Improved seed for poor farmers: Contribution of CBDA managed improved seed distribution system: the case of Enebssie Sar Midir district, Eastern Gojam Zone, Ethiopia

A Research project Submitted to Van Hall Larenstein University of Applied Sciences in Partial Fulfilment of the Requirements for the Degree of Master of Development, specialisation in Food Security

By

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TABLE OF CONTENT

LIST OF TABLES AND FIGURES

Tables

Figures and Pictures

ACRONYMS

A/A: Addis Ababa

ABCBI:- Alem Birhan Community Based Institution

AB-CBDA: Alem Birhan Community Based Development Association

ASE:- Agri Service Ethiopia

BoM: Board of Management

BoA&RD: Bureau of Agriculture and Rural Development

CBDA:- Community Based Development Association

CBI:- Community Based Institution

CBSS:- Community Based Seed System

CSA:- Central Statistics Agency

DA: - Development Agent

DC: Development Centre

DCG:- Dry land Cooperation group

DUS:- Distinctiveness, Uniformity, and Stability

EIAR:- Ethiopian Institution of Agricultural Research

ESE:- Ethiopian Seed Enterprise

ESM:- Enebssie Sar Midir district

FHHH:- Female House Hold Head

HH:- House Hold

IBC: - Institute of Biodiversity Conservation, A/A

IFSP:- Integrated Food Security Program

IFPRI: - International Food Policy Research Institute

MHHH: - Male House hold Head

PGRFA: - Plant Genetic resources for Food and Agriculture

PP: - Project Participants

VCU: - Value for Cultivation and Use

ABSTRACT

The Ethiopian agriculture is subsistence with small land holding. Access to improved seed is critical for increased production and productivity, but small holder farmers face high price and late delivery (Bishaw, Sahlu and Simane, 2008).

This research assesses the contribution of CBDA managed seed distribution in availing improved seed to poor farmers. The case is that of Alem Birhan Community Based Development Association (AB-CBDA) in Enebssie Sar Midir District of Eastern Gojam Zone in Ethiopia. Access to improved seed for poor farmers was a problem diagnosed by Agri Service Ethiopia (ASE) during program formulations. To alleviate the problem, ASE, a country resident charity, has been trying to facilitate establishment of community based seed distribution system which is run by CBDAs.

AB-CBDA was established with the facilitation of ASE with the objective of "community taking over the achievement and sustaining of development issues on its own hands" (ASE CBI strategy). The improved seed distribution system is one of its activities.

AB-CBDA has been trying to avail improved seed to poor farmers without prepayment in loan basis and collects the loan with affordable interest to re circulate the seed to other needy farmers. However, how far the system has contributed in solving the problem hasn't been assessed.

The effect of the lack of improved seed on the poor farmers, the various actions taken by AB-CBDA to solve these problems, the achieved results of the CBDA seed system, the role of partners and issues for sustainability were assessed through a questionnaire developed for 30(13F) sample users of the service, discussion carried out with 3 sample seed committees of 3 branches, discussion with AB-CBDA secretariat staff and BoM members, discussion with heads of ESE at Bahir Dar, and the Regional Amhara BoA&RD input distribution section and a delegated staff of ASE.

The findings of the assessment indicate that 2/3 of the sample (85%F) were not users of improved seed before the CBDA intervention. The 1/3 who were users also expressed problems like high price (40%) untimely distribution (30%) and low quality (10%). In connection with production improvement, 80% of the users indicted that they earned higher production. With regard to those who weren't able to use improved seed, 53% were obliged to sharecrop their land (56%F). Though low in proportion, 13% only, there were also those who used to take loan to cover cost of the improved seeds. Problem in accessing improved seed has forced them to use local seed and harvest low production.

AB-CBDA had been providing seed to the poor without prepayment in loan basis. The loan was collected with interest. The beginning stock which had been 30,831kgs has grown now to 181,619kgs which is almost 6 fold, while the number of users currently is 3130(826F) households.

The advantages gained so far start with having an improved seed service at door step, relief from sharecropping by about 57% of the respondents (33%F), higher production that ranges from 500kgs to 900kgs per 0.25ha without and with fertiliser, and 37% got out of loan for seed or grain for food.

Problems of the AB-CBDA improved seed service include quality deterioration due to farmers mixing varieties, seed long stay in circulation, and though expressed by as low as 3%, nepotism in the service.

AB-CBDA has had good relationship with ESE, the district administration, office of agriculture and the cooperatives where it received various cooperation. The recently started own seed multiplication was realised with crucial support of the district administration that provided about 25 hectare of land.

Lack of formal source for foundation or certified seed, and dispersed farm plots that could create distance isolation problem, are issues of sustainability that need focus.

Hence, AB-CBDA, to continue as sustainable source of improved seed for poor farmers; it should register under the Regional BoA&RD plant and animal quarantine section as seed multiplier. The trial of own seed multiplication should continue strengthened, but professional assistance should also be included and the dispersed plots need to be brought to adjacent. AB-CBDA should also consider establishing seed stores maintenance and insurance budget in its action plans and the branch CBDAs should follow on suite.

CHAPTER 1: INTRODUCTION

Ethiopia is endowed with a diverse wealth of plants, animals, and microbial species, especially crop diversity due to the existence of diverse farming system, socio-economics, culture and agro-ecologies. The origin of the crop plants like coffee (Coffea Arabica), safflower (Carthamus tinctorius), tef (Eragrostis tef), noug (Guizotia abyssinica), anchote (Coccinia abyssinica), and enset (Ensete ventricosum) is Ethiopia. Moreover high genetic diversity is found in major food crops (wheat, barley, sorghum, and peas), industrial crops (linseed, castor and cotton), cash crop (coffee), food crops of regional and local importance (tef, noug, Ethiopian mustard, enset, finger millet, cowpea, lentil) and a number of species of world importance(clovers, medics, oats) (IBC, 2008).

In Ethiopia agriculture contributes to about 45% of GDP and 85% of employment, but the agricultural sector suffers from frequent drought and poor cultivation practices (CIA Fact Book, 2010).

The seed industry in Ethiopia comprises the public and private sector. The national research system headed by the EIAR (Ethiopian Institution of Agricultural Research) with other federal and regional research centres, and agricultural universities and faculties is expected of developing improved varieties and breeder and pre-basic seed needed. The MoA&RD (Ministry of Agriculture and Rural Development) takes the responsibility of regulation, and certification. ESE, Ethiopian Seed Enterprise, produces basic and certified seed on its own farms and alongside private co's, private sub-contractors, state farms, and cooperatives to multiply the seed supplied to the regional extension and input supply systems. Recently the country level ESE has been decentralised to regional level. At grass roots level, the seed is distributed by the district level offices of agriculture, through the development agents, and through the cooperatives.

According to Institute of Biodiversity Conservation (IBC 2008), in Ethiopia's agriculture, traditional small scale farming using simple technology still dominates. There is need for modern seed varieties in addition to the traditionally adapted landrace seeds, but the existing national breeding and seed multiplication capacity is not sufficient to address the seed shortage.

Ethiopian agriculture is subsistence farming with small landholding. The average landholding is below 1 hectare. To increase agricultural production and productivity and ensure food security and improve livelihood, access to improved seeds is critical. But small holder farmers are faced with high price and late delivery of improved seeds (Bishaw, Sahlu and Simane, 2008).

Enebssie Sar Midir (ESM) is one of the 13 districts, a food insecure one, of the Eastern Gojam zone of Ethiopia. A wealth ranking carried out by Agri Service Ethiopia in 2004 in the new intervention villages (Kebele Administrations) of its project, indicated that 64% of the households were in the poor category, women households covering the 19%.

A baseline survey carried out in 2004 by ESM program staff of Agri Service Ethiopia indicates that among the 480 sample taken, the average land possession of the poor community is 0.5-0.75 ha, where they also have no livestock, not enough seed for crop planting, and are exposed to food gap from March to the next harvesting period of October to November. Among the causes for low agricultural production are small size of land, low production potential seed varieties, low soil fertility, livestock and crop diseases, pests, low feed availability for livestock, lack of draught power, erratic rainfall and occurrence of hailstorm.

IFPRI in its July 10, 2010 working paper states that Ethiopia's agricultural sector has been showing continuous growth but also indicates shortage of improved seeds as one hindering factor. In addition the working paper points out that, the usage of improved seed can bring increase in production ranging from 30 to 60%, by pointing the cases of maize and wheat. In confirmation to this, according to the 2004 baseline survey report of the district of Enebssie Sar Midir, the program area of ASE, it was only 32% of the sample that were using improved seeds, with sources being the district office agriculture, cooperatives and private suppliers.

1.1 Statement of the problem

Ethiopian farmers are known to have used centuries old strategies including the improvement of farmer-saved seeds, farmer-to-farmer seed exchange and farmer –managed seed production (Bishaw, Sahlu and Simane, 2008). But these days, due to their low productivity, olden seeds are being replaced by new comer improved seeds. These new seeds have to be changed every year or two years to have good production output and the price to purchase it is high (Bishaw, Sahlu and Simane, 2008). The local government and NGOs have been trying to distribute improved seeds to farmers but have not addressed all farmers.

Due to lack of improved seeds, in Enebssie Sar Midir District, poor farmers are forced to sharecrop (an agreement entered by the poor farmer with the better off farmer in which the person will plough the land of the poor farmer by using his own seed and draught power) where the proportion of their share is further decreased to 50% or lower depending on their labour and fertilizer contribution. Moreover, since land is owned by government and one can't buy or sell it, well to do farmers who are eager to grab the land of the poor and work on it for long and win the existing competition with same status farmers, provide a "molesting" advance payment to such poor farmers which must be immediately returned if they want to stop their land from being share cropped. However, since most poor farmers spend the cash for some crucial household expenditure and it is not possible for them to save same amount in a short time, they are forced to let their land be managed for long by the loaner, share cropper, well to do farmer till someday chance comes to return the happily received but hard to repay "molesting money" expended. Or the other possibility for such poor farmers is, to enter in to debt with loan sharks where the interest is exorbitant.

ASE, a national NGO, or a country resident charity, according to the new legislation, access to improved seeds was a problem it diagnosed out during intervention program formulation (ASE ESM program doc, 2001-2003). Hence to solve the problem, and its consequences, the organisation has been facilitating the establishment of community seed distribution centres which are run by community based institutions (ASE strategic paper, 2010-2015).

The seed distribution system has been providing improved seed to poor farmers on loan basis without first payment obligation. However, the extent the system has managed to solve the problem, and its contribution in creating improved seed access to the poor has not been assessed so far. Hence, the need to carry out thus research.

1.2 Objective

The objective of this research is to assess the contribution of the CBDA managed seed system in creating access to improved seed for the poor community, where new learning lessons in managing CBDA managed seed distribution centres for further project interventions could be identified and to contribute inputs in improving the current system.

1.3 Research questions

1.3.1 Main research question

How far has the CBDA managed seed distribution centres contributed in addressing the poor farmers' need of improved seed?

1.3.2 Sub questions

- How has the lack of improved seed affected the poor farmers?
- What are the actions taken by the community managed seed distribution centres to address the improved seed problem?
- What are the results/outputs of the community managed seed distribution centres so far?
- What were the roles and participation of partners with regard to the seed distribution centres services?
- How is the sustainability of the CBDA seed system managed?

CHAPTER 2: CONCEPTUAL FRAMEWORK AND LITERATURE REVIEW

2.1 Seed

According to FAO definitions, a seed is a means of disseminating for plants in time and space. It represents continuity, change and adaptation to local environment. Through seed, technological innovations of agriculture could be distributed to farmers so as to exploit the genetic potential of new varieties. Hence, for crop production to increase (other inputs included), enhancing food security and alleviating rural poverty; availability, access and use of modern varieties is essential (FAO, 1975).

The modern varieties of seed are produced by National Agricultural Research Centres, and must have to pass through various tests, and such tests could be Distinctiveness, Uniformity, and stability (DUS) and Value for Cultivation and Use (VCU). The different seed classes include the breeder, pre-basic, basic, and certified (FAO, 1975).

The breeder seed is the initial source seed and usually produced by the breeder, and used for production of pre-basic seed.

The pre-basic is usually produced under the supervision of the breeder or its designated agency, and used for those crops with low multiplication ratio, or where large quantities of certified seed are required.

Basic seed is the progeny of breeder or pre-basic seed and is usually produced under the supervision of a breeder or his designate agency and under the control of a seed quality control agency.

Certified seed is the progeny of basic seed and is produced on contract with selected seed growers under the supervision of the seed enterprise, public or private. It can be used to produce further generations of certified seed or can be planted by farmers for grain production.

In this paper, the focus is on cereal/food crop seeds such as wheat, teff, barely, peas and beans, maize, sorghum etc…

2.2 Seed system in Ethiopia

The 80% of the Ethiopian population is dependent on agriculture and pastoralism, where the agriculture is labour intensive using traditional plough (FAO, 2010). Agriculture in Ethiopia is subsistence; especially in the area of food crops (CSA 2009/2010). The seed system in Ethiopia can be divided in two, the formal and the informal. The formal seed system comprises the public institutions such as the Ethiopian Institute of Agricultural Research (EIAR), the Ethiopian Seed Enterprise (ESE), which has been lately divided in regions also where the regions established their own seed enterprises, the Ministry of Agricultural and Rural Development (Bo&ARD), where bureaus of such also exist regionally. These have been responsible in crop variety developing, seed multiplication and distribution of new variety to users (DCG 2009).

The seed system in Ethiopia basically comprises the formal and informal seed systems. There are also systems referred as integrated seed system, Community Based Seed System (CBSS), and even though not developed some commercial seed systems as part of the formal seed system. However, the formal sector is the origin of improved seed (Abebe and Lijalem, 2010).

2.2.1 The formal seed system

Is a mainly government supported system where several public institutions are also involved in it. Here the major actors are, National Agricultural Research Systems(NARS), Ministry of Agriculture and Rural development(MoA&RD), Ethiopian seed Enterprise(ESE) and private seed companies like Pioneer. Recently regional seed enterprises like that of Amhara, Oromia, and Southern Nations, Nationalities and Peoples have been formed. All actors have interdependent roles and the efficiency one will affect the performance of the other.

Variety development and supply of initial seed is the responsibility of NARS (EIAR and RARIs) while ESE and RSEs take the responsibility of mass production of improved seeds. MoA&RD is engaged in variety release, multiplication, certification, and distribution of seeds in the country. Private seed growers, unions and cooperatives have also a role in multiplication and distribution of various classes of seeds.

The total cereal crop area in 2009/2010 production period was 9,233,025 hectares out of which 7,660,560 hectare was sown with indigenous seed and 322,819 hectare was sown with improved seed, indicating proportion of improved cereal seed area to be only 4%. On the other hand, number of holders using improved cereal seed in the same production year was 1,344,986 while those who used indigenous seed were 11,250,790, showing the proportion of improved cereal seed users to be 11%. The total cereal improved seed usage of the production year is 219,987qts (100kgs make a quintal), while the indigenous cereal seed size was 5,814,495 quintals, where the improved cereal seed proportion is 4% (CSA 2009/2010). Low utilization of improved seed is due to low availability of quality seed at the right time and place coupled with poor promotion system. The poor availability and promotion is due to the inefficiency the seed system of the country (Abebe and Lijalem, 2010).

There is a critical national level shortage of seeds for new varieties; of the total area cultivated the area sown with improved seed is below 2% due to high price of the improved seed and farmers' preference to grow traditional land races (IBC, 2008).
Improved seed utilisation in Ethiopia is by less than 10% of the farmers due to the inability of the various suppliers to meet demand, low working capital of the farmers and problem in accessing credit to cover the high cost of the seed and the related fertiliser (FAO, 2010).

2.2.2 The informal seed system

The informal seed system is the one that is run by the farmers themselves where no regulations or rules exist and characterized by farmer to farmer exchange (Abebe and Lijalem, 2010).

As indicated above, the indigenous cereal seed used covered 83% of the total cereal crop area, the indigenous cereal seed holders proportion is 89% and the indigenous cereal seed used covered almost 96% of the total cereal seed used CSA (2009/2010).
Short and simple, with no regulation characterises the seed production and distribution chain in the informal sector. Due to limited capacity of the formal sector, the informal sector is the main supplier of improved and local seeds for those many crops grown by small scale farmers (Marjha et al, 2008).

To improve the low utilisation of improved seed, the government of Tanzania established the parastatal Tanseed in 1973 with monopoly rights of production, processing and marketing of the cereal crops. However, the performance wasn't beyond 10%, and it couldn't serve remote rural areas. This led to liberalisation and establishment of private companies. Most of the private co's focussed on importing seeds of horticulture and few sold seeds of staple crops. Hence, even with these, improved seed access remained limited. This paved the way to establishment of community seed projects via government and NGOs with the aim of multiplication and distribution of improved seed. These community seed projects have been

successful in distributing new varieties but they are heavily subsidised (Rohrbach, DD.et al., 2002).

2.3 Farmer based seed production

Due to high production and distribution costs to reach the rural areas, few varieties, inconsistent seed quality, and policy related issues; it was difficult to provide the rural farmers with required improved seeds. Hence, farmer based seed production was initiated with the aim to solve the access problem. 'Farmer based seed production and marketing' is defined as where farmers have ownership and responsibility to operate independently with commercial intent. However, such farmer based seed production is used loosely to describe any such production and distribution with varying scope and ownership. In the Ethiopian context, several approaches with stakeholders involving farmers in local seed production, genetic resources conservation, crop improvement, variety popularization, and seed supply. These include local land race seed production for distribution in drought affected areas, landrace improvement, seed production and dissemination to repatriate farmer varieties, research based seed production and dissemination to popularize released varieties, contractual seed production by the formal sector, and the establishment of local business oriented seed enterprises managed by farmers/communities. These days various such initiatives have been implemented by federal and regional organizations and donor agencies but lack clarity on the role of the implementing agencies and the farmers' ownership of the operation (Yonas, Belay, and Zewdie, 2008).

2.4 Community Based Institutions

Community Based Institutions (CBIs), organized by government or NGOs or self-initiation of community, could be considered as emerging third sector organization that could provide a mechanism for self-reliant approach to development (Nihal, 2002). Agri Service Ethiopia, a country resident charity, in explaining why it establishes CBIs, as described in its 2010 – 2015 strategic paper, puts its belief and view about development in such a way "*development can be achieved and become sustained primarily through concerted effort of the people themselves- not with a sole push of either state or non-state actors*". Hence, it has been assisting the establishment and strengthening of CBIs in areas where it intervened.

Seed banks can be considered as providers of food security and conservers of biodiversity(Nihal, 2002), but in this case seed banks are those seed centres which make available improved seed to the community especially the poor community, based on bylaws set.

2.5 Who are the poor?

The definition of poor and poverty seem to have various definitions based on the authors view. However, Robert (1997), in his book, Poverty and livelihoods: whose reality counts? states that the term poor passes beyond being the adjective for poverty, and that it refers to lack of physical necessities, assets and income, to include the broader sense of being deprived, in a bad condition and lacking basic needs. On the other hand Robert further defines poverty as lack of physical necessities, assets and income, where it includes but is more than being income poor. ASE leaves the definition of poor to the community themselves, and it is they themselves who set criteria and group the community under the wealth categories they think can describe their community's situation. Hence what ASE does is try to estimate how many are in what category, using the baseline survey analysis.

In designing a community seed production scheme, choice of crops and variety, sources of seed, training of seed producers, quality control, need for credit to produce the seed, and sustainability issues need to be considered.(Banziger, Setimela, and Mwala. eds. 2004).

2.6 Sustainability factors for CBI seed production and supply system

On the other hand, with regard to factors that may lead to un sustainability for community based seed production and supply system, (Setimela, and Kosina (eds),2006) raise the following issues,

- Inadequate farmers' knowledge and skill in seed production, quality enhancing and the seed system,
- Low promotion of varieties so that farmers don't know about them,
- Lack of prior preparation for sustainability,
- Difficulty in estimation of community demand,
- Poor linkages with research centres, seed market information, and seed companies,
- Limited supply of foundation seed
- Farmers' need not met by the new improved varieties, and low adoption
- Lack of seed policy pertaining to community based seed production or not understanding it
- Due to the small land holdings, isolation distance requirements for quality seed production are problematic, if not impossible to achieve in some community areas.

According to the assessment carried out, quite in agreement with the above statement, limited supply of basic seed, isolation distance of multiplication plots, were also problems of the AB-CBDA improved seed system.

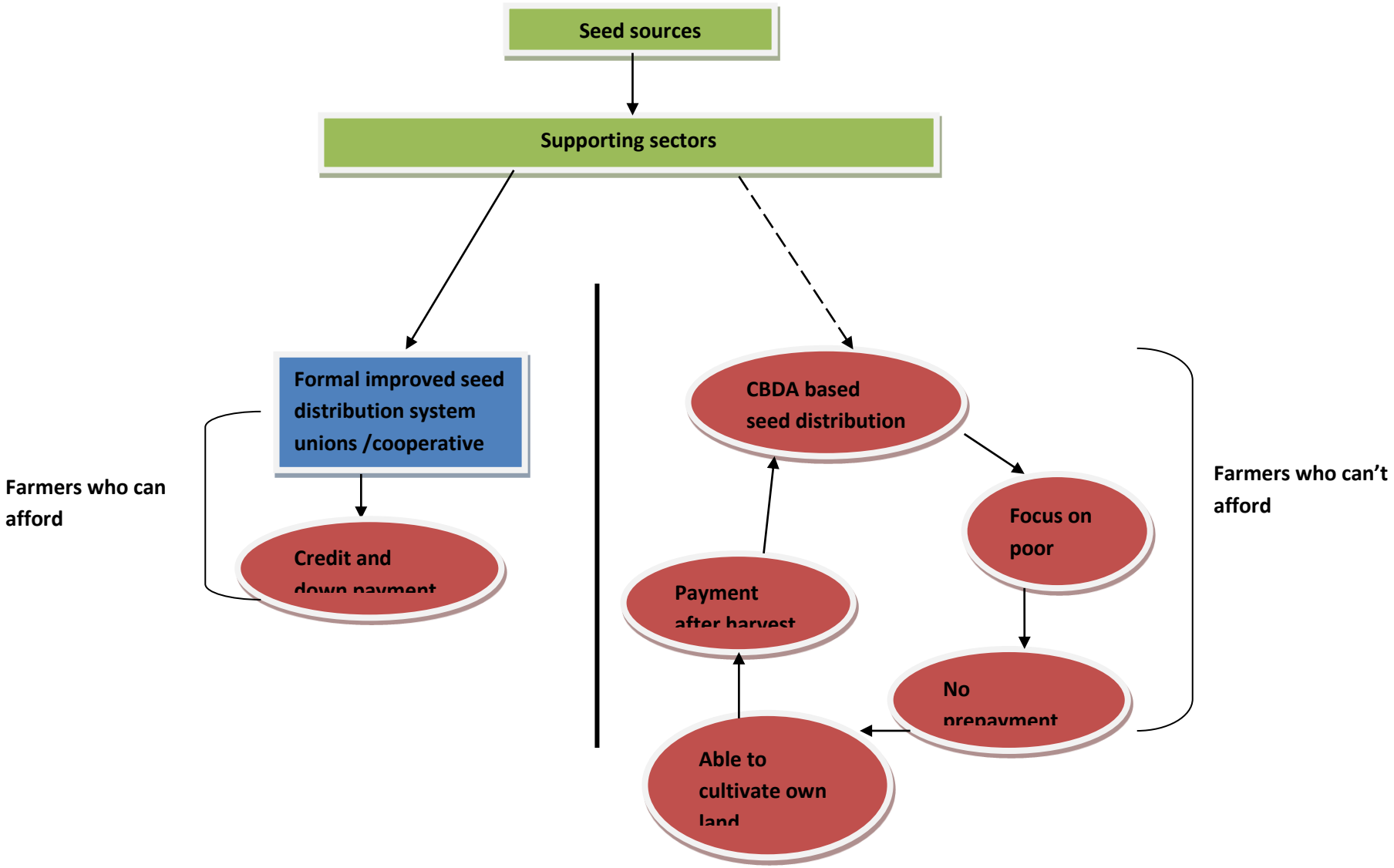
Other than the traditional seed exchange between farmers, community based seed distributions seem to start with efforts to tackle draught driven cropping problems. Such experiences include the kire based seed distribution in Wello and others.

A study about wheat seed carried out in Enebssie area (Alemu, Verkuijl, Mwangi, and Asmare 1998) indicates that the seed industry is in early stage, where it is characterised by farmer to farmer seed exchange, uncertain seed quality, and uncertain seed market. More than 50% of the farmers run out of seed every year and obtain additional seed from informal sources. Hence, it indicates the importance of strengthening the informal seed sources.

The SUNARMA seed bank experience was started in 2008 by a national NGO due to drought effect where aid to seed was changed to seed bank where farmers could take loan of seed and pay with equal of what they have taken after production. It was started in the area of some districts of Northern Shewa (Action Ethiopia, 2009).

Another trial is a seed bank where local varieties with good production, drought and disease tolerance are selected and saved in seed banks of farmers in Ejere in central Ethiopia. In such banks, farmers can borrow seed but have to pay with interest, some additional amount than they took. Ethiopian –Organic Seed Action (EOSA) an NGO around Addis Ababa is helping them (Green planet monitor 2010).

Figure 1: The different seed market channels for the different group of farmers



CHAPTER 3. RESEARCH METHODOLOGY

3.1 Study approach

To conduct this research primary and secondary data has been collected. The systematic approach carried out to collect information and perform the analysis is described in this section. To assess the before and current situation of the farmers, interview questions were organised for randomly selected sample farmers. Moreover, discussion with executive committee/ seed committee of randomly selected distribution centres was also carried out. Using open ended questions, discussion on the whole situation of the CBDA seed distribution was also carried out with some members of BoM of ABCBI and the secretariat staff. Data on the viability of supply of basic seed to AB-CBDA was also collected through discussion with the major seed supplier ESE and the Regional BoA&RD input distribution section heads.

3.2 Study area

Ethiopia is one of the countries in the horn of Africa. This study was carried in Ethiopia, in Enebssie Sar Midir District, eastern Gojam Zone, within the Amhara Region. Enebssie Sar Midir District is one of the 18 districts of Eastern Gojam zone. The district town Mertule Mariam is situated 370kms, 185kms, and 195kms far from Addis Ababa (the capital city of the country), Bahirdar (the capital of the region), and Debre Markos (the capital of the Zone) respectively. The district has 35 villages, where 33 are rural while 2 are town villages. The altitude ranges from 1300 to 3300 meters above sea level. The current total population of the district is 170107(85639F), 50%F. Out of this the rural population is 156973(78488F), 92%, and the urban population 13814(7151F). The total size of population in the villages of the AB-CBDA seed distribution centres is 69130(34812F) which is 44% of the total rural population. The geographic feature of the area is characterised by a very rugged and undulated terrain where the plain part is 20%, undulating 45%, valley 5%, mountainous 30%.

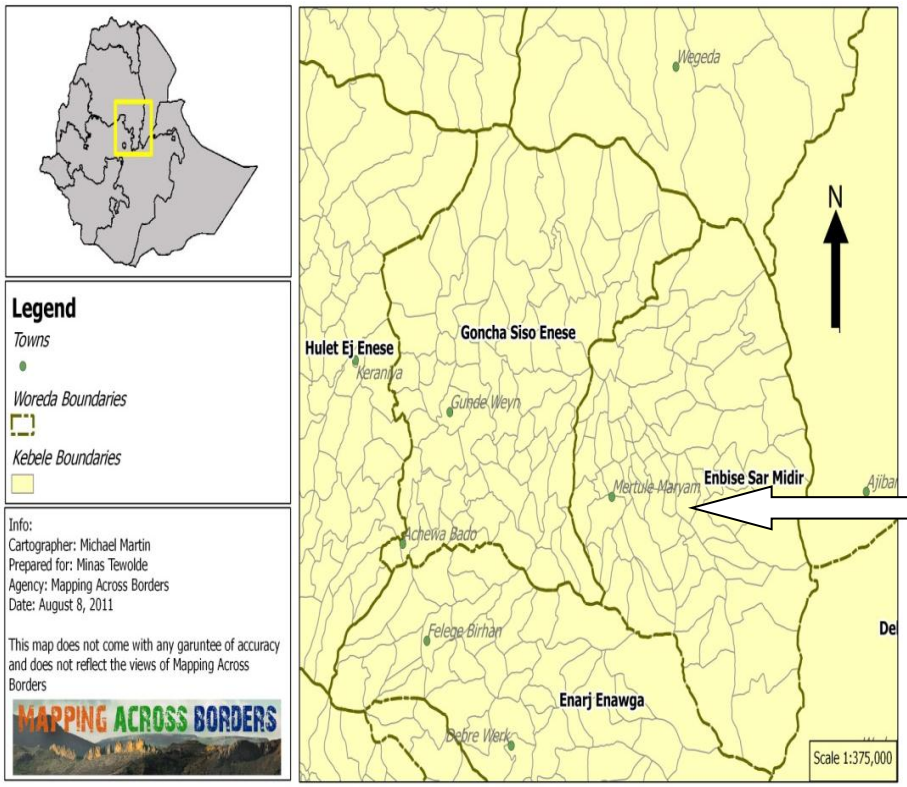
ASE has been carrying out integrated food security and community empowerment programs in 17 of the 35 villages of the district. All the 17 program villages do perform seed distribution, but 5 of them have been selected randomly based on agro ecology. From these 5 villages a total of 30(13F), female 43%, the seed system users from all wealth categories were selected randomly.

Table No 1: The 5 sample villages according to agro ecology

Highland	**Mid highland**	**Lowland**	
(19) LaiMichael	(05) Alusha	(09) Ansa,	
(04) Derje	(013) Zimbtit		

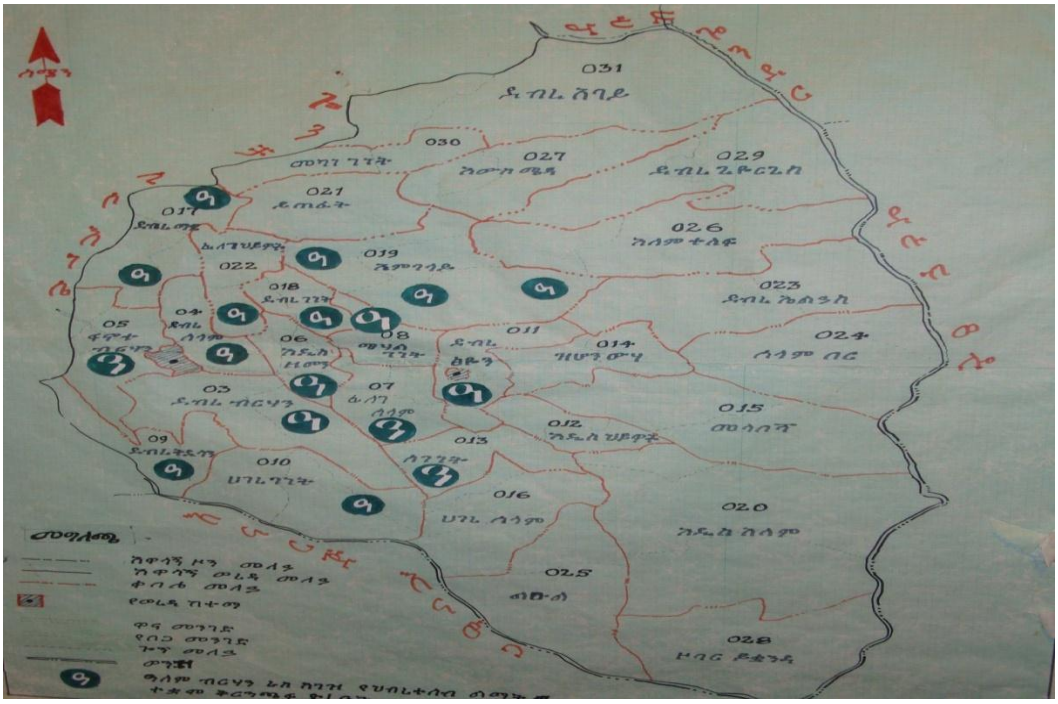
A baseline survey carried out in 2004 by ESM program staff of Agri Service Ethiopia indicates that among the 480 sample taken, the average land possession of the poor community is 0.5-0.75 ha, where they also have no livestock, not enough seed for crop planting, and are exposed to food gap from March to the next harvesting period of October to November. Among the causes for low agricultural production are small size of land, low production potential seed varieties, low soil fertility, livestock and crop diseases, pests, low feed availability for livestock, lack of draught power, erratic rainfall and occurrence of hailstorm. The main crops grown in the area are Teff, Wheat, Faba Bean, Horse bean, Chick pea, Field pea, Barely, Maize, Haricot etc.

Figure 2. Village boundaries of Enebssie Sar Midir district,



Source: Mapping Across Borders

Figure 3: handmade map of the study area with the ABCBDA branches indicated by ›



Source: ABCBDA secretariat office

3.3 Data collection

3.3.1 Secondary data

The research was begun with internet browsing, reading library books, documents of my organisation ASE etc. While at field level various documents and financial reports of ABCBDA reading and observing has also been carried out.

3.3.2 Primary data

Primary data collection was carried out by interviewing 30(13F) seed system user farmers, discussion with committee members of 3 selected seed distribution centres, the AB-CBDA manager and 3 BoM members of AB-CBDA, the delegate head of the ESE in Bahirdar, the BoA&RD input distribution section head of the Amhara Region and a staff delegated to represent ASE for this purpose. The seed user farmers were selected randomly from 5 of the 17 seed distribution branches of AB-CBDA where 3 of the branches were from previous and 2 branches from new. Moreover, as explained in the previous part, selection of the branches has also considered agro ecology. In selecting the 30(13F) participants, 6 interviewees per each branch were taken with consideration of their wealth ranks and gender. From the 5 branches, here also, considering agro ecology and previous and new branch status, 3 seed committees were selected and the discussion carried out, where two of the seed committees were from previous and 1 from new. The interview and the discussion questions and issues were based on the objective of the study which is to assess the improved seed situation before AB-CBDA seed distribution, the changes brought after the service and the general situation of the system with regard to sustainability and continuing as a source for improved seed to the poor farmers.

3.4. Data Analysis:

The data collected were from the interview and discussions carried out. Hence the analysis has been carried out qualitatively. For the analysis of the questionnaire for farmers, SPSS program was used. The analysis was based on the conceptual frame which deals with the seed distribution system. The questionnaire and the discussion issues used for collection of data are annexed.

CHAPTER 4: RESULTS

This section deals with the findings in relation to the interview carried out with the 30(13F) farmer participants of the seed distribution system, discussion with the seed committee (executive committee members) of 3 DCs and the secretariat staff of AB-CBDA, discussion with the ESE official in Bahirdar, Regional Bureau of Agriculture and Rural Development in put distribution section and ASE head office staff. The main issues included in this analysis will be back ground information, situation before and after the seed distribution system, quality and sustainability, and relationships with stakeholders etc

4.1 Background of the interviewees

The 30 (13F) farmers, women 43%, were from 5 DCs where the 2 are from new and the 3 DCs are from the previous ones. The age of the participants ranged from 25 years to 65, where the majority were in the range of 41-55 years of age.

Table No 2: Age and sex of the sample interviewees

Age category	**Male**	**Female**	**Total**	**%**
25-40	4	8	12	40
41-55	9	5	14	47
60 and above	4	0	4	13
Total	**17**	**13**	**30**	**100**

Source: survey data

With regard to educational status of the participants, 33% of the participants were illiterate before the project while after the project participation this has decreased to 17%.

In order to focus on the poor, wealth ranking is carried out by the ASE program office at the beginning of the project. The criteria to identify the wealth status is set out by the community itself, and it included size of land, number of oxen, cows, small ruminants, pack animals(livestock), ability to feed the household all year(or months of food gap per year), size of house, and existence of any other income alternative. Hence, based on these criteria, trial to assess the status of wealth rank of the participants indicated that there had been quite a significant change, where the poor section has decreased by more than 50% while the middle status has increased by 47% and a new rich section of at least 7% has been created. Here, note should be taken that, though the improved seed access could have played some contribution, the change in the wealth rank is not totally the result of the improved seed access. Here note should be taken that, though the improved seed access could have played some contribution, the change in the wealth rank is not totally the result of improved seed access.

Table No 3: Wealth rank comparison of interviewees in %

Wealth rank	**Previous**	**Current**	**variation**	**Remark**
Poorest of poor	46,7	3,3	-43,3	Decreasing
Poor	33,3	23,3	-13,3	Decreasing
Middle	20,0	66,7	+46,7	Increasing
Rich	-	6,7	+6,7	Increasing
Total	100,0	100,0	-	

4.2 Improved seed usage before

Almost 2/3 of the farmer interviewees were not users of improved seed before the CBI intervention. When the non-users households are observed sex wise, among the female households 85% were non users. Female household heads are created either due to divorce or spouse death, and when the main provider dies or is out poverty increases. Moreover, most of the time women are left to attend home management, where their knowledge of different information is low. In addition the local term (gebere or arsoader) used to explain a "farmer" depicts male farmers and doesn't serve to explain female ones. For those remaining 1/3 who were users of improved seed, their sources were the district cooperatives (80%), the district office agriculture (10%) and exchange from farmers who had been users of improved seed (10%).

Table No 4: Improved seed users before the CBDA service, proportion by sex

		Sex of interviewee				Total		Remark
		Male		Female			%	
		No	%	No	%	No		
usage of improved seed before ABCBI	**yes**	8	47	2	15	10	33	
	no	9	53	11	85	20	67	
Total		17	100.0	13	100.0	30	100.0	

When the seed utilisation is seen wealth rank wise, in the middle and poor section the users and non users were 50% to 50%, while in the poorest of the poor almost 86% were non users. The amount of seed acquired from these sources ranged from 25kgs to 75kgs, where the majority 50% used to get 37.5kgs. With regard to type of seed used were that of wheat, teff, maize and chickpea, where the highest proportion 50% was wheat and the next major proportion was wheat and teff, 30%.

Table No 5: improved seed non users proportion by wealth rank

Wealth rank	**usage of improved seed before ABCBDA**		**Total**	**No Response in %**	**Remark**
	Yes	No			
middle	3	3	6	50	
poor	5	5	10	50	
poorest of the poor	2	12	14	86	
Total	**10**	**20**	**30**	**33**	

Problems encountered by these seed users were expressed in relation to high price (40%), not being timely (30%), quality problem (10%), while those who say they had no problem were 20%. With regard to benefits earned from using these seeds, the majority 80% replied that they got higher/better production than before.

Concerning the non-seed users, those who were obliged to allow sharecropping of their land were 53%. The process of the sharecropping is carried out in a way where the one who comes to sharecrop the land covers the cost of the seed and labour and at harvest time equal sharing of the production is carried out between the land owner and the sharecropper. To lull the poor farmers, an advance payment in cash is also customary, but the money has to be repaid if the poor farmer wants to quit and keep his land. Problems expressed in connection with sharecropping were the loss of 50% of production, and problem in relation

with the poor land management or care taken by the sharecroppers. Assessment if any benefits due to the share cropping, 60% replied none while the remaining response is “it was better than leaving the plot uncultivated”.

Engagement in loan was another means of getting improved seed, and among the interviewees those who took loan for such purpose were 13% (interestingly, no women). Sources for the loan taken were the Regional Amhara Credit and Saving Institution and individuals, where the 75% of the loaners used the Regional Credit and Saving Institution. The credit and saving institution gives loan in groups and interest of the credit institution were 12.5% per year while that of the private individuals was 10% per month till one pays the loan if it is cash and 100% if it is in kind, i.e. if a farmer takes a loan of 50kgs of grain then he has to pay 100kgs.

Trial to assess problems encountered during the improved seed access before AB-CBDA service indicates that there were service and price related problems. The service related problems are expressed as delay in delivery, low availability of Teff and beans seeds, quality and lack of transport. When it comes to price almost 33% of the respondents expressed that it was high.

Comparison of the improved seed and the local seed with regard to productivity, market price and demand of the grain etc., the response was that the improved seed was better in productivity, market price and demand. Some even expressed that it can be exchanged as seed. However, there were also remarks that it is sometimes affected with disease.

For those who can’t get the improved seeds, alternative left was the local seed with sources being own, exchange from farmers and purchase from market, where the majority 42% used market and exchange from farmers.

4.3 Improved seed distribution by ABCBDA

AB-CBDA is a community based institution established by the community in Enebssie Sar Midir district, a program area of ASE, with the objective of “community taking over the achievement and sustaining of development issues, on its own hands”. Hence, one of the activities that it has been dealing on is improved seed distribution to the poor. ABCBI has 18 branches at 18 rural villages where 17 of them have their own seed store and the branch executive leaders carrying out the service. Intervention villages of ASE are divided in two, previous and new DCs. The previous DCs intervention started in 2001in ten villages while the new DCs intervention started in 2008 in 7 villages. Currently AB-CBDA has included one additional DC.

Picture No 4: Seed store at branches of AB-CBDA

Source: picture taken during data collection

Beginning stock was provided to these centres that amounted to 30,831kgs in total where 19,969kgs was for previous DCs and 10,862kgs for the new DCs.

Table No 6: beginning stock of the distribution branches (in kgs)

Crop	New DCs	Previous DCs	Total	%
wheat	9172	16594	25766	83,6
teff	870	365	1235	4,0
barley	0	800	800	2,6
bean	0	1500	1500	4,9
Field pea	820	600	1420	4,6
Chick pea	0	50	50	0,2
Haricot	0	48	48	0,2
sorghum	0	12	12	0,04
Total	**10862**	**19969**	**30831**	**100,0**

Source: ABCBDA secretariat office

The types of seeds included in this were wheat, teff, barely, peas and beans, and sorghum. Major part of these seeds to the extent of 84% was that of wheat while the other crops were below 5%. Previous DCs service started since 2001 while that of new DCs since 2007 program years.

Be that as it may, the current stock of the distribution centres has grown to 181,619 kgs almost six times of the beginning stock.

Table No 7:- Current seed stock (in kgs)

Seed type	New DCs	Previous DCs	Total	%
Wheat	28957	72650	101607	**55,9**
Teff	3480	10613	14093	**7,8**
Barley	100	11933	12033	**6,6**
Faba bean	1991	16620	18611	**10,2**
Field pea	5530	8564	14094	**7,8**
Chick pea	0	8642	8642	**4,8**
Haricot bean	1109	11237	12346	**6,8**
Sorghum	0	0	0	**0,0**
Horse bean	110	83	193	**0,1**
Total	**41277**	**140342**	**181619**	**100,0**

Source: ABCBDA secretariat office

When seen from the side of previous and new DCs, the stock division is 140, 342 kgs and 41,277 kgs respectively. While when seen from the proportion of the type of seeds, almost 60% wheat, teff 8%, barely 7%, beans 10%, peas 8%, haricot beans 7%, etc. According to reports from the ABCBDA secretariat office, the current improved seed users number has reached 3130(826F), F 26%.

Table No 8:- current size of improved seed users

participants	New Dcs	Previous Dcs	Total
Total	938	2192	3130
Male	597	1707	2304
Female	341	485	826

Source, ABCBDA secretariat office

4.4 Response of the interviewees about the ABCBDA seed service

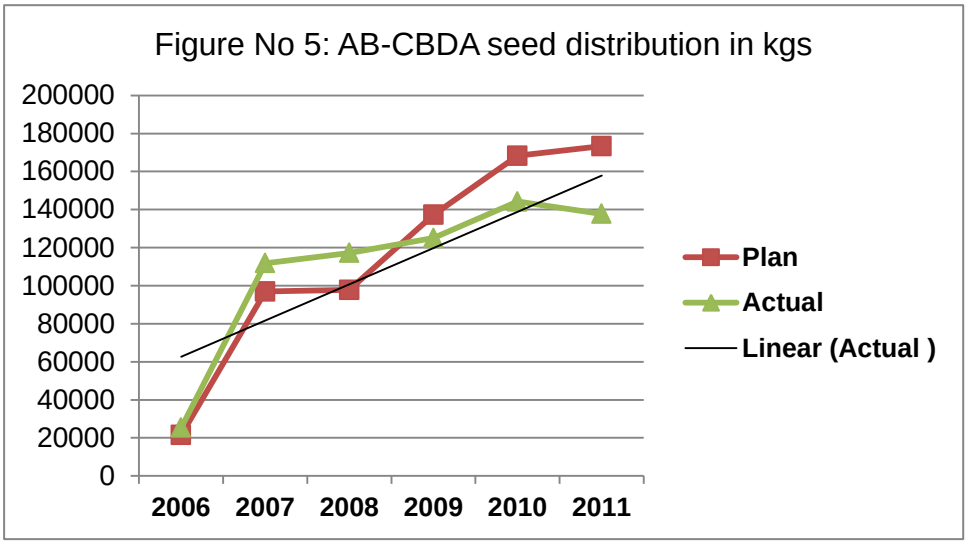
The following presentation will deal with the response of the interviewees starting with how they were able to get the service, what service they are having, problems and benefits observed and their general view of the service.

4.4.1 Selection and process of seed distribution

The response as to how the interviewees became participants of the seed distribution indicates that it was conducted through selection. To be selected as participant, request for seed, wealth rank status, membership fee paying of CBI, were at first the criterion considered. But in time other considerations like the initiation to repay loan, participation in communal activity, etc were also included. But all these have to be presented to general assembly and confirmation carried out.

After all these seed distribution is carried out when the agreement document developed is signed by the person taking loan together with the "wass"(sponsor who would take responsibility if the person taking loan didn't pay), and it is provided without prepayment but agreeing to repay at harvest time with the interest according to agreement in general assembly.

According to the data collected Wheat seed distribution starts in 2002, the number of users initially was 10% of the respondents but grows within time to the proportion of 60%. The range of wheat seed distributed was 18-50kgs.



The above graph indicates an increasing trend in the size of improved seed that has been distributed through its branches, though not carried out according to plan. Reason for not carrying out as planned is shortage of the seed from sources.

4.4.2 Satisfaction of seed users

Assessment whether the seed service has fulfilled all the requirements of the users, has indicated that the response was yes for the 70% while it was no for the remaining 30%. For those who said no, the issues raised were related with quality of the seed, and low quantity of peas and beans in distribution. Concerning adequacy of the seed distributed some 56% say it is enough while those who say no argue that it is not adequate as there are many users than the availability and existence of low peas and beans seeds.

Questions specifically focussed on quality of the seed have revealed that the majority (53%) feel that the quality is low. Reasons for the low quality were expressed as being due to users

mixing varieties, addition of foreign material, long stay of the wheat seed in circulation, sieving not carried out during collection etc.

Another issue related with satisfaction of users is distribution time. Quite admirably, all the respondents agree that the distribution is carried out timely with no delay.

4.4.3 Loan collection process

Seed users are provided the seed without prepayment but have to pay according to agreed decision in their general assembly. The interest at harvest time seems to differ from branch to branch where some report it is 10%, others indicate 20%, and one Dc states it is 7kgs additional for every 40 kgs of loan. A great majority of the respondents, 93% feel that the payment is fair. Those who oppose indicate that there are some committee members who ask them to pay more and the 7kgs per head is too much as the 50% of it is as incentive for the committee.

4.4.4 Advantages from the seed service

All the interviewees indicate that they have benefited from the service since it is improved seed at door step with no delay and has relieved them from distance travel and delay in waiting for committees' decision. Concerning the cooperatives service, distribution delay were expressed waiting for full committee meeting for decision.

In connection to the production/productivity that they are gaining except during rain shortage the more than 95% interviewee indicated that they are gaining more production than before. They also indicated that with fertiliser and good weather the productivity from one timad (a quarter of a hectare) has been doubled. Expressions like the productivity per timad has increased to 800kgs, 900kgs, etc with fertiliser and 500kgs to 600kgs in normal situation has been observed.

Another advantage observed is relief from sharecropping for 57% of the interviewees (33%F) which has enabled the farmers to get out of it and crop their own plots with the provided improved seed. The sharecropped land ranged from 2 to 4 timads which is 0.5 to 1hectare. To be relieved from sharecropping means, becoming owner of all the produce from their plots, as submitting half of the produce stops, there by contributing to increased food security status of the family.

11(5F) who constitute 37% of the interviewees indicate that they have been enabled to get out of loan be it in grain form or cash which they were indulged in to get improved seed.

Concerning market demand and suitability of the seed as food, all the interviewees expressed that the produce from such seeds has high market demand and fetches good price, even it can be exchanged as seed with farmers for better price and regarding the taste as food no problem has been observed so far.

4.4.5 Loan repayment practise

It was only 3 interviewees (10%) who replied that they do have experience of rejecting to pay the loan with interest. Reason indicated were related with weather issue that aborted the production expected and use of the seed for another purpose and not able to repay.

4.4.6 Problems encountered related with the seed distribution

Most of the PPs who account to 73% have indicated that they haven't encountered any problem in connection with the seed distribution system. While the remaining have raised issues with regard to quality, awareness in seed usage, low quantity of seed and nepotism related. The issue related with nepotism (3%), was expressed as a situation where new seeds are provided to friends or relatives and not based on genuine distribution.

4.4.7 Reporting and accountability

Presenting reports is one way of expressing accountability. Assessment with regard to whether the seed/CBDA committee present their reports to community and members have indicated that positive response in 93% of the respondents while the negative responses were 7% expressing no reporting and that the reporting experience has been quitted lately. The reporting intervals expressed by the respondents varied with the majority (64%) indicating quarterly and annual meetings.

All the participants have indicated that they do provide labour contribution in the newly started seed production/multiplication system of the CBI.

4.4.8 General view of respondents about the seed service

The general view of the respondents can be grouped in two as those that deal with appreciation and those that deal with comments.

The appreciations were expressed by about 57% of the respondents indicating that a seed service at nearby is to be appreciated, the service has brought many changes in the life of the poor, the service should continue strengthened, the newly started seed multiplication should also continue strengthened etc.

The comments were raised by about 42% of the respondents and they mostly dealt on quality issues. Some of the raised issues that focussed on quality were, old seeds need to be changed, quality control during collection of loan should be given focus, participant/user farmers should be responsible enough and give concern to quality, and professional follow up of the newly started seed multiplication should be considered etc. Though, of few participants (3%), there were issues with regard to nepotism and that such an experience needs to be corrected.

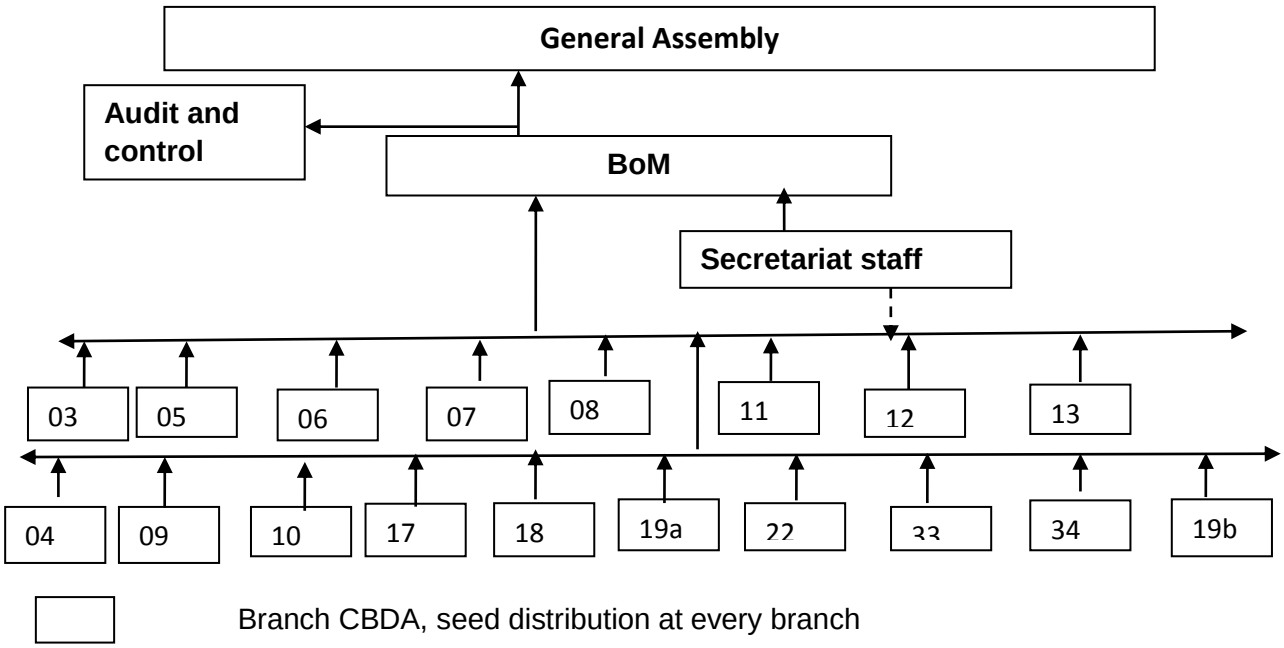
4.5 Discussion with the 3 sample seed committees' of branch CBDA

AB-CBDA is a legally registered CBDA working at district level. Hence it has 18 branches at 18 villages. The branch at village level has a general assembly and an executive committee and audit and control section. Previously there was a seed committee that was selected by community and members which were assigned to run the improved seed service under CBI. Currently as the service providing requires incentives and providing for many wasn't possible with the CBDA capacity, the responsibility has been transferred to the executive committee members of the village level CBDA. The discussion was carried out by randomly selecting 3 sample DCs which are 04(Derje), 03 (Alusha), and 09 (Ansa). 04 and 09 are from the previous while the 03 DC is from the new DCs. The selection of these 3 branch distribution centres takes agro ecology of the sites in to consideration, where the 04 is from highland, 03 from mid highland and 09 is from the lowland.

4.5.1 Objective of establishment

As stated by the executive committee/ seed committee, the objective for the establishment of the seed centres was to avail improved seed for the poor community at nearby and help in increase in production there by contribute to food security.

Figure 6: Structure of ABCBDA, its branches and seed distribution centres.



N.B *The above numbers in the boxes indicate the name of branch villages where the seed distribution branches are found. Since previously 2 or 3 villages are brought together for administration purpose by regional/district administration such numbered names are taken, though still there are alphabetical names also, like 03= Woinwuha, 04= Derje etc….*

4.5.2 Source of seed

Source of the beginning seed was Agri Service Ethiopia (ASE), a country resident charity according to the new legislation of NGOs in Ethiopia. ASE also has built stores and provided the necessary trainings and equipments for the seed distribution system. ASE has tried to create network between ABCBDA and the country's main seed source Ethiopian Seed Enterprise (ESE), and the cooperatives in the district. Hence, after ASE the main provider of seed was ESE and sometimes by purchasing from cooperatives. However the relationship with ESE is not formal, it is based on the good will of ESE. At time of scarcity there could be no seed to be transferred to AB-CBDA. If AB-CBDA has to get seed in such situation, it has to present its request through the district office of Agriculture or the cooperatives which they will send their request with AB-CBDA request added to the Regional BoA&RD input distribution section, since it is to them the official supply is provided.

4.5.3 Trial for seed multiplication

Since 2009 AB-CBDA has started to carry out seed multiplication activities in plots provided by some member DCs with the approval of the District Administration and Office of Agriculture. The total size of land provided was at first 22has but now it has reached 25has. At the first trial in 2009 a total of 19900kgs of seed was harvested where the 51% was wheat, 18%Field pea, 12% Faba bean, 10% Teff and 9% Haricot beans. In 2010 the total production was 13764kgs from the same 22 has but was lower than last year due to bad weather conditions, where the type of seeds produced were 61% wheat, 16%teff, 12% Field pea, and 8% Haricot bean etc. In 2011, a total of 25has has been cultivated with 12.75ha wheat, 4.25has Teff, 3.5has Field pea, 2.5has Faba bean, and 2has Haricot beans. The source for the seeds has been the district cooperative where it was provided through purchase. At time of land preparation, sawing, cultivation, harvesting and threshing etc ABCBDA uses the labour of the members where the District Administration also provided community labour through safety net programs.

Picture 7: Seed multiplication trial pictures

Wheat

Faba bean

Teff (“kuncho”, a new variety)

Picture 8: Taking meal together after communal labour service

Source: ABCBDA secretariat

4.5.4 Beginning and current stock of seed in the sample DCs

The 3 sample DCs had a total 6250kgs of improved seed composed of wheat, Teff, Faba bean, Field pea and barely. The wheat stock proportion was the highest amounting to about 85%. Currently this stock has increased to 34,364kgs which is 5.5 times the beginning stock. Here also the wheat stock proportion is 54%. Additional types of seed in the current stock are Chick pea, Horse bean, and Haricot beans.

4.5.5 Loan recollection

The improved seed is loaned without any prepayment and only signing of agreement to pay with interest and availing “wass”, (a person who will be responsible) if the payment is not carried out according to agreement. At time of recollection of the loan, interest is added to the loaned seed and also the type and quality of seed is checked up. However, as indicated in the participant farmers’ interview, sometimes even when a farmers brings low quality seed as payment, the committee will accept it due to fear of conflict or due to nepotism. Such a practise leads to low quality of the seed. On the other hand, the committee firmly indicate that strict measures are taken during loan collection, check up of the seed brought is conducted and if there is a problem the seed is rejected and the individual is told bring another pure seed. If refusal continues then the person will be taken to the local social court.

4.5.6 Refusal to pay loan

Discussion with regard to existence of refusal to pay loaned seed by participant farmers with sample DC committees has revealed that it does exist and its extent is 5% to 10% of the total loaners of a period. The committee indicates that before providing the seed in loan, trial to create awareness about the seed system and the responsibility that participant farmers bear

is given focus. In addition before taking the issues to the court, the committee say they try to give repeated advice to the individuals who are not fulfilling their promise. Of those cases submitted to court, the proportion of the solved ones differs between the sample DCs. There is a DC which indicated all not solved yet, another says some solved, and the other indicates that only few remaining. Reasons for the delay of solution to the cases were indicated as delay from the court officials, the committee becoming fed up of the issue and low follow up, the accused not being present at case appointed time etc. where the major reason expressed by all the DCs was delay of decision by the court. But since taking the issue to court and following it up strictly means entering in conflict with the perpetrators, there could be negligence created by committee.

4.5.7 Seed quality

The control for seed quality is carried out through physical check-up. The committee will try to check the repayment seed brought by comparing with the original seed that was distributed. But there doesn't seem a firmly applied practise that the seed brought should be sieved and clean since existence of foreign materials was repeatedly expressed by the farmer interviewees and my personal observation at time of data collection.

4.5.8 Time stay of the seed in circulation

The sample DCs committee say that the general practise they have is a seed can stay in circulation for three years. However, they do express the existence of seed of more than three years due to lack new replacement. Decision on the stay in circulation of seed depends on the availability of new replacement, on the active performance of the ABCBI secretariat and the board as they are the ones who communicate the ESE and others for supply of seed. Concerning the current seed stock status, the three sample DCs expressed that the majority of the seed is old (2/3) which means exceeding three years circulation in service. One DC even frankly expressed that the seed they are providing has stayed for longer years in circulation; hence they distribute the seed telling the farmers to use it as exchange with other better seed rather than using it as seed.

4.5.9 Trainings and capacity building to committee

All the sample DCs committees indicated that trainings with regard to seed and store management, pest and disease control, property management, seed distribution and reporting etc. has been provided to them and/or the previous seed committees. But they do also underline the need for trainings of reorientation and on new issues like the seed multiplication.

4.5.10 Auditing and control of the seed system

Within the structure of AB-CBDA audit and control section exists at branch level and at district level. The main function of these sections is to carry out control and auditing of the finance section, property and store, the performance of the branch and upper level executive leaders of the CBDA according to the bylaw set. The activity can be taken at any time the section feels it should be carried out or based on action plan it sets. The branch level audit and control section's assignment is to take care of its own branch while the district level takes care of the performance of the BoM, the secretariat staff and the branch offices. The district level audit and control section is accountable to the district level general assembly while the branch level is accountable to the branch level general assembly.

AB-CBDA has a financial, property management, and seed management system. Hence, auditing and control is carried out based on the bylaw and the system established. Documents of auditing and control carried out do exist but were not kept within the seed distributing committee. AB-CBDA also conducts auditing and control using external auditors.

4.5.11 Seed store security issue and maintenance

All the branches do have recruited guards. These guards are expected to take care of the seed store, and the CBDA office. So far, no serious problems have been encountered. But

discussion with regard to existence of any insurance entered for the stores has revealed that it doesn't exist. Moreover none of the branches or even at AB-CBDA level has considered the need to think of maintenance budget. Though the new branches stores might be new as they were constructed after 2007/2008, the previous DCs stores have been providing service for almost 8/9 years. Hence, the issue of insurance for any damages like fire, robbery etc and the availing of finance for maintenance need to be given immediate focus.

4.5.12 Encounter of conflict

The seed committee could get in to conflict with the community members in connection with seed distribution, loan recollection and currently in connection with land allotted for seed multiplication. When there is scarcity of seed, the committee say some individuals who haven't been provided could create dispute. Some of those who refuse to pay loan when taken to court could push the issue to conflict. Sometimes some guys could raise and argue that the land allotted for seed multiplication belongs to them and due to this conflict could start. Solutions practised for such conflicts were expressed as, those who receive seed this year need to cover from themselves so as to minimise scarcity, try to increase the amount of the scarce seeds, conduct meetings and carry out discussions on those issues of conflict, and be abided by the bylaw.

4.5.13 Partnerships

4.5.13.1 Local

AB-CBDA and its branches need to have a smooth relation and cooperation with local government, cooperatives and the seed system. The local government exists from grass roots to the upper level. The village level administration, village level office agriculture DAs, and the social court are the ones most essential at village level. At district level, the District Administration, the District Office of Agriculture, the legal section and the court, cooperatives etc are very crucial. Discussion as to how the relationship is has revealed that at the moment all the relations are smooth.

The secretariat staffs of AB-CBDA and branch executive leaders expressed that there had been cooperation of the local government in providing land for seed multiplication. The district and local courts were also assisting positively when cases with regard to the land ownership are raised. The village level administration and the DAs of the village office of agriculture have assisted in providing safety net during need of communal labour for cultivation of the seed multiplication effort. The cooperatives have been providing improved seed through sale to AB-CBDA which it tries to distribute to poor farmers with no prepayment but collect the loan after harvest with interest.

4.5.13.2 Regional

At regional level ESE and the Bureau of Agriculture and Rural Development are very crucial stakeholders. ESE is the main provider of the improved seed, the BoA&RD is the one who brings the seeds from the research centres and provides to those who could multiply and one who decides the quota of seeds to be distributed. As explained above the relationship with these offices hasn't been formalised. The head of the BoA&RD input distribution section indicated that, to change the relationship to formal, AB-CBDA has to register as seed producer and this requires issuing licence from the quarantine section of the BoA&RD.

4.5.14 Satisfaction of the service

Assessment or discussion on how the committee members feel about the service they are providing has revealed that they feel satisfaction since they are providing service to the poor community, they themselves are also the users of the service, and that it has helped them to have more knowledge etc.

4.6 Discussion with secretariat staff of AB-CBDA

Acquiring improved seed was previously carried out by submitting a letter of cooperation from the District Office Agriculture to ESE, and then ESE used to supply seed from its store in Bahirdar or other stores. Currently this has changed and to get seed, permission from the Regional BoA&RD is a must. The other means left is to buy from cooperatives.

Recently AB-CBDA has started a trial seed multiplication by acquiring land from different branch DCs with the permission of the District Administration.

4.7 Discussion with ESE staff

It has been explained by Mr Abdi (delegate head) that ESE was established in 1979 to assist the resettlement program of that time, to provide seed to the poor section of the community, by receiving the seed from the research centres and multiplying it in own farms and with contract farmers after providing the required training, and carry out seed extension. He confirmed that there is supply shortage. Mr Abdi further explains that these days private seed producers are joining the service. The varieties that they deal with majorly are wheat, teff and maize, and with regard to beans and peas he believes that the varieties under the hand of the farmer are good with the respect of disease and other effects. He advised that during scarcity that it is difficult to supply seed and that it is better if the regional BoA&RD could recognise AB-CBDA as one of the customers like the unions and cooperatives.

4.8 Discussion with regional BoA&RD input distribution section

The discussion was carried out with the head the input distribution Ato Muluken Zeryihun. He explained that the office receives basic seed from research centres and provides it for multiplication according to agreement for private and GO multipliers. Currently there are 14 multipliers where the 13 are private and 1 state owned. Be it from the private or state owned, the multiplied seed is submitted to the regional BoA&RD and the price is decided. Distribution to districts is carried out according to the plan they presented. There are 13 unions in the region; hence distribution to the farmer is carried out through them.
For AB-CBDA to get seed either it should present its request included in the request of the district through the district office of agriculture or it should register as seed multiplier fulfilling the requirements, then it can be provided with basic seed. The registration is carried out by the plant and animal quarantine section of the regional BoA&RD.

4.9 Discussion with ASE staff

The discussion with ASE as an organisation was carried out with Ato Nigussie, Hailu Wondimteka, who is serving as Community education and Institutional Support Program Officer based on assignment from the organisation. The discussion was focused on the objective of ASE in establishing CBDAs and the seed distribution system, the feeling of the organisation with the so far experience of program areas, what learning issues has been observed by the organisation and any new plans for the future.

4.9.1 Objective of ASE in establishing CBDA and the seed distribution

The activity of creating seed distribution centres was started before the establishment of CBDAs. The main objective of it being to bring about increase in production and productivity by availing improved seeds and technology which has been very lowly distributed then and now by the concerned sections. The plan was not only availing but also enabling farmers to produce the required seed locally. For such purpose, organising the farmers was essential and this led to the establishment of the CBDA. However, CBDAs establishment doesn't only focus on seed distribution; it is empowerment of the community where the community tries to deal with its problems in an organised association way for creation of sustainable livelihood.

4.9.2 The experience so far

Concerning the experience so far, Ato Nigussie feels that the objective to produce seed has not been achieved “as there is quality problem and what is being produced is grain rather than seed”. The experience of the CBDA in registering farmers first as members so as to get seed wasn’t in the objective of ASE; the aim was to be provided to any needy poor farmers. But, he believes that, a basis for a system of local seed production and distribution has been laid, considering the infrastructure (like store and balance) and establishment of the seed management which is a big achievement. In his view, the recently started seed production locally should be strengthened if quality seed is to be distributed.

4.9.3 Learning so far and future plan

What ASE has so far learned is that, with all the limitations, that it is possible to build the local capacity and create a local development partner. The future plan is to strongly work on enterprises that could serve as sustainable source of income for the CBDAs and consideration of seed production as one of the enterprises.

CHAPTER 5. DISCUSSIONS

Purpose of CBI establishment by ASE is the belief that community will come out the main leader and decision maker in its own development and improve its livelihood through solving its social problems by its own efforts (ASE, 2007). The AB-CBDA was first legally established in 2004 as a CBI. The new legislation of the country for NGOs and other civil society associations has changed the name to CBDA and Alem Birhan has to re-register as AB-CBDA in October 2010. AB-CBDA has a vision where it strives to see "*the community managing its development efforts through its own administrational and managerial practices where the social and economic problems of the community are solved and livelihood of the society improved*" (AB-CBDA bylaw).

The improved seed distribution trial is one of its development efforts where it tries to solve the problem of the poor community members. AB-CBDA is not established for profit but it tries to carry out its programs in a sustainable way. The improved seed distribution system it follows is different than others which are established for drought problem solving or from those contractual farmers based seed production and multiplication efforts in agreement with ESE etc. where ESE would collect the majority of the production so as to supply for other areas. The system doesn't ask prepayment, and interest on the loan is paid in kind.

Setimela, Monyo, and Banziger, (2004) indicate that community based seed systems can serve in distributing both improved varieties and quality declared local varieties as they work with both the formal and informal sector. Moreover, they indicate that such system can move to small scale seed enterprises with establishing quality system and integrating with the seed market.

5.1 Background of the respondent farmer seed users

The interviewed seed users were 30(13F) with different back ground of educational and wealth rank status. There has been an appreciable change observed in literacy and wealth status of the respondents. ASE gives concern to education and used to provide FAL and Livelihood Based Literacy (LBL) program in its project areas. Such a practice could have led to the exhibited decline of illiteracy from 33% to 17%. The Enebssie program office of ASE was an IFSP and Community Empowerment and it was carried out from 2001 to 2010 in three phases. Within these years different projects that focus on food security, income generation, social services and empowerment of community have been carried out other than laying the basis for the seed system. These seed system users have passed as participants of the program and the change in educational status and wealth rank are its results. Hence, the change in wealth rank where the poor and poorest section together has decreased by about 57% and improvement of wealth rank to middle and rich is observed.

5.2 Improved seed usage before

Improved seed utilisation in Ethiopia is by less than 10% of the farmers due to inability to meet demand (FAO 2010). Among the interviewees, those who had experience of improved seed were 1/3 only of which 20% were female. When it comes to the non user 67%, the major proportion, 85% of them, were female headed households. Female headed households are created due to divorce or death of spouse. The before wealth rank status of the respondent women was found to be poor and poorest of the poor for 92% of them. Though women do participate in many parts of agriculture, they are culturally prohibited to plough the land. Hence those who are socially and economically poor have constraints with regard to labour and inputs and can be forced to sharecrop their land (Askale 2005) confirming why 85% of the none seed users were women.

Problems encountered expressed by these improved seed users prior to the AB-CBDA service were in connection with higher price, quality, delay in distribution time, and few varieties. In confirmation to this, FAO/WFP (2010) special report indicates that farmers'

inability to cover the higher cost of seed and the related fertiliser, lack of credit facility and suppliers inability to meet demand has led to low number of farmers utilising improved seed. Moreover, report of CSA (2009/2010) indicates that only 12% of holders using improved seed, IBC (2008) expresses the area sown with improved seed as low as 2% due to critical shortage of new varieties and Abebe and Lijalem, (2010) indicate that the seed utilisation is low due to low availability of quality seed at the right time and place in connection with the poor efficiency of the seed system in the country. These expressions quite interestingly confirm the problems identified by the respondents.

The discussion with the ESE delegate head has revealed that with regard to beans and pea varieties, the variety in the hand of the farmers are better, while the farmers do expect release of new suitable varieties.

Those who weren't able to access the improved seed were obliged to enter in to sharecropping (53%) and take loan or use local seed be it from exchange among farmers or purchase from market. The process of the sharecropping is carried out in a way where the one who comes to sharecrop the land covers the cost of the seed and labour and at harvest time equal sharing of the production is carried out between the land owner and the sharecropper. To lull the poor farmers, an advance payment in cash is also customary, but the money has to be repaid if the poor farmer wants to quit and keep his land.

Engagement in loan for the sake of getting improved seed wasn't practised by many of respondents, only 13% of the non-users. The Regional credit and saving institution gives loan in groups and interest of the credit institution was 12.5% per year while that of the private individuals was 10% per month till one pays the loan if it is cash and 100% if it is in kind, i.e. if a farmer takes a loan of 50kgs of grain then he has to pay 100kgs. While sharecropping has its own way of lulling farmers, the exorbitant interest used by the local loaners could be the cause for low users of the private local loaners. In general, the improved seed distribution prior to AB-CBDA has helped to get more production for those who can afford and use the system. Such a practise by cooperatives is still going on with total or prepayment in cash but the response by farmers is low. According to information collected from discussion groups, a practical example could be the recent situation where to distribute input for the Growth and Transformation Plan (GTP) during the recent winter time of the country, farmers were asked to take seed and fertiliser with payment, but many farmers declined and it was after the sawing period has passed that the order was changed to provide farmers with loan without prepayment came.

5.3 Improved seed distribution by AB-CBDA

CBIs are considered as emerging third sector organisations that could provide mechanism for self-reliant approach to development (Nihal, 2002). When ASE facilitates for community to establish their own Community Based Institutions (CBIs), it is because it believes that concerted effort of the community is required for sustainable development and not a sole push of outsiders (ASE 2010). Hence, AB-CBDA was established in such manner and it has been carrying out various development efforts including the improved seed distribution system.

All the previous 10 program DCs of the ASE program in ESM district are founding members of the AB-CBDA. When ASE expanded its program to the new 7 villages, these also joined AB-CBDA and the member villages grew to 17. One village has been added by AB-CBDA and now the total member villages under AB-CBDA are 18. All 17 branch villages have their own seed store, and weighing balance where the service provision is carried out by the executive committee members of the branch.

At the start, ASE provided a total of 30,831 kgs where 19,969kgs was for previous and 10,862kgs for new DCs as beginning stock. Currently this stock has increased by 380% for the new villages, by almost 703% for the previous villages and by 589% in total. This is a big increase where currently a total of 3130(826F), F 26%, are users of the distribution system. Proportion of the seed content indicates 60% wheat, teff 8%, barely 7%, beans 10%, peas

8%, and haricot beans 7%. Such an increase was created through the interest collected, purchase of new seeds after discarding old ones and the newly started seed production.

Picture 9: Seed distribution in Ansa branch

Source: field photo

5.4 User selection and seed distribution and loan collection process

Various criteria starting with membership and fee paying, wealth rank, were used at first. Thereafter loan repayment history, communal labour participation etc. were added to it. The issue is the service was established for the poor and except being poor; membership and fee paying shouldn't have to be included. However, the CBI has used it to strengthen its institution. Another person signing for you and entering promise to take responsibility if you don't fulfil your obligation is a must to get a loan (in local term such a person is called "wass").

The interest on the loan which is decided by the specific branch general assembly varies from 10% to 17.5% between branches. 93% of the respondents feel the interest on the loan is fair. Bringing it to similar may help some arguments that could lead to contradiction as there are some who think the 17.5% interest should be lowered.

During collection of loan, the executive committee are expected to take serious measures with regard to quality of seed brought as payment of loan. However, farmers mixing varieties and addition of other materials lowering the quality have been expressed by about 45% of the respondents, which could be connected with negligence of the executive committee for accepting such seed where the quality of the seed has been questioned.

5.5 Source of seed for AB-CBDA

The AB-CBDA seed system has been acquiring seed mainly from ESE which is a government owned enterprise. ESE gets seed from research centres and multiplies it for distribution to farmers through unions. The relationship with AB-CBDA wasn't formal but it had been providing seed through sale except in scarcity situations. The local cooperative has also started supplying seed to AB-CBDA through sale recently. However, formalising the relationship is essential for making dependable source and will be discussed within the sustainability section.

5.6 Advantages of the seed service to the poor farmers

First and foremost, improved seed service at door step is the biggest advantage for the poor. The seed distribution without prior worry for payment is next important advantage since it solves the issue of high price and lack of credit expressed by those who were users and non users of the before AB-CBDA service. 95% of the respondents expressed that they are gaining more production which is 2,000kgs to 3,200kgs per hectare with out and with fertiliser. According to baseline survey of program DCs carried out in 2007 in ESM district

sharecropping was experienced by 23.7% of the total sample (15% female and 8.7% male). Reasons for indulging in sharecropping of their land were stated as lack of labour capacity, lack of oxen and lack of seed for both sexes (ESM BLS 2007). In this thesis research, about 57% of the respondents (33%F) have expressed that getting the improved seed has relived them from sharecropping their land where the size ranged from 0.5 to 1 hectare.

5.7 Seed quality issues

The improved seed collected from ESE is distributed to farmers and it stays in circulation for 2 or 3 times. Quality control is carried through physical check-up which tries to compare the seed brought with what exists at store. As explained above, farmers can bring mixed seeds and negligent executive committees could accept it leading to low quality. Another problem for quality of seed is long stay of seed in circulation without being changed and restocked with new one. According to discussion with the 3 sample seed committees, 2/3 of the seed existing has been in circulation more than 3 years. Such an encounter happens due to lack of formal foundation seed provider. Hence, these two experiences, farmers mixing varieties and long stay in circulation are affecting the seed quality of the system.

5.8 Accountability of the seed system

Annual and quarterly meetings of the CBDAs are set in their bylaw. Concerning the seed system, 93% of the respondents have indicated that reporting of the performance is carried out by the committee where 64% indicated such reporting is carried out in annual and quarterly meetings. The CBDAs have their own audit and control sections at branch level and at district level that are responsible in controlling the performance of branches and the overall AB-CBDA. At district level, AB- CBDA hires external auditors to carry out auditing and control of its performance as well as branches. According to the new legislation for charities and civil society's proclamation No 621/2009, every charity and civil society has to carry out external auditing of its projects and submit reports.

5.9 management issues

The branch seed centres are totally managed by the executive leaders of the branch CBDA and AB-CBDA plays the role of coordination, facilitation, creating network for seed source, providing trainings and advice etc. but it doesn't have a decisive role in the management of these centres. It is totally left to branch leaders. However, though not in daily activity, in major issues like disposing of old stock and restocking, quality control, distribution system etc, AB-CBDA should have a say. This entails a new managerial direction and will require the approval of the general assembly and updating the bylaw.

5.10 Sustainability issues

Some sustainability factors with regard to community based seed production and supply indicated by Setimela and Kosina (2006) include farmers knowledge and skill in seed system, isolation distance requirement for seed production, limited supply of foundation seed, existence of policy with regard to community based seed production, linkage with research centres etc. concerning AB-CBDA the basic issues of sustainability it is lacking are:-

- Lack of dependable source of foundation seed, as its relation with ESE is not formal
- Dispersed plots of seed multiplication which will have quality problem due to isolation distance problem
- Low knowledge with regard to seed multiplication

Concerning the creation of dependable seed source, discussion with the Regional BoA&RD input distribution section head has revealed that AB-CBDA has to register as seed producer

fulfilling the requirements of the Regional plant and animal quarantine section of the BoA&RD.

Gathering the newly started seed multiplication plots in to adjacent area is something that needs the decision of the district administration. Discussion with the secretariat staff has indicated that there is a promise, but it might take some time as it may entail beholder farmers changing their plots to other sites.

AB-CBDA has started an own seed multiplication trial in an area of around 25 hectares. The practise is being carried out with the guidance of its secretariat staffs that have agriculture back ground; however, it needs professional support be it from the district administration or the Regional plant and animal quarantine section of the BoA&RD.

Furthermore, discussion with the seed committees has revealed that maintenance and insurance for any risks that could happen hasn't been considered so far. Such issues are also connected with the sustainability of the service. Hence, consideration of assigning budget for such purpose is something AB-CBDA has to take immediate action on.

CHAPTER 6. CONCLUSIONS AND RECOMMENDATIONS

6.1 Conclusions

6.1.1 Lack of improved seed and its effects

Lack of affordable improved seed supply had effect on the life of poor farmers, especially female headed households, where it had forced about 53% of the respondents, (56% of them female) to sharecrop their land in which they were obliged to lose 50% of the produce at harvest time. Some 41% were forced to use local seed leading to low production. About 13% (no female) used to take loan in order to access improved seed with the major source loan (for 75%) being the Regional Credit and Saving Institution.

6.1.2 Serving as seed source to the poor

AB-CBDA is serving the community by availing improved seed through 17 branch distribution centres in 17 villages, which is a very needy service at door step. Executive members of the branch CBDAs are handling the service. Improved seed is purchased from ESE or from local cooperatives and distributed to farmers in loan basis without prepayment, then collected with some interest at harvest time and redistributed to other needy farmers. The recent practice of own seed multiplication on 22-25has of land also serves as seed source and in increasing the capacity of the system, where up to now a total of about 33,664 kgs various cereal seeds have been harvested. Currently, a total of 3130(826F) have become improved seed users.

6.1.3 Results of the AB-CBDA seed system

The issue that whether ABCBI has served as source of improved seed for the poor farmers and brought change is not to be denied. Enabling poor farmers accessing improved seed without suffering from where to get the payment has created great relief. The beginning stock of improved seed which was 30,831kgs has grown to 181,619kgs which is almost 6 fold, and shows the progressive increase in the service provided. 57% the seed system users (33%F), who have been previously sharecropping their land have relived themselves from the sharecropping and became owners of their plots' produce. Acquiring improved seed has helped in increase of production where 500 to 600kgs and 800 to 900kgs, with out and with fertiliser, have been produced per a quarter of a hectare (timad). The experience can be taken as a confirmation that farmer/community based seed distribution and multiplication could play a role in creating access of improved seed at door step for those who can't afford.

6.1.4 Quality related issues

Quality problems of the seed due to long stay in circulation and some mischief of user farmers have been reported. The initiation and dedication of the leaders to provide free community service is something to be very much appreciated, but one shouldn't wait till it erodes away and negligence follows. Acceptance of low quality loan repayment has been reported which indicates negligence or avoidance of conflict rather than respecting bylaws. Observing the long stay of seeds at circulation, quality control and the focus given to it seems low.

6.1.5 Role of partners

ASE has played the role of facilitating the formation of AB-CBDA and laying the basis for the establishment of the seed system. ESE has been supplying improved seed except during scarcities. The district level cooperative has been availing improved seed through sale when they have unsold stock. The district and village level administration, local court, bureau of agriculture and rural development and its staff at grass roots level have been providing the necessary assistance.

6.1.6 Sustainability of the service

The relation with ESE that AB-CBDA had is based on good will and not formal which can be aborted during scarcity. Moreover, long stay of seeds in circulation has been observed leading to low quality which indicates weak practise and also lack of dependable source in changing old seeds and restocking. The recently started own seed multiplication trial is carried out in dispersed plots which will have effect on quality due to isolation distance requirements. As far as there is no formal dependable source of improved/certified, foundation seed to be multiplied at local level, the sustainability of the AB-CBDA service seems questionable.

6.2 Recommendations

The improved seed service to the poor at door step should continue strengthened. To stay as a sustainable seed source for the poor, AB-CBDA needs to have sources for certified or foundation seed that could be multiplied and distributed to community. Hence, AB-CBDA should register as seed multiplier fulfilling the requirements of the regional plant and animal quarantine section in the BoA&RD, if the service is to continue sustainably.

The trial of own seed multiplication should continue strengthened, but professional assistance should also be included and the dispersed plots need to be brought to adjacent.

AB-CBDA should consider establishing seed stores maintenance and insurance budget in its action plans and the branch CBIs should follow on suite.

One reason for low quality could be fear of conflict and negligence by committees; hence AB-CBDA should consider ways where the free service time could be shortened, replace the free service with accountable paid workers, and consider availing sieving machines that could enhance quality, etc

The different interest rate on loaned seed being practiced among the branches needs to be arranged in a similar way as they could lead to conflict and misunderstanding.

Though it might require economic strength of the institution, elected leaders should focus on providing general guidance according to bylaw; while provision of service should be carried out by recruited staffs that are accountable if any damage and misfit happens.

Governments, NGOs and any development institutions should assist such endeavours of community since it is “community working for community”.

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8. ANNEXES

Annex 1. Questionnaire for CBI based seed distribution users

1.1 General (demographic questions)

Development Centre----------

Name of Participant----------, ----------, ----------

Sex ---------- Age----------,

Educational status;

Before intervention----------,

After intervention ----------

reasons for change ----------

Wealth rank;

Before intervention----------,

After intervention ----------

reasons for change ----------

Family size: - M---------- + F----------= _____

1.2 Prior sources of improved seed/ situation of improved seed prior to CBI distribution

Have you been using improved seed even before the CBI based seed distribution?

Yes -------- No----------

If yes, what was your source of the improved seed before?

What were the requirements to get the seed?

How much did you get, for a cropping season? local measurement , or qts, kgs

---

The major type of seeds you used to get?

----------, ----------, ----------, ----------, ----------

Any problems or advantages that you passed through the previous seed source?

Advantages ----------

.Problems ----------

Did you use to sharecrop your land to get improved seed?

If yes, how was the process carried out?

If yes, what are the advantages of sharecropping?

What are the problems of sharecropping?

Did you use to take loans for seed purchase, if yes sources?

What was the term of loan agreement, and what interest?

What other problems did you use to encounter before using the CBI based seed source?

If you didn't have any source of improved seed at that time what seeds were you sowing?

What was the source of these seeds?

What is the difference between these seeds and the improved seeds? In terms of production, market price/DD,

---

1.3 ABCBI (Alem Birhan Community Based Institution) seed distribution

How did you become participant of the ABCBI improved seed service?

What were the criteria for your selection?

How is improved seed provided to participants?

Since when were you participant?

How many times have you received improved seed, the type and amount?

Year----------, type---------- amount----------, type ----------, amount ----------,

Year----------, type---------- amount----------, type ----------, amount ----------,

Year----------, type---------- amount----------, type ----------, amount ----------,

Do the seed distributed by ABCBI match your preferences?

If no, what are the differences?

How is the quality of the seed distributed?

If you say the quality is not good what are the reasons behind?

Is the amount of the seed that you get adequate?

---.

If no what do you think are the reasons?

Is the seed distribution carried out timely?

How many times have you encountered delays?

What were the causes for the delay?

How do you pay for the seed that you are provided?

Do you think the price is affordable?

---.

What are the advantages that you got by using the ABCBI distributed seed? In terms of the service itself, production gain, marketability of the grain, relief from sharecropping, relief from loan, consumption taste etc...

Have you ever refused to repay the seed you had used?

If yes for what are the reasons?

---.

What are the problems you face, or you see in the distribution system?

How do you see the service of the seed distribution committee?

Do they abide by the law----------

Do the seed committee ask any favour to distribute seed? If yes in what type?

Do the seed committee or the CBI executive committee report about the status of the seed distribution to community?----------

If yes, at what intervals----------

In what way have you participated in the seed distribution system as one of the service users?----------
---

What is your over all view of the CBI seed distribution system?

Annex 2. Discussion question areas/check list with the seed committee

When was the improved seed distribution centre established?

----------.

What was/is the objective of establishment?

----------.

With how much initial seed amount and type did it start?

total ----------

type of seed ----------, amount ----------

type of seed ----------, amount ----------

type of seed ----------, amount ----------

type of seed ----------, amount ----------

what is the current total stock level, by type and amount

total ----------

type of seed ----------, amount ----------

type of seed ----------, amount ----------

type of seed ----------, amount ----------

type of seed ----------, amount ----------

what is the source of your seeds?

How is the process for seed request carried out by the committee?

What methods do you use to control the quality of the incoming seed?

----

how are users selected? And who selects them?

Who decides how much one gets?

----------.

When and how is distribution carried out?

Is there any formality applied during seed distribution?

If yes, what is it and how is it done?

---.

When is the seed distributed collected and how is it collected?

How do you control seed quality during collection?

What measures taken if the quality of the seed is low?

Is the seed distributed always new arrival or stays in circulation?

---.

If it stays in circulation, for how many seasons?

---.

How or who decides the circulation period of a seed?

Is the seed transaction documented, and what type of documents do you use?

If one refuses to repay for the seed what do you do?

Have you encountered such problems before?

Have all such encounters been solved or still on bay?

If still on bay, what is the reason?

What is the probability or ratio of such refusal encounters within a distribution period?

Any mechanism/ enforcement measures set for such problems?

---.

Is auditing of the seed service carried?

---

if yes by whom and how, at what intervals?

How do you solve the weight loss problem of seeds?

---.

Who takes care of the store security?

---.

How is the relationship with cooperatives, local administration, local courts etc?

---.

What help have they provided so far? Or any problems?

---.

What are the trainings that you have taken so far?

Title----------, duration----------

Title----------, duration----------

Title----------, duration----------

Title----------, duration----------

Title----------, duration----------

Are there any training topics you consider lacking?

If yes what are they?

Title----------,

Title----------,

Title----------,

Is there any incentive given to the committee?

If yes, in what form,

---.

Is reporting of the service provided to the community?

---.

If yes at what intervals?

---.

In what form are community requested to participate to assist the service?

---.

What are the problems faced by the seed committee?

What solutions are planned for these problems?

Do you think the system is solving the problems of the poor?

---.

If yes what are your points?

Have any of you had clash with the community?

---.

If yes for what reason?

How was these clashes resolved?

Why are serving in the seed committee?

For how many turns have each of you served?

---.

If you have served long why is that?

Are you satisfied with the service you give?

If yes why----------

If no, why ----------
----------.

Annex 3. Discussion areas with executive committee members of branch CBI,

About seed source dependability,

Any start of own production

If own production started detail about how, capacity, type, etc...

Type of seed received vis demand of users

Adherence to bylaw in participant selection

Timeliness of seed distribution and loan collection

Timeliness of old seed disposal and restocking, is there any guideline for this

Any problems in restocking

Existence of plans, use of documents

Auditing and reporting issues to concerned sections, community etc

The management of weight loss, loan enforcement with regard to those who refuse to repay the loan

Conflict occurrence and how resolved

Security and risk management issues

Ways/mechanisms of controlling the seed system

Means of maintenance cost

Term of service of the committee,

Incentive for seed committee

Capacity building for seed committee

Any feedback from community about the service

Community participation and means of passing its views

Relation with coops, Kebele administrators, local courts etc

Overall view of the seed service is it growing or …….

Annex 4. Discussion with ABCBI recruited staff and ABCBI BoM

How they acquire seed from ESE and research centres,

Own production trials and the status

The status of the relationship with ESE and the research centres

System for demand assessment from community via branches

The demand of seed they receive from branches and the amount they are provided

Loan repayment reinforcement measures

Disposal and restocking of seed, timeliness

Documentation issues

Capacity building, monitoring, auditing of branch seed distribution systems

Mechanism for maintenance of the seed stores and other equipment

Security and risk management

The overall picture of seed distribution and collection trend

Collaboration of the District Administration and the Court

Dependability of seed source

The legal status and entity of the CBI seed distribution system

Annex 5. Discussion with the ESE staff

The basis for providing improved seed to ABCBI

Sustainability of the seed provision

Any means of developing a business relation with ABCBI

What are the future plans of ESE in seed distribution?

Annex 6. Discussion with ASE

The objective of ASE in establishing CBIs and the seed distribution

What does the experiences in intervention areas show so far

What has ASE learned from the past experience?

Anything new in plan for the future.

Annex 7. Wealth rank criteria

Agri Service Ethiopia, Enebssie Sar Midir Integrated food security Program (2001-2005)

September 2000, Addis Ababa

Wealth rank criteria of the ESM district

Particulars	Rich	middle	poor	poorest of poor	Remark
size of land	1-1.5ha	0.75-1.0ha	0.5-0.75ha	0.5 ha No reliable source of income except a small house to live in. sale their labour or are engaged in begging.	
oxen	2	1			
cows	1	1			
donkey	1	1			
sheep	4				
food months	12	No enough food for whole year	4-6(from march to next harvest, Nov-Dec)		
seed availability	enough		Not enough seed		
Only small house				√	
No reliable source of income				√	

The average food month period for the entire programme Dcs was 6.42 months, while it ranged from 4.45 to 7.05 months.

Annex 8: Notes on discussion with the sample seed committees

	Discussion issues	Ansa village	Derje village
1	distribution centre establishment date	2002	2001
2	objective of the centre	to create improved seed access to poor farmers in their vicinity without prepayment	To create access of improved seed to poor farmers so as to increase production
3	starting capital type of seed and quantity	wheat 2500kgs, Faba bean 200kgs, F.pea 100kgs	wheat 2500kgs, Field pea 100kgs, Faba bean 200kgs, Barely 200kgs
4	Current total capacity of the centre by type and quantity	wheat 8100kgs, Chickpea 1500kgs Faba Bean 700kgs, Barely 600kgs, Horse beans 4100kgs, Teff 900kgs, field pea 600kgs	wheat 4730kgs, chickpea 592kgs, Field pea 1105kgs, Faba bean 2543kgs, Teff 1912kgs, Horse bean 83kgs
5	source of improved seed	through ABCBDA from Ethiopian Seed Enterprise	The beginning capital was from ASE, other than that there is increase from circulated seed recollection,
		Purchase from Cooperatives	new seed multiplication
6	how is request for improved seed attended by the committee	When the community presents request that the on circulation seed is old and needs changes we pass the request to ABCBI. The amount we ask depends on the cash we have and community's need.	present request to committee and selection is carried out by general assembly
7	how are beneficiaries selected and who selects them	Membership, wealth rank, CoLF participant, usage of fertiliser	membership fee paid, wealth rank, participation in communal work request, attending meetings
8	who decides the amount of seed provided to a participant	land size of the participant, for those at lower wealth rank based on their request, all requests are presented to the general assembly	based on the side of the land and the type of seed requested it is decided by the committee
9	when and how is seed distribution carried out	Starting from June according to the sawing date of the crop. Before it was seed committee, now the executive committee takes the role	based on the agro ecology for the high land it is carried out on May and the mid high land on June
10	the seed distribution process	membership fee needs to be paid, signing agreement, and wass, repayment date will be decided by the general assembly, No prepayment	selection carried out, minutes recorded, input out order given and the necessary cards prepared, fulfilling the require docs provide seed based on the signing of the wass
11	when and how is the distributed seed collected	At time of harvest, message to start payment of loan is transmitted collection carried during weekends and holidays, Based on the loan doc collection carried out, for 10kgs loan additional 2kgs interest collected, based on the decision of the general assembly	in holidays or weekends collection is carried out , after assuring the quality at time of harvest around Jan and Feb, in holidays or weekends collection is carried out, after assuring the quality,

	Discussion issues	Ansa Village	Derje village
12	how is quality control of the seed to be collected carried out	Physical check up/observation of the seed at time collection carried out comparing it with the distributed	the committee tries to compare with the sample that it has ,
13	what measures will you take if the collected seed is of poor quality	Reject the seed and remind the person to bring pure seed	if of poor quality it is rejected, they are told to bring pure seed, if not then they will be punished to pay additional amount by the general assembly
14	is the currently distributed seed old or new	About 2/3 is old, 1/3 of the wheat is new	almost all is old seed
15	the time stay in circulation of a seed	It can be used for 3 years, but since there is shortage it can stay more	in principle it is 3 years, but the seed has stayed for more than that. We are giving them to exchange it with new one
16	who and how decides the stay of an improved seed in circulation	It is based on practical experience and the existing shortage	It was told not to us to use for more than 3 years in training, but it is staying more due to weakness of the leadership and we have to take action quickly.
17	documentation of in and out seed, existence of docs and files	Yes there is	Yes there is documentation of in and out seed, we have printed receipts also.
18	do you encounter situations where participants refuse to pay		
	YES	YES	YES
	NO		
19	what measures do you take in such situations	First notice is given, after taking the case to court follows	we try to give them repeated advice, finally we take it to social court
20	the status such refusal incidences		
	are still not solved	still not solved	Out of 13 cases 9 still not solved
	solved		4 solved
21	what is the reason for those still not solved	waiting for the local court decide	delay in court decision, fed up of the committee, the accused not coming on appointed date
22	what is the likely proportion of refusal per distribution period	10%	below 5%
23	what measures are organised to solve such refusal to pay problems	Before provision creation of awareness, take the case to court	awareness provision, follow up that the seed is not used for other purpose, provide based on signed agreement, forbid seed provision for another time
24	is there auditing and control of the seed service	YES	YES

	Discussion issues	Ansa village	Derje village
25	if yes who, how and when is it carried out	It is carried by the audit section every year	By the Audit and control section of the CBI 3 times yearly.
26	existence of reports of the audit committee with the seed committee	Copies of the audit report don't exist within the store	yes there are copies
27	how do you solve weight loss problem	the committee don't seem to have awareness about the issue	the committee doesn't seem to know about the issue
28	seed store security and protection	there is a guard recruited that keeps watch of the store and the office	there is a guard recruited that keeps watch of the store and the office
29	relationship with DC Admin, coops, local court,		
	DC Admin	Have good relation, cooperate in recollection of loan with those who refuse, and safety net labour for communal work	It is not strong
	Coops	cooperate by providing seed and fertilizer through purchase	we do have a very good relation
	Local court	Assist in finalising timely the case those who refuse to pay	we do have a very good relation
30	Any problems in relationship with above sections	No problem	the DC leaders used the private political disagreement with the DC leaders as means for opposing the CBI
31	what measures are organised for such problems		the case has been solved, we are trying to attend their meetings and call them when we have meetings also
32	what trainings have you taken in relation to the seed service		
	title of trainings	On seed storage	seed management
		About seed pest and control	store management
		store management and seed distribution	
33	are there training topics that should have been provided, but not carried out	YES	YES
34	If yes on what topics	It has been long since the trainings were carried out, hence a reorientation training is required	with regard to seed multiplication management
35	do you encounter conflict with community	YES	YES
36	if yes on what issues	In connection with seed , those who refuse to pay, related with seeds that are scarce	concerning the seed wrong information was distributed to members
37	measures taken to solve the problems and their status	If one is given seed this year should cover his need for next year, trial to increase size of scarce seed	carry out open meetings about the issues that have created misunderstanding

	Discussion issues	Ansa village	Derje village
38	how did you come to serve in the seed distribution	Previously, seed committee used to serve by election. Currently it is all the branch CBI committee who are giving service as seed committee	Previously, seed committee used to serve by election. Currently it is all the branch CBI committee who are giving service as seed committee
39	for how many rounds have you served	The service round as executive committee of the branch is 3 years, hence an elected has to serve 2 rounds, hence some us in the second round some of us are new	for two rounds or 6 years
40	if you have served for long what was the reason	Decision from the executive committee	it based on the bylaw
41	are satisfied with the service you provide	Since we serve the community, yes	YES because it has enabled us to know more
	yes		we serve the poor community
			we are also included in the seed users
	no		
42	any issues that you would like to raise		the newly started seed multiplication needs support and follow up from the District Admin
			the seed life time in circulation should be seen by the general assembly and decision need to be taken
			we have served 2 terms and we should be replaced by others

	Discussion issues	Alusha village	
1	distribution centre establishment date	2007	
2	objective of the centre	To enable poor farmers to access improved seed and to carry out the seed multiplication by the farmers themselves	
3	starting capital type of seed and quantity	wheat 300kgs, Teff 50kgs, F.pea 100kgs	
4	Current total capacity of the centre by type and quantity	wheat 5600kgs, teff 950kgs, Faba bean 711kgs, Fieldpea 2696kgs	
5	source of improved seed	At first the beginning capital was from Agri Service, then purchase through ABCBI, currently we have started seed multiplication	
6	how is request for improved seed attended by the committee	request from members is collected by VLDPs, then it is submitted to the executive committee	
7	how are beneficiaries selected and who selects them	membership, wealth rank, one who will repay with quality seed, then selection is carried in a meeting where the DC chairman, elders, religious leaders, executive committee and VLDPs are present	
8	who decides the amount of seed provided to a participant	decision by general assembly	
9	when and how is seed distribution carried out	It is carried starting from May, documents and receipts are used for distribution	
10	the seed distribution process	the day of distribution is announced, registering the loan in docs, making the wass to sign, decision how much the interest will be, then they are provided without prepayment	
11	when and how is the distributed seed collected	beans and peas till the end of December, teff and wheat till the end of February, the recollection date is posted	
12	how is quality control of the seed to be collected carried out	physical of the seed is carried out before mixing it	
13	what measures will you take if the collected seed is of poor quality	it is rejected, and the person is advised to correct, if not it is taken to court	
14	is the currently distributed seed old or new	except the one from the seed multiplication all the other is old	
15	the time stay in circulation of a seed	the rule is for 3 years, but since the stock is old we advise them to change it with new one	

	Discussion issues	Alusha village	
16	who and how decides the stay of an improved seed in circulation	It is based on the advice of ABCBI staff and the decision of the general assembly.	
17	documentation of in and out seed, existence of docs and files	Yes they have docs for registering the in and out stock	
18	do you encounter situations where participants refuse to pay		
	YES	YES	
	NO		
19	what measures do you take in such situations	based on the agreement entered, is taken to court	
20	the status such refusal incidences		
	are still not solved	out of 8 cases 3 still not solved	
	solved	5 cases solved	
21	what is the reason for those still not solved	delay in court decision	
22	what is the likely proportion of refusal per distribution period	below 5%	
23	what measures are organised to solve such refusal to pay problems	the character of the person studied before provision, enter signed agreement with person and his wass, submit the case for general assembly	
24	is there auditing and control of the seed service	YES	
25	if yes who, how and when is it carried out	Is carried out by the Audit committee twice yearly, during seed provision and recollection time.	
26	existence of reports of the audit committee with the seed committee	yes there are	
27	how do you solve weight loss problem	they dont seem to understand the case	
28	seed store security and protection	there is a guard who takes care of security	
29	relationship with DC Admin, coops, local court,		
	DC Admin	we have good relation, they have supported us to get seed multiplication plots	
	Coops	we purchase seed and fertiliser from them, good relation	
	Local court	good relation have been assisting in refusal cases	
30	Any problems related with above sections	NO	

	Discussion issues	Alusha village	
31	what measures are organised for such problems		
32	what trainings have you taken in relation to the seed service		
	title of trainings	on seed management	
		store management	
		seed handling	
33	are there training topics that should have been provided, but not carried out	YES	
34	If yes on what topics	on accounting and store management	
35	do you encounter conflict with community	YES	
36	if yes on what issues	in connection with seed distribution and loan recollection, seed multiplication land related	
37	measures taken to solve these problems and their status	With regard to seed, the solution is to continue to be abided by the bylaw.	
38	how did you come to serve in the seed distribution	previously it was an elected committee, now all the executive committee is working	
39	for how many rounds have you served	just one round	
40	if you have served for long what was the reason		
41	are satisfied with the service you provide		
	yes	YES, since we serve community	
	no		
42	any issues that you would like to raise	the newly started seed multiplication, community participation is low, hence its sustainability needs focus	

Annex 9: ASE ESM CEP wealth rank criteria used

DC	RICH	MIDDLE	POOR	P OF P
05	-9-12 timad land -2oxen -10 ewes,3 goats,2donkeys, -3 bee hives -2 cows -House at town -Grain mill	-2 oxen -6-8 timad land -1 cow, 5-8 sheep -1donkey,2 beehives	2-5 timad land -1ox, 1cow, 2-3 ewes,	->= 1 timad land -Daily labourers
06	->= 6 timad land -2 oxen -possession of cows, donkeys	->=6 timad land with no livestock -or -3-6 timad land -1 oxen -1 cow, donkey -existence of land and oxen must	1-2 timad land -1 ox or -3-6 timad land and no livestock	-no land no oxen -or 1-3 timad land but no livestock -or no land but ox -or -no land, daily labourers
07	-8 timad land -2 oxen -2 cows 6 shoats -1 donkey -CIS house	-5 timad land -2 oxen ->= 1 cow ->= 3 sheep -1 donkey -CIS house	-4 timad land -1 oxen -2 sheep -grass thatched house	-<=2 timad land -grass thatched house -no livestock -daily labourer
08	-7-8 timad land -2 oxen -or -9 timad land -1 ox or >= 10 timad land and no oxen	-5-8 timad land -may possess ox or -4timad land & at least 1 ox	-4timad land, no oxen or -3timad land, may have or no oxen or -2timad land at least one ox	-2timad land, no ox or -.2 timad land, may have or not ox

DC	RICH	MIDDLE	POOR	P OF P
011	-One who feeds his family all year round -2oxen, 6 timad land, 3cows, -or -One who has grain mill or -Sewing machine and land in the town	-4 timad land, 1 ox, 2 cows, 2sheep, 1 donkey -	-2timad land,	-Landless, daily labourer

N.B:- timad is a local measurement of farm plot which is equal to 0.25 hectare

CIS house is to mean a house with corrugated iron sheet as head cover or roof.

Annex 10: Photos related with the research

Research area

orientation

on the way to research site

Data collection

data collection

seed store

Seed distribution

with seed committee

back to district town

With BoM and secretariat staff

With ABCBDA manager

with Ethiopian Seed Enterprise delegate

Certificates of ABCBDA

The renaissance bridge, on the way to site from A/A