

Ethiopian Cooperative Movement-An Explorative Study

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Preface



To identify and grasp the truth from whatever you hear, from wherever, is the virtue of wisdom.

(kural 423)

**Dedicated to my beloved brother
Dr.C.Pitchai**

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Case 1

Cooperatives and Food Security

Introduction

A Cooperative is an autonomous association of persons united voluntarily to meet their common economic, social and cultural needs and aspirations through a jointly owned and democratically controlled enterprise. The people of Ethiopia have got a very long social history of working together to fulfill their socio-economic needs. Agriculture, Trade and Military Operations were carried out through cooperative efforts. Many social events are still taking place in rural Ethiopia through collective effort. The Federal Government of Ethiopia has identified Cooperative form of business organizations as an instrument of socio-economic change particularly to achieve food security. As a result as on 30th June 1998 EC, the country has recorded 6004 Primary Agriculture and Allied Cooperatives to serve the suppressed and depressed community of Ethiopia. Are they really contributing to solve the problem of food insecurity? This needs a detailed study. Hence, in this paper the researcher has identified the potentiality of Cooperatives to attain food self sufficiency.

Objectives of the Study

The objectives of the study are:

- (i) to study the status of cooperatives and its contribution to the economy,
- (ii) to study the contribution of cooperatives for food security, and
- (iii) to identify the successful factors that could be replicated in the cooperatively less developed regions.

Methodology

The study was carried out by using both primary and secondary data. To justify the first objective the current status of Cooperatives in Ethiopia was taken into consideration. The second objective was achieved by analyzing the cases prepared by the researcher over a period of four years. The third objective was emanated from the analysis.

Findings of the study

The findings of the study were made in accordance with the objectives framed viz., Status of Cooperatives in Ethiopia, Cooperatives for food security and Policy Implications.

Status of Cooperatives in Ethiopia

Traditional Cooperatives in Ethiopia

Ethiopia is known as a country with diversified nationalities, ethnic groups, languages, each has its own unique culture and custom of living in entertaining different social activities .Our system of living is in cooperation mode of life that means; work in group (plowing, harvesting, trashing, house construction), habits of eating together (in holidays, festivals), and living together is the common phenomena of Ethiopians in the nearby village, with relatives and at workplace. In Ethiopia there are three well known traditional cooperatives or self-help groups

Edir: - Edir is one of the traditional forms of cooperatives still operating almost in all parts of Ethiopia, urban and rural. It is similar with burial cooperatives or organization that mainly stand for performing burial ceremonies, to condolence, and also to offer assist financially and labor with the deceased family member to overcome difficulties arise due to occurrence of death in members family. Almost the majority of **the** people especially heads of particular family are members' of Edir and also obliged to be a member in order to be assisted in case of death .The main objective for the establishment of Edir is to help a family in case of bereavement. Such a family requires personal, material and financial support from all of the Edir members based on the rules and regulations stated in the by law of the traditional society (Edir). If a person is going to get this assistance he has to fulfill the membership criteria set by the traditional society. Edir gets its legal personality from ministry of justice or regional justice bureau by paying registration fee. The member's participation is very high in Edir because its foundation is based on the willingness of each and every member.

Ekub: Ekub is other form of traditional cooperative or traditional self-help group in Ethiopia. Ekub is a financial form of traditional cooperative formed voluntarily. It is a rotating saving and credit type association whose members make regular contributions to a revolving loan fund. The formation of "Ekub "is based on classes of people who have identical (similar) earning or income. Unlike saving and credit cooperatives, it does not bear interest on the money saved (collected). The person who has got the money on his turn basis solves his immediate economic and social problem. Unlike saving and credit cooperatives, it does not bear interest on the money saved (collected). To minimize risk in an Ekub, personal guarantee should be given by payee to the traditional society when he/she takes taking the money from the Ekub members. Many people use this form of traditional cooperative as a means of financial solution to their economic problems. Ekub is some what is similar to the modern saving and credit cooperatives Therefore, there is a chance that this traditional form of cooperative could be changed into modern cooperative societies with some adjustments on their operation and making them to have legal bases. The amount of money which is now used for immediate problem solving could be changed into sustainable and continuous problem solving system of modern cooperative by convincing and promoting the Ekub members. This alleviates the temporary nature of Ekub.

Debo/ Wenfal/ Lefenty:

This form of traditional cooperative or mutual help group is an important form of traditional cooperatives in Ethiopia. This is mainly a cooperative formed at the rural area of

the different parts of the country where most of the people are farmers. Debo is a system of farmer's cooperation during the time of farming, weeding, harvesting, trashing, and house construction etc. Debo/Wenfale/Lefenty does not have a system of administration like the other form of associations; it is based on equivalent labour or material contribution (Ox) by each farmer. It is a mechanism by which all farmers are helping each other on turn basis. Since each type of work is being done in time, the productivity per farmer can be increased. Generally, these three traditional forms of associations which are the values and customs of our society should be brought to modern form of cooperatives so that they can contribute to the economic and social development of the people of Ethiopia.

Some special features of Traditional Cooperatives in Relation to Modern Cooperative. are as follows:

- Established on the felt needs of members and voluntary membership
- Democratic control and administration
- Fair and equal compensation
- Equal contribution
- Equal participation of each member.
- Serve their members
- Cultural development and other development activities
- Political neutrality
- Equal opportunity to all members
- They can be organized at working place, living area bases.

Therefore, traditional form of cooperatives can be the bases for modern cooperatives. They can have management committee and serve on honorary base, have by-laws, different books of accounts, and have accounts in near-by banks, conduct annual meetings, election and even amend their by- laws. Especially Edirs can have office, store houses and hired employees

Advantages of traditional cooperatives

- Indigenous way of solving members problems
- No need of external experts assistance (to be established, formulate by-laws, keeping of books of accounts, managing employees etc.)
- Strong and autonomous
- (No appropriate authority)
- Serve only members & members' faith in their organization is high
- Strong participation of members
- Management committees of Edir are loyal and corruption is a rare phenomena.
- Edirs participate in social and economic activities like assisting orphanage, constructing roads, schools, cleaning the surroundings, night guard of their localities, etc,

Limitations- Ekub

- Traditional organization like Equb is far from the concept of ***present value of money.***

- It has no *continuity* for long time & most of them are established for specified period and then dissolved.
- Mostly hasn't any legal documents and some times ends with conflict.
- Some of the leaders delay the money paid to the member and use the money for usury purpose in the between.
- In some Ekub the chairman's and secretary's contribution is paid by members and favored to take the first and second chance.
- Members forced to drink during the time of gathering together to draw the chance to create income for the one hosting the meeting.

Limitations of Edir

Most of the Edir are still stick to only for death time assistance, while there is an ample opportunity to help a member before death. Also, even though the chance to start saving and credit and consumer activities is there, only a few of them are practicing it.

- The chance to bring young leaders on these organizations is small.
- Some of its obligations needed to be meeting by its members are becoming challenging.

Cooperative movement during the Regime of Emperor Haileselassie (1960- 1974)

Modern form of cooperatives started in Ethiopia during the ruling era of Emperor Haile selassie I. Emperor Haile selassie I was Ethiopian ruler during 1932-1974. In 1960 the first legislative called "Farm Workers Cooperatives Decree" was declared as Decree No.44/1960. The objectives needed to enact this decree were:

- To accelerate the development of the agricultural economy of the country.
- The organization of cooperative enterprise was believed to be as it can contribute measurably to this end
- And it was also found necessary that the proper framework be created for the establishment of such cooperative enterprises.

Cooperatives Decree No.44/1960

Purposes and objectives of these cooperatives

Cooperatives organized hereunder shall have as their principal purpose and object the promotion of the economic interest of Ethiopia and of their members through the efficient cultivation and development of land made available to them and the produced on said land.

Without limiting the generality of the foregoing, the cooperative shall:

- Arrange for the cooperative production, processing, transportation and marketing of agricultural products and commodities and the taking of other action calculated to achieve the most profitable production, processing and marketing of agricultural products and livestock produced or owned by the cooperative;
- Operate and administer livestock and agricultural and other machinery owned by the cooperative for the benefit of its members.
- Promote good farming and agricultural practices

- Promote cooperation among members of the cooperative
- Promote cooperation among cooperatives generally by the pooling of common resources and the taking of other action appropriate to this end.

Some documents revealed that Ethiopian Air Line Workers Saving and Credit Cooperative was established in 1956. It was also believed that this SACCO has come to existence with the experience of foreign workers in that organization. Decree No.44/1960 had no full version of cooperative proclamation and only limited to agricultural cooperatives that didn't incorporate cooperatives that were emerging in the country like SACCOs. Even though the cooperative activity was started with the implementation of the above mentioned objectives in legal basis, it had the following short comings:

- Lack of awareness by different government institutions
- The support given by the government was very low and the result is also very low (performance was only 4 coops out of 20plan)
- Since there was no other supportive laws to cooperatives, it was difficult to solve horizontal problems faced by the cooperatives
- The existing land tenure system was the main hindering factor for stunted cooperatives development (especially for the poor peasant farmers)

As a result of the above problems, a Cooperative society Proclamation No.241/1966 was to come to effective with consideration of previous Decree's short comings.

Cooperative societies Proclamation No.241/1966

The main reason stated for the enactment of this proclamation was “where as our People have understood the usefulness of cooperative activities it is expedient to provide a proper basis for the formation of co-operative Societies which shall promote thrift, mutual help and self-help among persons sharing common needs and desires.

Purposes and Objects of societies

Societies organised under this Proclamation shall have as their principal purposes and objects the promotion, in accordance with cooperative principles and the requirements of social justice, of better living, better business and better methods of production by such means as:

- reducing the cost of credit and other expenses;
- reducing the cost of goods and services for production and consumption;
- minimizing and reducing the individual impact of risks and uncertainties;
- spreading knowledge of practical technical improvements; or
- may otherwise contribute to achieve the above mentioned purposes and object.

By the end of second five year development plan (1963-1967) 14 cooperative societies (of which 12 in agriculture) were established and registered. Despite these achievements, the program was hindered by the shortage of trained cooperative personnel and lack of credit facility. When the third five year development plan was launched (1968-1973) it again is stressed the creation and expansion of cooperative societies and designed to encourage community self-reliance. During this plan period at least 300 new cooperative societies were supposed to be established and registered. Though various efforts were made to

expand the cooperative movement in the country, the development was not as much as anticipated due to the following reasons:

- The oppressive land tenure system and the domination of feudal land relationship in the rural areas.
- Inadequate trained manpower to promote the development of cooperative ideas, organization and management.
- Inconvenient collateral policies for bank credit toward farm workers and poor farmers which, prevented farmers to get credit for farm development. The plan benefited the rich farmers and the landlords by excluding the majority of the farming community.
- Lack of efficient marketing system that is characterized by low price of farm products and high price of inputs coupled with poor transport facilities.

There were 14 workers in the cooperative department. All of them had been trained in cooperatives of which two of them are abroad. Besides the training of personnel employed in the cooperative department, training in cooperatives had been imparted to 150 community development workers at the community development training and demonstration center Awassa. To alleviate the financial problem, a National cooperative investment fund which would be administered by special cooperative credit section in Development Bank of Ethiopia was to be set up. At the end of the plan year, however the numbers of agricultural cooperatives established in the country were 50, having a membership of about 11,000 and a capital amounting of 6 million. The total number of other type of cooperatives was also 50 (SACCO, Consumer and Handcrafts). The government contributed the following for the development of cooperative movement:

- Introduction of modern cooperative concepts
- Establishment of independent appropriate authority to promote cooperative societies of different type.
- Establishment of independent regulatory body (to register, audit and cooperative court)
- Establishment of training institution (the community development training and demonstration center Awassa)
- Arrangement of National cooperative investment fund which would be administered by special cooperative credit section in Development Bank of Ethiopia was to be set up.

The Post Revolution Cooperative Movement (1974- 1991)

After the overthrow of Haile Selassie's monarchical system in Ethiopia, the military Junta has got the chance to come to the power in 1974. Starting with other leaders, Mengistu Hailemariam was the leader of the country in socialist principle to the end of his era up to May 1991 when he was forced to leave the country. The peasant associations were given legality by proclamation no. 71/1975. In this proclamation, the objectives, powers and duties of peasant associations, service cooperatives and agricultural producer cooperatives were clearly stated. It was during this time that a number of "Ye'irsha Mahber" was unwillingly organized in quota bases in most of the then provinces. The Cooperative Societies Proclamation No. 138/1978 was issued later in order to include other type of

cooperatives like Housing, Thrift and Credit and Handicrafts etc. All the efforts made to restructure the cooperative movement based on these proclamations were essentially geared towards direct control of cooperative and turning them into government and political rather than socio economic development instruments.

Cooperative Societies Proclamation No. 138/1978

Objectives of Cooperatives 138/1978

Cooperatives shall be organized for the following objectives:

- to develop self-reliance and to promote the interest of their members
- to put the means of production under the control of cooperatives and to transform them gradually to collective properly as be necessary
- to increase production
- to expand industry
- to eliminate reactionary culture and custom
- to participate in the building up of the socialist economy
- to accumulate capital and to mobilize human resources to sustain economic development

Two or more peasant Associations were deemed to form Service cooperative providing services to the members such as grain marketing, inputs supply credit, tractors, transport, services and consumer goods supply. They were considered interim institutions for future massive socialist rural economic infrastructures and systems. In the process, individual farmers (3 or more), were therefore encouraged to form production. In the early 1990 there were already **3,316** producers' cooperatives and **525** service cooperatives in the country. In March 1990 the Derg Regime was forced to look into the new economic situation of the world. The policy of mixed economy was announced. In its 15 years of rein of terror regime cooperatives were among the victims. From the very beginning full confidence and willingness were lacking in the cooperative members. Cooperatives were faced with organizational, operational, leadership as well as production and distribution problems. In a situation where member's participation was so passive and leadership appointed by the political cadres, wastefulness and embezzlement were inevitable. In addition to that villagization program which lacked proper studies and the willingness of the people created a devastating effect to the development of cooperatives. In the ten year plan of 1983/94 farmer members of producer cooperatives were expected to make up 52.7 percent of all the farmers. There was no word mentioned about the democratic rights of individuals to be or not to be a member of the desired cooperatives, which is the central point of cooperative principles and values. Consequently, it was only one sentence of the Derg mixed economic policy which says "Any cooperatives can legally dissolve it self if its general assembly decides" that contributed to total dismantling of almost all producer cooperatives and some of the service cooperatives of rural Ethiopia. As a result of this mixed economy option given for cooperatives, all producers cooperatives are legally dissolved throughout the country. During the fall of Drug regime (May 1991) most of the multipurpose cooperatives that survived the mixed economy policy, had been looted and dismantled even by their members. Since cooperatives were seen as institutions of Derge regime, no body was interested to rescue their property from looting & dismantling by thieves, dissatisfied

members and corrupted management members. Due to this fact some of the properties, money and documents were taken and destroyed. Even though, Cooperative values and principles were violated by the cooperative movement of that period, there were some positive contributions to the cooperative development of Ethiopia. The country witnessed expansion and promotion of different types of cooperatives. Introduction of distribution of consumer goods and extending agricultural credits (inputs, oxen, tractors, machinery, etc) through cooperatives. The establishment of cooperative training center (Ardaita), government support to investment and infrastructural facilities, provision of domestic and international training, the agricultural cooperative society's proclamation no.85/1995 was the major contribution of the regime. The proclamation was however, meant to serve only agricultural cooperatives. Other types of cooperatives had no chance (legal ground) to adjust themselves to the newly created environment.

Cooperative movement in Ethiopia: Post 1991

After the downfall of the Derg regime, there was a gap between 1991- 1995 in the cooperative movement of Ethiopia. This gap was created due to the fact that the government's attention was mainly drawn towards stabilizing, bringing peace and creating administration organs. Later on due to cooperative experts dedication and devotion and the government's commitment towards cooperative development, it became necessary to enact new cooperative proclamation which suits to the current economic system.

Agricultural Cooperative Societies Proclamation No.85/1994

Objectives of the Society

The society to be established under this proclamation shall have the following objectives: -

- to improve the living condition of members by increasing production and productivity;
- to promote self-reliance among members;
- to solve problems collectively which a peasant cannot personally achieve;
- to make members obtain modern technologies products which are capable to increase agricultural production and materials necessary for their livelihood easily and at fair price;
- to satisfy the needs of a community and increase the income of a peasant by processing agricultural product to industrial products; and
- to promote the culture of the members by teaching and training.

Salient features of Proclamation No.85/1994

“General Meeting” means a meeting of members of the primary cooperative society. Individuals who are supposed to be voluntarily members must have similar type of work and interest. Any kind of discrimination or influence based on religion, sex, nationality and political outlook shall not be made on those who want to be members;

The society shall carryout any of its activities on a democratic basis. One member shall have only one vote; Formation of Higher Level Society, The benefits of any dismissed

member shall be respected in accordance with the by-laws of the society; Concept of shares holding introduced, Appropriation of net surplus after deduction for reserve, for the expansion of the work, and for social services .In the history of cooperative movement in Ethiopia, the government has taken serious measures after 1988 EC (1996). The measures include, organizing and reorganizing different types of agricultural cooperative societies and establishing cooperative promotion bureaus/ offices in regions. In the Federal government the cooperative promotion desk under the Prime Minister office has been also established. A proclamation No. 147/ 1998 to provide for the establishment of cooperative societies had been also declared by the Federal Government to bring all types of cooperative societies under one umbrella. Later on the Federal Cooperative Commission (the currently Federal Cooperative Agency) based on proclamation no. 274 / 2002 was established in 2002. More over to correct the short- comings in the proclamation 147/1998 amendment 402/ 2002 and regulation number 106/2002 became important instrumental documents in the cooperative movement of the country. As a result, some improvements have been seen in cooperative societies in the country. Cooperative societies started to:

- distribute inputs,
- provide loan to their members,
- Unions (secondary cooperatives) were formed with the assistance of Cooperative Union Project (CUP) funded by VOCA/Ethiopia/USAID),
- market member produces in the domestic and foreign market,
- Dividend payments were made by primary cooperatives as well as the unions.
- Conducting cooperatives produce exhibition
- Entered to the banking service
- Prepared to establish federation at national level

The number of primary and secondary cooperatives of different types with significant increase in number of member beneficiaries could be achieved. Trained man power in the sector is increasing through universities and colleges, training, exposures visits and education of members by coordinated effort of the government.

Table 1 . Number and Type of Primary Cooperatives In Ethiopia

S. No	Types of coops	No.of coops.	Male	Female	Total	Capital
1	Multipurpose	5104	3285990	401747	3,687,737	347.36
2	Dairy	112	3048	1087	4135	3.3
3	Incense	14	1257	202	1459	0.129
4	Fishery	36	2267	134	2401	3.42
5	Irrigation	442	26280	4217	30497	11.86
6	Apiary	40	2478	44	2522	0.442
7	Seed production	17	1751	182	1933	2.37
8	Fruits & vegetable marketing	60	0	0	1740	0.719
9	Livestock production and vet. service	149	3180	383	3563	3.13
10.	Slaughtering house	8	239	7	246	0.82
11	Coffee pulpury cooperatives	1	16	4	20	0.35
12	Tree growers	12	1430	295	1736	0.203
13	Sugar cane producers	9	1311	453	1764	1.94
14	SACCOs	4178	69072	33589	102661	1037.62
15	Housing Coops	5869	0	0	424731	18.37
16	Rural Electric Coops.	12	2963	774	3737	0.47
17	Handicrafts Coops.	1514	0	0	31408	21.8
18	Mining	355	25335	1044	26379	5.85
19	Consumers	81	0	0	6459	3.07

	Coops					
20	Construction	204	0	0	19431	10.304
21	Others	930	3018	128	3146	1.744
	Total	19,147	3,430,435	444,354	4,076,323	1,475.253

Table 2. Number of Unions by Region

S.No	Region	No. of Union	No. of Affiliated primaries	Male members	Female members	Total members	Capital In Mil.
1	Tigray	20	160	86,514	30,159	116,673	8.8
2	Benshangule	1	8	2,157	273	2,430	0.13
3	Addis Ababa	3	165	0	0	8,012	1.74
4	Oromia	49	1242	462,807	50,854	513,661	44.99
5	SNNP	20	420	183,163	14,243	197,406	8.65
6	Amhara	29	588	430726	45435	476161	31.52
	Total	122	2570	1,165,367	140,964	1,314,343	95.85

The above mentioned two tables (Sources: Federal Cooperative Agency) reveals the present status of cooperatives in Ethiopia. The number of unions started to import fertilizers in the production year 2004/05 were three (two from Oromia and one from Amhara region) and the amount of fertilizer imported was 100, 000.00 Mt. After acquiring significant experience in this field, the number of unions and the amount of fertilizer imported in the year 2005/06 has also increased to eight and 253,750.00 Mt respectively. Three unions from Amhara, SNNP and Tigray region, as well as five unions from Oromia region had participated in this process. The amount of fertilizer imported by these unions has reached 253, 750.00 Mt. Loan source from commercial bank of Ethiopia through the guarantee of the regional governments Total value of the fertilizer imported by the Eight cooperative unions of the year 2005/06 = USD \$ 79,678,087.00. National Market share 70% of the total fertilizer demand of the country. Tigray 100% of the fertilizer distribution is covered this year by Enderta Cooperative (DAP = 92,195 quintals, Urea = 104,457 quintal, Total= 196,652 quintals)

Problems

The cooperative movement in the country faced a number of problems in the different economic systems of the country. Most of the cooperatives don't have professional managers due to two reasons. The viability of the cooperative is not always ensured due to low organization, technical supports and follow up by the concerned bodies. The ever-changing structure of the cooperative bodies at federal, regional and woreda level highly affected the smooth development of cooperative societies in the country. Lack of long term credit hinders the investment of cooperatives in different projects that would have economic benefit to members. The members' economic and /or financial power to strengthen their cooperative society is very weak. So cooperatives are suffering in shortage of capital .The infrastructure problem (road, transportation, bank, etc) in the rural Ethiopia hinders the provision of inputs, consumer goods and marketing of members produce by cooperative societies to member patrons. Lack of timely, accurate and reliable market information adds to the problem. To conclude, the government of Ethiopia had already paved the way for better cooperative development in the country through creating legal basis and expansion of human resource development at higher institution level .Therefore, it is high time to the cooperative bureaus, cooperative experts, higher institutions, and cooperative staff to maximize the existing policy environment to the advantage of cooperative development so that members will benefit from it and cooperatives can contribute to the social and economic development of the nation.

Cooperatives for Food Security

Cooperatives are the best institutional intervention for attaining food security in any country. The developed nations like the United States of America, Canada, Australia, almost all European countries and Socialist country like China have attained food self sufficiency mainly through Cooperatives. In Ethiopia currently (2007) the Cooperatives are playing a crucial role in attaining food security through;

- The provision of agriculture input and output marketing
- Facilitating irrigation for crop production
- Value addition
- Creation of employment
- The establishment small and micro enterprises

Here in this paper, the author would like to highlight the contributions of some selected types of cooperatives.

Case I Multipurpose Cooperatives: The Multipurpose Cooperatives otherwise called agricultural cooperatives carries out the following activities effectively;

1. Marketing of the following agricultural inputs to the members primarily and the non-members if warrants with the government guarantee;
 - a. Chemical fertilizers(The Cooperative Union imports from Jordan and distributes to all the Primaries Cooperatives in the region),
 - b. Improved hybrid and high yielding varieties of seeds
 - c. Quality farm implements at a fair price
2. Provision of agricultural credit to the members

3. Production and marketing of seeds and seedlings
4. Processing of produces particularly Coffee and oilseeds
5. Provision of storage facilities
6. Marketing of members' agricultural produces
7. Supply of consumer goods like sugar, coffee, kerosene and other basic necessities.
8. Operating a flourmill for grinding of food grains and other spices for both members and non members.
9. Mining of sand and stone, manufacturing Hollow blocks. This activity gives employment to a significant level of people and income to the cooperatives.

The Cooperative is marching towards creating congenial atmosphere, more production and employment generation so that food security could be achieved.

Case II Dairy Cooperatives: Dairy Cooperatives are procuring milk from dairy farmers and selling the same for the city consumers. Hitherto unnoticed and highly unorganized milk marketing received due attention among the suburban farmers. Though the movement has to go a long way in establishing federal structure for processing and marketing milk and milk products, 112 Dairy Cooperatives is not a mean number. The result shows that the Cooperatives are in a position to procure milk at a competitive price and have acquired reputation among the consumers on quality and price factors. However these Cooperatives are facing problems during Religious fasting seasons and needs to think of alternatives such as processing.

Case III Water Users' Associations and Irrigation Cooperatives:

Water Users' Associations and Irrigation Cooperatives were started for ensuring supply of water for irrigation purpose. Farmer members of many Irrigation Cooperatives are cultivating more than two crops in a year. The Irrigation Cooperatives block and accumulate the stream water and pump for irrigation as per the pre- planned and accepted schedule. They share the fuel and motor operator's expenses. Though on a small scale, the irrigation cooperatives work perfectly and can be replicated in other regions.

Ground water exploitation has not been explored in any of the irrigation cooperatives. Implications of blocking of a stream have not been studied. Drip irrigation to save water and expand the cultivable area has not been introduced. Hence, the farmers are in need of appropriate help from the development interventionists.

Case IV Fisheries Cooperatives

Fisheries Cooperatives are to provide employment to fishing community through fishing and marketing of fish. They have the mandate of preserving and developing the indigenous fish varieties and go for exotic varieties without affecting the ecological balance. They operate on a small scale and need the support of other development interventionists to go for large scale production, processing and marketing of fish and fish products. Wherever we have natural and artificial water reservoirs, we can go for fisheries cooperatives. Fisheries Cooperatives create employment, ensure food security, and provide a better way for preservation and use of precious water resources for multiple purposes.

Case V Forest and Tree Growers Cooperatives

Forest Cooperatives are for the collection and marketing of minor forest products/non-timber forests product such as fodder, honey, wax, medicinal plants, wild fruits, tree bark, resin, gum, roots, and seeds. Tree Growers Cooperatives are for afforestation of dry lands by planting fruits and fodder trees with limited water use. Unfortunately such cooperatives are not found in Ethiopia, although it needs them very badly. Highly deforested lands were converted into man-made forest lands in India because of Tree Growers Cooperatives. Forest Cooperatives are the best form of institutions to protect the forests while using the resources in a sustainable way.

In Ethiopia there were instances of 'Community Management of Natural Resources.' A case study of woodlots in Northern Ethiopia resembles a cooperative. Most of the woodlots are managed at the village level by the village council, and are used only by members of that village. The most common use allowed on woodlots is to cut and collect grass for animal feed, root materials, or other purposes. Collection of fruits and bee-keeping in woodlots are also commonly allowed. Most other uses, including cutting trees, shrubs, branches, or roots, and collecting fuel-wood, bark, leaves, or dung, are not allowed in woodlots. In a few cases, animals are allowed to graze in the woodlot, but only during the drought.

Woodlots are protected in almost all cases by a guard paid in cash or in kind. In some cases, the guard is compensated by being allowed to collect grass from the woodlot. Violations of restrictions are usually punishable by a cash fine set by the community council, though in many cases fines are decided by the local court. Labor for tree planting, constructing soil and water conservation structures, weeding and harrowing are the main collective inputs. The main benefit of a woodlot is not the value of grass collected, but the value of the trees in the woodlot, a non-liquidated capital gain. The authors observed many such non-formal cooperative experiments. It's time to regularize such experiments in order to cooperativise the management of natural resources.

Successful factors that could be replicated in the cooperatively less developed regions

Subject to further empirical substantiation, the author found the following points for further consideration and replication

- Cooperatives in Ethiopia have been established in all business fields (agriculture, fisheries, milk, meat, grain marketing and fruits and vegetables co operatives)
- Rural Ethiopian farmers have already started tasting the fruits of cooperative enterprises (input and output marketing)
- Through Cooperatives, agricultural production and productivity has increased and the income level of the farmers too (improved agricultural practices like application of fertilizers and use of yielding varieties, systematic sale of agricultural produces)
- Hither to exploited agricultural marketing is getting regularized and cooperativised.
- Proper education on thrift and savings drove the members to save and meet their emergencies
- Extravaganzas have comedown and keeping food grain buffer is order of the day

- Consumption of milk, fish, vegetables and fruits have increased among all classes of people
- Awareness on family planning is increasing and malnutrition is decreasing
- Dependency syndrome is in the declining trend

A regular field visit of the author in rural Ethiopia between 2002 and 2006 made him to conclude that Ethiopia is not a poor country, rather it is a wealthiest poor country. Judicious and sustainable use of abundant natural resources would certainly create food self sufficiency. To ensure equitable distribution of wealth and social justice, cooperative marketing needs are to be given prime importance. The government and the development interventionists should keep the momentum of promoting cooperatives.

Case 2

University Education to Professionalize the Cooperatives of Ethiopia

Problems of Cooperatives in Ethiopia

The Government of Ethiopia is encouraging and supporting the establishment of cooperatives in various spheres of the country's economy. As a result, the cooperative movement is expanding, diversifying and growing at a rapid pace. But as in other developing countries, the cooperative sector of Ethiopia also faces the organizational and structural, resources, political and legal, monitoring and evaluation problems.

Organizational and Structural problems:

Organization of cooperatives basically needs strong cooperative extension team to propagate the concept, principles and philosophy of cooperatives to the general public, potential members, youth and women. Members with cooperative awareness are prerequisite for organizing a cooperative. To elect a committee for management and to participate in the general body meeting and in the business, members should be motivated by the cooperative extension officials. The government support in terms of financial, managerial and technical aids is warranted in any developing country. Many cooperatives in Ethiopia are multi-purpose cooperatives with limited means. Unfortunately, the government machinery has very limited personnel and other resources for that purpose.

Resources and Capacity

The significance of cooperatives has been recognized at all relevant levels by one and all. But, in order to manage and administer cooperatives effectively, there is a dire need of qualified, trained and competent people. Many members of the cooperatives are rural agricultural poor having very limited savings. The cooperatives are finding it very difficult to mobilize financial resource base from among the members. The members themselves are living in a precarious condition and they can't contribute considerably to build infrastructural facilities for the cooperatives. The feudal social and economic system prevailed for a very long time in Ethiopia and the continuous suppression through forced cooperative settlements by the military regime, made people lack cooperative leadership among them.

Political and Legal

The concept of the people to accept cooperatives as an economic alternative was due to the political interference in the affairs of cooperatives and delay in settlement of disputes. The Cooperative proclamation gives clear direction and guidelines to run a cooperative as an autonomous association. But it has not reached the people fully yet.

Monitoring and Evaluation

Many cooperative employees are not having adequate training to maintain their accounts properly. Cooperatives need to be supervised, inspected and audited at regular intervals, failing which, the members of the board and the employees working in the cooperatives may ignore accountability to the general body. Moreover, the future plan of action cannot be framed without the results of earlier attempts, for which, the cooperative bureaus of the governments need professionals.

Of all problems highlighted above, the problem of lack cooperative professionals to run the cooperative movement predominates. So as in other developing countries, Professionalisation of cooperative management has been thought of in Ethiopia.

Professional Management in Cooperatives: Some Issues and Challenges

Professional management is defined as “an act and process of performing various management functions by a professional manager who has acquired specialized knowledge, skills and expertise in management through formal training or long work experience whose expertise is socially recognized as valuable to society at large” (Singh 1996).

Co-operatives like any business enterprises are also needed to be managed efficiently, if they are to maximize the returns or value for their members. For this, they need managers who are professionally qualified. Professionalisation is considered as an important solution to many of the ills of the co-operatives (Shah 1987). There seems to be a growing realization, among co-operatives, of the need to both attract fresh professionals and also upgrade the skills of their existing personnel. The unfolding economic scenario characterized by increased competition has made at least some of the cooperatives to think in terms of enhancing the professional competence of their human resources to face up to the emerging scenario (Vyas, B.M. 1999; Vyas, M.N. 1999).

However, the professional abilities of the cooperative managers are found to be awfully lacking or inadequate. Arul’s study (1999) about the managerial qualities of middle and top level managers of dairy cooperatives revealed that 74 per cent of the managers were found to possess low and inadequate relevant professional knowledge which was found to be correlated with lack of command over basic facts of one’s own profession. The study inferred that paucity of competent managers could be having a negative impact on the performance of the dairy cooperatives and called for augmenting the inventory of managerial qualities in the dairy sector.

The findings of the above study are further corroborated by Reddy (1999) who made an attempt to assess the different training needs of professionals in various agri-business cooperatives. As per Reddy’s study, there exists a very high demand or need for training of the managers in areas like finance, marketing, human resource management, and production and project management. However, despite the need, there are many constraints coming in the way of meeting these training needs. The cooperatives were found to be fairly low on the HRD salience and training effectiveness, which indicates a low importance, attached to

human resource development (HRD) initiatives in these organizations. The study suggested appropriate training policy and conscious efforts to nurture and develop HRD culture in cooperatives. At the same time, cooperatives continue to be dogged by problems not conducive to strengthening professionalism. As identified by Rao (1989), it is common to find in cooperatives absence of manpower planning, neglect of training and development, no clear demarcation between the roles of the board and the chief executive, unsound personnel policies including determination of promotions based on seniority and confining direct recruitments to lower posts, and the practice of appointing officials on deputation on a long term basis.

Added to these internal constraints, the cooperatives also face problems in attracting fresh professionals. A study by Rangarajan and Rangarajan (1999) revealed that only a small proportion of students pursuing professional courses are willing to join cooperatives. The negative image of the sector and the low emoluments are among major reasons identified for the unwillingness of professionals to join cooperatives.

There are many other challenging dimensions to the process of professionalizing cooperatives. Though professional management is a crucial factor in the survival and growth of cooperatives, especially pursuing agribusiness, Singh (1996) argues that professional management can make a significant difference only when the number of professional managers inducted in an organization constitutes a critical minimum threshold level. In other words, cooperatives have to absorb professional managers in significant numbers to see a visible impact. Singh (1996) identified several obstacles, which come in the way of effective professionalisation of the management of cooperatives. These factors include lack of professional managers having values and ethos congenial to cooperative management, excessive government control and political interference, lack of good leadership among cooperatives, small size of business of cooperatives and hence inability to hire professional managers, lack of performance based reward systems, and internal work culture and environment not suitable for professionalisation.

One of the counter arguments to a deliberately planned approach to initiate the process of professionalizing cooperatives is that such a strategy may not succeed unless it reckons with the factors, which inhibit such a process. Professionalisation of management is a social process. Unless professionalisation comes to be accepted as a way of life in the wider society, cooperatives alone may neither be able to initiate nor sustain the process (Taimni 1986). Further, Professionalisation has to reckon with the democratic characteristics and the values for which the cooperatives stand for (*ibid*). Cooperative management can succeed only when the objectives commensurate with the cooperative principles (Shah 1987). A professional manager's role particularly in a cooperative is thus a challenging task. To succeed in the role of management of change, a professional has to exhibit exceptional characteristics: "the **ethic** of mastering one's subject; a **focus** of other's needs; an internalization of the exterior world one serves; **constructive iconoclasm** towards one's bureaucracy; and **clarity of mind** about the many seemingly small elements which make up great endeavors" (Kurien 1997).

Earlier Efforts

Considering the importance of trained manpower at all levels, the government of Ethiopia had the following strategies:

1. Offering certificate and diploma programs in Cooperatives by the Ardaita Cooperative Training College
2. Deputing the Cooperative personnel for training to India , Kenya and other countries
3. On the job training to the personnel who have joined in the cooperative sector with Degree/ Diploma in agriculture.

But all these efforts were not adequate to meet the growing needs of Cooperatives in Ethiopia.

University Programmes

The Ethiopian Government has reviewed experiences in cooperatives promotion and development and drawn a national legislation to promote the development of cooperatives to foster the social and economic development of the country. A Cooperative Desk has been formed under the Office of the Prime Minister to oversee the policy, research, organizational and technical conditions of Regional Bureaus of Cooperative Promotion and Development. This desk constituted a study team to conduct training needs assessment. The team collected the necessary information that can support the preparation of the five-year plan for cooperative development and promotion in the country with specific emphasis on the required trained manpower. On the basis of the Cooperative Capacity Building document, the Ministry of Education has assumed the responsibility of producing trained manpower for cooperative development in the country. To this end, a Cooperatives Training Task Force was formed by drawing expertise from different organizations to study the necessary conditions for launching cooperative training programs at Degree level, whose output is followed on by the Cooperatives Curriculum Development Task Force.

In order to realize the plans of the government and guide volunteers to be productive in their cooperatives, trained manpower with adequate knowledge, skill and attitude is required. Hence, a new Degree program in cooperatives was launched in Mekelle University, Alemaya University, Jimma University and Debu University in the year 1996EC. The program is typically characterized by its practical-oriented training process that attempts to equip students with the required skills and capacity of promoting cooperative behavior through practical attachment programs with cooperative societies and banks.

Objectives of the Program

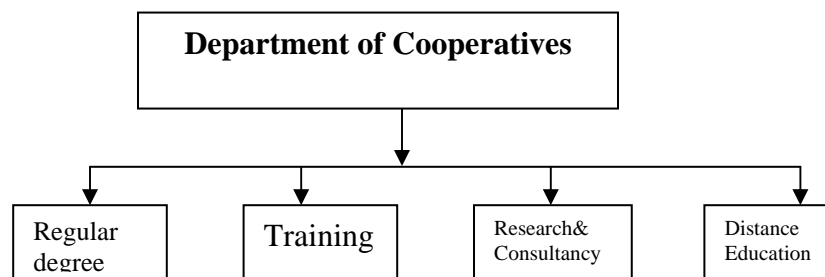
The overall objective of the program (through out Ethiopia) is to develop expertise in cooperatives and people-centered organizations with capability to promote self-reliance and self-governance. The program is aiming at developing values, economic opportunities and

ways of controlling own resources to attain transparency, cooperation and involvement of members. The specific objectives are to:

- *Produce trained manpower who can work in multifaceted cooperatives, Cooperative Banks, Cooperative Promotion and Development Bureaus, Cooperative Training Institutions, NGOs and Universities;*
- *Provide short-term training programs and cooperative education activities through correspondence and field and radio programs for cooperative leaders and members, schools and the society at large; and*
- *Carryout cooperative research and consultancy services on policies and methodologies for institutional and organizational development of cooperatives and other community-based institutions.*

Organizational Structure of the Department of Cooperatives, Mekelle University:

Here the author would like to give a case of the Department of Cooperatives, Faculty of Dryland agriculture and Natural Resources, Mekelle University to highlight the structure and functions visualized to professionalize the cooperative management.



The structure of the department envisages regular Degree program with specializations in Business management and Accounting & Auditing. Further the department will be having the following sections to accelerate the cooperative movement of Ethiopia.

Short-term Training Section

Education of board members, managers, the general public and young people in particular is essential in order to generate interest, enthusiasm and effective participation in cooperatives. This section will be responsible to:

- organize short-term training programs
- prepare training materials and cooperative guidelines
- organize instructional resources
- conduct training needs assessment
- evaluate performance of trainees and graduates
- establish field-training centers
- provide education media services

Research and Consultancy Section

Ongoing research and educational effort on cooperatives is necessary to develop cooperative movement to its full potential in Ethiopia. This section will be responsible to:

- conduct research on the role and history of cooperative movement, cooperative policy, cooperative organization and management, cooperative process, the nature of decision-making in cooperatives and food security
- study the perceptions of cooperation and challenges of cooperative societies
- provide information for the preparation of cooperative guidelines and training materials
- provide consultancy, auditing and accountancy services for cooperative societies and banks

Distance Education Section

Distance education—individual learning—covers those forms of education, which afford educational opportunities, through technical means, to learners who study individually. The value of distance education is viewed as a means of *allowing almost anyone, almost anywhere to learn almost anything*. The objective of this section is to provide widespread educational services in cooperatives for participants who cannot afford coming to training centers. It can serve as a foundation course for in-service training programs. The section is responsible to develop learning materials, establish tutorial centers and educate participants of distance education.

Need based post graduate programme in Cooperative Marketing has been launched. Future Vision of the Department is to upgrade it as a school of Cooperatives and agribusiness.

Conclusion

The four universities have taken initiative to offer Degree program in cooperatives. The expertise attained by the expected 500 professional graduates every year from all the four universities will go a long way in fulfilling the growing needs of cooperative professionals. Further, training to the existing employees of the cooperatives and officials of the cooperative bureaus will motivate them and bring them out of skill obsolescence. Professional management of cooperatives in Ethiopia will improve the efficiency and efficacy of the cooperatives. The Universities will impart professional skill to manage the varied businesses like agricultural production, processing, marketing; agro based industries; consumer cooperatives; housing cooperatives; and cooperative banking of the organized sector/cooperatives. This will provide the much needed base for the development and expansion of Ethiopian economy. In furthermore of the objectives, the Mekelle University is in the process of starting a School of Cooperatives and Agribusiness which is expected to materialize in due course.

Case 3

Need for Cooperative Education, Training and Information in Local Languages ¹

Research Issue:

A Cooperative is an autonomous association of persons united voluntarily to meet their common economic, social and cultural needs and aspirations through a jointly owned and democratically controlled enterprise.

The people of Ethiopia have got a very long social history of working together to fulfill their socio-economic needs. Agriculture, Trade and Military Operations were carried out through cooperative efforts. Many social events are still taking place in rural Ethiopia through collective effort. The Federal Government of Ethiopia has identified Cooperative form of business organizations as an instrument of socio-economic change. Many Cooperatives have emerged in the recent past to serve the suppressed and depressed community of Ethiopia. Due to the encouragement given by the present government, there were 514 Multi Purpose Cooperatives, 41 Irrigation Cooperatives, one Fisheries Cooperative, one handicrafts Cooperative, 13 Savings and Credit Cooperatives, and one Housing Cooperative functioning in the Tigray region of Ethiopia as on 30th March 2003.

The basic assumption behind the organization of cooperatives is that the members are aware of Cooperative Principles and Practices. Cooperatives are to provide education and training for their members, elected representatives, managers, and employees so that they can contribute efficiently to the development of their Cooperatives. They should also inform the general public, particularly young people and opinion leaders, about the nature and benefit of Cooperation.

This paper tries to emphasize the vital role played by education and training within cooperatives. Education means more than just distributing information or encouraging patronage; it means engaging the minds of members, elected leaders, managers and employees to comprehend fully the complexities and richness of cooperative thought and action. Training means making sure that all those who are associated with cooperatives have the skills they require in order to carry out their responsibilities effectively. Education and training are also important because they provide excellent opportunities whereby cooperative leaders can understand the needs of their members. This training and education should be conducted in such a way that the cooperative leaders are able to suggest ways to improve or to provide new services. A cooperative that encourages effective two-way communication between its members and leaders, while operative in an effective manner, can rarely fail.

¹ Presented in the Workshop on Language, Culture and Development in Ethiopia, held at Addis Ababa on 6th and 7th June, 2003

The paper further tries to recognize that cooperatives have a particular responsibility to inform young people and opinion leaders, politicians, public servants, media representatives and educators about the nature and benefits of cooperation.

Hence an attempt has been made in this study to explore the education, training and information process in the Cooperative Sector.

Objectives of the Study

The objectives of the study are:

1. To identify the awareness of members, directors of the boards, youth and employees regarding the ownership of cooperative,
2. to identify Education, Training and Information needs of the respondents,
3. to identify the content and medium of Education, Training and Information process

Methodology

The study was carried out in the following four cooperative societies selected randomly in and around Mekelle, Tigray region, Ethiopia:

1. Romanat Multi-purpose Cooperative,
2. Debri Multi-purpose Cooperative,
3. Two Irrigation Cooperatives, Wukro

By administering a checklist, an interview was conducted among the following categories of respondents during the month of March 2003,

1. Five Board Directors of each society,
2. Five Farmer Members of each society,
3. Five youth of each society,
4. Two Bookkeepers and two Salesgirls

Analytical Framework

Data so collected were classified into three categories Viz.,

1. Awareness of Members, Board Directors, Youth and Employees regarding the ownership of cooperatives
2. Education, Training and Information needs of the respondents,
3. Content and Medium of Education, Training and Information process

Description of Sample Respondents

Age group of Board Directors and the Farmer Members were between 50 and 70 years. The author could find only male respondents. Directors on the board were only literates and farmers were without any formal education. They mainly depend on agriculture. Monthly income of the respondents' family ranges ETB 150 to 300. Respondents' average

family size was around eight. No respondent lives in a comfortable house. Their houses were not electrified. They take only one or two types of food. Medical facilities were not accessible to them. The respondents were satisfied with minimum clothes. The interviewed youths were school going boys. They travel around five to ten kilometers on foot to schools. They were exposed to developments taking place in the towns. They study using the kerosene lamps. Employees had schooling and were aged between 20 and 30 years. Out of four employees interviewed three were female.

Description of the Selected Cooperatives

The Multi Purpose Cooperatives were to function with the objectives of: (i) Provision of agricultural credit, (ii) Provision of agricultural inputs (iii) Facilitating Sale of agricultural produce, (iv) Operating a consumer store, (v) Optimum utilization of natural resources like sand and stones, (vi) Inculcation of thrift and savings habit among the members. The study reveals that in the selected cooperatives, agricultural credit was not given effectively. As far as agricultural inputs are concerned, only seeds and fertilizers were supplied. The selected cooperatives never entered into the function of facilitating sale of agricultural produces. Almost all respondents of the study appreciated the functioning of consumer store. Optimum utilization of natural resources like sand and stones gives employment to a small segment of population and increases the non-business revenue of cooperatives. Very few are involved in the thrift and savings activity. As far as Irrigation Cooperatives are concerned, they started with the allotment of lands to the farmers. Each cooperative has got 35 members and each member has got a hectare of land. The interesting phenomena here is that the barren lands were converted into irrigated lands and the farmers take three crops in a year. They decide, in advance, what should be produced and how the irrigation schedule be managed. They also decide the transportation and sale of produces in the Mekelle Market. Unfortunately, the farmers were not provided with adequate credit to develop cement canals/drip irrigation (that will save the water considerably). They also expect proper guidance on scientific cultivation and input supply.

Major Findings of the Study

Very interestingly the author found uniformity in the opinion of all respondents. The major findings of the study were classified into three aspects viz., awareness regarding ownership of cooperative; education, training and information needs; and the model for education, training and information processes.

Awareness Regarding Ownership of Cooperatives

The respondents were approached with a clear mission of identifying their awareness regarding ownership of cooperatives. The interviewers had in their minds the following points as standard: a cooperative is a registered institution functioning under the Cooperative Societies Proclamation No 147/1998 of the Federal government of Ethiopia; the cooperative societies are for the members, by the members and of the members; it is a democratic business enterprise. For the purpose of this paper, 'awareness regarding

ownership of cooperatives' denotes the respondents opined or accepted that the cooperative belonged to them.

The study found that since many board directors were founders of the Cooperatives, they were aware of the ownership status of a Cooperative (in many developing countries many feel that a Cooperative is a government organization). Members and the youth had the right opinion regarding the ownership of a Cooperative. Bookkeepers have got a clear understanding regarding the role of government as friend, philosopher and guide. The respondents feel proud to have a cooperative institution in their village.

Education, Training and Information Needs

The respondents were interviewed with an intention of identifying their education, training and information needs. The interviewers enquired about their operational problems in dealing with cooperatives and they were asked to explain the steps taken by them to solve those problems. They were made to realize the importance of education, training and information process to solve the problems and misunderstanding about cooperatives. The briefing helped the authors to identify the gap in the education, training and information process.

The directors of the board felt that they were not aware of the principles, philosophy and practice of cooperation. They would like to expand the business operation of their cooperatives. They felt that they lacked confidence in monitoring the business and maintenance of accounts. They would also like to learn more on business practices and government regulations.

The farmer members opined that they participated in the general body meetings and in the business. Still many respondents were not in a position to understand the magnitude of a cooperative. They would be the possible leaders in the future and they should continuously contribute to the cooperative. The authors inferred that there must be a permanent mechanism to impart member education.

The interviewed youth expressed their interest to know what a cooperative is (principles and philosophy), how it works (practices), who patronizes it (role of government and the non-governmental agencies), how it will help them and the community (advantages). It drives the authors to conclude that there must be continuous cooperative education to attract the youth and the potential members in the cooperative fold.

The Bookkeepers observed that, to run the cooperatives very efficiently and effectively, they need training on business practices and maintenance of accounts. They have also expressed their interest in learning the legal aspects of Cooperative Business.

Every one of the respondents wants to be educated, trained and informed only in Tigrinya, the local language of Tigray region of Ethiopia. The respondents acknowledged the good work of Tigray Cooperative Promotion Office. But the authors found that, to develop the movement in the right and needed direction, what has been done

is limited (though it is appreciable with their limited resources) and what should be done is more. There must be an institutional arrangement for the purpose of education, training and information process. To impart cooperative education to the members, youth and general public, the nation should have the following institutional structure:

1. National Cooperative Union at the Federal Government level
2. Regional Cooperative Union at regional level
3. Woreda level Cooperative Union

To conduct training programs for board directors and employees, there must be one national cooperative training institute and regional cooperative training institutes in all regions (the authors fully acknowledge the yeomen work of existing training institutes in the nation).

A Model for Education, Training and Information Process

A model has been prepared after taking into consideration the experiences of other cooperatively developed countries especially India. Here, the authors took five variables viz., target group, content, mode, medium and duration to build the model for education, training and information process. For the purpose of this paper, the term ‘target groups’ denotes persons having affiliation with the cooperative, persons who could establish contact with the cooperatives in future and the opinion leaders who could influence the decision of others. The term ‘content’ denotes the subject matter to be disseminated to the target groups. Mode means how we impart knowledge and skill. The preferred language of the area was considered as medium of instruction. Duration of the program is to fit into the content and objectives of the process. The following table illustrates the model in detail.

The objectives of the model are as follows:

1. Every citizen of the country should have an understanding about cooperatives
2. Success of cooperatives depends on the participation of members in the decision-making and business.
3. Employees of cooperatives should understand the unique features of cooperatives

Sl. No.	Target group	Content	Mode	Medium	Duration
1	Members (enrolled and doing business with the cooperative), General Public and the youth (potential members)	The members, general public and the youth may be taught what a cooperative is (principles and philosophy), how it works (practices), who patronizes it (role of government and the non-governmental agencies), how it will help them and the community (advantages).	Mass Media like Television, Radio, Newspapers and Internet. All extension tools such as screening moving films, display through permanent posters, distribution of booklets and conduct of participatory workshops may be opted.	Tigrinya	Permanent
2	Board Directors	Principles and practices of Cooperation, Cooperative Societies Proclamation, Cooperative Accounting,	Training	Tigrinya	One week
3	Employees	Principles and practices of Cooperation , Cooperative Societies Proclamation, Cooperative Accounting, and Business Strategy	Training	Tigrinya	One month

Syllabus for the Recommended Courses

1. Principles of Cooperation: Cooperation-definition, economic benefits, social, cultural and moral benefits. Principles of cooperation. Cooperation and other forms of economic systems/enterprises. Important experiments and the contributions of cooperators.
2. Practice of Cooperation: Different types of cooperatives, organization and management, problems of cooperatives, backward and forward linkages. Cooperation in the planned economy. Business strategies.

3. Cooperative Societies Proclamation: Cooperative Societies proclamation No 147/1998-Objectives of a society, Formation and Registration of Cooperative societies, Rights and Duties of Members of a Society, Management Bodies, Special privileges of Society, Assets and Funds of a society, Audit and Inspection of societies, Dissolution and Winding up of societies, Settlement of Disputes and Miscellaneous provisions.
4. Cooperative Accounting: Fundamentals of Cooperatives Accounts- Evolution, Differences between Cooperative Accounting and double entry system, Single entry system and Cooperative Accounting, Bookkeeping in Cooperatives-Day Book, General Ledger and Special Ledgers, Reconciliation of balances-Receipts and payments Statement. Preparation of Financial Statements-Forms and preparation of Trading Accounts, Profit and Loss Accounts, and Balance Sheet, Preparation of Budget.
5. Business Strategy: Materials management, Cost minimization strategies, Wastage minimization strategies, Risk management.

Study materials need to be prepared by an expert group who knows the subject and the regional language of Tigrinya. Expert assistance may be sought from the cooperative extension specialists particularly for member education programs.

Policy Framework

Considering the necessity of continuous education, Training and Information process to develop the Cooperative Movement in the democratic way and to build a strong decentralized economy, the authors advise the Tigray Cooperative Promotion Office, the Department of Cooperatives, Mekelle University and the Non-governmental Organization (VOCA), to evolve a suitable plan to reach out to the people. A standing committee to look into that matter may be constituted by the government.

The Power of Knowledge can be realized better if it's disseminated through mother tongue.

Case 4

Cooperative Management of Natural Resources²

Introduction

Management of natural resources such as land, water, forests, fish etc. of a nation is an important factor affecting the level and pace of its development. Many systems of management of natural resources have been proposed by academics and practitioners. They include privatization, nationalization or centralized public management, and cooperative/collective management by local people themselves. There is no single best system of management that could be recommended for all situations and for all times. The choice of an appropriate system depends on several factors such as the characteristics of the resource, attributes of the resource users, the decision-making environment, and the goals of resource management. The resource management warrants an understanding about the conditions under which each of the three alternative systems of resource management is likely to succeed as well as the conditions under which a system is likely to fail. Hence, an attempt has been made in this paper to explore and critically analyze the suitability of cooperatives to manage the natural resources in Ethiopia.

Objectives of the Study

The main objectives of the study are:

1. To examine the rationale of cooperative management of natural resources
2. To review the current status of cooperatives engaged in the management of natural resources
3. To propose a cooperative model to manage the natural resources

Methodology for the Study

The data for the study to justify the objectives were collected mainly from the secondary sources. Observations during the field visits of the author also form part of the description. Further, the author had discussion with the officials involved in organization and supervision of cooperatives in the Tigray region. Though this paper can have the limitations of significant level of empirical evidences, the author believes that this modest attempt would facilitate further research.

Findings of the Study

² Coauthored by Dr.C.Pitchai and Presented in the International Cooperative Conference organised by the Mondragon University held at Onate, **Spain** between 12th and 14th July 2006,

The findings of the study are presented in the following paragraphs in concurrence with the objectives.

Rationale for Cooperative Management of Natural Resources

The natural resources are dynamic and subject to management interventions that can provide sustainable benefit flows in the form of food, fodder, fuel wood, fibre, timber, manure, etc., clean surface and ground water, air filtration and humidification, and Eco-tourism. Management of natural resources on sustained yield basis depends upon a careful orchestration of the policies and management practices. Lack of equitable access to natural resources and, hence, inequitable distribution of their benefits often leads to clandestine encroachment, or misappropriation of these resources. There is, therefore, a need for exploring viable natural resources management strategies for their restoration and utilization within a development context.

Until recently the role of natural resources in the rural economy was not understood properly. Therefore, privatization or nationalization of natural resources was suggested as a solution to arrest their degradation and preserve the environment. Experience with nationalization of natural resources has not been good in most of the cases all over the world. Privatization has yielded mixed results: it has been justified on efficiency grounds and condemned on equity and sustainability grounds.

For the success of any strategy of natural resources management, the involvement of local people is essential. This is so because the use of natural resources by any user has many unintended side-effects, or in technical terms, externalities on other co-users. For example, pumping of ground water in a watershed affects the aquifer that is a natural resource to which all those who live in the watershed have a legitimate claim. If one of the co-users pumps more water, to that extent, less water is left for use by the others in the watershed. Optimum use of ground water in a watershed, therefore, requires the cooperation or participation of all the people living and using ground water in the watershed. Similarly, soil and water conservation in a watershed requires the participation of all the land-owners having land in the watershed in the form of adoption of the recommended soil and water conservation measures. In a nutshell, all uses of the natural resources, irrespective of whether they are owned privately or publicly, are interdependent and require the cooperation of all the resource users for internalizing/minimizing the externalities involved. This is best achieved when the planning and management of natural resources is done on watershed basis and the resources managed by their users are organized in the form of an association preferably a cooperative society. Cooperative management of natural resources is therefore the most appropriate of all forms of management in most situations. Moreover, theoretically and ideologically, the cooperative mode of natural resources management seems to be the best of all. This is so because, with proper rules and regulations, it can better meet the goals of efficiency, sustainability, equity and resource users' satisfaction and is politically and socially more acceptable in most societies and nations than any other alternatives. Group management of the natural resources will be more efficient in a watershed when implemented through the cooperative.

Current Status of Cooperatives Engaged in the Management of Natural Resources

A Cooperative is an autonomous association of persons united voluntarily to meet their common economic, social and cultural needs and aspirations through a jointly owned and democratically controlled enterprise.

The people of Ethiopia have got a very long social history of working together to fulfill their socio-economic needs. Agriculture, Trade and Military Operations were carried out through cooperative efforts. Many social events are still taking place in rural Ethiopia through collective effort. The Federal Government of Ethiopia has identified Cooperative form of business organizations as an instrument of socio-economic change. Many Cooperatives have emerged in the recent past to serve the suppressed and depressed community of Ethiopia. Due to the encouragement given by the present government, there were 514 Multi Purpose Cooperatives, 38 Irrigation Cooperatives, 13 Water Resources Associations, one Fisheries Cooperative, one handicrafts Cooperative, 22 Savings and Credit Cooperatives, eight Urban Savings and Credit Cooperatives and one Housing Cooperative functioning in the Tigray region of Ethiopia as on the last day of 1995 EC.

The cooperatives and its members should have social responsibility, which includes preservation and promotion of natural resources. Irrespective of the nature of business, the cooperatives are to function with environmental consciousness. Any form of environmental degradation or pollution is against the cooperative philosophy.

In Ethiopia, the following cooperatives are directly involved in natural resources management.

- Multipurpose Cooperatives
- Irrigation Cooperatives
- Water Users Associations
- Fisheries Cooperatives

The level of involvement and scope for further expansion of these cooperatives in management of natural resources is examined below:-

Multipurpose Cooperatives

Multipurpose Cooperatives are considered an institutional intervention to increase agricultural production and productivity. Multipurpose Cooperatives are functioning with the following objectives:

1. Provision of agricultural credit
2. Provision of agricultural inputs
3. Facilitating sale of agricultural produces
4. Operating a consumer store
5. *Optimum utilization of natural resources like sand and stone*
6. Inculcation of thrift and savings habit among members

The objective of Optimum utilization of natural resources like sand and stone is operational with the help of local administration. The members of cooperatives are engaged in the mining work and get wages for their labor. The cooperative also gets a moderate commission for every load of supply to the urban consumers/contractors. The amount so generated forms part of the cooperative's income.

The Cooperatives engaged in such mining operations need a detailed geological study as to what extent they could use the resources and where and when it should be stopped (It can't be a perpetual operation since land mining has an adverse effect on ecology).

The members of cooperatives should be made aware of the conservation of natural resources. Since the entire rural community is involved in the cooperative process, management of natural resources will be very much transparent and more effective. Soil erosion and land degradation are the other major threats to the farming land which need to be addressed through cooperatives.

Water Users' Associations and Irrigation Cooperatives:

Water Users' Associations and Irrigation Cooperatives were started for ensuring supply of water for irrigation purpose. Farmer members of many Irrigation Cooperatives are cultivating more than two crops in a year. The Irrigation Cooperatives block and accumulate the stream water and pump for irrigation as per the pre-planned and accepted schedule. They share the fuel and motor operator's expenses. Though on a small scale, the irrigation cooperatives work perfectly and can be replicated in other regions.

Ground water exploitation has not been explored in any of the irrigation cooperatives. Implications of blocking of a stream have not been studied. Drip irrigation to save water and expand the cultivable area has not been introduced. Hence, the farmers are in need of appropriate help from the development interventionists.

Fisheries Cooperatives

Fisheries Cooperatives are to provide employment to fishing community through fishing and marketing of fish. They have the mandate of preserving and developing the indigenous fish varieties and go for exotic varieties without affecting the ecological balance. They operate on a small scale and need the support of other development interventionists to go for large scale production, processing and marketing of fish and fish products. Wherever we have natural and artificial water reservoirs, we can go for fisheries cooperatives. Fisheries Cooperatives create employment, ensure food security, and provide a better way for preservation and use of precious water resources for multiple purposes.

Forest and Tree Growers Cooperatives

Forest Cooperatives are for the collection and marketing of minor forest products/non-timber forest products such as fodder, honey, wax, medicinal plants, wild fruits, tree bark, resin, gum, roots, and seeds. Tree Growers Cooperatives are for afforestation of dry lands

by planting fruits and fodder trees with limited water use. Unfortunately such cooperatives are not found in Ethiopia, although it needs them very badly. Highly deforested lands were converted in to man-made forest lands in India because of Tree Growers Cooperatives. Forest Cooperatives are the best form of institutions to protect the forests while using the resources in a sustainable way.

In Ethiopia the author noted various instances of 'Community Management of Natural Resources.' A case study of woodlots in Northern Ethiopia resembles a cooperative. The most woodlots are managed at the village level by the village council, and are used only by members of that village. The most common use allowed on woodlots is to cut and collect grass for animal feed, root materials, or other purposes. Collecting fruits and bee-keeping in woodlots are also commonly allowed. Most other uses, including cutting trees, shrubs, branches, or roots, and collecting fuel-wood, bark, leaves, or dung, are not allowed in woodlots. In a few cases animals are allowed to graze in the woodlot, but only during a drought.

Woodlots are protected in almost all cases by a guard paid in cash or in kind. In some cases, the guard is compensated by being allowed to collect grass from the woodlot. Violations of restrictions are usually punishable by a cash fine set by the community council, though in many cases fines are decided by the local court. Labor for tree planting, constructing soil and water conservation structures, weeding and harrowing are the main collective input. The main benefit of a woodlot is not the value of grass collected, but the value of the trees in the woodlot, a non-liquidated capital gain. The authors observed many such non-formal cooperative experiments. It's time to regularize such experiments in order to cooperativise the management of natural resources.

Factors Responsible for the Success of Cooperative Management of Natural Resources

The factors responsible for the success of cooperative management of natural resources are:

1. High stakes of resource users in the resources as well as in the cooperative managing of resources.
2. Good local leadership and social and political entrepreneurship.
3. Existence and strict enforcement of rules for regulating the use of the resources, preventing free riding, sharing the cost and benefits of cooperative management equitably (in proportion to the effort put in or contribution made).
4. Willingness of government departments and officials to share power with the cooperatives and to support them in the forms of funds, technical information, legitimacy and coordination.
5. Involvement of external agency as a catalyst.
6. Integration of production, processing and marketing.
7. Small and cohesive groups have higher chances of success in management of natural resources.
8. Social fencing is possible through cooperatives.

Based on the above review the authors present the following Model for the Cooperative Management of Natural Resources in Ethiopia (page 43).

Conclusion

There are three alternative systems or regions under which natural resources are and can be managed, namely: privatization, nationalization, and Cooperativisation. Experience with nationalization of natural resources has not been good in most of the cases all over the world. Privatization has yielded mixed results: it has been justified on efficiency grounds and condemned on equity and sustainability grounds. Cooperativisation or cooperative management is relatively recent origin. The results of cooperative management of natural resources have so far been mixed. But this mode of management seems to hold the highest promise as an instrument of achieving the goals of efficiency, sustainability, equity and resource users' satisfaction and is politically and socially more acceptable in most societies and nations than any other alternatives.

Model for the Cooperative Management of Natural Resources in Ethiopia

Actors

Members

Local
Leaders

Government
Department

Development
Interventionists

Sustainable
Management

- Preservation
- Promotion
- Production
- Process
- Marketing

National
Resources

- Land
- Water
- Forests
- Fish

Institutional Intervention

Cooperatives

1. Agricultural Cooperatives
2. Irrigation Cooperatives
3. Forests and Tree Growers
Cooperatives
4. Fisheries Cooperatives

Funds

Technical
Information

Legitimacy

Coordination

Strategies

Case 5

Milk Production Enhancement Activities through Milk Cooperatives of Ethiopia-An Explorative Study³

Introduction

A Cooperative is an autonomous association of persons united voluntarily to meet their common economic, social and cultural needs and aspirations through a jointly owned and democratically controlled enterprise.

The people of Ethiopia have got a very long social history of working together to fulfill their socio-economic needs. Agriculture, Trade and Military Operations were carried out through cooperative efforts. Many social events are still taking place in rural Ethiopia through collective effort. The Federal Government of Ethiopia has identified Cooperative form of business organizations as an instrument of socio-economic change. Many Cooperatives have emerged in the recent past to serve the suppressed and depressed community of Ethiopia. Due to the encouragement given by the present government, there were 4039 Agricultural Cooperatives and 3338 Non-agricultural cooperatives in Ethiopia as on the last day of September 2003.

The Milk and Milk Marketing Cooperatives in Ethiopia are spreading at a significant level. As on date, we have 42 Milk and Milk Marketing Cooperatives and one Dairy Marketing Union in the Oromia region. Cattle population in Ethiopia are around 41,527,142 in the year 1994EC. The abundant cattle population in Ethiopia is underutilized both for milk and for meat. Considering the topography of the country the scope for Cooperative Milk marketing Network is ample. Hence, in this paper the researcher is trying to identify the potential of Milk Cooperatives in the milk production enhancement activities.

Objectives of the Research

The major objectives of the study are:

- (i) to frame a model for milk marketing in Ethiopia
- (ii) to suggest the possible milk production enhancement activities

Methodology of the Study

The study was carried out with secondary data only. To justify the first objective, current status of Milk and Milk Marketing Cooperatives were taken in to consideration. Then the cattle population was also considered for determining the potential for starting more milk cooperatives. The second objective was analyzed by taking in to consideration the Indian

³ Presented by the author 18th Conference of the Ethiopian Veterinary Association at Addis Ababa on 9-10, June 2004.

experience. The attempt lacks primary empirical evidences. The authors feels that this modest attempt can become a basis for further research and development.

Findings of the Study

The findings of the study was made in accordance with the objectives framed viz.: to frame a model for Milk Marketing in Ethiopia and to suggest possible Milk Production Enhancement Activities through Cooperatives.

Model for Milk Marketing in Ethiopia

Cattle play a significant role in the economic life of rural Ethiopia. They have remained as the keystone of Ethiopian farming since time immemorial. Cattle remain as the sole motive power of agriculture and without them no cultivation is possible and no produce could be transported. They provide much needed milk and milk products. The following table indicates the bovine population of Ethiopia. Regional disparities noticed in the figure need not be taken seriously since area is limited in those regions where cattle are less. Oromia and Amahara regions are having high population with 43 and 25 percentages to total respectively. The Tigray and SNNP also have six and 21 percentages to total respectively.

Table 1
Livestock Number and Location 1994EC

Sl.#	Region	Cattle	Percentage to total
1	Tigray	2,668,078	6.43
2	Afar	345,635	0.83
3	Amahara	10,512,770	25.31
4	Oromia	18,035,686	43.43
5	Somali	512,320	1.23
6	Behshangul G umuz	309,627	0.75
7	SNNP	8,831,450	21.27
8	Gambela	126,198	0.30
9	Harari	34,008	0.08
10	Addisababa	97,215	0.23
11	Diredawa	54,155	0.13
12	Ethiopia Total	41,527,142	100

Source: CSA-Ethiopian Agricultural Sample Enumeration, 2001/02(1994EC)

In spite of the fact that Ethiopia possesses huge bovine stock, the milk consumption is very low. The demand for milk is rising rapidly due to urbanization and rise in level of income. Hence, the author advocates the establishment of Milk Cooperatives. Milk Cooperatives are

for improving the economic lot of the large number of small farmers and agricultural laborers. In a mixed farm, crop production and dairy development mutually contribute and would result in added income to the subsistence farmer. Widespread unemployment and underemployment also present a strong case for the adoption of dairy farming and mixed farming to mitigate this problem.

Despite the potentialities and prevailing opportunities, the progress and performance of dairy cooperatives is far from satisfactory. The dairy industry in Ethiopia suffers from the following problems:

- Too many milch animals producing too little milk have been the problem of Ethiopian dairy industry. Unless the lactation yield of Ethiopian bovine animals is improved there is no hope of developing dairy industry on sound and economic lines.
- Dairy industry is highly unorganized and substantially in the hands of private traders
- Dairy industry in Ethiopia is less modernized and consequently less efficient with high cost of operation.

Milk Cooperatives in Ethiopia give a better hope to the planners and it will be a strong movement in the years to come. The following table gives the status of Milk cooperatives in Ethiopia.

Table 2
Milk Cooperatives in Ethiopia as on 30 September, 2003m

Sl.#	Region	No. of Coops	No. of Members	Total asset(ETB)
1	Tigray	Nil	Nil	Nil
2	Afar	2	NA	26160
3	Amahara	5	NA	62387
4	Oromia	23	676	1052218
5	Somali	Nil	Nil	Nil
6	Behshangul G umuz	Nil	Nil	Nil
7	SNNP	3	NA	80870
8	Gambela	Nil	Nil	Nil
9	Harari	2	Nil	87000
10	Addisababa	7	308	440968
11	Diredawa	Nil	Nil	Nil
12	Ethiopia Total	42	NA	1749603

Source: Records of Federal Cooperative Commission, Addis Ababa

The above table indicates the poor status of milk cooperatives. Though Ethiopia has the potential and opportunities to start milk cooperatives, farmers have not yet risen to the occasion. The development of milk cooperatives in the Oromia region with one Dairy Union is worth mentioning. The milk cooperatives are collecting and marketing the milk

from farmers. The Cooperatives are trying to supply cattle feed to the farmers. They face the problem of marketing during the fasting months. They need to go a long way in procurement of milk on quality and quantity basis, processing of milk in to milk products like powder, butter, cheese, ghee, standardized and pasteurized milk, and marketing the same in their own outlets.

Effective functioning of milk cooperatives is possible in Ethiopia if we adopt the structure of successful Anand Model of India:

Depending upon the development of primary cooperatives and unions, Federation at the Regional level may be organized.

Milk Production Enhancement Activities

The milk production enhancement programmes mainly covers the following activities:

1. Animal health
2. Artificial insemination
3. Feeds and Fodder Development
4. Extension

All these activities can be controlled by the structure which we discussed earlier viz., Federation, Unions and Primary Cooperatives.

Federation Level Input

The Federation can undertake the following activities:

1. Central diagnostic laboratory
2. Frozen semen production and supply
3. Liquid nitrogen production and delivery
4. Centralized publication units

Union Level Input

The Unions can undertake the following activities:

(a) Animal Health:

- (i) Organization of veterinary routes for regular and emergency services
- (ii) Extension of necessary help to central diagnostic laboratory for disease diagnosis
- (iii) Training of Primary Cooperatives' workers in Veterinary first aid
- (iv) Preventive vaccination/inoculation of the dairy animals in cooperation with the government departments

(b) Artificial Insemination:

- (i) Establishment of semen banks for organizing the artificial insemination work

- (ii) Procurement and storage of frozen semen and liquid nitrogen for regular supply to primary cooperatives
- (iii) Regular follow-up on AI program
- (iv) Organization of sterility/infertility camps
- (v) Training of lay-inseminators

(c) Feeds and Fodder Development:

- (i) Organization of feed and fodder development program
- (ii) Production/procurement and supply of balanced cattle feed
- (iii) Procurement and supply of quality fodder seeds
- (iv) Follow-up program

(d) Extension activities:

- (vi) Organization of milk yield competition
- (vii) Organizing audio visual shows and kabele level meetings
- (viii) Helping the publication unit by providing required information and distribution materials to member cooperatives
- (ix) Arranging visits of producer members to union's milk plant, cattle feed plant, AI Center, etc.
- (x) Establishment of demonstration dairy farms and fodder farms.

Primary Cooperative Level Inputs

The primary milk cooperative at kabele level can extend the following inputs to the dairy farmers:

(a) Animal Health:

- (i) To provide veterinary first aid in the kabele
- (ii) To assist the milk union in preventive vaccination and inoculation

(b) Artificial Insemination:

- (i) To carry out artificial insemination as and when required
- (ii) To help maintain proper recording of artificial insemination
- (iii) To extend help to milk producers for identification of animals for ear tagging
- (iv) To follow-up AI activity, pregnancy diagnosis, and its feed back

(c) Feed and Fodder Development

- (i) To procure and supply quality balanced cattle feed from the milk union
- (ii) To demonstrate improved fodder cultivation
- (iii) To procure and supply quality fodder seeds to farmers

Implementation Strategies

After reviewing the strategies adopted by the Indian cooperative dairy industry, the authors advocate the following suitable implementation strategies for Ethiopia:

- There must be a national level program like Operation Flood program of India.
- The financial needs can be met from the sale of material assistance received in the form of milk and milk products, and ploughing back the funds for the development activities

- The major factor for the success of cooperative dairy industry is professionalisation of management. Appointment of veterinarians in all endeavors is recommended
- The movement should be under an independent national body established and patronized by the Federal Government.

Conclusion

The advent of dairying has been a boon for dairy farmers, but it has been of particular importance to those segments of the society that have been traditionally weak. These are the small landholders, the landless laborers, and women. It has provided people, who could only depend on payments from small seasonal crops or from occasional labor, with a year-round source of income. The package of Milk Production Enhancement Activities through Cooperatives presented above, on effective implementation, would certainly make a significant change in the socio-economic life of rural mass of Ethiopia. At the same time, the urban consumers will also get good milk and milk products at a fair price.

Case 6

Role of Cooperatives in Promoting Democratic Culture in the Tigray Region⁴

Research Issue:

The Federal Democratic Republic of Ethiopia, in its Proclamation No 147/1998 to provide for the establishment of Cooperative Societies, declared that the “Cooperative societies are democratic organizations controlled by their members who actively participate in setting their policies and making decisions. Every member has equal voting rights and accordingly one member shall have one vote (Section 5(2))”. Within cooperatives, ‘democracy’ includes considerations of rights and responsibilities. It means fostering the spirit of democracy within cooperatives. ‘Controlled by their members’ mean members participating in setting the policies and making decisions. It implies that members ultimately control their cooperatives and they do so in democratic manner. Elected representatives hold their office in trust of the immediate and long-term benefits of members. Cooperatives belong to the members and not to elected officials. They are trustees on behalf of members. Member control also prohibits a non-member becoming office bearer through nomination to the committee by the government or through the process of cooperation.

The democracy is the corner stone of cooperative management. The cooperative democracy is essentially an economic democracy. The principles of freedom of association, equality within the organization and participation in the organization process are the foundations of cooperative democracy.

The Government of Ethiopia is encouraging and supporting the establishment of cooperatives in various spheres for the development of the country’s economy. As a result, the cooperative movement is expanding, diversifying and growing at rapid pace. Due to this as on 30th March 2004, there were 4039 Agricultural Cooperatives, 3338 Non-Agricultural Cooperatives such as Handicrafts Cooperatives, Savings and Credit Cooperatives, Housing Cooperatives and Construction Cooperatives functioning in Ethiopia. Moreover 35 Unions have been started at the woreda level to market the product of the primary cooperatives.

In the years to come, every family is expected to associate with the local cooperative. Every citizen is expected to believe and lead a civilized democratic life. As a minor democratic institution, cooperatives are to build a strong democratic culture among their

⁴ Co-authored by Ato Mengistu Hailu and presented in the National conference organised by the OSSREA and held on 3&4th December 2004 at Addis Ababa.

members. Are our cooperatives in Ethiopia adopting the principles of cooperative democracy in all its endeavors? This question needs to be explored scientifically. Hence, an attempt has been made in this paper to study the Role of Cooperatives in promoting Democratic Culture in the Tigray Region.

Objectives of the Study

The major objective of the study is to understand the extent of democratic management in the cooperatives of Tigray region.

The specific objectives of the study are:

1. To know the level of members' participation in the General Assembly and in the election
2. To Know the practice of democratic management by the committee members
3. To explore the linkage between the cooperatives and the local administration.

Methodology

The data for the study to justify the objectives have been collected mainly from the primary sources. As on 30th, November 2003, there were 556 cooperatives in 35 woredas of Tigray region. Due to the cost and time constrains, the study randomly identified 24 woredas and from each Woreda one responsible official was selected as respondent for the preliminary survey. A questionnaire was administered among them to collect the required data. The variables studies were: (i) Members participation (ii) Democratic management (iii) Local administration. The second stage was to study the opinion of members and committee members of cooperatives. This paper is the outcome of preliminary survey conducted during September 2004.

Analytical Framework

Data so collected were classified into three categories Viz.,

1. Members participation in the election, General assembly and in the business,
2. Democratic Management by the Committee members,
3. Local administration and Cooperatives.

Description of the Sample Respondents

The study randomly covered 24 woredas of 35 in the Tigray region. The total Cooperatives of all types come to about 493. The woreda have got Multi Purpose Cooperatives, Housing Cooperatives, Irrigation Cooperatives, Savings and Credit Cooperatives, Construction Cooperatives, Handicrafts Cooperatives, Fisheries Cooperatives and unions. Each woreda has its own Cooperative Promotion Office with five to ten officials. Cooperative Bureaus were the official development interventionists for promotion of Cooperative sector in their respective woredas.

The study collected data from 24 officials of the Cooperative Promotion Bureaus at the woreda level. Out of 24 officials 20 were male and only four were female. It's evident that there was gender inequality in staff pattern. Age group of the employees showed an interesting revelation that all the respondents were below 40, and that too only four were above 30. All the respondents had a diploma in the related field and were serving for more than five years in the department.

Member's Participation

The concept of Members' participation in cooperatives denotes (i) members participation in the General assembly, (ii) members participation in the election and (iii) members participation in the business. The following paragraphs deal with the concepts and results of the study.

Members Participation in the General Assembly

General assembly means a meeting of members of the primary cooperatives or representatives of societies above primary level. The supreme organ of any society shall be the general assembly (Section 20 of Proclamation No 147/1998). The general assembly of a society shall pass decisions after evaluating the general activities of the society; approve and amend the by-laws and internal regulations of the society; elect and dismiss the members of the management committee, control committee and when necessary the members of other sub-committee; determine the amount of shares of the society; decide on how the annual net profit of the society is distributed; make decision on the audit report; hear work reports and take proper decision; decide whether a society either be amalgamated with another society or be divided in pursuance of this proclamation; approve the annual work plan and budget; decide any issue submitted by the management committee and other committees. Absenteeism of members in the general assembly may lead to the loss of democratic character that may result in the dominance of the vested interest. The ultimate mission of the cooperatives may also get diluted to the whims and fancies of the caucus group.

Seventy nine percent of the respondents of the study opined that only moderate members' participation (50 to 80 percent of the total membership) was there in the general assembly. Around 17 percent of the respondents perceived less than 50 percent participation by the members in the general assembly. The attendance in the general assembly depended on factors, viz., convenience, place and willingness to attend.

Members' Participation in the Election

Democratic election of the management committee is vital to democratic member control. This involves three steps: Legal framework; informed member electorate and the election process. Articles of incorporation and bylaws usually define who may serve, number of committee members and length of term, method of selection, who may vote, and the duties and responsibilities of those elected. Members must have a background of general information on the cooperative before they can make intelligent evaluation of the qualifications of candidates for management committee. The next step is nominating

qualified members to serve on the management committee and voting in the election process. Members choose a few of the leading persons from the membership to serve as committee members. The committee is representative of the general assembly and is responsible and accountable to it for its acts of commission and omission. Hence, the general assembly has to take an intelligent decision for electing the members of the committee, for which the presence of all members is essential. Seventy one percent of the respondents of the study opined that at the time of election for management committee, the members participated in the process moderately (50-80 percent). Moreover, 12 percent of the total respondents opined that the members participated fully in the election process.

Members' Participation in the Business

Members contribute equitably to, and democratically control, the capital of their cooperative. At least part of the capital is usually the common property of the cooperative. Members usually receive limited compensation, if any, on capital subscribed as a condition of membership. Members allocate surplus for any or all of the following purposes: developing their cooperative, possibly by setting up reserves, part of which at least would be indivisible; benefiting members in proportion to their transactions with the cooperative; and supporting other activities approved by the membership. The surplus is generated by the cooperatives by the active involvement of the members in the business of the cooperatives. Mere investment in the form of share capital will not pave way for the business development of the cooperatives. Around 75 percent of the respondents opined that moderate participation of members was seen in the business of the cooperatives. At the same time, 17 percent of the respondents said that the members' participation was very less i.e. less than 50 percent. The trend is not good for any cooperatives in the long run.

Democratic Management by the Committee Members

Cooperatives have user-owners and for all of them to involve in the decision making process is difficult. So the members elect a few members as members of the management committee who can make most decisions for them. The committee, most importantly, function to direct the business affairs of the cooperative and it is the cooperative's central decision centre. In carrying out this responsibility, the committee performs several important supporting roles. It is a communication hub, imparting information between members and management. It is an advisory body to members and management, providing recommendations and guidance. But in every role and action, the committee is accountable to members.

In this respect, the researchers felt it that was pertinent to obtain the opinion of the cooperative officials. Sixty seven percent of the respondents viewed that moderate participation (50 to 80 percent) was there in the management committee meetings. One positive note is that 21 percent of the respondents said that there was full participation of the members in the committee meetings. It could be inferred from the results that the committee members showed interest in the development of their cooperatives.

Democratic Governance

The uniqueness of the cooperatives is the role of the user, which is different from any other form of business. With the rapid proliferation, diversified activities and extensive coverage cooperatives have emerged as the relevant institutions in the contemporary context. The fundamental concept of the democratic governance in a cooperative is that those who need and use the services provided by the cooperative manage it. Hence, a cooperative is organized, owned and controlled by those who need and use the services of the cooperatives. By keeping this in mind, the researchers got the opinion of the respondents on the democratic governance. Except one, everybody said that they have belief in the concept of democracy. And everybody was of the opinion that the elections for the cooperatives were conducted in accordance with the cooperative proclamation.

It is interesting to note that in three woredas, the elections of few cooperatives were not conducted. Only those cooperatives started during the earlier regime and not functioning (dormant) were not brought under the election process.

Democratic Management is a Base for Democratic Governance in the Local Administration

The experienced members get from the cooperatives helps the people to become members in the local administration. For many local leaders, cooperatives are the stepping stone for their long run political career. All the respondents are of the opinion that the Democratic management is a base for Democratic Governance in the Local Administration. This will help the people of the local administration to identify the problems, needs of the locals and surmount it in a democratic way.

Policy Implications

It must be impressed upon the members that the satisfactory functioning of their cooperatives depends primarily upon their active participation in democratic management. To secure satisfactory services from the cooperative, it would be in their own interest to participate in the general assembly meetings. It is an obligation to themselves for protecting and promoting their own interests.

Member contact, member information and member education are extremely important for democratic management in cooperatives because without enlightening members, it is impossible to secure members' participation in management which is the essence of democratic management.

There are members who do participate in the business of the cooperative but neglect their right to participate in the management. Such members get undue opportunities to shape the policies in a manner which may not be conducive to the interests of the former. It is important that the members of the cooperatives participate not merely in the capital, but in the business and management as well.

The democratic management of cooperatives is a base for Democratic Governance in the Local Administration; hence, it is imperative for the government to promote cooperatives in a big way. This will result in electing the right person for local administrations to identify and fulfill the social, economical, cultural and political needs of the people. It will pave the way for a clean, perfect and efficient political administration.

Table 1
Respondents' Opinion on Democratic Culture of the Cooperatives from Tigray Region

Sl. No	Name of the Woredas	No. of Coops	Members Election	Participation in	Members Participation in GA	Members Participation in	Participation in	Members Participation in	Participation in	Members Participation in	Participation in	Members Participation in	Participation in	
1	Enderta	25		√		√			√			√		
2	Ofla	26		√			√			√		√		
3	Alamata	17			√			√			√		√	
4	Raya Azebo	12		√			√		√			√		
5	Hindalo Wajiat	31	√				√			√			√	
6	Endamohony	16			√			√			√			
7	S/S/Emba	19		√			√			√			√	
8	Kite Awlalo	23		√		√				√			√	
9	Ganta Afeshum	32		√			√			√			√	
10	Europe	5		√			√		√				√	
11	Kola Tembien	28		√			√			√			√	
12	A/Wonberta	17		√			√			√			√	
13	Tahtay Maychew	18			√			√			√		√	
14	Adwa	24		√			√			√			√	
15	Degua Tembien	21		√			√			√			√	
16	Werea Leke	28		√				√			√		√	
17	Naeder Adet	16		√			√		√				√	
18	Mereb Leke	29		√			√			√			√	
19	Medebay Zana	13		√			√			√			√	
20	Tahtay Adyabo	16	√				√			√			√	
21	Tselemt	17		√			√		√				√	
22	Wolkayet	11		√			√		√				√	
23	Tsegede	21		√			√			√			√	
24	Mekelle	28	√				√			√			√	
	Total	493	3	17	4	1	19	4	5	16	3	2	18	4
	Percentage		(12%)	(71%)	(17%)	(4%)	(79%)	(17%)	(21%)	(66.5%)	(12.5%)	(8%)	(75%)	(17%)

Source: Primary Data Collected from the Woreda Level Officials of the Tigray Region

Note: Percentages in Parenthesis Denotes Percentages to Total Respondents

Case 7

Export Marketing of Meat through Cooperatives in Ethiopia⁵

Introduction

A Cooperative is an autonomous association of persons united voluntarily to meet their common economic, social and cultural needs and aspirations through a jointly owned and democratically controlled enterprise.

The people of Ethiopia have got a very long social history of working together to fulfil their socio-economic needs. Agriculture, Trade and Military Operations were carried out through cooperative efforts. Many social events are still taking place in rural Ethiopia through collective effort. The Federal Government of Ethiopia has identified Cooperative form of business organizations as an instrument of socio-economic change. Many Cooperatives have emerged in the recent past to serve the suppressed and depressed community of Ethiopia. The abundant cattle population in Ethiopia is under-utilised both for milk and meat. Considering the wide pastoral lands in the country the scope for *cooperative export marketing Network* is ample. Hence, in this paper the researcher has identified the potentiality of Cooperatives in marketing meat.

Objectives of the Research

The major objectives of the study are:

1. To frame a cooperative model for meat marketing in Ethiopia,
2. To suggest possible export marketing strategies through cooperatives.

Methodology of the Study

The study was carried out with secondary data only. To justify the first objective current status of Cooperatives in Ethiopia were taken in to consideration. The second objective was analysed by taking into consideration the cooperative experiences in other countries. The attempt lacks primary empirical evidences. The author feels that this modest attempt can be a basis for further research and development.

Findings of the Study

The findings of the study was made in accordance with the objectives framed viz.: to frame a model for meat marketing in Ethiopia and to suggest export marketing strategies through cooperatives.

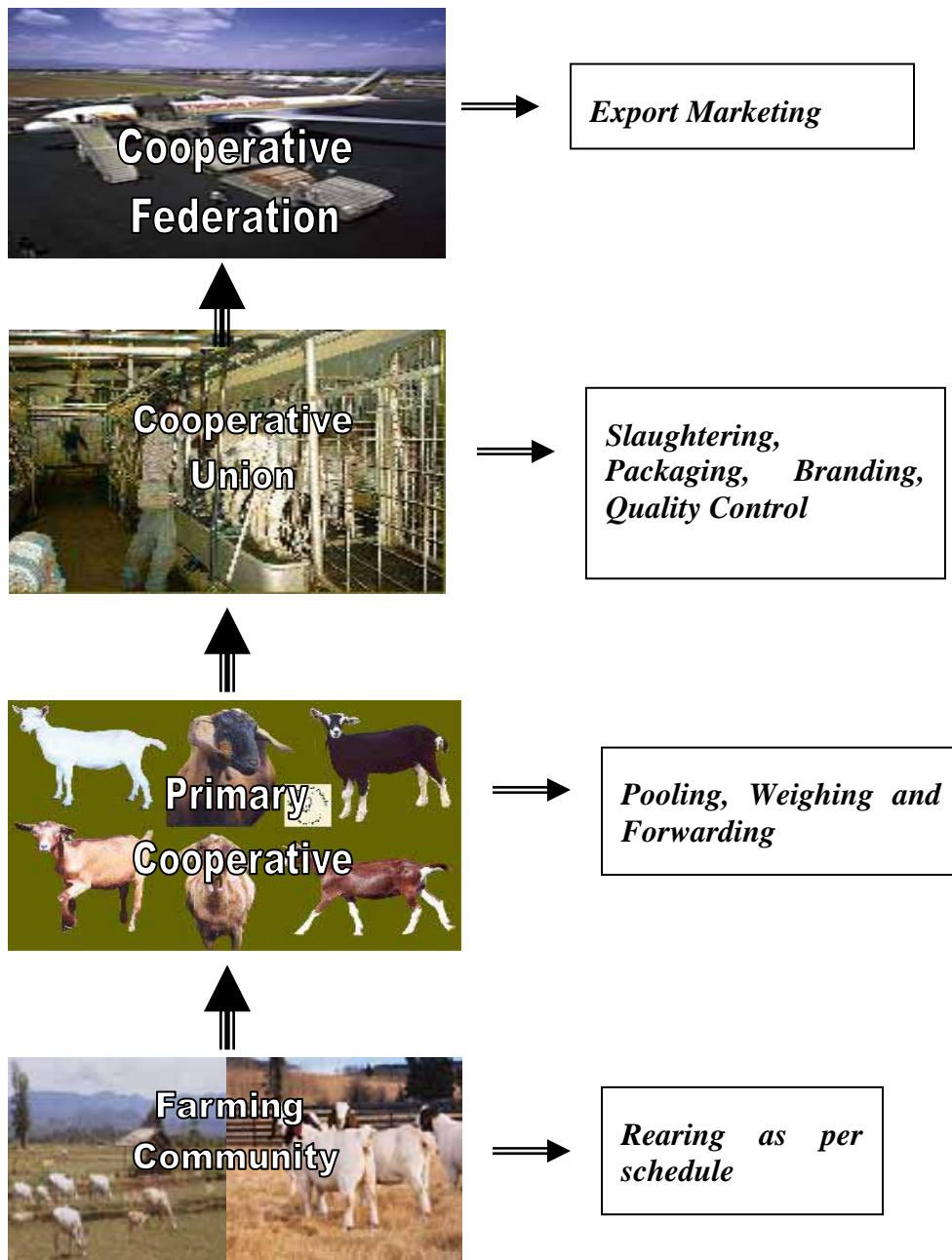
⁵ Coauthored by Dr.C.Pitchai and presented in the 19th Annual Conference of EVA on 8th and 9th June 2005 at Addis Ababa.

Model for meat marketing in Ethiopia

Cattle play a significant role in the economic life of rural Ethiopia. They have remained as the keystone of Ethiopian farming since time immemorial. Cattle remain as the sole motive power of agriculture and without them no cultivation is possible and no produce could be transported. They provide much needed milk and milk products. Cattle such as oxen, cow, sheep and goat are being used for meat and meat products. The domestic production and marketing of meat is not highly organised and beneficial to the farming community. Faced with the increasing concentration of today's conventional market, in which livestock producers have less and less control over the prices they receive, producers need to take advantage of every opportunity for innovative marketing and adding of value. Handful of private institutions operating in the country have not fully utilised the potential and they are profit oriented and ignore the welfare of farmers. Producers who want to cut out middleman do earn a large share of the end price by performing a wide range of functions. By eliminating middlemen, producers could avoid payment of high margins for different functions such as processing, packaging and labelling, storage, transportation, and marketing. Marketing includes research, targeting markets, advertising, and going out and making the sale. This can be one of the most difficult aspects for producers to master. While it is relatively simple for a good producer to learn how to produce something different, marketing is an entirely different occupation. To succeed, producers will need to learn the management of business and how to feel comfortable and confident when drumming up new business. Moreover, individual producers often experience difficulties in profitably achieving either the level of marketing services or the volume necessary for sustainable marketing. Therefore, a cooperative where several producers pool their animals and share fixed costs is often more appropriate. Marketing through a cooperative can shift many of the time-consuming marketing activities away from the producer. The cooperative can engage in bargaining, transportation, grading, processing, distribution, and research and development for its members. Cooperatives allow producers to get into the value-added sector of the marketplace while pooling knowledge, risks, and profits.

Currently in Ethiopia, we have Agricultural Cooperatives in almost all woredas of all regions. At district level we have started organising Agricultural Cooperative Unions. The major objective of the cooperatives is to market the produces of the farming community. So far, only a modest attempt has been made by the primary cooperatives to market the livestock of our farming community. Observations of the researchers reveal that there is high scope for meat marketing through cooperatives. Marketing of meat through cooperation is the most appropriate of all forms of organizations in most situations. Moreover, theoretically and ideologically, the cooperative mode seems to be the best of all. This is so because, with proper rules and regulations, it can better meet the goals of efficiency, sustainability, equity and users' satisfaction and is politically and socially more acceptable in most societies of the nation than any other alternatives.

The primary cooperatives are not having adequate capital base, cattle base and other resources to establish full-fledged export marketing system. The primaries can act as agents of the Unions to pool the livestock and transport them to the slaughtering houses managed by the Unions. The Federation at the National level can undertake the export marketing activities such as identification of potential buyers, branding, packaging, transportation and fulfilling all other export marketing functions. Until the federal level cooperative organisations are being organised, the Cooperative Unions can avail the services of the present Ethiopian Meat Exporters. The following diagram shows the pictorial organisational structure for meat marketing in Ethiopia through Cooperatives.



Meat Export Marketing Strategies through Cooperatives

Based on the experiences of the countries exporting agricultural produces including meat, the authors advocate the following strategies for marketing meat through cooperatives.

(A) Establishing Organisational Network

(i) Reorganising the Existing Cooperatives

In Ethiopia we have around 5000 agricultural cooperatives at the primary level. The objectives of the cooperatives are to provide agricultural inputs and agricultural marketing facilities. Unfortunately our primary agricultural cooperatives have not fulfilled the marketing requirements of the farming community particularly the pastoralists. Since our economy is mostly pastoral economy, existing cooperatives should undertake the marketing of livestock as a core activity. The promoters of the cooperatives viz., the Government and NGOs should take initiative in creating awareness among the cooperative members and educate the committee members to carry out the livestock marketing.

(ii) Establishing New Cooperatives

The promoters of the cooperatives can take initiative to establish new agricultural multi-purpose cooperatives. One of the main objectives of such cooperatives should be to carry out the livestock marketing. The major functions of such cooperatives are to pool and transport the livestock to the slaughtering houses of the cooperative union. The primary cooperatives will pay to the farming community based on the weight of the livestock as per the price fixed by the union.

(iii) Promoting Federal Organisation

The existing cooperative unions at woreda level should establish meat-processing units. New unions with such facilities should also be started wherever required. The meat processing units will carry out the activities of slaughtering of livestock, quality check, packing, branding and transporting. Federal organisations are *to be established* either at the regional level or / and at national level which may take care of export marketing functions. The federation should identify the potential export market, establish business relationship with the importers, shipment, and adhere international trade norms. The federation will schedule the livestock pooling and slaughtering based on demand and supply. The federation will also carry out dissemination of market information to the farming community through the union.

(B) Ensuring Product Quality

- Producing a quality animal is only the first step in producing quality meat products. The ability to offer a safe and attractively packaged product is a basic requirement for successful marketing. Farmers are to be well advised to learn as much as they can about slaughtering, cutting, aging, packaging, and so on. Learning about cuts, dressing percentages, and weights is crucial,

for which the author advocates *cooperative extension with the help of veterinarians*.

- Developing a sales base depends on being able to deliver a consistent product. While there may be more tolerance for slight inconsistencies among consumers who have developed a relationship with the producer, consistency is cited as a key factor in export marketing. The cooperatives should have *regular quality check* with the help of Quality Controllers who may be hired on full time basis by the unions.
- All packaging should be done with airtight, high quality freezer paper. Each package should be marked with the name of the cut and the date packaged. It may be possible to provide the slaughterhouse with a stamp containing the necessary farm information. The international norms on food products need to be adhered by the cooperatives. *Professionals with international marketing expertise need to be employed by the cooperatives*.

Conclusion

In the export of the country, meat forms a significant portion. Export of agricultural produces through cooperatives is not a new venture. We have in Ethiopia established a strong export network for organic coffee. The experiences can be used for meat marketing too. This will ensure better price for the livestock of the pastoralists and other people. It will also help our farming community to involve in fattening of livestock as a sustainable livelihood operation.

Case 8

Problems and Prospects of Water Users' Association in the Tigray Region⁶

Importance of Irrigation

Agriculture plays a pivotal role in Ethiopian economy. Eighty five percent of the people are living in rural Ethiopia and 45 percent of the GDP is generated through agriculture. Eighty five percent of export earning is through agricultural produces. Cereals, pulses and oilseeds are the three major crops that accounted for 85 percent of the total temporary and permanent crops. There is a significant improvement in the production of food grains, still the country has to go a long way to attain food security. The major impediments in attaining food security are attributed to many internal and external causes.

Among the internal factors, soil fertility continued to decline at a higher rate than the effort carried out to improve soil fertility through the application of inorganic fertilizers. The inclusion of more and more of marginal and degraded lands into cultivation, contributed both for low yield and high soil erosion.

The second indicator of the sluggish performance of Ethiopian agriculture is the low level of per capita food production.

The third point that demonstrates the continued poor performance of Ethiopian agriculture is the stagnant agricultural income. This is due to low price for agricultural commodities and declining terms of trade between agricultural produces and non-agricultural produces and services.

The fourth important point to be noted is inadequate attention to water harvesting and inadequate irrigation facilities. While the present growing emphasis for water harvesting and pond development is important and encouraging, medium and large irrigation development deserve sufficient attention and commitment from the government. Especially from long-term perspective, they are more important to create a sustainable, dependable and dynamic agricultural sector that can fully play its expected role in the national economy. Irrigation is linked to food security in most regions of the world: irrigated agriculture produces about 2/3 of the world's food on 1/3 of the arable land. Irrigators need to become better stewards of the environment. Irrigation consumes about two thirds of the world's

⁶ Coauthored by Ato Mengistu Hailu & Dr.C.Pitchai and presented to the Canadian NGO,WHIST.

fresh water, and is the largest of non-point source polluter. Over the last 25 years, irrigation has been invaluable in raising the standard of living of the poor, especially in rural areas.

Almost all the regional states of the country face similar problems and Tigray is one of the states, located in the northern part of the country between 12⁰15'N and 14⁰50'N and 36⁰27'E and 39⁰59'E. The region has approximate area coverage of 80,000 km². In the year 2005 Tigray had an estimated population of 4.2 million and an annual population growth rate of 3.3%.

The climate is generally characterized as tropical semi-arid with an annual rainfall ranging from 450 mm in the north, east and central zones to 980 mm in the southern and western parts of the region. Most of the rainfall occurs in July, August and September. The topography of the region mainly consists of highland plateaus up to 3900 m a.s.l. which are dissected by gorges. However, the north west of the region is characterized by lowlands with elevations as low as 500 m a.s.l. The highlands support a high population density, 40-70 persons Km², (FAO, 2004), and are seriously affected by land degradation due to their long cultivation history, steep topography and erosive rains. In contrast, the lowlands are sparsely populated and have soils that are less eroded and exploited.

Cooperative Management of Natural Resources

The natural resources are dynamic and subject to management interventions that can provide sustainable benefit flows in the form of food, fodder, fuel wood, fiber, timber, manure, etc., clean surface and ground water, air filtration and humidification, and Eco-tourism. Management of natural resources on sustained yield basis depends upon a careful orchestration of the policies and management practices. Lack of equitable access to natural resources and, hence, inequitable distribution of their benefits often leads to clandestine encroachment, or misappropriation of these resources. There is, therefore, a need for exploring viable natural resources management strategies for their restoration and utilization within a development context.

Until recently, the role of natural resources in the rural economy was not understood properly. Privatization or nationalization of natural resources was suggested as a solution to arrest their degradation and preserve the environment. Experience with nationalization of natural resources has not been good in most of the cases all over the world. Privatization has yielded mixed results: it has been justified on efficiency grounds and condemned on equity and sustainability grounds.

For the success of any strategy of natural resources management, the involvement of local people is essential. This is so because the use of natural resources by any user has many unintended side effects, or in technical terms, externalities on other co-users. For example, pumping of ground water in a watershed affects the aquifer that is a natural resource to which all those who live in the watershed have a legitimate claim. If one of the co-users

pumps more water, to that extent, less water is left for use by the others in the watershed. Optimum use of ground water in a watershed, therefore, requires the cooperation or participation of all the people living and using ground water in the watershed. Similarly, soil and water conservation in a watershed requires the participation of all the landowners having land in the watershed in the form of adoption of the recommended soil and water conservation measures. In a nutshell, all users of the natural resources, irrespective of whether they are owned privately or publicly, are interdependent and require the cooperation of all the resource users for internalizing/minimizing the externalities involved. This is best achieved when the planning and management of natural resources is done on watershed basis and the resources managed by their users are organized in the form of an association preferably a Water Users Association or a cooperative society. The management of natural resources by these institutions is therefore the most appropriate of all forms of management in most situations. Moreover, theoretically and ideologically, the WUA or cooperative mode of natural resources management seems to be the best of all. This is so because, with proper rules and regulations, it can better meet the goals of efficiency, sustainability, equity and resource users' satisfaction and is politically and socially more acceptable in most societies and nations than any other alternatives.

Water Users Associations/Irrigation Cooperatives are being established through out Tigray. The existing Water Users Associations/Irrigation Cooperatives need to be studied and strengthened. This paper tries to study the functioning of WUAs and irrigation cooperatives in the region and find out the reasons for success and failures. This ultimately will help to perfect the existing WUAs and irrigation cooperatives and come out with strategies for establishing WUAs and irrigation cooperatives of people's choice which will last for long and serve them in a better manner.

Review of Literature

There are innumerable studies carried out in many countries on the functioning of the Water Users' Associations. Here in this paper some core experiences in other countries are presented for replicable value. Moreover the attempts made in Ethiopia on different irrigation schemes with special reference to Water Users Associations would be presented separately.

Water Users Associations in Irrigation Management: Case of Andhra Pradesh, India

The Participatory Irrigation Management Program (PIM) in Andhra Pradesh (AP), India, widely known as the AP Model of Irrigation Reforms was initiated with the enactment of the Andhra Pradesh Farmers Managed Irrigation System Act (APFMIS Act) in 1997. The Act enables the transfer of rights over the canal water and its assets to the newly constituted Water Users' Associations (WUAs). In the state, 10,292 WUAs have been established. The State aims to build the capacity of the newly formed local level institutions in land and

water management and transfer the management to these institutions for better. Traditional local institutions responsible for water distribution and management under canal and tank irrigation lost their presence and relevance with the formation of WUAs. As new institutions are crafted by the State and empowered by a legislative Act, these new WUAs started functioning at local level with an assured funding from the State in the initial years of formation. The common property resources like canal water and structures are being managed in the past and present, and the new local institutions are able to address collective action by acknowledging the equity and livelihood concerns of the resource poor users. The primary knowledge about these institutional functioning, rules and practices has influenced in the thinking process and policymaking in the state.

Crop Profitability and WUA Success in Gujarat, India

The successful Mohini Water Distribution Cooperative in Gujarat, India, would not show a profit if it maintained the planned cropping pattern. At the present prevailing prices, the society makes a profit only if the major area is put under sugarcane. If the major area were under food grains, the society would make losses. The Mohini Society became a financial success because more than 85% of the area was put under sugarcane, single crop, instead of the prescribed 18% by the state.

Legal Framework for WUAs, Pakistan

The WUA ordinance in Pakistan's Punjab province provides an example of a legal framework that does little to empower or encourage WUA members. The only objectives of the organizations are the government's objectives, rather than the farmers'. WUAs adopted a standard set of by-laws in order to be registered, and WUAs have no right to appeal if government officers refuse to grant them registration. Little information is available about the ordinance in the local language, nor is the content of the law widely known. It is thus not surprising that most WUAs have little farmer participation, that they ceased to be active once initial watercourse lining was completed.

Successful Use of Contracts, Bangladesh

The Barind Integrated Area Development Project (BIADP) in Bangladesh used a deed of agreement between BIADP and the Barind Deep Tubewell Water Users' Association. Under this, farmers pay an irrigation charge and the management of the project guarantees water supply. The farmers are also responsible for the usual maintenance costs and the fuel, oil, and electricity for the pump. The project bears the servicing cost and owns the pump. The BIADP calculated the water charge in such a way that it would cover the cost of the equipment by the end of its expected lifetime, and charges were related to the extra income (made possible by using the equipment) earned by the farmer. The good performance of

this project could be seen in the increase in the irrigated area per cusec of discharge and the percentage of costs recouped.

Cases of Total Cost Reductions under WUA Management, New Zealand & Chile

In *New Zealand*, reports state that water charges on privatized systems (averaging 50 farmers, or 2,400 hectares) were two to four times lower than on similar government-managed systems, even though government systems operated at a loss and private systems met full costs. This was because where irrigators owned their own systems, they were able to cut costs by nearly two-thirds because of increased efficiency of operation, lower overhead costs than government systems, reduction in over elaborate engineering design and specifications, and the greater personal responsibility irrigators take for maintaining the systems they themselves own.

In *Chile*, the state management of a 60,000 hectares irrigated area on Rio Digullin involved five engineers, eight to ten technicians, 15 to 20 trucks, and five bulldozers, compared to one engineer, two technicians, one secretary, and two trucks under farmer management of the same area. Because farmers work collaboratively with engineers and technicians, they are fully aware of the "true" costs of running the irrigation systems, and for this reason perceive that the water fee charges they pay, even if they are high, are "believable" costs to the association.

Changes in Costs under WUA Management, Senegal

Senegal provides an example of both efficiency gains and cost increases to farmers when WUAs take over operations and management. Under agency management, irrigation fees and service quality were both low. The agency provided maintenance and paid for electricity on an irregular basis, leading to highly unreliable irrigation services. Agency field staffs were poorly supervised, and would therefore turn on pumps and leave. This resulted in over pumping and system breakdowns. By contrast, WUAs provided more careful supervision of staff, reducing over pumping and thereby cutting electricity costs by up to 50 percent. Other cost savings came from WUAs paying staff less than full civil service rates. Nevertheless, because WUAs had to pay for full electricity consumption along with maintenance and a fund for pump replacement, farmers' fees increased by two to four times.

Water Users Association, Nepal

The National Federation of Irrigation Water Users' Association, Nepal (NFIWUAN) is formed by the representatives of the Water Users' Associations (WUAs) throughout the country for their welfare and betterment in the preservation of water rights of the farmers and for voicing their woes.

NFIWUAN was institutionalized with a grant of US\$50,000 from the Ford Foundation. As a first step, a Coordination Committee was set up with representatives from NFIWUAN, other NGOs in Nepal, namely MRMG, WATCH, and FECOFUN, and the Ford Foundation and Winrock India.

A NFIWUAN office was established and appropriately equipped with most modern communication tools. The organization was extended to form 10 District Committees and Ad-hoc committees in 28 districts. NFIWUAN was strengthened and expanded by increasing membership and the number of WUAs increased to 436. The groups were formed in three unregistered WUAs. Participation of women and unorganized water users in irrigation management was promoted.

Training and interaction programs were conducted on setting Vision; developing a 10-year guideline; developing tools and techniques for group formation and how to apply these tools; building awareness among the water users concerning water policy, program and local issues conducted in three districts namely, Kathmandu, Makawanpur and Nawalparasi; identifying problems and issues.

A number of site observation visits were organized and needs, problems and issues were identified. These were of flood area of (Rapati Duban) Rapti River, Mohana and Kamala Irrigation project to review irrigation infrastructure; and a recommendation letter was provided to the Ministry of Environment and Population on the issues of West Seti River EIA.

A number of Central Committee, National Council and Secretariat meetings were organized.

Case Study of WUA, Zimbabwe

In a recent study of irrigation system performance in Zimbabwe, more than 70 percent of farmers on sample systems managed by either Agritex (the government agency responsible for smallholder irrigation development) or community groups reported that they would prefer to have Agritex to manage the systems, even if it meant paying twice the existing irrigation service charges. Indeed, the community-managed system petitioned Agritex to take it over, because problems with the system's infrastructure and divisions within the irrigation association became too great for the system to continue functioning.

Several factors contributed to farmers' reluctance to assume full management control, even of the small systems. First, farmers' cash costs of managing the systems exceeded even twice the prevailing irrigation service fees, especially on systems with pumped water

supplies. Second, Agritex does a relatively good job of managing systems and providing extension services and advice smallholders on the schemes. Third, WUAs had difficulty in obtaining repair services in the remote areas in which many smallholder schemes are located. Finally, many farmers reported that they did not feel their WUAs were capable of carrying out many of the management functions or did not wish to deal with conflicts among themselves. The latter consideration provides an indicator of farmers' perceptions of transaction costs for assuming WUA management of the systems.

WUA Case Study, UZBEKISTAN

Formerly, the state farms were responsible for the maintenance of the farmers' canals and of on-farm irrigation networks, the drainage systems and measures against the rising level of salinity. During the last decade, the maintenance of the irrigation system declined. The government assumed that further privatisation would deepen the gap in fulfilling the required service and ordered by decree the establishment of WUAs. The intention was that WUAs would take over the former state and collective farm's role as a service provider for the irrigation system.

The government originally intended to rehabilitate the old on-farm irrigation system fully and to hand over a completely restored and perfectly working system to the WUAs.

The formation of WUAs on privatized farms was ordered by presidential decree in the beginning of the year 2000. Therefore, the farmers had no other choice but to respond positively to the formation of the WUA. If they had refused then it is doubtful that they could maintain as independent farmers.

Every water user, household or farmer has to pay a water tax. The WUA collects the tax from the farmers. The tax was so low that the payment did not lead to disputes among the water users. Farmers calculated tax that was only about one per cent of the total farming cost.

The experts opined that the election procedures in the established WUAs were open and fair. Farmers nominated their own candidates. However, this does not imply that the farmers knew about the principles of the WUA or that they were informed about the responsibilities of the elected representatives or about the financial consequences. The groups were dominated and controlled by the chairman of the WUA.

Farmers worked together in terms of sharing water. They distributed the water accordingly with a time schedule of delivery. Furthermore, farmers traded their water rights. If the farmers did not need the water on the day, which was allocated to them, they exchanged the water allocation day with other farmers of the WUA.

WUAs claimed that initial training sessions for the farmers had taken place. There was no training given to farmers who joined the WUA at a later date. This indicates that their knowledge on water management and how to operate and manage a farm economically is limited.

The system of state order is still in place for certain agricultural products, such as cotton, grain and rice. At the time when the WUA was formed, farmers had to allocate 60 per cent of their land to cotton and 30 per cent to grain. The remaining 10 per cent was left to their individual choice.

Farmers can take bank loans and can apply for an advance payment from the state that would cover 80 per cent of their production costs. If the crop fails the farmer takes full responsibility of the loan. Considering the high maintenance cost, lack of machinery, lack of spare parts, high quotas for state orders and low prices for state ordered goods, the risk factor is too high. Hence, farmers are not willing to take the risk to take bank loans. It is possible to take a mortgage on the land owned. But as farmers and households just hold the land in lease they would not be able to take a mortgage for a long-term investment.

WUA Case Study, KYRGYZSTAN

In 1995 water users formed the first WUAs within the borders of the former state and collective farms. Individuals on decision of the founders, physical or juridical persons, established these WUAs. In 1996 the Asian Development Bank upon special request of the government carried out work in on-farm irrigation improvement. This included workshops, which promoted the importance to form WUA. This action resulted in an increase in WUAs. In the time period 1996-98 about 50 WUAs were established with a command area of 91,800 ha. By November 1999 about 132,000 ha were covered by 77 WUA, all of them formally established and registered. Besides these, additional 130 WUAs were functioning informally on a command area of 125,000 ha. The average size of a WUA is 1,800 ha.

At present some international projects concerning WUAs in Kyrgyzstan are ongoing or proposed such as a World Bank (WB) project for implementation of on-farm irrigation. The objectives for forming WUAs were diverse. In one case the formation of a WUA was not necessarily in response to immediate irrigation problems, but under the objective to obtain infrastructural improvements and equipment. In another case WUAs were founded in response to severe irrigation problems, such as rule breaching, water stealing and water shortages.

Even though, water for irrigation is not perceived as the main problem, cases of farmers breaching rules and stealing water have been reported. This would indicate that water availability is important. However, in most cases, farmers received their water allocation in time and the quantity of water was sufficient. Nevertheless, two of three villages established WUAs, because of severe irrigation problems and the need of farmers to deal with the arising problems on a local and communal basis.

The farmers expected that the government would rehabilitate the irrigation system but the government anticipated that the farmers should be responsible for 100 per cent of the rehabilitation cost.

It is argued that the election procedures were open and fair. However, it could also be argued that the Soviet legacy has left a feeling that elections do not really matter and that they will not change the influence of institutions.

If farmers felt that they had been treated unfairly and that there was inequity in the delivered supplies, they brought this to the attention of the WUA. This could be interpreted as participation, because farmers were working within the structures of the WUAs.

During the process of land reform, employees of the former state farms became farmers or owners of household plots. These employees even though working on a state farm did not necessarily had the capability to manage a farm by themselves.

The WUA tried to resolve the disputes among farmers. In case no agreement was reached, the case was referred to the local court. The implementation of fines influenced the situation positively and contributed to a decrease in water thefts.

The farmers had the feeling that the formation of the WUA raised a sense of ownership within the system. It is possible to interpret the sense of ownership and the feeling of responsibility as empowerment of the farmers.

The above cases reflect the following observations as the successful factors for WUAs.

Users work together through associations only where they can benefit significantly. Without offering benefits, associations cannot be sustained regardless of the effort put into capacity building.

The extent of decentralization is an important factor. Two key aspects of decentralization are granting of rights to specific quantities of water and freedom to set charges. WUAs that benefit from greater levels of decentralization develop a sense of ownership, which makes them invest in repair and maintenance of irrigation infrastructure.

External agents are critical to initiate and in many cases to ensure that WUAs continue to function. The need for external agents is likely to reduce as clear models of WUAs become available for potential groups to emulate. Much of the support received by WUAs from external agents has gone into strengthening the position of WUAs vis-à-vis the irrigation agencies. Where the agencies are willing participants in joint management, the need for external agents is also likely to be low.

WUAs benefit from the participation of individuals who were socio-economically powerful in their communities. Rule enforcement tends to be weak in WUAs without such powerful individuals in management positions.

In the Tigray region, Water Users' Associations and Irrigation Cooperatives were started for ensuring supply of water for irrigation purpose. Farmer members of many Irrigation Cooperatives are cultivating two crops in a year. The Irrigation Cooperatives block and accumulate the stream water and pump for irrigation as per the pre-planned and accepted schedule. They share the fuel and motor operator's expenses. Though on a small scale, the irrigation cooperatives work moderately well but needs to be strengthened further. To

advance the functioning of Water Users' Associations in Tigray a study was carried out with the following objectives:

Goals and Objectives of the Study:

The major goal of the study was to identify the problems of WUAs and Irrigation Cooperatives in Tigray region and suggest suitable recommendations.

The specific objectives of the study are as follows:

1. Evaluation of the existing WUAs, Irrigation Cooperatives in the Tigray Region on the following dimensions
 - a. Issues related to organization of WUAs, Irrigation Cooperatives
 - b. Issues related to Management and finance of WUAs, Irrigation Cooperatives
 - c. Issues related to water resources
 - d. Issues related to monitoring and Evaluation
 - e. Issues related to critical Linkages with other development interventionists
2. Evolving an appropriate WUAs Model to replicate in the other potential areas. The consultant groups have identified and organized a WUA based on the findings of this study.

Methodology for the Study

The consultants used both secondary and primary data, but primarily based on empirical analysis. Hence, field survey method was adopted for the study. Since the paper covers selected Water Users Association and Irrigation Cooperatives of Tigray Region, a Multi stage stratified Random sampling procedure was employed.

Selection of the Area for the Study:

There are 34 rural woredas in the Tigray region. Based on the agro climatic and topographical condition of the woredas the following woredas were selected for the purpose of survey.

1. Ofla Woreda: Falla Irrigation Cooperatives (River Diversion) and Zata Irrigation Cooperative (River Diversion)
2. Kleteawlaelo Woreda: Laelay Wukro Irrigation Cooperative (Earth Dam)
3. Kola Temblian Woreda: Tsalet WUA (River Diversion)
4. Laelay Maichew Woreda: Mainiguse WUA (Earth Dam)
5. Saesie Tsaeda Emba Woreda: Firehangoda Irrigation Coops. (Water Pump) and Shewit lemlem Irrigation Coops. (Water Pump)
6. Hintalo Waegerat Woreda: Ayene bizu WUA (River Diversion) and Shelanat WUA (Earth Dam)
7. Emba Alage Woreda: Mereduba WUA (River Diversion)

In total ten institutions viz., five WUAs and five Irrigation Cooperatives were studied. Well performing, showing poor performance and medium performance institutions were identified and studied. The selection of WUAs and irrigation cooperatives are deliberate because they have similar functions and because the consultant group wanted to investigate the basic difference between the two on ground.

Selection of the Respondents

In each woreda one to two Water Users Associations, Irrigation Cooperatives were identified based on their performance as evaluated by the Cooperative Promotion Office.

In each institution, three management committee members were interviewed. Moreover seven farmer members were interviewed. In total 100 respondents were interviewed for the study.

Tools and Techniques for the Study

Predominantly the qualitative data collection methods have been employed to collect data. A pre tested interview schedule was used for interviewing the management committee members and the farmer members. The consultants adopted the methods of using key informants, and also focus group discussions. Data has been synthesized through interpretation and using simple percentages.

The data collection was made possible by the consultants with the support of the woreda level cooperative experts. The data for the study was collected during the month of December 2005.

For more clarity and to understand the overall situation of the irrigation system in the selected woreda, the officials of the Cooperative Promotion Office were also interviewed with a checklist.

List of Variables

The Interviews were conducted to know the problems and prospects of the WUAs. Hence, the variables studied were closely related to the objectives. The following issues were addressed in depth-interviews.

- I. Policy and Legal Aspects
- II. Resources
- III. Infrastructural Facilities
- IV. Members Awareness
- V. Vested Interest
- VI. Capacity Building
- VII. Conflict and Settlement of Disputes
- VIII. Monitoring and Evaluation
- IX. Catchment Treatment
- X. Farmers' Involvement in the Construction of irrigation structures

Result and Discussion

I. Policy and Legal Aspects

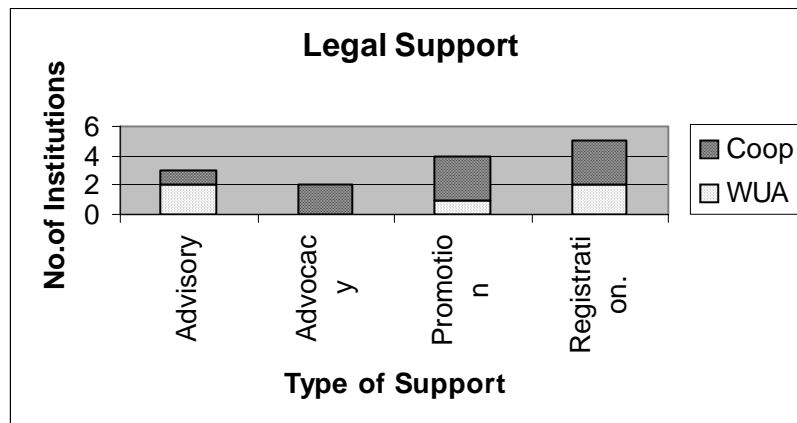
Legal Recognition:

Members and management committees in all the interviewed WUAs mentioned that their associations don't have any legal recognition. They were all organized following the construction of the irrigation structures (diversion or earth dams) in the areas by the organizations that construct them. Only a few of the interviewed have reported that they have applied to social courts in the Tabia. But all the interviewed respondents have reported that they have legal personality issued by Tigray Cooperative Promotion Office.

The issue of 'no legal recognition constraints' the WUAs from taking credit and other benefits they could reap out of their legal personality. The fact that they are not legally recognized seems to be a bottleneck for them to get professional and technical assistance from many organizations at institution level. For instance, they don't get extension and credit services in an organized manner. In one of the WUAs there is a serious problem in this regard. The municipality denied the WUA members to have a market place where they can sell their products thereby exposing them to delivering their products to merciless private retailers. The members of this WUA, believe that this is a result of the lack of legal recognition by the government. Shelanat WUA collects penalty from the erring members and the same is paid to the local administration as they have no legal status.

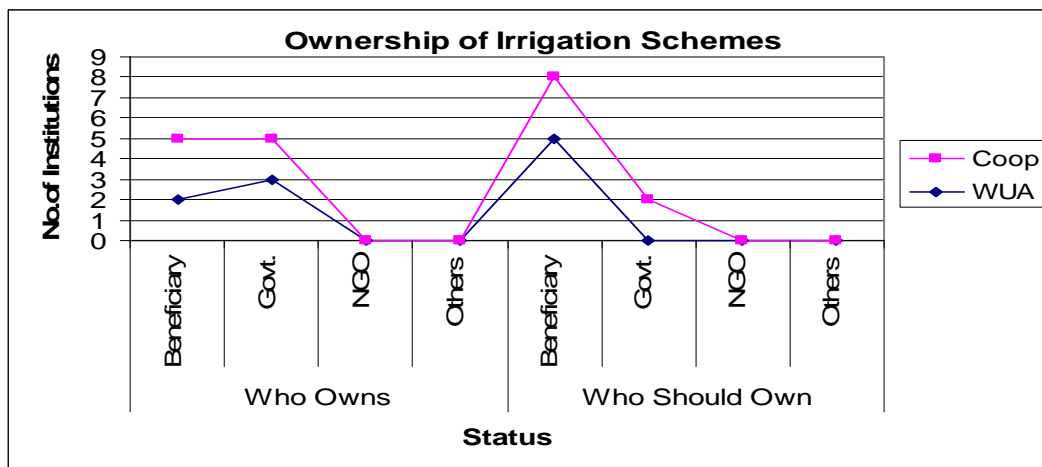
The consultant group found all of the WUAs less organized in many ways when compared with the coops. This includes the fact that most WUAs consider their association related to the utility of water only. There is less sense of organizational feeling that goes beyond using water. But this has not been the case in the cooperatives. The cooperatives have a better sense of belonging and organization. They have issues like marketing, input distribution and credit that they discuss beyond water use.

Figure 1: Legal Support Received from Government/ NGOs:



Out of the WUAs only 40% mentioned that they received advisory support from the government, and only 20% mentioned that they got service in promotion, and 40% received registration services. These WUAs consider their application to the social courts as registration, because they don't receive any legal registration from any other organization. This registration service is related to the above-discussed legal recognition and associated benefits. On the other hand only 20% of the coops received advisory support, 40% advocacy service, 60% promotion and 60% registration services.

Figure 2: Opinion on Ownership of Irrigation Schemes



Half of the interviewed WUAs believe that the government owns the schemes, while half of them believe that they own the schemes themselves. There is an interesting parallelism of thought on the coops as well; half believe that the government owns the schemes and half believe that they own them. Ferehagoda and shewit lemlem mentioned that the irrigation structure is owned by the local administration.

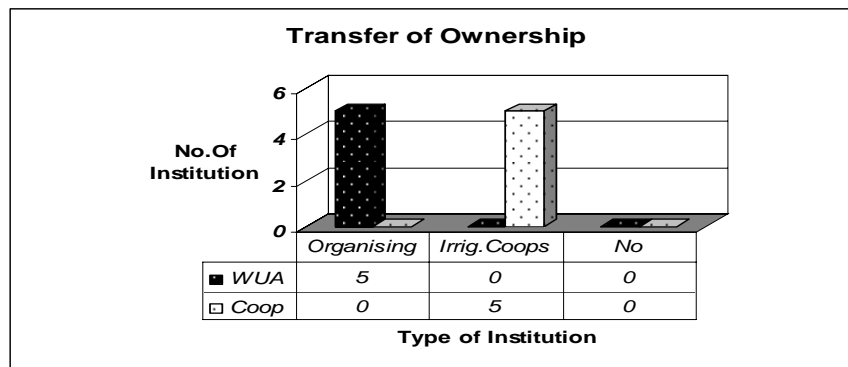
This indicates that there is less work done on the awareness creation on the ownership aspect. The members of the WUAs and coops need to be educated and trained to the level that they think and practice as owners.

The other side of this opinion is that there is interference from the wereda and Tabia administrations on the management of the water. A case in point is the scheme at Laelay maichew woreda, Mai Nigus. The interviewees mentioned unanimously that they don't own the water because the woreda administration orders them when to water and what for to water. In the case of Ayne bizu, the development agents impose the farmers to raise the crop suggested by them, otherwise they can't use the water. Laelay maichew woreda farmers complained that they were not allowed by the woreda administration to water for tillage. The reason given by the officials is that of economics the water use.

Asked who should own the schemes, all the WUAs responded that the beneficiaries should own them. On the cooperative side 60 % believe that the beneficiaries should own the scheme, while 40 % of prefer that the government should own it.

In some of the WUAs, it was found that the ownership issue is one of the factors for conflict and having a very weak organizational strength.

Figure 3: Transfer of Ownership



Most of the schemes the consultants visited, except Falla, have not been transferred officially to the WUAs and/or irrigation cooperatives; instead it was transferred to the local administration. In the case of Ferehengoda and Shewit lelem the irrigation cooperatives own not only the water pumps but also exclusive right has been given to use the water. The agreements between the local administration and the water resource development bureau declare that the responsibility of the beneficiaries is to maintain the canals and other small-scale damages of the irrigation structure, while big maintenance works that require big sum of money and complicated technical matters will be maintained by the organization that made the structures.

This agreement has not been observed on the part of the signatory organizations like REST & WRDB, that made the structures. In almost all of the schemes, there is complaint by beneficiaries that these schemes were not maintained since they have been constructed. The

beneficiaries applied repeatedly to these organizations but there was no response so far, mentioning that the organizations don't have budget to maintain these structures.

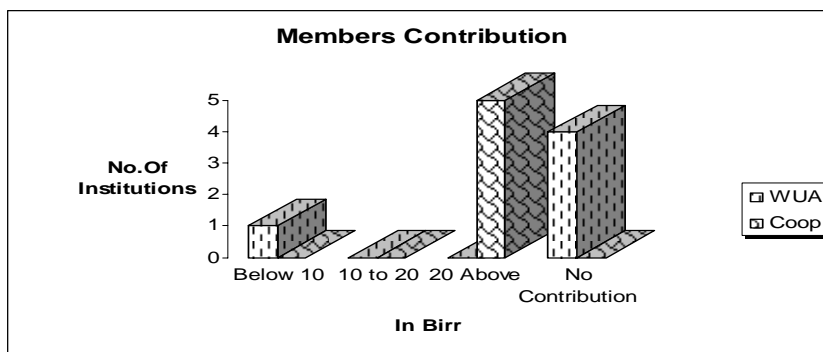
As a result, most schemes suffer from water loss and water logging in the canals causing a minor conflict on the members because of competition for water.

Interviewees were asked of the fact that they are organized has effect on the functioning of the un-organized farmers. Eighty percent opined that there wouldn't be any implications, unless these non-members are abided by the rules and regulations of the water users. But 20% have mentioned that there will be implications. These respondents mentioned that there is denial of water use for non-members.

Respondents were asked if there are policy (like water policy) or procedural bottlenecks that deter their agricultural and/or marketing practices as an institution. Almost all the respondents mentioned that they are not aware and unheard of the water policy as such by the government. But some implicated that the lack of market strategy to sell their products in a sustainable way is a stumbling block in advancing their market oriented irrigation practices.

II. Resource Related Problems

Figure 4: Members' Contribution



Most of the WUAs don't have any contribution scheme that can be used to maintain the irrigation structures or to advance any other business. Only one of the WUAs has established this scheme, but the contribution is insignificant, which is below 10 birr per annum. In the others there were irregular contributions for repair and at times of need. On the other hand all the cooperatives have money contribution schemes for various purposes. But most of the contributions in the coops are insignificant that it is barely used for any thing.

Most of the money, which is less than 20 birr per annum, is deposited in the banks so that they collect enough to make use of it. The coops feel that they will use this money later to rent vehicles to transport their products to market, and buy agricultural inputs. But they don't know when they will be able to do that, since it will take a long time to collect enough money to do these activities .If they continue to deposit such a small amount of money, they will not be using this money for long time.

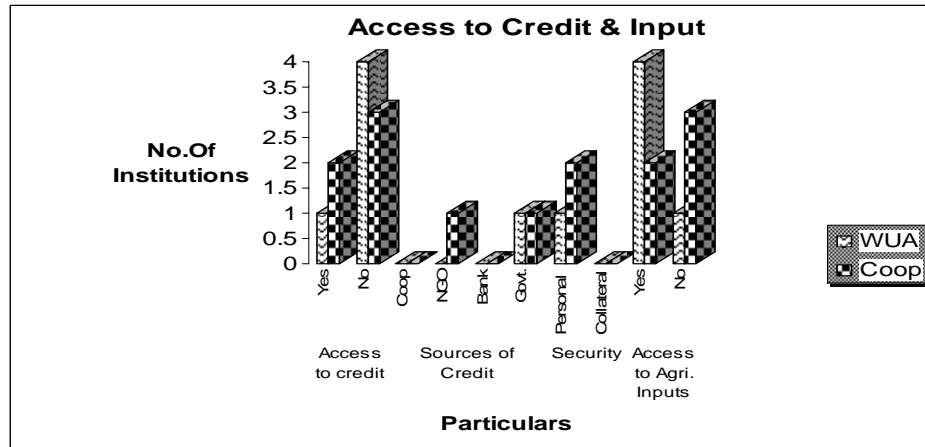
The WUA that contributes money regularly uses it for maintaining the structures of small-scale damage. In addition to that in the Shewit lelem, money has been lent to the needy members at nominal rate of interest.

Asked if they would consider it important to have a separate saving for the maintenance of the structures, 70% of the respondents (30% WUAs and 40% from Irrigation coops) were of the opinion that they have to have a separate payment for the maintenance of the structures. 20% WUAs and 10% Irrigation cooperatives expected support from the government / donor agencies for the cause. 50% of the respondents mentioned that they were raising funds for new projects, maintenance, rent a car, salary for guards etc, while the remaining are not collecting funds for the above purposes.

Hence there is a need to raise awareness on this respect so that the members raise some more money either in the form of saving and credit coops or in a direct contribution to their shares so that they have the amount of money they aspire to have and/or there should be a financial intervention on the part of the government and/or NGOs to raise their financial capacity so that they begin doing what they plan to do.

All respondents in the schemes mentioned that they were not paying for the water they used for the irrigation purpose. When the question was put before them about the introduction of payment for the water they use, 70% of the respondents mentioned that it was not important to pay for the water they used for the irrigation purpose. Remaining 30% were interested to pay if it was introduced. It was found that the promoter has not given much emphasis while providing the training and articulating the bylaw.

Figure 5. Organisation Access to Credit & Input



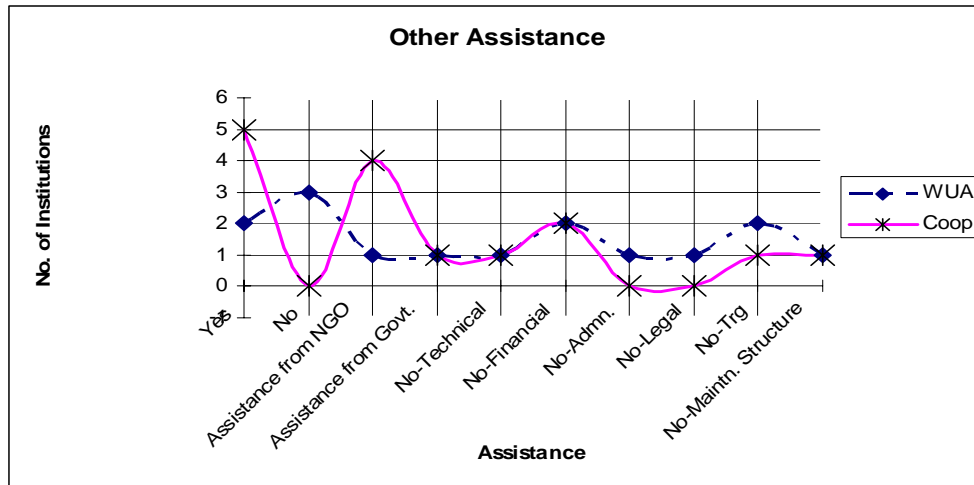
Most WUAs and coops i.e., 80 % and 60 % respectively reacted that they didn't have access to credit in an organized manner. All schemes had not taken any credit so far in the name of their organizations. All they had taken is on individual bases like the other un-organized farmers, i.e. through the existing credit schemes of the bank (Dedabit Micro-finance Saving and Credit Institution). Most members opined that they needed credit using their organization as a collateral.

The type of credit they received was both in kind and cash. Some of the institutions that responded the credit they received from the NGOs were a type of credit that was given in kind like seeds and seedlings. This credit is given in a form of a revolving fund for the institutions but it will be a credit for the individual members. For instance, the Action Aid, an NGO, gave potato seeds to the Falla and zata irrigation coops. These seeds had been given to the members on credit basis. But the money would be for the coop society itself. The coops considered this as a credit. One cooperative had received money for warehouse construction as aid.

Receiving establishments Fund

No group respondents under study have received any establishment fund. This has reduced their ability to exercise transactions. But, 70% of the interviewed institutions reported that they had received assistance in one or other form. This assistance includes technical, financial, legal, administrative, training and maintenance works. But this doesn't mean that all of the organizations received all the above-mentioned assistances. The following table summarises the type of assistance these organizations received.

Figure 6. Other Assistance



III. Infrastructure Problem

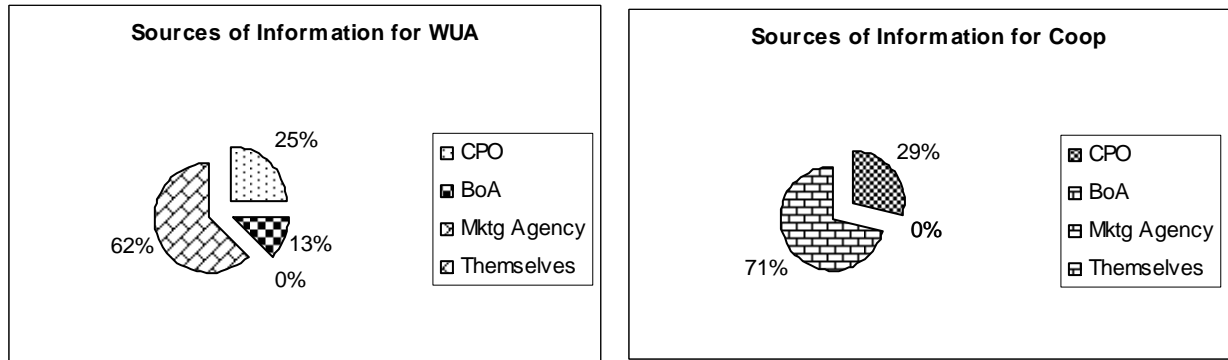
Communication

Three WUAs and two irrigation cooperatives are having access to communication facilities particularly telephone. Other five schemes are not having the access to this facility. There is a government scheme to connect all Tabias of the region through telephone network. Some of the institutions are already beneficiaries of this network, while the remaining ones will benefit in the near future. The members mentioned that the presence of this telephone service would enhance their market information and boost their income.

Road Access and Availability of Commercial Vehicles

All the ten schemes have road access. In seven out of the ten institutions, there are commercial vehicles that go to the areas on a daily basis. These commercial vehicles are important to transport the products to the market and to access market information. Most of the members in these institutions get market information by themselves, asking passengers and drivers who come to the area. But they also mentioned that they get information from the CPO experts. One institution mentioned that they get this information from the development agents. The following table summarises the sources of market information in these institutions.

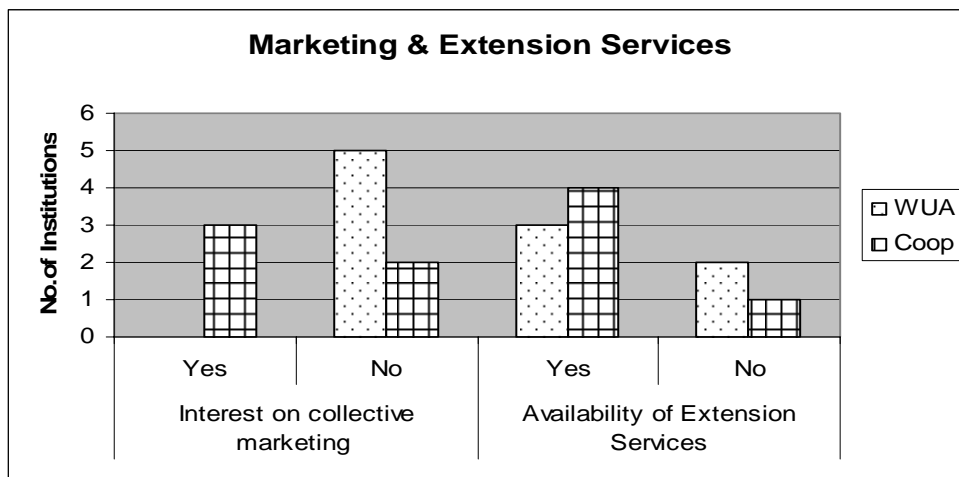
Figure 7: Opinion on Source of Marketing Information



Existing Infrastructures and Extension Problems

All the WUAs and irrigation cooperatives are not satisfied with the existing infrastructure facilities like road, storage, processing unit, communication facilities etc. For example even though Ferehangoda and shewit lelem have the road access, it is not up to the market and due to that they are paying triple the cost for transportation.

Figure 8: Collective Marketing and Extension Services



Asked if the members want to market their products collectively, all the members in the WUAs responded no, while 60 percent of the coops replied yes to the question. They also mentioned that collective marketing is risky in many ways and that some members bring less quality products, and that there are some management problems in collective decision, which can spoil the product itself. This implies that the members have not enjoyed the fruits of collective marketing and economics of scale. There is a need to train members and leaders alike to have a clear understanding of the benefits of collective marketing, and the management of collective marketing in order to increase their bargaining power and get rid of the exploitation from the middlemen. There is a grain of truth in the concerns of the members that collective marketing is a challenge. They have some failure experiences. For instance, the members of the Falla irrigation cooperative tried to market their products to Mekelle, in a collective manner. But this had been aborted by the aggressive move of the private sector that raised the market price of the products artificially.

There is extension service in all the Tabias where these institutions are located. But the degree of service they receive varied significantly. Seventy percent of the schemes have extension service, while the remaining do not have. There are “best” services and “worst” services as explained by the farmers. For instance in Falla the farmers complain that they almost don’t receive any significant extension support in the recent past. The CPO wereda experts also share these complaints that they have discussed the issue at wereda level. The consultant group have personally observed that there is less agricultural development intervention in the areas: there are no fodder trees, no perennial fruits and less conservation works made despite the availability of ample water. The farmers mentioned that they were made to plant an unsuitable variety of tomato that easily perishes and exposed to loss. They also needed technical support from the BoA to get seeds that are appropriate to the micro climate of their area so that they can go for two to three crops in a year. But they described that the service was very poor that did not even support on how to sow, what and when. They mentioned that the services were being given by the CPO experts of the wereda, despite the fact that they were not the experts in the area, but they want the right service from the proper experts. They also complained that there was no nursery that would provide them with seedlings. To curb this, members have established their own nursery in collaboration with the Wereda CPO. They mentioned that they would appreciate if they received proper advice on how to run this nursery from BoA.

Table: Product Market

Sl. No	Name	Mode of Product Market				Mode of Transport			Storage		
		Coop.	Individual	Collectively	Pvt.	Transport-Donkey	Transport-Car	Transport-personal	House	Coop	Field
1	WUA	0	4	0	3	5	3	5	2	0	3
2	Coop	1	3	0	1	5	3	2	1	0	4
Total		1	7	0	4	10	6	7	3	0	7

Most members of both WUAs and Coops (about 70%) market their products individually. Very insignificant percent of them market through cooperatives and some sell it directly to private retailers. Hundred percent of the respondents mentioned that they used donkeys to transport their products from the field to the transport center or nearby markets, while some of them also take their products using human labour and vehicles.

Thirty percent of the interviewees stored their products at home and about 70% in the fields. There is no storage facility in all the interviewed institutions. Two under the assistance of the 'Action Aid' are under construction. This absence of storage facilities has caused product loss. Most farmers complained that the post harvest loss, due to lack of market was significant, and un-bearable. For instance the farmers mentioned that they could have dried and stored tomatoes when the market price of tomatoes is very low. But what usually happens is that they dump the tomatoes in the field when they can't sell them in the market, or when they feel that there is no market for the tomatoes. Particularly the farmers of Falla experienced it last year.

Processing Units

In the selected sample area, no processing unit exists, not even owned by government and/or NGOs.

IV. Members' Awareness

Memberships, Observance of Duties and Rights

Out of the ten schemes, interviewees in nine schemes reported that they joined the institutions voluntarily, while members in one WUA scheme mentioned that they don't want to comment. Members in this WUA mentioned that there was no much benefit they could articulate by joining the WUA. They seemed to be nostalgic of their previous traditional irrigation. But most of the members in the nine remaining institutions mentioned that they had faith in the current arrangement of the WUAs and irrigation coops and were more appealing to them.

They mentioned that in the current arrangement there is a relative peace, since the water has been managed based on agreed conditions of the association or cooperative. In the traditional irrigation, they had problems, because powerful families used most water. Secondly these members stated that the current arrangement reduced labor loss. In most of the schemes interviewees mentioned that they used to spend earlier not less than 20 days to prepare the scheme for irrigation, and since the labor was not organized as it is now, they used to spend much time. But currently they use their labor for irrigating their own lands.

Hence they appreciated their membership of these institutions. This spirit is more visible in the irrigation cooperatives than the WUAs. In the WUAs members articulate the fact that water management has improved from the earlier practice, but there is less articulation in terms of the benefit of the water, when compared to the cooperatives.

Member Participation and Membership Abuse

Respondents were asked to describe the participation of members in the overall activities of the organizations, 50% of them responded that the participation of members was good, and 20% WUAs mentioned that they were satisfied with the participation, while 10% of them were not satisfied with the members' participation. Members' of these schemes expressed this participation of members in terms of members participation during clearing and maintenance of irrigation structures, attendance of regular meetings, accuracy of payments and contribution and adhering to the schedules of watering, and oral participation of members in generating ideas during discussions. Most of the interviewees in the schemes (90%), opined that members and leaders did not abuse their membership and leadership. In one scheme i.e., Ferehangoda, however, members complained that the leaders had abused the money of the cooperative and used it for personal gains. They also complained that water was distributed based on subjective judgments of the committee members. They accused the leaders for favoritism.

All the five irrigation cooperatives and one WUA have the record of the number of members participated in the last election of the management committee. Four WUAs do not have any record of member's participation. In general, however, all respondents agree that there were significant numbers in all the elections, and all members of all schemes ascertain that the elections were free, fair and done in a democratic manner. Leaders were elected taking their management skills, education, patience, and influence on the society into consideration.

Members underlined that they can recall members of the management committee at any time; when ever they think that they are weak or abusing their rights. This is interesting because it shows a strong empowerment on the part of the members. But contrary to this, the consultant group has come across only two schemes that changed their leadership since its establishment. They are Tsalet and Shewit lelem due to the expiry of the period and mismanagement & illness respectively. Most leaders are the ones who were elected during the establishment of the schemes. This poses a question if the opinion about the right of the farmers to recall their leaders are exercised properly. The consultant group's opinion is that most farmers are a bit negligent on the leadership as long as they don't come across a serious right violation.

All organizations have women members, except in Ayne Bizu and Mainiguse WUAs. And in each of the eight organizations, they have one woman member in the management

committee. There is a sound awareness on the part of the institutions that they need to encourage women both as members and leaders. But in practice, there is a limitation. The most dominant reason they provide is that they are fully occupied at home, and don't have time and the energy to spend in the leadership. In Mereduba and Tselat, though the land is owned by the women members, it has been given for share cropping, since they could not manage themselves. This happens when they don't have male member in their family.

But the consultant group's opinion goes that cultural impositions have also contributed for the limited participation of women in such schemes. For instance there are women led households, which desperately need to participate in the irrigation schemes. Though these women are allowed to participate in principle, the group observed a limited participation.

Hence it is recommended that there is a need for external intervention both in the cooperatives and WUAs that aim to empower women, both psychologically and financially. Like wise, there is a need to redress the awareness of members and leaders of these institutions to support women so that they participate at a full scale.

Participation in Drafting and Endorsing the Byelaw

Members in all the interviewed WUAs and irrigation cooperatives reported that they have participated in the endorsing process of the byelaw except at Mereduba and shelanat which don't have written byelaw of their own. They are managed by an oral agreement. The bylaws were all initiated /drafted by other organizations like CPO, NGOs and/or government. Most schemes mentioned that they endorsed the bylaws voluntarily. Members in all the coops reported that the CPO has prepared the draft and they were asked to endorse it after discussion. Sixty percent of the respondents feel that they own the bylaws, while the remaining two reported poor sense of ownership. Sixty percent of the respondents mentioned that they amended the bylaws in one or another form to suit their circumstances, while the remaining reported that they endorsed the bylaws as they were.

This shows that the people did not initiate most of the schemes, and this must have influenced the sense of ownership of the members, since about 40% of the respondents in the schemes don't think they own the schemes.

Table: Managing Water, Enough Water

Sl. No	Name	Manage Water		Watering Day & Time			Water Controller				Problem	
		Schedule	others	Water-Night	Water-Day	Water - anytime	Time Control -Water master	Time Control- Committee	Time control- Woreda Admn.	Time Control- Individuals.	Problems- Yes	Problems- No
1	WUA	5	0	1	1	3	5	0		0	2	3
2	Coop	5	0	1	0	4	3	2	0	0	1	4
4	Total	10	0	2	1	7	8	2	0	0	3	7

Hundred percent of the schemes confirmed that they managed water as per the schedule. The water masters mainly regulated watering time, while there were some instances where a water committee controlled it. About 70% of the schemes reported that they watered at any time of the day, while 20% reported that they watered during the night while 10% watered during the day.

Seventy percent of the schemes reported that they did not have problems associated with water distribution and management, while 30% reported that they had some problems. These problems included favoritism in water distribution, and problems related to poor construction of canals. Members repeatedly informed that since their canals were not cemented, water percolated and this exposed them to water logging that was spoiling their plots. This canal problem also caused shortage of water for farmers who were in the lower command areas, i.e. in the far end.

There seems a good understanding and practice of water management in most of the schemes. Members have a sound understanding of sharing and utilizing the water. In fact in some of the schemes the farmers don't complain about the non-availability of water. This is because they are not making the maximum use of the water. So far most of them use the irrigation for one crop in a year, despite their aspiration of producing crop twice a year through irrigation.

But in the earth dams, members have mentioned that the water in the reservoir is not sufficient for all members. The reasons provided were: reduction of water content in the reservoir due to evaporation, less rain water, water seepage in the reservoir and all across the canals, and wrong water content estimation, delay in measurement of water and failure during the design of the scheme. Example sites are Zata, Ayene-bizu, mainiguse and shenalat.

But it is unpleasant to learn that there is an apprehension on the members of some schemes such as Mainiguse, and Ayene-bizu, which need some kind of intervention. The problem in these institutions can degenerate into a serious conflict if it is not addressed pro-actively in time.

Scheme maintenance:

In all the schemes, that the members maintain their irrigation structures, wherever needed. Most of them reported that they maintain through campaigns, though some mentioned that they make money contribution for the maintenance of the structures. In most cases they use member's labour to maintain the structures, but when there is a damage, it incurs more money and they expect an external help. Maintenance work is organized and coordinated by committee members, and at times by water masters.

Crop Rotation:

Seventy percent of the total schemes revealed that they practiced crop rotation. Seventy two percent of, those who practiced crop rotation, respondents received advise regarding crop rotation from the BoA, while 14% received from NGOs. In the remaining 14 %, they practiced crop rotation just using their own wisdom.

V. Vested Interest

Leaders Link with Government

All members of the interviewed schemes responded that their leaders (management committee members) did not have any special link with the government. But, shelanat was not having a elected leader. And all schemes unanimously expressed that the Woreda administrators never involved in the process of election of the leaders of WUAs and Coops. The members considered this detachment of their leaders from the political leadership as a positive development, since the leaders would have time to run the institutions properly. Some interviewees mentioned that the government itself favored this kind of detachment. This, they say, reduced interference from the government on minor issues allowed these institutions to make decisions. A few interviewees, however, mentioned that the fact that the leaders are detached reduces the execution capacity of the leaders since they don't have a political power. These interviewees stated that, if the leaders had a political power, they could have synchronized those activities of the institutions well using their power and they would also solicit enough support from the government.

Asked if the leaders take serious decisions without the consultation and consent of the members, all except Ferehangoda coop, responded that the leaders don't take decisions without consulting the members.

The consultant group learned that the government and /or other NGOs did not have any negative interference on the operation of the WUAs and Irrigation cooperatives. This is good enough by itself letting these institutions to make independent decisions and makes them feel these institutions are their own. But since these institutions are at their infant stage, there is a lot that they can be supported through positive interference: a reference can be made to the Indian experience of funding the WUAs at the establishment phase. If left alone, however, there is a capacity gap that they can not fillout just by themselves. Hence there is a dire need for a positive intervention from the government and NGOs. The consultants learned that there is an encouraging policy environment from the government side that promotes cooperatives, it is important to implement these policies to the WUAs as well. At technical and financial support level, both the WUAs and Coops deserve more attention so that they stand on their own feet.

VI. Capacity Problems

All schemes except two WUAs (Shelanat and Mereduba) have received some kind of training from other organizations. These trainings have been of various nature: record keeping, vegetable production and marketing under irrigation farming, organization of coops and WUAs, and even orientations and briefings. These "trainings" have been imparted at various capacities that range from the Wereda to regional level. They ranged from one –day to five days. Most members appreciated the impact of these trainings but also underlined that they were far from enough to make them effective leaders. All except two coops expressed that their leaders did not have adequate skills to manage the organizations. Members of the management committee described their capacity as deficient, to the extent that it affected the running of the institutions. They were very open in making these comments, especially their ability related to conflict resolution and seeking market for their members' produce. Moreover, 90 percent of the interviewees mentioned that all of their water masters and members did not have adequate knowledge on the crop-water requirements. Hence they expressed their aspiration for a consolidated and well-organized training in all aspects of running these institutions. Asked what their priority would be, they mentioned training in management and marketing strategies of their products were their top priorities.

Management Committee and Promoter's Skill and Support:

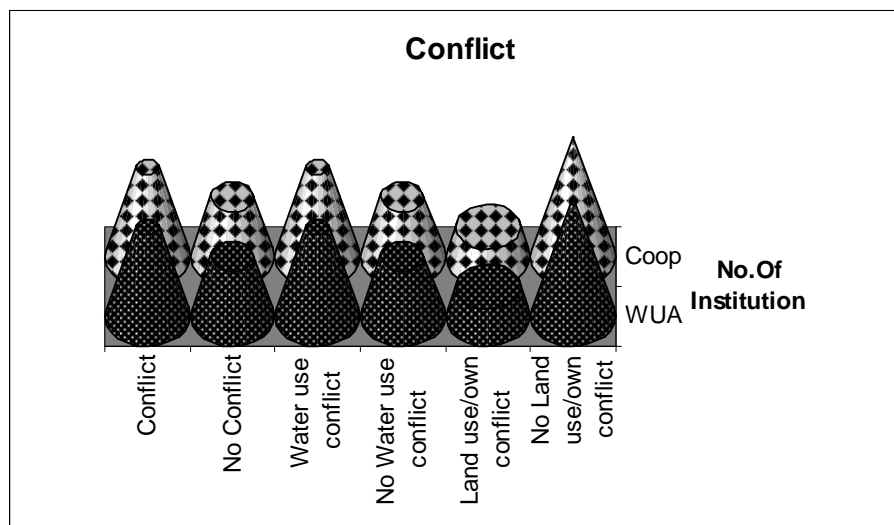
Asked if the CPO promoters have adequate knowledge to organize and consult them in running the institutions, all except three viz., Ayene bizu, Shelanat and Mereduba, expressed that the promoters had skill to organise, and to make follow up. Members of these interviewed institutions made a varied opinion about the support they got from the CPO experts. In some they appreciated their contribution very much and hailed their

dedication. They attributed the success of the institutions to the support of these experts. A case in point is the Wereda Ofla experts. In others, however, the reaction of the beneficiaries was to the contrary. Some mentioned that the experts visited them only twice since their establishment.

Asked if the management committee members had full understanding of the bylaws and act accordingly, all except in two WUAs (Shelanat and Mereduba), mentioned that they believed that their leaders have full understanding of the bylaws and acted according to the bylaws. Interviewees of all schemes, except Ferehangoda cooperative and Shelanat WUAs, expressed that they maintained confidence between the committee members and the members. The reason for this confidence is that there is a regular meeting between management committee and members on monthly bases where they discuss problems and developments. Sixty percent of the respondents reported that they had regular meetings, but 40% of respondents, of which 30% were from WUAs, reported that they did not have regular meetings. Interestingly these WUAs where the 30% respondents came reported less frequency of expert visit. It is in these institutions that the consultant group observed less organization and less sense of ownership.

Table : VII Conflict and Settlement of Dispute

Sl. No	Name	Conflict	No Conflict	Water use conflict	No Water use conflict	Land use/own conflict	No Land use/own conflict
1	WUA	3	2	3	2	1	4
2	Coop	3	2	3	2	1	4
	Total	6	4	6	4	2	8



Sixty percent of the respondents reported that they had conflict in the institutions related to water use. This conflict had been more pronounced at the two WUAs namely, Ayne-bizu

and Mai-Nigus. At Aine-bizu the up stream and down stream farmers had such water use conflict due to shortage of water, basically during the dry season, and the problem was acute during the late months of February to May. The farmers had of the opinion that the water was available in plenty before the construction of the diversion and all these problems emerged after that only.

Settlement of Disputes

Fifty percent of the respondents replied that they settle their disputes locally. Local dispute resolution includes the self management of conflict with in the institutions and an arbitration process that involves a third party but with in the locality. These respondents mentioned that they never had been to courts for dispute resolution. On the other hand 50% of the respondents mentioned that they have cases that are not yet resolved. These institutions that have unsettled conflict include: Shelanat, Ayena bizu, & Mainiguse and Zeta & Ferehangoda.

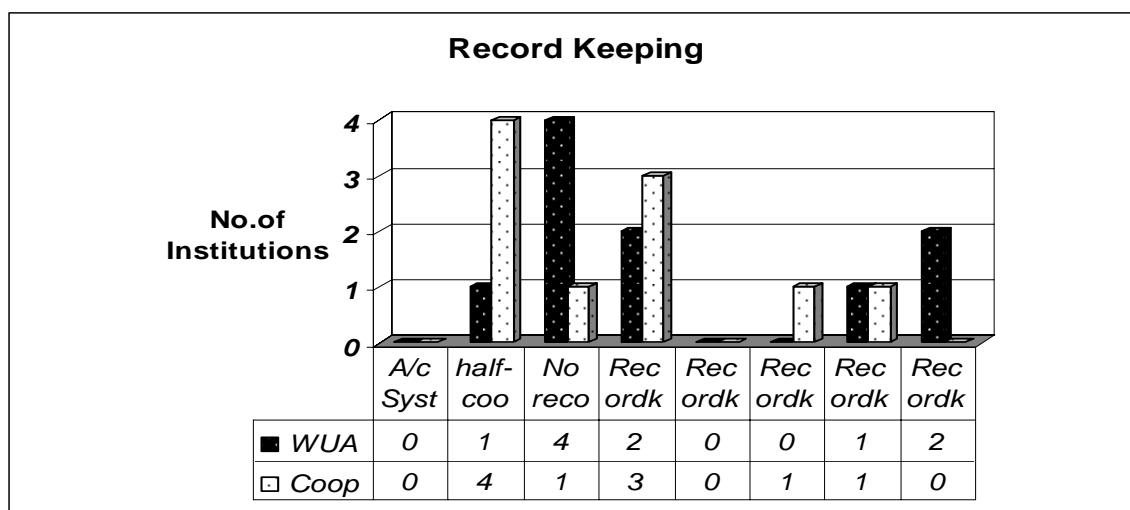
Thirty percent of the respondents mentioned that local experts (like DAs and CPO experts) participated in dispute resolution. On the other hand, 40% of the respondents mentioned that there was no expert involvement in their attempt to solve the disputes.

VIII Monitoring and Evaluation

Institutional Support

The respondents were asked if they were aware of the agencies that provide them technical and/or financial, or legal support. Seventy percent of the respondents responded that they knew the agencies and mentioned the following: CPO, IFAD, REST, Action Aid, WRB and BoA. These respondents mentioned that they were getting support from the listed institutions. The remaining respondents mentioned that they were not aware of the supporting agencies, and declined the confirmation of receipt of support.

Figure : Record Keeping



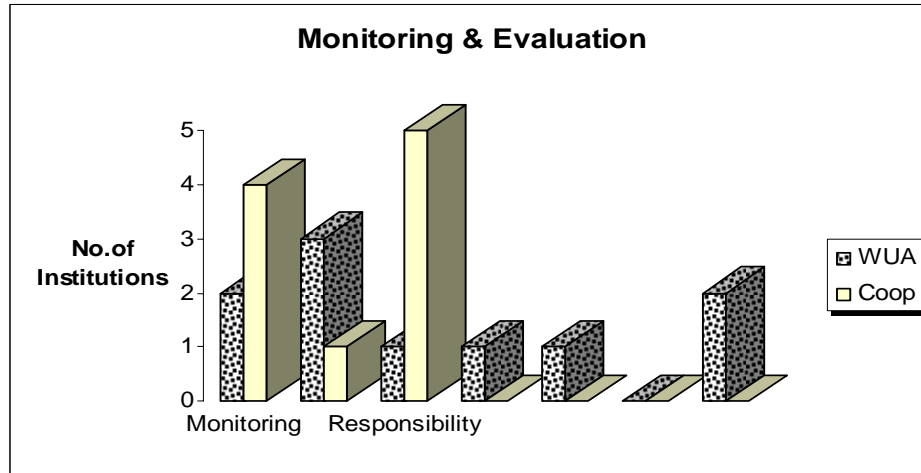
Among the respondents, no institution was keeping a proper record. In the case of irrigation cooperatives, 80 percent of them were having the vouchers, receipts etc. All these four irrigation cooperatives were trained by the officials of the CPO. But only one WUA was having at least some accounts. There was no proper record of the accounts by four WUAs. Ten percent of the respondents mentioned they got training from NGO on record keeping, and another 10% mentioned that they were given training by the Water Resource Development Bureau apart from CPO on record keeping. Twenty percent mentioned that they learned themselves, while the remaining reported that they were trained by different organizations.

Planning

Sixty percent of irrigation cooperatives and 40 percent of the respondents were of the opinion that they had a plan of action. In the case of irrigation cooperatives only 40 percent opined that the planning was done by the CPO, ten percent mentioned that it was done by themselves and the remaining opted not to respond to this planning question.

Table 13:Regular Monitoring/ Evaluation

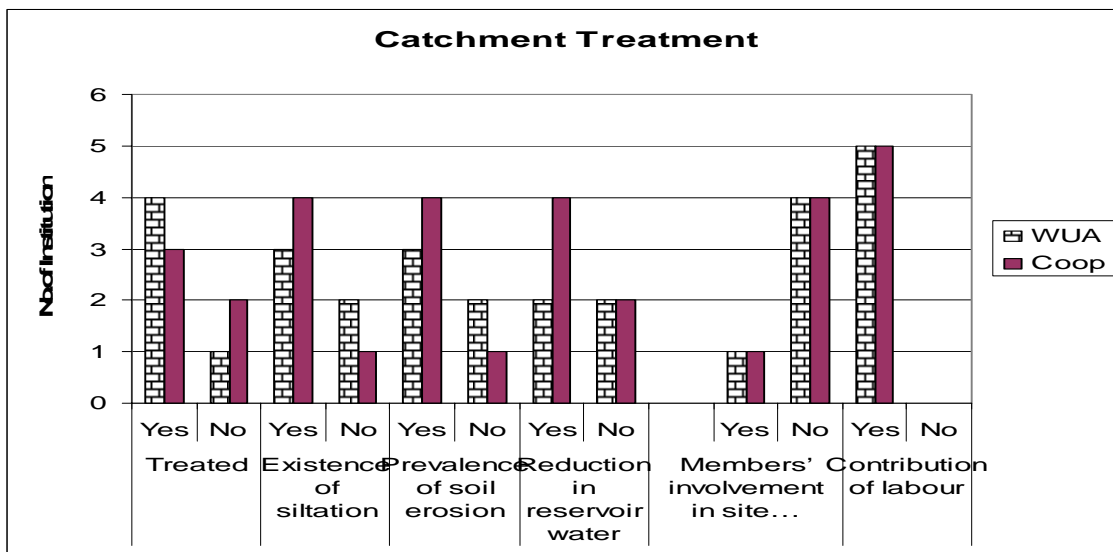
Sl. No	Name	Monitoring		Responsibility				
		Yes	No	CPO	BoA	NGO	WRB	Themselves
1	WUA	2	3	1	1	1	0	2
2	Coop	4	1	5	0	0	0	0
Total		6	4	6	1	1	0	2



All the irrigation cooperatives had been monitored by the Cooperative Promotion Office except the Laelay Wukro that opted not to respond for the question. Likewise only two WUAs were monitored by CPO and the remaining three were not monitored due to the same reason. Asked whose responsibility was to monitor the schemes, 80% mentioned the following: the CPO, BoA., WRB and NGOs. While 20% mentioned that they themselves were responsible to monitor their scheme.

IX. Catchment Treatment

Figure : Catchment treatment



Out of the ten schemes four WUAs and three irrigation cooperatives stated that the catchment area was treated. The community as a whole had done the treatment as they had the food for work programme from the government. Remaining schemes mentioned that it

had not been treated. The type of treatments include: check dams, stone and soil bunds, and reforestation. Both in Ayene bizu and Tsalet it was mentioned that the catchment area was treated at the time of construction or river diversion, but the same was washed away by the flood later. The respondents could not re-treat the same due to paucity of funds, low technical skill and coordination since it covered two three kebeles particularly in Ayene bizu.

Three WUAs and four irrigation cooperatives reported that there was siltation in the reservoir. The cause of the siltation is due to the heavy flooding from the upper catchment of the river diversion and poor catchment treatment done earlier. This resulted in damage of weir, and ultimately affected the water flow and seepage. This also affected the riverbank through the land sliding.

Sixty percent of the WUAs and 80 percent of the irrigation cooperatives expressed that soil erosion was prevalent in their area. The cause of the soil erosion is inadequate catchment treatment and flood due to torrential rain. This resulted in deterioration of arable land, widening of the gullies and siltation of irrigation structures . Remaining two WUAs and one-irrigation cooperatives do not face this problem.

Two WUAs and four irrigation cooperatives were of the opinion that there was a reduction of water in the reservoir due to shortage of rainfall, seepage, improper location of weirs, reservoir etc. Remaining respondents did not complaint such problem.

X Farmers' Involvement in the Construction of Irrigation Structures

Almost 80 percent of the respondents mentioned that they were not involved in the selection of site for reservoir, designing of the dams and diversion and planning of the same. The respondents were disappointed that they were not consulted and when they offered their help voluntarily it was not heard by the experts in carrying out the above process. This was strongly mentioned by the respondents of the Zata, Ayene bizu and Shelanat.

All the respondents had contributed their labour in the construction of the irrigation structures.

Conclusion and Recommendation

Conclusion:

An attempt made to study the problems and prospects of WUAs leads to conclude as follows: All the selected Water Users Associations are financially and organizationally in a weak position. All the WUAs don't have legal recognition. They are not registered by any organization like the irrigation cooperatives are. This lack of legal recognition is prohibiting them from getting technical and financial support from different organizations. This lack of technical support has made the WUAs less organized when compared to the irrigation cooperatives. They have also manifested less sense of ownership to the institution. The WUAs and their members have felt this issue and have manifested their worries about it.

Significant percentage of both WUAs (60%) and irrigation cooperatives (40%), believed that the government owned the schemes. This is a matter of serious concern; since the view of the government is that the schemes are owned and run by the beneficiaries. Lack of proper extension work; coupled with some unwarranted interventions from wereda experts in some schemes might have contributed to this feeling.

There is an encouraging level of assertiveness of members in electing and re-calling their management committee members. The confidence and awareness of members that they have right to choose and step down their leaders is phenomenal. But there has been very little change of leadership in most of the schemes. It seems that members are less interested in changing the leaders as long as they don't make serious violations. Most of the management committee members were in the same position since the establishment of the schemes. Change in leadership would enhance the dynamism of the schemes.

All schemes revealed that they got some kind of training and/or orientation from the government or NGOs. The schemes appreciated the impact of these trainings, but they underlined that the trainings were far from enough to make them efficient leaders, expressing the need for a well-structured training.

There is an encouraging understanding of water management among members in all schemes. Except in some, there is little conflict of serious nature due to water use. This is a positive development. But this can also be seen from a different angle: since the schemes are producing a single crop using irrigation, there is no serious water shortage encountered. But if they start to irrigate during the dry months (like February – May) water shortage will be eminent. This water shortage can be accompanied by serious conflict.

On the other hand there do already exist conflicts in some of the schemes that deserve due attention by all concerned bodies.

Most of the reasons for potential water shortages opened by the members of these schemes were: lack of maintenance of the structures, water seepage in the canals, less rain, and at times design failures, that stifled the water sources.

Members and leaders alike, had good awareness about the participation of women in the schemes. In practice, however, the participation of women both in the schemes and at leadership level was limited.

All schemes reveal that they have a serious concern about marketing their products. In some instances, lack of market access is a cause for a conflict between the management committee and the members. This lack of market is also a major disincentive for the farmers for producing vegetables. They complained that the income from the sale of these products was not even equivalent with the production cost. These schemes have also revealed a serious concern about the aggressive behaviour of the private sector, and asked for some kind of market protection from the government.

All, except few, mentioned that there was no serious interference from external agencies like NGOs and local administration, in their internal affairs. This is a very positive achievement by itself. On the other hand, there is a need for positive intervention in many aspects like training, and marketing, from the government side, that should facilitate the process of self-reliance of these infant institutions. Left alone, these institutions may not stand by themselves in the near future.

Ignoring the debate on demarcating the boundary between WUAs and irrigation cooperatives, the consultant group investigated the difference between WUAs and irrigation cooperatives in operation. There are some points that are worth high lighting: first, the WUAs don't have legal recognition since they are not registered by any formal organization. The only legality they claim is their application and registration by the social courts of their Tabiyas. The second difference is the lack of technical and financial support from organizations. Since they are not legally recognized, they receive less technical, financial and legal support. Thirdly, WUAs don't have share contribution, and even maintenance money, except in some. But this is a common practice in the irrigation cooperatives. Fourthly, there is less organization on the part of the WUAs as compared to the irrigation cooperatives. The cooperatives have a lot of issues to discuss and practice like, collective marketing, input distribution, dividend distribution and others beyond water management and distribution. But we found that the WUAs are united by a single factor; i.e water management.

The famous Rural Credit Survey committee of India said after studying the cooperative movement in India that ‘cooperation failed but it must succeed’. Here we would like to conclude that ‘WUAs in Tigray are functioning but they must succeed’.

It is understood that the people of Tigray region are known for their sense of gratitude and loyalty to the affiliations. The prevalence of democratic culture in their daily endeavors and assertiveness in their beliefs needs special appreciation. The resource poor farmers with moderate support of development interventionists organizing WUAs, producing what they know and marketing what way they could need special attention from the side of government. Though they are ignorant of the reasons for their poverty, the interventionists should not ignore their indigenous knowledge (IK), which has proved worthy to keep the socio economic web from time immemorial. Efficiency and efficacy of managing WUAs depend on sustainable development interventions of all stakeholders.

Recommendations

The study reveals that there is high potential to work on this line. What was done so far is appreciable and what should be done further is gargantuan. Based on the review of literature on international experiences, examination of historical development in the Tigray region and the empirical study, the consultant group study team proposes the following for the consideration and necessary action of all the stakeholders of Water Users’ Associations and Irrigation cooperatives.

1. The government machinery with the support of donor agencies should launch different irrigation schemes: The unfortunate part of some schemes was that the beneficiaries had not been consulted before construction of the earth dam or any other minor irrigation projects. Hence, the team strongly suggests to consider the opinion of the beneficiaries.
2. Sense of ownership brings success in all endeavors: Upon completion of the projects, it is expected to handover the rights to the beneficiaries, but unfortunately it doesn’t takes place. The proposed WUAs or the Irrigation Cooperatives should be given collective rights and obligations.
3. Agricultural development in the developing countries is based on the intervention of government, non-governmental organizations and other agencies. They found that these organizations were working in a significant level to improve the agricultural production and productivity of the region, so that the living condition of the people improves. Still with regard to WUAs, the consultant group proposes the following steps to strengthen the irrigation system of the region in order to develop the farmers socially and economically.
 - a. The WUAs should be given legal recognition by the Ministry of Agriculture and Cooperation.
 - b. The members of WUAs should be given Training on Management of WUAs, use of water and structure and watershed management.

- c. The members of the WUAs should have access to credit and agricultural input services on collective basis.
- d. During the initial stage of the project, the government should meet the fuel cost of the motor pumps or provide subsidized electricity.
- e. When the adverse natural calamities affect the irrigation structure and warrants huge money for repair and reconstruction, the government with the assistance of the donor agencies should come forward to recoup the irrigation schemes.
- f. The concerned agency, which has registered, should supervise, inspect and audit the WUAs.
- g. Agricultural extension should be taken up rigorously to help the WUAs on a regular basis so as to motivate the member farmers to produce cash crops since, the farmers spend more money on it than for dryland farming.
- h. The government should come up with a crop insurance scheme for the farmers.
- i. The team strongly suggests to have a Water Policy to see that the natural resources is equitably distributed to all the needy of the nation in an organised way.
- j. The development interventionists have not effectively addressed the problems of post harvesting. Hence, the consultant group suggest that there must be an institutional mechanism to
 - i. Establish market centers for the produces of the farmers
 - ii. Disseminate market information
 - iii. Establish processing plants storage facilities
- k. The government should take initiative to establish a Federal Organization for all WUAs operating in the region. This would coordinate the activities of all primary WUAs for effective functioning financially, technically and managerially.

Case 9

Journalism for the Cooperative Sector in Ethiopia- An Exploratory Analysis

Background and Justification

The people of Ethiopia have got a very long social history of working together to fulfill their socio-economic needs. Agriculture, Trade and Military Operations were carried out through cooperative efforts. Many social events are still taking place in rural Ethiopia through collective effort. The Federal Government of Ethiopia has identified Cooperative form of business organizations as an instrument of socio-economic change. Many Cooperatives have emerged in the recent past to serve the suppressed and depressed community of Ethiopia. Due to the encouragement given by the present government, there were 12364 cooperatives in the country and 1215 cooperatives in the Tigray region were functioning as on the last day of December 2005.

The International Cooperative Alliance's one of the seven principles, the Cooperative Education and Training emphasizes the vital importance played by education and training within cooperatives. Education means more than just distributing information or encouraging patronage; it means engaging the minds of members, elected leaders, managers and employees to comprehend fully the complexities and richness of cooperative thought and action. Training means making sure that all those who are associated with cooperatives have the skills they require in order to carry out their responsibilities effectively. Education and Training are also important, because they provide excellent opportunities whereby cooperative leaders can understand the needs of their membership. They should be conducted in such a way that they continuously access the activities of the cooperatives and suggest ways to improve or to provide new services. A cooperative that encourages effective two-way communication between its members and leaders, while operative in an effective manner, can rarely fail. The principle ends by recognizing that cooperatives have a particular responsibility to inform young people and opinion leaders, politicians, public servants, media representatives and educators, about the nature and benefits of cooperation.

There is a growing need to revise and rethink the scope of interdisciplinary ventures to strengthen various areas of study especially cooperative education. Hence, an attempt is hereby made to interwoven the cooperative education and journalism.

The Mass Media

Mass media communication constitutes a powerful force in our society. We learn many things today through some media of mass communication viz. radio, television, magazines, news papers, books and films. All these technologically produced channels have become

nearly all pervasive so that the person-to-person contacts have diminished in significance as means of effecting social change or maintaining social stability.

Mass media communication is a communication system in which identical message is originated by an organization and sent to large number of receivers through public channels. Mass media communication is public communication transmitted electronically or mechanically. We are delivering information, ideas and attitude to a sizeable and diversified audience through the use of media selected for that purpose. The audience in mass communication is relatively large, heterogeneous and anonymous to the source. The experience is public, rapid and fleeting.

The mass media are systems that combine human talents and mechanical devices that have as one of their central purpose, the supply of information. Journalism is the means of mass-communication. We may identify four areas of journalism as Newspaper journalism (print media), TV journalism, Radio journalism and film journalism. The four media important in journalism are Newspaper, TV, Radio and film.

The mass media audience come from all groups of society. They cannot interact with one another in the communication process. The communication by mass media is mostly one-way. Feedback exists, but it is indirect and delayed. Feedback is mostly in the form of letters to the editor or the programme producer and increased sales for an advertised product.

The functions of the mass media and journalism

- Surveillance of environment
- Interpretation of information and prescription for conduct in relation to these events
- Transmission of social heritage from one generation to next generation
- Entertainment

Functions of each media

- | | |
|--|---|
| 1. Radio, Television
and News paper | } News, opinion, entertainments,
messages advertised |
| 2. Films | } Informing, persuading, entertaining |
| 3. Magazine | } Entertainment, opinion, background
information |

- | | | |
|--------------|---|---|
| 4. Books | } | Deeper and most detailed examination of the subject and entertainment |
| 5. Pamphlets | } | Bring the view of commercial and civic organization |

Mass media not only gives news, but also provides information on different aspects of life and its problems. They also provide cultural fare and entertainment. They can provide motivation for social change; create the climate for development and influence of attitudes. They help in imparting various types of education and training to the farmers in the field, to the small and medium entrepreneurs in agriculture and small scale industries and the extension personnel on various subjects. They can help community-decision making by feeding a discussion. The electronic media can reach millions at home, overcoming the barriers of illiteracy. They do not depend on physical facilities of roads for reaching their target. Radio has speed which no other mass medium has. Radio can put across hot news in the homes of people instantly.

The newspaper has to wait for hours. The press can present news in a manner in which the news is read from headlines downwards, according to the interest of the reader, but radio has to be brief. Even a 15-minutes bulletin does not contain more than 2000 words, which would barely fill up two columns in an average size newspaper. A newspaper, on the other hand can give 20 to 30 times the space.

Cooperative Journalism and the Scope

The spirit, philosophy and principles of cooperatives have not fully diffused into the social system. The cooperatives are the best way to **wipe** out rural poverty and unemployment so that Ethiopia is moving in that direction. It could be made faster by promoting cooperative journalism as one of the means. Cooperative journalism encompasses the fields of newspaper journalism, radio journalism, TV journalism and film journalism. The spread of innovations needed by our farmers and members of cooperatives can be accelerated by effective cooperative journalism.

We have at present a dearth of programmes suited to the farmers in the field of journalism. As the media has become so powerful, our attention needs to be **focused** on exploiting the mass media to promote efforts in the field of cooperatives. Weekly farm feature pages in

the local newspapers, providing more coverage for features on cooperatives through radio and TV journalism, producing more documentary films on the success of cooperatives and water users' associations etc., come under the purview of cooperative journalism.

Journalists on the cooperative sector of Ethiopia should know about the techniques of motivation in Cooperative Extension. Apart from providing news, the treatment should be to convince the people and advance the cooperative and rural development programmes. The news story in the print media has only factual contents. It tells what is happening and has to be recent. The purpose of news story is to provide information about an event, which is mostly written in the inverted pyramid pattern.

The rural people of Ethiopia can be effectively persuaded and convinced about the needs and utility of cooperatives if the journalists use the feature style of writing. Feature stories are written to add depth and colour to the news, to instruct or entertain. The feature is more narrative, which has a long term implication. The feature is much descriptive in nature, narrative and interesting to the average reader. The feature story holds the readers from beginning to end. The feature goes further from presentation of facts. It may explain the background, growth of the event etc. A feature need not be recent, but has to be seasonable. "Why" and "how" aspects are more covered in the features. By and large, a feature story is a personal chat with the reader.

The different types of features to be used in cooperative journalism are:

- News features
- Process features
- Experience features
- Personality features
- Interview features
- Human interest features
- Information features
- Seasonal features

Important considerations in cooperative journalism:

- Understand what the readers want. Look at it from the readers' angle and also think of what the newspaper /magazine/ radio/ television wants.
- Choose the subjects related to cooperatives, such as: agricultural marketing through cooperatives, user associations, integrated rural development, women's empowerment through cooperatives, watershed management through community and group effort etc.
- Decide your objectives, what for and why.
- Decide "when" you want to reach and "how" you want to reach the people. Select the media or combination of media. You may use more than one media such as TV and magazine to reach the people. The subject you have chosen should have seasonableness.
- Collect relevant materials about the cooperatives and success stories. Newspaper clippings, government reports, magazine articles, research papers, books etc. will be useful to bring in more clarity and credibility to

the news and features. Talk to persons and clarify your mind. Generalizations and vague suggestions do not help any one.

- Decide the specific aspect of the subject you want to emphasize. Do not try to cover too many aspects.
- Fix the persons you want to interview.
- Draw a blue print for the feature which may serve you as a guide.
- Decide the tentative or working title for the feature. Title should sell your ideas. Titles can be provocative to arouse interest.
- Lead paragraph in the print medium need not be in summary form, but it should arouse interest. Central idea should be indicated in the lead and present it in an interesting forms.
- Style and length depend on the magazine. Don't add too many facts and figures. Arrange the facts in a logical order. Use the active voice rather than the passive voice. Conclusion should give a lasting impression.
- Observe the principles of journalistic writing. Avoid jargons. Have high regard for truth and accuracy. Avoid incorrect statements and the habit of preaching and sermonizing on the subject.
- Photographs and illustrations can tell many things which the written word cannot tell. Subject matter can be made interesting by adding pictures. Pictures help to cut out the length.
- Use simple, informal way of writing the script.
- Follow the ABC of journalism i.e., accuracy, **brevity** and clarity.

Journalism is also processing news: it is a process by which professionals involve in newsgathering and news presentation for dissemination. Journalism previously referred to print media encompasses now electronic media and even online dissemination also.

Components of Cooperative Journalism

Newsgathering depends on sociopolitical structure of the society. There is a difference in the process of news selection and processing based on the set up of the institutions. A libertarian society has accorded more freedom to its media organizations than an authoritarian society. A totalitarian system has its won parameters to determine what news is and what is not. The process of newsgathering is also dependent on the professional levels of the journalists and the extent of freedom even within the structure. Some of the media in some countries are government owned or controlled and hence towing the party or the ruling government line is the norm. Newsgathering follows certain set values of what constitute news in different countries and societies. A newborn trend of following the meteorology department for weather forecast is illustrative of changing values and preferences to follow news.

The techniques of news gathering can be put to use by people involved in the cooperative movement for collecting information about the success of cooperative marketing so that it can be appealing to a wider audience for better adoption. The information collection can be

purposeful and meaningful and can aid in the process of successful cooperative movement. The components can include

- Salient features of interviewing
- Understanding news values like proximity and prominence etc
- Importance of news sources
- Note making
- Recording the interview

News writing: The techniques of news writing would cover topics like the structure of news writing along with other kinds of writing techniques like

- Interview story writing
- Feature writing
- Editorial writing
- Report writing etc

The writing techniques will expose the participants to different kinds of writing and would enable them to write with a purpose.

News Editing: News editing will enable them to understand the techniques of making the news of information they have gathered to publish in a manner they require. It could be a news report, a project report, a proposal, a newsletter or a in house journal for circulation among its members. Topics covered in this would include

- Basics of sub editing
- Grammar, style and punctuation
- Headline strategies

News Publication: The publication basics will cover topics that would enable them to acquaint themselves with the publication basics for a news letter or a project report and typography etc. The topics would cover

- Basics of layout and designing
- Introduction to page make up, typography etc

Conclusion

The journalist, whether he is a TV journalist, newspaper journalist, radio journalist or free lancer should develop certain traits. Reading habit is a must. He has to regularly read the feature magazines. The writer has to be curious and interested in the things around him. Observing the things with the attention they deserve, keeping in mind that accuracy, brevity and clarity are essential, will be very much a necessity.

The journalist in the cooperative sector should have faith in the philosophy and principles of cooperation and skill in selecting the suitable media as well skill in treatment of the message. Language compatibility is a must for the journalist. He should also realize that newspaper journalism is useful only for the literates so that TV and Radio journalism are to be employed in parallel to make more impact in the growing cooperative sector of Ethiopia.

Case 10

Marketing of Cactus and its By-products through the Cooperatives in Tigray

Research Issue:

The cooperative is an autonomous association of persons united voluntarily to meet their common economic social, and cultural needs and aspirations through a jointly owned and democratically controlled enterprise.

The uniqueness of the cooperatives is the role of the user, which is different from any other form of business. With the rapid proliferation, diversified activities and extensive coverage, cooperatives have emerged as the relevant institutions in the contemporary context. Ethiopia is no way different from this phenomenon.

The people of Ethiopia have got a very long social history of working together to fulfil their socio-economic needs. Agriculture, Trade and Military Operations were carried out through cooperative efforts. Many social events are still taking place in rural Ethiopia through collective effort. The Federal Government of Ethiopia has identified Cooperative form of business organizations as an instrument of socio-economic change. Many Cooperatives have emerged in the recent past to serve the suppressed and depressed community of Ethiopia. Due to this as on 30th March 2004, there were 4039 Agricultural Cooperatives, 3338 Non- Agricultural Cooperatives such as Handicrafts Cooperatives, Savings and Credit Cooperatives, Housing Cooperatives and Construction Cooperatives functioning in Ethiopia. Moreover 35 Unions have been started at the woreda level to market the products of the primary cooperatives.

Due to the encouragement given by the present regional government, there were 514 Multi Purpose Cooperatives, 38 Irrigation Cooperatives, 13 Water Resources Associations, one Fisheries Cooperative, one handicrafts Cooperative, 22 Savings and Credit Cooperatives, eight Urban Savings and Credit Cooperatives and one Housing Cooperative functioning in the Tigray region of Ethiopia as on the last day of 1995 EC.

In this region, many crops are grown under dryland farming. Cactus is one of the plants that is grown throughout the region. The preliminary review reveals that cactus and its by-products are having adequate market surplus. Procurement, processing, storage and marketing of cactus and its by-products would increase the income of ordinary farming community. Hence, a modest attempt has been made in this paper to explore the possible extent to which the agricultural cooperatives can play a role.

Objective of the Study:

The major objectives of the study are:

1. To understand the marketing problems the cactus farming community
2. To build a model for procurement, processing, storage and marketing of cactus and its by-products through the agricultural cooperatives of Tigray region.

Methodology

The data for the study to justify the objectives have been collected both from the primary and secondary sources. The Faculty of Dryland Agriculture and Natural Resources, Mekelle University has generated data on 'cactus' and that forms part of the study. The primary data for the study were collected from 50 farmers of five villages in and around Mekelle by adopting Participatory Rural Appraisal (PRA) Method. That is a method which enables rural people to share, enhance and analyse their knowledge of life and conditions, to plan and to act.

Analytical Framework

Data so collected were classified into two categories viz.,

1. Problems in Marketing of cactus by the farming community and suggestions to overcome the problems.
2. Model for procurement, processing, storage and marketing of cactus and its by-products through the agricultural cooperatives of Tigray region.

Problems in Marketing of cactus by the farming community and suggestions to overcome the problems

Cactus, common name for the family comprising a peculiar group of spiny, fleshy plants is native to America. The family contains about 1650 species, most of which are adapted to arid climates. The fruits of cacti are important sources of food and drink in many areas to which they are native. Because cacti require little care and exhibit bizarre forms, they are popular for home cultivation and are coming under increasing pressure as a result. Cactus plants usually consist of spiny stems and roots. Leaves are greatly reduced or entirely absent. Only in two genera are fully formed leaves present. The stems of cacti are usually swollen and fleshy, adapted to water storage, and many are shaped in ways that cause rain to flow directly to the root system for absorption. The roots form extensive systems near the soil surface, assuring that a given plant will absorb the maximum amount of water from a wide area; plants in deserts are usually widely spaced.

The flowers of cacti are often large and showy and occur singly rather than in clusters of several flowers. The perianth (floral tube) does not consist of sharply differentiated sepals and petals, but rather of a series of bracts (modified leaves), which gradually grade into

sepals and finally into showy petals. The flowers have many stamens; the ovary is inferior and fused to the perianth. The fruits are often brightly coloured and fleshy.

Cochineal breeds in Cactus plant and it is a red dye derived from the dried bodies of female scale insects, *Dactylopius coccus*. The insects were used as a dye source by the Aztecs. Cochineal is still employed in pigments, inks, cosmetics, and food colourings, although it has been replaced by synthetic dyes in other uses.

Cactus could be found abundant in the African Region particularly in Ethiopia. Tigray region of Ethiopia produces Cactus in large quantity. It is grown for three months from May. The most valuable insects from cactus can be collected through out the year. But the produced cactus products are not fetching a good price due to the marketing problem. The major problems found in marketing the Cactus are:

- 1) Fruits were sold at a cheaper price by the producers and also by the local small vendors.
- 2) No significant market intervention mechanism has been introduced so far.
- 3) The commercialisation of cochineal is still in the infant stage.
- 4) Even though number of bye-products have been identified by the home scientists / food scientists, no formal food processing industries have come up in the region.
- 5) The fruits are perishable in nature and available only for three months but no steps have been taken to preserve and store it so that it will be sold through out the year.
- 6) The indigenous knowledge in this regard has not also been explored fully to ensure food security.

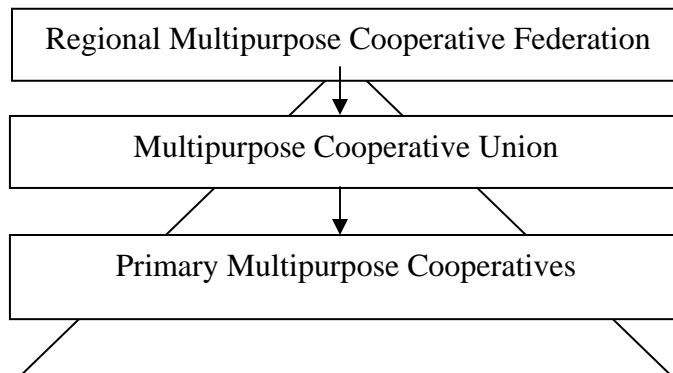
By having the above problems in mind, the authors consolidated the following alternative solutions, which emerged through the PRA method.

- 1) Involvement of Private Traders.
- 2) Participation of Government
- 3) Involvement of Cooperative Sector

If we look into pros and cons of the alternative solutions, privatisation has yielded mixed results. It has been justified on efficiency grounds and condemned on equity and sustainability grounds. Experience with government business has not been good in most of the cases all over the world. Theoretically and ideologically, the cooperative mode of business seems to be the best of all. This is so because, with proper rules and regulations, it can better meet the goals of efficiency, sustainability, equity and resource, users' satisfaction and is politically and socially more acceptable in most societies and nations than any other alternatives.

Model for Procurement, Marketing of Cactus and its Bye-Products through Cooperatives

After considering the strengths of the cooperative movement in the Tigray region the authors advocates the following model for the purpose.



The 521 Primary Multi Purpose Cooperatives in the Tigray region are to be the collection centres for the fruits and cochineal. They will in turn supply to the Woreda level Unions (currently six unions are in operation) for processing, storage and sale of products. The regional level federation (subject to formation like the one we have for coffee in the Oromia region) will undertake the national and international marketing.

Multipurpose Cooperatives are considered as an institutional intervention to increase agricultural production and productivity. Multi Purpose Cooperatives are functioning with the following objectives:

1. Provision of agricultural credit
2. Provision of agricultural inputs
3. Facilitating sale of agricultural produces
4. Operating a consumer store
5. Optimum utilization of natural resources like sand stones,
6. Inculcation of thrift and savings habit among the members

The objectives clearly spell out that it can take up the procurement and marketing of agricultural products. Since, almost all the families of the village are the members of the cooperatives or has come across any one of the cooperatives, it can be an effective tool for the procurement and marketing of Cactus.

The Woredas level unions can collect Cactus from the member cooperatives and process the same. The technological guidance may be obtained from the universities and the research bodies that carry work the cactus.

The Regional level federation should formulate strategies for marketing the products produced by the Woredas level unions both at the national and international levels.

Policy Implications:

The cooperative model suggested above may be implemented by adopting the following strategies.

- 1) The government should take initiative to declare that cooperatives are the organisations to procure and market the cactus products.
- 2) The government should also patronage the cooperatives in the form of loans and advances, grants and aids, tax exemption etc.
- 3) The Universities and other research bodies should be encouraged to proceed with further research and also support the cooperatives in sparing their knowledge, findings and experiences.
- 4) The Non-governmental organisations should take initiative for forming more number of cooperatives and also support the existing cooperatives for this cause.
- 5) Apart from the above, the agricultural cooperatives should take self-interest in accomplishing this task in a systematic way.
- 6) Since, it is an issue related to food security, the international agencies' intervention may also be sought.
- 7) Techniques for effective preservation and processing of cactus fruits may be considered.

Case 11

Participatory Forest Management-Cooperatives as an Institutional Alternative⁷

Introduction

A healthy economy depends on a healthy environment. Forest is a natural resource of a country which needs to be preserved and developed. Indiscriminate exploitation of the tropical forests for fuel wood and timbers creates more drylands in Ethiopia. An extensive area of forestland was converted into agricultural land for cultivation of food grains. Continuation of this phenomenon will adversely affect the existing ecosystem of the country. Hence, the environmentalists are making hues and cries throughout the world to adopt scientific forest management.

Management of forests consists of rehabilitation of degraded forest, development of new forests, and preservation of existing forests. Moreover it also denotes agro forestry which involves the growing of trees and crops and raising of livestock and trees in the same place.

Forest management practices are based on the participation of forest dependent communities. The forest villagers are normally the ethnic minorities having no voice in political decision making, very often ignored at all levels of policy decision and implementation but blamed for desertification. Hence, an attempt has been made in this paper to explore the possibility of an appropriate institutional framework for forest management by the forest villagers.

Institutional Intervention

The Federal Government of Ethiopia through the Department of Forest took several steps to protect the flora and fauna of the country. Many non-governmental agencies both domestic and foreign, are continuously striving to sensitize the importance of forest management among the people. There are some community based agroforestry efforts proved worthy of replicating its model. But a perpetual institutional mechanism of people for the people and by the people has not been evolved significantly so far. Whereas many developed and developing countries are successfully engaged in forest management through cooperative societies? Why can not we the Ethiopians know about community life and think about the socio-economic conditions for the forest villagers, while maintaining and improving the bio-diversity of our land?

⁷. Coauthored by Ato Akililu and presented in the International PFM Conference at AddisAbaba between 19th and 21st March 2006.

Unique Features of Cooperatives

A cooperative is an autonomous association of persons united voluntarily to meet their common economic, social and cultural needs and aspirations through a jointly owned and democratically controlled enterprise. Cooperatives are based on the values of self-help, self-responsibility, democracy, equality, equity and solidarity. Cooperatives believe in the ethical values of honesty, openness, social responsibility and caring for others.

Inculcations of virtues i.e. , wisdom (prudence, vigilance, foresight, clear thinking, rationality), courage (fortitude, resolution, confidence, self reliance), temperance (self-restraint, self-control, self-denial or self-sacrifice, forbearance) and justice (righteous, honesty, fairness, fair play , impartiality, lawfulness) in individual cooperators promotes qualitative changes in the working of cooperatives, minimizes chance of development of aberrations in cooperatives, builds a virtuous environment and healthy image of cooperatives.

Cooperatives are democratic organizations controlled by their members, who actively participate in setting their policies and making decisions. Men and women serving as elected representatives are accountable to the members. In primary cooperatives, members have equal voting rights (one member, one vote) and cooperatives at other levels are also organized in a democratic manner.

Considering the importance of cooperative form of organizations for the Nation's growth, the Federal Democratic Republic of Ethiopia notified Cooperative Societies' Proclamation No. 147/1998 on 29th December, 1998. The Act facilitates the organization of cooperative societies at all levels. Based on the provision, the paper visualizes a model for forest management.

Statement of the Problem

The rapid deforestation and environmental degradation have forced forest conservation authorities to seek an alternative to the conventional way of forest conservation by realizing that unless the local community is involved in the conservation effort, the forest is certain to disappear (Aklilu, 2002). Numerous efforts made by the government to restore forests such as forest border demarcation, resettlement of people within and outside the forest in confined areas, establishing forest protection committees and check points, afforestation, use of selected indigenous tree species (like Podocarpus Falcatus, Cordia African, Hayginia Abyssinica) and forbid logging deserve special mention. Therefore, as a strategy for development intervention, the beginning of managing forest involving the local community is imperative in the fighting of forest degradation in Ethiopia.

Objectives of the study

The study was carried out with the following objectives: -

- (i) to examine the rationale of cooperative management of forest resources,
- (ii) to review the current status of cooperatives engaged in the management of forest resources,

(iii) to propose a cooperative model to manage the forest resources.

Methodology

The study was carried out by using both primary and secondary data. To justify the first objective, reviews of relevant literature were made and summarized. The second objective was achieved with the data generated from Federal Cooperative Agency and the field visits carried out by the authors. The third objective was an outcome of the experiences in Ethiopia and India on Participatory Forest Management. Moreover the current status of different types of cooperatives and its development have been taken into consideration for framing the model. The study lacks detailed empirical evidences but having a strong point for further research.

Findings of the study

Rationale of Cooperative Management of Forest Resources

The natural resources are dynamic and subject to management interventions that can provide sustainable benefit flows in the form of food, fodder, fuel wood, fiber, timber, manure, etc., clean surface and ground water, air filtration and humidification, and Eco-tourism. Management of natural resources on sustained yield basis depends upon a careful orchestration of the policies and management practices. Lack of equitable access to natural resources and, hence, inequitable distribution of their benefits often leads to clandestine encroachment, or misappropriation of these resources. There is, therefore, a need for exploring viable natural resources management strategies for their restoration and utilization within a development context.

Until recently the role of natural resources in the rural economy was not understood properly. Therefore, privatization or nationalization of natural resources was suggested as a solution to arrest their degradation and preserve the environment. Experience with nationalization of natural resources has not been good in most of the cases all over the world. Privatization has yielded mixed results: it has been justified on efficiency grounds and condemned on equity and sustainability grounds.

For the success of any strategy of forest resources management, the involvement of local people is essential. This is so because overexploitation of forest resources by any user has many unintended side-effects, or in technical terms, externalities on other co-users. For example, overgrazing of common land, uncontrolled felling of trees and illegitimate use of forest resources like gum, herbs and other fruits by some would affect other law abiding people in the forest land. In a nutshell, all uses of the forest resources, irrespective of whether they are owned privately or publicly, are interdependent and require the cooperation of all the resource users of the watershed for internalizing/minimizing the externalities involved. This is best achieved when the planning and management of forest resources is done on watershed basis and the resources managed by their users are

organized in the form of an association preferably a cooperative society. Cooperative management of forest resources is therefore the most appropriate of all forms of management in most situations. Moreover, theoretically and ideologically, the cooperative mode of forest resources management seems to be the best of all. This is so because, with proper rules and regulations, it can better meet the goals of efficiency, sustainability, equity and resource users' satisfaction and is politically and socially more acceptable in most societies and nations than any other alternatives.

Status of Cooperatives in Ethiopia

The people of Ethiopia have got a very long social history of working together to fulfill their socio-economic needs. Agriculture, trade and military operations were carried out through cooperative efforts. In Ethiopia there are three well known traditional cooperatives or self-help groups namely, Edir, Ekub and Debo. Edir is one of the traditional cooperative forms which have been practicing almost in all parts of Ethiopia. Edir mainly stand for performing burial ceremonies. Ekub is a rotating saving and credit type association whose members make regular contributions to a revolving loan fund. The third one Debo is one of the cooperative system for mutual farming operations. These traditional forms of association which have values and customs of our society should be brought to modern form of cooperation and can contribute to the economic and social development of the country.

Development of Cooperative Movement

Modern form of cooperatives was started during the regime of Emperor Haileseelase I (1932-1974) with the first legislation called "Farm Workers Cooperatives Decree" in 1960 to help the agricultural lord. In 1966, Cooperative Society Proclamation No. 241/1966 was declared to promote real mutual help and self-help cooperatives. During the post-revolution cooperative movement (1974-1991) in the military Junta system, the peasant associations were given legality by Proclamation No. 71/1975. In 1978, another cooperative societies proclamation was issued (proclamation No. 138/1978) that includes other form of cooperatives. In the late 1990 there were already 3316 Producers' Cooperatives and 525 Service Cooperatives in the country.

The cooperative movement in Ethiopia from 1991 was well organized than in the previous regimes. The new cooperative proclamation which suits to the transitional economic system was declared as Agricultural Cooperative Societies Proclamation (proclamation No. 85/1994). In 1996 a great cooperative movement was made for organizing and reorganizing different cooperative societies and establishing cooperative promotion offices in the regions and in the federal government under the Prime Minister. A new proclamation in 1998 (Proclamation No. 147/1998) was also announced to bring all types of cooperative societies under one umbrella, Currently(1997EC) there are 19147 primary cooperatives and 122 unions in the whole of Ethiopia, of which 23 were Forest Production and Conservation Cooperatives and a Union.

Case I Gum Arabic and oleo-gum production

The non-timber forest products have been essential for subsistence and economic activities all around the world. It is also among the oldest and most long-standing of internationally traded commodities, dating back thousands of years to ancient times continuing in the present day (Wilkinson and Elevitch, 2001). Many products have traditionally been extracted from forests, but over time the resources became marginalized since emphasis in forest management was on timber production (Wong, 2000). This could be solved by training and organizing people to use the resources on sustainable base.

The non timber forest products extracted from indigenous tree species in the semi- arid and arid lands such as *Acacia commiphora*, *Acacia syal*, and *Boswellia* spp. could provide an additional opportunity for accelerated economic development (Mulugeta, 2002).

Tigray is located in the most northern part of Ethiopia where most of the lands fall under dryland categories. Gum Arabic and oleo –gum (the true frankincense) are the most important types of natural resources found in a very wider area of the region. The Tekeze river valley, western Tigray zone and north western zone are the major sources of employment and income for the people. In the year 1998 E.C., there were 22 Multi Purpose Cooperatives, one Cooperative Union and 8 big organizations working on gum and resin in western and north western Tigray. The total area devoted for this purpose is 118,486 ha.

The target of the government policy is maximizing production without threatening environment. Every cooperative should manage the resources registered under it. The government discounts the tax for cooperatives showing improvement in vegetative cover and density of gum and resin bearing trees. In addition to this, they can import different farm machineries free of tax. On the other hand, the government takes measures through its executives if the landholder associations do not manage the resources properly. The near by agricultural offices follow those associations closely and they inform the regional office of Agriculture to terminate the association and is obliged to handover their land to the government.

Case II Community intervention in proper management of Adaba-Dodola forest in southern parts of Ethiopia

Adaba-Dodola forest is one of the remnant coniferous forests in Ethiopia. It is found in the southern parts of Ethiopia as extension of Bale Mountain in west Arisi zone that belongs to Oromia region. The forest has been indiscriminately exploited and threatened for longer periods as a result of transfer of ownership from private to state in 1974, rapid population growth, agricultural expansion, absence of community involvement and unstable institutional arrangements (Aklilu, 2002). This natural forest is a mixed forest mainly with indigenous flora dominated by *Hagenia abyssinica*, *Podocarpus falcatus*, *Juniperus procera* and Erica heather. The forest is also spot for ecotourism [sit](#) establishment.

Since managing and conserving the remnant indigenous forests of the country is a priority task in the restoration of ecosystem; government and non government organizations are

interfering to restore the Adaba-Dodola forest. The association of nearby villagers to conserve and use the forest sustainably is an indication of participatory forest management practice in the country.

In the past, the forest administration has generated income from the forest through – destructive- commercial logging and charcoal burning. Nowadays the forest is particularly important for the local communities, for pasture and source of wood for various purposes. Small-scale commercialization of forest produce by the local people in local markets is a routine activity (Aklilu, 2002).

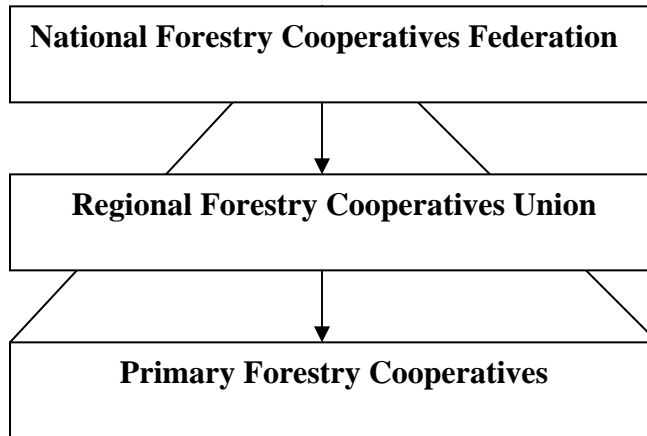
The villagers who live near by the forest have organized themselves in the form of cooperatives to manage, use and conserve the forest resources. There were four primary cooperatives functioning with 966 members. The primaries have formed their own union with a share capital of ETB88840. The cooperatives were functioning with the principle of democratic management as stipulated in the proclamation. The Objectives of the union were: to develop self reliance; to preserve and develop the natural resources; to increase produce and productivity and to convert raw materials of the forest to new products using modern technology and increasing the income of members.

Some of the rules and functions of the union regarding forest resource use:

- Maintain/preserve the forest and develop it;
- Supply different equipment that are used for forest development;
- Improve the services to the members, gain and create link with similar cooperatives;
- Expansion of eco-tourism;
- Supplying different forest seedlings to members and undertake enrichment of plantation;
- Supplying transportation facilities for visitors and improving and coordinating the services to tourists;
- Collecting the income obtained from tourism activity;
- Giving saving service and public relations for the society ;
- Supplying goods for members and to the society;
- Providing credit service;
- Updating members by providing information and educating the members and employees;
- Carrying out researches to maximize members' participation
- Advertising to attract new members and increase the capital;
- Permit use of unwanted forest products by the members;
- Permit the member to use woods for construction purpose;
- The member can earn money from sale of dry wood;
- Buying machines used for producing forest products and
- Share the remaining profit equally for the members

Model for the Participatory Forest Management through Cooperatives

Considering the administrative division of the country, on going cooperative experiments and the successful model of India, the authors propose the following structure



Primary Forestry Cooperatives

The area of operations of a Primary forestry Cooperative society should be of a forest range. The forest villager should be in a position to reach the head office within two hours of walk. Who ever resides in the area of operation and make use of its services and is willing to accept the responsibilities of membership can be enrolled as member of the cooperative society. The society can take the entire management of forest from the ministry or they can undertake the following activities;

- preparation of nurseries,
- planting of trees as part of reforestation, afforestation and roadside plantation,
- collection and transportation of deadwood,
- collection , management and marketing of non-timber forest products,
- provision of credit to the members,
- running of fair price consumer shops
- Dissemination of knowledge and information.
- Conduct of ecotourism

Based on the patronage extended by the government and non-governmental agencies, the functions can be modified and made appropriate to suit the local needs and conditions.

Regional Forestry Cooperatives

The jurisdiction of the Regional Forestry Cooperative Union shall be of a region as defined in the constitution. It should be a union of all primary forestry cooperatives operating in the respective region. Representatives of the primary forestry cooperatives will constitute the general assembly.

The regional forestry cooperative union can undertake the following functions;

- Organization and supervision of primary forestry cooperative societies,
- Procurement and supply of consumers good,
- Arranging credit facilities to the primary cooperatives,
- Processing of non-timber forest products and sale through city outlets and federation
- Conduct of member-education program.
- Coordinating the ecotourism activities of the primary cooperatives

The above mentioned functions should be in tune with the cooperative societies proclamation.

National Forestry Cooperatives Federation

The National Forestry Cooperatives Federation should serve the entire country. It should be the spokesman of forestry cooperatives of Ethiopia. All the regional forestry cooperatives unions shall be members of the Federation. Representatives of the regional unions shall constitute the management. The Federation should function as a promotional and business agency. The following functions can be visualized at the outset.

Promotional function:

- organizing seminars , conferences and workshops,
- running a training institute,
- publication of newsletters
- sponsoring candidates to national and international forums,
- organizing exhibitions and opening stalls in the international shopping festivals
- Lobbying for higher share and privilages from the government and non – governments.

Business function

- Arranging refinance facilities from the cooperative banks, national banks of Ethiopia. Commercial bank of Ethiopia and other financial institutions.
- Exporting non-timber forest products of Ethiopia
- Importing of consumer goods if necessary
- Acting as a financial intermediary between the international donors and the forestry cooperatives.
- Promotion of ecotourism at the national and international level.

The federation can also undertake any other functions which will improve the efficiency of forestry cooperatives. For the effective implementation of the above mentioned activities, the Federation should have proper management information system and logistics.

Conclusion

By organizing and running forestry cooperatives in the three tier structures in Ethiopia, we can manage the forest resources effectively and the forest villagers can share the benefits that flow from those resources. The government and non – governmental agencies should take necessary steps to organize forestry cooperatives. Both the bureau of cooperation and the department of forestry should act together. The government should ensure technical, administrative and financial aid to the forestry cooperatives, the foremost constraints of cooperative movements through out the world is that the non participation of members in the affairs of cooperatives. To overcome this the agencies should create awareness among the potential members. After making them aware of cooperative principles and philosophy, social and economic benefits they themselves will come forward to start their own cooperatives. Then no force can prevent their growth and green Ethiopia will not be far away from our vision.

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