



## Assessment of Livestock Market Information Systems in the Highland Regions of Ethiopia

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The lack of properly functioning markets has been pointed out as one of the key issues underlying the recurrent food crisis in Ethiopia and in other countries in the eastern Africa region. Many issues and constraints need to be tackled to create an efficient livestock marketing system. The absence of livestock market information is one such constraint facing livestock producers in Ethiopia in their efforts to earn a fair return from the sale of their livestock. Access to market information enables these producers to seek out and compare the information available for different market outlets and to realize the full potential profit by getting the best prices. The Sanitary and Phyto-sanitary Standards and Livestock and Meat Marketing (SPS-LMM) program of the Texas Agricultural Experiment Station commissioned an assessment of the livestock market information systems in the highland regions of Ethiopia. The main objective of the assessment was to determine the prevailing status of Livestock Market Information Systems in these areas and subsequently help identify opportunities and constraints towards the development of a unified national livestock market information system in Ethiopia. This brief describes the findings of this assessment study carried out by the Livestock Information Network and Knowledge System (LINKS) project of the Global Livestock Collaborative Research Support Program (GL-CRSP), in collaboration with the SPS-LMM project.

#### Background

Livestock marketing information is needed to improve decision making at all levels in the livestock industry and to enhance the competitive position of the Ethiopian livestock industry in international markets. The skewed access to livestock market information towards traders means that rural livestock producers have little or no knowledge of prevailing prices in different regions, and as such, they are unable to fetch the best possible prices for their livestock (Mukhebi, 1999).

Irregular and sporadic livestock market data collections have been going on in many of the eastern African countries for a long time, primarily as components of development projects such as the Arid Land Resource Management Project (ALRMP) in Kenya, the Tanzania Livestock Marketing Project (TLMP) in Tanzania, and in government ministries and by NGOs (CARE-Ethiopia) in Ethiopia. The Livestock Information Network and Knowledge System (LINKS) project, implemented by the Texas Agricultural Experiment Station (TAES) at Texas A&M University (TAMU), and the Livestock Market Information System project of the USAID-funded Southern Tier program of the Department of Livestock and Fish Marketing of Ethiopia's Ministry of Agriculture and Rural Development (MoARD) initiated one of the first attempts at establishing a National Livestock Market Information System in Ethiopia.

In recognition of the successful attempts by the LINKS project to implement a Livestock Market Information

System in the pastoral areas of Ethiopia, the SPS-LMM project of TAES-TAMU commissioned a study to assess livestock market information systems in the highland regions of Ethiopia with the objective of gaining an insight into the existing livestock market information systems there, and informing next steps for the creation of a unified national market information system that covers both pastoral and highland regions of Ethiopia.

The goal of the assessment was to gather information about any existing livestock market information systems and services at the various levels of the government in the highland regions of Ethiopia and help identify constraints and opportunities that would contribute towards the development of a successful unified National Livestock Market Information System along the lines of what has already been achieved in the pastoral regions (Jama et al., 2006).

The LINKS team conducted a fieldwork assessment in Southern Nations, Nationalities, and People's Region (SNNPR), Amhara, Tigray and Oromiya Regions in the period between May 24-June 15, 2006 using structured interviews with key informants, including informants at the key government offices, traders, and grassroots level livestock keepers. The findings of the study are expected to aid the MoARD in fine-tuning and improving ongoing efforts in the implementation of a standard Livestock Marketing Information System (LMIS) in the country.

## Major Findings

Significant overlaps and duplication of activities exist among the services that collect livestock market information at every level of the government (districts, zones, regions and the federal level). Moreover, there are weak institutional linkages, lack of effective collaborations and coordination, and poor working relationship among stakeholders and institutions involved in LMIS.

- Key organizations currently involved in livestock market information in the highland regions include: Bureau of Agriculture and Rural Development (Livestock Department), Disaster Prevention and Preparedness Bureau, Agricultural Marketing Agencies (new development), Bureau of Trade and Industry, and to a lesser extent, the Central Statistical Authority.
- Most of the organizations are collecting not only livestock market information but also information on other agricultural products such as cereals and crops, the latter of which is the primary information collected in most cases.
- Too much information is collected and stored in raw format at government offices in hard copies, and it is not clear to most government officers why they are collecting this information. The information is not analyzed and packaged for dissemination to the desired beneficiaries.
- Long delays exists in data transmission from the markets to the government offices.
- Frequent government bureau restructuring has caused losses in institutional memory as personnel are reallocated from one unit to another, and there exists a significantly high turnover rate of market monitors and experts.
- Lack of standards for data collection, even within the same bureaus, appears to be a significant challenge for the data collection processes.
- Most of the traders interviewed were in favor of the idea of creating a uniform, reliable livestock market information system, and they have indicated a willingness to pay minimal fees for the service provided, as long as it is regular and on a near real-time basis.
- In most of the highland market transactions, buyers and sellers deal directly with each other without the involvement of brokers. This makes the provision of market information to the producers particularly beneficial in order to level the playing field.

- Most of the traders and producers interviewed indicated that they would like to receive market information not only about the local markets, but also about distant central and terminal markets in the country.

## Practical Implications

Despite all the problems mentioned above, it was apparent from the rapid assessment conducted in the highland regions that a Livestock Marketing Information System should be a feasible and a worthwhile investment given the increasing demand to provide near-real time market information to end users. This is due to the fact that the producers in the highlands deal directly with the traders without the involvement of brokers or middlemen, as is the case in the pastoral regions, where informed brokers bargain on behalf of producers to get a fair price for their livestock.

**Long-term.** Market information will remain a public asset in Ethiopia for quite some time. Federal and regional governments must make efforts to make information accessible to all stakeholders. This information is an important element for the country, becoming a basis for stimulating trade and economic growth, encouraging public and private investment, and consequently generating economic and social development. In the long term, subsequent off-shoots in the private sector will occur when specific niche market needs have to be met, and entrepreneurial individuals may follow the models applied in the developed countries by taking this free public information, adding value to it, and selling it to serve the specific niche demand.

**Short-term.** Goodwill, appreciation and capacity-building seem to be the some of the most required investments in the short-term, in order to promote the capacities of market technicians and professionals. The survey carried out pointed to the fact that most of the monitors simply require appreciation of their efforts to get their job done. It is vital that the country works on the creation of a legal framework that supports the work on LMIS development within government departments (both at regional and federal level), in order for them to obtain the institutional backing that brings federal and/or regional budgetary commitment.

**Sustainability of LMIS.** All local key institutions at the various levels of the government must be involved in the planning, development and deployment phases of the LMIS program to ensure their ownership of the service, to be able to perhaps provide the necessary resources to increase the efficiency of the system, and to insure the sustainability and viability of a Livestock Market Information System. Some limited donor support and technical assistance might

be needed in the initial phases of the program. Willingness on the part of the government to support LMIS at the policy level is crucial to the success and sustainability of a National LMIS. Concerted efforts should be made to design a simple but useful system that could be managed within the regular budget allocations of the government agencies that have the mandate for operating the system.

**Implementation of a policy framework.** It is apparent from the assessment that issues of livestock market information cut across many programs and institutions. As such, it is evident that no single institution can be self-sufficient in handling the whole system by itself. However, a single institution needs to be identified as the lead organization for the overall coordination of the LMIS program at all levels. A clear national policy framework is a prerequisite to facilitate harmonization, cooperation and coordination among the various organizations. The policy framework is necessary to maximize mutual benefits and reduce unnecessary duplication of efforts for the implementation of a holistic and coherent program.

**Institutional framework for the implementation of national livestock market information.** New regional agricultural marketing agencies are emerging in most of the highland regions and seem to offer the potential to be the regional homes for the livestock information system. The Agricultural Input and Marketing agency promises to be the ideal coordinator at the federal level. They need to set up steering and technical committees composed of the major actors (agricultural and rural development, trade and industry bureaus, radio networks, etc.) to coordinate and to avoid duplication of efforts and resources.

**Capacity building.** Significant efforts should be made to enhance the institutional capacity of the “woredas,” both in terms of human development and equipment, and to ensure collection and delivery of information on a timely basis to all market participants. Careful recruitment and appropriate training will be needed to build a strong technical team. These staff should be given the task of market monitoring as their priority. The promotion of training and capacity building for local stakeholders, particularly major managers and practitioners of LMIS is crucial. Management and technical committees representing these stakeholders with expertise and perspectives from both the public and private sectors will need to be set up to promote a transparent image and instill team commitment.

**Standardization of LMIS.** A National LMIS requires standardization of, at the very least, data-formats to allow easy comparison of prices. There is a real and expressed need to standardize the livestock market data collection in the country to allow for comparability among various regions. It would be prudent to build on the experience

and the integrated format and design that came out of USAID Southern Tier Initiative of Ministry of Agriculture and Rural Development (MoARD) and LINKS projects.

**Scope of coverage.** The scope of the data collection activities in the highlands needs to be limited at the beginning to a small number of vital markets in each of the regions and expanded to other markets once a reliable system has been stabilized and as resources allow.

**Improving distribution and dissemination of livestock market information.** The impact of the Livestock Market Information System will ultimately be determined by the extent to which producers, livestock traders and policy makers utilize the information generated to aid their decision processes. Currently, dissemination appears to be the weakest link in the whole process of livestock market information. A proactive approach will be needed to improve targeted channeling of the LMIS. The challenge will be in finding ways to improve access of the market information by rural communities. The increasing coverage of the mobile-phone network, regional FM radio stations and the GovNet (formerly Woredanet) seem to hold promise to improve this situation. Traders are already ahead of the game in exploiting mobile telephone technology to keep them updated on both local and terminal markets.

**Enhanced use of Information Communication Technologies (ICTs).** The use of modern ICTs in LMIS is quicker and most cost effective in transferring information on a near real-time (i.e. Fax, Email, Internet and phone) basis. Using modern ICTs eliminates the chances of losing information, as it goes straight to the rightful inbox, web portal, fax machine or telephone as required, unlike the ordinary postal communication delivery system, which can easily result in information losses or misdirection and distortion. The amount of field and desk work required to produce livestock market information could be reduced through automation of data collection and processing and dissemination using a software/hardware architecture that makes use of the state-of-the-art telecommunication technologies.

## Further Reading

Jama , A., L. MacOpiyo, A. Ali, M. Gobena, and P. Dyke. 2006. "Rapid Assessment of Current Livestock Market Information Systems in the Highland Regions of Ethiopia." A USAID-Ethiopia/SPS-LMM (Sanitary & Phyto-sanitary Standards and Livestock & Meat Marketing) program report.

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The GL-CRSP Livestock Information Network and Knowledge System (LINKS) project developed from the GL-CRSP Livestock Early Warning System (LEWS) project established in 1997. The LEWS project developed and applied a suite of information communication technology to provide a regional decision-support framework for livestock early warning. The LINKS project is placing LEWS technology inside a broader livestock information and analysis system that is designed to improve livestock markets and trade, thereby enhancing the well-being of pastoralists in eastern Africa. The project was led by Dr. Jerry W. Stuth, Texas A&M University until his death in April 2006. The project is now led by Dr. Paul Dyke, Texas A&M University. Email: dyke@brc.tamus.edu.



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The Global Livestock CRSP is comprised of multidisciplinary, collaborative projects focused on human nutrition, economic growth, environment and policy related to animal agriculture and linked by a global theme of risk in a changing environment. The program is active in East and West Africa, Central Asia and Latin America.

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