

Factors Affecting Livestock Marketing: A Study in Geda Pastoralists Cooperative Union, Borana Zone, Oromia Regional State, Ethiopia

By Habtamu^[a] & Bekele Tassew^[b]

Abstract

This study therefore attempted to investigate the factors affecting livestock marketing by cooperatives in the Borana pastoral zone and assessed the performance of the cooperative union in terms of livestock marketing and proposed possible policy implication measures to improve the marketing performance. Both secondary and primary data were used in this study. Multi-stage random sampling procedure was followed for the study. As to the sample study units, the Geda Livestock marketing Cooperative Union was selected at zonal level and at the next stage, at the district level four primary cooperatives were selected from two districts (from each two societies) which were affiliated to the union. The researcher has contacted 36 Key Informants from the zonal office, district offices, union, and from primary cooperatives. Four FGDs were also conducted among selected group of members from the primary cooperatives in order to elicit information regarding the study. After sorting the collected data in the systematic manner, it was analyzed by using average, percentage, correlation, linear regression and as the collected data were more qualitative in nature subjective analysis were also made wherever necessary. Accordingly inadequate infrastructure and inadequate information is more important factor for bargaining power of the union. Where as, financial problem and lack of quarantine service is less important factor in affecting the union's performance. The results out of FGD are: irregularity of climate, diseases (physical risk) inadequate market infrastructure (transportation), inadequate market information, and lack of quarantine are as most important problem in livestock marketing in the area. The union should employ the most up-to-date technology to team together independent producers and create a seamless supply chain, and adaptation strategies to mitigate climatic and physical risk factors. The cooperative must keep its members informed of its broad activities. This function entails preparation of speeches and presentations for cooperative staff, design of marketing campaigns, preparation of annual and other periodic reports, and development of different communication based information.

Keywords: Cooperatives, livestock marketing, marketing performance, pastoralist.

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1. Introduction

Borana is one of the seventeen administrative zones of Oromia Regional State, located at about 570 kilo meters south of Addis Ababa on the way to Kenya. According to the zonal strategic management plan (SPM,2006) it covers 48,743km square having a total population of 958,486 of which, 878,486 and 120,000 were residing in rural and urban areas respectively with almost similar proportion of both sex (male and female).

The climate is sub-divided into semi-arid and arid in which the rainfall pattern is bimodal. In most cases rainfall is low, erratic, unreliable, unpredictable and fluctuating from season to season within the year and between years. The local rainy seasons are between March and May (Constitute the long rainy season) and between September and November (short rain season) with annual average varying from 400mm to 700mm and the corresponding annual average temperature ranges from minimum of 15^c to a mean maximum of 25^c (Borana Zone SPM). The Borana people inhabit ten low land districts (Yabello, Arero, Taltale, Dire, Moyale, Dugda-Dewa, Miyo, Soda, Borbor and Dillo) and three semi-arid districts (Abaya, Bule-Hora and Galana).

Livestock rearing is the most dominant farming practice followed by limited crop cultivation. The Borana communities have diverse and desirable cultural practices including the 'Geda' system. However past and current conditions showed that the Borana people are living in difficult socio-economic conditions. Livestock production system plays a crucial role in the Borana pastoral society household economy. Family wealth, which is general, can be measured in terms of the number of livestock that determines the subsistence food security and overall livelihood of the pastoral communities.

The major challenging problems of Borana people include low productivity, lack of sustainable credit provision, and lack of fair market for their livestock, drought and very poor saving culture. As a result, pastoralists in Borana Zone face crucial problems at times of drought due to shortage of food and death of cattle.

To alleviate these socio-economic problems, few primary cooperatives have been organized in the area. However, these primary cooperatives could not solve problems related to livestock marketing.

Therefore, it was decided to organize a pastoralist cooperative union from Dire and Yabello districts of the Borana Zone to give better solutions to the problems of livestock marketing. Then Geda Pastoralists Cooperative Union was established with seven primary cooperatives from the two Districts affiliated to the Union in 2005.

2. Statement of the problem

A community, which saves its wealth in different system, can save himself from unfortunate hazards. If pastoralists sell their cattle when their cattle are at good performance in physical, health, and weight they save its capital in the bank or by investing on different activities.

They can save from losses of their cattle and themselves when climatic change happens since their life is highly tied with their cattle. But pastoralist believes in having large number of cattle in order to survive when unfortunately, drought comes due to climatic change some of them might die and the others left. Whereas, having little number of cattle

lead to the probability of losing all and becoming nil. So one can save by the number (Coppock, 1994)

Marketing in Borana area is complicated by high transaction costs due to the long distances that pastoralists must travel and the poor infrastructure that is generally found in the market place. Marketing institutions in the areas are often poor and are not suited for procuring grain from livestock sales during a crisis. Rural roads and communication system in pastoral areas are difficult to justify according to its economic viability.

Now a day's cooperative became a popular solution for marketing problems of the pastoralists. Since the community's problem is marketing problem in general and livestock marketing in particular, cooperative is proposed as solution. Through discussion on the government policy direction, empowerment of the local people in potential mobilization with technical assistance of government official's establishment of cooperative union was agreed. After the agreement was made, seven primary cooperatives were affiliated from two districts of the Borana low land areas to become the member of union, based on their General Assembly decision procedurally and became the founders of the union.

The major activities of the cooperative union include:- collect, transport and sell livestock of members in local and foreign markets; provide credit and technical supports to member primary cooperatives to buy cattle, goats, sheep and camel from individual members based on existing marketing information, buy and supply members with veterinary medicines and consumer goods; promote the organization and promotion of saving and credit cooperatives in the union operation areas; marketing infrastructure etc.

The union is inefficient and inactive in achieving its goals. Where as, the pastoralists suffer due to lack of marketing system. According to this study, there are factors that affect the activities of Geda Pastoralists' Cooperative Union. This research study is intended to investigate the factors affecting livestock marketing of the cooperative union.

3. Need and Significance of the study

African pastoral systems are currently being characterized by lower stability, food insecurity, decreasing income, increasing poverty and environmental degradation, loss of key grazing lands to cultivation, annexation by government and private interest, drought, inappropriate development policies and population growth (Coppock, 1994). The pastoral sector makes a very significant contribution to the national income, employment, agriculture production, and food demand of people in Africa.

Ethiopia has the leading livestock population in Africa, estimated to be 81 million livestock population (MOA, 1997) as cited by Aklilu,2002 and the sector plays a vital role in overall development of country's economy.

Yet, the existing income generating capacity of livestock as compared to its immense potentials in the country is not encouraging. Off-take rate is estimated at about 8% (FAO 1998) for cattle, one of the lowest in Africa, in terms of proportion to the livestock population. This amounts to between 2.2 and 2.8 million head of cattle/year. Off-take for sheep and goats is estimated at 40.5% and 34% respectively or a total of about 14.5 million sheep and goats annually.

The primary reason among others is inefficient livestock marketing. Consequently, livestock marketing studies becoming essential to provide vital and valid information on the

operation and efficiency of the livestock marketing for effective research, planning, and policy formulation ([www farm Africa.org.uk](http://www.farmAfrica.org.uk))

The Borana pastoral system of southern Ethiopia has been traditionally practicing livestock husbandry for wealth storage, milk production, immediate cash income and others. Most of the time, the pastoral society, which depends on livestock resource is able to purchase food grains, cloth and other household items.

Earlier studies on local and regional livestock marketing in the country have undertaken very limited investigation, not cooperative oriented and mostly conducted in the highlands of the country, which cannot represent the area where hedge number of livestock exists.

This study therefore attempted to investigate the factors affecting livestock marketing by cooperatives in the Borana pastoral zone and assessed the performance of the cooperative union in terms of livestock marketing and proposed possible policy implication measures to improve the marketing performance.

4. Objectives of the study

The specific objectives of study are:

- To study the performance of the union in terms of live stock marketing;
- To assess the factors which affect livestock marketing system of the union; and
- To offer possible measures for the achievement of effective livestock marketing system.

5. Methodology

Types and Sources of Data

Both secondary and primary data were used in this study. Informants for the primary data were management bodies (of the co-operative union and primary co-operatives sampled for the study), employees of the union as well as the promoters from zone and the two Districts. The primary data were used to understand factors affecting livestock marketing of the co-operative union in Borana. The Secondary data were used to obtain information from annual report of the union and other relevant documents found in the co-operative office, and other concerned bodies in order to assess the performance of the union in terms of livestock marketing.

The survey generated data on demographic characteristics of respondents, transaction costs, distance to market and major livestock marketing problems. Other data, like market information system, transport, infrastructure development, and credit facilities towards livestock marketing were collected from sample respondents through key informant interviews using semi-structured questionnaire.

Focused Group Discussions were conducted with four groups in which each groups contained ten individual members from sampled primary co-operatives right after the survey of management bodies of the Primary co-operatives and Union, employees of the union as well as the promoters.

Sample Selection Technique

Multi-stage random sampling procedure was followed for the study. As to the sample study units, the Geda Livestock marketing Cooperative Union was selected at zonal level and at the next stage, at the district level four primary cooperatives were selected from two districts (from each two societies) which were affiliated to the union. As far as the selection of the respondents, the researcher has contacted 36 KIS from the zonal office, district offices, union, and from primary cooperatives. Apart from KIS four FGDs were conducted among selected group of members from the primary cooperatives in order to elicit information regarding the study. The number of samples for the study has been given in the following table.

Table 1 Sampling Table

S/no	Sample units	No of Sample units	Respondents	
			KIS	FGD
1	Zonal office	2	2	0
2	District office	2	4	0
3	Union	1	10	0
4	Primary coops	4	20	40
	Total	9	36	40 (Four groups)

**The researcher has conducted one FGD from each primary co-operative society in which the number of members per group was ten. From the zonal office, the researcher has contacted two key informants: one from co-operative promotion office and the other from rural and agricultural development office. The same was followed for the district offices.*

Methods of Data Collection

Discussions were held with officials and experts at zonal and district levels for any form of assistance and to officially undertake the survey. Similar discussions were also held with the manager of the union and management bodies of the primary co-operatives selected, to explain the purpose of the study. Following the discussion, list of positions of the management bodies of the union (Chairperson, vice chairperson, treasury, control committee, credit committee, loan committee and conflict resolution committee) and primary co-operatives (Chairperson, vice chairperson, treasury, control committee, and credit committee) at the time of the survey were prepared. Through a random sampling technique, five management committees from each sampled primary co-operatives which led the number of respondents of the management bodies of the primary co-operatives to twenty were selected. Ten respondents were selected from the union of which seven of them were management bodies of the union and three were employee. Other two respondents were selected from zonal level (A head department of co-operative promotion office and a head department of Agricultural and Rural development office). In the similar way, from the selected two Districts (Dire and Yabello), two respondents from each were selected.

Survey teams composed of two enumerators and one supervisor were organized for each district. Therefore, a total of four enumerators and two supervisors were employed for

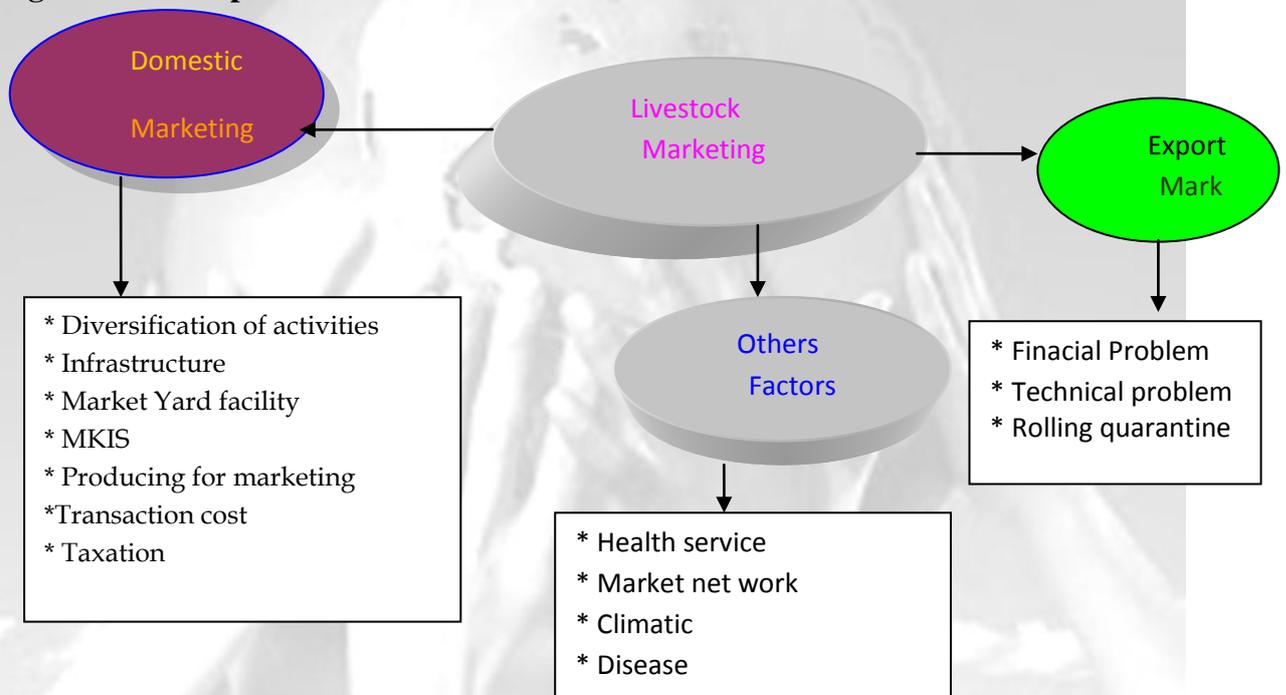
surveys in the randomly selected sample Districts and primary co-operatives. Supervisors were graduates with a minimum of diploma from a recognized university or college and had good experiences working with cooperatives, while completion of a high school level education was the minimum criteria set for the enumerators' selection.

Training was arranged in two separate places, Dire and Yabello towns. Trainees who came from Dire District were trained in Mega (The main town of Dire District administrative) in similar way at Yabello for trainees who came from Yabello District.

Methods of Data Analysis

After sorting the collected data in the systematic manner, it was analyzed by using average, percentage, tables, standard deviation, correlation, linear regression and as the collected data were more qualitative in nature subjective analysis were also made where ever necessary.

Figure -1- Conceptual frame work



6. Summary of Findings and Policy Implications

GPCU was established nearly ten years ago by pastoralists community of Borana for the purpose of building a stronger, more effective and economic livestock marketing system, rendering different services such as veterinary, medicine offering, dissemination of livestock marketing information, feeding (ranching) market yard facility etc.

It was dedicated to the task of procuring for livestock producers the highest possible net returns for their livestock, to protect general livestock price structure to develop bargaining power in the market place and to serve the long time best interest of its members and the community around but still it castles in the air its target because of many problems (In regularity of Climatic, Disease, Lack of quarantine, Inadequate Market Information, Inadequate Infrastructure, Transportation Problem, Lack of Finance, Technical Staff problem) that has been the main stumbling block in livestock marketing cooperatives.

7. The study summarizes findings as follows:

The sources of livestock for export were pastoral areas that were far from the center. Further, the pastoral livestock producers have scattered through large expanse of lowland and semi-arid areas. For efficient marketing, adequate livestock markets, stock routes, resting places, quarantine stations need to be developed to allow easy access to Cooperatives for assembling and transporting livestock. However, these **infrastructures** were poorly developed in the pastoralists' area under study.

Further, export standard slaughterhouses are located in central areas far from surplus producing areas. In addition, transport facilities that allow the flow of livestock are not adequately employed.

Livestock market was located far from most rural producers and has no geographical centrality to serve all equally. Lack of all necessary facilities and poor accessibility are serious constraints.

The study area's livestock quantity, annual off take, productivity, and consumption levels are not adequately known. This creates problems in planning and designing of policies to enhance the sector's development.

Market information, partly distorted by brokers, is a serious problem. Producers (pastoralists) and co-operatives were completely fed up of the disruptive activities of brokers, who abusively intervene in livestock sales transactions and the general exchange process. They often found to be disseminating false and unreliable information. There is no reliable source of information neither on export demand nor on domestic supply situations.

Pastoralists considered their livestock as means of saving or capital accumulation. There were no efforts to strategically **produce for the market** by adjusting and planning production to market needs.

Cooperatives have not yet proved its adequacy in promoting production through additional investment and creation of marketable surplus. The scattered individualistic production system has been exposed to the vagaries of natural conditions (drought, disease, and outbreak-etc).

Transaction and marketing costs are inherent in any marketing system. However, it is more significant in the marketing systems of pastoral settings. Remoteness besides increasing marketing and transactions costs reduced the bargaining power of the producers, and producers' cooperatives. When there is reduced demand in the market, keeping livestock until next market day, moving to another market and trek animals back to their home were difficult options for far off households.

Thus, remote pastoralists were ready to take any price offered in the market. In the study area's, there were many livestock **diseases** that create frequent livestock mortalities. The presence of livestock diseases apart from affecting the efficiency of production hampers export market development as a result of frequent bans by importing countries.

The cumulative effect of several years of **drought** has severely affected pastoral production and productivity. Water scarcity, general range degradation due to a variety of factors, poor veterinary services and lack of effective pastoral extension services are the underlying causes of this problem.

Financial institutions were poorly developed in the area and the existing few ones were less motivated to finance the rural poor due to lack of collateral. Limited access to credit (lack of finance) is one of the critical marketing problems faced in the study area.

Absence of Livestock product quality controlling, processing and marketing training institute, Lack of trained manpower, undeveloped standard for the products, Poor extension services are the main **technical problems** in the study area. Livestock marketing is based on quality standards. Animal's selection is purely based on eye- appraisals and exchange takes place on bargaining. Due to the above mentioned factors, the union is not able to maintain the quality standard.

Regression Analysis

Regression analysis for the model developed as factors affecting livestock marketing have been discussed below.

Table 2 Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.952(a)	.907	.721	.271

Source: Survey data, February 2014

As depicted in the table 2 above, the correlation between livestock marketing of the union and factors affecting it : - lack of transportation, lack of diversification of activities of the union, irregularity of climate, financial problem, lack of quarantine service, taxation system, technical Staff service constraint, inadequate information, inadequate infrastructure and disease were very strong with the value of $R = 0.952$. Further more, these factors explained more than 91 percent of the change in livestock marketing of the union. So the model well fits to represent the data.

The overall effect of the model is significant at less than 5 percent level of significance with the computed value of $F=4.868$ (See table 3)

Table 3 ANOVA Analysis

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3.571	10	.357	4.868	.047
	Residual	.367	5	.073		
	Total	3.938	15			

Source: Survey data, February, 2014

Table 4 below depicts that B (partial regression coefficient) express the relationship between livestock marketing of the Union as dependent variable and one of the factors affecting its purchasing power as independent variable holding other variables constant.

Table 4 Regression Coefficient

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	-2.626	.000	0.877	-.648	.047
	Lack of transportation	-.220	.000	-.270	-.719	.000
	Lack of diversification of activities	-.396	.000	-.345	-.081	.000
	Taxation system	.253	.000	.199	.721	.021
	Financial problem	-.017	.000	.000	.000	.032
	Technical Staff service constraint	.681	.000	.595	.151	.026
	lack of quarantine service	-.015	.000	.000	.000	.032
	Inadequate Information	.429	.000	.601	.892	.016
	Inadequate Infrastructure	.901	.000	.842	.450	.008
	Irregularity of climate	.044	.000	.044	.303	.000
	Disease	.099	.000	.171	.124	.009

Source: Survey data, February, 2014

As shown in the same table all the variables are statistically significant at level of significance ranging from less than 1 percent for lack of transportation, lack of diversification of activities of the union, and irregularity of climate, to 3.2 percent for financial problem and lack of quarantine service. Beta (standardized partial regression coefficient) used as measured relative importance of factors affecting livestock marketing of the union.

Accordingly inadequate infrastructure and inadequate information is more important factor for bargaining power of the union. Where as, financial problem and lack of quarantine service is less important factor in affecting the union's performance.

The above table shows the survey result of finding, in addition to these, the researcher conducted FGD with member of primary cooperatives. The sampled members of primary cooperatives were asked to rank major factors affecting livestock marketing (cattle, shoats and camel) in the study area, in descending order of importance. As the results are summarized in table 5 irregularity of climate, diseases (physical risk) inadequate market infrastructure (transportation), inadequate market information, and lack of quarantine was mentioned as most important problem in livestock marketing in the area.

Table 5 Prioritization of Factors Affecting Livestock marketing as perceived by members during FGD

Factors	Scores				Average score	Rank
	Group 1	Group 2	Group 3	Group 4		
Climatic	10	7	8	9	34	1
Taxation	10	6	7	6	29	4
Infrastructure /Transportation/	8	9	9	6	32	2
Staff technical	7	5	7	6	25	7
Market Information	5	8	6	9	28	5
Disease	7	7	9	8	31	3
Quarantine	8	5	7	6	26	6

Source: FGD conducted among members of sampled primary cooperatives, 2014.

The cumulative effect of several years of **drought** has severely affected pastoral production and productivity. Water scarcity, general range degradation due to a variety of factors, poor veterinary services and lack of effective pastoral extension services are the underlying causes of this problem.

The **infrastructures** were poorly developed in the pastoralists' area under study; transport facilities that allow the flow of livestock are not adequately employed. Lack of all necessary facilities and poor accessibility are serious constraints.

According to FGD discussion, access to quality **information** for marketing decisions was a serious gap in the study area. Market information on livestock prices was normally extracted from different sources; they get price information only on market days from friends, families and other members of the community, neighbors (*olla*). Multiple and non transparent **tax** system was also mentioned as one of the critical marketing problem faced.

Almost all the four groups of FGD indicated the lack of **technical staff** as major problem in livestock marketing cooperatives (both primary LMC and GPCU). Livestock were generally traded by “eye ball” pricing, and weighting livestock is not well known.

8. Conclusion

Policy Implications

The present status of the livestock markets in Ethiopia necessitates a complete review of the situation in order to formulate goal-oriented strategies. The roles and responsibilities of governments, trade and producer's cooperatives, and marketing cooperatives need to be reassessed with a view to hand over most of trade related activities to marketing cooperatives for sustainability while maintaining the regulatory and supervisory roles of governments. Governments should also take the courage to admit that the livestock sub-sector has been ignored for far too long and take new initiatives to promote the productivity of the livestock industry.

The Ministry of agriculture should establish necessary quarantine facilities at appropriate locations and introduce necessary procedures; the government should also allocate necessary budgets and assign relevant staff. The stakeholders could cover livestock maintain-

ing costs and the cooperative union should do against of these problems in order to achieve its goals and objectives.

The cooperative must; increase efficiency by improving producer-to-consumer and consumer-to-producer information flow; Coordinate production, processing and marketing through real-time information management systems; Develop systems and partnerships to determine value as close to the retail consumer as possible, including development of an independent producer brand; and Support new and existing producer cooperatives and return profits to the local level by developing and supporting livestock marketing opportunities for new and existing cooperatives.

Governance and operational structure items such as membership, marketing agreements and producer education programs that provide incentives for producers to operate as if they were within the boundary of the cooperative are essential.

All of the primary alternatives that livestock producers considered should involve legal formation based on the cooperative principles. This structure is often formed by producers who perceive the best opportunity for continued economic success hinging on their ability to retain more value generated from their production.

Access to financial resources enables the poor to exploit investment opportunities, reduces their vulnerability to shocks, and promotes economic growth. But lack of credit at reasonable rates is a persistent problem, in large part, reflecting the collapse of the cooperative credit system. The failure of the organized credit system in extending credit has led to excessive dependence on informal sources usually at exorbitant interest rates. This is at the root of farmer distress reflected in excessive indebtedness. There are of course some recent positive developments, for example, the acceptance by the government on co-operatives and the success of commercial banks to almost double the flow of agricultural credit after 2003. Nonetheless, problems still persist.

Problems of the long-term credit structure have hardly been addressed, and the large increase in commercial bank credit does not appear to have significantly improved access in either district with poor banking support for small marginal pastoralists.

Staff must perform a variety of duties to enable the cooperative to identify business opportunities, inform members of these opportunities, allow customers to state their needs, and educate members how to fulfill these demands.

Attention to these functions will be necessary to implement the structure; Potential business opportunities must be evaluated to determine if they fit the strategic vision of “win-win” opportunities and will result in long-term sustainable business relationships. Due diligence must be practiced by establishing terms, identifying product specifications, coordinating logistical support, defining pricing structures, costs and timetables.

The union should employ the most up-to-date technology to team together independent producers and create a seamless supply chain. This system will align consumer demand with producers in order to gain customer satisfaction and effectively utilize the cooperative’s assets. Member Education Sustainability of the cooperative requires producer support. Member education and outreach will be necessary to maintain support. The cooperative must inform producers about alternative investment opportunities. The education function must complement and facilitate producers’ decisions about their individual livestock operations.

The education may entail technical assistance on production techniques and sales or marketing aspects of the business. This function will be enhanced through the use of information systems and communication with producer members. The cooperative must function as liaison between its members, its individual business units, and local, state, and federal government entities. The cooperative must effectively keep members informed of government regulations that will affect them and their businesses. The cooperative must keep contact with government regulatory agencies at all levels to minimize risk of non-compliance.

The cooperative must also keep its members and the public in general informed of its broad activities. This function entails preparation of speeches and presentations for cooperative staff, design of marketing campaigns, preparation of annual and other periodic reports, and development of different communication based information.

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- 2) www.preemptinc.com/definitions.htm
- 3) <http://www.w.ibiblio.org/farming-connection/links/organic.htm/>