areas, high agricultural potential areas such as Gamo Gofa, South Omo, Sidama, Hadiya. However, at present, the trunk roads are still poor condition due to permanent financial deficit. In addition, maintenance work is generally performed. The delay in improving these roads impedes rural development and puts traders as a disadvantage in entering the market system. Furthermore, quality of agriculture products is reduced by damage during transportation; consequently, profits are lowered.

The above mentioned problem poses the looming issue not only for the trunk roads but for the access roads to woreda marketplaces, In addition, most access roads to the local marketplaces are not improved for all weather use. Therefore, farmers' profits are reduced from the inefficiency of the transportation system of post-harvest and farmers' will to reduce the target crops is repressed due to poor transporting condition. According the base line survey conducted by the JICA Study Team, 58% of respondents, who are agricultural producers or relating business, dissatisfies the present road

condition and 28.3% of them answered to be big problem thus urgent improvement is desired.

On the other hand, RRP is putting priority on the continuity of the previous 2009/10 construction and prioritizing future road development according to the following criteria:

- (1) Population pressure of woreda (40%)
- (2) Agricultural production potential (20%)
- (3) Economic growth (15%)
- (4) Extension of kebele and importance of road (10%)
- (5) Others (15%)

Since improvement of road network requires much investment cost, it shall be done taking into consideration cost-benefit effectiveness. In the absence of active market linkage in this Region having huge area at present, road network development shall be implemented based on proper strategy and regional equity. As evaluated in Chapter 3.4, the past road network development and present RRP is appropriate. Therefore, it is recommended that RRA shall continue his development plan, RRP properly in timely manner. Thus, in this Master Plan, no program is proposed under this strategy 3-1.

Strategy 3-2: Improvement of Market Infrastructure at Woreda Marketplaces in Target Areas

Marketplaces in Ethiopia can be classified according to locations or facility scale, namely Zone, Woreda and Local marketplace, respectively. Marketplaces not only play a considerably important role for agricultural products trading in the area, but also have a role in the social community such as in a place of information gathering. Generally, the existing woreda marketplaces organize at about 1 to 3 ha open air place without any permanent facility except for wooden framed small wretched huts. In addition there are no shade against sunshine and rain and drainage system and water supply system thus marketplaces are muddy and unsanitary. Consequently, these conditions impede the efficient trading system of taking out and carrying in of products in the marketplaces. Working condition in trading facility are unfavorable as well as roofs are not used for shade in the dry season.

There are many problems in a management of marketplaces, such as lack of common knowledge of user rules. Also, municipality-led and other market managing activities are not functioning well.

In order to improve these situations, it is recommended to establish a development plan for acceleration of trading efficiency and betterment of quality and trading volume through provision of market infrastructure and its management for strategic agricultural products. According to the baseline survey conducted by the Study Team, 79% of respondents strongly desire improvement of present poor marketplace.

As discussed previously, there are many problems on woreda marketplaces to be solved and it may require huge budget and long time. Therefore, in this Master Plan, as a long term vision within a limited budget, a realistic wherever possible plan which contributes to future expansion of marketplaces is proposed. That is, a target crop is selected as a certain marketplace in woreda area and a facility sole use for the target crop is constructed and managed for becoming a core of a marketplace.

Then this approach expands to other crops by woreda/municipality in the same marketplace gradually in order to develop for whole marketplace.

Haricot bean and Ginger have been selected as the subject crops for the Pilot Projects from cereals, pulse, fruits, vegetables, and spices such as ginger through several discussions between BoMC and JICA Study Team. The main reasons are as follows:

Haricot bean:

1. Haricot bean is one of the representative crops in SNNPR and its production is the second followed by horse bean in SNNPR and it counts about 18.2% of the total production in Ethiopia.
2. The quality of haricot bean in a market is poor with many impurities, so it is expected to be improved in case trading is made in a proper facility with shed and floor.
3. Fair trade can be expected in case trading is done in a proper facility.
4. According to the Ethiopian government regulation, white haricot bean shall be dealt through ECX since 2010.

Ginger:

1. Ginger is the most representative crop in SNNPR and 99% of it in Ethiopia is being produced in SNNPR.
2. Ginger is precious cash crop for farmers and fair trade is indispensable in a proper market facility.
3. Ginger is able to be sold in fresh or with value added such as dried, washed and dried condition etc. so, post-harvested processed ginger can be traded in higher price in a market.

The JICA Study Team constructed two exclusive market facilities for the selected haricot bean and ginger trading as the pilot projects of PP06 and PP07 and provided their management manner for the management body, in this case municipalities. As the results, 1) fair trade between farmers and traders who have trading license issued by the management committee, 2) quality improvement because of trading inside the facility, and 3) increment of income by tax to the municipalities, are realized and it can be judged that the constructed facility made the marketplace active and is expected to be a nuclear of the existing marketplace for improvement.

While, the Agricultural Development Program (AGP) under the World Bank, which launched October 2010 has a component of Rural Infrastructure Development as one of the three components of the Program aiming at construction of rural infrastructure including market facility. However, AGP supports only financial aspect and no technical and management support are considered. Now, actually AGP is in process to construct seven (7) new market facilities in six (6) woredas in four (4) zones in SNNPR. The JICA Study Team has provided every data on the construction of facility such as drawings, bill of quantities, specifications etc. for PP06 and PP07 to AGP from the beginning of the AGP's process for market facility construction. The JICA Study Team also has provided a workshop on the PP06 and PP07 experiences to staff from all woredas and zones concerned above. The workshop consisted of 1) management aspect, 2) technical aspect which includes i) planning, ii)

design, iii) construction and iv) experiences of PP06 and PP07, 3) experience sharing by the management committee of Belila market facility management committee, and 4) site visit to the Belila market facility on the market day. As just described the JICA Study Team and BoMC has been collaborating closely with AGP.

Based on these experience and actual achievements, “Market Infrastructure at Woreda Marketplace Improvement Program” is proposed as one of the Master Plan. Under the Program, several project plans are formulated for not only haricot bean and ginger but also other agricultural products. Notwithstanding that a financial alliance with AGP is indispensable for the implementation of the Program, the subject woredas of the Program are not the same of AGP. So, prior close communication and collaboration between AGP and BoMC is the fundamental issue.

Strategy 3-3: Improvement of Hawassa City Marketplace Infrastructure

The staff of BoMC who was dispatched to Japan by the Training Program in Japan prepared an improvement Plan of Hawassa Marketplace Infrastructure as the outcome of their training in Japan by referring experience in Japan. Since the construction cost is promising to be borne by AGP, this plan is proposed as a Master Plan of “Improvement of Hawassa City Marketplace Infrastructure Program”.

Strategy 3-4: Development of New Agricultural Warehouse and Improvement of Existing Warehouse for Effective Use

Agricultural warehouses in Ethiopia are being managed by public sectors, cooperative unions and private sectors. However, almost of agricultural warehouses do not equip requirement functions which are access line, entrance and exit for first in first out, quality assurance measure (pest control, aeration etc.). It seems that warehouses are constructed without strategic plan of regional characteristics, purposes suitable size etc. thus no effective use is observed. In addition, most of them have structural defects such as non-block made for long term storage and deteriorated for improvement and some time fertilizer and distributing seeds are stored mixed under poor management.

In order to strengthen effective agricultural market system and to decrease warehouse losses for healthy management of warehouse, functional warehouses wiping out the fore-mentioned matters are necessary. A huge budget is required for the construction of new warehouses having proper function. So, the development plan for warehouses involves improvement of the existing warehouses. As the Pilot Project (PP08), the JICA Study Team constructed a standard warehouse having 500 tons capacity for a certain cooperative union who had no own warehouse and gave guidance on proper management method using constructed warehouse. As for the improvement of the existing warehouse, the Team prepared the “Improvement Guideline for Existing Agricultural Warehouse” and “Operation Manual for Agricultural Warehouse” for proper management and operation. In addition, the Team provided other cooperative unions and primary cooperatives with proper warehouse management training by inviting them to the constructed warehouse for transfer of knowledge.

However, since training has been given to a part of stakeholders, a consecutive training is expected to

the remainders. Then, it is proposed “Agricultural Warehouse Construction and Existing Warehouse Improvement Program” for the purpose of proper use of agricultural warehouse. This program provides stakeholders with proper technical support for construction of new warehouse and improvement of existing warehouses. The Program for the training for the proper management for agricultural warehouse is provided under the Strategy 2-2.

Strategy 3-5: Promotion of Agricultural Products Sales at Roadside Infrastructure

The main market routes from SNNPR are consisting of 1) Hawassa route, 2) Hosana - Arba Minch route, and 3) Jima route. In these routes, there found street vendors of agricultural products on the roads in and around the main cities or producing areas. These street vendors are individual and have no facility thus are forced to be unstable sales. On the other hand, there are a few rest stations in these routes and it makes long distance drivers and/or road users inconvenience. In order to solve both inconveniences and to encourage a regional specific character, some proper sale places on roadside are provided on strategic spots. The sales place shall equip parking space, toilet etc. for drivers/road users and retail shops for product sellers. With an increment of users, buying power and transaction volume of products are expected to increase.

However, since the motorization in Ethiopia is still less developed, the development concept of the facility is not for drivers or road users but for regional people. It means that a facility will be a permanent market on roadside for selling local products to road users and has a function of interaction with regional people each other and with road users. The facility is named as “Roadside Rural Promotion Center (RRPC)” which is developed under the “Promotion of Rural Products Sales at Roadside Infrastructure Program” to be proposed.

The location of a facility shall be decided based on the following standing points.

- (1) Disciplined organization shall handle management of facility
- (2) Enough traffic is secure
- (3) Land for facility is available
- (4) There is a specific agricultural product for retail

The following functions shall be equipped in the facility.

- Entrance / exit access
- Gravel paved parking space for midsize-car of 20 and large size-vehicle of 5
- Water closet
- Coffee shop and kiosk
- Retail shops for products

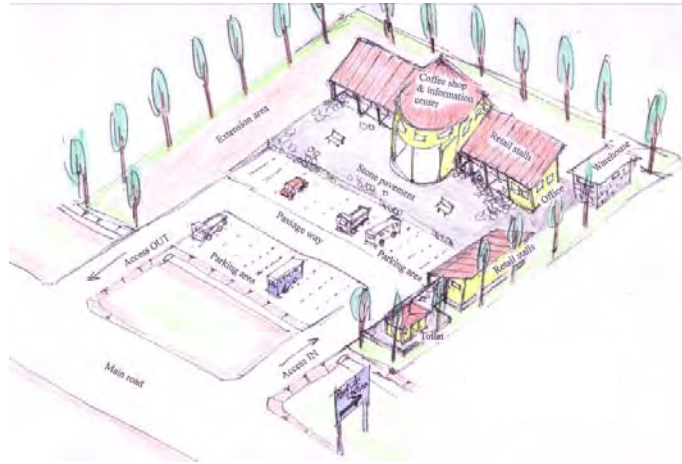


Figure 5-3 Image Layout of RRPC

Management shall be done by a regional entity taking into consideration sustainability of the facility. The management body shall be selected among several candidates who have enough capability and strong willingness. For the selection of a management body, the following procedure is recommended.

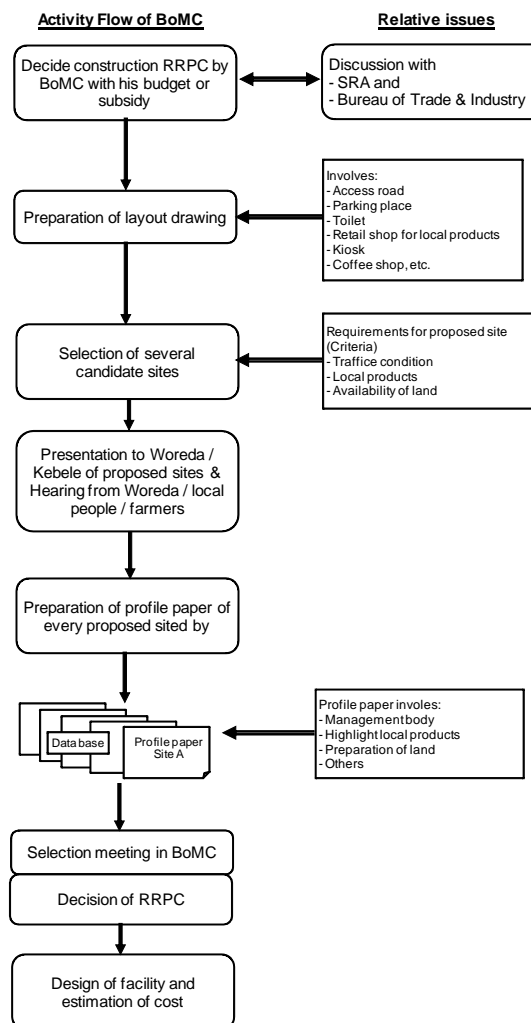


Figure 5-4 Work Flow for Selection of RRPC Construction Site

5.2.8 Basic Strategy 4 : Catch up and Adjustment to the Institutional System of Agricultural Marketing

By 1990, Ethiopia had implemented a controlled economy under a socialist regime. After the collapse of the Soviet Union, Ethiopia moved to a market economy. Not only industrial materials but also agricultural markets were liberalized and deregulated. Also, decentralization has been promoted and so the SNNPR government is now being asked to develop the region by its own policies.

Enforcement of a supporting system and operational capability of the local government is therefore the key strategy to be considered since the agricultural marketing system is perceived as a government's indirect measure by supporting private commercial trade. In particular, BoMC has to play a central role in involving many actors in order to accomplish the aims of basic Strategy 1-3 by conducting practical action plans. Therefore their implementing capacities are the key to fulfilling this aim. BoMC has to bear the heavy responsibility of stimulating the economy by agricultural marketing system reform in SNNPR and contributing to nationwide food security issues.

The necessary Master Plan Strategies target for the year 2017 for solving the issues on the institutional systems will be illustrated as follows.

Strategy 4-1: Acceleration of Coordination among Agricultural Marketing Stakeholders

There is little that can be done by BoMC themselves to accomplish the ideas of the Basic Strategies 1, 2 and 3. Regarding market information service, collaboration with other AMIS operators as well as with radio stations is important to be considered. Likewise, regarding business transactions, the collaboration with the BoTI, the Chamber of Commerce and Industry, and ECX is essential to be taken into account. For market facility management, municipalities will be potential partners to work with and for road maintenance, the Road Authority will be the one for implementing projects together. The governmental Rural Financing Fund or private financial institutions are the ones to work with for rural finance.

Thus, in this development plan, an acceleration of partnership with other agencies by BoMC is proposed in order to improve the ability of negotiation and to obtain others' active cooperation. Specifically, it is important to strengthen the ability of bringing out other agencies' favorable cooperation in the matter of improvement of communication, road infrastructure and market facility management to BoMC staffs. Moreover, the competence of BoMC staffs who can lead other agencies to participate actively in the development plan is also very much expected to be enhanced.

Strategy 4-2: Publicity and Maintenance of Specification/Metrological Standard

Since the transition to a market economy, chronic food shortages and needed improvement of food security have been longstanding issues to be solved in Ethiopia. Enhancement of commercial crops is the key to vitalize its economy. Therefore, the Government of Ethiopia is now putting emphasis on

acceleration of market access for farmers who have surplus commodities in order to develop the agricultural sector as a whole. In fact, the government plans to fulfill the aims of resolution of food security and economic revitalization by promoting agricultural marketing at the same time. To accomplish these aims, the ECX was established as one of the governmental marketing system reform plans in April 2008.

WFP has been providing imported grains to food-insecure areas. However, criticism against the food donation system has increased because the system can disturb the steady development of agriculture in Ethiopia and also cause a price slump in surplus commodity areas. Therefore, WFP has started a new program called P4P in 2009 which aims to increase farmers' income by direct purchase from smallholders' farmers in the country to respond to those criticisms. WFP aims to contribute to solutions in food security and promotion of surplus grains by domestic grain procurement through the ECX system. In this circumstance, ECX has pursued an e-commerce system of agricultural commodities in the country. However, the recognition gap between the central government and the actual players is critically large, and the institution and policy of the government don't reach the public in practice.

Furthermore, a metrological standard system, which is one of the basal conditions for agricultural products trading, was controlled by QSAE. However, its control has now been transferred to the MoTI. MoTI is responsible for performing inspections of measuring apparatus and certifying them. However, its inspection is insufficient, therefore there are many scales that have not been inspected but are commonly used. Thus, it is necessary to work with MoTI for improvement of agricultural marketing.

The institutional system and policy were introduced by developed countries of Europe and the US, and though the contents are ideal, the gap between theory and reality is very large and it is hard to find the optimal practical methods to decrease the gap. Even if the theory were repeated, the field players would not follow. Therefore, the government enforces them by law, but it takes time to realize the law in the fields.

Since the implementation agency of this strategy is not BoMC, action plan is not included in the 5-years master plan.

Strategy 4-3: Strengthening of Supporting System for Cooperatives/Unions

In SNNPR, farmers' livelihoods are mostly dependent on farming, nevertheless, their participation in commercial transaction of farming produce is extremely limited. Their exposure to marketing information is minimum, thus their bargaining power against traders is almost nil. Although primary cooperatives (PCs) are highly expected to play a major role in livelihood improvement of smallholder farmers through collective marketing, lack of organizational and technical capacity as well as members' low commitment to their PC make it very difficult for cooperatives to fulfill what they are expected to achieve. Bearing this in mind, this strategy is formulated with the two objectives;

- To assist cooperatives to develop into a professional and democratic organization, which is able to manage and operate collective marketing business under the principle of transparency and accountability.
- To assist BoMC and its line offices to establish a functional support system for cooperative development.

Capacity Enhancement of Grain Cooperatives in Collective Marketing

This will target 84 PCs which participate in WFP/P4P. Cognizant of their weak managerial and technical capacity, a series of training will be carried out. Such training will be organizational management, gender mainstreaming, accounting, quality control, warehouse management and marketing system. In due course, a needs survey will be implemented to assess the capacity of the P4P target cooperative unions (CUs) in business operation. The survey outcomes will be utilized to design and implement an intervention for respective CU so as to enhance the effectiveness and resultant impact of the PC training. Since the organizational capacity of CUs greatly varies from one CU to another, a standardized approach could not be applicable and useful to all grain CUs.

Capacity Enhancement of Cooperatives in Non-grain Commodity Transaction

This will target the PCs which have been engaged or have a plan to be engaged in the collective marketing of non-grain cash crops. Since the Study identified mango, avocado, ginger, cassava and pepper as cash crops with comparative advantage, the assistance will be extended to those PCs which are involved in or have an interest to be involved in transaction of these identified commodities. PCs will receive the training on organizational management, gender mainstreaming, accounting, harvesting and post-harvest handling and marketing system with market survey. The training on marketing system will be designed to facilitate the understanding of participants on needs and preferences of users and consumers as well as marketing system and pricing mechanism of a target commodity. The outcomes of market survey will be incorporated in the harvesting and post-harvest handling training. The CUs dealing with these identified crops are Gamo Gofa CU (mango), Damota Walayita CU (ginger) and Ambericho CU (ginger), thus, for the time being, the project will work with only these three CUs.

Development of Cooperative Support System in BoMC

BoMC will be a responsible organization for the training of PCs targeted above. Since the training programme consists of both organizational and technical aspects, a team will be formed with experts from both Cooperative and Marketing Processes of BoMC. The main activities to be carried out by the team are as listed below. Although these activities are not new to BoMC, the past experiences obviously suggest a major overhaul of the approach and the activities which have been carried out by the agency. An external consultant with sufficient relevant experiences should be recruited to assist BoMC in this respect.

a) Preparation of Training Materials

The training materials for all subjects will be prepared. In development of materials, the followings should be taken into consideration. Sample training materials are shown in Appendices (volume 2)

1. Contents should be simple and clear given relatively low educational attainment of trainees.
2. Contents should be easy for trainees to implement with minimum financial investment.
3. Trained technologies or skills should be those which can generate immediate and tangible benefit to trainees once they are implemented.
4. Contents should be designed based upon needs of trainees.
5. Materials should be user-friendly and contents should be clear and well articulated so that a trainer can deliver the training without any difficulty.

It has been verified through the pilot project (PP02/08) that “Picture-cards” style materials and simple teaching aid with trainer’s guideline are some of those materials which are suitable to farmers training in rural area. Thus, it is desirable that the same type of material be developed.

b) Development of Cascade Training System

It adopts the cascade training system, which PP02/08 tried and verified its effectiveness. BoMC provides ToT to WoMC, which will organize the training for PCs in its locality.

c) Implementation of Follow-up Activities

The follow-up activities will be organized to assess effectiveness and shortcomings of the training programme. Accordingly, training materials or modalities will be revised or modified if it deems necessary.

d) Support for WoMC

After receiving ToT, WoMC will carry out the training for the target PCs. In the following year, WoMC will organize training for new PCs or farmer groups in their woreda on their own. Prior to such training, BoMC will support WoMC for preparation of operation and budget plans.

Strategy 4-4: Capacity Development of BoMC Staff

It is important to enhance the regional agricultural marketing through product development, promotion of marketable agricultural products and dissemination of market information. However, such expected missions have not yet been accomplished by BoMC due to lack of budget and practical experience in project operation and management. Many experts in BoMC have experiences of overseas training, and they frequently participate in various seminars in the country, but they don’t modify their approach to problem-solving. It seems that the experts take trainings just for their own benefit and for addressing foreign visitors. It is necessary to change the mind-set of BoMC staff.

Total of 8 BoA and BoMC staff were invited to the C/P training in Japan during the study period. However, 2 of them canceled just a few weeks before departure and 3 out of the 6 participants left BoMC or moved to another section soon after the training.

The knowledge/experience provided in trainings stay only in their heads and are not utilized, and the training of government staff should be fundamentally reconsidered. Hence, this master plan only recommends the cascade method training for BoMC/WoMC staff, cooperatives and farmers that practically contributes to improve the activities of cooperatives and farmers.

5.3 Master Plan Program

5.3.1 Plan for Agricultural Market Information Service (AMIS) Development

As a Master Plan Program for AMIS development, Project No. 1: Project on the Strengthening of Agricultural Market Information Service is proposed. This project is to install the job systems for AMIS in the Marketing and Cooperative administration. Following six (6) components are planned in line with the strategies described in the previous chapter of Basic Strategy 1.

Component 1: Stepwise expansion of “AMIS with SMS and bulletin boards” into 6 target crops and 82 WoMCs

Component 2: Delivery of collected price data to the related offices in SNNPR

Component 3: Dissemination of collected price data by radios and newspaper

Component 4: Dissemination of collected price data by BoMC website

Component 5: Obtain Addis Ababa market information from Oromia Marketing Agency

Component 6: Obtain ECX auction price of sesame

These six components are implemented by coordinated fashion as one program. Component 2 to 6 are implemented according to the stepwise expansion of “AMIS with SMS and bulletin boards” into 6 target crops/82 WoMCs.

Based on the planning principles described in the Strategy 1-1, the process to install job systems for AMIS in the target WoMC and BoMC in 5 years period is planned as follows.

Before starting AMIS for new crops, Ginger AMIS and Haricot bean AMIS should be restarted. In addition, precondition for the project implementation; i.e. securing the project budget funds and additional AMIS staff of BoMC should be solved in the 1st year (2013).

Table 5-5 Process for AMIS Systems installation

Major Activities	Target WoMC	WoMC to install job system
Year 1 (2013)		
1. Allocate the budget to restart Ginger AMIS and Haricot bean AMIS	5 + 9	0
2. Make code systems of 83 woredas, 8 crops, Product types, Marketplaces		
3. Stipulate the operating rules on data delivery to superagency and related offices		

Major Activities	Target WoMC	WoMC to install job system
4. Secure the project budget, and take necessary procedures to increase AMIS staff of BoMC		
5. Take necessary measures to secure the operating budget of target WoMCs		
6. Start disseminating the information by Kembata Community Radio		
Year 2 (2014)		
1. Build a database application software		
2. Install the job system for Mango AMIS and Red pepper AMIS	7 + 7	3 + 6
3. Install the job system for Maize AMIS in 14 WoMCs	14	0
4. Start disseminating the information by radio/newspaper of Mass Media Organization		
5. Recruit new BoMC staff		
6. Make a database of the collected price data		
Year 3 (2015)		
1. Install the job system for Sesame AMIS and Avocado AMIS	8 + 20	8 + 15
2. Install the job system for Maize AMIS in 5 WoMCs	5	0
3. Upload the database onto the BoMC website (web server)		
4. Start obtaining Addis Ababa market information from Oromia Marketing Agency		
5. Start obtaining ECX auction price of sesame		
Year 4 (2016)		
1. Install the job system for Wheat AMIS	18	18
2. Install the job system for Maize AMIS in 4 WoMCs	4	0
Year 5 (2017)		
1. Install the job system for Maize AMIS in remaining 19 WoMCs	19	19

5.3.2 Plan for Promotion of High Value-Added Marketing

In line with the Basic Strategy 2, following five (5) programs and one (1) planning activity are proposed as a Master Plan Program for High Value Addition for six (6) crops.

1. Mango, Avocado : Fruits loss mitigation program
2. Tomato : Vegetable shipment modernization program
3. Cereals, Pulses : Quality control skills dissemination program
4. Cassava : High quality dried cassava promotion program
5. Ginger : High quality dried ginger promotion program
6. Turmeric : Planning of post-harvest improvement of Turmeric

(1) Fruits loss mitigation program

In line with the strategy 2-1, following three (3) activity/projects are proposed.

Project No. 2: Follow-up Support of the PP03 Target Groups

BoMC/WoMC/kebele community organizer carry out the site monitoring and advisory support at the 3 sites of PP03 to promote effective use of provided tools and continue attempt at collective marketing by the primary cooperatives.

Project No. 3: Project on the Popularization of Fruit Harvesting Tools

This project aims to popularize the harvesting tool developed by PP03 in the selected 18 woreda. To create farmers demands for the tool, the project a) explains and demonstrates the benefits of using tool, b) posts posters in the villages, and c) provides free tools to key farmers. The project targets to create a situation that “the new tool becomes a commercially-available product like a sickle or hoe in local markets in fruits producing areas”, and promote the commercial manufacturing of the tools. In addition, the project supports the market-linkage building with quality-seeking buyers.

Project No. 4: Support for the Materialization of Mango Sales to Africa Juice Company

Build the stable business connection between Africa Juice Company and two fruit handling unions in SNNPR. BoMC shall take a lead role in building business connection, and support the unions and primary cooperatives.

The implementation schedule of three projects; including the funding for projects, is planned as shown in the following figure. Activities are carried out during a period of main harvest season of mango.

	2013				2014				2015				2016				2017			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
a) Follow-up Support of the PP03 Target Groups	■				■															
b) Project on the Popularization of Fruit Harvesting Tools																				
Activities to secure the budget funds for the project	■																			
Component 1 : Popularize the fruit harvesting tools			■				■				■				■				■	
Component 2 : Support for market-linkage with quality-seeking institutional buyers			■	■			■	■			■	■			■	■			■	■
Component 3 : Support for local metal workshops in fruits producing areas				■				■				■				■				■
Component 4 : Extension of the harvesting tool through local traders				■				■				■				■				■
c) Support for the Materialization of Mango Sales to Africa Juice Company			■				■				■				■				■	
Mango harvest main season			■				■				■				■				■	
Avocado harvest main season			■				■				■				■				■	

Figure 5-5 Implementation schedule of Fruits loss mitigation program

(2) Vegetable shipment modernization program

In line with the strategy 2-1, following two (2) projects are proposed.

Project No. 5: Project on the Improvement of Tomato Marketing to Urban Markets

Phase 1 : Establishment of Model Cases

To promote the farmers’ challenge for damage protection of tomato fruits during harvesting work

and transportation, the project attempts to establish models of tomato shipping improvement by producers groups in the irrigated tomato production area around Hawassa city. The project targets to establish two model groups.

Project No. 6: Project on the Improvement of Tomato Marketing to Urban Market

Phase 2 : Preparation and Operation of the Initial Cost Support Scheme

Formulate and operate the initial cost support scheme for handling equipment such as plastic boxes, to promote the farmers’ challenge to mitigate tomato fruits damage occurs in the harvesting work and transportation as well as collective marketing.

The implementation schedule of two projects; including the funding for projects, is planned as shown in the following figure. Project No. 6 shall be successively performed after Project No. 5.

Project on the Improvement of Tomato Marketing to Urban Markets	2013				2014				2015				2016				2017			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Phase 1 : Establishment of Model Case (Project No. 5)																				
- Activities to secure the budget funds for the project implementation	█																			
- Project implementation					█															
Phase 2 : Preparation and Operation of the Initial Cost Support Scheme (Project No. 6)																				
- Planning of Initial Cost Support Scheme for tomato shipping equipment																				
- Activities to acquire the budget funds for the Support Scheme [After acquires the budget funds]																				
- Implementation / disbursement																				
Harvest time of irrigated tomato (Main time is Nov. - Jan.)																				

Figure 5-6 Implementation schedule of Vegetable shipment modernization program

(3) Quality control skills dissemination program

In line with the strategy 2-2, following project is proposed.

Project No. 7: Capacity Enhancement of Cooperatives in Grain & Pulses Quality Control and Warehouse Management

Effective training method and teaching materials on quality control and warehouse management have been prepared by the pilot project (PP02). This project intends to implement the cascade system trainings for 65 non-trained cooperatives under the 7 cooperative unions.

(4) High quality dried cassava promotion program

In line with the strategy 2-3, following three (3) activity/projects are proposed.

Project No. 8: Follow-up Support of the PP04 Target Groups

Dried cassava processing and marketing by small-scale farmers groups were attempted by the pilot project (PP04). BoMC/ZoMC/WoMC shall continue the support of targets groups (12 farmers groups in 2 woredas, especially the groups in Offa woreda).

Project No. 9: Support for the Extension of High Quality Dried Cassava Producing Business

Farmers' groups in cassava production areas in Wolayita zone and Gamo Gofa zone wish to challenge the dried cassava processing and marketing. BoMC/ZoMC/WoMC provides support for farmers' groups for technical training, market linkage building and getting a loan for initial inputs.

Project No. 10: Sales Promotion of High Quality Dried Cassava

Consumers' demand for high quality and small size dried cassava was verified in Hawassa through PP04 implementation. In order to promote the high quality dried cassava production, market development in large consuming area such as Addis Ababa and Nazaret is essential. BoMC shall promote a market development for clean dried cassava in Addis Ababa and Nazaret.

(5) High quality dried ginger promotion program

In line with the strategy 2-3, following two (2) activity and project are proposed.

Project No. 11: Follow-up Support of the PP05 Target Groups

The pilot project (PP05) supported the production of "clean dried ginger" by two farmers/traders groups. BoMC/WoMC carry out the site monitoring and advisory support for the two groups in the next two seasons (2012/13 and 2013/14) to sustain and to strengthen their businesses.

Project No. 12: Project on the Incubation of Ginger Washing & Drying Business

Support other farmers/traders groups in ginger production area for entering into a ginger washing & drying business of similar scale of PP05. The project aims to support the two (2) groups per season during 3 seasons (from 2014/15 to 2016/17); in total of six (6) groups.

In the last 2016/17 season, a method which interest groups make application for the support (bottom-up mode) shall be attempted.

(6) Planning of Post-harvest improvement of Turmeric

In line with the strategy 2-3, following planning activity is proposed.

Project No. 13: Planning of post-harvest improvement of Turmeric

Conduct a research study on current post-harvest processing and turmeric collection to clarify the necessity to change current post-harvest practice from the viewpoint of 'market-oriented', and explore the applicable technology; include the 'soaking + jet-washing method'. In the case the applicable technology is identified, think of an introduction strategy and formulate a support scheme/project.

5.3.3 Plan for Agricultural Products Market Infrastructure Development

As discussed in the Basic Strategy 3, the following four programs are proposed as a Master Plan Program for Development Plan for Agricultural Products Market Infrastructure to Empower Market

Activities.

1. Woreda Marketplace Improvement Program
2. Improvement of Hawassa City Marketplace Infrastructure Program
3. Agricultural Warehouse Construction and Existing Warehouse Improvement Program
4. Promotion of Rural Products Sales at Roadside Infrastructure Program

(1) Woreda Marketplace Improvement Program

Under this program, following five (5) projects are proposed.

Project No. 14: PP06 Haricot Bean Market Infrastructure Support Project

BoMC monitors and verifies the management of the market facility for haricot bean constructed at Belila Marketplace of Boricha woreda as PP06 in order to reflect the result and support to other market facilities to be constructed by the Project No. 15: Haricot Bean Market Infrastructure Improvement Project.

Project No. 15: Haricot Bean Market Infrastructure Development

New haricot bean market facilities in 8 woredas where PP01 for Strengthening of the Agricultural Market Information Service had been executed are constructed, and their management are supported, except for Boricha woreda in Sidama zone where the facility has been constructed by PP06.

Project No. 16: PP07 Ginger Market Infrastructure Support Project

BoMC monitors and verifies the management of the market facility by the town whether the advantages are still continuing or not, and supports the management to make a good sample for other market facilities to be introduced.

Project No. 17: Ginger Market Infrastructure Development

New ginger market facilities in 4 woredas where PP01 for Strengthening of the Agricultural Market Information Service had been executed are constructed, and their management are supported, except for Hadaro Tunto woreda in Kembata Tembaro zone where the facility has been constructed by PP07.

Project No. 18: Market Infrastructure Development for Rural Agricultural Product Project

This project is proposed to extend market infrastructure for rural agricultural products other than haricot bean and ginger. BoMC acts positive involvement for a construction of market facility by AGP in terms of technical and management aspects.

(2) Improvement of Hawassa City Marketplace Infrastructure Program

Market facility building in Hawassa city has been initiated with AGP funds. No project plan is proposed in this program.

(3) Agricultural Warehouse Construction and Existing Warehouse Improvement Program

In this program, following two (2) projects are proposed.

Project No. 19: Promotion of Standard Agricultural Warehouse

BoMC provides the standard design of 500 tons warehouse and know-how on procurement of contractor that were gained by the pilot project (PP08) and other technical advice for construction of new warehouses.

Project No. 20: Existing Agricultural Warehouse Improvement Project

BoMC provides primary cooperatives with technical guidance and material support for improvement of existing warehouses for their effective use.

(4) Promotion of Rural Products Sales at Roadside Infrastructure Program

In this program, following project is proposed to be carried out.

Project No. 21: Roadside Rural Promotion Center (RRPC) Development

To encourage and activate rural economy and interaction between regional people and people from other regions through constructed RRPC on main road sides.

5.3.4 Plan for Capacity Strengthening of Cooperatives / Unions

As discussed in Basic Strategy 4, the Master Plan Program for Capacity Strengthening of Cooperatives /Unions comprises the following two projects. Further, through the implementation of these two projects, BoMC and its line offices will establish and develop a functional system to carry on the project activities after the set project period.

Project No. 22: Capacity Enhancement of Grain Cooperatives in Collective Marketing

The project will carry out the comprehensive training programme for 9 CUs and 84 PCs, which participate in WFP/P4P.

Project No. 23: Capacity Enhancement of Cooperatives in Non-grain Commodity Marketing

The Study has identified five cash crops (mango, avocado, ginger, cassava and pepper) with comparative advantage. In view of this, the project will implement the comprehensive training programme for 26 PCs, which are engaged in or have an interest to be engaged in collective marketing of these identified crops. In the end, it aims to establish a system within BoMC to effectively support cooperatives at a start of new business.

Chapter 6 Projects Plan

6.1 Policy for Preparation of Projects Plan

The Master Plan is composed by projects plan, and each project plan is an applicable and concrete action plan to be implemented. Preparation of the projects plan applies the following policies with full utilization of the lessons learnt and information obtained from 10 pilot projects implementation.

1. Practical projects plan reflecting the results and lessons learnt of the pilot projects
2. Securing necessary funds for the implementation and collaboration with other donor agencies, especially with AGP of World Bank and P4P of WFP
3. Holistic and comprehensive approach
4. Focusing on production areas (maximization of potentials of target commodities and areas)
5. Approach to producers for tangible increment of their profits
6. Adaptation of appropriate technologies
7. Project within an applicable amount of budget

6.2 Parameters for the Projects Plan

The projects plan in the 5-years Master Plan are formulated mainly based on the concept of “Continuation”, “Enlargement of target areas”, and “Application to other products” of the 10 pilot projects.

The content of projects plan covers the following parameters:

1. Development strategy and Master plan program
2. Implementation period
3. Target area and Target product
4. Target group (beneficiary)
5. Background and objective
6. Activities
7. Inputs and costs
8. Implementation schedule
9. Remarks

As for the project costs, estimation is applied based on the actual expenditures of the pilot projects implementation. However, considering the recent price increase in SNNPR, 10% of total cost is added as contingency. The travel allowance for the government official (BoMC/ZoMC/WoMC) is also computed by the standard applied in the pilot projects implementation. The salary of the government official is not included.

6.3 Projects Plan List

The 23 projects plans to assume its implementation during the 5-years' period are shown in the following list (Table 6-1).

Prioritization of the Projects plan

The implementation priority of 23 projects plan should be determined with consideration for the limited budget and human resources of BoMC. The draft final report was submitted to BoMC and each proposed projects plan were explained and discussed by the Study Team and BoMC in August 2012. The opinions on project priority of each C/P personnel were also surveyed. In addition, the project plans were explained in the final workshop meeting held in October 2010 at Hawassa; in which expected supportive agencies; World Bank/AGP, IFAD/AMIP, WFP, NGOs were participated.

However, BoMC's opinion on the implementation priority, as the bureau, has not yet defined. Therefore, the priority is not shown in the report.

Table 6-1 Projects Plan List

Basic Strategy	Strategy	No.	Projects Plan	Pilot Projects		
1. Strengthening of AMIS	1. Stepwise expansion of “AMIS with SMS and bulletin boards” into other important crops	1. Project on the Strengthening of Agricultural Market Information Service	1. Project on the Strengthening of Agricultural Market Information Service	PP01: Strengthening of the Agricultural Market Information Service		
	2. Utilization of collected price data					
	3. Utilization of the existing information resources					
2. Increment of profit by Introduction of High Value-Added Marketing	1. Improvement of Harvesting and Handling Method of Fruits and Vegetables	2. Follow-up Support of the PP03 Target Groups	2. Follow-up Support of the PP03 Target Groups	PP03: Improvement of harvesting and handling practices of mango/avocado		
		3. Project on the Popularization of Fruit Harvesting Tools				
		5. Project on the Improvement of Tomato Marketing to Urban Markets Phase 1 : Establishment of Model Cases				
	2. Acceleration and Strengthen participation in the Quality Oriented Markets	6. Project on the Improvement of Tomato Marketing to Urban Markets Phase 2 : Preparation and Operation of Initial Cost Support Scheme	7. Capacity Enhancement of Cooperatives in Grain & Pulses Quality Control and Warehouse Management	PP02: Capacity development of quality control of cereals and pulses for cooperative unions		
		7. Capacity Enhancement of Cooperatives in Grain & Pulses Quality Control and Warehouse Management				
	3. Development of Value-Added Activities in the Producing Areas	2. Acceleration and Strengthen participation in the Quality Oriented Markets	8. Follow-up Support of the PP04 Target Groups	8. Follow-up Support of the PP04 Target Groups	PP04: Improvement of dried cassava quality and market development project	
			3. Development of Value-Added Activities in the Producing Areas			
		4. Strengthening the Marketability of Specialized and Superior Products/Varieties	9. Support for the Extension of High Quality Dried Cassava Producing Business	11. Follow-up Support of the PP05 Target Groups	12. Project on the Incubation of Ginger Washing & Drying Business	PP05: Production of “clean” dried ginger and establishment of linkages with buyers
			11. Follow-up Support of the PP05 Target Groups			
			12. Project on the Incubation of Ginger Washing & Drying Business			
5. Acceleration of Collective Marketing	4. Strengthening the Marketability of Specialized and Superior Products/Varieties	13. Planning of post-harvest improvement of Turmeric	4. Support for the Materialization of Mango Sales to Africa Juice Company	PP03: Improvement of harvesting and handling practices of mango/avocado		
		4. Support for the Materialization of Mango Sales to Africa Juice Company				
		10. Sales Promotion of High Quality Dried Cassava			PP04: Improvement of dried cassava quality and market development project	
5. Acceleration of Collective Marketing						

Basic Strategy	Strategy	No.	Projects Plan	Pilot Projects	
3. Improvement of Effective Market Infrastructure to Empower Market Activities	1. Improvement of Trunk Roads and Access Roads to Woreda Marketplace and Access Roads to Local Marketplaces				
	2. Improvement of Market Infrastructure at Woreda Marketplaces in Target Areas	14. PP06 Haricot Bean Market Infrastructure Support Project	PP06: Local market improvement project in haricot bean producing area		
			15. Haricot Bean Market Infrastructure Development		
			16. PP07 Ginger Market Infrastructure Support Project	PP07: Local market improvement project in ginger producing area	
			17. Ginger Market Infrastructure Development		
			18. Market Infrastructure Development for Rural Agricultural Product		
	3. Improvement of Hawassa City Marketplace Infrastructure				
	4. Development of New Agricultural Warehouse and Improvement of Existing Warehouse for Effective Use		19. Promotion of Standard Agricultural Warehouse 20. Existing Agricultural Warehouse Improvement		PP08: Standard warehouse construction and its ideal management
	5. Promotion of Agricultural Products Sales at Roadside Infrastructure		21. Roadside Rural Promotion Center (RRPC) Development		
	4. Catch up and Adjustment to the Institutional System of Agricultural Marketing	1. Acceleration of Coordination among Agricultural Marketing Stakeholders			
2. Publicity and Maintenance of Specification/Metrological Standard				PP09: Comparison test for ECX and non-ECX wheat	
3. Strengthening of Supporting System for Cooperatives/Unions		22. Capacity Enhancement of Grain Cooperatives in Collective Marketing			
4. Capacity Development of BoMC Staffs		23. Capacity Enhancement of Cooperatives in Non-grain Commodity Marketing			PP10: Empowerment of civil servants' understanding of market improvement through monitoring the pilot projects

No.	Project Title	Strategy												Target area (Zone / Special woreda)															Target crop												
		1 Strengthening of AMIS	2-1 Improvement of Harvesting/ Handling Method of Fruits & Vegetables	2-2 Acceleration and Strengthen Participation in the Quality Oriented Markets	2-3 Development of Value-Added Activities in the Producing Areas	2-4 Strengthening the Marketability of Specialized and Superior Products/ Varieties	2-5 Acceleration of Collective Marketing	3 Improvement of Effective Market Infrastructure to Empower Market	4-1 Acceleration of Coordination among Agricultural Marketing Stakeholders	4-2 Publicity and Maintenance of Specification/Metrological Standard for Cooperatives/Unions	4-3 Strengthening of Supporting System	4-4 Capacity Development of BoMC Staffs	Bench Maji	Dawro	South Omo	Gamo Gofa	Geddo	Guraghe	Hadhya	Keffa	Kembata Tembaro	Sheka	Sidama	Siilite	Wolayita	Alaba S.W.	Basket S.W.	Konta S.W.	Yem S.W.	Cereals	Pulses	Vegetables	Fruits	Root crops	Others : Ginger, Sesame, etc.						
1	Project on the Strengthening of Agricultural Market Information Service	X																					X	X	X	X	X	X	X	X	X	X		X							
	Others : Ginger (PP)																																								
	Pulses : Haricot bean (PP)																																								
	Fruits : Mango																																								
	Vegetables : Red chili																																								
	Others : Sesame																																								
	Fruits : Avocado																																								
	Cereals : Wheat																																								
	Cereals : Maize																																								
2	Follow-up Support of the PPO3 Target Groups	X																					X	X	X	X	X	X	X	X	X	X	X	X							
3	Project on the Popularization of Fruit Harvesting Tools	X																					X	X	X	X	X	X	X	X	X	X	X	X							
4	Support for the Materialization of Mango Sales to Africa Juice Company	X									X																														
5	Project on the Improvement of Tomato Marketing to Urban Markets Phase 1 : Establishment of Model Cases	X									X																														
6	Project on the Improvement of Tomato Marketing to Urban Markets Phase 2 : Preparation and Operation of Initial Cost Support Scheme	X									X																														
7	Capacity Enhancement of Cooperatives in Grain & Pulses Quality Control and Warehouse Management												X																												
8	Follow-up Support of the PPO4 Target Groups													X																											
9	Support for the Extension of High Quality Dried Cassava Producing Business													X																											
10	Sales Promotion of High Quality Dried Cassava													X																											
11	Follow-up Support of the PPO5 Target Groups													X																											
12	Project on the Incubation of Ginger Washing & Drying Business													X																											
13	Planning of post-harvest improvement of Turmeric													X																											
14	PP06 Haricot Bean Market Infrastructure Support Project																																								
15	Haricot Bean Market Infrastructure Development																																								
16	PP07 Ginger Market Infrastructure Support Project																																								
17	Ginger Market Infrastructure Development																																								
18	Market Infrastructure Development for Rural Agricultural Product																																								
19	Promotion of Standard Agricultural Warehouse																																								
20	Existing Agricultural Warehouse Improvement																																								
21	Roadside Rural Promotion Center (RRPC) Development																																								
22	Capacity Enhancement of Grain Cooperatives in Collective Marketing																																								
23	Capacity Enhancement of Cooperatives in Non-grain Commodity Marketing																																								

(X) Not a project site, but benefit area
[X] Sites of the pilot project (PP), and not targeted in the Master Plan

Figure 6-1 Strategies, Target areas and Target crops of each Project Plan

6.4 Projects Plan

6.4.1 Plan for Agricultural Market Information Service (AMIS) Development

Project No. 1

Project Title	Project on the Strengthening of Agricultural Market Information Service																																																																																																																																																																																																																																																																																					
Strategy	1: Strengthening of the Agricultural Market Information Services (AMIS) 1-1: Stepwise expansion of “AMIS with SMS and bulletin boards” into other important crops 1-2: Utilization of collected price data 1-3: Utilization of the existing information resources																																																																																																																																																																																																																																																																																					
Master Plan Program	Plan for Agricultural Market Information Service (AMIS) Development																																																																																																																																																																																																																																																																																					
Project Period	2013 - 2017 (5 years)																																																																																																																																																																																																																																																																																					
Project Site and Target Crop	Number of target woredas by target crop: <table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th rowspan="2"></th> <th colspan="17">Zone / Special woreda</th> <th rowspan="2">Total</th> <th rowspan="2">New woredas</th> </tr> <tr> <th>1</th><th>2</th><th>3</th><th>4</th><th>5</th><th>6</th><th>7</th><th>8</th><th>9</th><th>10</th><th>11</th><th>12</th><th>13</th><th>14</th><th>15</th><th>16</th><th>17</th> </tr> </thead> <tbody> <tr> <td></td> <td>Bench Maji</td><td>Dawro</td><td>South Omo</td><td>Gamo Gofa</td><td>Gedeo</td><td>Guraghe</td><td>Hadiya</td><td>Keffa</td><td>Kembata Tembaro</td><td>Sheka</td><td>Sidama</td><td>Siltie</td><td>Wolayita</td><td>Segen</td><td>Alaba S. W.</td><td>Basket S. W.</td><td>Konta S. W.</td><td></td><td></td> </tr> <tr> <td>1</td> <td>Mango</td> <td></td><td></td><td>1</td><td>2</td><td></td><td></td><td></td><td>1</td><td></td><td></td><td></td><td>3</td><td></td><td></td><td></td><td></td><td></td><td></td><td>7</td><td>3</td> </tr> <tr> <td>2</td> <td>Red pepper</td> <td></td><td></td><td></td><td></td><td>2</td><td></td><td>1</td><td></td><td></td><td>1</td><td>2</td><td></td><td></td><td>1</td><td></td><td></td><td></td><td></td><td>7</td><td>6</td> </tr> <tr> <td>3</td> <td>Sesame</td> <td>5</td><td></td><td>1</td><td>1</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>1</td><td></td><td></td><td></td><td>8</td><td>8</td> </tr> <tr> <td>4</td> <td>Avocado</td> <td>2</td><td></td><td></td><td></td><td>3</td><td></td><td></td><td>3</td><td>2</td><td>6</td><td></td><td>4</td><td></td><td></td><td></td><td></td><td></td><td></td><td>20</td><td>15</td> </tr> <tr> <td>5</td> <td>Wheat</td> <td></td><td>2</td><td></td><td>3</td><td>1</td><td></td><td>4</td><td>2</td><td>3</td><td></td><td>2</td><td>1</td><td></td><td></td><td></td><td></td><td></td><td></td><td>18</td><td>18</td> </tr> <tr> <td>6</td> <td>Maize</td> <td>4</td><td>2</td><td>2</td><td>4</td><td>1</td><td>3</td><td>2</td><td>4</td><td>3</td><td>1</td><td>3</td><td>3</td><td>6</td><td>2</td><td>1</td><td></td><td>1</td><td></td><td>42</td><td>34</td> </tr> <tr> <td></td> <td>Total</td> <td>11</td><td>4</td><td>4</td><td>10</td><td>5</td><td>5</td><td>6</td><td>7</td><td>10</td><td>3</td><td>12</td><td>6</td><td>13</td><td>2</td><td>2</td><td>1</td><td>1</td><td>102</td><td>84</td> </tr> <tr> <td></td> <td colspan="20">PP01 Target crops</td> </tr> <tr> <td>7</td> <td>Ginger</td> <td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>2</td><td></td><td></td><td></td><td>3</td><td></td><td></td><td></td><td></td><td></td><td>5</td><td></td> </tr> <tr> <td>8</td> <td>Haricot Bean</td> <td></td><td></td><td></td><td></td><td></td><td></td><td>2</td><td></td><td></td><td></td><td>2</td><td></td><td>2</td><td>2</td><td>1</td><td></td><td></td><td></td><td>9</td><td></td> </tr> </tbody> </table> <p>There are woredas that will deal with several target crops. Actual number of new woreda is 69. Names of 69 target woredas are shown in Annex 1.</p>				Zone / Special woreda																	Total	New woredas	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17		Bench Maji	Dawro	South Omo	Gamo Gofa	Gedeo	Guraghe	Hadiya	Keffa	Kembata Tembaro	Sheka	Sidama	Siltie	Wolayita	Segen	Alaba S. W.	Basket S. W.	Konta S. W.			1	Mango			1	2				1				3							7	3	2	Red pepper					2		1			1	2			1					7	6	3	Sesame	5		1	1											1				8	8	4	Avocado	2				3			3	2	6		4							20	15	5	Wheat		2		3	1		4	2	3		2	1							18	18	6	Maize	4	2	2	4	1	3	2	4	3	1	3	3	6	2	1		1		42	34		Total	11	4	4	10	5	5	6	7	10	3	12	6	13	2	2	1	1	102	84		PP01 Target crops																				7	Ginger									2				3						5		8	Haricot Bean							2				2		2	2	1				9	
	Zone / Special woreda																	Total	New woredas																																																																																																																																																																																																																																																																			
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2	Red pepper					2		1			1	2			1					7	6																																																																																																																																																																																																																																																																	
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4	Avocado	2				3			3	2	6		4							20	15																																																																																																																																																																																																																																																																	
5	Wheat		2		3	1		4	2	3		2	1							18	18																																																																																																																																																																																																																																																																	
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8	Haricot Bean							2				2		2	2	1				9																																																																																																																																																																																																																																																																		
Target Group	Target of market information service is farmers and local traders																																																																																																																																																																																																																																																																																					
Implementing Agency	BoMC and WoMCs in the project sites	Supporting Agency	- SNNPR Mass Media Organization - Community radio station(s) - Oromia Marketing Agency																																																																																																																																																																																																																																																																																			
Background & Objectives: The pilot project (PP01) tested the “AMIS with SMS and bulletin boards” with 14 WoMCs and BoMC for ginger and haricot bean, and it was confirmed that this method is workable for sending/receiving/disseminating the price information under the poor communication services in the rural area. This project aims to strengthen the AMIS in SNNPR by installing the “AMIS with SMS and bulletin boards” for the selected 6 kinds of crops step-by-step, and in addition, by enhancing utilization of the collected price data and the existing information resources.																																																																																																																																																																																																																																																																																						

This project is composed of the following 6 components:

- Component 1: Stepwise expansion of “AMIS with SMS and bulletin boards” into 6 target crops
- Component 2: Delivery of collected price data to the related offices in SNNPR
- Component 3: Dissemination of collected price data by radio and newspaper
- Component 4: Dissemination of collected price data by BoMC website
- Component 5: Obtain Addis Ababa market information from Oromia Marketing Agency
- Component 6: Obtain ECX auction price of sesame

After the completion of this project, including ginger and haricot bean, price information for 8 crops will be collected and disseminated by 83 WoMCs.

Activities:

* Actor for the activities is BoMC unless otherwise noted.

Component 1: Stepwise expansion of “AMIS with SMS and bulletin boards” into 6 target crops

Expansion shall be implemented in the following order.

CY	Target crops	Number of target woreda	Number of WoMC to install job system
2013	Ginger, Haricot bean (Restart the PP01)	14	0
2014	Mango, Red pepper	7 + 7	3 + 6
2015	Sesame, Avocado	8 + 20	8 + 15
2016	Wheat	18	18
2017	Maize	42	19

[Year-1]

- 1-1. Allocate the budget to restart Ginger AMIS and Haricot bean AMIS
- 1-2. Make code systems: 83 woredas, 8 crops, Product types, Marketplaces
- 1-3. Secure the project budget, and undertake necessary procedures to increase AMIS staff of BoMC
- 1-4. Take necessary measures to secure the operating budget of target WoMCs
- 1-5 & 6. Conduct the periodical site monitoring, and WoMCs meeting (Ginger and Haricot bean)

[Year-2]

- 2-1. Build a database application software (outsourcing)
- 2-2. Install the job system for Mango AMIS, and launch the service
- 2-3. Install the job system for Red pepper AMIS, and launch the service
- 2-4. Install the job system for Maize AMIS in 14 WoMCs, and launch the service
- 2-5 & 6. Conduct periodical site monitoring, and WoMCs meeting
- 2-7. Recruit a new BoMC staff
- 2-8. Provide computer & data handling training to WoMC staff and ZoMC staff

[Year-3]

- 3-1. Install the job system for Sesame AMIS, and launch the service
- 3-2. Install the job system for Avocado AMIS, and launch the service
- 3-3. Install the job system for Maize AMIS in 5 WoMCs, and launch the service
- 3-4 & 5. Conduct periodical site monitoring, and WoMCs meeting
- 3-6. Provide computer & data handling training to WoMC staff

[Year-4]

- 4-1. Install the job system for Wheat AMIS, and launch the service
- 4-2. Install the job system for Maize AMIS in 4 WoMCs, and launch the service
- 4-3 & 4. Conduct periodical site monitoring, and WoMCs meeting
- 4-5. Provide computer & data handling training to WoMC staff

[Year-5]

- 5-1. Install the job system for Maize AMIS in remaining 19 WoMCs, and launch the service
- 5-2 & 3. Conduct the periodical site monitoring, and WoMCs meeting
- 5-4. Provide a computer & data handling training to WoMC staff

Component 2: Delivery of collected price data to the related offices in SNNPR

1. Stipulate the operating rules on data delivery to superagency and related offices
2. WoMC sends SMS to ZoMC
3. WoMC summarizes monthly data, and submits it to the related offices in woreda
4. ZoMC summarizes monthly data, and submits it to the related offices in zone
5. BoMC summarizes monthly data, and submits it to the related offices in region

Component 3: Dissemination of collected price data by radio and newspaper

1. Make arrangements, and disseminate by radio/newspaper of Mass Media Organization
2. Make arrangements, and disseminate by Kambata Community Radio

Component 4: Dissemination of collected price data by BoMC website

1. Make a database of the collected price data, and update it regularly
2. Upload the database onto the BoMC website (web server), and update it regularly

Component 5: Obtain Addis Ababa market information from Oromia Marketing Agency

1. Build a cooperative framework to exchange price information with Oromia Marketing Agency
2. Exchange price information regularly
3. Disseminate the obtained price information by SMS to WoMCs regularly

Component 6: Obtain ECX auction price of sesame

1. Register for ECX mobile SMS/IVR services [Sesame WoMCs and BoMC]
2. Post the ECX auction price on bulletin board regularly [Sesame WoMCs]

Input:

- BoMC expert : Year-1: 1, Year-2: 2, After Year-3: 3 experts
- WoMC expert : 83 (1 expert/WoMC)
- Equipment for each WoMC : Desktop PC, Printer (A4), UPS, Mobile phone, Price bulletin board
- Equipment for each ZoMC : Desktop PC, Printer (A4), UPS, Mobile phone
- Equipment for BoMC : None
- Expenses for WoMC meeting, Computer & data handling training
- Operating expense of WoMCs & BoMC : Mobile cards, consumables (file, A4 paper, toner, etc.), transportation fee to marketplace (only WoMCs), BoMC expert travel expense (allowance, car fuel)

Cost:

CY	2013	2014	2015	2016	2017	Total
Number of New WoMC	14	23	46	64	83	
Number of WoMC to install job system	0	9	23	18	19	69
Number of ZoMC to provide equipment	6	5	4	1	1	17
WoMC Equipment cost	0	231,300	591,100	462,600	488,300	1,773,300
Transportation cost of equipment	0	7,000	16,000	9,000	12,000	44,000
ZoMC Equipment cost	127,200	106,000	84,800	21,200	21,200	360,400
BoMC expert travel cost (allowance + car fuel)						
WoMC Offices survey	0	8,500	11,000	10,800	14,700	45,000
Equipment installation & Kick-off meeting	0	8,500	11,000	10,800	14,700	45,000
Periodical site monitoring	6,400	10,200	17,600	22,700	27,800	84,700
Meeting with Oromia Marketing Agency			5,200			5,200
WoMCs Meeting	11,200	20,500	40,100	52,900	68,900	193,600
Computer & Data handling training	0	41,000	61,200	51,200	53,200	206,600
Database application software (outsource)	0	45,000	0	0	0	45,000
ETC Domain Name Server Service fee	1,100	1,100	1,100	1,100	1,100	5,500
BoMC Operating expense 600 /month	7,200	7,200	7,200	7,200	7,200	36,000
WoMC Operating expense 570 /month	47,880	78,660	157,320	218,880	283,860	786,600
Total	200,980	564,960	1,003,620	868,380	992,960	3,630,900

Contingency (10%) : 363,100 Birr

Total : 3,994,000 Birr

* Operating expense of WoMCs is estimated with the condition that AMIS activity is conducted only during harvesting & marketing season; i.e. 6 months in a year.

* No operating expense is estimated for ZoMCs since they will not send SMS; only reception.

Schedule:

As per Annex 2

Points of concern:

1) Utilize the outputs of PP01:

- Operational guideline for “AMIS with SMS and bulletin boards”
- Check sheet of WoMC activities to use for periodical monitoring
- Training materials for Computer & data handling training
- Drawing of the price bulletin board

2) Installation of job system for each crop shall be carried out with the following steps as performed in PP01.

1. BoMC expert checks the situation of office, responsible person at each WoMC office.
2. Planning meeting -- Decide product types, marketplaces & market days to collect price, etc.
3. BoMC expert finalizes code systems, SMS format, and operational guideline.
4. BoMC expert prepares a procurement & installation plan, and BoMC procures equipment.
5. BoMC expert delivers and installs PC, and explains how to use/maintain them.
6. WoMC expert installs a price bulletin board in the marketplace.
7. Kick off meeting -- Confirm the work procedures, and then start the operation.

3) Preconditions for the project

- Securing of project budget: Year-1 (2013) is scheduled for a period of securing the project budget.
- Continued service of PP01 Team leader: PP01 team leader knows work procedures to launch “AMIS with SMS and bulletin boards”. In addition, he carried out the BoMC website making, PC and data handling training, and fixed computer troubles for WoMCs. Smooth implementation of the project is hard to expect without him.

Annex 1: Target crops and target woredas for AMIS development (1/2)

Zone / SP woreda	Woreda	Ginger	H.Bean	Mango	Pepper	Sesame	Avocado	Wheat	Maize
Alaba SP woreda	* 1 Alaba Sp woreda		x		x				x
Basketo SP woreda	2 Basket Sp woreda					x			
Bench Maji	3 Bero					x			
	4 Debub Bench						x		x
	5 Guraferda					x			x
	6 Meinie Goldia					x			
	7 Nebut Sgasa ??					x			
	8 Semen Bench						x		
	9 Sheko								x
	10 Shewa Bench					x			x
Dawro	11 Gena Bosa								x
	12 Mareka							x	
	13 Tocha							x	x
Gamo Gofa	14 Arbaminch Zuria			x					
	15 Chench							x	
	16 Denba Gofa								x
	17 Gerese ??							x	
	18 Kemba							x	
	19 Kucha								x
	20 Melo Koza					x			
	21 Mirab Abaya			x					
	22 Uba Debre Tsehay								x
23 Zala								x	
Gedeo	24 Bule							x	x
	25 Dilla Zuria						x		
	26 Kachore						x		
	27 Wonago						x		
Guraghe	28 Abeshge								x
	29 Mareko				x				
	30 Meskan				x				x
	31 Sodo								x
Hadiya	32 Bimu ??							x	
	33 Gombora							x	
	* 34 West Badewacho		x						x
	35 Misha							x	
	* 36 East Badewacho		x						x
37 Soro							x		
Keffa	38 Adiy							x	
	39 Bit								x
	40 Chena								x
	41 Decha								x
	42 Gimbo				x				x
	43 Saylem							x	
Kembata Tembaro	44 Angacha							x	x
	45 Damboya								x
	46 Doyogenna							x	
	* 47 Hadaro Tunto	x		x			x		
	48 Kacha Bira						x		
	49 Kedida Gamela							x	x
* 50 Tembaro	x					x			

* PP01 sites

Annex 1: Target crops and target woredas for AMIS development (2/2)

Zone / SP woreda		Woreda	Ginger	H.Bean	Mango	Pepper	Sesame	Avocado	Wheat	Maize
Konta SP woreda		51 Konta Sp woreda								x
Segen	*	52 Amaro		x						x
	*	53 Buriji		x						
		54 Derashe								x
Sheka		55 Sueko ??						x		
		56 Yeki						x		x
Sidama		57 Aleta Wondo						x		
		58 Bonna						x		
	*	59 Boricha		x						x
		60 Dale						x		
		61 Dara						x		
		62 Hawassa Zuria				x				x
		63 Hula							x	
	*	64 Loka Abaya		x						x
		65 Malga							x	
		66 Wensho						x		
	67 Wondogenet						x			
Silitie		68 Dalocha				x				x
		69 Mierab Azernet							x	
		70 Sankura								x
		71 Silti				x				x
South Omo		72 Bena Tsemay								x
		73 Dehub Ari			x					x
		74 Sakanagi ??					x			
Wolayita	*	75 Boloso Bombe	x		x			x		
	*	76 Boloso Sore	x		x			x		
		77 Damot Fulassa								x
	*	78 Damot Gale		x				x		x
		79 Damot Sorre								x
		80 Damot Weyde						x		x
		81 Humbo								x
	*	82 Kindo Koisha	x		x					
	*	83 Sodo Zuria		x						x
Total number of woredas			5	8	7	7	8	20	18	42

* PP01 sites

Annex 2: Implementation schedule

	2013				2014				2015				2016				2017											
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4								
Component 1: Stepwise expansion of “AMIS with SMS and bulletin boards” into 6 target crops																												
1-1. Allocate the budget to restart Ginger AMIS and Haricot bean AMIS	■																											
Restart Ginger AMIS and Haricot bean AMIS			X																									
1-2. Make code systems: 83 woredas, 8 crops, Product types, Marketplaces	■																											
1-3. Secure the project budget, and undertake necessary procedures to increase AMIS staff of BoMC	■																											
1-4. Take necessary measures to secure the operating budget of target WoMCs	■																											
1-5. Conduct periodical site monitoring (Ginger and Haricot bean)			■																									
1-6. Conduct WoMCs meeting (Ginger and Haricot bean)			■																									
2-1. Build a database application software (outsourcing)					■				■ (review and improvement)																			
2-2. Install the job system for Mango AMIS, and launch the service									■																			
2-3. Install the job system for Red chili AMIS, and launch the service													■															
2-4. Install the job system for Maize AMIS in 14 WoMCs, and launch the service																	■											
2-5. Conduct periodical site monitoring																												
2-6. Conduct WoMCs meeting																												
2-7. Recruit new BoMC staff					■																							
2-8. Provide computer & data handling training to WoMC & ZoMC staff																												
3-1. Install the job system for Sesame AMIS, and launch the service													■															
3-2. Install the job system for Avocado AMIS, and launch the service													■															
3-3. Install the job system for Maize AMIS in 5 WoMCs, and launch the service																	■											
3-4. Conduct periodical site monitoring																												
3-5. Conduct WoMCs meeting																												
3-6. Provide computer & data handling training to WoMC staff																												
4-1. Install the job system for Wheat AMIS, and launch the service																	■											
4-2. Install the job system for Maize AMIS in 4 WoMCs, and launch the service																												
4-3. Conduct periodical site monitoring																												
4-4. Conduct WoMCs meeting																												
4-5. Provide computer & data handling training to WoMC staff																												
5-1. Install the job system for Maize AMIS in remaining 19 WoMCs, and launch the service																	■											
5-2. Conduct periodical site monitoring																												
5-3. Conduct WoMCs meeting																												
5-4. Provide computer & data handling training to WoMC staff																												
Component 2: Delivery of collected price data to the related offices in SNNPR																												
1. Stipulate the operating rules on data delivery to superagency and related offices	■																											
2. WoMC sends SMS to ZoMC					■■■■																							
3. WoMC summarizes monthly data, and submits it to the related offices in woreda					■■■■																							
4. ZoMC summarizes monthly data, and submits it to the related offices in zone					■■■■																							
5. BoMC summarizes monthly data, and submits it to the related offices in region					■■■■																							
Component 3: Dissemination of collected price data by radio and newspaper																												
1. Make arrangements, and disseminate by radio/newspaper of Mass Media Organization									■■■■																			
2. Make arrangements, and disseminate by Kambata Community Radio					■				■■■■																			
Component 4: Dissemination of collected price data by BoMC website																												
1. Make a database of the collected price data, and update it regularly									■■■■																			
2. Upload the database onto the BoMC website (web server), and update it regularly									■■■■																			
Component 5: Obtain Addis Ababa market information from Oromia Marketing Agency																												
1. Build a cooperative framework with Oromia Marketing Agency									■				■■■■															
2. Exchange price information regularly									■■■■																			
3. Disseminate the obtained price information by SMS to WoMCs regularly									■■■■																			
Component 6: Obtain ECX auction price of sesame																												
1. Register for ECX mobile SMS/IVR services [Sesame WoMCs and BoMC]																	■											
2. Post the ECX auction price on bulletin board regularly [Sesame WoMCs]													■■■■															

■ Time-limited activity ■■■■ Continuous activity

6.4.2 Plan for Promotion of High Value Addition

Project No. 2

Project Title	Follow-up Support of the PP03 Target Groups		
Strategy	2: Increment of profit by Introduction of High Value-Added Marketing 2-1: Improvement of Harvesting and Handling Method of Fruits and Vegetables 2-5: Acceleration of Collective Marketing		
Master Plan Program	High Value Addition Program Fruits loss mitigation program		
Project Period	2013 – 2014 (2012/13 and 2013/14 harvest seasons)		
Project Site	Mango: Mirab Abaya woreda (Goma Gofa zone) Boloso Bombe woreda (Wolayita zone) Avocado: Dale woreda (Sidama zone)		
Target Crop/Product	Mango, Avocado		
Target Group	Mirab Abaya woreda : Umo Lante primary cooperative (PC) Boloso Bombe woreda : Boloso Bombe PC Dale woreda : Dagiya Kebele Vegetable and Fruits PC		
Implementing Agency	BoMC and WoMCs of the Project sites	Supporting Agency	
<p>Background & Objectives:</p> <p>The pilot project (PP03) worked on the development and dissemination of appropriate harvesting and handling methods/tools to reduce physical damage to fruits. Project-designed harvesting tools, handling tools (plastic box, push cart) and materials for making huts for fruits collection were provided to the 3 PC to test the workability in the real operation. In addition, PP03 provided marketing linkage support to the groups. The use situations for tools and results of collective marketing were different by PC.</p> <p>Fruits harvesting time was only one time (Nov. 2011 – Mar. 2012) in the PP period. Therefore, to promote effective use of provided tools and continue attempt at collective marketing, conduct the site monitoring and advisory support by BoMC/WoMC/kebele community organizer at the 3 sites.</p>			
<p>Activities:</p> <p>Period of the monitoring and advisory support shall be Jan.-Feb. 2013 (2 months) and Nov. 2013 – Feb. 2014 (4 months).</p> <p>1. Site monitoring</p> <p>1-1. by BoMC: 1 time/month/site. To be carried out with WoMC expert</p> <p>1-2. by WoMC: Regularly and according to the collective shipment by PC</p>			

2. Advisory support

2-1. Advisory support to promote effective use of tools shall be given to Dagiya Kebele Vegetable and Fruits PC and Boloso Bombe PC. WoMC/community organizer shall provide guidance to PC leaders and demonstrate the benefits of the harvesting tool to member farmers.

2-2. Advisory support to promote continue attempt at collective marketing shall be given to Boloso Bombe PC where the leaders' commitment is weak. Facilitate the leaders' motivation and support the operation/management of fruits collection.

In case of being requested to do so, provide support to Umo Lante PC and Dagiya Kebele Vegetable and Fruits PC to link them with institutional buyers.

Work descriptions:

BoMC expert:

- Explain to 3 WoMC offices about the scheme/contents of the Follow-up Support.
- Supervise the work of WoMC and community organizer. Provide instruction, accordingly.
- Site monitoring (1 time/month/site), Provide advice/guidance to PC leaders.
- Linkage support with institutional buyers.

WoMC expert:

- Supervise the work of community organizer.
- Site monitoring regularly and according to the collective shipment by PC.
- Provide advice/guidance to PC leaders; especially on the management of collective marketing.
- Periodical reporting to BoMC expert.

Kebele community organizer:

- Demonstrations of harvesting tools to member farmers.
- Provide advice/guidance to PC leaders; especially on the management of collective marketing.
- Regularly reporting to WoMC expert.

Input:

- BoMC expert : 1
- WoMC expert : 3 (1 each/site)
- Kebele community organizer : 3 (1 each/site)
- Operating expense : BoMC expert travel expense (allowance, car fuel), communication charge, office supplies, transportation fee to site (WoMC)

Cost:

Crop Year	2012/13	2013/14	Total
BoMC Expert travel expense (allowance, car fuel)	5,200	10,400	15,600
WoMC Transportation fee to site	600	1,200	1,800
BoMC Operating expense	1,000	2,000	3,000
WoMC Operating expense	1,200	2,400	3,600
Total	8,000	16,000	24,000

The Development Study on the Strengthening Agricultural Marketing System in SNNPR

Contingency (10%) : 2,400 Birr
 Total : 26,000 Birr

Schedule:

	2013				2014				2015				2016				2017			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
a) Follow-up Support of the PP03 Target Groups	■			■	■															
Mango harvest main season				■				■				■				■				■
Avocado harvest main season				■				■				■				■				■

Project No. 3

Project Title	Project on the Popularization of Fruit Harvesting Tools		
Strategy	2: Increment of profit by Introduction of High Value-Added Marketing 2-1: Improvement of Harvesting and Handling Method of Fruits and Vegetables 2-4: Strengthening the Marketability of Specialized and Superior Products/Varieties 2-5: Acceleration of Collective Marketing		
Master Plan Program	High Value Addition Program Fruits loss mitigation program		
Project Period	2013 – 2017 (5 years, 4 harvest seasons)		
Project Site	18 woredas in 5 zones Gamo Gofa : Arbaminch Zuria, Mirab Abaya, Denba Goffa Wolayita : Bolosso Bombe, Boloso Sore, Damot Gale, Damot Fulassa K.Tembaro : Hadaro Tunto Zuria, Tembaro, Kacha Bira, Kedida Gamela Sidama : Wondogenet, Dale, Aleta Wondo, Hawassa Zuria Gedeo : Dilla Zuria, Wonago Bench Maji : Semen (North) Bench, Debub (South) Bench		
Target Crop/Product	Mango, Avocado		
Target Group	- Farmers who have mango/avocado trees - Local metal workshops		
Implementing Agency	BoMC, ZoMC and WoMC	Supporting Agency	BoA, ZoA and WoA
<p>Background & Objectives:</p> <p>To improve current harvesting and handling practices of mango and avocado, the pilot project (PP03) worked on the development and dissemination of appropriate harvesting and handling methods/tools. A harvesting tool that is easily-manufactured and cheap was designed and its effectiveness to reduce physical damage was verified in the real operations.</p> <p>This project aims to popularize the developed fruit harvesting tool in the major mango/avocado producing woredas in SNNPR. The final goal of the popularization shall be “the new tool becomes a commercially-available product like a sickle or hoe in local markets in fruits producing areas”, and promotion of commercial manufacturing of the tools in fruits producing areas (i.e. support for local metal workshops) shall be incorporated in the project.</p> <p>To popularize the tool; i.e. to create farmers demands for the tool, extension methods of a) explain and demonstrate the benefit of using tool by kebele community organizers and WoMC staff, b) posting posters in the villages, and c) provide free tools to key farmers shall be performed. In addition, support for market-linkage with quality-seeking buyers and management of collective sales of fruits shall be provided.</p>			

The project is composed of 3 parts and targets are set as follows;

Popularize the fruit : Harvesting tool is well know in 18 target woredas, and harvesting tool demand from farmers and local traders has appeared.

Support for market-linkage : At least one farmer group starts the collective sale in each and collective sales target woreda.

Support for local metal : At least one metal workshop starts making the harvesting tool workshops in fruits for sale in each target woreda. producing areas

Target woredas are 18 in total. Target woredas of each year is set as follows.

Zone	Woreda	Mango	Avocado	Priority *	PP03 target	2013/14	2014/15	2015/16	2016/17
Gamo Gofa	1 Arbaminch Zuria	X		1		X			
	2 Mirab Abaya	X		2	☆	X			
	3 Denba Goffa	x		3			X		
Wolayita	4 Boloso Bombe	X	X	1	☆		X		
	5 Boloso Sore	X	X	2			X		
	6 Damot Gale		X	3				X	
	7 Damot Fulassa		x	4				X	
Kembata Tembaro	8 HadaroTunto Zuria	X	X	1			X		
	9 Kacha Bira		X	2			X		
	10 Kedida Gamela		x	3				X	
Sidama	11 Wondogenet		X	1		X			
	12 Dale		X	2	☆		X		
	13 Aleta Wondo		X	3		X			
	14 Hawassa Zuria		x	4				X	
Gedeo	15 Dilla Zuria		X	1				X	
	16 Wonago		X	2				X	
Bench Maji	17 Semen (North) Bench	x	X	1					X
	18 Debub (South) Bench	x	X	2					X

X : Target woredas for Project No.01 Strengthening of AMIS

Activities:

All activities will be carried out during the period of main harvest season; from September to March (7 months) each year.

Activities to secure the budget funds for the project

* Funding for the 1st year (2013/14) activities should be completed before the end of June 2013.

1. Identify the potential donors / fund: Donor program, NGO, Regional government, etc.
2. Prepare the project proposal and explanatory papers (utilize the PP03 as an actual achievement).
3. Explain the project proposal to the identified potential donors.
4. Discuss in the regional government for budgetary allocation.
5. Readjustment of the project scale and schedule based on the secured budget funds.

Component 1 : Popularize the fruit harvesting tools

Call WoMC and ZoMC offices of the target sites of the year to explain the project scheme/contents

and provide clear and detailed operating directions. Decide the target kebeles to distribute free-tools and their quantity in this explanatory meeting.

Quantity of free-tools shall be 150 harvesting tools and 300 plastic boxes per woreda at maximum, and distribute them to about 5 kebeles in each woreda; at a rate of 1 harvesting tool plus 2 boxes per key farmer.

Kebele community organizer and WoMC staff shall explain and demonstrate the benefit of using tools upon distribution, and then monitor their use. Distribution of the tools to key farmers should be completed in/before mid-October each year.

[Operating process]

1. Conduct an explanatory meeting of BoMC/WoMC/ZoMC in Hawassa.
2. Procure and transport the tools to the sites [by BoMC]
3. Discuss with kebele leaders and community organizer, and decide the key farmers in each kebele [by WoMC]
4. Post the posters in kebele [by WoMC/community organizer]
5. Demonstrate the benefit of using tools at each kebele [by WoMC/community organizer]
6. Monitor the status of tool use, and report to WoMC [by Community organizer]
7. Report the status of tool use to ZoMC and BoMC periodically [by WoMC]
8. Conduct site monitoring periodically [by BoMC]

- * Invite a responsible expert and head of WoMC to an explanatory meeting.
- * WoMC shall prepare a plan of candidate kebeles in advance.
- * 300 plastic boxes is maximum load of Isuzu truck.
- * Harvesting tools can be manufactured at Rural Technology Center to minimize production cost.
- * Posters have been designed and printed in the PP03.
- * Adjust the tool quantity per woreda for the 2nd year based on the observations in the 1st year.

Component 2 : Support for market-linkage with quality-seeking institutional buyers

Commence the support for market-linkage and collective sales based on the self-motivated willingness/needs of farmers. In case many villages (groups) request support, select a village (group) with their experiences in collective sales, unity/solidarity of group, etc. Consider the possibility of joint operation with neighboring village(s).

Provide plastic boxes, materials for collection hut, push carts and/or donkey cart to each village (group). Identification of quality-seeking institutional buyers shall be made by BoMC, and provide information to WoMCs and target groups. BoMC shall conduct a market survey in Addis Ababa, Nazaret and other cities in each year before harvesting season.

- * The project cost is computed under the condition that ‘at least one farmer group starts the collective sale in each target woreda’ (intended target).

[Operating process]

1. Conduct a market survey in the big cities to identify the potential buyers and confirm their requirements in quality/volume/business terms [by BoMC]
2. Grasp the farmers willingness/needs in periodical site monitoring, and report to BoMC [by WoMC]
3. Conduct a hearing survey of farmers group(s), and decide a target group [by BoMC & WoMC]
4. Discuss and decide the fruits collection method/place [by farmer group & WoMC/BoMC]
5. Make a MOU which states the obligation of farmers group [by farmer group & WoMC/BoMC]
6. Procure and transport the tools and materials to the sites [by BoMC]
7. Monitor the fruits collection hut building by farmer group [by WoMC/community organizer]
8. Prepare and conduct a business meeting with potential buyer at site, and facilitate the sales contract [by BoMC & WoMC]
9. Provide business formats (collection record, sales record, etc.) to farmer group. Provide guidance on collection/sorting/inspection methods [by WoMC]
10. Monitor and instruct the operation of collection/sorting/inspection [by WoMC/community organizer]
11. Report the progress/result to ZoMC and BoMC periodically [by WoMC]
12. Conduct site monitoring occasionally [by BoMC]
 - * BoMC shall provide clear and detailed operating directions to WoMC and community organizer when conducting a hearing survey of farmers group.
 - * Donkey should be procured in/around the site.
 - * Consider giving the role of linkage support (brokerage job) to the unions in case supporting the farmers groups in Gamo Gofa zone and Wolayita zone.

Component 3 : Support for local metal workshops in fruits producing areas

Promote the attempt of commercial manufacturing of harvesting tools by metal workshops by providing samples, drawing, molds for bending and free materials (iron rebar for 30 tools) for initial production. Selling price range of tools made shall be defined.

[Operating process]

1. Explain the harvesting tool and support scheme to metal workshops in woreda town. Confirm their willingness and decide a target workshop [by WoMC]
2. Procure and provide samples, drawings, molds for bending and free materials [by BoMC]
3. Check the quality (uniformity of tool shape) of tools made, and give guidance if necessary [by WoMC]
4. Post the posters of the harvesting tool in front of the workshop. Make a simple advertising display [by WoMC]
5. Monitor the sales and manufacturing periodically [by WoMC]
6. Report the progress / sales result to BoMC periodically [by WoMC]
 - * Make a MOU.
 - * Free materials (iron rebar for 30 tools) may be procured by WoMC at site.

Component 4 : Extension of the harvesting tool through local traders

To create the demand in farmers, disseminate information for the harvesting tool through local traders who buy fruits from farmers. Identify/select about 5 traders who want to use the harvesting tool at each target woreda. Provide 10-15 tools per trader. Some weeks later, hear from them about usage and usability, and if he/she wants to keep using the tools, handover the ownership to him/her.

[Operating process]

1. Explain the harvesting tool and the intent to local traders in market day [by WoMC]
2. Identify/select about 5 traders, and confirm their names, contacts and fruit collection plan (village and date) [by WoMC]
3. Inform the name/contact/date to community organizer [by WoMC]
4. Monitor the use of tools by traders in village, and report to WoMC [by community organizer]
5. Hear about usage and usability, and handover the tools if he/she wants to keep using them [by WoMC]
6. Inform other local traders that the tool is available at the target workshop [by WoMC]
7. Report the progress/result to BoMC periodically [by WoMC]
 - * Make an IOU and handover note.
 - * If few traders want to keep using the tools in the 1st year (2013/14), reduce the number of target woredas for this component in the 2nd year (2014/15).

Input:

- BoMC expert : 1 in 2013/14, more than 2 in/after 2014/15
- WoMC expert : 18 (1 per WoMC)
- Kebele community organizer : 90 (18 woredas x 5 kebele/woreda)

1. Equipment and materials:

Component 1 : Harvesting tool 150 x 18, Plastic box 300 x 18, Posters

Component 2 : Plastic box 50 x 18, Materials for collection hut x 18, Transportation x 18

Component 3 : Harvesting tool (sample) 2 x 18, Mold 1 x 18, Iron rebar for 30 tools x 18

Component 4 : Harvesting tool 70 x 18

2. Explanatory meeting of BoMC/WoMC/ZoMC : Travel allowance, refreshment

3. Market survey : BoMC expert travel expense (allowance, car fuel)

4. Business meeting with potential buyer : Buyers' travel expense, refreshment

5. BoMC operating expense: BoMC expert travel expense for monitoring (allowance, car fuel), communication charge, office supplies

6. WoMC operating expense: Transportation fee to site, communication charge, office supplies

Target farmers groups for Component 2

Land, timber and labour for hut building

Cost:

* Expenses for Activities to secure the budget funds for the project are not estimated.

Crop Year	2013/14	2014/15	2015/16	2016/17	Total
Number of target woredas	4	6	6	2	18
Component 1 : Popularize the fruit harvesting tools					
Equipment and materials	102,000	153,000	153,000	51,000	459,000
Transportation of equipment and materials	11,000	16,100	14,600	10,000	51,700
Explanatory meeting of BoMC/WoMC/ZoMC	3,200	6,000	5,900	2,400	17,500
Component 2 : Support for market-linkage					
Market survey (BoMC expert travel expense (allowance, car fuel))	4,900	4,900	4,900	4,900	19,600
Equipment and materials	78,200	117,300	117,300	39,100	351,900
Transportation of equipment and materials	5,500	10,800	9,300	5,000	30,600
Business meeting with potential buyer	9,000	18,000	22,500	27,000	76,500
Component 3 : Support for local metal workshops					
Equipment and materials	4,400	6,600	6,600	2,200	19,800
Component 4 : Extension of the harvesting tool through local traders					
Equipment and materials	16,800	25,200	6,600	2,200	50,800
BoMC/WoMC Operating expense					
BoMC expert travel expense for monitoring (allowance, car fuel)	18,000	25,200	36,000	43,200	122,400
BoMC operating expense	3,500	3,500	3,500	3,500	14,000
WoMC experts transportation fee to site	4,200	10,500	16,800	18,900	50,400
WoMC operating expense:	6,000	15,000	24,000	27,000	72,000
Total	266,700	412,100	421,000	236,400	1,336,200

Contingency (10%) : 133,700 Birr

Total : 1,470,000 Birr

Schedule:

* The schedule is drawn conditional upon the budget allocation for the 1st year (2013/14) activities being completed by the end of June 2013.

	2013				2014				2015				2016				2017			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
b) Project on the Popularization of Fruit Harvesting Tools																				
Activities to secure the budget funds for the project	■	■	■	■																
Component 1 : Popularize the fruit harvesting tools				■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	
Component 2 : Support for market-linkage with quality-seeking institutional buyers				■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	
Component 3 : Support for local metal workshops in fruits producing areas				■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	
Component 4 : Extension of the harvesting tool through local traders				■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	
Mango harvest main season				■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	
Avocado harvest main season				■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	

Points of concern (for all components) :

Establishment of monitoring system in each woreda

Monitoring should be conducted not only in the year of providing the tools but also in every season through the project period. Therefore, establish a firm monitoring system in each target woreda; to be performed by WoMC and community organizers.

BoMC shall conduct periodical (or occasional) monitoring 1 to 2 times/woreda/year. Since the number of woredas increases each year, traveling schedule needs good planning.

Utilization and roles of ZoMC offices

It is advisable to transfer the BoMC's roles/activities to ZoMCs after the 2nd year to mitigate the workload of BoMC. However, it is not clear about transfer of spending authority to ZoMC; therefore, this project plan is prepared under the assumption that the project budget is solely managed by BoMC. Regarding the transfer of roles/spending authority (i.e. utilization of ZoMC manpower), BoMC should consider it before the implementation.

Job demarcation between BoMC-WoMC and BoA-WoA

BoMC should discuss the demarcation/cooperation with BoA before the implementation. 'Cooperation' sounds good; however, ill-defined cooperation can make a mess on the sites. Make clear demarcation of role and responsibility.

Annex : Long list of candidate woredas for the Project No. 3

Zone	Woreda	Mango	Avocado	Priority *	PP03 sites	
Gamo Gofa	1	Arbaminch Zuria	X	1		
	2	Mirab Abaya	X	2	☆	
	3	Denba Goffa	x	3		
Wolayita	4	Bolosso Bombe	X	X	1	☆
	5	Boloso Sore	X	X	2	
	6	Damot Gale		X	3	
	7	Damot Fulassa		x	4	
	8	Sodo Zuria		x	5	
	9	Offa		x	6	
	10	Kindo Koisha		x	7	
	11	Damot Weyde		X	8	
Kembata Tembaro	12	Hadaro Tunto Zuria	X	X	1	
	13	Kacha Bira		X	2	
	14	Kedida Gamela		x	3	
	15	Tembaro		X	4	
Sidama	16	Wondogenet		X	1	
	17	Dale		X	2	☆
	18	Aleta Wondo		X	3	
	19	Hawassa Zuria		x	4	
	20	Bonna Zurya		X	5	
	21	Shebedino		x	6	
	22	Wensho		X	7	
	23	Bensa		x	8	
Gedeo	24	Dara		X	9	
	25	Dilla Zuria		X	1	
	26	Wonago		X	2	
Bench Maji	27	Semen (North) Bench	x	X	1	
	28	Debub (South) Bench	x	X	2	

 Target woredas

* Priority were given by BoMC Expert (PP03 Team leader)

X : Target woredas for Project No.01 Strengthening of AMIS

Project No. 4

Project Title	Support for the Materialization of Mango Sales to Africa Juice Company		
Strategy	2: Increment of profit by Introduction of High Value-Added Marketing 2-4: Strengthening the Marketability of Specialized and Superior Products/Varieties		
Master Plan Program	High Value Addition Program Fruits loss mitigation program		
Project Period	2013 – 2017 (5 years)		
Target Site	Goma Gofa zone, Wolayita zone		
Target Crop/Product	Mango		
Target Group	Damota union, Gamo Gofa union and member PCs		
Implementing Agency	BoMC	Supporting Agency	
<p>Background & Objectives:</p> <p>Supply of mangoes to Africa Juice Company is considered to mitigate the problem of low prices at the peak harvest time. Supplier side (unions, primary coops, WoMCs and BoMC) should make efforts to build stable business connection with the company by fulfilling company's quality and quantitative requirements.</p> <p>BoMC shall take a lead role in building stable business connection between the company and the unions. After materializing the sales agreement, conduct monitoring and support by WoMC for primary cooperatives to promote smooth operation of fruits collection.</p> <p>Enhance the unity among the parties of supplier side including the joint operation by two unions.</p>			
<p>Activities:</p> <p>Activities will be carried out during the period of main harvest season; from October to March (6 months) each year.</p> <p>* Actor for the activities is BoMC unless otherwise noted.</p> <ol style="list-style-type: none"> 1. Facilitate the sales agreement between Africa Juice and Cooperative Unions <ol style="list-style-type: none"> 1-1. Confirm the contact person (responsible person for material procurement) of Africa Juice 1-2. Provide information about fruiting situation, expected harvest time, etc. to Africa Juice 1-3. Prepare and conduct a business meeting between the unions and Africa Juice 1-4. Support for finalizing the sales agreement 1-5. Prepare and conduct a review meeting between the unions and Africa Juice; after harvest season 2. Support the smooth operation of fruits collection and shipment <ol style="list-style-type: none"> 2-1. Inform the schedule/requirements of Africa Juice to WoMC 2-2. Monitor the fruits collection by primary coops., and give guidance [by WoMC] 			

2-3. Grasp the progress of shipping through WoMC, and give support to solve problems if needed.

Input:

- BoMC expert : 1
- Business meeting : Participants travel allowance, car fuel to the juice factory (meeting place)
- Review meeting : Participants travel allowance, car fuel to the juice factory (meeting place)
- Operating expense : BoMC expert travel expense (allowance, car fuel), communication charge, office supplies, transportation fee to site (WoMC)

Cost:

* Target woredas may not be the same as Project No. 3. Therefore, project cost (WoMC operating expense) is estimated under the assumption that there are 6 target woredas (primary cooperatives).

Crop Year	2013/14	2014/15	2015/16	2016/17	Total
Business meeting	11,000	11,000	11,000	11,000	44,000
Review meeting	11,000	11,000	11,000	11,000	44,000
BoMC expert travel expense (allowance, car fuel)	9,000	9,000	9,000	9,000	36,000
WoMC experts transportation fee to site	3,600	3,600	3,600	3,600	14,400
BoMC Operating expense	3,000	3,000	3,000	3,000	12,000
WoMC Operating expense	7,200	7,200	7,200	7,200	28,800
Total	44,800	44,800	44,800	44,800	179,200

Contingency (10%) : 18,000 Birr
 Total : 197,000 Birr

Schedule:

	2013				2014				2015				2016				2017			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
c) Support for the Materialization of Mango Sales to Africa Juice Company				■				■				■				■				■
Business meeting between unions and Africa Juice			■				■				■				■				■	
Review meeting between unions and Africa Juice				■				■				■				■				■
Mango harvest main season			■	■			■	■			■	■			■	■			■	■

Remarks:

BoMC expert (Team leader of PP03) visited Africa Juice company in the PP03 and had contact with quality control manager of the juice factory.

Project No. 5

Project Title	Project on the Improvement of Tomato Marketing to Urban Markets <u>Phase 1 : Establishment of Model Cases</u>		
Strategy	2: Increment of profit by Introduction of High Value-Added Marketing 2-1: Improvement of Harvesting and Handling Method of Fruits and Vegetables 2-5: Acceleration of Collective Marketing		
Master Plan Program	High Value Addition Program Vegetable shipment modernization program		
Project Period	2013 – 2016 (4 years, 2 harvest seasons) * Assumed period to get the project budget is one year. * Harvest season of irrigated tomato around Hawassa city is Nov. to Jan.. Project period covers two harvest seasons.		
Project Site	Sidama zone * Irrigated tomato production area around Hawassa city. * Selection of target woredas and target groups is included in project activities.		
Target Crop/Product	Tomato		
Target Group	Tomato producers groups * Target group is 2; to compare the outputs. * Each target group should have enough production volume to ship truck-full tomatoes regularly (at least 1 time/week) during harvest season (at least for 2 months).		
Implementing Agency	BoMC and WoMC	Supporting Agency	
<p>Background & Objectives:</p> <p>It is considered that nature of tomato to ship to urban markets will change ‘from hard to soft’ and ‘from green matured fruits to red ripen fruits’ (i.e. become more perishable) in response to consumers’ preference and market price. Damage protection of tomato fruits during harvesting work and transportation will become more important from now on.</p> <p>To promote the farmers challenge for damage protection of tomato fruits during harvesting work and transportation, this project attempts to establish models of tomato shipping improvement by producers groups in the irrigated tomato production area around Hawassa city. The project targets to establish two model groups.</p> <p>Regarding the plastic boxes, formation of circulation system of boxes between producer group and buyer shall be tackled in the project. On top of this, information to plan an initial cost support scheme for producers group in the Phase 2 shall be gathered through the implementation.</p>			

Activities:

* Actor for the activities is BoMC unless otherwise noted.

[2013]

0. Activities to secure the budget funds for the project implementation

[2014/2015 harvest season]

1. Select target woredas and target groups
2. Build consensus with responsible WoMC expert about his TOR
3. Build consensus with target group about contents of support and their responsibilities (Prepare MOU)
4. Planning meeting with target group on how to operate the collective sales by use of plastic boxes and other project equipment
5. Support for preparing record keeping formats/booklets for collective sales
6. Support for finding institutional buyers in Hawassa and Sheshamane
7. Support for concluding detailed trade conditions with buyer; include the circulation system of plastic boxes
8. Procure and transport equipment and materials to the sites
9. Instruct the operation of collection/sorting/storing on site, and periodical monitoring [BoMC and WoMC]
10. Prepare and conduct the observation tour to see the challenge of target group; by WoMC experts in Sidama zone, key tomato farmers, cooperative/farmers group leaders
11. Review and evaluation

[2015/2016 harvest season]

4. Planning meeting with target group on how to operate the collective sales by use of plastic boxes and other project equipment
6. Support for finding institutional buyers in Hawassa and Sheshamane
7. Support for concluding detailed trade conditions with buyer; include the circulation system of plastic boxes
9. Instruct the operation of collection/sorting/storing on site, and periodical monitoring [BoMC and WoMC]
10. Prepare and conduct the observation tour to see the challenge of target group; by WoMC experts in Sidama zone, key tomato farmers, cooperative/farmers group leaders
11. Review and evaluation

Input:

BoMC and WoMC

- BoMC expert : 1 in the 1st year, 2 after the 2nd year (BoMC 32 M/M)
- WoMC expert : 2 (1 per woreda x 2 woredas) (WoMC 18 M/M)
- Equipment and materials : Plastic boxes (400 boxes/group), Platform scale, Push carts, Materials for simple store building for keeping plastic boxes

- Subsidy for expenses for marketing activities of target groups
- Expense for observation tour
- Operating expense of BoMC/WoMC : Car fuel, communication charge, transportation fee to site (WoMC), office supplies, etc.

Target groups

- Land, timbers and labour for simple store building

Cost:

- * Expenses for activities to secure the budget funds for the project are not estimated in the project cost.
- * Project sites are around Hawassa city, and BoMC travel allowance is not estimated in the project cost.

Equipment and materials for target groups

- Equipment and materials	82,000	(@41,000 x 2 groups)
- Transportation of equipment	10,000	
- Record keeping formats/booklets	1,000	

Operating expense of BoMC/WoMC

- BoMC expert transportation (car fuel)	14,500
- WoMC expert transportation (bus fare)	4,000
- Meeting expense	4,000
- Office supplies, etc.	9,500
- BoMC and WoMC communication charge	7,600

Support for finding institutional buyers and concluding trade conditions

- Transportation expense of target group leaders	1,000
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Observation tour to the target group

- Transportation expense of participants, refreshment	1,000
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Sub total	: 134,600 Birr
Contingency (10%)	: 13,400 Birr
Total	: 148,000 Birr

Schedule:

- * Assumed period to acquire the project budget is one year.

Phase 1 : Establishment of Model Case	2013				2014				2015				2016			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
0. Activities to secure the budget funds for the project implementation	■															
1. Select target woredas and target groups					■											
2. Build consensus with WoMC expert about his TOR						■										
3. Build consensus with target group about the support and their responsibilities.						■										
4. Planning meeting on how to operate collective sales by use of plastic boxes						■										
5. Support for preparing record keeping formats/booklets							■									
6. Support for finding institutional buyers							■									
7. Support for concluding detailed trade conditions with buyer							■									
8. Procure and transport equipment and materials to the sites							■									
9. Instruct the operation of collection/sorting/storing on site, and monitoring							■		■				■			
10. Prepare and conduct the observation tour to see the challenge of target group							■									
11. Review and evaluation							■									
Harvest time of irrigated tomato (Main time is Nov. - Jan.)							■		■				■			

Remarks:

* Viewpoints for review and evaluation:

- Sustainability of circulation system of plastic boxes
- How to introduce the circulation system of plastic boxes to other groups, contents of support measures

Project No. 6

Project Title	Project on the Improvement of Tomato Marketing to Urban Markets <u>Phase 2 : Preparation and Operation of Initial Cost Support Scheme</u>		
Strategy	2: Increment of profit by Introduction of High Value-Added Marketing 2-1: Improvement of Harvesting and Handling Method of Fruits and Vegetables 2-5: Acceleration of Collective Marketing		
Master Plan Program	High Value Addition Program Vegetable shipment modernization program		
Project Period	2016 – 2018 (24 months)		
Target Area	Sidama zone * Irrigated tomato production area around Hawassa city		
Target Crop	Tomato		
Target Group	Tomato producers groups Number of target groups is tentatively set at 15 groups during the project period.		
Implementing Agency	BoMC	Supporting Agency	
<p>Background & Objectives:</p> <p>To promote the farmers' challenge to mitigate tomato fruits damage occurs in the harvesting work and transportation as well as challenge for collective marketing, formulate and operate an initial cost support scheme for producers groups. To be more exact, materialize a partly financial support for purchasing cost of necessary equipment such as plastic boxes. Obtained information in the Project No. 5 shall be utilized to design the support scheme.</p> <p>BoMC shall perform the activities to acquire the budget funds from the regional government or NGO / donors at the start.</p>			
<p>Activities: * Actor for the activities is BoMC unless otherwise noted.</p> <p>1. Planning of initial cost support scheme for tomato shipping equipment</p> <p>< Items to be planned ></p> <ul style="list-style-type: none"> - Scale of the operation : Number of beneficiary groups, Intended equipment and its quantity - Grant rate, Upper limit * Note : For the purpose of project cost estimation, grant rate of 50% is tentatively used. - Target area - Conditions of beneficiary producers group - Mechanism/method of disbursement - Obligations of beneficiary (return of subsidy, record keeping, reporting, etc.) - Countermeasures to the lessons learnt in the Project No.5 			

2. Activities to acquire the budget funds for the support scheme

Prepare a proposal documents and explain it to the expected funding organizations. The proposal should cover the details of proposed support scheme, and include the benefit/ achievements made in the Project No.5.

[Activities to be carried out after acquires the budget funds]

3. Planning of methods for public notification, application and selection

< Items to be planned >

- Methods for public notification
- Application forms and documents to be attached (e.g. 'Plan for collective sales', 'Experiences in collective sales, etc.). Manual for preparation of application documents
- Selection criteria and method

4. Public notification of the subsidy system

5. Reception of submitted applications, Survey of the applicants, and selection of beneficiaries

6. Disbursement

7. Monitoring of collective shipment by the beneficiary groups, and instruction on site

8. Prepare reporting documents, and report to concerned parties

9. Planning of the subsidy project for the next year

10. Activities to acquire the budget funds for the next year

Input:

- BoMC expert : 2 (26 M/M)
- Local consultant as advisor for planning of support scheme, and planning of methods for public notification, application and selection.
- BoMC operating expense : Car fuel, meeting cost, office supplies, printing cost, communication charge, etc.
- Fund for initial cost support for 15 producers groups (tentative number of target groups)

Cost:

* Target area is around Hawassa city, and BoMC travel allowance is not estimated in the project cost.

Activity 1 to 2 :

Local consultant (1 person, 1 M/M)	17,500 (USD1000.-)
BoMC expert transportation (car fuel)	1,500
Meeting expense	1,800
Office supplies, Printing of proposal	4,000
Communication charge	1,600

Activity 3 to 10 :

Local consultant (1 person, 1 M/M)	17,500 (USD1000.-)
Public notification	2,000
BoMC expert transportation (car fuel)	8,000
WoMC expert transportation (bus fare)	2,600
Meeting expense	3,600
Office supplies, Printing of reporting documents	9,000
Communication charge	3,600

Sub total : 72,700 Birr

Contingency (10%) : 7,300 Birr

Total : 80,000 Birr

Fund for initial cost support for 15 producers groups:

- Intended equipment (tentative) : Plastic boxes (400 boxes/group), Platform scale, Push carts, Materials for simple store building for keeping plastic boxes
- Amount of fund : @41,000/group x 15 groups x Grant rate (tentative) 50% = 307,500 Birr

Schedule:

* This project should be implemented after the Project No. 5

Phase 2 : Preparation and Operation of the Initial Cost Support Scheme	2016				2017				2018			
	1	2	3	4	1	2	3	4	1	2	3	4
1. Planning of Initial Cost Support Scheme for tomato shipping equipment		■										
2. Activities to acquire the budget funds for the Support Scheme [Activities to be carried out after acquires the budget funds]			■	■								
3. Planning of methods for public notification, application and selection					■							
4. Public notification of the Support Scheme					■							
5. Survey of the applicants, and selection of beneficiaries						■						
6. Disbursement							■					
7. Monitoring of collective shipment by the beneficiary groups								■				
8. Prepare reporting documents, and report to concerned parties									■			
9. Planning of the Support Scheme operation for the next year										■		
10. Activities to acquire the budget funds for the next year											■	
Harvest time of irrigated tomato (Main time is Nov. - Jan.)	■	■			■	■			■	■		

Remarks:

- This project aims to promote value-added marketing as well as promote collective marketing.

Project No. 7

Project Title	Capacity Enhancement of Cooperatives in Grain & Pulses Quality Control and Warehouse Management		
Strategy	2: Increment of profit by Introduction of High Value-Added Marketing 2-2: Acceleration and Strengthen participation in the Quality Oriented Markets (Dissemination of Quality control skills)		
Master Plan Program	High Value Addition Program Quality control skills dissemination program		
Project Period	2013 - 2017 (5 years)		
Project Site	Wolayita Zone (6 woreda), Hadiya Zone (3 woreda), Kembata Tembaro Zone (1 woreda), Guraghe Zone (6 woreda), Silitie Zone (3 woreda), Alaba Special Woreda		
Target Crop/Product	Cereals, Pulses		
Target Group	65 cooperatives belonging to WFP/P4P targeted 7 unions		
Implementing Agency	BoMC, ZoMC, WoMC	Supporting Agency	WFP

Background & Objectives:

Most farmers who produce cereals and pulses are ignorant about quality control and also are lack knowledge on warehouse management. They do not know there are some issues for conventional and traditional production methods.

Buyers using quality standards in domestic business are only WFP and ECX. In case of ECX auction, business of coffee and sesame for export is active, but the business of cereals and pulses except white haricot bean for export is inactive. In case of WFP/P4P (direct purchase program from cooperative unions), it was necessary that the cooperative committees and members should improve the quality consciousness and technology of quality control such as storage, cleaning and separation to make product adapt WFP standard. The Pilot Project (PP02/08) implemented the training on quality control and warehouse management on trial and established an effective training method. The teaching materials were developed and prepared for the trainings. 19 cooperatives in 84 targeted cooperatives of P4P were participated the trainings in the PP02/08. The small number of trained cooperatives was found to have improved quality consciousness and warehouse management.

This project intends to implement the cascade type training by using training method and teaching materials developed by PP02/08 for 65 non-trained cooperatives under 7 cooperative unions. The improvement of quality consciousness and dissemination of quality control and warehouse management technology are expected. The objective of this project is to contribute the improvement of knowledge and skills of post-harvest processing technology, the reduction of post-harvest loss and the increase of farmers' income.

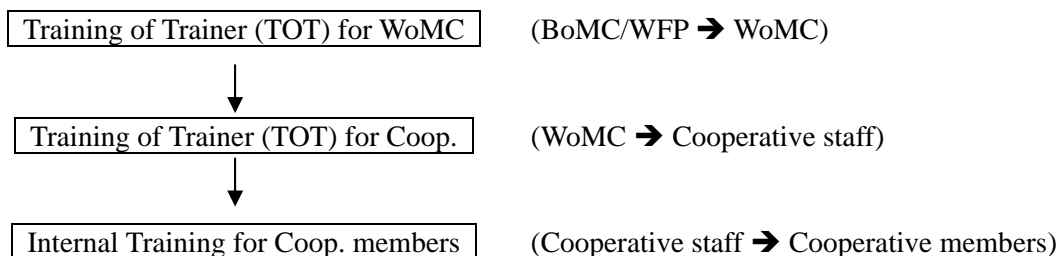
In the first year 2013, teaching materials shall be prepared and the training of trainer (TOT) for WoMC shall be conducted. In the next 3 years (2014-2016), TOT for the primary cooperatives shall be implemented. The below table shows the training schedule plan for 4 years period.

Training Schedule Plan:

Year	Union	Primary coop	ZoMC	WoMCs	Woreda Name		
2013	Preparation of teaching materials and Implementation of TOT (Training of Trainer for WoMC)						
2014	Damota	10	Wolayita	6	Sodo Zuria	Damot Sore	Offa
					Boloso Sore	Damot Gale	Humbo
	Licha	6	Hadiya	3	Misha	Limo	Anna Lemo
	Angacha	5	* Kembata Tembaro	1	Doyo Gena		
2015	Walta	12	Guraghe	3	Meskan	Sodo	Mareko
	Admas	10		3	Cheha	Abeshge	Kabena
2016	Melik	5	Silitie	3	Silitie	Alicho Wuriro	Sankura
	Mancheno	17	---	1	Alaba		
Total	7	65	4	20			

* K. Tembaro ZoMC received the training in the PP02/08.

- The training will be implemented by three-stage cascade method.



- In the PP02/08, WFP expressed to BoMC that they would support the continuity of training of PP method (incl. cost burden). WFP will prepare the teaching materials and supply them to BoMC in-kind. So, the teaching materials preparation cost is not allocated.
- Preparation quantity of teaching materials set (3 kinds of card type materials, 4 kinds of posters and 1 kind of sample box) is 90 sets in total. (65 sets for Coops, 24 sets for WoMC/ZoMC and 1 spare)
- BoMC shall implement the TOT for WoMCs as follows.
 - * BoMC makes the detailed implementation plan of the TOT.
 - * The TOT is implemented at Hawassa for 2 days.
 - * Two instructors are assigned same as PP02/08; a BoMC expert and a WFP expert.
 - * Participants are 44 persons; 4 persons from ZoMCs and 40 persons from WoMCs.

5. WoMC shall implement the TOT for Cooperatives under the supervision of BoMC as follows.
 - * WoMC staff (trainers) decide the schedule after coordination with target coops. by consultation with head of WoMC.
 - * WoMC staff implement the training in one (1) day per cooperative.
 - * ZoMC staff who participated in the TOT for WoMC has no specific task but assists the training if BoMC requests.
 - * Training should be conducted between October and January; during the period from harvest to sales of maize and haricot bean.
 - * WoMC staff monitor the outcomes of TOT for Cooperatives (improvements made by the coops. after the training) for several months after the training.
6. Internal Training for Cooperative Members shall be implemented as follows.
 - * Cooperative staff who received the TOT for Cooperatives will conduct the training for cooperative members as trainers. Take any opportunities such as annual general meeting, etc.
 - * BoMC staff shall provide the coops staff guidance in the training together with WoMC staff.
 - * WoMC staff check the implementation situation of Internal Training.

Activities:

[2013]

- 1-1. WFP prepares teaching materials and provides them to BoMC.
- 1-2. WoMC staff reconfirm 65 cooperatives' name and informs BoMC.
- 1-3. BoMC staff confirms participants (44 persons) of TOT for WoMC.
- 1-4. BoMC staff arranges 2 instructors for the TOT for WoMC.
- 1-5. BoMC staff implement the TOT for WoMC (2 days at Hawassa).

[2014]

- 2-1. WoMC staff coordinate the schedule of TOT for Cooperatives.
- 2-2. WoMC staff implement the TOT for Cooperatives (1 day per coop.)
- 2-3. WoMC staff monitor the outcomes of the TOT for Cooperatives (improvements made by the coops. after the training) and report to BoMC. A situation of Internal Training implementation shall be checked at the same time.
- 2-4. Feedback to next year training: BoMC improves the next year training if there are any issues on training method and teaching materials based on the report from WoMCs.

[2015] Same as 2014

[2016] Same as 2014

[2017] Same as 2014

Input:

1. Full-time staff of BoMC: 1 person
2. WoMC staff: 2 persons
3. TOT for WoMC: Daily allowance & transportation cost for trained staffs of ZoMC/WoMC, meeting room charge & stationery cost.

4. TOT for Cooperatives: Transportation cost to coops of WoMC staff, stationery cost & beverage cost.
5. Monitoring cost of Internal Training for cooperative members: Transportation cost and daily allowance to coops of WoMC staff, vehicle fuel cost & communication/stationery cost.
6. Preparation (fabrication) cost of teaching materials is borne by WFP.

Cost:

- * Since the TOT for Cooperative is one-day training, no daily allowance is allocated to WoMC staff and farmers. Only beverage cost (mineral water, tea and coffee) is allocated at the rate of 20 Birr/person/day as same as the PP02/08. 12 persons per cooperative (10 farmers and 2 instructors) are presumed.
- * Required quantity of teaching materials (card type materials, posters, sample box): 90 sets (65 sets for coops, 24 sets for WoMC/ZoMC & 1 set for spare.)
- * Traveling expenses for the TOT for WoMC are allocated because accommodation is needed. (350 Birr/person = daily allowance:100 Birr x 2 days + round trip fare:150 Birr)
- * Meeting room charge of the TOT for WoMC is allocated for 2 days. (1,000 Birr/day x 2 days)

A. Cost of TOT for WoMC

1. Daily allowance & transportation cost of ZoMC/WoMC staff: 15,400
 2. Meeting room charge: 2,000 (@1,000/day x 2 days)
 3. Stationery cost: 1,000
- Sub-total: 18,400 Birr

B. Cost of TOT for Cooperatives

1. Transportation charge to coops of WoMC staffs: 3,900
 2. Stationery cost: 9,750
 3. Beverage cost: 15,600
- Sub-total: 29,250 Birr

C. Cost of monitoring by WoMC staff

1. Traveling expenses & daily allowance: 2,400
 2. Vehicle fuel cost: 12,000
 3. Communication/ stationery cost: 3,000
- Sub-total: 17,400 Birr

Total of A+B+C	: 65,050 Birr
Contingency (10%)	: 6,500 Birr
Total	: 72,000 Birr (rounded up less than 1,000)

Schedule:

Implementation Agency	Activities	Implementation Schedule																			
		2013				2014				2015				2016				2017			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
WFP	1-1. Preparation of teaching materials by WFP & provision to BoMC	■	■																		
WoMC	1-2. Confirmation of participating coops of training of trainer (TOT) for coops & report to BoMC		■																		
WoMC	1-3. Confirmation of participants to training of trainer (TOT) for WoMC		■																		
BoMC	1-4. Arrangement of instructors for training of trainer (TOT) for WoMC			■																	
BoMC/WoMC	1-5. Implementation of training of trainer (TOT) for WoMC				△																
WoMC	2-1. Coordination of training schedule of training of trainer (TOT) for coops by WoMC staffs						■				■				■						
BoMC/WoMC	2-2. Implementation of training of trainer (TOT) for coops							■			■					■					
WoMC	2-3. Monitoring of trained coops after training & implementation confirmation of internal training for coop members. Report to BoMC										■				■				■		
WoMC	2-4. Feedback to next year's training by BoMC/WoMC											■				■				■	

Remarks:

BoMC allocates the operating costs such as transportation cost and supplies expenses for WoMC staff and conducts cost reimbursement.

Project No.8

Project Title	Follow-up Support of the PP04 Target Groups		
Strategy	2: Increment of profit by Introduction of High Value-Added Marketing 2-3: Development of Value-Added Activities in the Producing Areas 2-4: Strengthening the Marketability of Specialized and Superior Products/Varieties 2-5: Acceleration of Collective Marketing		
Master Plan Program	High Value Addition Program High quality dried cassava promotion program		
Project Period	2013 - 2014 (2 years)		
Project Site	Kindo Koysha woreda and Offa woreda in Wolayita zone		
Target Crop/Product	Cassava		
Target Group	12 farmers' groups involved PP04		
Implementing Agency	BoMC, ZoMC, WoMC	Supporting Agency	
<p>Background & Objectives:</p> <p>The pilot project (PP04) implemented supporting activities for dried cassava processing and marketing to small-scale farmers groups. PP04 successfully verified its efficiency and effectiveness in increment of profit by introduction of high value-added processing and marketing for small-scale farmers. However, the project period was short; started in October 2011 and ended in March 2012 for 6 months only.</p> <p>Farmers' groups in Kindo Koysha woreda increased their profits through this project but farmers in Offa woreda suspended their activity because cassava traders in Offa woreda do not handle this type high quality dried cassava so farmers cannot find the market.</p> <p>BoMC/ZoMC/WoMC shall continue the support of PP04 target groups aiming at establishing a model of agro-processing promotion and increment of farmers' profits. The follow-up supporting work includes periodic monitoring, assistance and advice, promotion of market linkage and advertising the high quality dried cassava.</p>			
<p>Activities:</p> <p><u>BoMC, ZoMC and WoMC</u></p> <ol style="list-style-type: none"> 1. For farmers' groups in Kindo Koysha woreda <ol style="list-style-type: none"> 1-1. WoMC initiates holding a periodic group meeting around once a month, gathering 6 farmers groups and grasps current situation and gives them necessary advice. 1-2. WoMC assists the market linkage between farmers groups and local traders and grind-mills in Sodo city. 2. For farmers' groups in Offa woreda <ol style="list-style-type: none"> 2-1. WoMC initiates holding a periodic group meeting around once a month gathering 6 farmers groups and grasps current situation and gives them necessary advice. 			

2-2. WoMC in Offa woreda collaborates with BoMC and ZoMC for development of market linkages between local traders in Gessuba town of Offa woreda and traders and grind-mills in Sodo and other urban areas including Addis Abeba.

3. Support of developing market linkages

3-1. ZoMC of Walayita zone develops market linkages between the producing woredas and urban consumers and traders by introducing clean dried cassava through seminars and exhibitions.

3-2. BoMC carries on market development and advertising work in collaboration with ZoMC and WoMC through seminars and exhibitions in Hawassa and Shashamane.

4. Periodical stakeholders' meeting and advertizing

4-1 BoMC together with ZoMC and WoMCs initiates periodic stakeholders' meeting among officers, traders, grind-mills and consumer groups for the acceleration of mutual understanding and consumption. 2 times per year.

Target Groups

1. Production and quality control by farmers' groups
2. Participation in meetings arranged by BoMC/ZoMC/WoMC
3. Provision of samples for marketing activities

Input by BoMC/ZoMC/WoMC:

1. Periodic visits to Kebeles by officers of WoMC for the follow-up
(2 days/time, 7 times/year in dry season for 2 years)
2. Assisting work for sales promotion by WoMC and ZoMC
(1 time/month, 7 months/year for 2 years)
3. Assisting work for sales promotion to grind-mills in Hawassa and Shashamane by BoMC
(3 times/year for 2 years)
4. BoMC initiates periodic stakeholders' meeting (2 times/year for 2 years)

Cost:

1. Periodic visiting fee to Kebeles by WoMC: 5,600
(100/day x 2 days/time x 7 times/year x 2 years x 2 WoMC)
 2. Assisting work for sales promotion by WoMC and ZoMC: 8,400
(200/time/month x 7 months/year x 2 years x 3 persons)
 3. Assisting work for sales promotion to grind-mills in Hawassa and Shashamane by BoMC: 1,200
(200/time x 3 times/year x 2 years)
 4. Stakeholders' meeting fee: 10,000
(5,000/ time/year x 2 years)
- Sub total : 25,200 Birr (12,600/year x 2 years)
- Contingency (10%) : 2,500 Birr
- Total : 28,000 Birr

Schedule:

Activities	2013				2014				2015			
	1	2	3	4	1	2	3	4	1	2	3	4
1. Supports of Kindo Koysha woreda	■	■		■	■	■		■				
2. Supports to Offa woreda	■	■		■	■	■		■				
3. Supports to market linkage	■	■		■	■	■		■				
4. Stakeholders meeting	☆			☆	☆			☆				

Remarks:

1. Farmers' groups are weak in market linkage development. They need supports from WoMC/BoMC.
2. Expansion of clean dried cassava consumption will lead to rural development of cassava production areas.

Project No. 9

Project Title	Support for the Extension of High Quality Dried Cassava Producing Business		
Strategy	2: Increment of profit by Introduction of High Value-Added Marketing 2-3: Development of Value-Added Activities in the Producing Areas 2-4: Strengthening the Marketability of Specialized and Superior Products/Varieties 2-5: Acceleration of Collective Marketing		
Master Plan Program	High Value Addition Program High quality dried cassava promotion program		
Project Period	2013 - 2015 (3 years)		
Project Site	Wolayita zone and Gamo Gofa zone		
Target Crop/Product	Cassava		
Target Group	Farmers' groups in Wolayita zone and Gamo Gofa zone		
Implementing Agency	BoMC, ZoMC, WoMC	Supporting Agency	
<p>Background & Objectives:</p> <p>The pilot project (PP04) was implemented in main cassava production woredas; Kindo Koyssha and Offa in Wolayita zone. Other farmers' groups wish to join such value addition activities in the targeted woredas and other cassava production areas such as Sozo Zuria woreda in Wolayita zone and Denbagofa woreda in Gamo Gofa zone.</p> <p>For the purpose to increasing farmers' profits, the extension works should be conducted in those areas as the production is high and the feasibility of the project seems to be high. The project cost (initial investment fee) should be covered by the loan scheme from IFAD/AMIP, Omo Micro Finance and other financing institutes, and BoMC shall assist them in getting a loan scheme.</p>			
<p>Activities:</p> <p><u>BoMC, ZoMC and WoMC</u></p> <ol style="list-style-type: none"> 1. For Wolayita zone and Gamo Gofa zone <ol style="list-style-type: none"> 1-1. BoMC/ZoMC selects new farmers' groups in the target areas. 1-2. BoMC/ZoMC/WoMC arranges study tour to Kindo Koyssha woreda for those new candidates. 1-3. Farmers' groups make a project plan with administrative supports for the loan application. 1-4. Farmers' groups receive the project loan with administrative support. 1-5. Farmers' groups procure necessary machines and equipment with administrative support. 1-6. BoMC/WoMC conducts technical trainings to the target farmers groups. 1-7. BoMC/WoMC supports new project getting on the track through periodic monitoring and necessary advice. 2. Support for developing market linkages <ol style="list-style-type: none"> 2-1. ZoMCs of Walayita zone and Gamo Gofa zone develop a market linkage between the 			

producing woredas and urban consumers and traders in Sodo and other urban cities by introducing clean dried cassava through seminars and exhibitions.

2-2. BoMC carries on market development and advertising work in collaboration with ZoMC and WoMC through seminars and exhibitions in Hawassa and Shashamane.

3. Periodic stakeholders' meeting and advertizing

BoMC together with ZoMCs and WoMCs initiates periodic stakeholders' meeting among officers, traders, grind-mills and consumer groups for accelerations of mutual understanding and consumption.

Target Groups

1. Loan application

2. Secure the initial investment cost (7,000 Birr/group; consisting of raw cassava cutting machine (@2,500 x 2 units) and 4 pieces of plastic sheets (@500 x 4 pieces))

3. Procure the machines and equipment

4. Start the project i.e. producing and marketing

5. Participation in stakeholders' meeting arranged by the administration

Note: Based on the lesson learnt in the PP04, construction of product storage for group-use shall be excluded from the project. Each household keeps the products on his own premise and delivers the products collectively.

Inputs by BoMC/ZoMC/WoMC:

1. Supporting work to new groups in selection the candidates, arrangement study tours, securing the loan and other assistance.

2. Arrangement of technical training.

3. Monitoring and advice.

4. Assistancess for developing market linkage.

5. Arrangement of stakeholders' meeting.

Cost:

* The initial investment cost is not included in these project costs.

1. Initial supporting activities by BoMC/ZoMC (travel expenses) : 2,400

(100/day x 2 persons x 2 days x 3 times x 2 woredas)

2. Travel expenses of WoMC to Kebeles : 5,600

(100/day x 2 days x 7 times/year x 2 years x 2 WoMC)

3. Study tours by farmers' groups to Kindo Koyssha : 5,000

((2,000/minibus + visiting expenses for farmers 50/farmer x 10 farmers) x 2 times)

4. Sales promotion by WoMC/ZoMC : 8,400

(200/person x 3 persons x 7 times/year x 2 years)

5. Sales promotion to grind-mills in Hawassa and Shashamane by BoMC: 1,200

(200/time x 3 times/year x 2 years)

6. Stakeholders' meeting fee: 25,000

(5,000/time x 5 times in 3 years)

Sub total : 46,400 Birr

Contingency (10%) : 4,600 Birr

Total : 51,000 Birr

Schedule:

Activities	2013				2014				2015			
	1	2	3	4	1	2	3	4	1	2	3	4
1. Starting up new projects and its supports												
1-1. Selection of farmers' groups	■											
1-2. Study tour	■											
1-3. Project planning by farmers' groups		■	■									
1-4. Loan application and its supports by BoMC			■	■								
1-5. Procurement and technical training				■								
1-6. Start the production and sales					■	■			■	■		■
1-7. Monitoring and advices by BoMC/ZoMC/WoMC	■	■	■	■	■	■			■	■	■	■
2. Support developing market linkage by BoMC/ZoMC/WoMC					■	■	■	■	■	■	■	■
3. Stakeholders' meeting				☆		☆		☆		☆		☆

Remarks:

The raw cassava cutting machine which was developed in the PP04 is available in Hawassa and the Rural Technology Center of BoA in Sodo.

Project No. 10

Project Title	Sales Promotion of High Quality Dried Cassava		
Strategy	2: Increment of profit by Introduction of High Value-Added Marketing 2-3: Development of Value-Added Activities in the Producing Areas 2-4: Strengthening the Marketability of Specialized and Superior Products/Varieties		
Master Plan Program	High Value Addition Program High quality dried cassava promotion program		
Project Period	2013 - 2015 (3 years)		
Project Site	Addis Ababa, Nazaret		
Target Crop/Product	High quality dried cassava		
Target Group	Consumers in urban areas		
Implementing Agency	BoMC	Supporting Agency	
<p>Background & Objectives:</p> <p>Strong consumers' demands for high quality and small size dried cassava have been verified in Hawassa and Shashamane through the PP04 implementation. In order to promote the high quality dried cassava production, market development in large consuming area such as Addis Ababa and Nazaret is essential.</p> <p>Consumers in Addis Ababa have a bad image of dried cassava in general as dirty and not suitable for diet. BoMC shall promote market development for clean dried cassava in Addis Ababa and Nazaret.</p>			
<p>Activities:</p> <ol style="list-style-type: none"> 1. BoMC participates in agricultural exhibitions in Addis Ababa and demonstrates clean dried cassava for promotion. 2. BoMC works on advertisement to newspapers, TV and radios for the clean dried cassava. 3. BoMC promotes the consumption of clean dried cassava to consumers in Addis Ababa. 4. Collect samples for the advertisement. 			
<p>Input:</p> <ol style="list-style-type: none"> 1. Participation in agricultural exhibitions in Addis Ababa 2. Advertising to TV and newspapers 3. Advertising to consumers including supply of samples 			
<p>Cost:</p> <ol style="list-style-type: none"> 1. Participation cost in agricultural exhibitions in Addis Ababa; including travel expenses: 15,000 (5,000/year x 3 years) 2. Advertising cost to consumers (seminar fee, courier cost of samples): 60,000 (20,000/year x 3 years) 			

Sub total : 75,000 Birr (25,000/year x 3 years)
 Contingency (10%): : 7,500 Birr
 Total : 82,500 Birr

Schedule:

Activities	2013				2014				2015				2016			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
1. Participation in Exhibitions	☆				☆				☆							
2. Promotion to TV and Newspapers																
3. Direct promotion to consumers in AA																

Project No. 11

Project Title	Follow-up Support of the PP05 Target Groups		
Strategy	2: Increment of profit by Introduction of High Value-Added Marketing 2-3: Development of Value-Added Activities in the Production Areas 2-4: Strengthening the Marketability of Specialized and Superior Products/Varieties 2-5: Acceleration of Collective Marketing		
Master Plan Program	High Value Addition Program High quality dried ginger promotion program		
Project Period	2012 - 2014 (2012/13 and 2013/14 harvest season)		
Project Site	Hadaro Tunto woreda (Kembata Tembaro zone) Boloso Bombe woreda (Wolayita zone)		
Target Crop/Product	Ginger		
Target Group	Hadaro Tunto woreda: - Abay Ginger Production and Marketing Group (Abay Group) - Harado Primary Cooperative * Boloso Bombe woreda: - Boloso Bombe primary cooperative (PC) * The group started washing & drying business with their own capital by seeing PP05 (Abay Group)		
Implementing Agency	BoMC and WoMC	Supporting Agency	
<p>Background & Objectives:</p> <p>The pilot project (PP05) supported the production of “clean dried ginger” by two farmers/traders groups; i.e. supported to start the ginger washing & drying business. They are the first case tackles the ginger washing & drying business and expected to become a model for others.</p> <p>However, the business operation was only one time in 2011/12 harvest season during the project period, and sales result has not yet come out. Therefore, BoMC and WoMC shall provide the support for the groups in the next two seasons (2012/13 and 2013/14) such as advisory and provision of marketing information to sustain and strengthen the business.</p> <p>In Abay Group and Boloso Bombe PC, the management ability of executive members and financial capacity differ from each other greatly. Therefore, provide the support according to their needs (weakness).</p>			
<p>Activities:</p> <p>* Actor for the activities is BoMC and WoMC unless otherwise noted.</p>			

1. Periodical site monitoring
 - 1-1. by BoMC : 1 time/month/site during Sep. to June. To be carried out with WoMC expert.
 - 1-2. by WoMC : Regularly during Sep. to June.
2. Advisory support for business operation
 - 2-1. Grasp the problems/weakness in the monitoring and give advice.
* If difficult for WoMC expert to give advice, consult with BoMC expert.
3. Support of products marketing
 - 3-1. Conduct a buyer survey in Addis Ababa (exporters, wholesale traders for domestic markets. * Include the survey of 'washed' fresh ginger demand). [by BoMC]
 - 3-2. Prepare and conduct a business meeting with identified buyers at site.
4. Support for acquiring funds for material procurement (only for Boloso Bombe PC)
 - 4-1. Support the negotiation with financing institutions in SNNPR. [by BoMC]
 - 4-2. Explore the possibility and support the materialization of following means:
 - JV or subcontract with Damota union or Abay Group.
 - Advance payment by the identified buyers.

Input:

- BoMC expert : 1
- WoMC expert : 2 (1 each /WoMC)
- Expense for buyer survey in Addis Ababa, business meeting
- Operating expense : BoMC expert travel expense (allowance, car fuel), communication charge, office supplies, transportation fee to site (WoMC)

Cost:

	2012	2013	2014	Total
BoMC expert travel expense (allowance, car fuel)				
Periodical site monitoring	9,400	23,400	14,000	46,800
Buyer survey in Addis Ababa		4,900	4,900	9,800
Support for acquiring funds for Boloso Bombe PC	2,300	2,300		4,600
Business meeting at site		13,000	13,000	26,000
BoMC Operating expense	2,000	5,000	3,000	10,000
WoMC Operating expense	2,400	6,000	3,600	12,000
Total	16,100	54,600	38,500	109,200

Contingency (10%) : 10,900 Birr

Total : 120,000 Birr

Note: 'Buyer survey' and 'Business meeting' to conduct in 2014 are overlapped with the activities in the Project No. 12. In case the Project No. 12 implements, correct the estimated cost of this follow-up support.

Schedule:

	2012				2013				2014			
	1	2	3	4	1	2	3	4	1	2	3	4
1. Periodical site monitoring				■	■	■	■	■	■	■	■	■
2. Advisory support for business operation				■	■	■	■	■	■	■	■	■
3. Support of products marketing												
3-1. Buyer survey in Addis Ababa * include the survey of 'washed' fresh ginger demand				■					■			
3-2. Prepare and conduct a business meeting with identified buyers at site					■				■			
4. Support for acquiring funds for material procurement (only Boloso Bombe PC)												
4-1. Support the negotiation with financing institutions in SNNPR				■				■				
4-2. Possibility and materialization of JV/subcontract, advance payment contract				■				■	■			
Ginger harvest season (washing & drying operation period)				■	■			■	■			

Project No. 12

Project Title	Project on the Incubation of Ginger Washing & Drying Business		
Strategy	2: Increment of profit by Introduction of High Value-Added Marketing 2-3: Development of Value-Added Activities in the Production Areas 2-4: Strengthening the Marketability of Specialized and Superior Products/Varieties 2-5: Acceleration of Collective Marketing		
Master Plan Program	High Value Addition Program High quality dried ginger promotion program		
Project Period	2013 – 2017 (5 years, 3 harvest seasons)		
Project Site	Wolayita zone and Kambata Tembaro zone		
Target Crop/Product	Ginger		
Target Group (Business operating body)	Ginger producers group, Ginger traders group * Target group is existing group or self-formed group. Facilitation of group formation is not planned in the project. * The legal status (type of group) shall not be limited to a cooperative. * In case supports a cooperative, promote to form a JV or to work as subcontractor with cooperative union or private business (only in 2014/15 season and 2015/16 season). * Target group should have adequate amount of funds for ginger procurement.		
Implementing Agency	BoMC, WoMC and ZoMC	Supporting Agency	
<p>Background & Objectives:</p> <p>This project intends to support other farmers/traders groups in ginger production area for entering into a ginger washing & drying business of the similar scale of PP05. The project aims to support the two (2) groups per season during 3 seasons (from 2014/15 to 2016/17); in total of six (6) groups.</p> <p>The target groups for the support include not only ginger farmers groups but local traders groups.</p> <p>Considering the not-so-active state of economic activity by groups in the site, a method which BoMC/WoMC proactively promote/encourage the challenge (top-down mode) shall be applied in the initial two seasons (2014/15 and 2015/16). In the last 2016/17 season, a method which interest groups make application for the support (bottom-up mode) shall be applied, since the number of group business reaches 6 (include 2 cases of the PP05) and the support scheme must be well-known and willingness of farmers/traders to challenge must be high enough.</p> <p>Contents of BoMC/WoMC support shall be as follows:</p> <ul style="list-style-type: none"> - Designing of washing & drying facility - Provision of equipment for washing 			

- Cost for making of washing facility (materials, skilled labour cost and BoMC/WoMC instruction)
- Cost for making of drying tables (materials, skilled labour cost and BoMC/WoMC instruction)
- Provision of OJT training of washing work, and work management
- Support of products marketing: Buyers information, Business meeting at site, Travel expense for marketing activity performed out of SNNPR
- Advisory support for business operation/management

The 1st year (2013) is scheduled for a period of securing the project budget funds.

Activities:

* Actor for the activities is BoMC unless otherwise noted.

(2013)

Activities to secure the budget funds for the project by BoMC

1. Identify the potential donor / fund: Donor program, NGO, Regional government, etc.
2. Prepare the project proposal and explanatory papers (utilize the PP05 as an existing model).
3. Explain the project proposal to identified potential donors.
4. Discuss with the regional government for budgetary allocation.
5. Readjustment of the project scale and schedule based on the secured budget funds.

(2014/15 season)

1. Selection of target groups

- 1-1. Explanatory meeting with concerned offices: Explain the project scheme/contents to WoMC, ZoMC and cooperative unions (Damota union, Ambericho union) in Wolayita zone and Kambata Tembaro zone. Make a long-list of candidate groups for this year.
- 1-2. Explanatory meeting with candidate groups: Explain the project scheme, contents of supports and responsibilities of beneficiary to the candidate groups. Take the candidate groups to Abay Group site in Hadaro Tunto.
- 1-3. Narrow down the candidate to a short-list. Conduct survey of the short-listed groups (survey on their resources / capacity).
- 1-4. Explore the possibility of JV formation or subcontracting with union or private business, in case candidate is a cooperative / a group without adequate amount of funds.
- 1-5. Determine the beneficiary groups. Exchange MOU on BoMC support and beneficiary's responsibilities.

2. Support for establishment of washing & drying facility

- 2-1. Design washing & drying facility and layout (use a local consultant).
- 2-2. Site clearing, make fence, and clear procedures for power feeding to site [by Target group].
- 2-3. Procure and deliver the equipment for washing.
- 2-4. Procure and deliver the materials to make washing facility and drying tables. Instruct skilled labour on making.

3. Support for washing & drying operation and management

- 3-1. Provision of OJT training of washing work (to workers, site manager).
- 3-2. Provision of OJT training of work management (to site manager, group leaders).
- 3-3. Periodical monitoring by BoMC and WoMC, and advisory support at site.

4. Support of products marketing

- 4-1. Obtain buyers information from MoT.
- 4-2. Conduct a buyer survey in Addis Ababa (exporters, wholesale traders for domestic markets). * Include the survey of 'washed' fresh ginger demand.
- 4-3. Prepare and conduct a business meeting with identified buyers at site.
- 4-4. Explore the possibility for joint-sales by target groups.
- 4-5. Provide subsidy for expenses for travel expenses on marketing activities of target groups at outside of SNNRP.

(2015/16 season) : Same as 2014/15 season

(2016/17 season)

1. Planning of the Initial Cost Support Scheme

Reviewing the support made in 2014/15 and 2015/16, and derive lessons to plan the following points.

- Scale of subsidy : Number of beneficiary groups, Intended equipment & facility and their quantity
- Grant rate, Upper limit
- Conditions of beneficiary group
- Obligations of beneficiary (return of subsidy, record keeping, reporting, etc.)
- Mechanism/method of disbursement

2. Planning of methods for public notification, application and selection.

3. Public notification of the Initial Cost Support Scheme, Explanation of the scheme to ZoMC/WoMC/Union.

4. Reception of submitted applications, and conduct survey of the applicants.

5. Determine the beneficiary groups. Exchange MOU on BoMC support and beneficiary's responsibilities.

6. Disbursement and provision of support (Same as 2. to 4. of 2014/15 season).

Input:

- BoMC expert : 2
- Equipment for washing : Engine pump, Portable high pressure washing machine, Plastic boxes, Push cart, Hose pipe, Filter/gate valve/fittings, Tools for maintenance
- Washing facility : 2000 liter water tank with stand, Soaking pits, Cemented floor for jet-washing
- Drying tables : Bamboo or Wire-mesh top, 1000 m² per site
- Local consultant: Designing of washing & drying facility, Advisor for planning of subsidy system and planning of methods for public notification/application/selection

<ul style="list-style-type: none"> - Expense for Explanatory meeting with candidate groups (transportation expense, refreshment), Business meeting at site (buyers travel expenses, refreshment), Subsidy for expenses for travel expense on marketing activities of target groups - BoMC and WoMC operating expense: BoMC expert travel expense (allowance, car fuel), communication charge, office supplies, etc. 																										
<p>Cost:</p> <p>0. Activities to secure the budget funds for the project by BoMC : non-estimation</p> <p>1. Support for establishment of washing & drying facility</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="padding-left: 20px;">Equipment for washing</td> <td style="text-align: right;">: 200,400</td> </tr> <tr> <td style="padding-left: 20px;">Washing facility</td> <td style="text-align: right;">: 163,800</td> </tr> <tr> <td style="padding-left: 20px;">Drying tables</td> <td style="text-align: right;">: 540,000</td> </tr> <tr> <td style="padding-left: 20px;">Local consultant for designing of facility and layout</td> <td style="text-align: right;">: 36,000</td> </tr> </table> <p>2. Expense for the meetings</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="padding-left: 20px;">Explanatory meeting with candidate groups</td> <td style="text-align: right;">: 7,600</td> </tr> <tr> <td style="padding-left: 20px;">Business meeting at site</td> <td style="text-align: right;">: 39,000</td> </tr> <tr> <td style="padding-left: 20px;">Subsidy for marketing activities of target groups</td> <td style="text-align: right;">: 12,600</td> </tr> <tr> <td style="padding-left: 20px;">Local consultant for planning of subsidy system</td> <td style="text-align: right;">: 17,500</td> </tr> </table> <p>3. BoMC/WoMC operating expense</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="padding-left: 20px;">Explanatory meeting with ZoMC/WoMC/Unions</td> <td style="text-align: right;">: 27,000</td> </tr> <tr> <td style="padding-left: 20px;">Buyer survey in Addis Ababa</td> <td style="text-align: right;">: 14,700</td> </tr> <tr> <td style="padding-left: 20px;">BoMC periodical monitoring</td> <td style="text-align: right;">: 66,900</td> </tr> <tr> <td style="padding-left: 20px;">BoMC operating expense</td> <td style="text-align: right;">: 21,000</td> </tr> <tr> <td style="padding-left: 20px;">WoMC operating expense</td> <td style="text-align: right;">: 54,000</td> </tr> </table> <p>1. - 3. Sub total : 1,200,500 Birr</p> <p>Contingency (10%) : 120,000 Birr</p> <p>Total : 1,320,000 Birr</p> <p>* Project cost for each year is shown in Annex 1.</p>	Equipment for washing	: 200,400	Washing facility	: 163,800	Drying tables	: 540,000	Local consultant for designing of facility and layout	: 36,000	Explanatory meeting with candidate groups	: 7,600	Business meeting at site	: 39,000	Subsidy for marketing activities of target groups	: 12,600	Local consultant for planning of subsidy system	: 17,500	Explanatory meeting with ZoMC/WoMC/Unions	: 27,000	Buyer survey in Addis Ababa	: 14,700	BoMC periodical monitoring	: 66,900	BoMC operating expense	: 21,000	WoMC operating expense	: 54,000
Equipment for washing	: 200,400																									
Washing facility	: 163,800																									
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Buyer survey in Addis Ababa	: 14,700																									
BoMC periodical monitoring	: 66,900																									
BoMC operating expense	: 21,000																									
WoMC operating expense	: 54,000																									
<p>Schedule:</p> <p>As per Annex 2.</p>																										
<p>Points of concerns:</p> <ul style="list-style-type: none"> - Target group (beneficiary) shall be responsible for facility site (land and cleaning), making of drying shelves, fence, and clearing the procedures for power feeding to the site. - A facility site should locate riverside and availability for appropriate site may be limited. However, avoid a clustered situation in nearby area. Try to distribute them in the ginger production area. - In case a primary cooperative(s) is selected, Project No. 23 ‘Capacity Enhancement of Cooperatives in Non-grain Commodity Marketing’ shall provide training on organizational management, bookkeeping, etc. 																										

Annex 1 : Project cost for each year

	2013	2014	2015	2016	2017	Total
Number of sites (target groups)		2	2	2		6
Explanatory meeting with ZoMC/WoMC/Unions		9,000	9,000	9,000		27,000
Explanatory meeting with candidate groups		3,800	3,800			7,600
Equipment for washing		61,200	61,200	61,200		183,600
Transportation of equipment & materials		5,600	5,600	5,600		16,800
Washing facility		54,600	54,600	54,600		163,800
Drying table		180,000	180,000	180,000		540,000
Designing of facility and layout (local consultnat)		12,000	12,000	12,000		36,000
BoMC travel expenses (allowance, car fuel)						
Selection of target groups		4,700	4,700	4,700		14,100
Delivery/installation of equipment, Supervision of facility making work		7,000	7,000	7,000		21,000
OJT washing work /work management		3,600	3,600	3,600		10,800
Periodical monitoring			7,000	7,000	7,000	21,000
Buyer survey in Addis Ababa			4,900	4,900	4,900	14,700
Business meeting at site			13,000	13,000	13,000	39,000
Subsidy for marketing activities of target groups (Travel expense)			4,200	4,200	4,200	12,600
Local consultant for planning of Initial cost support scheme				17,500		17,500
BoMC operating expense		6,000	6,000	6,000	3,000	21,000
WoMC operating expense		7,200	14,400	21,600	10,800	54,000
Total	0	354,700	391,000	411,900	42,900	1,200,500

Annex 2 : Implementation Schedule

* Assumed period to acquire the project budget is one year.

	2013				2014				2015				2016				2017			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
0. Activities to secure the budget funds for the project by BoMC	■																			
1. Selection of target groups																				
(2014/15 & 2015/16 seasons)																				
1-1. Explanatory meeting with concerned offices (ZoMC, WoMC, Unions), Make a long-list of candidate groups				■					■											
1-2. Explanatory meeting with candidate groups, and Take the candidate groups to Abay Group site in Hadaro Tunto.				■					■											
1-3. Narrow down the candidate to a short-list. Conduct survey of the short-listed groups.					■				■											
1-4. Explore the possibility of JV formation or subcontracting with union or private business,					■				■											
1-5. Determine the beneficiary groups, Exchange MOU						■				■										
(2016/17 season)																				
1-6. Reviewing the support made in 2014/15 and 2015/16 seasons, and derive the Initial Cost Support Scheme													■							
1-7. Planning of methods for public notification, application and selection.													■	■						
1-8. Public notification of the Initial Cost Support Scheme													■							
1-9. Conduct survey of the applicants, Determine the beneficiary groups, Exchange MOU, Disbursement													■	■						
2. Support for establishment of washing & drying facility																				
2-1. Design washing & drying facility and layout							■				■				■					
2-2. Site clearing, make fence, and clear procedures for power feeding to site [by Target group]							■	■			■	■			■	■				
2-3. Procure and deliver the equipment for washing							■				■				■					
2-4. Making of washing facility and drying tables [by BoMC/Target group]							■				■				■					
3. Support for washing & drying operation and management																				
3-1. Provision of OJT training of washing work (to workers)								■				■				■				
3-2. Provision of OJT training of work management (to site manager, group leaders)								■				■				■				
3-3. Periodical monitoring by BoMC and WoMC, and advisory support at site								■				■				■				
4. Support of products marketing																				
4-1. Obtain buyers information from MoT								■				■				■				
4-2. Conduct a buyer survey in Addis Ababa								■				■				■				
4-3. Prepare and conduct a business meeting with identified buyers at site											■				■				■	
4-4. Explore the possibility for joint-sales by target groups											■				■				■	
4-5. Provide subsidy for expenses for travel expenses on marketing activities of target groups at outside of SNNRP											■				■				■	
Ginger harvest season (washing & drying operation period)				■				■				■				■				■

Project No. 13

Project Title	Planning of post-harvest improvement of Turmeric		
Strategy	2: Increment of profit by Introduction of High Value-Added Marketing 2-3: Development of Value-Added Activities in the Production Areas 2-4: Strengthening the Marketability of Specialized and Superior Products/Varieties		
Master Plan Program	High Value Addition Program		
Project Period	2013 (1 year)		
Project Site	Yeki woreda (Sheka zone)		
Target Crop/Product	Turmeric		
Target Group	Turmeric producers, local traders		
Implementing Agency	BoMC	Supporting Agency	ZoMC and WoMC in the survey area
<p>Background & Objectives:</p> <p>A workable ginger washing method was explored in the pilot project (PP05) and it was concluded that soaking pit plus portable high pressure washing machine was the practical way. In SNNPR, turmeric; similar crop as ginger, is cultivated as a cash crop. Powder is the form of final product of turmeric. Root cutting, washing, and drying are necessary. It is reported that boiling is traditionally applied before drying, but the details are not clear. In the case of Japan, root cutting and peeling are made before drying, but in SNNPR roots and peel are removed by polishing before drying.</p> <p>Conduct a research study on current post-harvest processing and turmeric collection to clarify the necessity to change current post-harvest practice from the viewpoint of ‘market-oriented’, and explore the applicable technology; include the ‘soaking + jet-washing method’. In the case the applicable technology is identified, think of an introduction strategy and formulate a support scheme/project.</p> <p>The following points should be clarified in the research study.</p> <ul style="list-style-type: none"> - Necessary improvements to produce the product conforming to buyer’s needs - Whether applicable technology (tools, equipment) is available in the country or not, and if possible to import/develop or not. - How to introduce applicable technology to farmers/traders (target group, preconditions, approach, etc.) 			
<p>Activities:</p> <ol style="list-style-type: none"> 1. Conduct a field survey in production sites 2. Conduct a user/buyer survey in Addis Ababa 3. Consider the contents of improvement (what to change & how to change) <ol style="list-style-type: none"> 3-1. Clarify the necessary improvement to be made from a ‘market-oriented’ viewpoint 			

<p>3-2. Search the applicable technology (tools, equipment)</p> <p>< In case the applicable technology is identified ></p> <p>3-3. Consider the appropriate operator of new technology</p> <p>3-4. Consider the change in collection systems that come with introduction of new technology</p> <p>4. Formulate a support scheme/project to improve post-harvest processing</p> <p>4-1. Consider the contents of supportive measures</p> <p>4-2. Formulate a support project</p>																																																																																																																																	
<p>Input:</p> <ul style="list-style-type: none"> - BoMC expert - Survey expense : BoMC expert travel expense (allowance, car fuel), local consultant*, printing cost, etc. - Operating expense : Communication charge, office supplies <p>* It is hard to say whether the capacity of BoMC expert for planning has been strengthened with OJT in the PP implementation. In order to compensate for the limited capacity, using a local consultant in the survey as advisor is planned.</p>																																																																																																																																	
<p>Cost:</p> <p>1. Survey expense (Travel expense (allowance, car fuel), Printing cost, etc.) : 40,200</p> <p>2. Survey expense (Local consultant) : 17,500</p> <p>3. Operating expense : 3,500</p> <p>1. – 3. Sub total : 61,200 Birr</p> <p>Contingency (10%) : 6,100 Birr</p> <p>Total : 67,000 Birr</p>																																																																																																																																	
<p>Schedule:</p> <p>Field survey in the production site should be conducted during the harvesting time; Feb. to March.</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th rowspan="2"></th> <th colspan="4">2013</th> <th colspan="4">2014</th> </tr> <tr> <th>1</th> <th>2</th> <th>3</th> <th>4</th> <th>1</th> <th>2</th> <th>3</th> <th>4</th> </tr> </thead> <tbody> <tr> <td>1. Field survey in production sites</td> <td style="text-align: center;">■</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>2. User/buyer survey in Addis Ababa</td> <td style="text-align: center;">■</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>3. Consider the contents of improvement</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>3-1. Clarify the necessary improvement to be made from a 'market-oriented' viewpoint</td> <td></td> <td style="text-align: center;">■</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>3-2. Search the applicable technology (tools, equipment)</td> <td></td> <td style="text-align: center;">■</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td colspan="9" style="text-align: center;">< In case the applicable technology is identified ></td> </tr> <tr> <td>3-3. Consider the appropriate operator of new technology</td> <td></td> <td></td> <td style="text-align: center;">■</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>3-4. Consider the change in collection systems that come with introduction of new technology</td> <td></td> <td></td> <td style="text-align: center;">■</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>4. Formulate a support scheme/project to improve post-harvest processing</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>4-1. Consider the contents of supportive measures</td> <td></td> <td></td> <td style="text-align: center;">■</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>4-2. Formulate a support project</td> <td></td> <td></td> <td style="text-align: center;">■</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td style="text-align: right;">Turmeric harvesting season</td> <td style="text-align: center;">■</td> <td style="text-align: center;">■</td> <td style="text-align: center;">■</td> <td style="text-align: center;">■</td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>						2013				2014				1	2	3	4	1	2	3	4	1. Field survey in production sites	■								2. User/buyer survey in Addis Ababa	■								3. Consider the contents of improvement									3-1. Clarify the necessary improvement to be made from a 'market-oriented' viewpoint		■							3-2. Search the applicable technology (tools, equipment)		■							< In case the applicable technology is identified >									3-3. Consider the appropriate operator of new technology			■						3-4. Consider the change in collection systems that come with introduction of new technology			■						4. Formulate a support scheme/project to improve post-harvest processing									4-1. Consider the contents of supportive measures			■						4-2. Formulate a support project			■						Turmeric harvesting season	■	■	■	■				
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6.4.3 Plan for Agricultural Products Market Infrastructure Development

Project No. 14

Project Title	PP06 Haricot Bean Market Infrastructure Support Project		
Strategy	3: Improvement of Effective Market Infrastructure to Empower Market Activities 3-2: Improvement of Market Infrastructure at Woreda Marketplaces in Target Areas		
Master Plan Program	Woreda Marketplace Improvement Program		
Project Period	2013 - 2017 (5 years)		
Project Site	Belila town (Boricha woreda)		
Target Crop/Product	Haricot bean		
Target Group	Boricha woreda administration, Belila town municipality, Haricot bean traders, Haricot bean producers		
Implementing Agency	BoMC, Boricha woreda administration, Belila town municipality	Supporting Agency	
<p>Background & Objectives:</p> <p>The pilot project (PP06) constructed a new market facility for haricot bean at Belila town of Boricha woreda in Sidama zone in order to improve transactions circumstances and to strengthen the management capability of the town for quality improvement and extension of the market for haricot bean.</p> <p>As a result, the facility with roof and concrete floor has brought orderly trade of haricot bean between licensed traders and farmers to the town. Therefore, all stakeholders such as farmers (producer), management body (town) and traders have given high appreciation of the facility and its management. The noteworthy advantages are as follows:</p> <ol style="list-style-type: none"> 1) Since transactions must be done within designated space by licensed traders, illegal traders and false mixtures with other grains have remarkably decreased. Therefore, proper transactions between traders and farmers have started. Previously, farmers sometime were forced to sell products at cheap prices by traders. Since licensed traders are obliged to use a calibrated balance, unfair transactions with farmers are reduced. 2) Since all transactions are now undertaken within the facility with roof and floor, chances of mixing in with foreign materials (mud, twigs, etc.) into a bulk of haricot beans has decreased, chances of moisture absorption from the ground has decreased and thus its quality has improved. 3) Newly introduced facility using tax on traders brings economic benefit to the woreda. <p>In order to improve the quality of haricot beans, a moisture tester and bean cleaner has been provided to the town municipality.</p>			

By this Project Plan No.14, BoMC monitors and verifies the current management of the facility by the town whether the above advantages are still continuing or not and support the management of the facility to become good sample for other market facility to be introduced.

Activities:

BoMC :

1. Has regular meeting with woreda and municipality once every three months for monitoring and giving necessary advice.
2. According to the woreda's request, suggest advice on extension plan of the market.
3. Public relations to other woredas and municipalities.

Woreda administration / Town municipality :

1. Grasp and record of transaction volumes of haricot bean.
2. Has regular meeting of the management committee including BoMC once every two months.
3. Preparation of extension plan.
4. Exchange of opinions with farmers.
5. Revision / upgrade of management guideline once every two years or as required.

Input:

BoMC :

1. Deploy of staff
2. Organize meeting born by BoMC

Woreda administration / Town municipality :

1. Deploy staff
2. Dispatch staff to BoMC activity meeting.

Cost:

1. Travel expense to other city by BoMC staff. (Transportation and allowance) : 500 Birr/time
2. Meeting expense (Transportation and allowance) : 5,000 Birr/time

Schedule:

Implementing Agency	Activities	Implementation schedule																			
		2013				2014				2015				2016				2017			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
BoMC	Regular meeting on activities	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼
	Public relations	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Woreda/ Municipality	Record of trade	—————																			
	Management committee meeting	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
	Farmers voice	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
	Revision of guideline				▲								▲								▲

Remarks:

The monitoring results must be reflected to the Project Plan No.15 for the better application.

Project No. 15

Project Title	Haricot Bean Market Infrastructure Development		
Strategy	3: Improvement of Effective Market Infrastructure to Empower Market Activities 3-2: Improvement of Market Infrastructure at Woreda Marketplaces in Target Areas		
Master Plan Program	Woreda Marketplace Improvement Program		
Project Period	2013 - 2017 (5 years)		
Project Site	Following 8 woredas where PP01 for Strengthening of the Agricultural Market Information Service had been executed. (1) East Badawacho, Hadiya zone (2) West Badawacho, Hadiya zone (3) Damot Gale, Wolayita zone (4) Sodo Zuria, Wolayita zone (5) Loka Abaya, Sidama zone (6) Amaro, Segen zone (7) Burji , Segen zone (8) Alaba Special woreda		
Target Crop/Product	Haricot bean		
Target Group	Woreda administration, Town municipality, Traders of haricot bean, Haricot bean producers		
Implementing Agency	BoMC, WoMC Woreda administration, Town municipality	Supporting Agency	AGP Other donors
<p>Background & Objectives:</p> <p>Haricot bean is one of the key crops in Ethiopia. White haricot bean has been exported to European countries for a long time and red one is the main supply source to northern Kenya. Thus, demand for haricot bean is increasing remarkably these years. In this context, the Ethiopian government has issued “the Sesame and White Haricot Beans Marketing Regulation” (Regulation No.178/2010) decreed by the Federal Democracy of Ethiopia and in effect on 22 May, 2010. According to this Federal regulation, white haricot beans shall be dealt through the Ethiopian Commodity Exchange Market (ECX), even producers. In general, traders in SNNPR purchase haricot bean, excluding white one, in producing areas and transport them to Nazeret for domestic market or import. Transactions of haricot bean between traders and producers are being made in an open market under very poor conditions without shade against sunshine and rain, or proper drainage. So, quality of haricot bean is not good and is expected to improve through provision of market facilities.</p> <p>Under this situation, the JICA Study Team constructed a new market facility for haricot bean at Belila town of Boricha woreda in Sidama zone, as the pilot project (PP06), in order to improve transaction circumstances and to strengthen management capability of the town for quality</p>			

improvement and extension of the market for haricot bean.

As a result, a facility with roof and concrete floor has brought orderly trade of haricot bean between licensed traders and farmers to the town. So, all stakeholders such as farmers (producer), management body (town) and traders have given high appreciation of the facility and its management. The noteworthy advantages are as follows:

- 1) Since transaction must be done within designated space by licensed traders, illegal traders and false mixtures with other grains have remarkably decreased. So, proper transactions between traders and farmers have started. Previously, farmers sometime were forced to sell products at cheap prices by traders. Since licensed traders are obliged to use a calibrated balance, unfair transactions with farmers have been reduced.
- 2) Since all transactions are now undertaken within the facility with roof and floor, chances of mixing in with foreign materials (mud, twigs, etc.) into a bulk of haricot beans has decreased, chances of moisture absorption from the ground has decreased and thus its quality has improved.
- 3) Newly introduced facility use tax on traders brings economic benefit to the woreda.

Consequently, as Project Plan No.15 under the Market Infrastructure at Woreda Marketplace Improvement Program, a haricot bean market infrastructure improvement is planned for implementation for the other woredas.

Activities:

<p>BoMC :</p> <ol style="list-style-type: none"> 1. Provision of standard design drawings. 2. Provision of standard tender documents. 3. Technical support for finalization of design drawings and tender documents. 4. Workshop on management of infrastructure including provision of draft management guideline. 	<p>Woreda administration/Town municipality:</p> <ol style="list-style-type: none"> 1. To decide facility scale based on transaction volume of traders. 2. To make facility layout by considering topographic condition of a proposed site and scale. 3. Revision and/or finalization of design drawings and cost estimate (entrusted work to engineering consultant). 4. Preparation of tender documents. 5. Tendering, evaluation and contract. 6. Construction supervision (entrusted work to engineering consultant). 7. Establishment of Management Committee 8. Preparation of management guideline 9. Management of infrastructure. 	<p>Other donors :</p> <p>Technical and financial support to the activities to be carried out by woreda/municipality.</p>
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Input:		
BoMC / Woreda : 1. Deployment of staff of BoMC in charge. 2. Deployment of staff of woreda in charge.	AGP : 1. Construction cost of facility. 2. Cost for design revision and construction supervision by the consultant.	Other donors : Remuneration of engineering advisor together with necessary activity cost.
Facility Layout and Design: <u>Concept of Layout</u> 1. A new facility shall be constructed within the area of the existing market place. 2. A new facility shall be constructed at a corner of the existing market place. 3. Drainage ditch shall be provided surrounding the facility. 4. Allocation of facility blocks shall refer the Layout Plan 1 or Layout Plan 2 annexed. <u>Design Concept</u> 1. Facility shall have concrete floor. 2. Facility shall have roof supported by concrete columns and beams. 3. Basic space for transaction is 6m x 3m, subject to change according to transaction volume. 4. Facility shall have proper drainage system with outlet. 5. Trading space in front of facility shall be stone paved as much as possible. 6. Access road to facility is mandatory. 7. Standard drawings are as follows according slope of the ground. Refer the drawings in Appendices (volume 2). 1) Type A1 : Size 6m x 30m=180m ² , H=3.5m, 5 floor levels (steps), 10 trading spaces of 6m x 3m 2) Type A2 : Size 6m x 30m=180m ² , H=3.5m, 3 floor levels, 10 trading spaces of 6m x 3m 3) Type A3 : Size 6m x 30m=180m ² , H=3.5m, 2 floor levels, 10 trading spaces of 6m x 3m 4) Type A4 : Size 6m x 30m=180m ² , H=3.5m, 1 floor levels (flat), 10 trading spaces of 6m x 3m 5) Type B1 : Size 12m x 42m=504m ² , H=3.5m, 3 floor levels, 28 trading spaces of 6m x 3m 6) Type B2 : Size 12m x 42m=504m ² , H=3.5m, 1 floor levels (flat), 28 trading spaces of 6m x 3m		
Cost: 1. Construction cost of facility Construction cost of a facility is calculated after the decision of facility scale and ground slope and selection of facility type and number and area of stone pavement. An approximate construction cost of each type as of Jan. 2011 excluding VAT is shown below: 1) Type A1 : 340,000 Birr /Block 2) Type A2 : 290,000 Birr /Block 3) Type A3 : 280,000 Birr /Block 4) Type A4 : 260,000 Birr /Block 5) Type B1 : 670,000 Birr /Block 6) Type B2 : 620,000 Birr /Block		

- 7) Stone pavement of trading space of 40 cm thickness : 150 Birr /m²
2. Manpower cost
- 1) Design and construction supervision : 16,000 Birr/month x 5 months = 80,000 Birr
 - 2) Technical advisor cost : US\$15,000/month x 2 months = US\$30,000
3. Training cost
- 5,000 Birr/time

Schedule:

This Project shall collaborate with AGP and follow their budget. However, it is proposed that implementation of the Project shall be done in accordance with the following zones, i.e. one year for one zone. The Project consists of 2 phases, construction and management training and practice. It is estimated that preparatory work for contract requires 2 months, 4 months for construction and 5 months training and practice.

Zone	Woreda	Phase	Implementation Plan																				
			2013				2014				2015				2016				2017				
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	
Wolayita	Damot Gale	I Construction	█	█																			
		II Management			█	█																	
	Sodo Zuria	I Construction	█	█																			
		II Management			█	█																	
Sidama	Loka Abaya	I Construction					█	█															
		II Management						█	█														
Hadiya	West Badawacho	I Construction									█	█											
		II Management										█	█										
Lift Valley	Amaro	I Construction																	█	█			
		II Management																		█	█		
	Burji	I Construction																		█	█		
		II Management																			█	█	
Alaba Special Woreda	I Construction																				█	█	
	II Management																					█	

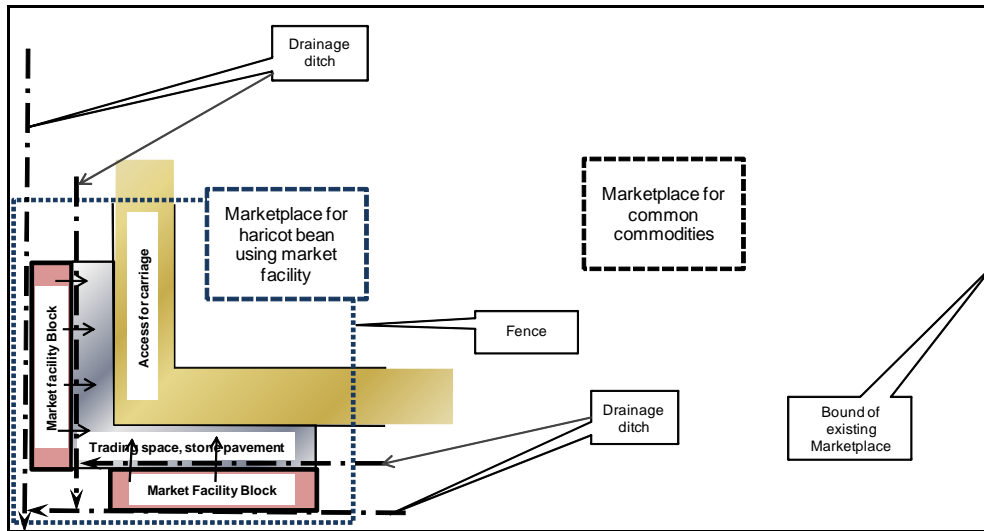
Remarks:

Eight (8) woredas proposed in this Project No.15 are not objective woreds of AGP. So, for the implementation of the Project, BoMC shall have close discussion with AGP on necessity of this Project and AGP's support.

In addition, during planning, design modification and construction supervision, a technical advisor is indispensable. So, support from the other donor shall be sought.

Annex : Layout Plans and Project Costs of Haricot Bean Marketplace

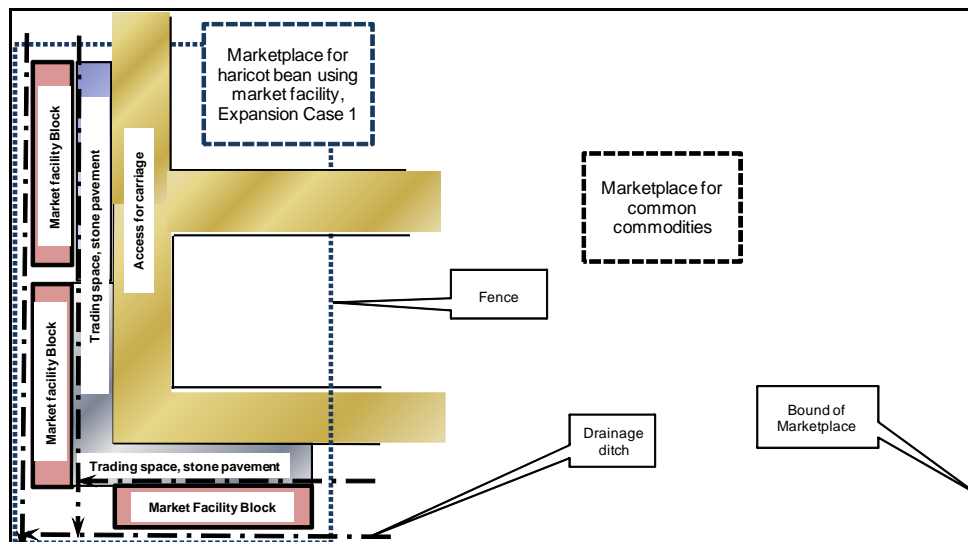
Layout Plan 1



Project Cost of Layout Plan 1 (without technical advisor cost and training cost)

1) Facility construction	Type A1 x 2 =	: 680, 000 Birr
2) Stone pavement	360 m ² =	: 54,000 Birr
3) Design & construction supervision		: 80,000 Birr
4) Contingency		: 86,000 Birr
	Total	: 900,000 Birr

Layout Plan 2



Project Cost of Layout Plan 2 (without technical advisor cost and training cost)

1) Facility construction	Type A3 x 2 =	: 1,020, 000 Birr
2) Stone pavement	570 m ² =	: 85,500 Birr
3) Design & construction supervision		: 80,000 Birr
4) Contingency		: 118,500 Birr
	Total	: 1,304,000 Birr

Project No. 16

Project Title	PP07 Ginger Market Infrastructure Support Project		
Strategy	3: Improvement of Effective Market Infrastructure to Empower Market Activities 3-2: Improvement of Market Infrastructure at Woreda Marketplaces in Target Areas		
Master Plan Program	Woreda Marketplace Improvement Program		
Project Period	2013 - 2017 (5 years)		
Project Site	Hadaro town (Hadaro Tunto woreda)		
Target Crop/Product	Ginger		
Target Group	Hadaro Tunto woreda administration, Hadaro town municipality Ginger traders, Ginger producers		
Implementing Agency	BoMC, Hadaro Tunto woreda administration, Hadaro town municipality	Supporting Agency	
<p>Background & Objectives:</p> <p>As the pilot project (PP07), the JICA Study Team constructed a new market facility for ginger at Hadaro town of Hadaro Tunto woreda in Kembata Tembaro zone in order to improve transactions circumstances and to strengthen the management capability of the town for quality improvement and extension of the market for ginger.</p> <p>As a result, the facility with roof and concrete floor has brought orderly trade of ginger between licensed traders and farmers to the town. Therefore, all stakeholders such as farmers (producer), management body (town) and traders have given high appreciation of the facility and its management. The noteworthy advantages are as follows:</p> <ol style="list-style-type: none"> 1) Since transactions must be done within designated space by licensed traders, illegal traders and false mixtures with other grains have remarkably decreased. Therefore, proper transactions between traders and farmers have started. Previously, farmers sometime were forced to sell products at cheap prices by traders. Since licensed traders are obliged to use a calibrated balance, unfair transactions with farmers are reduced. 2) Since some ginger roots are kept under the roof and on the floor, quality is not deteriorated. 3) Newly introduced facility using tax on traders brings economic benefit to the woreda. <p>By this Project No.16, BoMC monitors and verifies the current management of the facility by the town whether the above advantages are still continuing or not and support the management of the facility to become good sample for other market facility to be introduced.</p>			
Activities:			
BoMC :		Woreda administration / Town municipality :	
1. Has regular meeting with woreda and municipality once every three months for		1. Grasp and record of transaction volumes of ginger.	

monitoring and giving necessary advice. 2. According to the woreda's request, suggest advice on extension plan of the market. 3. Public relations to other woredas and municipalities.	2. Has regular meeting of the management committee including BoMC once every two months. 3. Preparation of extension plan. 4. Exchange of opinions with farmers. 5. Revision / upgrade of management guideline once every two years or as required.																																																																																																																																																																																														
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<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th rowspan="3">Implementing Agency</th> <th rowspan="3">Activities</th> <th colspan="20">Implementation schedule</th> </tr> <tr> <th colspan="4">2013</th> <th colspan="4">2014</th> <th colspan="4">2015</th> <th colspan="4">2016</th> <th colspan="4">2017</th> </tr> <tr> <th>1</th><th>2</th><th>3</th><th>4</th> <th>1</th><th>2</th><th>3</th><th>4</th> <th>1</th><th>2</th><th>3</th><th>4</th> <th>1</th><th>2</th><th>3</th><th>4</th> <th>1</th><th>2</th><th>3</th><th>4</th> </tr> </thead> <tbody> <tr> <td rowspan="2" style="text-align: center;">BoMC</td> <td>Regular meeting on activities</td> <td style="text-align: center;">▽</td><td style="text-align: center;">▽</td><td style="text-align: center;">▽</td><td style="text-align: center;">▽</td> <td style="text-align: center;">▽</td><td style="text-align: center;">▽</td><td style="text-align: center;">▽</td><td style="text-align: center;">▽</td> <td style="text-align: center;">▽</td><td style="text-align: center;">▽</td><td style="text-align: center;">▽</td><td style="text-align: center;">▽</td> <td style="text-align: center;">▽</td><td style="text-align: center;">▽</td><td style="text-align: center;">▽</td><td style="text-align: center;">▽</td> <td style="text-align: center;">▽</td><td style="text-align: center;">▽</td><td style="text-align: center;">▽</td><td style="text-align: center;">▽</td> </tr> <tr> <td>Public relations</td> <td style="text-align: center;">■</td><td style="text-align: center;">■</td><td style="text-align: center;">■</td><td style="text-align: center;">■</td> <td style="text-align: center;">■</td><td style="text-align: center;">■</td><td style="text-align: center;">■</td><td style="text-align: center;">■</td> <td style="text-align: center;">■</td><td style="text-align: center;">■</td><td style="text-align: center;">■</td><td style="text-align: center;">■</td> <td style="text-align: center;">■</td><td style="text-align: center;">■</td><td style="text-align: center;">■</td><td style="text-align: center;">■</td> <td style="text-align: center;">■</td><td style="text-align: center;">■</td><td style="text-align: center;">■</td><td style="text-align: center;">■</td> </tr> <tr> <td rowspan="4" style="text-align: center;">Woreda/ Municipality</td> <td>Record of trade</td> <td colspan="20" style="text-align: center;">—————</td> </tr> <tr> <td>Management committee meeting</td> <td style="text-align: center;">■</td><td style="text-align: center;">■</td><td style="text-align: center;">■</td><td style="text-align: center;">■</td> <td style="text-align: center;">■</td><td style="text-align: center;">■</td><td style="text-align: center;">■</td><td style="text-align: center;">■</td> <td style="text-align: center;">■</td><td style="text-align: center;">■</td><td style="text-align: center;">■</td><td style="text-align: center;">■</td> <td style="text-align: center;">■</td><td style="text-align: center;">■</td><td style="text-align: center;">■</td><td style="text-align: center;">■</td> <td style="text-align: center;">■</td><td style="text-align: center;">■</td><td style="text-align: center;">■</td><td style="text-align: center;">■</td> </tr> <tr> <td>Farmers voice</td> <td style="text-align: center;">■</td><td style="text-align: center;">■</td><td style="text-align: center;">■</td><td style="text-align: center;">■</td> <td style="text-align: center;">■</td><td style="text-align: center;">■</td><td style="text-align: center;">■</td><td style="text-align: center;">■</td> <td style="text-align: center;">■</td><td style="text-align: center;">■</td><td style="text-align: center;">■</td><td style="text-align: center;">■</td> <td style="text-align: center;">■</td><td style="text-align: center;">■</td><td style="text-align: center;">■</td><td style="text-align: center;">■</td> <td style="text-align: center;">■</td><td style="text-align: center;">■</td><td style="text-align: center;">■</td><td style="text-align: center;">■</td> </tr> <tr> <td>Revision of guideline</td> <td></td><td></td><td></td><td style="text-align: center;">△</td> <td></td><td></td><td></td><td></td> <td></td><td></td><td></td><td style="text-align: center;">△</td> <td></td><td></td><td></td><td></td> <td></td><td></td><td></td><td style="text-align: center;">△</td> </tr> </tbody> </table>	Implementing Agency	Activities	Implementation schedule																				2013				2014				2015				2016				2017				1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	BoMC	Regular meeting on activities	▽	▽	▽	▽	▽	▽	▽	▽	▽	▽	▽	▽	▽	▽	▽	▽	▽	▽	▽	▽	Public relations	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	Woreda/ Municipality	Record of trade	—————																				Management committee meeting	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	Farmers voice	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	Revision of guideline				△								△								△	
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The monitoring results must be reflected to the Project Plan No.17 for the better application.																																																																																																																																																																																															

Project No. 17

Project Title	Ginger Market Infrastructure Development		
Strategy	3: Improvement of Effective Market Infrastructure to Empower Market Activities 3-2: Improvement of Market Infrastructure at Woreda Marketplaces in Target Areas		
Master Plan Program	Woreda Marketplace Improvement Program		
Project Period	2013 - 2016 (4 years)		
Project Site	Following 4 woredas where PP01 for Strengthening of the Agricultural Market Information Service had been executed. (1) Boloso Sore (2) Boloso Bombe (3) Kindo Kosha (4) Tembaro		
Target Crop/Product	Ginger		
Target Group	Woreda administration, Town municipality, Traders of ginger, Ginger producers		
Implementing Agency	BoMC, WoMC Woreda administration, Town municipality	Supporting Agency	AGP Other donors
<p>Background & Objectives:</p> <p>SNNPR produces 99% of total ginger production in Ethiopia. Ginger is able to be sold in fresh or in dried form, and is very important cash crop for farmers. Generally, in SNNPR, brokers buy fresh ginger in woreda marketplaces and sell traders in Addis Ababa. While, dried ginger are sold for a) consumables as tea, spice mix etc. and b) export to the Middle East. There is no big trader in SNNPR and they are mostly in Addis Ababa. Brokers in SNNPR are buying ginger in very poor woreda open air marketplaces without sun/rain shed and drainage canal. So, it is expected to improvement of a marketplace through provision of market facility.</p> <p>Under this situation, the Study constructed a new market facility for ginger at Hadaro town of Hadaro Tunto woreda in Kembata Tembaro zone, as Pilot Project No.7 (PP07), in order to improve transaction circumstances and to strengthen management capability of the town for quality improvement and extension of the market for ginger.</p> <p>As a result, a facility with roof and concrete floor has brought orderly trade of hginger between licensed traders and farmers to the town. So, all stakeholders such as farmers (producer), management body (town) and traders have given high appreciation of the facility and its management. The noteworthy advantages are as follows:</p> <p>1) Since transaction must be done within designated space by licensed traders, illegal traders have remarkably decreased. So, proper transactions between traders and farmers have started.</p>			

<p>Previously, farmers sometime were forced to sell products at cheap prices by traders. Since licensed traders are obliged to use a calibrated balance, unfair transactions with farmers have been reduced.</p> <p>2) Since some ginger roots are kept under the roof and on the floor, quality is not deteriorated.</p> <p>3) Newly introduced facility use tax on traders brings economic benefit to the woreda.</p> <p>Consequently, as Project Plan No.17 under the Market Infrastructure at Woreda Marketplace Improvement Program, a ginger market infrastructure improvement is planned for implementation for the other woredas.</p>		
<p>Activities:</p>		
<p>BoMC :</p> <ol style="list-style-type: none"> 1. Provision of standard design drawings. 2. Provision of standard tender documents. 3. Technical support for finalization of design drawings and tender documents. 4. Workshop on management of infrastructure including provision of draft management guideline. 	<p>Woreda administration/Town municipality:</p> <ol style="list-style-type: none"> 1. To decide facility scale based on transaction volume of traders. 2. To make facility layout by considering topographic condition of a proposed site and scale. 3. Revision and/or finalization of design drawings and cost estimate (entrusted work to engineering consultant). 4. Preparation of tender documents. 5. Tendering, evaluation and contract. 6. Construction supervision (entrusted work to engineering consultant). 7. Establishment of Management Committee 8. Preparation of management guideline 9. Management of infrastructure. 	<p>Other donors :</p> <p>Technical and financial support to the activities to be carried out by Woreda/Municipality.</p>
<p>Input:</p>		
<p>BoMC / Woreda :</p> <ol style="list-style-type: none"> 1. Deployment of staff of BoMC in charge. 2. Deployment of staff of woreda in charge. 	<p>AGP :</p> <ol style="list-style-type: none"> 1. Construction cost of facility. 2. Cost for design revision and construction supervision by the consultant. 	<p>Other donors :</p> <p>Remuneration of engineering advisor together with necessary activity cost.</p>
<p>Facility Layout and Design:</p> <p><u>Concept of Layout</u></p> <ol style="list-style-type: none"> 1. A new facility shall be constructed within the area of the existing market place. 2. A new facility shall be constructed at a corner of the existing market place. 3. Drainage ditch shall be provided surrounding the facility. 4. Allocation of facility blocks shall refer the Layout Plan 1 or Layout Plan 2 annexed. 		

Design Concept

1. Facility shall have concrete floor.
2. Facility shall have roof supported by concrete columns and beams.
3. Basic space for transaction is 6m x 6m, subject to change according to transaction volume.
4. Facility shall have proper drainage system with outlet.
5. Trading space in front of facility shall be stone paved as much as possible.
6. Access road to facility is mandatory.
7. Standard drawings are as follows according slope of the ground. Refer the drawings in Appendices (volume 2).
 - 1) Type A1 : Size 6m x 30m=180m², H=3.5m, 5 floor levels (steps), 5 trading spaces of 6m x 5m
 - 2) Type A2 : Size 6m x 30m=180m², H=3.5m, 3 floor levels, 5 trading spaces of 6m x 6m
 - 3) Type A3 : Size 6m x 30m=180m², H=3.5m, 2 floor levels, 5 trading spaces of 6m x 6m
 - 4) Type A4 : Size 6m x 30m=180m², H=3.5m, 1 floor levels (flat), 5 trading spaces of 6m x 6m
 - 5) Type B1 : Size 12m x 42m=504m², H=3.5m, 3 floor levels, 14 trading spaces of 6m x 6m
 - 6) Type B2 : Size 12m x 42m=504m², H=3.5m, 1 floor levels (flat), 14 trading spaces of 6m x 6m

Cost:

1. Construction cost of facility

Construction cost of a facility is calculated after the decision of facility scale and ground slope and selection of facility type and number and area of stone pavement.

An approximate construction cost of each type as of Jan. 2011 excluding VAT is shown below:

- 1) Type A1 : 340,000 Birr /Block
- 2) Type A2 : 290,000 Birr /Block
- 3) Type A3 : 280,000 Birr /Block
- 4) Type A4 : 260,000 Birr /Block
- 5) Type B1 : 670,000 Birr /Block
- 6) Type B2 : 620,000 Birr /Block
- 7) Stone pavement of trading space of 40 cm thickness : 150 Birr /m²

2. Manpower cost

- 1) Design and construction supervision : 16,000 Birr/month x 5 months = 80,000 Birr
- 2) Technical advisor cost : US15,000/month x 2 months = US\$30,000

3. Training cost

5,000 Birr/time

Schedule:

This Project shall collaborate with AGP and follow their budget. However, it is proposed that implementation of the Project shall be done in accordance with the following zones, i.e. one year for one zone. The Project consists of 2 phases, construction and management training and practice. It is estimated that preparatory work for contract requires 2 months, 4 months for construction and 5 months training and practice.

Zone	Woreda	Phase	Implementation Plan																			
			2013				2014				2015				2016				2017			
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Wolayita	Boloso Sore	I Construction	█	█																		
		II Management			█	█																
	Boloso Bombe	I Construction					█	█														
		II Management							█	█												
	Kindo Koisha	I Construction									█	█										
		II Management											█	█								
Kembata Tembaro	Tembaro	I Construction															█	█				
		II Management																█	█			

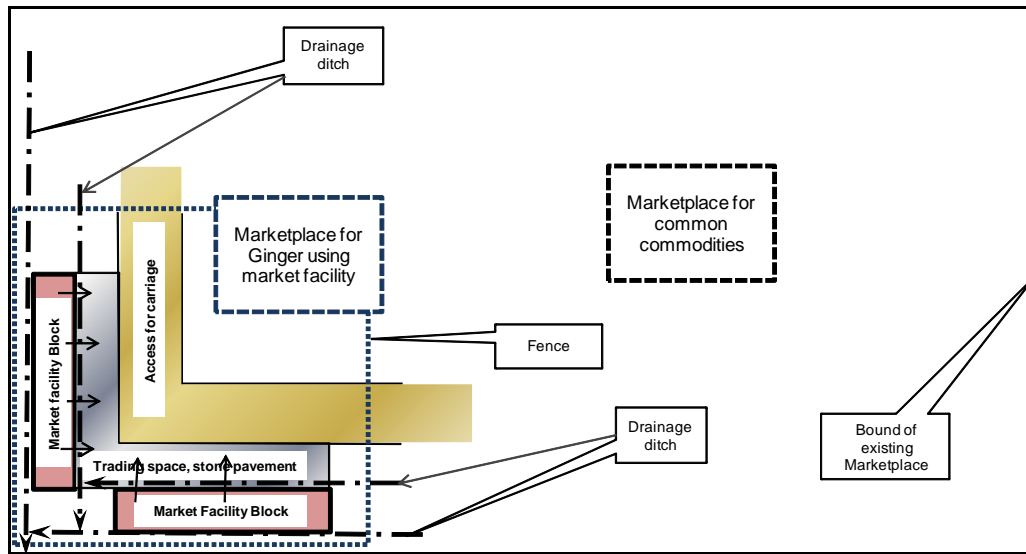
Remarks:

Four (4) woredas proposed in this Project No.17 are not objective woredas of AGP. So, for the implementation of the Project, BoMC shall have close discussion with AGP on necessity of this Project and AGP's support.

In addition, during planning, design modification and construction supervision, a technical advisor is indispensable. So, support from the other donor shall be sought.

Annex : Layout Plans and Project Costs of Ginger Marketplace

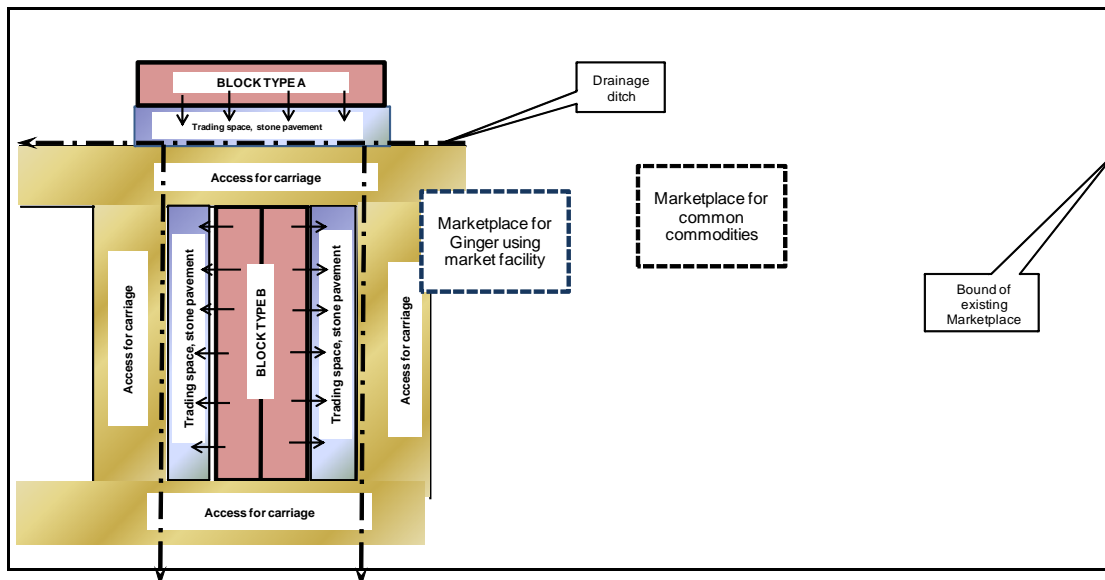
Layout Plan 1



Project Cost for Layout Plan 1 (without technical advisor cost and training cost)

1) Facility construction	Type A1 x 2 =	: 680, 000 Birr
2) Stone pavement	360 m ² =	: 54,000 Birr
3) Design & construction supervision		: 80,000 Birr
4) Contingency		: 86,000 Birr
	Total	: 900,000 Birr

Layout Plan 2



Project Cost for Layout Plan 2 (without technical advisor cost and training cost)

1) Facility construction	Type A1 x 1 =	: 340, 000 Birr
2) Facility construction	Type B1 x 1 =	: 670,000 Birr
3) Stone pavement	684 m ² =	: 102,600 Birr
4) Design & construction supervision		: 80,000 Birr
5) Contingency		: 127,400 Birr
	Total	: 1,320,000 Birr

Project No. 18

Project Title	Market Infrastructure Development for Rural Agricultural Product		
Strategy	3: Improvement of Effective Market Infrastructure to Empower Market Activities 3-2: Improvement of Market Infrastructure at Woreda Marketplaces in Target Areas		
Master Plan Program	Woreda Marketplace Improvement Program		
Project Period	2013 - 2017 (5 years)		
Project Site	Following 13 woredas; out of AGP's 19 target woredas excluding 6 woredas where facility construction has been executed in 2012. (1) Wondo Genet, Sidama zone (2) Melega, Sidama zone (3) Gereche, Sidama zone (4) Esera, Dawro zone (5) Enmor Ener, Guraghe zone (6) Endagegn, Guaghe zone (7) Meserak Azernet, Silitie zone (8) Debub Bench, Bemch Maji zone (9) Debub Ari, South Omo zone (10) Semi Arir, South Omo zone (11) Chenna, Keffa zone (12) Yen Special woreda (13) Basketo Special woreda		
Target Crop/Product	Important cash crop/product of each woreda		
Target Group	Woreda administration, Town municipality, Traders and producers of target crop/product		
Implementing Agency	BoMC Woreda administration, Town municipality	Supporting Agency	AGP Other donors
<p>Background & Objectives:</p> <p>The Agricultural Development Project (AGP) under the World Bank had launched in 2010 with 3 components. Rural Infrastructure Development is one of 3 components and aims to construct facilities for regional development. The construction of market facility is subject to it. However, AGP provides only cost for construction of facility without any technical or management support. While, the JICA Study Team constructed market facilities for haricot bean and ginger as the samples to improve trade environment and to enhance management of facility for quality betterment and expansion of market.</p> <p>As the results, with provision of a proper market facility, fair trade by licensed traders is realized thus high appropriation was given by the stake holders. The remarkable outputs are:</p>			

- 1) Since transaction must be done within designated space by licensed traders, illegal traders have remarkably decreased. So, proper transactions between traders and farmers have started. Previously, farmers sometime were forced to sell products at cheap price by traders. Since licensed traders are obliged to use a calibrated balance, unfair transactions with farmers are reduced.
- 2) Since commodities are kept under the roof and on the floor, its quality is improved.
- 3) Newly introduced facility use tax on traders brings economic benefit to the woreda.

In this context, Project Plan No.15 and No.17 for market infrastructure development for haricot bean and ginger are proposed under this Master Plan Program. In this Project Plan No.18: Market Infrastructure Development for Rural Agricultural Product is proposed and BoMC acts positive involvement for a construction of market facility by AGP in terms of technical and management aspects.

Activities:

<p>BoMC :</p> <ol style="list-style-type: none"> 1. Provision of standard design drawings. 2. Provision of standard tender documents. 3. Technical support for finalization of design drawings and tender documents. 4. Workshop on management of infrastructure including provision of draft management guideline. 	<p>Woreda administration/Town municipality:</p> <ol style="list-style-type: none"> 1. To decide target agricultural product for a market facility 2. To decide facility scale based on transaction volume of traders. 3. To make facility layout by considering topographic condition of a proposed site and scale. 4. Revision and/or finalization of design drawings and cost estimate (entrusted work to engineering consultant). 5. Preparation of tender documents. 6. Tendering, evaluation and contract. 7. Construction supervision (entrusted work to engineering consultant). 8. Establishment of Management Committee 9. Preparation of management guideline 10. Management of infrastructure. 	<p>Other donors :</p> <p>Technical and financial support to the activities to be done by Woreda/ Municipality.</p>
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Input:

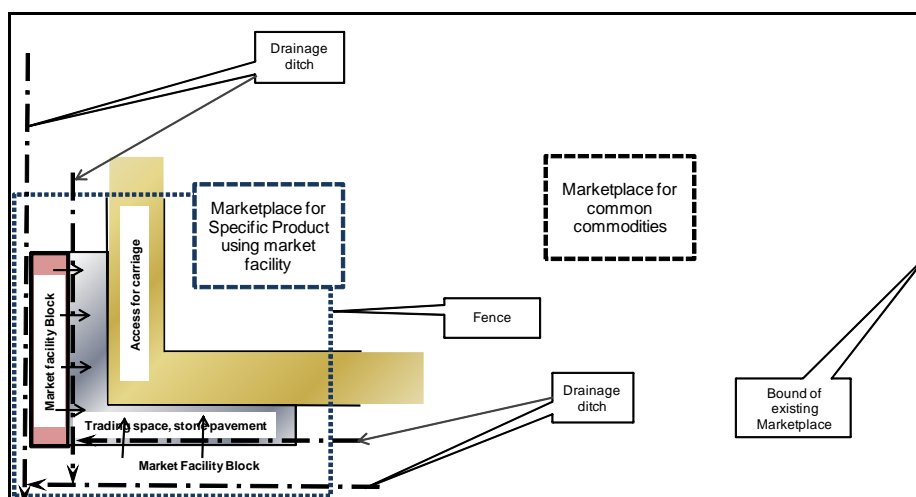
<p>BoMC / Woreda :</p> <ol style="list-style-type: none"> 1. Deployment of staff of BoMC in charge. 2. Deployment of staff of Woredain charge. 	<p>AGP :</p> <ol style="list-style-type: none"> 1. Construction cost of facility. 2. Cost for design revision and construction supervision by the consultant. 	<p>Other donors :</p> <p>Remuneration of engineering advisor together with necessary activity cost.</p>
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Facility Layout and Design:

Concept of Layout

1. A new facility shall be constructed within the area of the existing market place.
2. A new facility shall be constructed at a corner of the existing market place.
3. Drainage ditch shall be provided surrounding the facility.
4. Allocation of facility blocks shall refer the following Layout Plan.

Layout Plan



Design Concept

1. Facility shall have concrete floor.
2. Facility shall have roof supported by concrete made columns and beams.
3. Basic space for transaction is 6m x 3m, subject to change according to transaction volume.
4. Facility shall have proper drainage system with outlet.
5. Trading space in front of facility shall be stone paved as much as possible.
6. Access road to facility is mandatory.
7. Standard drawings are as follows according slope of the ground. Refer the drawings in Appendices (volume 2).
 - 1) Type A1 : Size 6m x 30m=180m², H=3.5m, 5 floor levels (steps), 10 trading spaces of 6m x 3m
 - 2) Type A2 : Size 6m x 30m=180m², H=3.5m, 3 floor levels, 10 trading spaces of 6m x 3m
 - 3) Type A3 : Size 6m x 30m=180m², H=3.5m, 2 floor levels, 10 trading spaces of 6m x 3m
 - 4) Type A4 : Size 6m x 30m=180m², H=3.5m, 1 floor levels (flat), 10 trading spaces of 6m x 3m
 - 5) Type B1 : Size 12m x 42m=504m², H=3.5m, 3 floor levels, 28 trading spaces of 6m x 3m
 - 6) Type B2 : Size 12m x 42m=504m², H=3.5m, 1 floor levels (flat), 28 trading spaces of 6m x 3m

Cost:

1. Construction cost of facility

Construction cost of a facility is calculated after the decision of facility scale and ground slope and selection of facility type and number and area of stone pavement.

An approximate construction cost of each type as of Jan. 2011 excluding VAT is shown below:

- 1) Type A1 : 340,000 Birr /Block
- 2) Type A2 : 290,000 Birr /Block
- 3) Type A3 : 280,000 Birr /Block
- 4) Type A4 : 260,000 Birr /Block
- 5) Type B1 : 670,000 Birr /Block
- 6) Type B2 : 620,000 Birr /Block
- 7) Stone pavement of trading space of 40 cm thickness : 150 Birr /m²

2. Manpower cost

- 1) Design and construction supervision : 16,000 Birr/month x 5 months = 80,000 Birr
- 2) Technical advisor cost : US15,000/month x 2 months = US\$30,000

3. Training cost

5,000 Birr/time

* Total Cost of the above Layout Plan (without technical advisor cost and training cost)

- a. Facility construction Type A1 x 2 = : 680, 000 Birr
 - b. Stone pavement 360 m² = : 54,000 Birr
 - c. Design & construction supervision : 80,000 Birr
 - d. Contingency : 86,000 Birr
- Total : 900,000 Birr

Schedule:

Zone	Woreda	Phase	Implementation Plan																			
			2013				2014				2015				2016				2017			
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Sidama	Wondo Genet	I Construction	█	█																		
		II Management			█	█																
	Melega	I Construction	█	█																		
		II Management			█	█																
	Gereche	I Construction	█	█																		
		II Management			█	█																
Dawro	Esera	I Construction					█	█														
		II Management							█	█												
Gurage	Enmor Ener	I Construction					█	█														
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	Endagegn	I Construction					█	█														
		II Management							█	█												
Siltie	Meserak Azernet	I Construction									█	█										
		II Management											█	█								
Bench Maji	Debub Bench	I Construction									█	█										
		II Management											█	█								
South Omo	Debub Ari	I Construction													█	█						
		II Management															█	█				
	Semi Ari	I Construction													█	█						
		II Management															█	█				
Keffa	Chenna	I Construction													█	█						
		II Management															█	█				
Yem Special Woreda		I Construction																	█	█		
		II Management																			█	█
Basket Special Woreda		I Construction																	█	█		
		II Management																			█	█

This Project shall collaborate with AGP and follow his budget. However, it is proposed that

implementation of the Project shall be done in accordance with the following zones. The Project consists of 2 phases, construction and management training and practice. It is estimated that preparatory work for contract require 2 months, 4 months for construction and 5 months training and practice.

Remarks:

It is unknown whether every woreda, objective woreda of AGP, proposes construction of market facility or not. So, for the implementation of the Project, BoMC shall have close discussion with AGP on necessity of this Project and AGP's support.

Project No. 19

Project Title	Promotion of Standard Agricultural Warehouse		
Strategy	3: Improvement of Effective Market Infrastructure to Empower Market Activities 3-4: Development of New Agricultural Warehouse and Improvement of Existing Warehouse for Effective Use		
Master Plan Program	Agricultural Warehouse Construction and Existing Warehouse Improvement Program		
Project Period	2013 - 2017 (5 years)		
Project Site	6 zones (Guraghe, Silitie, Kembata Tembaro, Wolayta, Hadiya, Sidama) and Alaba Special woreda		
Target Crop/Product	Cereal grains, Pulses		
Target Group	Municipalities, Cooperative unions, Primary cooperatives		
Implementing Agency	BoMC, ZoMC, WoMC	Supporting Agency	AGP, AIP, or other donors
<p>Background & Objectives:</p> <p>Agricultural warehouses in Ethiopia are generally being managed and operated by government agencies, agricultural cooperatives and private sectors. However, most of them have no necessary functions such as traffic lines inside the warehouse, enough doors or quality control arrangements such as ventilation and anti-insect devices. Moreover, there are no guidelines for construction of warehouses to meet the actual requirement in size and purpose. Most of them are not block made for a long storage period. They need significant improvement and renovation. Some warehouses store grains/ pulses together with seeds, fertilizers and chemicals in a same room without any partition.</p> <p>In this context, in order to improve effective agricultural marketing system and to reduce storage losses, functional and rational warehouse should be extended the same as the one the pilot project (PP08) constructed, as a standard warehouse of 500 tons for an agricultural cooperative union's use, and they should be given technical training for proper management of the warehouse.</p> <p>The Project Plan aims to promote standard warehouse for agricultural products and provides standard design of warehouse of 500 tons and 1000 tons and know-how of procurement of contractor and other technical advice for construction of new warehouse.</p> <p>The target areas are 6 zones (Guraghe, Silitie, Kembata Tembaro, Wolayta, Hadiya, Sidama) and Alaba Special woreda, where WFP/P4P target cooperative unions exist.</p> <p>Target groups are municipalities, cooperative unions and primary cooperatives who intend to construct a new warehouse for agricultural products. ZoMC of target zones calls a conference once a year to confirm organization(s) who wish to construct a new warehouse. The construction cost including designing and supervising costs shall be born or procured by the owner of the warehouse. BoMC provides support for financial procurement / application.</p>			

Activities:

BoMC:

1. Meeting on activity of the Project Plan / selection of site at zones
2. Support for financial procurement by donor
3. Provision of design drawings and tender documents (Refer to Appendix B in volume 2)
4. Support on design modification and tendering

Target groups:

1. Procurement of construction budget / application of subsidy
2. Finalization of design and cost estimation
3. Procurement of consultant for supervision work
4. Management of constructed warehouse

Input:

BoMC:

1. Deployment of staff in BoMC and woreda (WoMC)
2. Technical guidance to the target groups

Target groups:

1. Funds for construction
2. Funds for procurement of consultant for design modification and construction supervision

Cost:

* The project cost is estimated under the assumption that 1 or 2 warehouses will be built annually.

Expense for BoMC's support activities:

- Transportation and travel allowance	: 64,000/year x 5years
(Breakdown)	
Travel allowance	: @340 for 2 days trip x 12 times/year = 4,080 Birr/year
Transportation cost (fuel)	: @5,000/time x 12 times/year = 60,000 Birr/year
Sub total	: 320,000 Birr
Contingency (10%)	: 32,000 Birr
Total	: 352,000 Birr

Schedule:

It is not obvious since applicants for construction of warehouse haven't been decided at present; detail implementation schedule is not able to be shown. A more realistic implementation schedule can be planned when anticipated owners of warehouses are identified. The required time for construction is 2 months for preparatory work and 4 months for construction.

Implementing Agency	Activities	Implementation schedule																			
		2013				2014				2015				2016				2017			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
BoMC	Regular meeting with Zone/Budge procurance by donor	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Zone	Regular meeting with PC & Union/Selection of owner of warehouse	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■

Construction cost for reference:

The funds for construction cost should be prepared by the warehouse owner (municipality or coop. union). The construction cost differs by the size of warehouse. Following figures show the estimated cost for 500 ton and 1000 ton warehouse based on the 2011 costs; VAT is excluded.

1) 500 ton class

Size L x B x H = 24m x 11m x 4.5m (264 m²), with 2 sliding doors and ventilation windows.

One story building with brick wall, reinforced concrete columns and beams and folded iron roofing sheet with steel truss.

Estimated cost:

- Warehouse : 530,000 Birr
- Design & construction supervision : 50,000 Birr
- Contingency : 50,000 Birr
- Total : 630,000 Birr

2) 1,000 ton class:

Size L x B x H = 36m x 11m x 5.5m (396 m²), with 2 sliding doors and ventilation windows.

One story building with brick wall, reinforced concrete columns and beams and folded iron roofing sheet with steel truss.

Estimated cost:

- Warehouse : 720,000 Birr
- Design & construction supervision : 50,000 Birr
- Contingency : 60,000 Birr
- Total : 830,000 Birr

Project No. 20

Project Title	Existing Agricultural Warehouse Improvement		
Strategy	3: Improvement of Effective Market Infrastructure to Empower Market Activities 3-4: Development of New Agricultural Warehouse and Improvement of Existing Warehouse for Effective Use t		
Master Plan Program	Agricultural Warehouse Construction and Existing Warehouse Improvement Program		
Project Period	2014 - 2017 (4 years)		
Project Site	Wolayita zone (6 woreda), Hadiya zone (3 woreda), Kembata Tembaro zone (1 woreda), Guraghe zone (6 woreda), Silitie zone (3 woreda), Alaba Special woreda		
Target Crop/Product	Cereals, Pulses		
Target Group	Primary Cooperatives which possess own warehouses among 65 primary cooperatives for the target of Projetc No.7.		
Implementing Agency	BoMC, ZoMC, WoMC	Supporting Agency	
<p>Background & Objectives:</p> <p>Many warehouses of primary cooperatives are not appropriate for storage of grains. They are made of wood and mud with only one entry door. No ventilation facilities are available and no sun light comes inside. The holding capacity is also very small. The primary cooperatives without their own agricultural warehouse rent one from a municipality, but these warehouses are not those which were originally built for this purpose, thus they don't have proper structure and functions necessary for an agricultural warehouse. There are many issues on agricultural warehouse to be addressed.</p> <p>Technical training of proper warehouse management was implemented by PP in order to make cooperative staff and members aware of current issues and problems, and hence, to reduce the storage loss and to improve the quality. As a result, after implementation of the above-mentioned training, in which issues related to warehouse renovation were also discussed, the small number of trained primary cooperatives was found that they actually started some activities for improved warehouse management. Project plan No.7 will implement the training of warehouse management and warehouse renovation for 65 primary cooperatives, which were not trained in the pilot project. This project will financially assist the primary cooperatives, who participated in project No.7, with provision of construction materials necessary for warehouse renovation.</p> <p>The details of the warehouses which are used by 65 primary cooperatives are not grasped. Hence, WoMC staff will confirm their conditions of warehouses of primary cooperatives, select the applicant cooperatives. 26 primary cooperatives will be targeted in this project. This figure is calculated based on the assumption that 40% of 65 primary cooperatives have own warehouses.</p>			

The contents and the purpose of a renovation work are as follows:

- Additional construction of a door: A carrying-in entrance and carrying-out opening are secured for FIFO (first-in first-out) and work flow line reservation. The existing door is used as is and adds one new door (2m in width x 2m in height, double doors opening outward).
- Installation of ventilation openings: The purpose of installation of a wooden frame with mesh at the upper part of wall of none-ventilated warehouse is to promote the ventilation in warehouse with high temperature and high humidity and also to prevent the infestation of pests and deterioration of grain quality during storage. Although the size and quantity of ventilation openings differ from each other in the configuration and size of warehouse, six wooden frames per warehouse (200mm in width x 400mm in height, with woven net) shall be installed.
- Plastic sheeting: The floor in a warehouse of cooperatives is mostly an earthen floor. Earthen floor of agricultural warehouses are very dirty because PP bags for farm products, agricultural chemicals and seeds are stored together in the warehouse and piled up directly on earthen floor. The purpose of plastic sheeting is to prevent mold damage by the humidity of the earthen floor, adhesion of soil and foreign substances and residual pesticides problem. Five plastic sheets (4m x 5m) per warehouse shall be provided.

Activities:

[2014]

1. BoMC assigns the full-time staff for this project and conducts the drive for funds on warehouse improvement.

[2015]

2. WoMC staff confirm the situation of existing warehouses at the training, and make long list at the end of training every year. After confirmation of the situation of warehouses and the applicants, BoMC makes the short list.
3. BoMC selects 26 cooperatives.
4. BoMC procures work materials (wood doors, wooden frames with net, plastic sheets).
5. BoMC provides the work materials to 26 cooperatives. Standard drawings for renovation are also offered.
6. Cooperatives carry out the renovation work by themselves.
7. WoMC conducts technical assistance and supervision. WoMC submits completion of work to BoMC.
8. BoMC conducts monitoring of operation and management of renovated warehouse.

[2016] Same as 2015

[2017] Same as 2015

Input:

BoMC / WoMC:

1. Expenses of driving for funds
2. Renovation work materials cost

Primary Cooperatives:

1. Renovation labor

Cost:

1. Expenses of driving for funds:

* Traveling cost and daily allowance (BoMC/WoMC): 12,000

* Vehicle fuel cost: 20,000

* Communication cost and supplies expenses: 2,000

Sub-total 1: 34,000 Birr

2. Renovation work materials cost:

(1) Wooden door: 20,800 (@800 x 1 pc/coop x 26 coops)

(2) Wooden frame with mesh: 46,800 (@300 x 6 pcs/coop x 26 coops)

(3) Plastic sheet: 78,000 (@600 x 5 pcs/coop x 26 coops)

(4) Transportation cost of materials: 30,000

Sub-total 2: 175,600

Sub total (1+2) : 209,600 Birr

Contingency (10%) : 20,960 Birr

Total : 231,000 Birr

Schedule:

* Period of driving for fund is for 1 year.

* To be implemented along with Plan No.7.

* Renovation work is conducted the next year of the training of Plan No.7.

* Work period per warehouse assumes for 0.5 – 1.0 month, and the work is conducted during the empty period of warehouse (July – September).

* This project will be finished upon achievement of objectives which 26 coops (warehouses) are allocated.

Activities	2014				2015				2016				2017			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
1. Drive for fund to implement project by BoMC.																
2. Warehouse research at training by BoMC staff and making of short list after confirmation of renovated warehouse & applicants																
3. Selection of cooperatives by BoMC																
4. Procurement of work materials (door, frame with mesh, plastic sheet) by BoMC																
5. Allocation of materials & offer of drawings for renovation																
6. Implementation of renovation work by coops																
7. Supervision & completion report of work by WoMC																
8. Monitoring of management of renovated warehouse by WoMC																

Project No. 21

Project Title	Roadside Rural Promotion Center (RRPC) Development		
Strategy	3: Improvement of Effective Market Infrastructure to Empower Market Activities 3-5: Promotion of Agricultural Products Sales at Roadside Infrastructure		
Master Plan Program	Promotion of Rural Products Sales at Roadside Infrastructure Program		
Project Period	2013 - 2017 (5 years)		
Project Site			
Target Crop/Product			
Target Group	Local administration, Farmers group, Primary cooperative		
Implementing Agency	BoMC Local administration	Supporting Agency	HABP(FSP), AGP, Grass Roots Grant Aid (Japan), Other donors
<p>Background & Objectives:</p> <p>The main marketing routes from SNNPR consist of : i) Hawassa route, ii) Hosana~Arba Minch route, and iii) Jima route. On these routes, there are found street vendors of agricultural products on the roads in and around the main cities or producing areas. These street vendors are individuals and have no facility and thus are forced to be unstable sales. On the other hand, there are few rest stations on these routes and it makes long distance drivers and/or road users inconvenienced. In order to solve both inconveniences and to encourage a regional specific character, some proper sale places on the roadside are provided on strategic spots. The sales place shall be equipped with parking space, toilet etc. for drivers/road users and retail shops for product sellers. With an increment of users, buying power and transaction volume of products are expected to increase.</p> <p>However, since motorization in Ethiopia is still less-developed, the development concept of the facility is not for drivers or road users but for local people. It means that a facility will be a permanent market on the roadside for selling local products to road users and has a function of interaction with other local people and with road users. Thus, the facility is named as “Roadside Rural Promotion Center (RRPC)”.</p> <p>The location of a center shall be decided based on the following standing points.</p> <ol style="list-style-type: none"> 1) Disciplined organization shall handle management of facility. 2) Enough traffic is secure. 3) Land for facility is available. 4) There is a specific agricultural product for retail. <p>The following functions shall be equipped in the facility.</p> <ul style="list-style-type: none"> - Entrance and exit access - Gravel paved parking space for 20 midsize cars and 5 large size vehicles - Toilet - Coffee shop and kiosk - Retail shops for farm products 			

It is expected that a constructed RRPC encourages and activates rural economy and interaction between local people and people from other regions.

Activities:

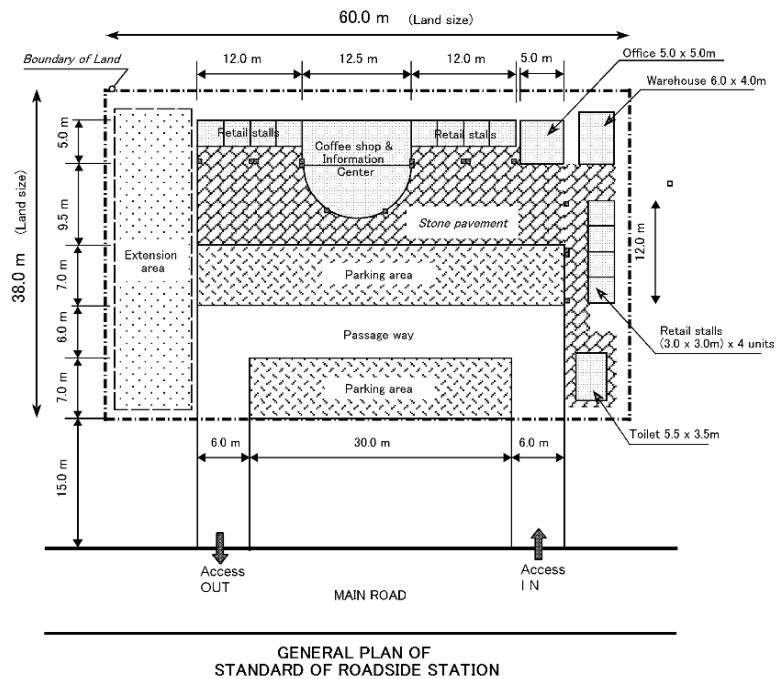
<p>BoMC/Local administration :</p> <ol style="list-style-type: none"> 1. Activity meeting at zones and woredas 2. Selection of place based on proposals from candidate management bodies 3. Preparation of drawing 4. Procurement of budget 5. Provision of necessary technical support 	<p>Management body :</p> <ol style="list-style-type: none"> 1. Preparation of business plan 2. Establishment of management organization 3. Management of facility 	<p>Donor :</p> <p>Checking of consistency with donor's program and necessary budget</p>
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Input:

<p>BoMC/Local administration :</p> <ol style="list-style-type: none"> 1. Deployment of staff of BoMC and Woreda 2. Business trip for procurement of budget 3. Periodical meeting among stakeholders 4. Design and construction supervision 	<p>Management body :</p> <ol style="list-style-type: none"> 1. Provision or acquire land for facility 2. Management fee 	<p>Donor :</p> <p>Provision of budget funds for facility construction</p>
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Basic Concept of Facility:

The basic design shall be decided by a management body and BoMC. The rough layout of facility is as follows:





Cost:

1. Construction cost (burden share by donor) : 4,500,000 Birr /place (except land)
2. Manpower cost (burden share of BoMC)
 - Design / Construction supervision : 16,000 Birr/month x 5 months = 80,000 Birr
3. Activity cost
 - 5,000 Birr/time : Burden of BoMC
 - 1,000 Birr/time : Burden of Local administration
 - 200 Birr/time : Burden of Management body
4. Trip expense
 - At cost (according to regulations)

Schedule:

Actual implementation of this Project Plan will be prepared after selection of management body for facility. For the implementation, many activities such as procurement of budget for donor, selection of place and management body, management method, design and construction supervision etc are required. So, strong leadership of BoMC is indispensable. The following schedule shows a sample for construction of one place. In case more places are available or feasible, such places are able to proceed simultaneously.

Implementing Agency	Activities	Implementation schedule																				
		2013				2014				2015				2016				2017				
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	
BoMC	Procurement of fund	■																				
	Public relation on project	■	■	■	■																	
	Selection of site			■																		
Executing body	Preparation of bussiness plan		■																			
	Establishment of managing body		■	■	■	■																
	Design / construction				■	■	■	■	■													

6.4.4 Plan for Capacity Strengthening of Cooperatives / Unions

Project No. 22

Project Title	Capacity Enhancement of Grain Cooperatives in Collective Marketing		
Strategy	<p>4: Catch up and Adjustment to the Institutional System of Agricultural Marketing</p> <p>4-3: Strengthening of Supporting System for Cooperatives/Unions</p> <p>4-4: Capacity Development of BoMC Staffs</p> <p>2: Increment of profit by Introduction of High Value-Added Marketing</p> <p>2-2: Acceleration and Strengthen participation in the Quality Oriented Markets</p> <p>2-5: Acceleration of Collective Marketing</p>		
Master Plan Program	Plan for Capacity Strengthening of Cooperatives / Unions		
Project Period	2013 - 2017 (5 years)		
Project Site	Sidama, Silitie, Hadiya, Guraghe, Walayita, Kembata Tembaro zones and Alaba special woreda		
Target Crop/Product	Cereals, Pulses		
Target Group	9 grain unions and 84 grain primary cooperatives, which participate in WFP/P4P		
Implementing Agency	BoMC, ZoMC, WoMC	Supporting Agency	Donor (Development partner)
<p>Background & Objectives:</p> <p>As of June 2012, a total of 9 cooperative unions (CUs) and 84 primary cooperatives (PCs) participate in WFP/P4P. This project will carry out a comprehensive training program for these cooperatives to enhance their technical and organizational capacity in grain marketing.</p> <p>Along with the implementation of the training program, the project also aims to establish and develop the cooperative support system within BoMC structure so that they will be able to carry on the training program without any external assistance.</p> <p>In case Project No.7 is implemented as planned, this project will not organize the technical training (“quality control” and “warehouse management & improvement”), which should be undertaken by Project No.7.</p>			
<p>Activities:</p> <p>0. Necessary preparation for project implementation is carried out.</p> <p>0-1. A project team is organized in BoMC.</p> <p>0-2. Sensitization workshop for ZoMC/WoMC and CUs on the project approach is organized.</p> <p>1. The organizational capacity of cooperatives is enhanced.</p> <p>(Primary Cooperatives)</p> <p>1-1. Training materials for capacity development of organizational management are developed.</p>			

<p>(* Training subjects are shown in the remarks column.)</p> <p>1-2. ToT for WoMC staff is organized.</p> <p>1-3. WoMC staff organizes the training for the PC in charge.</p> <p>1-4. BoMC/WoMC staff organizes monitoring and follow up activities.</p> <p>(Cooperative Unions)</p> <p>1-5. Methodologies and contents for the CU needs survey are decided and prepared.</p> <p>1-6. Needs Survey is carried out.</p> <p>1-7. Based on outcomes of the survey, interventions are designed for CUs' capacity enhancement.</p> <p>1-8. Interventions are carried out.</p> <p>1-9. BoMC organizes monitoring.</p> <p>2. The capacity of cooperatives in collective marketing is enhanced.</p> <p>The activities under this output will be implemented in collaboration with concerned CUs if necessary.</p> <p>2-1. Training materials (marketing) are developed.</p> <p>2-2. ToT for WoMC staff is organized.</p> <p>2-3. WoMC staff organizes the training for the PC in charge.</p> <p>2-4. BoMC/WoMC staff organizes monitoring and follow up activities.</p> <p>3. The capacity of BoMC and its line offices to support cooperative development is strengthened.</p> <p>3-1. BoMC develops "Package for Capacity Development of PCs", compiling the materials prepared for output 1 and 2 above.</p> <p>3-2. BoMC assists ZoMC and WoMC for preparation of activity and budget plan to carry out the "Package for Capacity Development of PCs" independently.</p> <p>3-3. WoMC implement the plan prepared in 3-2 under supervision of BoMC and ZoMC.</p>	
<p>Input:</p>	
<p>BoMC:</p> <ol style="list-style-type: none"> 1. Organization of a project team 2. Preparation of activity plan 3. Development of training materials 4. Implementation of ToT 5. Monitoring & follow-up 6. Provision of assistance to WoMC in establishment of PC support system 	<p>WoMC:</p> <ol style="list-style-type: none"> 1. Participation in ToT 2. Implementation of PC training 3. Monitoring & follow-up 4. Preparation of activity and budget plan for training of other PCs 5. Implementation of training for other PCs
<p>ZoMC:</p> <ol style="list-style-type: none"> 1. Participation in ToT 2. Backstopping of WoMC 3. Implementation of training for those WoMC which did not participate in ToT 	<p>Primary Cooperatives:</p> <ol style="list-style-type: none"> 1. Consensus building among members for participation in the project 2. Ensure active participation of members in training

	3. Dissemination of what they learned in the training to the other members, who did not participate in the training															
<p>Cooperative Unions:</p> <p>1. Support and participation in training</p>	<p>Development Partner:</p> <p>1. Recruitment of an international consultant and allocation of budget necessary for implementation of project activities</p>															
<p>Cost:</p> <p>1. Development & duplication of training materials: $2,000 \times 84 \text{ WoMC} = 168,000 \text{ Birr}$</p> <p>2. Venue for ToT: $1,000 \times 5 \text{ days} \times 4 \text{ groups} = 20,000 \text{ Birr}$</p> <p>3. Per diem & transportation cost for ToT participants: $(50 \times 7 \text{ days} + 150 \times 5 \text{ days} + 100) \times 84 \text{ WoMC} = 100,800 \text{ Birr}$</p> <p>4. Per diem & transportation cost for ToT trainers: $(50 \times 9 \text{ days} + 150 \times 7 \text{ days} + 200) \times 3 \text{ C/P} = 5,100 \text{ Birr}$</p> <p>5. Per diem & transportation cost for trainers in PC training: $350 \times 5 \text{ days} \times 84 \text{ WoMC} = 147,000 \text{ Birr}$</p> <p>6. Per diem & transportation cost for monitoring: $350 \times 2 \text{ days} \times 84 \text{ WoMC} = 58,800 \text{ Birr}$</p> <p>7. Per diem & transportation cost for monitoring: $500 \times 15 \text{ days} \times 3 \text{ C/P} = 22,500 \text{ Birr}$</p> <p>8. Needs survey (per diem and transportation cost): 10,000 Birr</p> <p>9. Cost related to a hired consultant</p>																
<p>Schedule:</p> <p>The project will divide the participant PCs into four groups and organize training for one group each year. The following year, ZoMC will train those WoMC, which did not participate in ToT while WoMC will train continuously other PCs and farmer groups in wereda.</p> <table border="1"> <thead> <tr> <th>Group</th> <th>Zone</th> <th>Unions (No. of target PCs)</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>Sidama / Silitie</td> <td>Sidama Elto (8) / Melik (5)</td> </tr> <tr> <td>B</td> <td>Alaba Special</td> <td>Mancheno (20)</td> </tr> <tr> <td>C</td> <td>Hadiya / Guraghe</td> <td>Licha (6) / Walta (12) / Admas (10)</td> </tr> <tr> <td>D</td> <td>Walayita / Kembata Tembaro</td> <td>Damota (10) / Ambericho (5) / Angacha (8)</td> </tr> </tbody> </table>		Group	Zone	Unions (No. of target PCs)	A	Sidama / Silitie	Sidama Elto (8) / Melik (5)	B	Alaba Special	Mancheno (20)	C	Hadiya / Guraghe	Licha (6) / Walta (12) / Admas (10)	D	Walayita / Kembata Tembaro	Damota (10) / Ambericho (5) / Angacha (8)
Group	Zone	Unions (No. of target PCs)														
A	Sidama / Silitie	Sidama Elto (8) / Melik (5)														
B	Alaba Special	Mancheno (20)														
C	Hadiya / Guraghe	Licha (6) / Walta (12) / Admas (10)														
D	Walayita / Kembata Tembaro	Damota (10) / Ambericho (5) / Angacha (8)														

	2013	2014	2015	2016	2017
Preparation					
Material development	■■■■				
Activity plan formulation	■■■■				
Selection of target PCs	■	■	■	■	
Training Programme					
Group A		■■■■			
Group B			■■■■		
Group C				■■■■	
Group D					■■■■
Follow Up Activity					
Group A		■■■■			
Group B			■■■■		
Group C				■■■■	
Group D					■■■■
Expansion of Training Programme					
Group A			←-----→		
Group B			←-----→		
Group C				←-----→	
Group D					←-----→

Remarks:

(1) Training subjects

Organizational management

- What is cooperative
- Roles & responsibilities of management committee, executive committee and members
- Communication within organization

Gender mainstreaming

- What is gender
- Enhancement of participation of men and women in organizational management

Accounting

- Book-keeping
- Aggregation of the monthly results and review or monthly fluctuation

Marketing system

- Overview of grain marketing and pricing mechanism
- Roles of cooperatives for livelihood improvement of members

Quality Control

- Same as PP02 training

Warehouse management

- Same as PP08 training

(2) Training material

The sample training material is shown in Appendices (volume 2).

Project No. 23

Project Title	Capacity Enhancement of Cooperatives / Farmer Groups in Non-grain Commodity Marketing		
Strategy	4: Catch up and Adjustment to the Institutional System of Agricultural Marketing 4-3: Strengthening of Supporting System for Cooperatives/Unions 4-4: Capacity Development of BoMC Staffs 2: Increment of profit by Introduction of High Value-Added Marketing 2-2: Acceleration and Strengthen participation in the Quality Oriented Markets 2-5: Acceleration of Collective Marketing		
Master Plan Program	Plan for Capacity Strengthening of Cooperatives / Unions		
Project Period	2013 – 2016 (4 years)		
Project Site	Wolayita, Kembata Tembaro, Sidama, Silitie, Guraghe, Gamo Gofa, South Omo zones and Alaba special woreda,		
Target Crop/Product	Ginger, Mango, Avocado, Cassava, Red Pepper		
Target Group	- 26 PCs / Farmer Groups engaged in Collective Marketing of Non-grain Commodities - WoMCs		
Implementing Agency	BoMC, ZoMC, WoMC	Supporting Agency	Donor (Development Partner)
<p>Background & Objectives:</p> <p>In SNNPR the number of grain primary cooperatives (PCs) and farmer groups has been gradually increasing, however, those groups which deal with non-grain commodities are still very small in number and most have no skill or knowledge to start business. Since profitability of non-grain commodities is generally better than that of grains, collective marketing of non-grain commodities is likely to lead to the livelihood improvement of smallholder farmers.</p> <p>The study has identified mango, avocado, ginger, cassava and red pepper as cash crops with comparative advantage. Accordingly, this project assists 1) those cooperatives and farmer groups which are engaged in or aim to start the collective marketing of these identified crops and 2) BoMC to establish a comprehensive and functional system to support cooperatives and farmer groups in new business.</p> <p>The cooperative unions (CUs) dealing with the identified crops in SNNPR are Gamo Gofa CU (mango), Damota Walayita CU (ginger) and Ambericho CU (ginger). Therefore, for the time being, the project will work with only these three CUs. In case the Project No.12, which plans to assist ginger business, selects a PC for its target group, this project will closely collaborate with the Project No.12 in support of such PC.</p>			

Activities:

0. Necessary preparation for project implementation is carried out.
 - 0-1. A project team is organized in BoMC.
 - 0-2. A total of 26 PCs and farmer groups are selected. (* See the remarks for Selection of target groups below.)
 - 0-3. Sensitization workshop for ZoMC/WoMC and CUs on the project approach is organized.

1. The organizational capacity of PCs / farmer groups is enhanced.
 - 1-1. Training materials for capacity development of organizational management are developed. (* See the remarks for Training subjects below.)
 - 1-2. ToT for WoMC staff is organized.
 - 1-3. WoMC staff organizes the training for a PC / a farmer group in charge.
 - 1-4. BoMC/WoMC staff organizes monitoring and follow up activities.

2. The capacity of cooperatives / farmer groups in collective marketing is enhanced.
 The activities under this output will be implemented in collaboration with concerned CUs if necessary.
 - 2-1. PC/farmer group selects a few potential commodities.
 - 2-2. Workshop will be organized to assess market conditions of potential commodities selected in 2-1.
 - 2-3. PC/farmer group selects a target commodity based on 2-2.
 - 2-4. Training materials related to quality improvement and post-harvest handling of selected commodity are developed.
 - 2-5. ToT for WoMC staff is organized.
 - 2-6. WoMC staff organizes the training for the PC / farmer group in charge.
 - 2-7. BoMC/WoMC staff organizes monitoring and follow up activities.

3. The capacity of BoMC and its line offices to support cooperative development is strengthened.
 - 3-1. BoMC develops “Package for Capacity Development of PCs/Farmer Groups”, compiling the materials prepared for output 1 and 2 above.
 - 3-2. BoMC assists ZoMC and WoMC for preparation of activity and budget plan to carry out the “Package for Capacity Development of PCs/Farmer Groups” independently.
 - 3-3. WoMC implement the plan prepared in 3-2 under supervision of BoMC and ZoMC.

Input:

BoMC:

1. Organization of a project team
2. Preparation of activity plan
3. Development of training materials
4. Implementation of ToT

WoMC:

1. Participation in ToT
2. Implementation of PC/farmer group training
3. Monitoring & follow-up
4. Preparation of activity and budget plan for

<p>5. Monitoring & follow-up 6. Provision of assistance to WoMC in establishment of PC support system</p>	<p>training of other PCs/farmer groups 5. Implementation of training for other PCs/farmer groups</p>																
<p>ZoMC: 1. Participation in ToT 2. Backstopping of WoMC 3. Implementation of training for those WoMC which did not participate in ToT</p>	<p>Primary Cooperatives / Farmer Groups: 1. Consensus building among members for participation in the project 2. Ensure active participation of members in training 3. Dissemination of what they learned in the training to the other members, who did not participate in the training</p>																
<p>Cooperative Unions: 1. Support and participation in training and marketing activities</p>	<p>Development Partner: 1. Recruitment of an international consultant and allocation of budget necessary for implementation of project activities</p>																
<p>Cost:</p> <ol style="list-style-type: none"> 1. Development & duplication of training materials: 2,000 x 26 WoMC =52,000 Birr 2. Venue for ToT: 1,000 x 5 days x 3 groups = 15,000 Birr 3. Per diem & transportation cost for ToT participants: (50 x 7 days + 150 x 5 days +100) x 26 WoMC = 31,200 Birr 4. Per diem & transportation cost for ToT trainers: (50 x 9 days + 150 x7 days +200) x 3 C/P = 5,100 Birr 5. Per diem & transportation cost for trainers in PC/farmer group training: 350 x 5 days x 26 WoMC = 45,500 Birr 6. Per diem & transportation cost for monitoring: 350 x 2 days x 26 WoMC = 18,200 Birr 7. Per diem & transportation cost for monitoring: 500 x 10 days x 3 C/P = 15,000 Birr 8. Cost related to a hired consultant 																	
<p>Schedule:</p> <p>The project will divide the participant PCs/farmer groups into three groups and organize training for one group each year. The following year, ZoMC will train those WoMC, which did not participate in ToT while WoMC will train continuously other PCs and farmer groups in wereda.</p> <table border="1"> <thead> <tr> <th>Group</th> <th>Zone</th> <th>Identified commodities</th> <th>No. of PC/WoMC</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>Wolayita / Kembata Tembaro</td> <td>Ginger, Mango, Avocado, Cassava</td> <td>6</td> </tr> <tr> <td>B</td> <td>Sidama / Alaba SP / Silitie / Guraghe</td> <td>Red Pepper, Avocado</td> <td>14</td> </tr> <tr> <td>C</td> <td>Gamo Gofa / South Omo</td> <td>Mango</td> <td>6</td> </tr> </tbody> </table>		Group	Zone	Identified commodities	No. of PC/WoMC	A	Wolayita / Kembata Tembaro	Ginger, Mango, Avocado, Cassava	6	B	Sidama / Alaba SP / Silitie / Guraghe	Red Pepper, Avocado	14	C	Gamo Gofa / South Omo	Mango	6
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	2013	2014	2015	2016
Preparation				
Material development	■			
Activity plan formulation	■			
Selection of target PCs	■	■	■	■
Training Programme				
Group A		■		
Group B			■	
Group C				■
Follow Up Activity				
Group A		■		
Group B			■	
Group C				■
Expansion of Training Programme				
Group A			←-----→	
Group B			←-----→	
Group C				↔

Remarks:

(1) Selection of target PCs/farmer group

This project will select three PCs/farmer groups per zone which are main production areas of cash crops (mango, Avocado, ginger, cassava and red pepper). The criteria for PC selection are listed below.

- Having been engaged or willing to start collective marketing of identified commodities
- Consensus among members to participate in the project.
- Willing to increase the number of women members.
- One PC/farmer group from one woreda

(2) Training subjects

Organizational management

- What is cooperative
- Roles & responsibilities of management committee, executive committee and members
- Communication within organization

Gender mainstreaming

- What is gender
- Enhancement of participation of men and women in organizational management

Accounting

- Book-keeping
- Aggregation of the monthly results and review or monthly fluctuation

Marketing system

- Overview of non-grain marketing and pricing mechanism
- Market survey
- Roles of cooperatives for livelihood improvement of members

Harvesting / Post-harvest

- Harvesting
- Post-harvest handling
- Processing

(Experiences from PP03, 04 & 05 will be utilized in preparation of training materials and contents for harvesting / post-harvesting training).

(3) Training material

The sample training material is shown in Appendices (volume 2).

Chapter 7 Recommendations

The roles for the government agencies in improvement of agricultural marketing systems are to formulate policies which encourage marketing actors to practice transactions in a fair and efficient manner, allocate necessary funds and perform the activities to realize such policies.

As being described in Chapter 4, there are a number of development issues which are likely to hamper the improvement of agricultural marketing systems in SNNPR. To put it simply, the issues are shortage of human and financial resources, underdeveloped social infrastructure and information network and low technology adaptation. The proposed development strategies and activities/projects for each strategy (i.e. 5-years Master Plan) are presented in Chapter 5 and 6. BoMC is expected to play a leading role in promoting and implementing those activities and projects.

In addition to the development strategies presented in Chapter 5, the SNNPR government and BoMC are strongly encouraged to implement the following points.

(1) BoMC should take an initiative in securing the project budget through collaboration with development partners

The annual budget of BoMC is generally too small to allocate sufficient funds to a new project. On the other hand, many development partners and NGOs are financially affluent. BoMC should enhance its capacity to prepare a financeable project proposal, which will attract external partners.

In the pilot projects, two local market facilities were constructed with a clear objective of vitalizing the local economy through the improvement of target commodity marketing. Although World Bank/AGP recognizes the importance of market facilities, what they plan to do in this aspect is only the construction of market facilities with roofs. It doesn't seem to have any clear idea about what is to be achieved through a market facility construction. No activities are planned for high-value addition of target commodities or improvement of marketing systems, which could be carried out by utilizing the constructed facility as a core of various activities. Construction of a new market facility alone may benefit a small number of traders/farmers but not a majority of stakeholders. BoMC should formulate a comprehensive project to improve the marketing system of particular commodities based on the experiences gained through the pilot projects as well as secure the fund from AGP for implementation.

The pilot project (PP02) organized the training on quality improvement of grains and pulses as well as warehouse management for WoMC and cooperatives. Along with delivering the training in the local language, simple training materials and well articulated contents were greatly appreciated by many stakeholders. WFP/P4P has expressed its intention to financially support the duplication of training materials. BoMC should have consultations with WFP/P4P to explore the ways of effectively collaborating with P4P.

IFAD organized through AMIP the training on post-harvest technologies and quality improvement for smallholder farmers in 40 woredas in SNNPR. After the training, farmer groups were instructed to prepare and submit a project proposal for AMIP loan. Most training was facilitated by local consultants and, unfortunately, did not provide training participants with any new technology which could be easily adopted by the participants. With extremely limited knowledge and skills in proposal writing, very few farmer groups managed to submit a proposal to AMIP. In view of this, BoMC and its line offices should support farmer groups, which have been trained on appropriate technologies developed by the Study Team, in preparation for a proposal to be submitted for AMIP loan.

BoMC should determine the implementation priority of 23 projects in the Master Plan first. In addition, it is recommended that BoMC establishes a new section in the bureau, which works with development partners and NGOs to facilitate and coordinate their support for BoMC activities.

(2) Capacity Strengthening of Primary Cooperatives and Cooperative Unions

As discussed in the Master Plan Program for “Capacity Strengthening of Cooperatives /Unions”, BoMC should organize a project team, which is responsible for the capacity enhancement of cooperatives. Up to now, BoMC has strongly promoted the establishment of new cooperatives but now it should change its strategy and put more emphasis on the capacity enhancement of existing cooperatives. Licha Hadiya Cooperative Union is one of the most competent cooperative unions in SNNPR. Its budget and membership are considerably bigger than those of any other union in the region and it has been engaged in a wide variety of businesses. The experiences of Licha Hadiya in business operation should be of great use to enhance the relevant capacities of other unions.

(3) Creation of Subsidy System for New Entrepreneurs

Many governments (both national and local) in industrialized countries provide subsidies for farmer groups (cooperatives) and/or private companies to promote policy measures. It gives a government a means of executing a policy as well as making use of capital and human resources of private sector.

As suggested in “Project on the Incubation of Ginger Washing & Drying Business”, the SNNPR government should introduce a subsidy system to financially assist producers’ and traders’ groups at the start of a new business. In this aspect, BoMC should be made responsible for securing required funding and establish a subsidy system in which applications are widely solicited from the public.

(4) Creation and Strengthening of Credit Facilities and Credit Guarantee System

Currently, in SNNPR, Omo Microfinance, the parastatal micro-finance institute, is a main provider of credit to agriculture-related businesses in rural communities. Because of a high default rate, the institute sets high interest rates of 10 – 18%. Very few, except for speculative ventures, could stay in business while bearing such extremely high interest.

Although the interest rate of a commercial bank is around 7%, lower than that of Omo Microfinance,

few cooperatives or farmer groups are able to fulfill its collateral requirement. BoMC should create a new system such as a credit guarantee to facilitate credit provision of commercial banks to agriculture-related business undertaken by cooperatives and farmer groups. In addition to the creation and operation of credit facilities, such a guarantee system will be of great help for farmer groups in starting new businesses.

(5) Creation and Strengthening of Market Linkage between Producers and Traders

Smallholder farmers residing in rural areas have little access to information on traders, market and consumer trends in towns. BoMC and its line offices should work in collaboration not only for value-addition of identified commodities, but also for creation of market linkage between producers and agro-processors and traders. Smallholder farmers will become more active in an agro-processing business once such linkage is established and operational.

(6) Provision of assistance for private traders for fair and efficient marketing system operation

Private traders are main actors in the agricultural commodity market. They are the ones who purchase surplus produce from farmers; nevertheless, their image is poor. A win-win relationship must be created between producers and traders. To this end, the government should work for raising awareness of private traders on the merits of fair practices in commercial transactions.

(7) ECX Auction System

In the ECX auction system, the trading of coffee, sesame and white haricot beans for export has been active. However, as regards an internal commodity transaction, its system has been hardly operational. Cooperative unions, private traders and milling companies are hardly convinced of the merit of using the system. PP09 successfully verified better recovery rate of ECX wheat after they were milled. ECX should make use of these comparison test results for their promotion activities to increase the number of users of the auction system.

ECX suspects the reason why cooperative unions are not willing to be involved in the auction is because they are not able to meet the designated quality standard of ECX due to their low technical capability. In view of this, ECX has been organizing a campaign, targeting primary cooperatives, to facilitate their involvement in the auction system.

On the other hand, WFP/P4P has provided the P4P participating unions with training and a number of equipment, including moisture meters, with an aim to enhance technical capacity of the unions in grain quality improvement. It is likely that the volume of grain and pulses which WFP/P4P aims to procure will be less than what the target unions can supply. Hence, if ECX aims to encourage cooperatives to use its auction system, it should be more effective and practical for ECX to collaborate with WFP/P4P than independently organizing an awareness raising campaign for primary cooperatives.

ECX should work with WFP/P4P to establish a working relationship with cooperative unions.

(8) Project monitoring and follow-up by BoMC staff

One objective of the Development Study agreed upon between JICA and the SNNPR government was to enhance the capacity of government agencies, farmers, primary cooperatives, cooperative unions and traders on the agricultural marketing system through the study implementation. The Study Team requested BoMC/BoA to nominate leaders and sub-leaders of respective pilot projects, bearing in mind to carry out the technical transfer from the Study Team to the government staff during the project implementation.

Most of the nominated staff for the pilot projects were in the position of expert. Regrettably, few were aware that the pilot projects were carried out as their on-the-job training, hence, their leadership and proactive involvement in the project implementation was limited. On the other hand, farmers, cooperatives and traders who directly benefited from the projects positively participated in its implementation.

BoMC should become aware that they are responsible for fully understanding the objectives and contents of any projects implemented in the region as well as disseminating the experiences and lessons of such projects to zone and woreda staff.

The Study Team strongly suggests BoMC that:

- Disseminate the experiences and lessons learnt through the implementation of pilot projects to all staff in BoMC and line offices.
- Secure sustainability of the pilot projects and replicate them to other areas or another commodity.

Attachments

Attachment-1

Minutes of Meetings on S/W for the Study

23 March 2009

Attachment-2

Scope of Work for the Study

10 September, 2009

Attachment-3

Minutes of Meetings on the Study

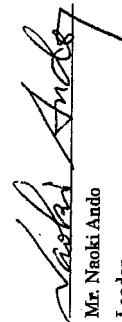
December 2010


MINUTES OF MEETINGS


ON
SCOPE OF WORK
FOR
THE DEVELOPMENT STUDY
FOR

AGRICULTURAL MARKET INFORMATION SYSTEM
IN SOUTHERN NATIONS NATIONALITIES AND PEOPLES REGION
AGREED UPON BETWEEN
AUTHORITIES CONCERNED OF THE GOVERNMENT OF
THE FEDERAL DEMOCRATIC REPUBLIC OF ETHIOPIA
(SOUTHERN NATIONS NATIONALITIES AND PEOPLES REGIONAL STATE)
AND
THE JAPAN INTERNATIONAL COOPERATION AGENCY

Hawassa, 23 March, 2009


Mr. Naoki Ando
Leader
Preparatory Study Team
Japan International
Agency


Mr. Akhlu Fikre Silasse
Process Head
Development Planning, Monitoring and
Evaluation Process
Bureau of Finance and Economic
Development
The Government of Southern Nations
Nationalities and Peoples Regional State


Mr. Sani Redi Ahmed
Bureau Head
Bureau of Agriculture and Rural
Development
The Government of Southern Nations
Nationalities and Peoples Regional State

I. INTRODUCTION

In response to a request of the Government of the Federal Democratic Republic of Ethiopia (hereinafter referred to as "GOE"), the Preparatory Study Team headed by Mr. Naoki Ando (hereinafter referred to as "the Team") to Ethiopia by the Japan International Cooperation Agency (hereinafter referred to as "JICA"), from 15th February to 24th March, 2009 for the purpose of discussing and confirming the Scope of Work for the Development Study for Agricultural Market Information System in Southern Nations Nationalities and Peoples Region (hereinafter referred to as "the Study").

The Team held a series of discussions with the Government of Southern Nations Nationalities and Peoples Regional State.

As a result of the discussions, the Ethiopian side and the Team agreed on the draft of the Scope of Work for the Study (Annex II). However, the Ethiopian side will consult with responsible government body about (4), (5) and (7) of Section 1 in article VIII of the draft.

The followings are the main issues discussed and agreed on by both sides in relation to the Scope of Work.

II. RESULTS OF DISCUSSION

1. Title of the Development Study

Both sides agreed that title of the Study should be changed to "The Development Study on Strengthening Agricultural Marketing System in Southern Nations Nationalities and Peoples Region" from original title "The Development Study for Agricultural Market Information System in Southern Nations Nationalities and Peoples Region" because the Study will cover wider scope of works than original proposal. Both sides also agreed that title of the Study will be officially changed after diplomatic procedure between GOE and the Government of Japan.

2. Scope of the Study

Both sides agreed on the following points:

- (1) The study aims at improving efficiency and promoting fair competition of agricultural marketing system through indicating appropriate strategy and implementation of pilot activities.
- (2) Analytical works on present situation of agricultural marketing system will be done in order to clarify effective measures for the improvement of agricultural marketing



- system. Main items of analytical works are:
- a. Existing strategy, policy and regulation of GOE and Southern Nations Nationalities and Peoples Region (hereinafter referred to as "SNNPR") and their implementation,
 - b. Present situation on target crops in terms of following points:
 - Production (amount, quality, area)
 - Distribution (route, amount of trade and consumption, market town and stakeholders)
 - Price fluctuations (Long-term and short-term trend, causes and effects)
 - Loss during post-harvest and trade (causes, constraints and effects on value of products)
 - Value chain
 - c. Present situation and future development plan on infrastructure relating agricultural marketing.
 - d. Present situation of activities of agricultural cooperatives and cooperative unions,
 - e. Present situation of agricultural market information service,
 - f. Impact of Ethiopia Commodity Exchange (hereinafter referred to as "ECX") on local market in SNNPR and traders' and farmers' knowledge and behavior,
 - g. Impact of agricultural marketing system on food security situation,
 - h. Program and project implemented by other donors.
- (3) Pilot projects will be conducted. Details of the pilot projects will be decided in the course of the Study. Recommended components of pilot projects are:
- a. Agricultural market information services
 - b. Value addition and quality improvement activities
 - c. Upgrading and introducing infrastructure and institution relating agricultural marketing
- (4) Capacity building program will be implemented. Recommended components of capacity building program are:
- a. On-the-job training for administrative officers on:
 - Data collection and analysis for specific crops and area
 - Development of short-term strategic plan utilizing collected data
 - b. Training program for farmers, agricultural cooperatives, agricultural cooperative unions, and traders on:
 - Basic business skill
 - Market information collection, analysis, and utilization
 - Value addition and quality improvement activities

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- (5) The master plan (long term comprehensive development plan) as final report of the Study will be developed based on results of analytical works and pilot projects. Following points will be covered by the master plan:
- a. Regional agricultural marketing development plan
 - b. Marketing development plan of main crops
 - c. Development plan of agricultural marketing system
 - d. Development plan of agricultural marketing infrastructure
 - e. Plan of agricultural market information services
 - f. Capacity building plan with training guidelines and extension materials on important topics such as agricultural market information services, value-addition and quality improvement activities,
 - g. Recommendation about expected impact of agricultural marketing development plan on food security situation.
- (6) Proposal for future plan of operation of ECX will be also developed in analytical works and as well as pilot projects.

3. Counterpart Organization

Both sides agreed as follows:

- (1) Agricultural Marketing Process, Cooperative Development Process, and Extension Service Process of Bureau of Agriculture and Rural Development (hereinafter referred to as "BoARD") are responsible for coordination and implementation of the Study with the assistance by the Study Team,
- (2) Bureau of Finance and Economic Development is responsible for bilateral cooperation.

4. Counterpart Personnel

Both sides agreed that Agricultural Marketing Process, Cooperative Development Process, and Extension Service Process of BoARD should take responsibility for assigning qualified counterpart personnel at its own expenses during the whole period of the Study for the Japanese study team prior to the start of the Study.

5. Steering Committee

For the smooth and effective implementation of the Study, both sides agreed that it

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is essential to establish the Steering Committee chaired by Head of BoARD. The Steering Committee Meeting will be held to approve annual plan and budget, to examine the results and activities, to evaluate annual progress, twice a year and/or in the case of necessity. Expected members of the Steering Committee are as follows:

(a) Ethiopian side:

1. Head of BoARD
2. Agricultural Marketing Process, BoARD,
3. Cooperative Development Process, BoARD,
4. Extension Services Process, BoARD,
5. Early Warning and Food Security Process, BoARD,
6. Bureau of Finance and Economic Development, SNNPR,
7. Regional Road Authorities, SNNPR,
8. Rural Financial Funding Service, SNNPR,
9. Other organizations concerned designated by the chairperson.

(b) Japanese side

1. The Japanese study team
2. Advisory study team
3. JICA Ethiopia Office

6. Coordination between SNNPR and Oromia Region

Both sides agreed that the government of SNNPR will be responsible for coordination with the government of Oromia Region because the Study will take into consideration Shashamane market.

7. Technology Transfer

Both sides agreed that on-the-job training, seminars, and workshops would be carried out in the course of the Study. The seminars are to be jointly organized by the Ethiopian side and the Japanese study team.

8. Necessary Equipments and Facilities for the Study

The Ethiopian side will provide spaces for main office in Hawassa and field offices equipped with telephone lines, equipments and furniture to the Japanese study team.

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9. Final Report

Both sides agreed that the final report of the Study would be made open to the public.

10. Training of Counterpart Personnel in Japan

The Ethiopian side requested counterpart training in Japan for effective technology transfer. The Japanese side promised to convey the request to the Government of Japan for consideration.

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Annex I: LIST OF PARTICIPANTS

Bureau of Finance and Economic Development

Mr. Akilu Fikre Shasiss Process Head, Development Planning, Monitoring and Evaluation Process

Bureau of Agriculture and Rural Development

Mr. Sami Redi Ahmed Bureau Head

Mr. Gezahegn Alma Yhu Process Owner, Agricultural Marketing Process

Mr. Teshome Menjour Experts, Input and Marketing

JICA Preparatory Study Team

Mr. Naoki Ando Leader

Mr. Kenji Yamada Member (Agricultural Marketing System)

Mr. Akesahi Mori Member (Agricultural Market Information)

Mr. Takao Akutsu Member (Quality Improvement and Value Addition)

Mr. Mitsuaki Ono Member (Preliminary Evaluation and Planning)

Handwritten notes:
MORI
2013/09
NA

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Annex II

SCOPE OF WORK (Draft)
FOR
THE DEVELOPMENT STUDY
ON

THE STRENGTHENING AGRICULTURAL MARKETING SYSTEM
IN SOUTHERN NATIONS NATIONALITIES AND PEOPLES REGION
AGREED UPON BETWEEN

AUTHORITIES CONCERNED OF THE GOVERNMENT OF
THE FEDERAL DEMOCRATIC REPUBLIC OF ETHIOPIA
(SOUTHERN NATIONS NATIONALITIES AND PEOPLES REGIONAL STATE)

AND

THE JAPAN INTERNATIONAL COOPERATION AGENCY

Hawassa, *** April, 2009

Mr. Naoki Ando

Leader

Preparatory Study Team

Japan International Cooperation

Agency

Mr. Bargude Bancha

Bureau Head

Bureau of Finance and Economic

Development

The Government of Southern Nations

Nationalities and Peoples Regional State

witnessed by

Mr. Sami Redi Ahmed

Bureau Head

Bureau of Agriculture and Rural

Development

The Government of Southern Nations

Nationalities and Peoples Regional State

Mr. Hallemichael Kirifu

Head

Bilateral Cooperation Department

Ministry of Financial and Economic

Handwritten notes:
N. Ando
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NA

I. INTRODUCTION

In response to a request of the Government of the Federal Democratic Republic of Ethiopia (hereinafter referred to as "GOE"), the Government of Japan (hereinafter referred to as the "GOJ") has decided to conduct the Development Study on Strengthening Agricultural Marketing System in Southern Nations Nationalities and Peoples Region (hereinafter referred to as "the Study") in accordance with the relevant laws and regulations in force in Japan.

Accordingly, the Japan International Cooperation Agency (hereinafter referred to as "JICA"), the official agency responsible for the implementation of the technical cooperation program of GOJ, will undertake the Study in close cooperation with the authorities concerned of GOE.

This document sets forth the Scope of Work with regard to the Study.

II. OBJECTIVES OF THE STUDY

1. The overall goal of the Study is:
 - (1) To improve value of agricultural products in Southern Nations Nationalities and Peoples Region (hereinafter referred to as "SNNPR"), and
 - (2) To improve food security situation through improvement of agricultural marketing system in Southern Nations Nationalities and Peoples Region (hereinafter as to "SNNPR").
2. The objectives of the Study are as follow:
 - (1) To formulate master plan in order to design efficient and fair agricultural marketing system in SNNPR, and
 - (2) To carry out capacity development of Ethiopian counterpart personnel as well as farmers, agricultural cooperatives, agricultural cooperative unions, and traders in the course of the Study.

III. STUDY AREA

1. The Study area is covered by all zones in SNNPR.
2. Sites of pilot projects for verification study will be selected in the course of the study from Guraghe Zone, Hadiya Zone, Kembata Tembaro Zone, Sidama Zone, Gedeo Zone, Wolayita Zone, Gamo Gofa Zone, Silti Zone, Alaba Special Woreda, Amaro

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Special Woreda, and Burji Special Woreda shown in Annex III.

IV. STUDY CROP

1. Target crops of the Study are:
 - (1) Cereals: Maize, teff, wheat,
 - (2) Pulses: Field peas, haricot beans, horse beans,
 - (3) Vegetables: Cabbage, green peppers, red peppers,
 - (4) Fruits: Avocados, bananas, mangoes, papayas,
 - (5) Root crops: Cassava, ensete, sweet potatoes, taro,
 - (6) Other necessary crops: Sugar cane, spices such as ginger and turmeric, and other necessary crops.
2. Target crops of the pilot activities will be selected in the course of the Study.

V. SCOPE OF THE STUDY

In order to achieve the above objectives, the Study will consist of two Phases detailed below.

1. Phase 1
 - (1) Strategy, policy and regulation
 - a. Federal level
 - b. Regional level
 - (2) Present situation on main agricultural crops (grains, vegetables, fruits and spices)
 - a. Production (amount, quality, area)
 - b. Distribution (route, amount of trade and consumption, market town, infrastructure such as transportations and warehouses)
 - c. Price fluctuations (Long-term and short-term trend, causes and effects)
 - d. Loss during post-harvest and trade (causes, constraints and effects on efficiency of trade and value of products)
 - e. Value chain
 - (3) Present situation and future development plan on infrastructure relating agricultural marketing

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- a. Telecommunication
- b. Road (Several types of road including feeder roads)
- c. Warehouse
- d. Transportation
- e. Market place
- (4) Present situation of activities of agricultural cooperatives and cooperative unions
- (5) Present situation of agricultural market information service
 - a. Data collection
 - b. Data distribution
 - c. Data analysis
 - d. Needs of farmers, cooperatives, unions, and middlepersons
- (6) Impact of Ethiopia Commodity Exchange (hereinafter referred to as "ECX") on:
 - a. Total amount of trade
 - b. Market price and its fluctuations
 - c. Market information access by stakeholders
 - d. Capacity of stakeholders such as post-harvest activities and quality control of products
 - e. Difference of behavior and income between ECX members and others
 - f. Difference of trade situation between target commodities of ECX and other commodities
 - g. Food security situation
- (7) Impact of existing agricultural marketing system on food security situation
- (8) Program and project implemented by other donors
- 1. 2. To formulate the draft of the master plan (long-term comprehensive development plan) composed by:
 - a. Regional agricultural marketing development plan
 - b. Marketing development plan of main crops
 - c. Development plan of agricultural marketing system
 - d. Development plan of agricultural marketing infrastructure
 - e. Plan of agricultural market information services
 - f. Capacity building plan with training guidelines and extension materials on such as agricultural market information services, value-addition and quality improvement activities
 - g. Recommendation about expected impact of agricultural marketing development plan on food security situation

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- 1. 3. To select and prepare priority activities and target area for pilot activities.
- 2. Phase 2
 - 2. 1. To collect and analyze additional data and information to monitor changing agricultural marketing situation following phase 1
 - 2. 2. To implement pilot projects for verification of the result of analytical works. Recommended components are:
 - (1) Agricultural market information services
 - (2) Value addition and quality improvement activities
 - (3) Upgrading and introducing infrastructure and institution relating agricultural marketing
 - 2. 3. To implement capacity building program
 - (1) On-the-job training for administrative officers on:
 - a. Data collection and analysis for specific crops and area
 - b. Development of short-term strategic plan utilizing collected data for specific crops and area
 - (2) Training program for farmers, agricultural cooperatives, agricultural cooperative unions, and traders on:
 - a. Basic business skill
 - b. Market information collection, analysis, and utilization
 - c. Value addition and quality improvement activities
 - 2. 4. To develop improvement and expansion plan of ECX and to propose to GOE, ECX secretariat and the government of SNNPR
 - 2. 5. To evaluate the pilot activities
 - 2. 6. To finalize the master plan

VI. STUDY SCHEDULE

The Study will be carried out in accordance with the Tentative Working Schedule attached as Annex IV.

VII. REPORTING

JICA shall prepare and submit the following reports to GOE.
Inception Report: Twenty (20) copies at the commencement of Phase 1.

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- Progress Report(s): Twenty (20) copies at the end of field study in Ethiopia.
 Interim Report(s): Twenty (20) copies after work in Japan of Phase 2.
 Draft Final Report: Twenty (20) copies at the end of field work:
 GOE shall submit its written comments on the Draft Final Report to JICA within one (1) month after its receipt of the report.
 Final Report (Master Plan): Thirty (30) copies and one set of CD-ROM within two (2) months after receipt of GOE's comments on the Draft Final Report from Ethiopian side.

VIII. UNDERTAKINGS OF GOE

1. To facilitate smooth conduct of the Study, GOE shall take the following necessary measures:
 - (1) To secure the safety of the Japanese study team,
 - (2) To permit the members of the Japanese study team to enter, leave and sojourn in Ethiopia for the duration of their assignments therein and exempt them from foreign registration requirements and consular fees,
 - (3) To exempt the members of the Japanese study team from taxes, duties, and any other charges on equipment, machinery and other materials brought into Ethiopia for the implementation of the Study,
 - (4) To exempt the members of the Japanese study team from income tax and charges of any kind imposed on or in connection with any emoluments or allowances paid to the members of the Japanese study team for their services in connection with the implementation of the Study,
 - (5) To provide necessary facilities to the Japanese study team for the remittance as well as utilization of the funds introduced into Ethiopia from Japan in connection with the implementation of the study,
 - (6) To secure permission to enter wherever necessary for the implementation of the Study into the selected Woredas,
 - (7) To secure permission for the Japanese study team to take all data and documents (including photographs and maps) related to the Study out of Ethiopia to Japan, and
 - (8) To provide medical services as needed. Such expense will be chargeable to the members of the Japanese study team.
2. GOE shall bear claims, if any arises, against the members of the Japanese study team resulting from, occurring in the course of, or otherwise connected with the

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3. Agricultural Marketing Process, Cooperative Development Process, and Extension Service Process of Bureau of Agriculture and Rural Development of SNNPR shall act as a counterpart agency to the Japanese study team and also as a coordinating body in relation to other governmental organizations, international agencies, donors, non-governmental organizations, and related bodies concerned for the smooth implementation of the Study.
4. GOE shall be responsible for coordination with the government of Oromia Region because the Study will take into consideration Shashamane market.
5. GOE shall, at its own expense, provide the Japanese study team with the following in cooperation with other organizations concerned:
 - (1) Available data and information related to the Study,
 - (2) Counterpart personnel,
 - (3) Suitable office space with necessary equipment and furniture in Hawassa and field offices in the target area, and
 - (4) Credentials or identification cards.

IX. UNDERTAKINGS OF JICA

- For the implementation of the Study, JICA shall take the following measures:
- (1) To dispatch, at its own expense, the Japanese study team to Ethiopia, and
 - (2) To pursue technology transfer to the Ethiopian counterpart personnel in the process of the Study,

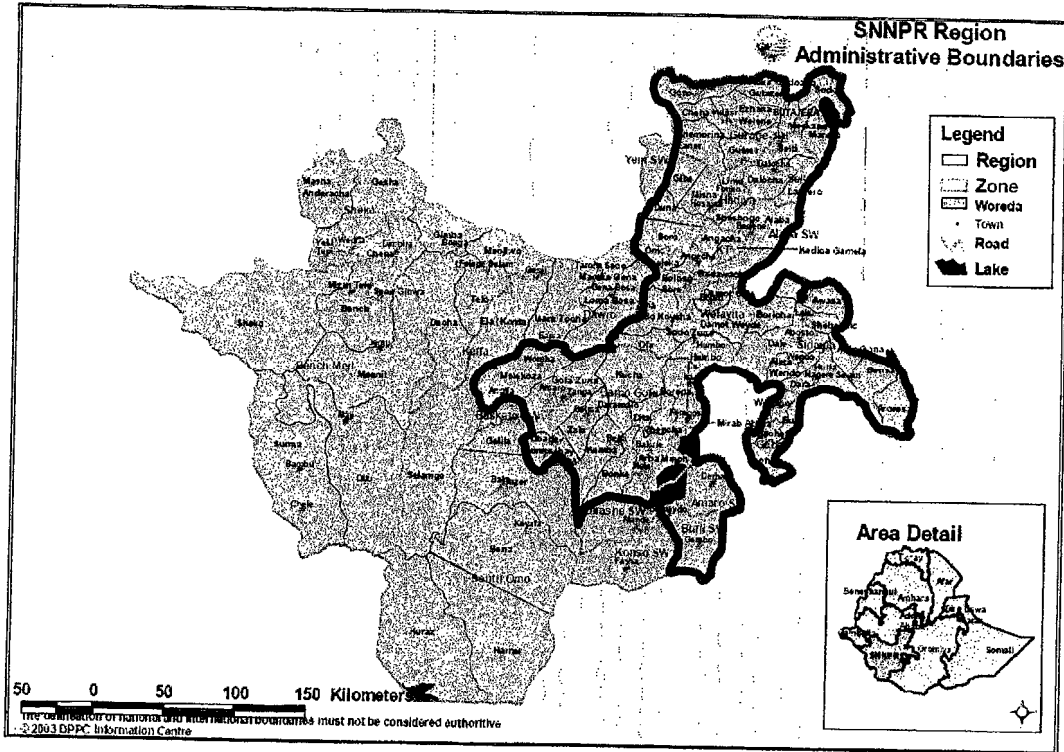
X. CONCLUSION

JICA and Bureau of Agriculture and Rural Development shall consult with each other in respect of any matter that may arise from or in connection with the Study.

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ANNEX III. STUDY AREA



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ANNEX IV. TENTATIVE WORKING SCHEDULE

Month	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36			
Phase	Phase 1												Phase 2																										
Work in Ethiopia	[Shaded]												[Shaded]																										
Work in Japan	[Shaded]																																						
Reports	Ic/R						Pr/R																																


Ic/R: Inception Report
Pr/R: Progress Report
It/R: Interim Report
Df/R: Draft Final Report
F/R: Final Report


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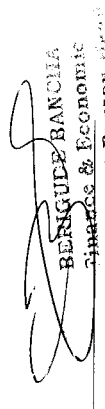
SCOPE OF WORK
FOR
THE DEVELOPMENT STUDY
ON
THE STRENGTHENING AGRICULTURAL MARKETING SYSTEM
IN SOUTHERN NATIONS NATIONALITIES AND PEOPLES REGION
AGREED UPON BETWEEN
AUTHORITIES CONCERNED OF THE GOVERNMENT OF
THE FEDERAL DEMOCRATIC REPUBLIC OF ETHIOPIA
(SOUTHERN NATIONS NATIONALITIES AND PEOPLES REGIONAL STATE)
AND
THE JAPAN INTERNATIONAL COOPERATION AGENCY

Hawassa, 10th September, 2009


Mr. Makoto SHINKAWA
Senior Representative
JICA Ethiopia Office
Japan International Cooperation
Agency


Mr. Sani Redi Ahmed
Bureau Head
Bureau of Agriculture and Rural
Development
The Government of Southern Nations
Nationalities and Peoples Regional State

witnessed by

Mr. Tilahun Tadesse
Director,
Bilateral Cooperation
Ministry of Finance and Economic
Development


Mr. Bargude Banachale
Bureau Head
Bureau of Finance and Economic
Development
The Government of Southern Nations
Nationalities and Peoples Regional State

I. INTRODUCTION

In response to a request of the Government of the Federal Democratic Republic of Ethiopia (hereinafter referred to as "GOE"), the Government of Japan (hereinafter referred to as the "GOJ") has decided to conduct the Development Study on Strengthening Agricultural Marketing System in Southern Nations Nationalities and Peoples Region (hereinafter referred to as "the Study") in accordance with the relevant laws and regulations in force in Japan.

Accordingly, the Japan International Cooperation Agency (hereinafter referred to as "JICA"), the official agency responsible for the implementation of the technical cooperation program of GOJ, will undertake the Study in close cooperation with the authorities concerned of GOE.

This document sets forth the Scope of Work with regard to the Study.

II. OBJECTIVES OF THE STUDY

1. The overall goal of the Study is:

- (1) To improve value of agricultural products in Southern Nations Nationalities and Peoples Region (hereinafter referred to as "SNNPR"), and
- (2) To improve food security situation through improvement of agricultural marketing system in SNNPR.

2. The objectives of the Study are as follow;

- (1) To formulate master plan in order to design efficient and fair agricultural marketing system in SNNPR, and
- (2) To carry out capacity development of Ethiopian counterpart personnel as well as farmers, agricultural cooperatives, agricultural cooperative unions, and traders in the course of the Study.

III. STUDY AREA

1. The Study area is covered by all zones in SNNPR.
2. Sites of pilot projects for verification study will be selected in the course of the study from Guraghe Zone, Hadiya Zone, Kembata Tembaro Zone, Sidama Zone, Geddo



Zone, Wolayita Zone, Gamo Gofa Zone, Silti Zone, Alaba Special Woreda, Amaro Special Woreda, and Burji Special Woreda shown in Annex I.

IV. TARGET CROP

1. Target crops of the Study are:

- (1) Cereals: Maize, teff, wheat,
- (2) Pulses: Field peas, haricot beans, horse beans,
- (3) Vegetables: Cabbage, green peppers, red peppers,
- (4) Fruits: Avocados, bananas, mangoes, papayas,
- (5) Root crops: Cassava, ensete, sweet potatoes, taro,
- (6) Other necessary crops: Sugar cane, spices such as ginger and turmeric, and other necessary crops.

2. Target crops of the pilot activities will be selected in the course of the Study.

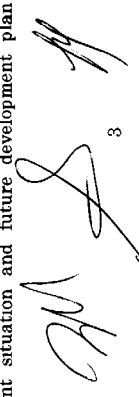
V. SCOPE OF THE STUDY

In order to achieve the above objectives, the Study will consist of two Phases detailed below.

1. Phase 1

1. 1. To collect and review the existing information on the following items:

- (1) Strategy, policy, regulation and basic data/information on main agricultural crops both at Federal and Regional level
- (2) Present situation on main agricultural crops (grains, vegetables, fruits and spices) in SNNPR
 - a. Production (amount, quality, area)
 - b. Distribution (route, amount of trade and consumption, market town, infrastructure such as transportations and warehouses)
 - c. Price fluctuations (long-term and short-term trend, causes and effects)
 - d. Loss during post-harvest and trade (causes, constraints and effects on efficiency of trade and value of products)
 - e. Value chain
- (3) Present situation and future development plan on infrastructure relating

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agricultural marketing in SNNPR

- a. Telecommunication
- b. Road (Several types of road including feeder roads)
- c. Warehouse
- d. Transportation
- e. Market place

(4) Present situation of activities of agricultural cooperatives and cooperative unions in SNNPR

(5) Present situation of agricultural market information service in SNNPR

- a. Data collection
- b. Data distribution
- c. Data analysis
- d. Needs of farmers, cooperatives, unions, and middlepersons

(6) Impact of Ethiopia Commodity Exchange (hereinafter referred to as "ECX") in SNNPR on:

- a. Total amount of trade
- b. Market price and its fluctuations
- c. Market information access by stakeholders
- d. Capacity of stakeholders such as post-harvest activities and quality control of products
- e. Difference of behavior and income between ECX members and others
- f. Difference of trade situation between target commodities of ECX and other commodities
- g. Food security situation

(7) Impact of existing agricultural marketing system on food security situation in SNNPR

- (8) Program and project implemented by other donors in SNNPR
- (9) Present situation of value-addition and quality improvement activities of main agricultural crops in SNNPR

1. 2. To formulate the draft of the master plan (long-term comprehensive development plan) composed by:

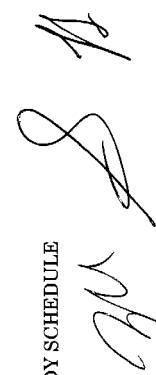
- a. Regional agricultural marketing development plan
- b. Marketing development plan of main crops
- c. Development plan of agricultural marketing system
- d. Development plan of agricultural marketing infrastructure

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- e. Plan of agricultural market information services
 - f. Capacity building plan with training guidelines and extension materials on such as agricultural market information services, value addition and quality improvement activities
 - g. Recommendation about expected impact of agricultural marketing development plan on food security situation
- 1.3. To select and prepare priority activities and target area for pilot activities.
2. Phase 2
2. 1. To collect and analyze additional data and information to monitor changing agricultural marketing situation following phase 1
2. 2. To implement pilot projects for verification of the result of analytical works. Recommended components are:
- (1) Agricultural market information services
 - (2) Value addition and quality improvement activities
 - (3) Upgrading and introducing infrastructure and institution relating agricultural marketing
2. 3. To implement capacity building program
- (1) On-the job training for administrative officers on:
 - a. Data collection and analysis for specific crops and area
 - b. Development of short-term strategic plan utilizing collected data for specific crops and area
 - (2) Training program for farmers, agricultural cooperatives, agricultural cooperative unions, and traders on:
 - a. Basic business skill
 - b. Market information collection, analysis, and utilization
 - c. Value addition and quality improvement activities
2. 4. To develop improvement and expansion plan of ECX and to propose to GOE, ECX secretariat and the government of SNNPR
2. 5. To evaluate the pilot activities
2. 6. To finalize the master plan

VI. STUDY SCHEDULE




The Study will be carried out in accordance with the Tentative Working Schedule of three years attached as Annex II.

VII. REPORTING

- JICA shall prepare and submit the following reports to GOE.
- Inception Report: Twenty (20) copies at the commencement of Phase 1.
 - Progress Report(s): Twenty (20) copies at the end of field study in Ethiopia.
 - Interim Report(s): Twenty (20) copies after work in Japan of Phase 2.
 - Draft Final Report: Twenty (20) copies at the end of field work:
 - GOE shall submit its written comments on the Draft Final Report to JICA within one (1) month after its receipt of the report.
 - Final Report (Master Plan): Thirty (30) copies and one set of CD-ROM within two (2) months after receipt of GOE's comments on the Draft Final Report from Ethiopian side.

VIII. UNDERTAKINGS OF GOE

1. To facilitate smooth conduct of the Study, GOE shall take the following necessary measures :
- (1) To secure the safety of the Japanese study team,
 - (2) To permit the members of the Japanese study team to enter, leave and sojourn in Ethiopia for the duration of their assignments therein and exempt them from foreign registration requirements and consular fees,
 - (3) To exempt the members of the Japanese study team from taxes, duties, and any other charges on equipment, machinery and other materials brought into Ethiopia for the implementation of the Study,
 - (4) To exempt the members of the Japanese study team from income tax and charges of any kind imposed on or in connection with any emoluments or allowances paid to the members of the Japanese study team for their services in connection with the implementation of the Study,
 - (5) To provide necessary facilities to the Japanese study team for the remittance as well as utilization of the funds introduced into Ethiopia from Japan in connection with the implementation of the study,




- (6) To secure permission to enter wherever necessary for the implementation of the Study into the selected Woredas.
- (7) To secure permission for the Japanese study team to take all data and documents (including photographs and maps) related to the Study out of Ethiopia to Japan, and
- (8) To provide medical services as needed. Such expense will be chargeable to the members of the Japanese study team.
2. GOE shall bear claims, if any arises, against the members of the Japanese study team resulting from, occurring in the course of, or otherwise connected with the discharge of their duties in the implementation of the Study, except when such claims arise from gross negligence or willful misconduct on the part of the members of the Japanese study team.
3. Agricultural Marketing Process, Cooperative Development Process, and Extension Service Process of Bureau of Agriculture and Rural Development of SNNPR shall act as a counterpart agency to the Japanese study team and also as a coordinating body in relation to other governmental organizations, international agencies, donors, non-governmental organizations, and related bodies concerned for the smooth implementation of the Study.
4. GOE shall be responsible for coordination with the government of Oromia Region because the Study will take into consideration Shashamane market.
5. GOE shall, at its own expense, provide the Japanese study team with the following in cooperation with other organizations concerned:
 - (1) Available data and information related to the Study,
 - (2) Counterpart personnel,
 - (3) Suitable office space with necessary equipment and furniture in Hawassa and field offices in the target area, and
 - (4) Credentials or identification cards.

IX. UNDERTAKINGS OF JICA

- For the implementation of the Study, JICA shall take the following measures:
- (1) To dispatch, at its own expense, the Japanese study team to Ethiopia based on the request of SNNPR, and
 - (2) To pursue technology transfer to the Ethiopian counterpart personnel in the process of the Study.

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X. CONCLUSION

JICA and Bureau of Agriculture and Rural Development of SNNPR shall consult with each other in respect of any matter that may arise from or in connection with the Study.



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THE MINUTES OF MEETING
BETWEEN
THE JAPAN INTERNATIONAL COOPERATION AGENCY
AND
AUTHORITIES CONCERNED OF THE GOVERNMENT OF THE FEDERAL DEMOCRATIC
REPUBLIC OF ETHIOPIA
(SOUTHERN NATIONALITIES NATIONALITIES AND PEOPLES REGIONAL STATE)

ON
THE DEVELOPMENT STUDY
ON
THE STRENGTHENING AGRICULTURAL MARKET INFORMATION SYSTEM IN
SOUTHERN NATIONALITIES NATIONALITIES AND PEOPLES REGION

This Minutes of Meeting is purposed to confirm the results of the discussion which was held between Japan International Cooperation Agency (hereinafter referred to as "JICA") and the Ethiopian authorities concerned (hereinafter referred to as "Ethiopian side"), regarding the Development Study on the strengthening Agricultural Marketing Information System in Southern Nations Nationalities and Peoples Region (hereinafter referred to as "the Study"). As a result of discussions, JICA and the Ethiopian sides agreed on the matters referred to in the document attached hereto.

Hawassa, December 2010



Mr. Makoto Shinkawa
Senior Representative
Ethiopia Office
Japan International Cooperation Agency

Mr. Hanle Biffara
Head
Bureau of Finance and Economic Development
The Government of Southern Nations Nationalities and Peoples Regional State

Mr. Sani Redi Ahmed
Deputy Regional President and Head of Bureau of Agriculture
The Government of Southern Nations Nationalities and Peoples Regional State

Mr. Nureidin Mohammed
Head
Bureau of Marketing and Cooperative
The Government of Southern Nations Nationalities and Peoples Regional State

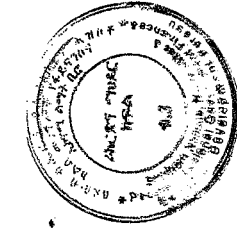
THE ATTACHED DOCUMENT

1. Based upon the result of the reorganization of the Bureau of Agriculture (hereinafter referred to as "BoA"), JICA and the Ethiopian sides agreed to revise the Minutes of Meetings on Scope of Work signed on 23 March, 2009.

1-1. Counterpart Organization
(1) Marketing and Cooperative Process of Bureau of Marketing and Cooperative (hereinafter referred to as "BoMC") and Extension Service Process of BoA are responsible for coordination and implementation of the Study with the assistance by the Study Team,
(2) Bureau of Finance and Economic Development is responsible for bilateral cooperation.

1-2. Counterpart Personnel
Both sides agreed that Cooperative and Marketing Process of BoMC and Extension Service Process of BoA should take responsibility for assigning qualified counterpart personnel at its own expenses during the whole period of the Study for the Japanese study team prior to the start of the Study.

1-3. Steering Committee
The structure of the Steering Committee of Ethiopian side changes as follows, reflecting upon the result of reorganization of BoA and establishment of BoMC.



- 1-3-1. Structure of Steering Committee (Ethiopian side)
1. Head of BoA
 2. Head of BoMC
 3. Agricultural Marketing Process, BoMC
 4. Cooperative Process, BoMC
 5. Extension Service Process, BoA
 6. Early Warning and Food Security Process, BoA
 7. Bureau of Finance and Economic Development
 8. Regional Road Authorities, SNNPR
 9. Other organizations concerned designated by the chairperson

1-4. All the other stipulations except for the above matter in the M/M on S/W are valid.

Handwritten signatures and initials of the representatives.