



**ASSESSMENT OF AGRICULTURAL INFORMATION NEEDS IN  
AFRICAN, CARIBBEAN & PACIFIC (ACP) STATES**

**EASTERN AFRICA**

**Country Study: Ethiopia**

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**On behalf of the:**

**Technical Centre for Agricultural and Rural Cooperation (CTA)**

**Final Report**

**Project: 4-7-41-255-7/d**

**December 2008**

## Acknowledgements

I am indebted to Aklilu Woube and Solomon Tsega for assisting me in collecting institutional data and Ato Henok Tibebe for his assistance in collecting information for most of the Annexes.

## List of Acronyms

AAU	Addis Ababa University
ACP	African, Caribbean, and Pacific
ADLI	Agricultural Development-led-Industrialization
AGOA	African Growth and Opportunity Act
AGRIS	Agricultural Information System of Food and Agriculture of Organization of the United Nations
ARARI	Amhara Region Agricultural Research Institute
ASARECA	Association for Strengthening Agricultural Research in East and Central Africa
BPR	Business Process Reengineering
CBO	Civil Society Organization
CGIAR	Consultative Groups for International Agricultural Research
COMESA	Common Market for East and Southern Africa
CSA	Central Statistical Authority
CTA	Technical Centre for Agricultural and Rural Cooperation
EAAP	Ethiopian Association of Agricultural Professionals
EIAR	Ethiopia Institute Agricultural Research
EICTDA	Ethiopian Information and Communication Development Agency
ERTA	Ethiopian Radio and Television Agency
ESTA	Ethiopian Science and technology Agency
ETA	Ethiopian Telecommunications Agency
ETC	Ethiopian Telecommunications Corporation
FAO	Food and Agriculture of Organization of the United Nations
FARA	Forum on Agricultural Research for Africa
FDRE	Federal Democratic Republic of Ethiopia
GEF	Global Environment Facility
GMO	Genetically Modified Organism
GoE	Government of Ethiopia
ICM	Information and Communication Management
ICT	Information and Communication Technology
ICT4D	Information and Communication Technology for Development
ILRI	International Livestock Research Institute
IPGRI	International Institutions of Plant Genetic Resources
IPMS	Improving Production and Marketing Systems
JICA	Japan International Cooperation Agency
MDG	Millennium Development Goal
MIS	Management Information Systems
MOARD	Ministry of Agriculture and Rural Development
MoTI	Ministry of Trade and Industry
MOWRD	Ministry of Water Resources Development
na	not available

NBE	National Bank of Ethiopia
OARDB	Oromiya Agriculture and Rural Development Bureau
OARI	Oromiya Regional Agricultural Research Institute
PSCAP	Public Sector Capacity Building
QAS	Question and Answer Services
R&D	Research and Development
SARI	South Agricultural; Research Institute
SDI	Selective Dissemination of Information
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
WAICENT	World Agricultural Information Centre of Food and Agriculture of Organization of the United Nations

#### Exchange rate

1 birr = 0.0655 Euro  
 1 Euro = 14.3570 birr

Applicable on 24/09/2008  
 Source: NBE

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## **Executive Summary**

### **Introduction**

The Technical Centre for Agricultural and Rural Cooperation (CTA) was established in 1983 under the Lomé Convention between the ACP (African, Caribbean and Pacific) Group of States and the European Union Member States. Since 2000, it has operated within the framework of the ACP-EC Cotonou Agreement.

CTA's tasks are to develop and provide services that improve access to information for agricultural and rural development, and to strengthen the capacity of ACP countries to produce, acquire, exchange and utilise information in this area. CTA's programmes are organised around three principal activities: providing an increasing range and quantity of information products and services and enhancing awareness of relevant information sources; supporting the integrated use of appropriate communication channels and intensifying contacts and information exchange (particularly intra-ACP); and developing ACP capacity to generate and manage agricultural information and to formulate information and communication management (ICM) strategies, including those relevant to science and technology. These activities take account of methodological developments in cross-cutting issues (gender, youth, information & communication technologies – ICTs, and social capital), findings from impact assessments and evaluations of ongoing programmes as well as priority information themes for ACP agriculture.

Since 2003, CTA has been systematically conducting needs assessment studies across the Pacific, Caribbean and Africa regions – the regions it has been mandated to serve. These studies have been in direct response to calls for CTA, in various evaluations of its products, services and programmes, to be more strategic in its choice regarding the setting of its own agenda and reacting to demand. In putting together its Strategic Plan and Framework for Action 2001 – 2005, CTA took a pragmatic view and opted to develop a strategy combining the benefits of both approaches, whereby the need to address the expressed demands of its stakeholders and the potential long-term advantages of developing programmes that address future needs were combined.

The Centre's new strategic plan covering the 2007 – 2010 period places emphasis on: improving CTA's efficiency and increasing the Centre's outreach by addressing the major bottleneck of difficult or insufficient access to information in ACP countries; (ii) honing CTA's profile and further defining the niche where the Centre has a comparative advantage. Consequently, reaching more beneficiaries and further strengthening CTA's partnership networks is key as well as the thrust to make ICTs and ICM strategies more widely available.

### **Objective of the study**

The major objectives of this study are

- Provide an overview of the agricultural services existing in Ethiopia (information supply side in terms of their strength, weaknesses and opportunities for collaboration with CTA;

- Identify agricultural information and ICM capacity building needs of key actors/ key strategic partners for CTA products and services;
- Identify potential partners for CTA activities and services (paying special attention to, for example, print media, editors, radio, TV, and journalist networks);
- Develop some baseline data on the status of ICM and ICTs in the country to facilitate subsequent monitoring and upgrading activities

## **Methodology**

According to the information gathered from briefing in Uganda by CTA, the following methodologies were employed: a desk study was conducted to capture data and information on the general agricultural and socio-economic profile, media and telecommunications, and institutions involved in agriculture and rural development in Ethiopia. Seventeen institutions were visited to conduct interviews, using a standard semi-structured questionnaire, with key personnel involved in ICM activities. Participatory appraisal, methods were employed as needed. When appropriate ICM staff was absent, telephone and e-mail communications were used to gather information. A total of 34 key personnel involved in ICM and related activities, and top-level managers were interviewed. Data was captured on ICM operations, resources, sources, needs, impacts, constraints, as well as success stories.

## **Expected results**

The expected results of the study are as follow:

- status of infrastructure, information services and ICM capacity of institutions involved in Ethiopian agriculture and rural development described and analysed;
- information and capacity-building needs in the area of ICM identified for key institutions in the country and potential CTA partners involved in agriculture and rural development;
- baseline data on the status of ICM and ICT in agriculture and rural development of Ethiopia compiled for monitoring purposes and improved outreach

The study should therefore also provide updated country profiles on the status agricultural information services, the status of ICM/T in the country, which will allow CTA to make informed decisions re type and mode of intervention as well as partner selection.

## **Conclusions**

### **Information Needs**

It was noted that institutions visited in this study depend on different approaches to satisfy their information needs to better execute their work programmes. Institutions also differ in their preference for formats. The common approach, among others, is dependence on interpersonal communications, which are either formal or informal. The formal ones are usually conducted during meetings such as workshops, conferences, seminars, and trainings. This necessitates devising a mechanism to

strengthening the linkages among agricultural research and development institutions as well as exposing personnel to regional and international forums.

The growing trend of using web technologies for accessing and managing information resources has been featured among institutions. This has the potential to exploit resources from a number of information centres both locally and internationally such as from CTA, FAO, World Bank, and CGIAR online resources.

One of the major observations noted among institutions is the lack of understanding the needs of their clients. This has created a major gap on the kind of available and accessible information.

One of the other observations is with the policy of FAO to download statistical information for research and educational purposes and poor countries like Ethiopia is very prohibitive.

### **Capacity-building Needs**

The priority capacity building needs as stated by the institutions interviewed are presented as follows:

- Training in ICM and ICT
- ICM/ICT/ knowledge policy and strategy formulation and implementation
- Training in extension materials production especially multimedia production
- Establishing stakeholders and partners forums
- Establishing stakeholders and partners forums at national, regional and international levels
- Training materials development
- Training in ICM and ICT
- Training in extension materials production especially multimedia production
- Training on innovative learning processes
- Establishing stakeholders and partners forums
- Training in ICM and ICT
- Strengthening in acquiring broadcasting equipment particularly for FM community radio stations
- Training in agricultural and rural development communication for journalists and reporters

### **Overview of CTA's Products and Services**

QAS was among the most referred services cited by some institutions that already have access to it either through EIAR, which is the national QAS service provider or from CTA. Therefore, the service should be realigned in a centralized way so that institutions and their clients could benefit from the knowledge resources available in various institutions as well as individually.

The publications especially production guidelines for a number of agricultural activities were very much appreciated by those institutions that have an extension role in their mandate.

### **Potential Partners and Beneficiaries**

The major producer of scientific, technical, and non-technical information and knowledge resources on Ethiopian agriculture and rural development is EIAR. A number of information materials are also produced by the MOARD, regional states agricultural and rural development bureaus, higher learning institutions with agricultural and rural development interest and responsibility, regional state

agricultural research institutions, NGOs such as Agri-Service Ethiopia working with farmers and pastoralists, and agro-pastoralists. Each of them could be a partner of CTA in their own right.

The EICTDA is the institution responsible to enhance the ICM capacity of mainly governmental institutions. Though institutions interviewed mentioned a little about information and knowledge policies and strategies as constraints, there is a larger need to handle capacity building activities like training in ICT/ICM and dealing with formulating institutions information and knowledge policies and strategies. This Agency could be an appropriate partner for CTA.

The Faculty of Journalism and Communications of Addis Ababa University is also a potential partner for undergraduate, postgraduate, and short-term training in development communications. The Faculty has also the capacity to take care of development communication trainings for the eastern Africa ACP countries.

EIAR is one of the institutions that has the most qualified and experienced staff in agriculture and rural development. Stakeholders and clients should be able to use tap such massive resource judiciously. CTA has identified the institution as a national QAS centre, therefore, the partnership of CTA and EIAR should be strengthened and the QAS should be able to render services in a very robust manner.

It was also noted by a number of institutions that they have good partnership with international organizations such as FAO, UNESCO and UNDP. They also noted that the focus of partnership with such institutions is mainly development or research-oriented with some interventions in ICM. They also suggested that CTA might be able to identify such gaps, form partnership with the organizations, and enhance the capacity of institutions.

As one of the problems identified by institutions surveyed, obtaining statistical information from CSA and other international organization such as FAO is difficult. From the local institution like CSA, the problem is more of a bureaucratic one, which could be improved by introducing appropriate policies and strategies. Therefore, CSA could be a potential partner for CTA to work with and avail relevant agricultural and rural development statistical data to users.

By way of co-publishing agricultural and rural development publications relevant to Ethiopia, CTA can arrange partnership mechanisms with EIAR, which is well experienced in agricultural publishing.

From a different observation, other than this study, all universities and agricultural technical and vocational education and training centres, in addition to training agricultural experts and technicians, are supporting agricultural and rural development endeavours of the country in a number of ways. Therefore, CTA could use the extensive availability of these institutions to expand its intervention activities to the development of Ethiopian agriculture.

## **Recommendations**

### **Information needs**

To satisfy their information needs, reduce the difficulty of acquiring resources such as newsletters, summaries, full documents, leaflets, video tapes, CDs, DVDs, TV and radio programmes, and fact sheets and better execute their work programmes institutions should be able to devise a mechanisms to strengthen the linkages among agricultural research and development institutions as well as exposing personnel to regional and international forums. Also they should be able to spread their efforts to make partnership with CTA

The Institutions should be able to tackle the problem of acquiring certain information like farm problems, social development, gender issues, crop varieties, market data, and management of information through partnership interventions with institutions such as CTA and local institutions which have profound resources

MOARD should be able to train extension agents and small-scale farmers and encourage them to use them for their comparative advantages especially for weather/ climate and market information.

### **Capacity –building needs**

In this study, it was realised that institutions are mostly constrained by the lack of trained and skilled personnel to handle their ICM activities. The suggestion of respondents referred on the need to improve the working conditions for their staff by way of improving the remuneration schemes by government arrangements.

The other suggestion was arranging skills upgrading trainings in conjunction with international institutions such as CTA, FAO, UNESCO and CGIAR research centres and local training institutions so that the attrition rate would be minimised.

The EICTDA in partnership with international institutions like CTA should work together so that institutions would be able to formulate their internal information and knowledge policies and strategies.

Training on basic ICM can help meet some of the institutional capacity needs identified in the study. In this connection, Institutions should make linkages with capable local institutions to acquire the trainings; while at the same time CTA help address such requests by organizing training of trainers' sessions at national or sub regional levels.

### **CTA's products and services**

As QAS was the most referred services cited by some institutions that already have access to it either through EIAR, the service should be realigned in a centralized way so that institutions and their clients could benefit from the knowledge resources available in various institutions as well as individually.

The publications of CTA, especially production guidelines for a number of agricultural activities are very much appreciated by those institutions that have an extension role

in their mandate. Therefore, CTA should produce and distribute these publications widely; while local institutions should participate with the activities of CTA

### **Potential partners and beneficiaries**

One of the critical observations in this study was that institutions have different degree of development in their ICM activities. The difference ranged from being nominal information and knowledge provider to the more resourceful ones. Therefore, CTA, as partner of these institutions, can intervene by way of capacity-building venture.

Several institutions noted that the focus of partnership with organizations such as FAO, UNESCO and UNDP mostly is development or research oriented with some interventions in ICM. It is, therefore, recommended that CTA should work on identifying ways and means to form inter-institutional partnership with such organizations when they work in isolation for a similar case in the country.

It is also recommended that CTA shall work by way of mediation with FAO so that FAO could deregulate the policy for downloading statistical information for research and educational purposes and poor countries for a little or no cost.

The EICTDA and FJC are the major training and skill-upgrading institutions in Ethiopia, therefore CTA should be able to form a strong partnership for materializing its intervention strategies.

The EIAR and MOARD are the major research and extension actors in the country. Therefore, CTA should be able to forge a strong partnership in terms of improving the information needs of researchers and ICT/ICM capacities of extension agents.

As regards to the use of media for reaching the society at large, working with ETRA is colossal, because it is owned by the government and it is free especially for public and community based institutions

## 1. INTRODUCTION

1. The Technical Centre for Agricultural and Rural Cooperation (CTA) has envisaged that by 2010 its technical and financial support for capacity building will have enabled an increased number of African, Caribbean, and Pacific (ACP) regional, national, and local networks and organizations to benefit from its products and services.
2. CTA will continue to build on its achievements and pursue the two operational objectives of improving the availability of relevant, adequate, timely and well adapted information on priority topics for ACP agricultural and rural development, and improving the information and communication management (ICM) capacity of ACP agricultural and rural development organizations.
3. CTA has been systematically conducting needs assessment studies of ACP countries with the aim to create better-targeted interventions for potential partners and beneficiaries including women, youth, private sector, and civil society organisations (CSO).
4. The current needs assessment study is believed to maximise the benefit of CTA's interventions for eastern Africa countries by ensuring the systematic application of its corporate strategies emphasizing on the new ICM services; that will involve the use of ICTs and strategic partnership arrangements.
5. The major objectives of this study are to identify potential and strategic partners for CTA to work with and to improve availability and effectiveness of ICM services to beneficiaries in Ethiopia.
6. In this study, 17 institutions/ organizations were visited (Annex 3.2) to conduct interviews using a standard semi-structured questionnaire, with key personnel involved in ICM activities (n= 34) (Annex 3.1). Participatory appraisal methods were employed as needed. When appropriate ICM staff was absent, telephone and e-mail communications were used to gather information.

## 2. COUNTRY PROFILE

7. The Federal Democratic Republic of Ethiopia (FDRE) is located in the horn of Africa neighbouring Eritrea in the north, the Sudan in the west, Kenya in the south, Somalia southeast and east, and Djibouti in the east. The country is landlocked and has a land area of 1.12 million km<sup>2</sup>. The elevations range from 112 m below sea levels in the Denakil depression of the Afar Region to more than 4,600 m above sea levels in Mount Ras Dashen. The country is endowed with huge water resources of rivers, lakes, and underground water. The livestock population is one of the largest in Africa. The existence of a wide range of flora and fauna and historical heritages makes it one of the preferred destinations for tourists.
8. Ethiopia is divided into 18 major agro-ecological zones and 49 sub-agro-ecological zones. Nearly one-third of this country's land area belongs to hot to warm arid lowland plains, with hot to warm moist lowlands, hot to warm sub-moist lowlands and tepid to cool moist mid-highlands accounting for approximately 13.1%, 11.7%, and 11.2%, respectively. It can be seen that nearly 68% of Ethiopia is in the lowlands category whereas the mid-highlands and the sub-afro-alpine and afro-alpine zones account for about 30% and less than 2%, respectively (EIAR, 2007)
9. Ethiopia's economy is heavily dependent on the agricultural sector, which accounts for about 40% of national GDP, 90% of exports, 85 percent of employment, and 90% of the poor. The Country is largely an agrarian nation with majority of the population involved in agricultural, pastoral, and agro-pastoral activities. Over 60% of the country's foreign income and about 80% of domestic production are generated by these sectors. Smallholding and subsistence agriculture is the main engagement of the people. However, to date, large-scale commercial farms are operational in several regions. Recently however, the national economy is moving from being primarily agriculture-based towards more reliance on manufacturing, construction, and service sectors. As a result, there is a steady annual growth rate in the economy of the country, which makes Ethiopia one of the best performing countries in sub-Saharan Africa. However, income disparities among the population groups are still pronounced. The economic policies of the government and democratisation since the early 1990s have made advances in reducing poverty and empowering the disadvantaged sectors of the rural communities by widening access to social and economical services and infrastructure.
10. The total population of Ethiopia in 2007 was about 77 million, of which 53% are below the age of 20 and 4.5% older than 60 years (Annex 2.2.1). Furthermore, 16.5% of the population is urban while the remaining 83.5% lives in rural areas. A slight but continued decline in the proportion of rural inhabitants who are migrating to urban areas in search of alternative income from the increased urbanisation schemes in different regions, has been observed (CSA, 2007).

11. Ethiopia has a parliamentary form of government with a federal government and decentralised regional governments within 9 regional states (Tigray, Afar, Amhara, Oromiya, Somali, Benshangul-Gumuz, Gambella, Harari and Southern Nations, Nationalities and Peoples) delimited based on settlement patterns, language, identity and the consent of the people and 2 city-states (Addis Ababa and Dire Dawa).
12. There are over 80 languages and several ethnic groups (nationals, nationalities and peoples) in Ethiopia. Every nation and nationality has a constitutional right to use and develop its language. However, Amharic is the working language of the Federal Government. English is the common language for science, education, and many other formal activities.

## **2.1. Agriculture, Fisheries, Forestry, and Livestock**

### **2.1.1. Agriculture**

13. This country possesses a wide range of agro-ecological diversity and therefore produces a wide array of crops and animals. Major crops include cereals, roots and tubers, pulses, oilseeds, vegetables, fruits and cash crops such as coffee, cotton, tea, sugarcane, and tobacco. In addition, Ethiopia has large areas where many other high value crops such as black pepper, ginger, cardamom, cumin, and fenugreek could be grown, but this potential has not been fully utilized. This country ranks among the highest in Africa in its livestock resources. Cattle, sheep, goats, chickens, camels and honeybee are the major livestock species. The country also has rich water bodies and huge aquatic resources associated with them.
14. Close to 31 million ha of the total area of Ethiopia (1.12 million km<sup>2</sup>) is agricultural land but an average of approximately 10 million ha of this potential agricultural area is cultivated annually. Agriculture is the most important enterprise, providing employment for more than 83.5 percent of the country's population and accounting for more than 40 percent of the total GDP and 90 percent of export earnings (MoFED, 2006).
15. In accordance with the UN Millennium Development Goals, the Government of Ethiopia is committed to achieving food security and reducing poverty by 50 percent by the year 2015. Ethiopia's chances of success in this endeavour are largely dependent on its agricultural development. There is a sense of urgency for agricultural research and development (R&D) to make impact on solving hunger, poverty and natural resource degradation and to reduce dependency on aid. There is high pressure and expectations for the agricultural R&D to deliver, perhaps even above the system's current capabilities. The system needs to move quickly to a new working model. This needs a paradigm shift from a passive to a proactive culture, attitudinal change, and improved incentive systems.

16. The Ministry of Agriculture and Rural Development (MOARD) through its various institutions, agencies and departments is the primary government body responsible for directing, structuring and regulating the agricultural sector at federal level in Ethiopia. However, at the level of regional governments, the Bureau of Agriculture and Rural Development, in each region, is responsible to direct and support the sector. The core issues outlined in the 'Agricultural Policy, Strategy and Guideline' developed by the Government of Federal Democratic Republic of Ethiopia (FDRE) aimed to develop the country's economy through agricultural-led-industrialization strategy. For this, a 5-year plan is being executed and positive changes in the economy of the country are being witnessed, whereby agriculture is growing at a rate of 13% for the past four years.
17. The Ethiopia Institute Agricultural Research (EIAR) is the national body responsible for coordinating agricultural research in Ethiopia. EIAR is also charged with the responsibility of providing improved agricultural technologies that would enhance productivity and quality of crops, livestock, forestry and natural resources. Regional research institutions and some universities are also conducting research to serve the local needs of farmers, agro-pastoralists and pastoralists. Almost all universities are providing tertiary level and post-graduate training in agriculture and related disciplines; while agricultural technical and vocational colleges are providing diploma level training courses in each regional state.
18. There are several farmers' cooperatives, unions and agribusinesses that supply inputs and promote the interests of their members. Numerous NGOs also work closely with farmers or are involved in rural, pastoralist development, and extension activities.
19. The major structural transformation in Ethiopian agriculture in the last decade has been the deregulation of markets. This has had a net positive effect on the livelihood of small-scale farmers and has strengthened commercial agriculture in the country.

### **2.1.2. Fisheries**

20. There are over 200 species of fish are known to occur in lakes, rivers and reservoirs In Ethiopia. The fisheries in the rift valley lakes and Lake Tana have become a dynamically developing sector of the food industry, employing well over 3, 000 fisher folks. The increase in the number of fishermen has been tremendous in some lakes such as Langano, while a corresponding decline of is seen in others, such as Lake Chamo. Many traders and fishermen have strived to take advantage of the new opportunity by investing in modern fishing and transportation in response to EU- supported Lake Fisheries Development Project (LFDP). Clear signs of over-exploitation of important fish stocks, modifications of ecosystems, significant economic losses, and management conflicts threatened the long-term sustainability of fisheries and the contribution of fisheries to food supply (EARO, 2000).The estimated average national per capita fish consumption is currently at 0.140 kg per year, an increase of 20%

over the last four years. At Addis Ababa, the figure is about 1 kg per year, or about ten times the national average, while in towns located in production areas (Bahir Dar, Zewai, Arba Minch, Awassa, Gambella) per capita fish consumption is estimated at 10 kg per year, or about hundred times the national average (EARO, 2000).

21. The major fishery and aquaculture R&D and training bodies are EIAR, Oromiya Regional Agricultural Research Institute (OARI), Amhara Region Agricultural Research Institute (ARARI), South Agricultural Research Institute (SARI) Bahirdar University, Hawassa University, and Addis Ababa University.
22. MOARD is the primary government body responsible for directing, structuring and regulating the fishery sub-sector at federal level in Ethiopia. However, at regional governments' level, the bureaus of agriculture and rural development, in each region, is responsible to direct and support the sector.

### **2.1.3 Forestry**

23. Plantation and natural forest cover of Ethiopia is estimated to be about 3% of the total landmass of the country. Wood and non-wood products and firewood are the major products of the sector. There are several small-scale timber-producing farmers. The forestry sector is contributing to the livelihood of a number of people. Nearly 2 % of the populations is believed to be involved in forest production and conservation of natural forests. However, its contribution to the GDP is not documented yet. To date the country does not export forest products
24. The major forestry R&D and training bodies are EIAR, all regional agricultural research institutes, most of the universities. There are some NGOs that are involved in community forestry and agro-forestry development projects.

### **2.1.4. Livestock and Pastoralism**

25. Ethiopia ranks among the highest in Africa in its livestock resources. Cattle (43 million), sheep (23.6 million), goats (18.5 million), chickens (34.2 million), camels (0.62 million), horses (1.6 million), donkeys (4.5 million), and beehives (4.9 million) are the major species (CSA, 2006). In recent years, modern dairy farms, abattoirs, milk processing industries, and tanneries are flourishing in different parts of the country. The leather industry is the most advanced one in Africa for its processed and semi-processed leather products, for both local and international markets, (FAO, 2006).
26. Despite its high agricultural, Ethiopia has faced food deficits over the last several decades. While cash crops such as coffee showed sustained yield increases over the years, it has not been possible to attain sustainable increased yields for food crops or livestock. The low livestock productivity reported for national averages is in sharp contrast to what could be achieved on

farmers' fields where improved livestock breeds and production technologies have been adopted.

27. Pastoralism in Ethiopia has its own mode of development over many centuries administered and is through a number of traditional institutions which fashion the social, economic, and political dimension of the pastoral development. These traditional institutions have also facilitated the ownership, management and sharing of resources, conflict resolution, the redistribution of wealth and made provisions for governance.

## **2.2. Brief Description of the Status of ICT Infrastructure and Resent Developments**

28. The Government of Ethiopia (GoE) has taken bold measures to harness the benefits of ICTs aimed at transforming the economy from an agricultural-based to a knowledge based economy, and to fully participate in the modern Internet-based global economy. One of the measures taken by the GoE is the establishment of Ethiopian Information and Communication Technology Development Agency (EICTDA). EICTDA has now formulated a national ICT development policy and strategy and heavily engaged in implementing the strategy. Also ongoing are the implementation of key national sector like health, courts, high schools, and agricultural research based ICT projects and initiatives. To date, the key ICT development infrastructures are Weredanet (district level networks), Schoolnet, Healthnet, Agrinet, ETC backbone, Radio and TV. These key infrastructures are well served by the technologies of telecommunication using DSL, terrestrial lines, and satellite apparatus.
29. As part of the national ICT development strategy, the telecommunication industry of Ethiopia is growing very fast to cover the vast geographical areas in order to support the national economic development drive. The Ethiopian Telecommunications Corporation (ETC) has invested heavily in network infrastructure in recent years and provides up-to-date data on connectivity nationwide.
30. ETC is a public enterprise whose principal duty is to maintain and expand telecommunication services to the country in accordance with Proclamation 49/1996, and provide domestic and international telecommunication services (Annex 2.3.2) under the supervision of Ethiopian Telecommunications Agency (ETA).
31. Internet is expanding across the entire country and those persons whom are computer literate are able to access the technology. For instance, as of 2003, education at high schools is based entirely on on-line systems. At university level, there is a growing trend of postgraduate training by remote schooling using video conferencing. The use of video conferencing in mobilizing farmers, pastoralists, rural development agents, and local administrators has become the order of the day in the country.

### **3. STATUS OF INFORMATION AND COMMUNICATIONS FOR AGRICULTURE AND RURAL DEVELOPMENT**

#### **3.1. Institutional and Regulatory Policy Framework**

36. Like most media activities, agricultural and rural development Information and communication by either print or electronic media is not restricted by any kind of government legislation or policies in Ethiopia. Newspapers and magazines are published and owned by both government and private companies. Because of the Press Law of Ethiopia, the government does not control the content and concepts expressed in such publications.
38. The Broadcast Agency of Ethiopia regulates the broadcast media (radio and television). Similarly, the Ethiopian Telecommunications Agency (ETA) regulates telecommunication. The regulatory activity is aims to promote a broader communication of agricultural and rural development information and to provide affordable telephone (both fixed and mobile) and Internet services as well as non-IP services such as radio and television.
39. The strategic programme of agricultural-led-industrialization and the current economic growth record have motivated the institutions visited to do their best to share agricultural and rural development information and scale up their outreach activities in unaddressed and disadvantaged areas.
40. The institutions surveyed did not claim any specific legislation that inhibits their efficiency of reaching their audiences to meet their information requirements. However, a few noted that there are certain inefficiencies by some government offices by way of getting sufficient information on time. Some persons also noted that extension agents are not properly trained or lack the experience to share their ICM knowledge with farmers; thus, impeding the rapid development of ICM at grassroots level.
41. The government has a specific ICT development policy, which is mandated to the EICTDA. EICTDA has formulated an ICT development strategy aimed at identifying specific levels and types of interventions, which afford the greatest opportunity to achieve the high-level information and knowledge society/ economy goals in the national ICT policy; and lending ICT enabled support to targeted development initiatives such as the agricultural development-led-industrialization (ADLI) policy.
42. Most of the institutions visited are not aware of the existing national ICT development strategy. In addition, none of them has their own functional ICT strategies. However, there is a tendency of copying some institutions that have institutional strategies to develop and expand their ICM activities within their domain. No interviewed persons claimed that the absence of an institutional strategy is affecting their activities towards developing a functional and sustainable agricultural and rural development related ICM. However, a few

claimed that there is management inefficiency in their own institutions to support the development of ICM. Some interviewees have also suggested that for subsequent development and sustainability, there is a felt need to have a comprehensive institutional ICM strategy and workable plans.

## **3.2. Operational Aspects**

### **3.2.1 Description of Agricultural Information and Services**

43. EIAR is major producer of scientific, technical, and non-technical information and knowledge resources on Ethiopian agriculture and rural development. However, a number of information materials are produced by MOARD, regional states agricultural and rural development bureaus, higher learning institutions, regional state agricultural research institutions, NGOs working with farmers and pastoralists, CSA and professional societies. EIAR maintains collections of publications produced by such institutions and serves as the nation's repository for agriculture and rural development information and knowledge resources. All literature with content of Ethiopian agriculture and rural development are processed using International Information Systems for Agricultural Science and Technology (AGRIS) database and input to World Agricultural Information Center (WAICENT) to be part of the global resources. In addition, the National Archives and Library of Ethiopia also acquire such publications, preserve, and make it accessible to users.

### **3.2.2. Information Sources**

45. In every institution, it is customary to see a library and documentation centre/unit, which are accessible internally and open to the public in most cases. The most common sources found in the centres are presented in Table 3.2.3.1

### **3.2.3. Information Products and Services**

46. Printed and electronic copies of research findings, study reports, survey results, consultancy reports, etc, are available in all library/documentation centres. However, institutions such as the EIAR, IBC, and CSA also render agricultural information services online.
47. Proceedings, research reports, technical manuals, production guidelines, newsletter, bulletins, magazines, and leaflets are published in Amharic and English and are common in 64% of the institutions visited. Certain publications, mostly mass circulating types like leaflets and brochures, are also produced in Oromiffa, Tigrigna, Somali, and other local languages. Largely professional associations publish agricultural scientific journals. Information products and services of the institutions are presented in Table 3.2.3.1.

Table 3.2.3.1: Information products and services produced by institutions

Products and services	Institutions Producing	Count
<b>Print materials</b>		
• Newsletters	MOARD, EIAR, ESE, EMSA, EPA, IBC, OARI, ARARI, OARDB, ASE, EDRI	11
• Leaflets	MOARD, EIAR, ESE, ARARI, OARI, ASE, EIIPD, EPA	8
• Booklets	MOARD, EIAR, ESE, ARARI, OARI, ASE, EIIPD, EPA	8
• Brochures	MOARD, EIAR,	2
• Manuals	EIAR	1
• Posters	MOARD, EIAR, ESE, EMSA, EPA, IBC, OARI, ARARI, OARDB, ASE, EDRI, NALA	12
• Proceedings	EIAR, IBC, EMSA	3
• Progress reports	EIAR, ARARI, ORARI	3
• Research papers	EIAR, ARARI, ORARI	3
• Calendars	ESE	1
• Bulletins	EIAR, EMSA	2
• Strategic plan	MOARD, EIAR, ESE, EMSA, EPA, IBC, OARI, ARARI, OARDB, ASE, EDRI, NALA, EICTDA, EIIPD, FJC	15
• Journal	-	-
• Magazines	MOARD	1
<b>Electronic</b>		
• Radio programmes	MOARD, EMSA	2
• TV programmes	EMSA	1
• Video episodes	MOAR, EIAR	6
• Websites	EIAR, IBC, EPA, MOARD, EICTDA, EMSA, ARARI, EDRI, ASE	9
• Database	EIAR, IBC, EMSA	3
<b>Others</b>		
• Extension services	MOARD, OARDB, ASE, EIAR, ARARI, OARI	6
• Training materials	EIAR, MOARD, FJC	3
• Agricultural shows/exhibitions	MOARD, ARARI, OARI, OARDB, EIAR, ESE	6
• Campaigns	MOARD	1
• Meeting with beneficiaries	MOARD, ARARI, OARI, OARDB, EIAR, ESE, NALA,	7
• Dialogues	MOARD, EIAR, ESE, EMSA, EPA, IBC, OARI, ARARI, OARDB, ASE, EDRI, NALA	12
• Seminars/workshops	MOARD, EIAR, ESE, EMSA, EPA, IBC, OARI, ARARI, OARDB, ASE, EDRI, NALA, ERTA	13
• Exchange visits	EIAR	1
• Library	MOARD, EIAR, ESE, EMSA, EPA, IBC, OARI, ARARI, OARDB, ASE, EDRI, NALA, ERTA, FJC, ShegerFM,	16
• Press conferences	ERTA, ShegerFM	2

Source: Survey data

48. As one of its strategic activities, EIAR also provides Q&A services using different kinds of approach in collaboration with CTA. The most common ones are provision of relevant publications and answering questions using individual professionals face-to-face, telephone conversations, faxes, e-mail, or using mass media (radio, TV and the press). Users of this service are farmers, students, development agents, cooperatives, unions, local administrators, policymakers, educators/ trainers, researchers and the public at large. The

most important challenge in providing this service is getting the appropriate knowledge expert to deal with answers expected by requesters.

49. Sharing electronic documents internally through the Local Area network (LAN) is becoming a common practice in the majority of agricultural and related institutions. Some institutions such as EIAR are also using WAN to share information resources mainly electronic journals (LANTEEAL). Access to Global Online Research in Agriculture (AGORA) also gives access to major journals in agriculture and related biological, environmental, and social sciences offered by the leading academic publishers.
50. Web technologies are playing a significant role in information and knowledge sharing within the Ethiopian context. Most of the institutions surveyed (78.9 %) have websites hosted by ETC. In this regard, it was also noted that the majority of the institutions' websites are static and dedicated to describing their profile. Only 26.3% have portal-type sites with downloadable resources. The MOARD has also launched its portal very recently.
51. As a state-owned institution, the Ethiopian Television and Radio Agency has become instrumental in development activities. This is evidenced in their mission statement which states, "Prepare and present to the public radio and television major and current events taking place within the country and abroad, as well as educational and recreational programmes in accordance with media, press and other relevant policies and laws." The agency has a wide coverage of transmitting agricultural, rural, and pastoral information even beyond the nation. For example, the radio agriculture programme and the economy programme of ETV can be mentioned.

#### **3.2.4. Information and Communication Management Capacity**

52. The level of ICM capacity among the surveyed institutions varies widely. In terms of number of ICM staff, only 5.2% have more than 15 staff, 10.5% have 10-15 staff, 26.3% have 5-10 staff and 57.9% have less than 5 ICM staff. The experience and qualification of ICM staff also varies. ICM staff composition of the studied institutions showed that 6.1% have a Masters degree, 30.6% a Bachelors degree, 43.9% have diploma and 19.4% are high school dropouts. It was also noted that 86.7% of the staff have relevant ICM training background with short-term training opportunities. However, almost every person contacted for interview suggested the need more training opportunities in ICM.
53. Only 31% of the institutions have an ICM unit while the remainder stated the existence of a library service only. Only EIAR mentioned the existence of an ICM strategy and the majority of the other institutions surveyed stated there is no separate strategy but rather an one within their institutions. No institution claimed the existence of a knowledge management policy or plan.
54. The most readily available resource in each institution are personal computers and associated devices such as printers. However, about 79% have LAN and the rest do not have any computer networks of any kind. Among those who claimed to have LAN, 26.7% declared that they own WAN and web-based ICT.

55. The only complaint with regard to the impact of government's ICT/ICM policy is the lack of awareness regarding budget utilization and the acquisition of ICTs using government funds. Moreover, the lack of experienced human resources was identified as the sole bottleneck for the sustainability of ICM in almost all institutions surveyed.
56. Concerning the budget, 31.6% of all institutions surveyed claimed to have a separate budget for ICM, 57.9% stated that there is no specific budget for ICM, but obtain their budget from the core budget of their institutions. The remaining 10.5% revealed that they generate income for their ICM activities. The latter are all media institutions that depend on the sale of airtime and advertisement fees.
57. The availability of information resources or content also varies from institution to institution. The main reason for this discrepancy is the objective or mission statements of the institutions. The most diverse resources were observed from research institutions such as IBC and EIAR. However, specific content, for example, meteorological information, statistical data, environmental and biodiversity information could be obtained from them. The study also indicated that some institutions (21%) require a formal way of delivering data and information to requesters. These institutions (all of them public entities) ask for a formal communication, i.e., producing a formal letter of request. Almost all the remaining institutions have an open door approach for their services; however, more than 80% of them do have certain restrictions for some of their services, which need the requester to appeal to a higher level of authority for permission.
58. It was also noted that it is very difficult to get already broadcast programmes from media agencies when asked by some institutions that need such programmes for training and study purposes. This kind of complaint has been stated by 36.8% of responding institutions. As a solution, some institutions suggested arranging a national agricultural and rural development ICM meeting with all stakeholders to iron out the difficulties. They also suggested the involvement of CTA in this regard.
59. As mentioned earlier, nearly 80% of the institutions have Internet access at the institutional level. However, all respondents are able to have Internet access from other private service providers in their localities. The most frequent complaint identified in this study was the low speed of access to the Internet even in large cities like Addis Ababa.
60. The other most important grievance of responding institutions was inaccessibility of most full text agricultural and related documents held elsewhere, because of a lack of funds for downloading. When asked availability of some freely available resources such as AGORA and LANTEEAL only 31.6% know about their existence and are benefiting from such services, while the remainder are not aware of them. Even those who are exploiting AGORA and LANTEEAL still complain the unavailability of a number of journals in them.
61. With regard to online statistical data from FAO, only 10-15% knew of their existence and only very few staff of those institutions interviewed had access to

it because of limited funding. On the other hand, data from CSA is very much used by almost all responding institutions.

#### **3.2.4. Interventions Supporting Information and Communication for Agricultural and Rural Development**

62. According to EICTDA's report (EICTDA. 2008), as part of the national ICT development strategy, the telecommunication industry of Ethiopia is growing very fast to cover the vast geographical areas to support the national economic development drive. The ETC has invested heavily in network infrastructure in recent years and provided up-to-date data on connectivity nationwide. As per its commitment to enhance development through ICT, ETC is currently engaged in numerous projects to upgrade capacity throughout the country. As a result, telecommunication technologies are now finding their niches in all corners of the country. This endeavour has largely supported the various public sector capacity-building programmes.
63. In Ethiopia, to date, the key ICT development infrastructures are Weredanet (district level networks), Schoolnet, Healthnet, Agrinet, ETC backbone, Radio and TV. These key infrastructures are well served by the technologies of telecommunication using DSL, terrestrial lines, and satellite apparatuses.
64. Through the AGRInet infrastructure, over 50 agricultural research centres and institutions have broadband and satellite connectivity. As to the Weredanet, over 600 district level agriculture and rural development offices are interconnected for delivering services such as voice over IP telephones, web services, messaging and video conferencing. This development also aims to narrow the divide between rural and urban areas by serving the lowest level of government.
65. Through Schoolnet, all high schools in the country (over 700) are taking the opportunity to teach students on-line. Higher learning institutions (over 22 government universities) are also enjoying the telecommunication technologies. However, it should be noted that there are still certain drawbacks to maintain dependable services from the telecom sector. However, the ETC is taking fast and concrete corrective measures to address shortcomings.
66. The most noticeable lesson from such activities are that acquiring information from the nearest and most accessible place has become the order of the day in most institutions and by almost every individuals. Secondly, the role of telecommunication and ICTs is gaining more recognition by everyone irrespective of educational background.
67. The Ethiopian Government has established a new commodity exchange centre that is believed to improve agricultural commodities information services in the country.

## 4. INSTITUTIONAL NEEDS ANALYSIS (STRENGTHS, MAIN BOTTLENECKS/ SHORTCOMINGS)

### 4.1. Information needs

68. All institutions surveyed stated their requirement for a wide range of information to support the attainment of their goals also to better serve the requirement of their audiences. The list of institutions interviewed and their role and category are summarised in Table 4.1.1.

Table 4.1.1. Institutions interviewed

Institution	Type	Role
Ministry of Agriculture and Rural Development	GOV	EX, IN, PP, RG, TR
Ethiopian Meteorological Services Agency	GOV	IN, RD, TR
Environment Protection Agency	GOV	RG, IN
Institute of Biodiversity Conservation	GOV	IN, RD, TR
Ethiopian Seed Enterprise	TE	EX, IN, RD, TR
National Archives and Library Agency	GOV	IN, TR
Ethiopian Information and Communications Technology Development Agency	GOV	PP, RD, RG, TR
Oromiya of Agriculture and Rural Development Bureau	GOV, AS-E	EX, IN, RU
Ethiopian Institute of Agricultural Research	GOV	RD, IN, RU, EX
Oromiya Region Agricultural Research Institute	GOV	RD, IN, RU, EX
Amhara Region Agricultural Research Institute	GOV	RD, IN, RU, EX
Ethiopian Development Research Institute	GOV	RD, RG, PP
Ethiopian Television and Radio Agency	MED, GOV	IN
Sheger FM 102.1	MED, PRV	IN, TR
Faculty of Journalism and Communications, Addis Ababa University	EDU	IN, TR
Agri-Service Ethiopia	NGO	EX, IN, RD, TR
Ethiopian Institute for Peace and Development	NGO	PP, RG

Source: Survey data

69. Based on the operational complexities and the vast interest of their clients, development-oriented institutions such as MOARD, regional agricultural and rural development bureaus, and NGOs require different kinds of information ranging from technical, economic, rural development and training information. Research institutions on the other hand, require specific but a wide range of information encompassing a number of traditional as well as emerging disciplines such as biotechnology.
70. The information needs of responding institutions indicated that 26% require and satisfy their needs from local sources, and the remaining 74% have a mixed interest of both local and global sources. It was also understood that over 88% of the institutions rely on informal and formal contacts at institutional and individual levels particularly consultations and knowledge sharing moments. Institutions that are more involved in extension, marketing, and information

services have dominantly revealed this. Research institutions were found to be preferred partners because they provide well-organized sources of information such as publications and make available experts for knowledge sharing. In addition to training responsibilities, higher learning institutions were also identified as best repositories for expert knowledge.

71. About a quarter of responding institutions, complained about the difficulty acquiring resources such as newsletters, summaries, full documents, leaflets, video tapes, CDs, DVDs, TV and radio programmes, and fact sheets. The most difficult to obtain information formats are presented in Table 4.1.2

Table 4.1.2: Information formats difficult to obtain/access

Format	Institutions	No.
Journal articles	MOARD, EIAR, ESE, EMSA, EPA, IBC, OARI, ARARI, OARDB, ASE, EDRI,	11
Briefings/ summaries	MOARD, ERTA, Sheger FM, EPA, ASE	5
Abstracts	EIAR, ARARI, OARI, FJC, EPA, IBC, EDRI, EMSA	8
Statistical data	MOARD, EIAR, ARARI, OARI, FJC, EPA, IBC, ESE, ASE, EDRI, EMSA	11
Standards	MOARD, EPA, EIAR	3
Patents	EIAR	1
Material suitable for mass distribution	MOARD, OARDB	2
Material in appropriate languages	MOARD, EIAR, ARARI, OARI, EPA, IBC, ESE, ASE, EMSA, NALA	10
Others: Visual & pictorial posters	MOARD, OARDB, EPA, NALA	4

Source: Survey data

72. Many of the institutions interviewed expressed the value of marketing information (74%). It seems that most of them are expecting such information to be obtained at no cost. Similarly, the need for market information among the emerging small-scale commercial farmers and pastoralists is crucial.
73. Media institutions are very interested in having access to information products while development, research, and educational institutions prefer both information products and services. Certain FM radio stations, daily newspapers and local brokers are filling the gap on market information, but are not adequate and the majority of farmers and pastoralists still do not have the necessary facility to access the information and act based on it.
74. Lessons learned from this finding were that institutions should properly identify their information requirements for their purpose or on behalf of their clients by organizing regular stakeholders meetings. They also need to establish appropriate pathways of information exchange by monitoring the ICM capacities of each institution.

75. Most of the institutions are involved, in one way or another, in agriculture and rural development programmes or projects. Based on their interest they require various kinds of information and expert knowledge on issues related to farmers' circumstances such as farming systems, agro-ecologies, climate, livelihood, enterprise choices, demographic, socioeconomic, and conflicts on land and water use. As these institutions are working more closely with the farmers, pastoralists, and agro-pastoralists than ever before, they seek additional information to handle their programmes or project aimed at improving the livelihood system of farmers, pastoralists and agro-pastoralists. The most mentioned needs of responding institutions are presented in Table 4.2.3.
76. Target audiences addressed by different institutions also varied. Summary of the major ones is presented Table 4.1.3.

Table 4.1.3. Target audiences identified by institutions

Target audience	Frequency by type of institution					Total	Rank
	GOV	EDU	MED	NGO	TE		
Farmers	12	0	2	1	1	16	1
Pastoralists and agro-pastoralists	9	0	1	1	0	11	2
Technology multipliers	3	0	2	1	0	6	4
Educational institutions	3	1	2	0	0	6	4
Government and non government institutions	4	1	2	8	1	16	1
Agro-business	6	1	2	0	1	10	3
Agro-processors	3	0	2	0	1	6	4
Agricultural produce exporters	1	1	2	0	1	5	5
Women and youth	3	0	2	1	0	6	4

Source: Survey data

#### **4.2. Capacity building needs (IC policies and strategies, sensitization, networking, skills, training needs, media, ICT, equipment)**

77. All the institutions interviewed suggested some kind of capacity-building needs to better manage their ICM activities and render services to their clients sufficiently. Institutions identified a number of constraints to their activities. The most frequently mentioned constraints were shortage of funds and skilled workforce (Table 4.2.1).
78. Most institutions stated that it is not only shortage of funds, but also less priority given to ICM activities to have an earmarked budget. Mostly budget is allocated from the core budget of the institute when a pressing request is made by ICM staff or when the head of the institution has some budget to spare to undertake certain ICM activities.

79. It was also understood that in most institutions it is a matter of not having enough staff to handle the necessary ICM duties rather than shortage of skills among the existing staff. This implies a need for skills development training.
80. It was also understood that, the common cause attributed to the increasing attrition rate of skilled and experienced personnel was the lack consideration by the management to reclassify positions and be able to retain them in their posts.
81. Only very few institutions (16%) revealed that they are not limited by unavailability of ICTs to carry out their ICM activities. However, the majority of the institutions visited indicated that their staff do not have access to ICT resources. The constraints of ICT and ICM of the institutions are presented in Table 4.2.1.

Table 4.2.1. ICT and ICM constraints of institutions

Constraint	Mentioned by (no of institutions )
<b>Human resources</b>	
• Inadequate no of experienced/ skilled staff in ICM	14
• Inadequate no of experienced/ skilled staff in ICTs operation	16
• Inadequate no of experienced/ skilled staff in ICTs maintenance and trouble shooting	9
• Lack of skills in producing information materials such as leaflets, production guidelines, and posters	5
<b>Funding</b>	
• Insufficient budget to acquire ICTs	17
• Lack of budget to acquire information materials	13
• Lack of budget to train staff	7
• Inadequate budget to employ additional staff	4
• Uncertain future of funding	3
<b>Management/ technical</b>	
• Less priority for ICM	7
• Poor capacity of ICTs	13
• Misinterpretation/ misunderstanding of government policies related to acquisition of ICTs	4
• Insufficient promotion of services and products	2
<b>Other</b>	
• Limited access of clients particularly farmers and pastoralists for agricultural information and knowledge resources	3
• Unavailability of ICTs for agricultural extension agents and related staff	8

Source: Survey data

82. Only EIAR and EDRI have in-house printing facilities for their different categories of publications. However, most of the time these institutions, require external assistance from commercial print shops for full colour printing of publications including posters. The rest depend on commercial enterprises to take care of their publications requirements.

83. The research institutions visited suggested that their information and knowledge resources are not used sufficiently mainly because of the technical difficulties of clients to understand their contents. They also suggest that MOARD and regional agricultural and rural development bureaus, NGOs and media institutions should be able to produce less technical publications and multimedia contents for small farmers and pastoralists even for extension agents.
84. EIAR stated that it is producing less technical and more practical publications in Amharic for mass distribution among the farming communities. This kind of approach is now a growing venture in most of the institutions visited (77%), but the production of such publications is not on a sustainable manner. They are produced only during certain events such as farmers training sessions and field days.
85. The most noted concern mentioned by some of the institutions was that mass-circulating publications are produced in limited languages. This is minimal in a country where over 80 languages are prevailing among farmers and pastoralists. The problem noted in this regard was lack of skilled translators even for languages spoken by a large number of clients.
86. One of the strengths of the MOARD is that it has been producing radio programmes for farmers since the last five decades, which is known to be the oldest and sustainable programme in Africa. These days some regional bureaus of agriculture that have an FM radio station (for example Tigray, Amhara, Oromiya and Southern Nations, Nationalities and Peoples Regional State (SNNPRS) are also broadcasting farmers programmes. Occasionally, some NGOs also buy airtime to for similar purposes. In all cases the common problem is that, the broadcast is of limited audience as it is transmitted in only a few local languages.
87. One common activity observed in this assessment is that, for the same content, head of institutions make frequent interviews with journalists in both print and broadcast media. In this context, in addition to reporting execution of institutional plans, they tell their audiences pertinent information on agricultural and rural development aspects.
88. As part of the e-governance initiative of the Government of Ethiopia, EICTDA is supporting the fulfilment of training requirements of most government institutions by way of building their skills to set up and administer their WAN and LAN connectivity and maintain the security of the networks. The Agency is also responsible to enact national ICM policies and strategies.
89. The Faculty of Journalism and Communications of Addis Ababa University is also a potential partner for undergraduate, postgraduate and short-term training in development communications.
90. Capacity building needs (weaknesses) and strengths of institutions interviewed showed a range of responses. The pooled responses by category of institutions interviewed are presented in Tables 4.2.2 and 4.2.3.

Table 4.2.2. Capacity building needs (weaknesses) and strengths of institutions

Category of Institution	Capacity building need	Strength
GOV		
Policy and regulatory (MOARD, OARDB, EPA, EICTDA, IBC)	<ul style="list-style-type: none"> <li>• Training in ICM and ICT</li> <li>• ICM/ICT/ knowledge policy and strategy formulation and implementation</li> <li>• Training in extension materials production especially multimedia production</li> <li>• Establishing stakeholders and partners forums</li> </ul>	<ul style="list-style-type: none"> <li>• Formulating guidelines</li> <li>• Training extension personnel</li> </ul>
Research for development (EIAR, ARARI, OARI, EDRI, NALA, ESE, MOARD, IBC, EMSA)	<ul style="list-style-type: none"> <li>• Establishing stakeholders and partners forums at national, regional and international levels</li> </ul>	<ul style="list-style-type: none"> <li>• Producing agricultural contents</li> <li>• Existence of mostly untapped agricultural scientific and technical knowledge pool</li> </ul>
EDU (FJC)	<ul style="list-style-type: none"> <li>• Training materials development</li> </ul>	<ul style="list-style-type: none"> <li>• Existence of agricultural scientific and technical knowledge pool</li> </ul>
NGO (ASE)	<ul style="list-style-type: none"> <li>• Training in ICM and ICT</li> <li>• Training in extension materials production especially multimedia production</li> <li>• Training on innovative learning processes</li> <li>• Establishing stakeholders and partners forums</li> </ul>	<ul style="list-style-type: none"> <li>• Training farmers and pastoralists innovative aspects of agriculture</li> </ul>
MED (ERTA, Sheger FM)	<ul style="list-style-type: none"> <li>• Training in ICM and ICT</li> <li>• Strengthening in acquiring broadcasting equipment particularly for FM community radio stations</li> <li>• Training in agricultural and rural development communication for journalists and reporters</li> </ul>	<ul style="list-style-type: none"> <li>• Reaching the wider segment of rural and agricultural communities of the country</li> </ul>

Source: Survey data

Table 4.2.3: Information needs identified among institutions visited

Category	Information needed	Institutions
Broad rural development	Farm problems, Social development, Gender issues	MOARD, EIAR, OARI, ARARI, OARDB, ASE, EDRI
	Regulations	MOARD, EPA
	Available networks	EIAR, IBC, EPA, EMSA
Technical	Post harvest technology	MOARD, OARDB, OARI
	Equipments sourcing	EIAR, EMSA
	Crop varieties	EIAR, ARARI, OARI, MOARD, OARDB
Economic	Market data	MOARD, EIAR, OARI, ARARI
	Identification of markets	MOARD
	Commodity profiles, Credit and Micro credit	MOARD, OARDB
Training	Management of information	EIAR, EICTDA, NALA
	Application of ICT in extension, Editing	MOARD, ERTA, EIAR
	Participatory methods	EIAR, ARARI, OARI

Source: Survey data

### 4.3. Feedback on CTA's Products and Services

91. Institutions including EIAR, IBC, MOARD, ARARI, ESE and OARI (36.8% of the interviewees rated them between 50 and 75% and above) knew the products and services of CTA. It was also noted that these institutions have different levels of knowledge about the services and products of CTA. Only EIAR (5.3% of the interviewees) attested knowing the majority of CTA's of the services and products. The remaining institutions (63.2%) were not familiar with CTA's activities.
92. All responding institutions with knowledge about the products of CTA indicated that they have access to *Spore* while only EIAR noted that it gets most of the products.
93. QAS was among the most referred services cited by some institutions that already have access to it either through EIAR, which is the national QAS service provider or from CTA.
94. EIAR and Amhara Agricultural Research Institute (ARARI) (10.5% of respondents) noted the benefit they got from CTA in terms of training and seminar sponsorship.

## **5. Conclusions and Recommendations**

### **5.1. Conclusions**

#### **5.1.1. Information Needs**

95. It was noted that institutions visited in this study depend on different approaches to satisfy their information needs to better execute their work programmes. Institutions also differ in their preference for formats. The common approach, among others, is dependence on interpersonal communications, which are either formal or informal. The formal ones are usually conducted during meetings such as workshops, conferences, seminars, and trainings. This necessitates devising a mechanism to strengthening the linkages among agricultural research and development institutions as well as exposing personnel to regional and international forums.
96. The growing trend of using web technologies for accessing and managing information resources has been featured among institutions. This has the potential to exploit resources from a number of information centres both locally and internationally such as from CTA, FAO, World Bank, and CGIAR online resources.
97. One of the major observations noted among institutions is the lack of understanding the needs of their clients. This has created a major gap on the kind of available and accessible information.
98. One of the other observations is with the policy of FAO to download statistical information for research and educational purposes and poor countries like Ethiopia is very prohibitive.

#### **5.1.2. Capacity-building Needs**

99. The priority capacity building needs as stated by the institutions interviewed are presented as follows:
  - Training in ICM and ICT
  - ICM/ICT/ knowledge policy and strategy formulation and implementation
  - Training in extension materials production especially multimedia production
  - Establishing stakeholders and partners forums
  - Establishing stakeholders and partners forums at national, regional and international levels
  - Training materials development
  - Training in ICM and ICT
  - Training in extension materials production especially multimedia production
  - Training on innovative learning processes
  - Establishing stakeholders and partners forums
  - Training in ICM and ICT
  - Strengthening in acquiring broadcasting equipment particularly for FM community radio stations
  - Training in agricultural and rural development communication for journalists and reporters

### **5.1.3. Overview of CTA's Products and Services**

102. QAS was among the most referred services cited by some institutions that already have access to it either through EIAR, which is the national QAS service provider or from CTA. Therefore, the service should be realigned in a centralized way so that institutions and their clients could benefit from the knowledge resources available in various institutions as well as individually.
103. The publications especially production guidelines for a number of agricultural activities were very much appreciated by those institutions that have an extension role in their mandate.

### **5.1.4. Potential Partners and Beneficiaries**

104. The major producer of scientific, technical, and non-technical information and knowledge resources on Ethiopian agriculture and rural development is EIAR. A number of information materials are also produced by the MOARD, regional states agricultural and rural development bureaus, higher learning institutions with agricultural and rural development interest and responsibility, regional state agricultural research institutions, NGOs such as Agri-Service Ethiopia working with farmers and pastoralists, and agro-pastoralists. Each of them could be a partner of CTA in their own right.
105. The EICTDA is the institution responsible to enhance the ICM capacity of mainly governmental institutions. Though institutions interviewed mentioned a little about information and knowledge policies and strategies as constraints, there is a larger need to handle capacity building activities like training in ICT/ICM and dealing with formulating institutions information and knowledge policies and strategies. This Agency could be an appropriate partner for CTA.
106. The Faculty of Journalism and Communications of Addis Ababa University is also a potential partner for undergraduate, postgraduate, and short-term training in development communications. The Faculty has also the capacity to take care of development communication trainings for the eastern Africa ACP countries.
107. EIAR is one of the institutions that has the most qualified and experienced staff in agriculture and rural development. Stakeholders and clients should be able to use tap such massive resource judiciously. CTA has identified the institution as a national QAS centre, therefore, the partnership of CTA and EIAR should be strengthened and the QAS should be able to render services in a very robust manner.
108. It was also noted by a number of institutions that they have good partnership with international organizations such as FAO, UNESCO and UNDP. They also noted that the focus of partnership with such institutions is mainly development or research-oriented with some interventions in ICM. They also suggested that CTA might be able to identify such gaps, form partnership with the organizations, and enhance the capacity of institutions.

109. As one of the problems identified by institutions surveyed, obtaining statistical information from CSA and other international organization such as FAO is difficult. From the local institution like CSA, the problem is more of a bureaucratic one, which could be improved by introducing appropriate policies and strategies. Therefore, CSA could be a potential partner for CTA to work with and avail relevant agricultural and rural development statistical data to users.
110. By way of co-publishing agricultural and rural development publications relevant to Ethiopia, CTA can arrange partnership mechanisms with EIAR, which is well experienced in agricultural publishing.
111. From a different observation, other than this study, all universities and agricultural technical and vocational education and training centres, in addition to training agricultural experts and technicians, are supporting agricultural and rural development endeavours of the country in a number of ways. Therefore, CTA could use the extensive availability of these institutions to expand its intervention activities to the development of Ethiopian agriculture.

## **5.2. Recommendations**

### **5.2.1. Information Needs**

112. To satisfy their information needs, reduce the difficulty of acquiring resources such as newsletters, summaries, full documents, leaflets, video tapes, CDs, DVDs, TV and radio programmes, and fact sheets and better execute their work programmes institutions should be able to devise a mechanisms to strengthen the linkages among agricultural research and development institutions as well as exposing personnel to regional and international forums. Also they should be able to spread their efforts to make partnership with CTA
113. The Institutions should be able to tackle the problem of acquiring certain information like farm problems, social development, gender issues, crop varieties, market data, and management of information through partnership interventions with institutions such as CTA and local institutions which have profound resources
114. MOARD should be able to train extension agents and small-scale farmers and encourage them to use them for their comparative advantages especially for weather/ climate and market information.

### **5.2.2. Capacity–building Needs**

115. In this study, it was realised that institutions are mostly constrained by the lack of trained and skilled personnel to handle their ICM activities. The suggestion of respondents referred on the need to improve the working conditions for their staff by way of improving the remuneration schemes by government arrangements.
116. The other suggestion was arranging skills upgrading trainings in conjunction with international institutions such as CTA, FAO, UNESCO and CGIAR research centres and local training institutions so that the attrition rate would be minimised.
117. The EICTDA in partnership with international institutions like CTA should work together so that institutions would be able to formulate their internal information and knowledge policies and strategies.
118. Training on basic ICM can help meet some of the institutional capacity needs identified in the study. In this connection, Institutions should make linkages with capable local institutions to acquire the trainings; while at the same time CTA help address such requests by organizing training of trainers' sessions at national or sub regional levels.

### **5.2.3. CTA's Products and Services**

119. As QAS was the most referred services cited by some institutions that already have access to it either through EIAR, the service should be realigned in a centralized way so that institutions and their clients could benefit from the knowledge resources available in various institutions as well as individually.
120. The publications of CTA, especially production guidelines for a number of agricultural activities are very much appreciated by those institutions that have an extension role in their mandate. Therefore CTA should produce and distribute these publications widely; while local institutions should participate with the activities of CTA

### **5.2.4. Potential Partners and Beneficiaries**

124. One of the critical observations in this study was that institutions have different degree of development in their ICM activities. The difference ranged from being nominal information and knowledge provider to the more resourceful ones. Therefore, CTA, as partner of these institutions, can intervene by way of capacity-building venture.
125. Several institutions noted that the focus of partnership with organizations such as FAO, UNESCO and UNDP mostly is development or research oriented with some interventions in ICM. It is, therefore, recommended that CTA should work on identifying ways and means to form inter-institutional partnership with such organizations when they work in isolation for a similar case in the country.

126. It is also recommended that CTA shall work by way of mediation with FAO so that FAO could deregulate the policy for downloading statistical information for research and educational purposes and poor countries for a little or no cost.
127. The EICTDA and FJC are the major training and skill-upgrading institutions in Ethiopia, therefore CTA should be able to form a strong partnership for materializing its intervention strategies.
128. The EIAR and MOARD are the major research and extension actors in the country. Therefore, CTA should be able to forge a strong partnership in terms of improving the information needs of researchers and ICT/ICM capacities of extension agents.
129. As regards to the use of media for reaching the society at large, working with ETRA is colossal, because it is owned by the government and it is free especially for public and community based institutions

## **6. PROPOSED CTA INTERVENTION STRATEGY AND ACTION PLAN**

### **6.1. Intervention Strategy**

130. From the current needs assessment study of Ethiopia, the following interventions are recommended to enhance availability and delivery of CTA's products and services to beneficiaries.

1. Increase awareness of CTA's services and products and modes of operations within the agricultural and rural development actors of all levels
2. Build the ICM capacity of institutions and organizations to meet their identified requirements
3. Promote partnership and inter-institutional collaborations and partnership for a wide-ranging information and knowledge sharing

### **6.2. Action Plan**

131. The intervention strategies, listed-above, are in agreement with the strategic plan of CTA for 2007-2010. The rationale and action plan of these intervention strategies are presented as follows

#### **Intervention Strategy N°1. Increase awareness of CTA's services and products**

##### **Justification**

Most of the institutions assessed in this study do not use CTA's products and services. Only a few individuals in some institutions know something about the existence of CTA. Very few are familiar with the QAS services rendered by EIAR and they knew about *Spore*. Therefore, CTA should use the existing partnership with EIAR and others to make its services and products widely known, and enhance its image to a wider audience in Ethiopia

##### **Objective**

Increase the role of CTA's services and products in the development of the agricultural sector of Ethiopia.

##### **Responsibility**

CTA, EIAR

##### **Expected results**

More institutions will know and understand the role and responsibilities of CTA and make use of its services and products

**Action plan**

4 <sup>th</sup> quarter of 2008	2008-2010	3 <sup>rd</sup> and 4 <sup>th</sup> quarters of 2010
<ul style="list-style-type: none"> <li>• Contact the identified institutions and from this study and provide CTA's strategic plan documents and other relevant publications (digital or print)</li> <li>• By way of creating a strategic partnership, contact EIAR or any appropriate institution and agree on possibilities to support the distribution of awareness creation materials in Ethiopia</li> </ul>	<ul style="list-style-type: none"> <li>• Arrange a national conference for a greater publicity of CTA's products and services and its modes of operation in Ethiopia</li> <li>• Sustain a regular contact with institutions and organizations identified in this study by providing new products and services and information on training and funding opportunities</li> </ul>	<ul style="list-style-type: none"> <li>• Monitor and evaluate the effectiveness of CTA's services and products in Ethiopia</li> <li>• Suggest and implement on-going and new interventions</li> </ul>

**Intervention Plan No 2. Build ICM capacity of institutions and organizations**

**Justification**

Institutions and organizations can enhance their current ICM activities and plan and execute new programmes by deploying skills of their personnel. Therefore, CTA should meet personnel capacity building needs by facilitating appropriate training courses. The role of Institutions like EICTDA and AAU could be instrumental for CTA to collaborate for handling the training

**Objective**

Enhance the ICM capacities agricultural and rural development and research institutions in Ethiopia

**Responsibilities**

CTA, ERICTDA, AAU (FJC)

**Expected results**

Trained and skilled ICT/ICM staff available to handle with efficiency and effectiveness current ICM activities and to plan and execute new programmes

**Action Plan**

2008-2010	3 <sup>rd</sup> and 4 <sup>th</sup> quarters of 2009	3 <sup>rd</sup> and 4 <sup>th</sup> quarters of 2010
-	<ul style="list-style-type: none"> <li>• Identify training courses, seminars , workshops and symposia that could be of interest and relevant to meet ICM training needs of institutions and organizations</li> <li>• In consultation with the suggested institutions, identify appropriate personnel to receive training</li> <li>• Support the trainee financially and technically</li> </ul>	<ul style="list-style-type: none"> <li>• Evaluate the effectiveness of training interventions</li> <li>• Identify emerging capacity building interventions</li> </ul>

**Intervention Strategy No 3. Promote partnership and inter-institutional collaboration and partnership**

**Justification**

Institutions obtain and generate useful information and knowledge primarily for their own purposes; this could be transferred to others as useful resources. Therefore, establishing and strengthening institutional and personal networks on information and knowledge sharing in Ethiopian agriculture and rural development challenges and opportunities in a wider extent should be promoted. CTA, besides its own approaches to work with institutions and organizations in Ethiopia, should assist in establishing and operating a national agricultural and rural development network focused on facilitating information exchange and knowledge sharing

**Objective**

Strengthen the national network on agricultural and rural development information exchange and knowledge sharing at different levels

**Responsibilities**

CTA and EIAR

**Expected results**

Agricultural and rural development Information exchange and knowledge sharing enhanced

**Action Plan**

2008-2010	3 <sup>rd</sup> and 4 <sup>th</sup> quarters of 2009	3 <sup>rd</sup> and 4 <sup>th</sup> quarters of 2010
-	<ul style="list-style-type: none"> <li>• Use the national conference for a greater publicity of CTA's profile to promote inter-institutions collaboration and partnership on information and knowledge sharing mechanisms (<i>as stated in intervention strategy no 1</i>)</li> <li>• Contact EIAR or any appropriate institution to facilitate the initiative</li> </ul>	<ul style="list-style-type: none"> <li>• Monitor and evaluate the effectiveness of CTA's approach for this intervention</li> <li>• Promote emerging inter-institutional networking approaches</li> </ul>

132. The focus of CTA's strategic intervention in Ethiopia would be to better support institutions and organizations identified in this study (See Annex 3) that provide information and arrange capacity-building programmes for farmers, pastoralists and agro-pastoralists as well as rural development agents.

133. Further study is required on emerging relevant institutions and organizations that are involved in providing information and sharing knowledge and capacity building programmes for farmers, pastoralists, agro-pastoralists, and rural development agents.

134. Provision of information and sharing of knowledge are crucial for ADLI programme of the Government of Ethiopia is to succeed and the current economic growth be maintained.

**ANNEXES**

## Annex 1. Terms of Reference

<p style="text-align: center;"><b>ASSESSMENT OF AGRICULTURAL INFORMATION NEEDS FOR CTA'S PRODUCTS AND SERVICES IN ACP AFRICAN STATES: Ethiopia</b></p>
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### 1. Introduction

The Technical Centre for Agricultural and Rural Cooperation (CTA) was established in 1983 under the Lomé Convention between the ACP (African, Caribbean and Pacific) Group of States and the European Union Member States. Since 2000, it has operated within the framework of the ACP-EC Cotonou Agreement.

CTA's tasks are to develop and provide services that improve access to information for agricultural and rural development, and to strengthen the capacity of ACP countries to produce, acquire, exchange and utilise information in this area. CTA's programmes are organised around three principal activities: providing an increasing range and quantity of information products and services and enhancing awareness of relevant information sources; supporting the integrated use of appropriate communication channels and intensifying contacts and information exchange (particularly intra-ACP); and developing ACP capacity to generate and manage agricultural information and to formulate information and communication management (ICM) strategies, including those relevant to science and technology. These activities take account of methodological developments in cross-cutting issues (gender, youth, information & communication technologies – ICTs, and social capital), findings from impact assessments and evaluations of ongoing programmes as well as priority information themes for ACP agriculture.

CTA's activities are currently distributed among three operational programme areas / departments:

- Information Products and Services;
- Communication Channels and Services;
- Information and Communication Management Skills and Systems.

These operational departments are supported by Planning Corporate Services (P&CS) which is charged with the methodological underpinning of their work and monitoring the ACP environment in order to identify emerging issues and trends and make proposals for their translation into programmes and activities. This current exercise, therefore, falls within the mandate of P&CS.

### 2. Background

Since 2003, CTA has been systematically conducting needs assessment studies across the Pacific, Caribbean and Africa regions – the regions it has been mandated to serve. These studies have been in direct response to calls for CTA, in various evaluations of its products, services and programmes, to be more strategic in its choice regarding the setting of its own agenda and reacting to demand. In putting together its Strategic Plan and Framework for Action 2001 – 2005, CTA took a pragmatic view and opted to develop a strategy combining the benefits of both approaches, whereby the need to address the expressed demands of its stakeholders and the potential long-term advantages of developing programmes that address future needs were combined.

The Centre's new strategic plan covering the 2007 – 2010 period places emphasis on: improving CTA's efficiency and increasing the Centre's outreach by addressing the major bottleneck of difficult or insufficient access to information in ACP countries; (ii) honing CTA's

profile and further defining the niche where the Centre has a comparative advantage. Consequently, reaching more beneficiaries and further strengthening CTA's partnership networks is key as well as the thrust to make ICTs and ICM strategies more widely available.

### 3. Main issues

CTA works primarily through intermediary public and private partners (research centres, extension services, libraries, NGOs, farmers' organisations, regional organisations and networks,) to promote agriculture and rural development. Under the new strategic plan, the organisations targeted will be extended to include print media, editors, radio, TV and journalist networks in order to further maximise outreach. Through these partnerships, CTA hopes to increase the number of ACP organisations capable of accessing and combining modern and conventional ICTs, generating and managing information and developing their own ICM strategies. The identification of appropriate partners is therefore of primordial importance, whilst bearing in mind issues such as geographical coverage, decentralisation, regionalisation, thematic orientation and transparent and objective criteria and procedures for partner selection.

### 4. Overall Objective

Collaboration strategies with ACP agricultural organisations and relevance of CTA's support to African ACP countries improved.

### 5. Scope of the study

The study will focus on:

- providing an overview of main agricultural services and actors existing in the country (information supply side) in terms of their strengths, weaknesses and opportunities for collaboration with CTA;
- identifying agricultural information and ICM capacity building needs of key actors / key strategic partners for CTA products and services;
- identifying potential strategic partners for CTA activities and services (paying special attention to e.g. print media, editors, radio, TV and journalist networks);
- developing some baseline data on the status of ICM and ICTs in the country to facilitate subsequent monitoring and updating activities.

The study should assist CTA to improve and better target interventions and activities aimed at potential partners and beneficiaries (including women, youth, private sector and civil society organisations) to have a more informed picture of their needs and aid in the elaboration of a strategy and framework of action. The study should also highlight where there are specific needs for CTA's products and services thereby enabling improvement in the delivery of the same.

### 6. Expected results

The expected results of the study are as follow:

- status of infrastructure, information services and ICM capacity of institutions involved in agriculture and rural development described and analysed;
- information and capacity building needs in the area of ICM identified for key institutions and potential CTA partners involved in agriculture and rural development;
- baseline data on the status of ICM and ICT in agriculture and rural development compiled for monitoring purposes and improved outreach.

The study should therefore also provide updated country profiles on the status agricultural information services, the status of ICM/T in the country, which will allow CTA to make informed decisions re type and mode of intervention as well as partner selection. This will be

summarised in one (1) main report per country not exceeding 30 pages excluding annexes (cf. section 8 below).

## 7. Methodology

The consultant will use a combination of qualitative and quantitative rapid appraisal methods including:

- the desk review of available literature and information sources including the findings of programme evaluations;
- the conduct of face-to-face interviews with relevant stakeholders / concerned parties;
- the limited use of questionnaires.

The rapid appraisal approach will allow a general overview of the key issues and company / organisational profiles on a per country basis and may give rise to more in-depth studies as and when needed in the future.

## 8. Reporting

The country reports will not exceed 30 pages (excluding annexes) and is broken down as follows:

### **Main report**

*Acknowledgements*

*List of Acronyms*

*Executive summary*

### **1. Introduction**

### **2. Country profile**

*2.1 Brief description of agriculture and recent developments in the sector:*

2.1.1 Agriculture

2.1.2 Fisheries

2.1.3 Forestry

2.1.4 Pastoralism / Livestock (where applicable)

*2.2 Brief description of the status of ICT infrastructure and recent developments in the sector*

### **3. Status of information and communication for agriculture and rural development**

*3.1 Institutional, regulatory and policy framework*

Status of national and/or other sectoral policies on information and communication for agriculture and rural development; definition of main strategic focus and principal characteristics; opportunities and threats posed by the political, institutional and regulatory environment

*3.2 Operational aspects*

3.2.1 Description of agricultural information and services (main actors in the area of information and communication for agriculture and rural development)

3.2.2 Information products and services provided

3.2.3 Information and communication management capacity

*3.3 Interventions supporting information and communication for agriculture and rural development*

Examine the main interventions undertaken, planned or foreseen by the State, donor agencies, private sector (e.g. telecommunications sector) to respond to identified needs paying particular attention to the priorities and means mobilised. Lessons learnt should also be addressed in this section

### 3.4. Needs analysis (*Main bottlenecks and shortcomings*)

#### 3.4.1 Information needs

#### 3.4.2 Capacity building needs (IC policies & strategies, sensitisation, networking, skills, training, media, ICT, equipment)

## 4. Conclusions and recommendations

### 4.1 Conclusions

#### 4.1.1 Information Needs

#### 4.1.2 Capacity Building Needs

#### 4.1.3 Potential Strategic Partners

### 4.2 Recommendations

#### 4.2.1 Capacity Building Needs

#### 4.2.2 Information Needs

#### 4.2.3. Potential Strategic Partner Institutions

## 5. Proposed CTA Intervention Strategy and Action Plan

From the above analysis, establish a link between the needs which are not currently met or for which complementary actions are needed and CTA's supply (products and services). This should lead to an overall and coherent strategy for CTA and an action plan in priorities are identified and an implementation schedule defined.

## Annexes

### 1. Terms of reference

### 2. Country profile

#### 2.1 *General agricultural profile (from available documentation)*

##### 2.1.1 Size of agricultural population (male / female / youth)

##### 2.1.2 Farmed land, forests, fishing areas

##### 2.1.3 Agricultural systems

##### 2.1.4 Agriculture in the economy (percentage GDP)

##### 2.1.5 Main agricultural produce and secondary products

##### 2.1.6 Main export markets

##### 2.1.7 Trade agreements that include agriculture

##### 2.1.8 Sectoral policy related to agriculture, fisheries and forests

#### 2.2 *Socio-economic profile (from available documentation)*

##### 2.2.1 Total active population, demographic breakdown

##### 2.2.2 Literacy level and languages

##### 2.2.3 Access to services (health, schools, electricity)

##### 2.2.4 Rural urban drift

#### 2.3 *Media and telecommunications (update / check)*

##### 2.3.1 Newspapers, periodicals, magazines, radio stations, television channels,

##### 2.3.2 Telecommunication services (fixed, mobile, etc.)

##### 2.3.3 Computers and Internet access

### 3. Profile of institutions

#### 3.1 *List of all main institutions involved in agriculture and rural development activities, including private sector and civil society organisations, with name, contact details, type and role of institution*

#### 3.2 *Select list of key institutions involved in agriculture and rural development, with extensive data and information on the institution, the problems faced and why it is considered a key actor*

### 4. List of institutions / persons interviewed (to include full contact details)

### 5. Bibliography

### 9. Timing

The draft final report is to be submitted within three months after contract signature by CTA; the final report is due two weeks after receipt of comments from CTA.

### 10. Expertise needed

The **national consultant** should have a university degree or equivalent by experience. In addition, he/she should have at least 10 years experience in field of agriculture, rural development or social / economic sciences. He/she must have in-depth knowledge of the agricultural sector in his/her country and be able to identify key players and institutions / organisations active in this area. Some knowledge of information sciences would be an added advantage. The ability to communicate and write clearly in English is essential, while knowledge of at least one of the local languages for communication / interview purposes is an added advantage.

In addition to the skills above, the **regional coordinator** is expected to be fluent in English, have some knowledge of the 9 countries forming the object of this study, have demonstrated experience in coordinating studies with several consultants and in producing synthesis reports.

The overall coordination of the exercise will be carried out by Ms Christine Webster, Deputy Head, Planning and Corporate Services CTA.

#### 11. Implementation schedule (CTA)

- Preparation/Finalisation of ToR; Identification/ short-listing of (potential) consultants; Call for offers: October 2007 – January 2008;
- Selection of consultants & contractual arrangements: February – March 2008
- Briefing: April 2008
- Start date of contract: March/April 2008
- Contract implementation period: March – November 2008
- End date of contract: November 2008.

#### 12. Key documents to be made available to consultants

Documents include:

- Cotonou Framework Agreement
- Executive Summaries of previous evaluation reports including ITAD, OPM, etc.
- CTA's Strategic Plan (2007-2010)
- Annual Reports
- Examples of reports of previous needs assessment studies
- Documents on products & services provided by CTA

#### 13. Definition of roles and responsibilities

##### ***Regional Coordinator***

- Respect the timeframe regarding submission of reports and deadlines
- Help identify/vet country consultants
- Attend pre-briefing and briefing meetings
- Review the terms of reference
- Finalise questionnaires<sup>1</sup> and methodological approach after due consultation with CTA Team
- Finalise the briefing notes and guidelines<sup>2</sup> for local consultants to ensure accurate and consistent application of the agreed methodology in data collection
- Answer queries (technical & otherwise) of local consultants
- During the studies, monitor and provide technical assistance/information to the local consultants
- Review preliminary country reports and findings and send comments back to local consultants
- Send edited draft final country reports to CTA for feedback

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<sup>1</sup> The documents used in previous needs assessment studies are available and will need some slight modifications.

<sup>2</sup> See footnote above.

- Coordinate and ensure consistency of country reports
- Prepare the overall report taking into account the findings and recommendations of all the country reports (table of contents to be agreed).

#### ***Local Consultants***

- Respect the timeframe regarding submission of reports and deadlines
- Attend briefing meeting
- Familiarise themselves with background documents received from CTA; including the Terms of Reference
- Undertake desk study and prepare country profile, list of institutions involved in agriculture as well as preliminary list of select institutions.
- Undertake field visits in the country specified in the contract
- Conduct interviews and gather information in the country specified in the contract
- Draft preliminary country reports and send to Regional Coordinator for initial comments
- Based on comments received from Regional Coordinator, revise country reports and send draft final report to CTA within the specified timeframe
- Finalise country reports based on comments and observations received from CTA and send final report back to CTA

#### ***Role of CTA***

- Draw up initial Terms of Reference and prepare relevant background documents
- Appoint the Regional Coordinator and the ACP Local Consultants
- Prepare and attend briefing meeting of consultants
- Invite the Regional Coordinator and Local Consultants for Briefing Meeting
- Provide input to the Regional Coordinator with regard to fine-tuning terms of reference, questionnaires, interview guide and reporting guidelines for the consultants
- Provide relevant background documents to the Local Consultants & Regional Coordinator
- Elaborate budget and discuss contractual obligations with the Team of consultants & Regional Coordinator
- Liaise with Regional Coordinator throughout the study
- Pay invoices for services rendered in a timely manner on condition that all payment conditions are fulfilled
- Overall responsibility for the supervision and implementation of the studies
- Bear the agreed costs of expenditure in respect of the study (economy class return tickets, hotel accommodation and subsistence allowances during briefing meeting, or during agreed and specified field visits)
- Provide feedback and comments on draft country reports to the Local Consultants
- Give feedback to the Regional Coordinator on the Overview Report.

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## **Annex 2. Country Profile: Ethiopia**

### **2.1. General agricultural profile**

About 31 million ha of the total area of Ethiopia (1.12 million km<sup>2</sup>) is agricultural land but an average of approximately 10 million ha of this potential agricultural area is cultivated annually.

The country is divided into 18 major agro-ecological zones and 49 sub-agro-ecological zones. Nearly one-third of this country's land area belongs to hot to warm arid lowland plains, with hot to warm moist lowlands, hot to warm sub-moist lowlands and tepid to cool moist mid-highlands accounting for approximately 13.1%, 11.7%, and 11.2%, respectively. It can be seen that nearly 68% of Ethiopia is in the lowlands category whereas the mid-highlands and the sub-afro-alpine and afro-alpine zones account for about 30% and less than 2%, respectively

Major crops include cereals, roots and tubers, pulses, oilseeds, vegetables, fruits and cash crops such as coffee, cotton, tea, sugarcane, and tobacco. In addition, Ethiopia has large areas where many other high value crops (e.g. spices such as black pepper, ginger, cardamom, cumin, and fenugreek) could be grown, but this potential has not been fully utilized. This country ranks among the highest in Africa in its livestock resources. Cattle, sheep, goats, chickens, camels and honeybee are the major livestock species. The country also has rich water bodies and huge aquatic resources associated with them.

The total population of Ethiopia in 2007 was about 77 million of which 53% are below the age of 20 and 4.5% older than 60 years, 16.5% of the population is urban and the remaining 83.5% lives in rural areas. There has been a continued increase in the proportion of rural inhabitants migrating to urban areas in search of alternative income from the increased urbanisation schemes in different Regional States.

#### **2.1.1. Size of agricultural population (July 2007)**

Like any other ACP country, the population of Ethiopia is growing at a rate of about 2.7% annually. In the rural areas, the growth is a bit more than in urban areas. This is because of more family planning activities going on in urban areas than rural areas. The concentration of the population lies below the age of 20. The ratio of agricultural population in terms of age and gender is presented in Table 2.1.1.

Table 2.1.1. Size of agricultural/ rural population (millions) of Ethiopia

Age	Rural		
	Male	Female	Total
0-4	5 477 074	5 415 921	10 892 996
5-9	4 892 891	4 806 683	9 699 574
10-14	4 048 521	3 922 547	7 971 068
15-19	3 427 634	3 277 916	6 705 549
20-24	3 011 516	2 864 646	5 876 162
25-29	2 540 222	2 442 170	4 982 392
30-34	2 033 312	2 049 586	4 082 898
35-39	1 613 800	1 701 719	3 315 519
40-44	1 2804 22	1 407 770	2 688 192
45-49	1 020 490	1 150 000	2 170 490
50-54	844 159	922 635	1 766 793
55-59	687 027	722 050	1 409 077
60-64	532 561	535 509	1 068 070
65-69	391 829	380 733	772 562
70-74	267 396	254 117	521 513
≥75	268 146	246 998	515 144
Total	32,337,000	32,101,000	64,437,999

Source CSA, 2007

### 2.1.2. Farmland, forests, fishing areas

Ethiopia is endowed with diverse biophysical resources of which agricultural lands, forests and fishing areas occupy considerable portion of the country. Most agricultural producers are subsistence farmers with small land holdings, often broken into several plots. Most of these farmers lived on the highlands, mainly at elevations of 1,500 to 3,000 meters. The population in the lowland peripheries (below 1,500 meters) was pastoralists and agro-pastoralists engaged mainly in livestock raising. Almost all the forests in Ethiopia have been destroyed in the last 40 years, and only less than 3 percent of the entire country is now covered with trees, prompting fears of an impending environmental disaster if the problem is not addressed. The country is a land-locked country and depends on its inland bodies of water for fish supply for its population. The country's bodies of water have a surface area estimated at 7 334 km<sup>2</sup> of major lakes and reservoirs, and 275 km<sup>2</sup> of small water bodies (see tables), with 7 185 km of rivers within the country. The proportion of coverage of these resources is summarized in Table 2.1.2.

Table 2.1.2. Summary of cropland, forests and fishing areas of Ethiopia

Item	Coverage (%)
Arable and permanent cropland as percent of total land area	9.6
Percent of cropland that is irrigated	1.8
Forestland	2.3
Fisheries	0.12

Source: UN Office for the Coordination of Humanitarian Affairs. 2007

### 2.1.3. Agricultural Systems

The three most traditional agricultural systems classifications prevailing in Ethiopia are, the mixed crop/livestock system practiced in the mid and highland areas and the pastoral and agro-pastoral production systems exercised in the lowlands. Agro-pastoral production is relatively of a recent phenomenon. The description and major development issues relating to them are given below (EIAR, 2007; Gezahegn and Kidane, 2008):

#### *Mixed crop/livestock production system*

This production system is predominant in the highland agro-ecological zone. Here, crop farming targeting subsistent household food production and cash generation from minor seasonally surplus crops is the major agricultural business with livestock playing a major supportive role. Livestock make an important and significant contribution in draft power supply, organic fertilizer production, and the generation of cash income required for the purchase of other inputs for crop production, food items under the events of crop stock depletion and meeting incidental household expenses. The livestock sub-sector in turn benefits from crops through grazing on stubbles, straws, and other by-products (EAAP, 2006).

#### *Pastoral system*

The rangelands of Ethiopia are estimated to cover 625,000 km<sup>2</sup> distributed over seven regional states and are inhabited by an estimated 9.8 million people (5.5 million pastoral, 3.1 million agro-pastoral and 1.2 million urban communities). High variability in the seasonal distribution of precipitation that influences feed availability from the rangelands and the prevalence of harsh climatic conditions characterize the pastoral production systems of the semi-arid and arid lowland areas of the country. The major production challenge constantly confronting pastoralists in this system is matching the permanent livestock feed requirement with seasonally variable feed supply. To overcome this challenge, pastoralist households base their livestock management system on a strategy of the nomadic way of survival and ownership of multiple animal species with different feeding habits and production cycles. They obtain their subsistence livelihood from raising livestock (EAAP. 2006).

#### *Agro-pastoral system*

Agro-pastoral production system arises because of the settlement of pastoral societies that find it difficult to continue their traditional way of nomadic lifestyle due to a number of reasons. Loss of herds, severe drought and the failure to re-stock due to economic reasons and the population boom that creates a new generation without adequate livestock resources to pursue tradition lifestyle are among these reasons. Settled herders reduce their animals since owning large herds in the harsh environment is impractical without nomadic management style. Agro-pastoralists engage in both crop and livestock production with livestock comprising the major agri-business for their livelihood. They herd their animals on rangelands close to their settlements and use seasonal migration in search of feed and water (EAAP. 2006).

#### **2.1.4. Agriculture in the economy (percentage GDP)**

Ethiopia's economy is heavily dependent on the agricultural sector, which accounts for about 40% of national GDP, 90 percent of exports, 85% of employment, and 90% of the poor. The Country is largely an agrarian nation with the majority of the population involved in agricultural, pastoral, and agro-pastoral activities. Over 60% of the country's foreign income and about 80% of domestic production are generated by these sectors.

Smallholding and subsistence agriculture is the main engagement of the people. However, to date, large-scale commercial farms are operational in several regions. In recent years however, the national economy is moving from being based primarily up on agriculture towards more reliance on manufacturing, construction, and service sectors. As a result, there is a steady annual growth rate in the economy of the country, which makes Ethiopia one of the best performing countries in sub-Saharan Africa. However, income disparities among the population groups are still pronounced.

The economic policies of the government and democratisation since the early 1990s have made advances in reducing poverty and empowering the disadvantaged sectors of the rural communities by widening access to social and economical services and infrastructure (MoFED, 2006).

Although the growth of agriculture value added declined by 11.4% following the drought in 2002/03, due to the prevalence of favourable conditions including adequate rainfall and provision of adequate supply of agricultural inputs, agricultural production has increased by 17.3% in 2003/04 and 13.4% in 2004/05 (MoFED, 2006). Agricultural contribution to GDP of agriculture is reported as 46.6% in 2005 and 47.3% in 2006 (MoFED, 2006).

#### **2.1.5. Main agricultural produce and secondary products**

##### *Crops*

Ethiopia produces a large number of crops for food, feed and fibre purposes. The major ones for export and local consumption are listed as follows (Table 2.1.5. a.). As secondary products, however, animal feeds are produced from farm bi-products such as crop residues.

Table .2.1.5. a. Summary of agricultural products by category and type

<b>Category</b>	<b>Type</b>
Cereals	Bread wheat, durum wheat, tef, maize, barley, sorghum,
Pulses	Haricot beans, faba beans, field peas, chickpea, lentil, soybean
Oil crops	Sesame, groundnut, rapeseed, lentil, sunflower
Fruits and nuts	Banana, apple, oranges, lemons, watermelon, papaya, mango, pineapple, vines
Vegetables	Cabbage, carrot, onion, green pepper,
Spices	Korarima, black pepper, ginger, cardamom, turmeric, cinnamon, hot pepper
Stimulant crops	Coffee, tea, chat
Industrial crops	Cotton, sugarcane

Source: EIAR, 2007

### *Livestock*

The livestock sector is the major occupation of the majority of farmers, agro-pastoralists and pastoralists. The major ones are listed below (Table 2.1.5.b.).

Table 2.1.5.b. Summary of livestock sector of Ethiopia by category and type

<b>Category</b>	<b>Type</b>
Large ruminants	Dairy, beef, camel
Small ruminants	Sheep, goat
Poultry	Chicken
Fishery	There a number of fish species in the freshwater bodies of the country, but the major ones are tilapia and Nile perch

Source: EIAR, 2007

### **2.1.6. Main export markets**

Development of agricultural products for export are identified and promoted and utmost efforts are made to penetrate international market by producing products that meet the standards of international trade. Exports of major agricultural products 2005/2006 are presented in Tables 2.1.6a, b, c, d.

Table 2.1.6a. Main export agricultural products of Ethiopia by volume and value

Products	Volume (Metric ton)	Value	
		('000 birr)	('000 Euro)
Animal Fodder	4,212.6	4,064.00	266.26
Bees Wax	352.8	13,291.00	870.77
Cereals	37,839.3	121,0273.00	79,292.49
Coffee	153,155.1	3,204,704.00	209,960.04
Cotton	6,177.5	59,691.00	3,910.73
Finished Leather	168.4	67,084.00	4,395.09
Flower (in 000 stems)	293,121.6	192,635.00	12,620.71
Fruits	6,789.8	18,120.00	1,187.15
Hides	6,272.6	63,591.00	4,166.24
Live Animals (000 heads)	163.4	238,903.00	15,652.02
Meat and Meat Products	7,855.7	160,339.00	10,504.80
Natural Gum	3,529.3	46,969.00	3,077.23
Oil Seed	263,251.4	1,838,827.00	120,472.96
Spices	8,554.8	86,442.00	5,663.35
Tea	596.3	7,339.00	480.82
Vegetables	27,755.7	92,846.00	6,082.92

Source: *Ethiopian Customs Authority, 2006*

Table 2.1.6.b. Top 20 export trading partners of Ethiopia

Country of destination	2004/05		2005/06	
	Value (Birr)	Value (Euro)	Value (Birr)	Value (Euro)
China	396,816.6	25997.9	1,180,679	77,353.6
Germany	1,144,796.9	78002.7	867,147	56,812.2
Japan	529,582.3	34696.2	692,476	45,368.4
Switzerland	287,786.7	18854.7	583,218	38,210.2
Saudi Arabia	422,142.6	27659.2	541,619	35,484.8
Djibouti	361,562.2	23688.8	497,593	32,600.4
Italy	381,323.8	24982.9	484,556	31,746.3
United States of America	385,182.5	25235.7	417,775	27,371.1
Somali Land	229,452.0	15032.8	399,851	26,196.7
Netherlands	256,301.6	16791.9	335,850	22,003.6
United Arab Emirates	248,890.1	10306.3	248,407	16,274.7
United Kingdom	213,728.4	14002.7	238,391	15,618.5
Belgium	211,380.4	13848.8	233,954	15,327.8
Sudan	137,306.6	8995.8	214,005	14,020.8
Yemen	156,513.7	10254.2	200,721	13,150.5
France	141,732.1	9285.7	179,152	11,737.4
Israel	175,029.1	11467.2	175,586	11,503.7
Egypt	50,041.1	3278.5	134,209	8,792.8
Somalia	245,221.9	16066.1	126,756	8,304.6
Turkey	108,677.5	7120.1	124,056	8,127.7

Source: *Ethiopian Customs Authority, 2006*

Table 2.1.6.c. Export to COMESA Member countries (in 000 Birr/ Euro)

Country of destination	2004/05		2005/06		Growth rate (%)
	Value (Birr)	Value (Euro)	Value (Birr)	Value (Euro)	
Angola	734.9	48.14	595.4	38.99	-19.0
Burundi	140.2	9.18	-	-	-100.0
DR Congo	4,383.6	287.13	1,256.3	82.28	-71.3
Djibouti	361,562.2	23682.32	497,593.3	32592.36	37.6
Egypt	50,042.1	3277.76	134,209.3	8790.71	168.2
Kenya	19,320.9	1265.52	21,868.7	1432.40	13.2
Libyan	4,656.5	305.00	-	-	-100.0
Madagascar	1,834.8	120.18	65.6	4.29	-96.4
Rwanda	20.7	1.36	687.8	45.05	3226.5
Sudan	137,306.6	9893.58	214,005.5	14017.36	55.9
Swaziland	16,670.8	1091.94	12,398.2	812.08	-25.6
Uganda	25.1	1.64	105.9	6.94	322.5
Zambia	1,208.9	79.18	2,264.0	148.29	87.3
Zimbabwe	515.6	33.77	603.5	39.53	17.0
<b>Total</b>	<b>598,422.8</b>	<b>39196.69</b>	<b>885,653.4</b>	<b>58010.29</b>	<b>48.0</b>

Source Ethiopian Customs Authority, 2006

Table 2.1.6.d. Export to EU Countries (in 000 Birr/ Euro)

Country of destination	2004/05		2005/06		Growth rate (%)
	Value (Birr)	Value (Euro)	Value (Birr)	Value (Euro)	
Austria	44.00	2.88	3.00	0.19	-92.6
Belgium	211,380.00	13,845.39	233,954.00	15,323.99	10.7
Cyprus	1,069.00	70.02	429.00	28.10	-59.8
Czech Republic	4,595.00	301.04	3,668.00	240.25	-20.2
Denmark	31,379.00	2,055.32	16,700.00	1,093.85	-46.8
Finland	3,986.00	261.08	5,982.00	457.32	50.1
France	141,732.00	9,283.64	179,151.00	11,734.40	26.4
Germany	1,144,796.00	74,984.14	867,147.00	56,798.13	-24.3
Greece	44,448.00	2,911.34	31,903.00	2,089.65	-28.2
Hungary	4,484.00	293.70	854.00	36.29	-80.9
Ireland	1,039.00	68.05	3.00	0.19	-99.7
Italy	381,323.00	24,976.66	484,556.00	31,738.42	27.1
Lithuania	238.00	15.59	-	-	-100.0
Luxembourg	191,490.00	12,542.59	-	-	-100.0
Malta	14.00	0.92	-	-	-100.0
Netherlands	256,301.00	16,787.72	335,850.00	21,998.17	31.0
Poland	4,424.00	289.77	5,732.00	375.45	29.6
Portugal	4,514.00	295.67	75,170.00	4,989.14	1565.0
Slovakia	0.1.00	0.01	10.00	0.65	7574.2
Slovenia	1,666.00	109.12	22.00	1.44	-98.7
Spain	25,469.00	1,668.22	19,707.00	1,290.81	-22.6
Sweden	31,597.00	2,069.04	18,793.00	1,230.94	-40.5
United Kingdom	213,728.00	14,001.15	238,390.00	15,614.55	11.5
<b>Total</b>	<b>2,699,725.00</b>	<b>176,831.98</b>	<b>2,518,033.00</b>	<b>164931.16</b>	<b>-6.7</b>

Source: Ethiopian Customs Authority, 2006

### **2.1.7. Trade agreements that include agriculture**

Ethiopia is benefiting from increased market access to the USA, EU, China, Canada, Japan, the Middle East and African countries through a number of trade agreements. The country is exporting textile products to the USA through the African Growth and Opportunity Act (AGOA). Moreover, Ethiopian coffee is being registered in the USA having its own trademark through which coffee farmers are getting more cash from the sale of the coffee products. The EU-Ethiopia trade agreement has also permitted agricultural products such as sugar and leather products to enter the European market. The COMESA trade agreements also allows Ethiopia to benefit by trading agricultural products such as meat and live animals

Ethiopia has also bilateral trade agreements with several countries the major ones being China, Japan, India, and Saudi Arabia. The main export commodities are coffee, pulses, oil crops, hide and skins and leather products.

Border trade agreements have also been signed with the Sudan. The country also has agreement with Djibouti and Somaliland in using their ports for the import and export of mainly agricultural products

### **2.1.8. Sectoral policy related to agriculture, fisheries and forests**

The major impediments to agricultural development in Ethiopia are the predominance of subsistence agriculture and the lack and/or absence of more business or market-oriented agriculture; adverse climatic changes; failure to use agricultural land according to appropriate land use management plans and resource base; limitation in information base; lack of provision of supply and dissemination of appropriate technology; failure to integrate relevant activities; and a lack of adequate implementation capacity (MoFED, 2006).

To solve the above-mentioned problems and bring about tenable changes and sustainable development in agriculture calls for the development of appropriate human resources, provision of an expanded and improved supply of agricultural inputs; adaptation/ application of appropriate technologies; and improvement and expansion of economic infrastructures (MoFED.2006). Securing accelerated and sustained development of the sector through the transformation of the subsistence agriculture to market-oriented development also guarantees the contribution of the sector to the MDG.

The Government of Ethiopia has formulated the country's Agricultural and Rural Development Policy and Strategy in 2002, that is currently being implemented. The major focus of activities being undertaken at the moment include capacity building in terms of training qualified personnel; the introduction and adaptation of high yielding technologies; increasing the quality and quantity of marketable agricultural products; the expansion of small and medium-scale irrigation and water conservation schemes; and ensuring prudent utilization of natural resources (MOI, 2002).

The first legislation covering Ethiopia's forests was enacted in 1965. This included proclamations, dealing with state, private and protected forests. The Ministry of

Agriculture is charged with the responsibility of conserving, protecting, managing and utilizing state forests. It was also made responsible for controlling and regulating the afforestation, conservation, management and utilization of the private and protection forests (Ministry of Natural Resources and Environmental Protection, 1994).

### **2.1.9. Institutional, regulatory and policy framework for information and communication**

Agricultural and rural development Information and communication in either print or electronic format is not restricted by any kind of government legislation or policies in Ethiopia. Newspapers and magazines are published and owned by both government and private companies. Because of the Press Law of Ethiopia, the Government does not control the content and concepts expressed in such publications.

As stipulated by the constitution of Federal Democratic Republic of Ethiopia (FDRE) and a number of proclamations passed by the House of Representatives, the Government plays more of a regulatory role as can be seen from the following institutional arrangements with the regard to regulating the key information and communications activities in the country:

- The Broadcast Agency of Ethiopia regulates the broadcast media (radio and television).
- Telecommunication is regulated by the Ethiopian Telecommunications Agency.
- ICT development is regulated by EICTDA to promote a broader communication of agricultural and rural development information and to provide affordable telephone (both fixed and mobile) and Internet services as well as non-IP services such as radio and television.

## **2.2. Socio-economic profile**

### **2.2.1. Demographics**

The total population of Ethiopia in 2007 was about 77 million, of which 53% are below the age of 20 and 4.5% older than 60 years. Of the total population, 16.5% of the population is urban and the remaining 83.5% lives in rural areas. There has been a slight but continued decline in the proportion of rural inhabitants migrating to urban areas in search of alternative income from the increased urbanisation schemes in different regions. The total population of Ethiopia by age group, sex, urban and rural (July 2007) is presented in the following table (Tables 2.2.1a and b).

Table 2.2.1a. Summary of the population of Ethiopia by age group, sex, urban and rural

Age	Urban			Rural			Total		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
0-4	807 555	744,045	1 551 600	5 477 074	5 415 921	1 0892 996	6 283 745	6 159 445	12 443 190
5-9	768 043	748,106	1 516 149	4 892 891	4 806 683	9 699 574	5 660 297	5 554 463	11 214 760
10-14	700 473	714,607	1 415 081	4 048 521	3 922 547	7 971 068	4 748 699	4 637 052	9 385 751
15-19	668 510	702,484	1 370 994	3 427 634	3 277 916	6 705 549	4 096 159	3 980 479	8 076 639
20-24	683 076	716,469	1 399 545	301 1516	2 864 646	5 876 162	3 694 929	3 581 345	7 276 274
25-29	629 073	645,389	1 274 462	2 540 222	2 442 170	4 982 392	3 169 748	3 087 809	6 257 557
30-34	527 229	517,582	1 044 811	2 033 312	2 049 586	4 082 898	2 560 978	2 567 340	5 128 318
35-39	488 201	410,129	828 329	1 613 800	1 701 719	3 315 519	2 032 344	2 111 961	4 144 304
40-44	308 067	310,517	618 584	1 280 422	1 407 770	2 688 192	1 588 678	1 718 335	3 307 013
45-49	229 368	237,375	466 743	1 020 490	1 150 000	2 170 490	1 249 958	1 387 389	2 637 347
50-54	176 554	184,338	360 892	844 159	922 635	1 766 793	1 020 753	1 106 974	2 127 726
55-59	135 839	142,179	278 017	687 027	722 050	1 409 077	822 871	864 226	1 687 097
60-64	98 646	110,897	209 543	532 561	535 509	1 068 070	631 188	646 413	1 277 601
65-69	69 285	82,831	152 116	391 829	380 733	772 562	461 090	463 576	924 666
70-74	44 881	56,963	101 844	267 396	254 117	521 513	312 252	311 090	623 342
≥75	42 201	58,090	100 292	268 146	246 998	515 144	310 313	305 102	615 415
Total	6377001	6382001	12689002	32337000	32101000	64437999	38644002	38482999	77127000

Source: CSA, 2007

Table 2.2.1.b. Summary of population of Ethiopia by sex, region, urban and rural

Region	Urban			Rural			Total		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Tigray	421	433	854	1,772	1,823	3,595	2,193	2,256	4,449
Afar	73	59	132	714	572	1,286	787	631	1,418
Amhara	1,149	1,150	2,299	8,656	8,669	17,325	9,805	9,819	19,624
Oromiya	1,842	1,849	3,691	11,784	11,829	23,613	13,626	13,678	27,304
Somali	412	356	768	1,972	1,704	3,676	2,384	2,060	4,444
Benishangul-Gumuz	32	32	64	290	286	576	322	318	640
Southern Nations Nationalities and Peoples	665	673	1338	6954	7029	13,983	7,619	7,802	15,321
Gambella	25	24	49	104	100	204	129	124	253
Harari	65	62	127	39	37	76	104	99	203
Addis Ababa	1,469	1,590	3,059	0	0	0	1,469	1,590	3,059
Dire Dawa	154	154	308	52	52	104	206	206	412
Total	6,307	6,382	12,689	32,337	32,101	64,438	38,644	38,483	77,127

Source: CSA, 2007

## 2.2.2. Literacy level and languages

At all levels, irrespective of gender, the proportion of literate population is increasing every year. In rural areas, the literacy rate increased from 18% in 1996 to 31% in 2005. However, narrowing gaps in literacy rate between rural and urban areas and males and females is still significant. At the national level, the literacy rate increased from 26% in 1996 50% in 2004, with male literacy rate increasing from 35% in 1996 to 50% in 2004, while female literacy rate increased from 17% in 1996 to 27% in 2004 (World Bank, 2007). Students enrolled at the different levels are presented in Table 2.2.2.

Table 2.2.2. Total number of student enrolment by level and sex 2004/05-2006/07

Total no. of students	2004/05	2005/06	2006/07
<b>Grades1-8</b>			
Male	6,276,921	6,356,523	6,704,292
Female	4,948,390	4,020,436	5,417,651
<b>Total</b>	<b>11,225,311</b>	<b>11,376,959</b>	<b>12,121,943</b>
<b>Grade 9-10</b>			
Male	521,931	533,687	576,021
Female	279,728	289,031	337,169
<b>Total</b>	<b>801,659</b>	<b>822,718</b>	<b>913,190</b>
<b>Grade 11-12 (Preparatory)</b>			
Male	66,279	69,397	82,176
Female	24,480	25,771	43,276
<b>Total</b>	<b>90,759</b>	<b>95,168</b>	<b>125,452</b>
<b>10+1 - 10+3 (TVET)</b>			
Male	30,450	47,775	39,569
Female	32,596	48,504	36,468
<b>Total</b>	<b>63,046</b>	<b>96,279</b>	<b>76,037</b>
<b>University (Colleges)</b>			
Male	70,388	70,388	79,465
Female	21,267	21,267	25,108
<b>Total</b>	<b>91,655</b>	<b>91,655</b>	<b>104,573</b>
<b>Grand Total</b>	<b>12,272,430</b>	<b>12,482,779</b>	<b>13,349,195</b>

Source: CSA, 2007

According to the Ethiopian Constitution, each child has the right to be educated at least up to primary school level, and as a result, a number of ethnic groups are teaching their children in their mother tongue. There are over 80 languages spoken in Ethiopia of which about 16 languages are being used to teach children in elementary (first and second cycles) schools (Ministry of Education, 2005). The statistics of major languages in Ethiopia Shows that Amharic is spoken by 32.7%, Oromiffa 31.6%, Tigrigna 6.1%, Somali 6%, Guaraghe 3.5%, Sidamigna 3.5%, Hadiyigna 1.7%, other 14.8%. The English language is the major foreign language taught in schools (<http://www.nationmaster.com/country>)

### 2.2.3. Access to services

Some of the pertinent basic facts about accessibility to services of the Ethiopian populations are presented as follows (Table 2.2.3).

Table 2.2.3. Access to major services in Ethiopia

Access to medical services	46%
Access to clean water	22%
Access to improved sanitation	44%
Access to electricity	22%
Literacy rate (Men)	49%
Literacy rate(Women)	34%
Primary school enrolment	100%
High school enrolment	93.4%
Doctors/persons	0.3/1000
Immunization rate for major vaccines	90%
Readership of newspapers/persons	1/1000
TV sets /persons	5/1000
Radio receivers/persons	179/1000
Computers/persons	1/1000
Internet access/persons	0.2/1000

Source: World Bank, 2005; World Bank, 2007; UN Office for the Coordination of Humanitarian Affairs, 2007; MoFED, 2006

#### 2.2.4. Rural-urban drift

According to the total population estimate of Ethiopia in 2007, 16.5% of the population is urban and the remaining 83.5% lives in rural areas. This shows that there is a decline in the proportion of rural inhabitants migrating to urban areas in search of alternative income from the increased urbanisation schemes in different regional states. (CSA 2007)

### 2.3. Media and telecommunications

As a state-owned institution, the Ethiopian Television and Radio and the press agencies have become instrumental in the development activities. This is evidenced revealed in the objective statement which states, "Prepare and present to the public radio and television major and current events taking place within the country and abroad, as well as educational and recreational programmes in accordance with media, press and other relevant policies and laws (data from field survey)." The agencies have wide coverage of transmitting agricultural, rural, and pastoral information even beyond the nation.

Like most media activities, agricultural and rural development information and communication in either print or electronic format is not restricted by any kind of government legislation or policies in Ethiopia. Newspapers and magazines are published and owned by both government and private companies. Because of the Press Law of Ethiopia, the government does not control the content and concepts expressed in such publications. The Broadcast Agency of Ethiopia regulates the broadcast media (radio and television). Similarly, telecommunication is regulated by the Ethiopian Telecommunications Agency. The regulatory activity serves to promote a broader communication of agricultural and rural development information and to provide affordable telephone (both fixed and mobile) and Internet services as well as non-IP services such as radio and television.

## 2.3.1. Newspapers, periodicals, magazines, radio stations, television channels

### 2.3.1.1 Newspapers

Newspaper publishing is about a 100 years old venture in Ethiopia. Since then, agrarian news and feature articles are the dominant columns in government owned newspapers. However, to date, several private newspapers include news and feature articles dealing with agriculture and rural development activities in the countries. They also include some crop production guidance in their columns. Newspapers published in Ethiopia are presented in Table 2.3.1.1 below.

### 2.3.1.2. Periodicals

Several periodicals (magazines, newsletters, and journals) are produced in Ethiopia. In most of government published magazines, agricultural and rural development issues are often in the headlines. The major periodicals with emphasis on agriculture and rural development including pastoral and agro-pastoral activities are presented in Table 2.3.1.2.

Table 2.3.1.1. Newspapers published in Ethiopia

Title	Language	Content	Circulation	Frequency	Publisher
Addis Zemen	Amharic	General	<ul style="list-style-type: none"> <li>Local Ethiopian embassies and communities abroad</li> </ul>	Daily (At least one article and a few news in agriculture and rural development)	EPA (government) <a href="http://www.ethiopress.gov.et">http://www.ethiopress.gov.et</a>
Ethiopian Herald	English	General	<ul style="list-style-type: none"> <li>Local Ethiopian embassies and communities abroad</li> </ul>	Daily (At least one article and a few news in agriculture and rural development)	EPA (government) <a href="http://www.ethiopress.gov.et">http://www.ethiopress.gov.et</a>
Barriisa	Oromifa	General	local (Addis Ababa and Oromiya Region)	Daily (At least one article and a few news in agriculture and rural development)	EPA (government) <a href="http://www.ethiopress.gov.et">http://www.ethiopress.gov.et</a>
Al Alem	Arabic	General	<ul style="list-style-type: none"> <li>Local Ethiopian embassies and communities abroad</li> </ul>	Daily (At least one article and a few news in agriculture and rural development)	EPA (government) <a href="http://www.ethiopress.gov.et">http://www.ethiopress.gov.et</a>
The Daily Monitor	English	Political Economy Social (PES)	local (mainly Addis Ababa)	Daily (Rarely publish on agricultural and rural development issues)	Monitor PLC (private)
Negadras	Amharic	Economy and Social	Local (mainly Addis Ababa)	Weekly (Mostly publish on agricultural marketing issues)	Sabisa Plc (private)
Fortune	English	Economy and Social	Local (mainly Addis Ababa)	Weekly (Rarely publish on agricultural and rural development issues)	Independent News & Media Plc (private)
Reporter	Amharic	PES	local (Addis Ababa and capital cities of regional states and some big towns)	Twice weekly (At least one article and a few news in agriculture and rural development)	Media Communication Centre (private) <a href="http://www.ethiopianreporter.com">http://www.ethiopianreporter.com</a>
Abyotawi Democracy	Amharic	PES	Through out the regional states including Addis Ababa and Dire	Weekly (At least one article and a few news in agriculture and rural development)	EPRDF (private)

Addis Lisne	Amharic	PES	Dawa Addis Ababa	Twice weekly (Rarely publish on agricultural and rural development issues)	Addis Ababa Administration (government)
Addis Admas	Amharic	PES	local (Addis Ababa and capital cities of regional states and some big towns)	Weekly (At least one article and a few news in agriculture and rural development)	Admas Advertising (private) <a href="http://www.addisadmass.com">http://www.addisadmass.com</a>

Source MOI, 2008; personal survey

Table 2.3.1.2. The major periodicals published in Ethiopia

Periodical	Language	Frequency	Circulation	Publisher
Zemen	Amharic	Quarterly (At least one major agricultural and rural development article in an issue)	<ul style="list-style-type: none"> <li>Local</li> <li>Ethiopian embassies and communities abroad</li> <li>10 000 copies per issue</li> </ul>	Ethiopian Press Agency <a href="http://www.ethiopianreporter.com">http://www.ethiopianreporter.com</a>
Ethiopia	Amharic	Quarterly (At least one major agricultural and rural development article in an issue)	<ul style="list-style-type: none"> <li>Local</li> <li>Ethiopian embassies and communities abroad</li> <li>10 000 copies per issue</li> </ul>	Ministry of Information <a href="http://www.ethiopianreporter.com">http://www.ethiopianreporter.com</a>
Ethiopia	English	Quarterly (At least one major agricultural and rural development article in an issue)	<ul style="list-style-type: none"> <li>Local</li> <li>Ethiopian embassies and communities abroad</li> <li>10 000 copies per issue</li> </ul>	Ministry of Information <a href="http://www.ethiopianreporter.com">http://www.ethiopianreporter.com</a>
Agriculture	Amharic	Quarterly (totally agricultural and rural development articles)	<ul style="list-style-type: none"> <li>Local</li> <li>5000 copies per issue</li> </ul>	Ministry of Agriculture and Rural Development
Ethiopian Journal of Agricultural Sciences	English	Bi-annual	<ul style="list-style-type: none"> <li>Local</li> <li>500 copies per issue</li> </ul>	Ethiopian Society of Agricultural Professionals  Indexed in AGRIS
Pest Management Journal of Ethiopia	English	Bi-annual	<ul style="list-style-type: none"> <li>Local</li> <li>500 copies per issue</li> </ul>	Crop Protection Society of Ethiopia  Indexed in AGRIS
Ethiopian Journal of Weed Science	English	Bi-Annual	<ul style="list-style-type: none"> <li>Local</li> <li>300 copies per issue</li> </ul>	Ethiopian Society of Weed Science  Indexed in AGRIS
Natural Resources Journal of Ethiopia	English	Bi-annual	<ul style="list-style-type: none"> <li>Local</li> <li>500 copies per issue</li> </ul>	Soil Science Society of Ethiopia  Indexed in AGRIS
Ethiopian Journal of Agricultural Economics	English	Bi-annual	<ul style="list-style-type: none"> <li>Local</li> <li>300 copies per issue</li> </ul>	Agricultural Economics Society of Ethiopia  Indexed in AGRIS
Ethiopian Journal of Animal Production	English	Bi-annual	<ul style="list-style-type: none"> <li>Local</li> <li>300-500 copies per issue</li> </ul>	Ethiopian Society of Animal Production

				Indexed in AGRIS
Journal of Dryland Agriculture	English	Bi-annual	<ul style="list-style-type: none"> <li>Local</li> <li>300-500 copies per issue</li> </ul>	Mekelle University
East African Journal of Science	English	Bi-annual	<ul style="list-style-type: none"> <li>Sub-regional</li> <li>500 copies per issue</li> </ul>	Haramaya University
MIRMIR	English and Amharic	Quarterly	<ul style="list-style-type: none"> <li>Local</li> <li>500-600 copies per issue</li> </ul>	Ethiopian Institute of Agricultural Research

Source MOI, 2008; Personal observations

### 2.3.1.3. Broadcast media

Even though the history of broadcast media in Ethiopia is relatively old, its development has been so slow until the last decade, when the expansion of both government-owned and the private media has been noted. The electronic media, which is still under government ownership, has increased its airtime very recently and also its coverage of development issues has expanded. Radio stations, mainly FM stations, have tremendously increased and the installation of community radio stations is being considered by private and government institutions. However, only a few FM stations deal with issues especially related to agricultural and rural development. The major broadcast media in Ethiopia are presented in Table 2.3.1.3

Table 2.3.1.3. Broadcast media with emphasis on agricultural and rural development issues

Category	Broadcast hour	Language	Coverage	Address
ETV	18	Amharic, Oromiffa, Tigrigna, Somali, English	90%	P.O. Box: 1020, Addis Ababa, Ethiopia Tel: 251-11-5505174 E-mail: etv2@ethionet.et Web site: <a href="http://www.arta.gov.et">http://www.arta.gov.et</a>
TV (Channel 2)	2.5 hours	Amharic	Addis Ababa and its surroundings	Addis Ababa
Ethiopian Radio (has 11 Radio transmitters for MW and SW transmissions and )	18	Amharic, Oromifa, Tigrigna, Somali, Afar, English	MW 70% and SW 100%	P.O. Box: 1020, Addis Ababa, Ethiopia Tel: 251-11-5505174 E-mail: etv2@ethionet.et Web site: <a href="http://www.arta.gov.et">http://www.arta.gov.et</a>
Radio Fana has 1MW transmitter intended for Addis Ababa area with 100KM Air distance coverage and 1 short wave transmitter covering the whole country with some penetration in neighbouring countries such as Kenya, Djibouti, Yemen and Somalia	18	Amharic, Oromifa, Tigrigna, Somali, Afar,	100% 100KM2 MW and with SW 80% of the country	P.O. Box: 30702, Addis Ababa, Ethiopia Tel: 251-11-5516777 E-mail: <a href="mailto:rfana@radiofana.com">rfana@radiofana.com</a> Web site: <a href="http://www.rfana.com">http://www.rfana.com</a>
FM 97.1	24	Amharic	Addis Ababa and its surroundings (more than 125km air distance)	Addis Ababa

Category	Broadcast hour	Language	Coverage	Address
FM 98.1 (Fana FM)	16	Amharic	Addis Ababa and its surroundings	Addis Ababa
FM 102.1 (Sheger FM)	12	Amharic	Addis Ababa and its surroundings	Addis Ababa
FM 91.1	6	Harari, Oromifa, Amharic	Harar City and its surroundings	Harar
Educational Media Agency (owns 13 transmitters for MW and SW transmissions)	6	Amharic, Oromifa, Tigrigna, Somali, Afar, etc	MW 90% of the country	Different parts of the country, headquarters in Addis Ababa
Amhara Region Mass Media Agency (FM Bahirdar)	6	Amharic	60KM <sup>2</sup> FM Around Bahir Dar	Bahirdar
Amhara Region Mass Media Agency MW transmitter		Amharic	90% of the Region	Bahirdar
Radio Oromiya	6	Oromifa		Adama
South Radio	6	Amharic, Sidama	100KM <sup>2</sup> MW around Hawassa	Hawassa
Harar Radio	6	Oromifa, Harari, Somali	Harari Region and its surroundings	Harar
Dimitse Woyane (has one short wave transmitter)	4	Tigrigna	100 km <sup>2</sup> with SW around Mekelle	Mekelle

*ETC, 2007; Personal knowledge.*

### **2.3.2. Telecommunications services**

As part of the national ICT development strategy, the telecommunication industry of Ethiopia is expanding rapidly to cover the vast geographical areas to supporting the national economic development drive. The Ethiopian Telecommunications Corporation (ETC) has invested heavily in network infrastructure in recent years and provided up-to-date data on connectivity nationwide. As per its commitment to enhance development through ICT, ETC is currently engaged in numerous projects to upgrade capacity throughout the country. As a result, telecommunication technologies are now penetrating all corners of the country. This endeavour has largely supported the various public sector capacity building programmes.

ETC is responsible to operate as a public enterprise with the principal duty of maintaining and expanding telecommunication services to the country by the Proclamation 49/1996, and providing domestic and international telecom services under the supervision of Ethiopian Telecommunications Agency (ETA). ETA is a separate regulatory body with the objective of promoting the development of high quality, efficient, reliable and affordable telecommunication services in Ethiopia. In this respect, ETC is the sole operator of telecommunication services including Internet and public phone.

Telecommunication services are one of the advancing infrastructural development activities in Ethiopia. The Government of Ethiopia is spending a huge amount of

money on telecommunications development projects. The services and their capacities and tariffs are presented in (Tables 2.3.2.1, 2.3.2.2a and b).

Table 2,3,2,1. Types of telecommunication services and their capacity

Type of service	Capacity	
	2007	2010
Broadband Internet	100,000	100,000
Multimedia	1,055	-
VSAT	1,900	-
Mobile phone	1,500,000	10,000,000
Fixed line	1,070,907	2,500,000
Wireless telephone (CDMA wireless local loop) network	625,000	2,400,000
Rural villages benefited from telephone services	7,389	15,000
Fibre optic network	10,000 km	14,000 km
International link	2,203 circuits (satellites, microwaves and fibre optic)	-
Tele centres*	936	-
Tele density (fixed line)	1.2 per 100 persons	-
Tele density (mobile)	1.48 per 100 persons	-
Tele density (fixed + mobile)	2.68 per 100 persons	10 per 100 persons

\*These are public phone stations

Source: ETC, 2007

#### Tariffs for Dial up Internet and Dedicated Internet Services

ETC has different tariffs for different services it is providing to the public. Tables 2.3.2.2a and b present the categories of services and the corresponding charges of subscription and monthly fees.

Table 2.3.2.2.a. Types of telecommunication services and their corresponding charges

Type of Service	Charge (birr)	
	Initial	Monthly
<b>For 64kbs</b>		
ADSL	4,608	1,986
BFWA - Data Only	7,267	2,458
BFWA - Data + Voice	12,764	3,431
<b>For 128kbs</b>		
ADSL	7,533	3,140
BFWA - Data Only	10,193	3,612
BFWA - Data + Voice	15,689	4,585
<b>For 256 kbs</b>		
ADSL	13,925	6,096
BFWA - Data Only	16,584	6,567
BFWA - Data + Voice	22,081	7,541
<b>For 384kbs</b>		
ADSL	20,316	9,052
BFWA - Data Only	22,976	9,523
BFWA - Data + Voice	28,472	10,497
<b>For 512kbs</b>		
ADSL	26,708	12,008
BFWA - Data Only	29,367	12,479
BFWA - Data + Voice	34,864	13,453
<b>For 768 kb</b>		
ADSL	39,491	17,920
BFWA - Data Only	42,150	18,391
BFWA - Data + Voice	47,647	19,365
<b>For 1Mb</b>		
ADSL	52,274	23,832
BFWA - Data Only	54,933	24,303
BFWA - Data + Voice	60,430	25,277
<b>For 2Mb</b>		
ADSL	103,406	41,479
BFWA - Data Only	106,066	47,950
BFWA - Data + Voice	111,562	48,924

Source: ETC, 2007

Table 2.3.2.2.b. Tariff for dial up services in Ethiopia

Tariff adjustment made on Dial-Up Internet Services	
Installation fee	156.00
Monthly fee rent (inclusive of 900 minutes free service)	60.00
Service fee (Over 900 minutes of service)	Birr 0.04 per minute (including 6 p.m. in the evening up to 8 a.m. in the morning, working days, holidays, Saturdays and Sundays)
	Birr 0.07 per minute (including 8 a.m. in the morning up to 6 p.m. in the evening and working days)

Source: ETC, 2007

### 2.3.3. Computer and the Internet

With regard to computer use and the Internet, one cannot compare the situation a few years ago where there were only 10000 Internet users in the country. Currently, the Internet is very much expanded to almost all corners of the country where everyone who is literate of the technology is able to use it. For instance, the teaching and learning process at high school level is entirely based on on-line systems, as result over a million students are getting similar syllabus at the same time from this Schoolnet programme. Woredanet enables networking among all district-level government offices in the country with their hierarchal officers and with other relevant institutions is another instance.

At university level, there is a growing trend of post graduate training by remote schooling using video conference, for example between Indian and Ethiopian universities in engineering and health streams.

Current computer use is estimated at 1 computer per 1 000 people, while Internet users are estimated at 0.2 per 1000 people (<http://www.Internetworldstats.com>). Internet use growth is presented in Table 2.3.3.

Table 2.3.3. Internet usage and population growth

Year	Users	Population	% of the population
2000	10,000	70,600,043	0.0
2005	113,000	72,238,014	0.2
2007	164,000	73,872,056	0.2

Source: <http://www.Internetworldstats.com>

### Annex. 3. Profile of Institutions

In this study, 88 Institutions are identified of which, 17 institutions were visited to conduct interviews using a standard semi-structured questionnaire, with 34 key personnel involved in ICM activities

#### 3.1. List of Institutions Involved in Agriculture and Rural Development

Name and Address	Type	Role
Ministry of Agriculture and Rural Development P.O. Box: 62347, Addis Ababa, Ethiopia Tel:251-11-1518040 E-mail: moard@moard.gov.et Web site: <a href="http://www.moar.gov.et">http://www.moar.gov.et</a>	GOV	EX, RU,IN,PP, RG
Ministry of Trade and Industry P.O. Box:794, Addis Ababa, Ethiopia Tel: 251-11-551825 E-mail: moi-et@ethionet.et Web site: <a href="http://www.moi.gov.et">http://www.moi.gov.et</a>	GOV	TM, IN, PP, RG
Ministry of Federal Affairs P.O. Box:5608, Addis Ababa, Ethiopia Tel:251-11-5510000 E-mail: mofa@ethionet.et Web site: <a href="http://www.mofa.gov.et">http://www.mofa.gov.et</a>	GOV	IN,PP
Ministry of Culture and Sports P.O. Box: 3241, Addis Ababa, Ethiopia Tel: 251-11-1517020 E-mail: mysc@ethionet.et Web site: <a href="http://www.mysc.gov.et">http://www.mysc.gov.et</a>	GOV	IN,PP
Disaster Prevention and Preparedness Agency P.O. Box: 5686, Addis Ababa, Ethiopia Tel: 251-11-5152430 E-mail: dppc@dppc.gov.et Web site: <a href="http://www.dppc.gov.et">http://www.dppc.gov.et</a>	GOV	IN
Cooperatives Development Agency P.O. Box: 19787, Addis Ababa, Ethiopia Tel: 251-11-5157486 E-mail: fcc@ethionet.et Web site: -	GOV, AS-E	IN, PP, RG
Ethiopian Dairy and Meat Technology Institute P.O. Box: - Tel: 251-114339566 E-mail: - Web site: -	GOV	IN,PP, RG
Ethiopian Meteorological Services Agency P.O. Box: 1090, Addis Ababa, Ethiopia Tel: 251-11-6615791 E-mail: nmsa@ethionet.et Web site: <a href="http://www.ethiomet.gov.et">http://www.ethiomet.gov.et</a>	GOV	IN, RD

<b>Name and Address</b>	<b>Type</b>	<b>Role</b>
Environment Protection Agency P.O. Box: 12760, Addis Ababa, Ethiopia Tel: 251-11-6465001 E-mail: esid@ethionet.et Web site: <a href="http://www.epa.gov.et">http://www.epa.gov.et</a>	GOV	PP, IN
Ethiopian Science and Technology Agency P.O. Box: 2490, Addis Ababa, Ethiopia Tel: 251-115513444 E-mail: esta@ethionet.et Web site: <a href="http://www.esta.gov.et">http://www.esta.gov.et</a>	GOV	IN
Quality and Standards Authority P.O. Box: 2310, Addis Ababa, Ethiopia Tel: 251-11-6460111 E-mail: qsae@ethionet.et Web site: <a href="http://www.qsae.gov.et">http://www.qsae.gov.et</a>	GOV	IN, RG
Institute of Biodiversity Conservation P.O. Box:30726, Addis Ababa, Ethiopia Tel: 251-11-6612244 E-mail: info@ibc-et.org Web site: <a href="http://www.ibc.gov.et">http://www.ibc.gov.et</a>	GOV	IN, RD, RG
Ethiopian Seed Enterprise P.O. Box: 2453, Addis Ababa, Ethiopia Tel: 251-11-6612267 E-mail: ese@ethionet.et Web site: -	TE	PS-P
Central Statistical Agency P.O. Box: Tel: 251-11-1578156 E-mail: csa@ethionet.et Web site: <a href="http://www.csa.gov.et">http://www.csa.gov.et</a>	GOV	IN
National Archives and Library Agency P.O. Box: 717, Addis Ababa, Ethiopia Tel: 251-11-5516532 E-mail: nala@ethionet.et Web site: <a href="http://www.nala.gov.et">http://www.nala.gov.et</a>	GOV	IN
Information and Communications Technology Development Agency P.O. Box: 1028, Addis Ababa, Ethiopia Tel: 251-11-5503973 E-mail: debre@eictda.gov.et Web site: <a href="http://www.eictda.gov.et">http://www.eictda.gov.et</a>	GOV	PP
Oromiya Agriculture and Rural Development Bureau P.O. Box: 8770, Addis Ababa, Ethiopia Tel: 251-11-5518542 E-mail: - Web site: -	GOV, AS-E	EX, IN, RU
Amhara Region Bureau of Agriculture and Rural Development P.O. Box: - Tel: 251-58-2200929 E-mail: - Web site: -	GOV	EX, IN, RU
SNNPRS Bureau of Agriculture and Rural Development P.O. Box: 80, Hawassa, Ethiopia Tel: 251-64-2206125 E-mail: srrdb@ethionet.et Web site: -	GOV	EX, IN, RU

<b>Name and Address</b>	<b>Type</b>	<b>Role</b>
Tigray Region Bureau of Agriculture and Rural Development P.O. Box: 10, Mekelle, Ethiopia Tel: 251-34-4400846 E-mail: - Web site: -	GOV	EX, IN, RU
Benishangul-Gumuz Region Bureau of Agriculture and Rural Development P.O. Box: 30, Assosa, Ethiopia Tel: 251-57-7750150 E-mail: - Web site: -	GOV	EX, IN, RU
Ethiopian Sugar Development Agency P.O. Box: 20034, Addis Ababa, Ethiopia Tel: 251-11-5511934 E-mail: esiscw@ethionet.et Web site: -	GOV	RD, IN
Ethiopian Institute of Agricultural Research P.O. Box: 2003, Addis Ababa, Ethiopia Tel: 251-0114462633 E-mail: infocom@eiar.gov.et Web site: <a href="http://www.eiar.gov.et">http://www.eiar.gov.et</a>	GOV	RD, IN
Oromiya Region Agricultural Research Institute P.O. Box: 81265, Addis Ababa, Ethiopia Tel: 251-11-6187346 E-mail: oari@ethionet.et Web site: -	GOV	RD, IN
Amhara Region Agricultural Research Institute P.O. Box: 527, Bahirdar, Ethiopia Tel: 251-58-2205200 E-mail: arari@ethionet.et Web site: <a href="http://www.ar-ari.org.et">http://www.ar-ari.org.et</a>	GOV	RD, IN
South Agricultural Research Institute P.O. Box: P.O. Box 06, Hawassa, Ethiopia Tel: 251-46-2204000 E-mail: srari@ethionet.et Web site: -	GOV	RD, IN
Tigray Region Agricultural Research Institute P.O. Box: 492, Mekelle, Ethiopia Tel: 251-34-4408028 E-mail: tari@ethionet.et Web site: -	GOV	RD, IN
Gambella Region Agricultural Research Institute P.O. Box: 62, Gambella, Ethiopia Tel: 251-47-5510014 E-mail: - Web site: -	GOV	RD, IN
Afar Region Pastoral and Agro-pastoral Research Institute P.O. Box: 73, Assaita, Ethiopia Tel: 251-33-6660434 E-mail: nidpafar@ethionet.et Web site: -	GOV	RD, IN
Somali Region Pastoral and Agro-pastoral Research Institute P. O. Box: 398, Jijiga, Ethiopia Tel: 251-25-5753122 E-mail: sorpari@yahoo.com Web site: -	GOV	RD, IN

Name and Address	Type	Role
National Soils Analysis Center P. O. Box: 147, Addis Ababa, Ethiopia Tel: E-mail: <a href="mailto:nsrc@ethionet.et">nsrc@ethionet.et</a> Web site: -	GOV	IN
Ethiopian Development Research Institute P.O. Box: 2479, Addis Ababa, Ethiopia Tel: 251-011-550-6066 E-mail: <a href="mailto:info@edri-et.org">info@edri-et.org</a> Web site: <a href="http://www.edri-et.gov.et">http://www.edri-et.gov.et</a>	GOV	RD, IN
Ethiopian Energy Promotion Centre P.O. Box: 8063, Addis Ababa, Ethiopia Tel: 251-11-5513689 E-mail: <a href="mailto:eesrc@ethionet.et">eesrc@ethionet.et</a> Web site: -	GOV	RD, IN
National Animal Health Diagnostic and Investigation Centre P.O. Box: 04, Sebeta, Ethiopia Tel: 251-11-3380898 E-mail: <a href="mailto:nahrclj@ethionet.et">nahrclj@ethionet.et</a> Web site: -	GOV	RD, IN
Ethiopian Television and Radio Agency P.O. Box: 1020, Addis Ababa, Ethiopia Tel: 251-11-5505174 E-mail: <a href="mailto:etv2@ethionet.et">etv2@ethionet.et</a> Web site: <a href="http://www.arta.gov.et">http://www.arta.gov.et</a>	MED, GOV	IN
Ministry of Information P.O. Box: 1364, Addis Ababa, Ethiopia Tel: 251-11-5516358 E-mail: - Web site: <a href="http://www.moinfo.gov.et">http://www.moinfo.gov.et</a>	GOV, MED	IN
Ethiopian Press Agency P.O. Box: 30232, Addis Ababa, Ethiopia Tel: 251-11-1569883 E-mail: - Web site: <a href="http://www.ethiopress.gov.et">http://www.ethiopress.gov.et</a>	MED, GOV	IN
Radio Fana P.O. Box: 30702, Addis Ababa, Ethiopia Tel: 251-11-5516777 E-mail: <a href="mailto:rfana@radiofana.com">rfana@radiofana.com</a> Web site: <a href="http://www.rfana.com">http://www.rfana.com</a>	MED, PRV	IN
Ethiopian News Agency P.O. Box:530, Addis Ababa, Ethiopia Tel: 251-11-1550011 E-mail: <a href="mailto:ena@ethionet.et">ena@ethionet.et</a> Web site: <a href="http://www.ena.gov.et">http://www.ena.gov.et</a>	MED, GOV	IN
World Promotion and Information Services P.O. Box: 184949, Addis Ababa, Ethiopia Tel: 251-11-4670750 E-mail: - Web site: -	MED, PRV	IN
Sheger FM 102.1 <b>Tel:</b> 251-11-1554545	MED, PRV	IN
International Livestock Research Institute P.O. Box: 5689, Addis Ababa, Ethiopia 251-11-6463215 E-mail: <a href="mailto:ILRI-Ethiopia@cgiar.org">ILRI-Ethiopia@cgiar.org</a> Web site: <a href="http://www.ilri-cgiar.org">http://www.ilri-cgiar.org</a>	INT	RD, IN

<b>Name and Address</b>	<b>Type</b>	<b>Role</b>
International Food and Policy Research Institute P.O. Box: 5689, Addis Ababa, Ethiopia Tel: 251-11-6463215 E-mail: IFPRI-Ethiopia@cgiar.org Web site: <a href="http://www.ifpri-cgiar.org">http://www.ifpri-cgiar.org</a>	INT	IN, RD
Ethiopian Sheep and Goat Productivity Development Programme P.O. Box: Tel: 251-11-4166962 E-mail: pvamrf_ethiopia@ethionet.et Web site: -	INT	IN, RD
Nile Basin Initiative P.O. Box: 60173, Addis Ababa, Ethiopia Tel: 251-11-6467011 E-mail: hgany@nilebasin.org Web site: <a href="http://www.nilebasin.org">http://www.nilebasin.org</a>	INT	IN, RD
Haramaya University, College of Agriculture P.O. Box: 291, Haramaya, Ethiopia Tel: 251-25-6610710 E-mail: - Web site: <a href="http://www.haramaya.edu.et">http://www.haramaya.edu.et</a>	EDU	TR, RD
Haramaya University, Institute of Pastoral Development Research P.O. Box: 291, Haramaya Ethiopia Tel: 251-25-66610710 E-mail: - Web site: <a href="http://www.haramaya.edu.et">http://www.haramaya.edu.et</a>	EDU	IN, RD
Hawassa University, College of Agriculture P.O. Box: 05, Hawassa, Ethiopia Tel: 251-47- 6210137 E-mail: aca-agmet@ethionet.et Web site: <a href="http://www.hawassa.edu.et">http://www.hawassa.edu.et</a>	EDU	TR, RD
Jimma University, College of Agriculture and Veterinary Medicine P.O. Box: 308, Jimma, Ethiopia Tel: 251-47-1111458 E-mail: - Web site: <a href="http://www.ju.edu.et">http://www.ju.edu.et</a>	EDU	TR, RD
Ambo College of Agriculture P.O. Box: 19 Ambo, Ethiopia Tel: 251-11-2362017 E-mail: - Web site: <a href="http://ju.edu.et">ju.edu.et</a>	EDU	TR
Addis Ababa University, Faculty of Journalism and Communications P.O. Box: 5646, Addis Ababa, Ethiopia Tel: 251-11-1578553 E-mail: aauemmti@ethionet.et Web site: <a href="http://www.aau.edu.et">http://www.aau.edu.et</a>	EDU	TR
Addis Ababa University, Faculty of Informatics and Information Systems P.O. Box: 564, Addis Ababa, Ethiopia Tel: - E-mail: - Web site: <a href="http://www.aau.edu.et">http://www.aau.edu.et</a>	EDU	TR
Mekelle University, Faculty of Dryland Agriculture and Natural Resources Management P.O. Box: 231, Mekelle, Ethiopia Tel: - E-mail: Mekelle.university@ethionet.et Web site: <a href="http://www.mu.edu.et">http://www.mu.edu.et</a>	EDU	TR, RD

<b>Name and Address</b>	<b>Type</b>	<b>Role</b>
Bahirdar University, Faculty of Agriculture P.O. Box: 79, Bahirdar, Ethiopia Tel: 251-58-2205943 E-mail: bdu@edu.net.et Web site: -	EDU	TR
Alagae Agricultural Technical College P.O. Box: 77, Ziway, Ethiopia Tel: 251-11-4613403 E-mail: - Web site: -	EDU	TR
Pastoralist Forum of Ethiopia P.O. Box: 364 code 1250, Addis Ababa, Ethiopia Tel: 251-11-6628343 E-mail: pastoralistforumeth@ethionet.et Web site: <a href="http://www.pfe-ethiopia.com">http://www.pfe-ethiopia.com</a>	NGO	IN
Sustainable Land Use Forum P.O. Box: 11919, Addis Ababa, Ethiopia Tel: 251-11-5157656 E-mail: sluf@ethionet.et Web site: -	NGO	IN,EX,RU
Agri-Service Ethiopia P.O. Box: 2460, Addis Ababa, Ethiopia Tel: 251-11-4651212 E-mail: - Web site: <a href="http://www.agriserviceethiopia.org">http://www.agriserviceethiopia.org</a>	NGO	IN, EX, RU
FARMAfrica P.O. Box: 5746, Addis Ababa, Ethiopia Tel: 251-11-4169245 E-mail: farm-ethiopia@ethionet.et Web site: <a href="http://www.farmafrica.org.uk">http://www.farmafrica.org.uk</a>	NGO	IN, EX, RU
World Vision Ethiopia P.O. Box:3330 Addis Ababa, Ethiopia Tel: 251-0116-293363 E-mail: - Web site: <a href="http://www.wvi.org">http://www.wvi.org</a>	NGO	IN, EX, RU
Christian Relief and Development Association P.O. Box: 5674, Addis Ababa, Ethiopia Tel: 251-11-4390322 E-mail: crda@ethionet.et Web site: <a href="http://www.crdaethionet.org">http://www.crdaethionet.org</a>	NGO	IN, RU
Sasakawa Global 2000 P.O. Box: 12771, Addis Ababa, Ethiopia Tel: 251-11-5528509 E-mail: sgeth@ethionet.et Web site: -	NGO	EX
Environmental Development Action P.O. Box: 8808, Addis Ababa, Ethiopia Tel: 251-11-4168895 E-mail: enda-eth@ethionet.et Web site: <a href="http://www.enda.sn">http://www.enda.sn</a>	NGO	IN, RD
Forum for Environment P.O. Box: 10386, Addis Ababa, Ethiopia Tel: 251-11-5521662 E-mail: ffe@ethionet.et Web site: <a href="http://www.ffe-ethiopia.org">http://www.ffe-ethiopia.org</a>	NGO	IN

Name and Address	Type	Role
Self Help Development International P.O. Box: 1204, Addis Ababa, Ethiopia Tel: 251-11-5522313 E-mail: shdi@ethionet.et Web site: <a href="http://www.shdi.org">http://www.shdi.org</a>	NGO	RD
GTZ-SUN Energy P.O. Box: 12994, Addis Ababa, Ethiopia Tel: 251-11-6463453 E-mail: gtz-sun.energy@ethionet.et Web site: -	NGO	RD
CARE International in Ethiopia P.O. Box: 4710, Addis Ababa, Ethiopia Tel: 251-11-6183294 E-mail: care.eth@ethionet.et Web site: -	NGO	RD
Jerusalem Children and Community Development P.O. Box: - Tel: 251-11-4611092 E-mail: jeccd@ethionet.et Web site: <a href="http://www.jccdoethiopia.org">http://www.jccdoethiopia.org</a>	NGO	UA (Urban Agriculture)
Pioneer Hybrids P.O. Box: 1134, Addis Ababa, Ethiopia Tel: 251-11-5510725 E-mail: - Web site:-	PRV	PS-P
Elfora Agro-industry PLC P.O. Box: 2500, Addis Ababa, Ethiopia Tel: 251-11-1320660 E-mail: elfora@ethionet.et Web site: -	PRV	PS-P, PS-E
AMIO Engineering PLC P.O. Box: 25946, Addis Ababa, Ethiopia Tel: 251-11-4168266 E-mail: amioeng@ethionet.et Web site: -	PRV	PS-M
Agri-CEFT Ethiopia (MIDROC Group) P.O. Box: 1006, Addis Ababa, Ethiopia Tel: 251-11-4621030 E-mail: ethioagriceft@ethionet.et Web site: -	PRV	PS-P, PS-E
Ambasel Trading House P.O. Box: 159, Gonder, Ethiopia Tel: 251-58-1111214 E-mail: - Web site: -	PRV	PS-E
Ethiopian Coffee Exporters Association P.O. Box: 8808, Addis Ababa, Ethiopia Tel: 251-11-4614030 E-mail: - Web site: -	PRV	PS-E
Natural Gum Processing and Marketing Enterprise P.O. Box: 62322, Addis Ababa, Ethiopia Tel: 251-11-5518110 E-mail: natgum@ethionet.et Web site: <a href="http://www.naturalgum.ebichina.com">http://www.naturalgum.ebichina.com</a>	PRV	PS-E

Name and Address	Type	Role
Lume-Adama Farmers Cooperative Union P.O. Box: 299, Modjo, Ethiopia Tel: 251-22-1161582 E-mail: lafcu@ethionet.et Web site: -	AS-F	PS-E
Yirgacheffe Coffee Farmers Cooperative Union P.O. Box: 122641, Addis Ababa, Ethiopia Tel: 251-11-4431774 E-mail: yirgacheffe@ethionet.et Web site: <a href="http://www.yirgacheffe-coffee.com">http://www.yirgacheffe-coffee.com</a>	AS-F	PS-E
Oromiya Coffee Farmers Cooperative Union P.O. Box: 1394 code 1110, Addis Ababa, Ethiopia Tel: 251-11-4673256 E-mail: cofunion@ethionet.et Web site: <a href="http://www.romiacoffeunion.org">http://www.romiacoffeunion.org</a>	AS-F	PS-E
Adami Tullu Pesticide Processing Share Co. P.O. Box: 247, Ziway, Ethiopia Tel: 251-36-412303 E-mail: atappse@ethionet.et Web site: -	TE	PS-P
Bale Agricultural Development Enterprise P.O. Box: 2, Bale Robe, Ethiopia Tel: 251-11-5158141 E-mail: baleagri@ethionet.et Web site: -	TE	PS-P
Ethiopian Grain Trade Enterprise P.O. Box: 3321, Addis Ababa, Ethiopia Tel: 251-11-4652436 E-mail: egte@ethionet.et Web site: <a href="http://www.egtemis.com">http://www.egtemis.com</a>	TE	TM
Coffee Plantation Development Enterprise P.O. Box: 4363, Addis Ababa, Ethiopia Tel: 251-11-4670888 E-mail: coffeep@ethionet.et Web site: -	TE	PS-P
National Veterinary Institute P.O. Box: 19, Debre Zeit, Ethiopia Tel: 251-11-4338411 E-mail: nvi-rt@ethionet.et Web site: -	TE	PS-P, PS-E
Ethiopian Kale Heywot Church, Central Office P.O. Box: 5829, Addis Ababa, Ethiopia Tel: 251-11-5516844 E-mail: amkhc@ethionet.et Web site: <a href="http://www.ekhc.org.et">http://www.ekhc.org.et</a>	CHU	RU
Addis Ababa Chamber of Commerce and Sectoral Association P.O. Box: 2458, Addis Ababa, Ethiopia Tel: 251-11-5511479 E-mail: aachamber@ethionet.et Web site: -	CCI	IN

Key:

AS-F Farmers' association (includes co-ops)  
CCI Chamber of commerce and industry  
CHU CHU-based group  
EDU Educational institution  
GOV Government department / ministry  
MED Media  
NGO Non-government organisation

PRV Private enterprise, company  
TE State enterprise  
EX Extension and outreach  
IN Information services  
PS-E Exporter (fresh, frozen and dried produce)  
PS-P Producer (e.g. commercial farm, fishing company)  
RD Research and development

RG Regulation (compliance, standards)  
RU Rural Development  
TR Training (tertiary and vocational level)

TM Trade and marketing (include development)  
UA Urban Agriculture

### 3.2. List of institutions Interviewed

Data collected from institutions are compiled in the following summary format

<b>Name of Institution: Agri-Service Ethiopia (ASE)</b>
<b>Address:</b> P.O. Box: 2460, Addis Ababa, Ethiopia Tel: 251-11-4651212 E-mail: ase@ethionet.et Web site: http://www.agriserviceethiopia.org
<b>Type of Institution:</b> NGO <b>Role:</b> EX,IN,RD,TR
<b>Mission and Objective:</b> Facilitate the empowerment of the poor and marginalized in Ethiopia towards a sustainable livelihood
<b>Field of Specialization:</b> <ul style="list-style-type: none"> <li>• Community learning/ participatory learning and action</li> <li>• Empowerment of communities and local institutions</li> <li>• Participatory research and development</li> <li>• Networking and advocacy</li> </ul>
<b>Number of staff:</b> over 150 (plus 2 ICM professionals)
<b>Branches, other sites:</b>
<b>Annual budget (for ICM):</b> 150,000 birr (9825 Euros)
<b>Source of funding</b> (including main donors/ sponsors): Action Aid, Trocaire, EU, Dan Church aid, Mercy Corps, UNESCO
<b>Programme/ projects undertaken:</b> none
<b>Target audience:</b> farmers, pastoralists, extension agents
<b>Extent of interaction with CTA:</b> <ul style="list-style-type: none"> <li>• SPORE</li> <li>• QAS</li> <li>• CTA publications</li> <li>• Co-seminars</li> <li>• CTA training programmes or non-CTA training programmes</li> <li>• Seminar Support Programme</li> </ul>
<b>Appreciation of CTA's products and services:</b> Very useful because it upgrades the skills of ASE clients in its constituencies and should be expanded more
<b>Extent of collaboration/ interaction with other institutions</b> (name, nature): <ul style="list-style-type: none"> <li>• MOARD by way of information exchange</li> <li>• MOE through information exchange and training</li> <li>• EIAR through information exchange, acquiring improved agricultural technologies and training and technical support</li> <li>• USAID, funding</li> <li>• Action Aid, funding</li> </ul>
<b>National/ sectoral policies impacting ICT use/ information and communication within the institution:</b> Problem of acquiring books and other information material
<b>How information needs are currently met, and from where and by whom:</b> <ul style="list-style-type: none"> <li>• Farm problems from MOARD and EIAR</li> <li>• Social development mostly from own surveys</li> <li>• Available agricultural technologies from EIAR</li> <li>• Post-harvest technologies from MOARD and EIAR</li> </ul>
<b>Main information needs not satisfied:</b> none so far

<b>Name of Institution: Agri-Service Ethiopia (ASE)</b>
<b>Success/main problems faced in terms of ICM:</b> <ul style="list-style-type: none"> <li>• Upgrading hardware and updating software for ICM is still unresolved for less attention gives by management</li> <li>•</li> </ul>
<b>Success/main problems faced in terms of knowledge management</b> (e.g., list of organizations/ clients using your products, databases, etc.): Farmers are applying knowledge acquired from training sessions and field activities are steadily increasing in scope.
<b>Why the institution is selected as a key:</b> This NGO is involved mostly in rural and agricultural development activities in the country. It is one of the oldest NGOs working in rural areas of Ethiopia. It also produces information materials and train farmers in certain aspects of agricultural practices. Also involved in conflict management activities among farmers and pastoralists
<b>Other observations:</b> ASE is very much interested in working together with other governmental and non-governmental organizations in the areas of information exchange and knowledge sharing activities.

<b>Name of Institution: Ethiopian Development Research Institute (EDRI)</b>
<b>Address:</b> P.O. Box: 2479, Addis Abeba, Ethiopia Tel: 251-011-550-6066 E-mail: info@edri.org, library@edri.org.et Web site: http://www.edri.gov.et
<b>Type of Institution:</b> STA <b>Role:</b> PP,RD,RG
<b>Mission and Objective:</b> Conduct research on the development of Ethiopian economy and disseminate results
<b>Field of Specialization:</b> <ul style="list-style-type: none"> <li>• Development research</li> <li>• Training</li> </ul>
<b>Number of staff:</b> 70 all of them permanent
<b>Branches, other sites:</b> -
<b>Annual budget (for ICM)</b> (in local currency with Euro equivalent): 150,000 birr (9825 Euro)
<b>Source of funding:</b> <ul style="list-style-type: none"> <li>• Ethiopian Government</li> <li>• Foreign funding agencies for example World Bank</li> </ul>
<b>Programme/ projects undertaken:</b> <ul style="list-style-type: none"> <li>• Knowledge management training</li> <li>• Weblis</li> </ul>
<b>Target audience:</b> <ul style="list-style-type: none"> <li>• Policymakers</li> <li>• Planners</li> <li>• Researchers</li> </ul>
<b>Extent of interaction with CTA:</b> none
<b>Appreciation of CTA's products and services:</b> not known

<b>Name of Institution: Ethiopian Development Research Institute (EDRI)</b>
<b>Extent of collaboration/ interaction with other institutions:</b> <ul style="list-style-type: none"> <li>• Local universities, joint research and information exchange</li> <li>• National agricultural research system of Ethiopia, information exchange</li> <li>• Government institutions, information exchange</li> <li>• Private enterprises, information exchange</li> <li>• International agricultural research centres such as ILRI and IFPRI, information exchange and joint projects</li> <li>• UN Systems such as UNESCO, training</li> </ul>
<b>National/ sectoral policies impacting ICT use/ information and communication within the institution:</b> Acquiring ICT equipment is a challenge
<b>How information needs are currently met, and from where and by whom:</b> <ul style="list-style-type: none"> <li>• Statistical information from CSA,</li> <li>• Trade and industry information from ministry of trade and industry</li> <li>• Agricultural research information from EIAR</li> <li>• Water development information, MOWRD and bureaus of agriculture and rural development of regional states,</li> <li>• Early warning information from DPPA,</li> <li>• Improved agricultural technologies from EIAR</li> </ul>
<b>Main information needs not satisfied:</b> Acquiring information and data from government institutions is very difficult
<b>Success/main problems faced in terms of ICM:</b> <ul style="list-style-type: none"> <li>• Availability of LAN</li> <li>• The main problems are shortage of budget to acquire ICT and obtaining background information and basic data from other government institutions.</li> </ul>
<b>Success/main problems faced in terms of knowledge management:</b> MOFED, MOARD, universities, research institutions are using our information services and is considered as a success
<b>Why the institution is selected as a key:</b> EDRI is in charge of development research activities in the country. As part of its general objective, the Institute is involved in agricultural development studies. It is also responsible to provide agricultural development information to policymakers and local authorities.
<b>Other observations:</b> The institute is looking forward to more collaborative ventures such as joint research projects and information exchange with national and international research institutions in economic development

<b>Name of Institution: Ethiopian Institute of Agricultural Research (EIAR)</b>
<b>Address:</b> P.O. Box: 2003, Addis Ababa, Ethiopia Tel:251-0114462633 E-mail: infocom@eiar.gov.et Web site: <a href="http://www/eiar.gov.et">http://www/eiar.gov.et</a>
<b>Type of Institution:</b> GOV <b>Role:</b> RD, IN
<b>Mission and Objective:</b> Coordinate agricultural research in Ethiopia and develop and supply improved crops, livestock, soil and water, forestry, and farm mechanization technologies by conducting basic, strategic and applied agricultural research
<b>Field of Specialization:</b> Pant breeding, agronomy, plant protection, animal breeding, animal nutrition, animal health, fisheries and limnology, forestry, biotechnology, soil science, irrigation and drainage, socioeconomics, extension, biometrics, GIS, agro-meteorology, and ICM
<b>Number of staff:</b>

<b>Name of Institution: Ethiopian Institute of Agricultural Research (EIAR)</b>
<ul style="list-style-type: none"> <li>• 530 researchers</li> <li>• 1200 technical and support staff</li> <li>• 26 ICM staff</li> </ul>
<b>Branches, other sites:</b> Holetta, Jimma, Kulumsa, Ambo, Debre Zeit, Werer, Forestry, Essential Oils, Melkassa, Pawe, Assosa, Fisheries, Bako-Maize, and Hawassa-Maize Research Centres
<b>Annual budget (for ICM):</b> 340,000 birr (22,270 Euros)
<b>Source of funding:</b> Ethiopian Government, World Bank, IFAD, Jica, EU
<b>Programme/ projects undertaken:</b> <ul style="list-style-type: none"> <li>• QAS in collaboration with CTA (on-going)</li> <li>• Web-Agris in collaboration with FAO (on-going)</li> <li>• ICT/ICM capacity building with ASARECA/ RAIN (completed)</li> <li>• Short-term training especially in digital information and data management and knowledge management with support from CTA, FAO, ICARDA (on-going)</li> </ul>
<b>Target audience:</b> <ul style="list-style-type: none"> <li>• Farmers</li> <li>• Pastoralists and agro-pastoralists</li> <li>• Technology multipliers</li> <li>• Educational institutions</li> <li>• Governmental and non-governmental institutions working in agriculture and rural development</li> <li>• Agro-industries</li> <li>• Agricultural produce exporters</li> </ul>
<b>Extent of interaction with CTA:</b> <ul style="list-style-type: none"> <li>• <i>Spore</i> magazine</li> <li>• CTA publications</li> <li>• DORA</li> <li>• SDI</li> <li>• CD-ROM / Database subscriptions</li> <li>• Question &amp; Answer Service</li> <li>• Co-seminars</li> <li>• CTA training programmes or non-CTA training programmes</li> <li>• Seminar Support Programme</li> </ul>
<b>Appreciation of CTA's products and services:</b> <ul style="list-style-type: none"> <li>• Some researchers refer to CTA publications when preparing training manuals for farmers and development agents</li> <li>• Training methodologies are adapted from CTA training programmes</li> </ul>
<b>Extent of collaboration/ interaction with other institutions</b> (name, nature): <ul style="list-style-type: none"> <li>• All governmental and non-governmental institutions working in agriculture and rural development by way of information exchange and technology supply, and training</li> <li>• All higher learning institutions with agriculture and allied faculties in terms joint research projects, funding, training</li> <li>• All CGIAR centres by way of information and research materials exchange</li> <li>• All international institutions working in agriculture and rural development aspects through information exchange and joint research projects</li> <li>• UN Systems, information exchange, joint projects</li> <li>• Regional and sub-regional Organizations such as FARA, ASARECA, information exchange, joint projects</li> </ul>
<b>National/ sectoral policies impacting ICT use/ information and communication within the institution:</b>

<b>Name of Institution: Ethiopian Institute of Agricultural Research (EIAR)</b>
None at the moment
<b>How information needs are currently met, and from where and by whom:</b> <ul style="list-style-type: none"> <li>• Farm problems, mostly from own survey and MOARD</li> <li>• Non-farm livelihoods, own survey and CSA</li> <li>• Social development issues, EDRI, IDR, MOARD</li> <li>• Gender issues, own survey and MOARD</li> <li>• Post-harvest technology, own survey</li> <li>• Crop varieties, own research, CGIAR</li> <li>• Livestock breeds, own research, CGIAR</li> <li>• Farm mechanization, own research, MOARD</li> <li>• Natural resources management, own research, MOARD</li> <li>• Meteorology and climate change, NMS</li> <li>• Marketing, SCA, MOARD, National Bank</li> <li>• Agricultural policies, MOARD</li> </ul>
<b>Main information needs not satisfied:</b> <ul style="list-style-type: none"> <li>• Some electronic journal articles (which are not included in AGORA) are difficult to download because of higher price (mostly unaffordable)</li> <li>• Statistical data, for example, is difficult to download statistical data from FAOSTAT for research purpose</li> </ul>
<b>Success/main problems faced in terms of ICM:</b> <ul style="list-style-type: none"> <li>• Staff turnover is the major constraint</li> <li>• LAN, WAN, 512kb broadband Internet on leased line at HQs and VSAT in research centres, availability of various kinds of hardware and software are sources of ICM success in EIAR</li> <li>• By reengineering the business process of ICM and identifying and implementing the necessary ICTs on a continuous bases, the Institute is intended to improve ICM</li> </ul>
<b>Success/main problems faced in terms of knowledge management:</b> The wider adaptation of EIAR agricultural technologies, information and knowledge by stakeholders
<b>Why the institution is selected as a key:</b> Because EIAR is responsible for coordination of the national agricultural research and undertake strategic and applied agricultural research at federal level. It is also responsible for advising the government on agricultural and rural development as well as pastoral and agro-pastoral development issues. It is also responsible to provide agricultural information and knowledge to a wide range of audiences.
<b>Other observations:</b> Because of its experience in handling agricultural technology generation, information exchange , knowledge sharing and joint research for development handling it appeared to be ideal entry point for CTA's intervention in Ethiopia

<b>Name of Institution: Ethiopian Information and Communications Technology Development Agency (EICTDA)</b>
<b>Address:</b> P.O. Box 1028, Addis Ababa, Ethiopia Tel 251-11-5503973 E-mail <a href="mailto:debre@eictda.gov.et">debre@eictda.gov.et</a> Web site: <a href="http://www.eictda.gov.et">http://www.eictda.gov.et</a>
<b>Type of Institution:</b> GOV <b>Role:</b> PP,RD,RG,TR
<b>Mission and Objective:</b> Improve the life of the society and promote the contribution of ICT for national development by developing and deploying ICT in all sectors of the economy.

<b>Name of Institution: Ethiopian Information and Communications Technology Development Agency (EICTDA)</b>
<b>Field of Specialization:</b> Information and Communications Technology Development
<b>Number of staff:</b> 120 professional staff
<b>Branches, other sites:</b> None
<b>Annual budget (for ICM) (in local currency with Euro equivalent):</b> 13,870
<b>Source of funding:</b> Government of Ethiopia
<b>Programme/ projects undertaken:</b> None
<b>Target audience:</b> All government economic and social sectors
<b>Extent of interaction with CTA:</b> None
<b>Appreciation of CTA's products and services: -</b>
<b>Extent of collaboration/ interaction with other institutions: -</b>
<b>National/ sectoral policies impacting ICT use/ information and communication within the institution:</b> The government ICT capacity-building programme is the main policy document that has impact on overall activities
<b>How information needs are currently met, and from where and by whom: -</b>
<b>Main information needs not satisfied (including types and format of information):</b> None
<b>Success/main problems faced in terms of ICM: -</b>
<b>Success/main problems faced in terms of knowledge management:</b> The development of the national ICT policy and strategy.
<b>Why the institution is selected as a key:</b> The agency is responsible to: <ul style="list-style-type: none"> <li>• implement ICT policy by formulating short, medium and long-term ICT programmes,</li> <li>• monitor and evaluate implementation of ICT projects and programmes,</li> <li>• develop frameworks for the development of ICT in sectors such as Agriculture, Industry and Commerce, Education, Health, etc.</li> <li>• formulate projects and programmes to guide ICT development with focus on strengthening on-going initiatives in all the sectors aimed at improved service delivery and enhancing good governance.</li> </ul>
<b>Other observations:</b> This institution could be a sole entry point for CTA to handle ICT training programmes in Ethiopia.

<b>Name of Institution: Ethiopian International Institute for Peace and Development (EIIPD)</b>
<b>Address:</b> P.O. Box 18529, Addis Ababa, Ethiopia Tel: 251-11-5531955 E-mail: eiipd@ethionet.et Web site: <a href="http://www.addis-eiipd.org">http://www.addis-eiipd.org</a>
<b>Type of Institution:</b> OT (Autonomous) <b>Role:</b> PP,RG,TR

<b>Name of Institution: Ethiopian International Institute for Peace and Development (EIIPD)</b>
<b>Mission and Objective:</b> Enhancing competence through training, research and think-tank, developing skills in conflict studies, preventive diplomacy, early warning and post conflict peace building, and capacity building for activities to promote peace, democracy and development
<b>Field of Specialization:</b> <ul style="list-style-type: none"> <li>• International relations</li> <li>• Economic policy and relations</li> <li>• Diplomacy and communications</li> <li>• Gender and social development</li> <li>• Environment and development</li> </ul>
<b>Number of staff:</b> 31 (5 full time professionals, 15 fulltime technical and 13 clerical)
<b>Branches, other sites:</b> None
<b>Annual budget (for ICM):</b> Total budget 2 million birr (131,000 Euro)
<b>Source of funding:</b> <ul style="list-style-type: none"> <li>• Government grant</li> <li>• International development agencies grant</li> <li>• Joint project from local NGOs</li> <li>• Training fee</li> </ul>
<b>Programme/ projects undertaken:</b> None
<b>Target audience (plus number, actual or estimated):</b>
<b>Extent of interaction with CTA:</b> None
<b>Appreciation of CTA's products and services:</b> Not known by the institute
<b>Extent of collaboration/ interaction with other institutions (name, nature):</b> <ul style="list-style-type: none"> <li>• UNDP, funding</li> <li>• Initiative Africa, joint project and funding</li> <li>• Civic and Voter Education Association, funding and joint project</li> <li>• Fredrich Ebert Stiufting, funding</li> <li>• MOFED, funding</li> <li>• Ministry of Foreign Affairs, information exchange</li> </ul>
<b>National/ sectoral policies impacting ICT use/ information and communication within the institution:</b> None
<b>How information needs are currently met, and from where and by whom: -</b>
<b>Main information needs not satisfied (including types and format of information): -</b>
<b>Success/main problems faced in terms of ICM:</b>
<b>Success/main problems faced in terms of knowledge management (e.g.: list of organizations/ clients using your products, databases, etc.): -</b>
<b>Why the institution is selected as a key:</b> EIIPD is involved in training, research and think-tank, developing skills in conflict studies, early warning and post conflict peace building, and capacity building for activities to promote peace, democracy and development.
<b>Other observations:</b> It is hoped that EIIPD could be a new partner for CTA to deal with conflict resolution activities among farmers and pastoralists in ACP countries

<b>Name of Institution: Environment Protection Agency (EPA)</b>
<b>Address:</b> P.O. Box: 12760, Addis Ababa, Ethiopia Tel: 251-11-6465001 E-mail: esid@ethionet.et Web site: http://www.epa.gov.et
<b>Type of Institution:</b> GOV <b>Role:</b> PP, IN
<b>Mission and Objective:</b> Enhancing good environmental governance through removing the constraints faced by public agents, civil societies and individuals
<b>Field of Specialization:</b> <ul style="list-style-type: none"> <li>• Protecting the environment,</li> <li>• Drafting policy on environment and regulatory framework</li> <li>• Coordinating institutions working on environmental protection</li> </ul>
<b>Number of staff:</b> EPA has the following ICM permanent staff <ul style="list-style-type: none"> <li>• 2 GIS experts,</li> <li>• 3 IT experts,</li> <li>• 1 IT coordinator</li> <li>• 1 secretary</li> <li>• EPA has a total of 131 professional staff in different disciplines/professions</li> </ul>
<b>Branches, other sites: -</b>
<b>Annual budget (for ICM):</b> 5,000,000 birr (327,500 Euros)
<b>Source of funding</b> (including main donors/ sponsors): <ul style="list-style-type: none"> <li>• Ethiopian Government</li> <li>• UNEP</li> </ul>
<b>Programme/ projects undertaken:</b> The following are the major ICM related projects in the last five years <ul style="list-style-type: none"> <li>• Bio-safety Clearing House</li> <li>• Ethiopian Environment Network</li> </ul>
<b>Target audience</b> (plus number, actual or estimated): <ul style="list-style-type: none"> <li>• Public sectors</li> <li>• Government institutions</li> <li>• NGOs</li> </ul>
<b>Extent of interaction with CTA:</b> none
<b>Appreciation of CTA's products and services:</b> not known by EPA
<b>Extent of collaboration/ interaction with other institutions:</b> <ul style="list-style-type: none"> <li>• Public sectors, government institutions, and NGOs working on environment related activities by way of information exchange and capacity building such as establishing WAN</li> <li>• UNEP in terms of funding</li> </ul>
<b>National/ sectoral policies impacting ICT use/ information and communication within the institution:</b> <ul style="list-style-type: none"> <li>• Purchasing process and regulation of MOFED is delaying the speed of acquiring ICTs</li> <li>• Inability to maintain the quality and standard of ICTs because of procurement policies</li> </ul>
<b>How information needs are currently met, and from where and by whom:</b> <ul style="list-style-type: none"> <li>• UNEP for environment and fund related information)</li> <li>• EICTDA for ICT/ICM related information on Ethiopian context</li> <li>• EIAR on agricultural research and natural resources management associated with environmental protection</li> </ul>
<b>Main information needs not satisfied:</b> <ul style="list-style-type: none"> <li>• Environmental information from stakeholders</li> <li>• Digital information on Ethiopian environmental issues</li> </ul>
<b>Success/main problems faced in terms of ICM:</b> <ul style="list-style-type: none"> <li>• Availability of LAN and WAN is seen as success</li> <li>• Shortage of budget to acquire dependable ICTs,</li> <li>• unavailability of licensed software mainly because of unaffordable price</li> </ul>

<b>Name of Institution: Environment Protection Agency (EPA)</b>
<p><b>Success/main problems faced in terms of knowledge management:</b>          Though there are no knowledge management policies or plans in the Agency, all public sectors; like the leather and brewery industries and commercial protected farms such as the flower industry are using its information products and services to comply with the national environmental policy; also research and development institutions are consulting EPA on issues related to national and international bio-safety to import and utilize GMOs</p>
<p><b>Why the institution is selected as a key:</b>          Because EPA is involved in environmental policy and planning as well as environmental information services activities, which as relevant for agricultural and rural development endeavours</p>
<p><b>Other observations:</b>          The initiative taken by EPA to coordinate the bio-safety information clearing house for Ethiopia and linking related activities with the global communities has been noted as meaningful move by the Agency. The need to improve management inefficiencies in developing ICT/ICM was mentioned as one of the issues. During the study, the need to have an institutional ICM strategy and policy was noted.</p>

<b>Name of Institution: Ethiopian Radio and Television Agency (ERTA)</b>
<p><b>Address:</b>          P.O. Box: 1020, Addis Ababa, Ethiopia          Tel: 251-11-5505174          E-mail: etv2@ethionet.et          Web site: <a href="http://www.arta.gov.et">http://www.arta.gov.et</a></p>
<p><b>Type of Institution:</b> MED  <b>Role:</b> IN</p>
<p><b>Mission and Objective:</b>          The purpose of the agency is to prepare and present to the public radio and television major and current events taking place within the country and abroad, as well as educational and recreational programmes in accordance with media, press and other relevant policies and laws. The agency has a wide coverage of transmitting agricultural, rural, and pastoral information even beyond the nation</p>
<p><b>Field of Specialization:</b></p> <ul style="list-style-type: none"> <li>• Media</li> <li>• Information</li> <li>• News</li> <li>• Entertainment</li> </ul>
<p><b>Number of staff:</b>          Over 500</p>
<b>Branches, other sites:</b>
<p><b>Annual budget (for ICM):</b>          70, 000 birr (4585 Euro) for library only</p>
<p><b>Source of funding:</b>          Internal income from advertisements and airtime sale</p>
<p><b>Programme/ projects undertaken:</b>          None</p>
<p><b>Target audience:</b>          The people of Ethiopia and the global community interested in Ethiopia and its people</p>
<p><b>Extent of interaction with CTA:</b>          None so far</p>
<p><b>Appreciation of CTA's products and services:</b> not known</p>

<b>Name of Institution: Ethiopian Radio and Television Agency (ERTA)</b>
<p><b>Extent of collaboration/ interaction with other institutions:</b></p> <ul style="list-style-type: none"> <li>• All government institutions,</li> <li>• Local NGOs</li> <li>• CBOs</li> <li>• Research institutions</li> <li>• Universities and training centres</li> <li>• Local news agencies</li> <li>• International news and media agencies</li> </ul> <p>The nature of collaboration is mostly information exchange</p>
<p><b>National/ sectoral policies impacting ICT use/ information and communication within the institution:</b></p> <p>Not so far</p>
<p><b>How information needs are currently met, and from where and by whom:</b></p> <ul style="list-style-type: none"> <li>• Development information from MOARD, EIAR, Regional agricultural development and rural development,</li> <li>• Educational and training information from universities and training centres</li> <li>• Market information from relevant institutions, cooperatives and unions</li> <li>• New agricultural technologies from EIAR and international agricultural research centres</li> <li>• Agricultural news from local and international news agencies</li> <li>• Agricultural science and technology, EIAR, ESTA, universities</li> <li>• Statistical information, CSA, MOARD</li> </ul>
<p><b>Main information needs not satisfied:</b></p> <p>None</p>
<p><b>Success/main problems faced in terms of ICM:</b></p> <p>The major problems are:</p> <ul style="list-style-type: none"> <li>• Lack of management support</li> <li>• Lack of budget</li> <li>• Lack of training</li> </ul> <p>The major successes are:</p> <ul style="list-style-type: none"> <li>• The expansion of broadcasting time and coverage for both radio and TV programmes</li> <li>• Introduction of modern broadcasting equipment</li> <li>• More emphasis given for agriculture and rural development issues in the programmes of ERTA</li> </ul>
<p><b>Success/main problems faced in terms of knowledge management:</b></p> <p>All interested individuals and entities in agriculture and rural development activities of Ethiopia are showing more interest to listen and watch programmes of ERTA</p>
<p><b>Why the institution is selected as a key:</b></p> <p>As the Agency is intending to cover a wider portion of the country in transmitting agricultural, rural, and pastoral information and continue the same beyond the nation and it is believed that it is looking forward to expand its partnership activities in this respect.</p>
<p><b>Other observations:</b></p> <p>The Agency requires more access to information and knowledge so that it will be able to transmit them to a wider audience for more applications</p>

<b>Name of Institution: Ethiopian Seed Enterprise (ESE)</b>
<b>Address:</b> P.O. Box: 2453, Addis Ababa, Ethiopia Tel: 251-11-6612266 E-mail: ese@ethionet.et Web site: -
<b>Type of Institution: TE</b> <b>Role: PS-P</b>
<b>Mission and Objective:</b> Supply quality seeds of improved varieties of food crops, vegetables, fruits, forage crops, spices, etc needed in the market by acquiring breeder seeds from local research institutions and importing from other countries.
<b>Field of Specialization:</b> <ul style="list-style-type: none"> <li>• Seed multiplication</li> <li>• Seed preparation</li> <li>• Seed distribution</li> </ul>
<b>Number of staff</b> (professional, clerical, technical, etc; permanent/ temporary): About 150
<b>Branches, other sites:</b> Arsi, Hawassa, Bahirdar, Bale, Wellega, Tigray, Ardaita farms are the major sites of the enterprise
<b>Annual budget (for ICM)</b> (in local currency with Euro equivalent): The total annual budget of ESE is 103 million birr (6,746,500 Euros). Budget for ICM is not specified.
<b>Source of funding:</b> Sales of seeds
<b>Programme/ projects undertaken:</b> None
<b>Target audience:</b> <ul style="list-style-type: none"> <li>• Farmers' cooperatives and unions</li> <li>• State farms</li> <li>• Private commercial farms</li> </ul> The common way of communications with the target audiences is using telephones, e-mails, fax, and letters. ESE serves thousands of its clients every year
<b>Extent of interaction with CTA</b> ( <i>Spore</i> SDI, QAS, DORA, seminars, consultancies, publications, training): <ul style="list-style-type: none"> <li>• <i>Spore</i></li> <li>• Publications</li> <li>• Co-seminars</li> <li>• CTA training programmes</li> </ul>
<b>Appreciation of CTA's products and services:</b> <ul style="list-style-type: none"> <li>• <i>Spore</i> is a very useful publication</li> <li>• Co-seminars and CTA training programmes are also useful</li> </ul>
<b>Extent of collaboration/ interaction with other institutions</b> (name, nature): <ul style="list-style-type: none"> <li>• EIAR in terms of acquiring breeder seeds of various crops and package of production</li> <li>• With MOARD through planning seed production and information exchange</li> <li>• With farmers' cooperatives and unions, state farms, and private commercial farms by way of delivering seeds and advices on production practices</li> <li>• With commercial seed producers out side of Ethiopia by way of information exchange, purchase of seeds, training of professionals on seed technology</li> </ul>
<b>National/ sectoral policies impacting ICT use/ information and communication within the institution:</b> None at the moment
<b>How information needs are currently met, and from where and by whom:</b> Crop production problems are dealt in association with EIAR
<b>Main information needs not satisfied</b> (including types and format of information): None at present

<b>Name of Institution: Ethiopian Seed Enterprise (ESE)</b>
<b>Success/main problems faced in terms of ICM:</b> <ul style="list-style-type: none"> <li>• Unavailability of ICM policy is a problem</li> <li>• Establishment of WAN for our branches and training given to ICM staff on CISCO technologies are success stories</li> </ul>
<b>Success/main problems faced in terms of knowledge:</b> By promoting our products through the media, in meetings, in farmers' field days, farmers training sessions and briefings to higher level politicians and policy-makers have enhanced the demand of improved seeds by our clients
<b>Why the institution is selected as a key:</b> This institution is responsible for providing improved crop varieties to farmers and sharing information on the status of improved crop technologies with researchers.
<b>Other observations:</b> There is a demand by ESE to share seed technology and marketing information from local and international sources. The role played by CTA in organizing and co-sponsoring meetings and training in issues related to improved seed production, processing and marketing should be elaborated more than ever before.

<b>Name of Institution: Faculty of Journalism and Communications (FJC), Addis Ababa University</b>
<b>Address:</b> P. O. Box: 5646, Addis Ababa, Ethiopia Tel: 251-11-1578553 E-mail: aauemmti@ethionet.et Web site: <a href="http://www.aau.edu.et">http://www.aau.edu.et</a>
<b>Type of Institution: GOV</b> <b>Role: EDU</b>
<b>Mission and Objective:</b> Training in journalism and communication at graduate and postgraduate levels and conducting research for social development.
<b>Field of Specialization:</b> Education and research
<b>Number of staff:</b> 18 professional staff and 2 Librarians
<b>Branches, other sites:</b> Abune Petros Campus, Undergraduate Programme for Journalism and Communication
<b>Annual budget (for ICM):</b> No specific budget is allocated until now, but allocated from the core budget as appropriately
<b>Source of funding:</b> Ethiopian Government, Norwegian Project
<b>Programme/ projects undertaken:</b> <ul style="list-style-type: none"> <li>• Norwegian Project for Educational Programme</li> <li>• Short-term training per request from governmental institutions and sometimes from NGOs</li> </ul>
<b>Target audience:</b> Students and media
<b>Extent of interaction with CTA:</b> None to date
<b>Appreciation of CTA's products and services:</b> Not known
<b>Extent of collaboration/ interaction with other institutions:</b> <ul style="list-style-type: none"> <li>• All universities in the country, information exchange</li> <li>• Government institutions, training and research</li> <li>• Nebraska University, information exchange</li> </ul>
<b>National/ sectoral policies impacting ICT use/ information and communication within the institution:</b> Purchasing IT equipment because of government lengthy guidelines and stiff policies

<b>Name of Institution: Faculty of Journalism and Communications (FJC), Addis Ababa University</b>
<b>How information needs are currently met, and from where and by whom:</b> <ul style="list-style-type: none"> <li>• Social development from AAU</li> <li>• Patents from Intellectual Property Office</li> <li>• Market data from MIT and CSA</li> <li>• Application of communication technologies from ERTA,ETC, EICTDA</li> <li>• Training needs from various government institutions</li> </ul>
<b>Main information needs not satisfied:</b> So far no
<b>Success/main problems faced in terms of ICM:</b> <ul style="list-style-type: none"> <li>• Support from ICT institutions is minimum</li> <li>• International training opportunities for ICT staff is required</li> <li>• Graduating a number of people in print and broadcast media successfully at the level of BA and MA degrees is one of the outstanding achievements of the faculty</li> </ul>
<b>Success/main problems faced in terms of knowledge management:</b> Restructuring of departments and building the capacity of staff have led the Faculty to be realized by a number of governmental institutions and NGOs
<b>Why the institution is selected as a key:</b> This faculty is in charge of educating students at undergraduate and graduate levels in journalism and communications, of its graduates most of them are employed as development communication experts in agricultural ad rural development affiliated government institutions and NGOs.
<b>Other observations:</b> The Faculty is very much interested to work with partners like CTA in the areas of media training and research for agricultural and rural development

<b>Name of Institution: Institute of Biodiversity Conservation (IBC)</b>
<b>Address:</b> P.O. Box:30726, Addis Ababa, Ethiopia Tel: 251-11-6612244 E-mail: info@ibc-et.org Web site: <a href="http://www.ibc.gov.et">http://www.ibc.gov.et</a>
<b>Type of Institution:</b> GOV <b>Role:</b> IN, RD, RG
<b>Mission and Objective:</b> Undertake conservation and promote the development and sustainable utilization of the country's biological resources
<b>Field of Specialization:</b> <ul style="list-style-type: none"> <li>• Forestry</li> <li>• Medicinal plants</li> <li>• Field crops</li> <li>• Horticulture</li> <li>• Pasture and Forage</li> <li>• Animal Genetics</li> <li>• Microbial genetics</li> <li>• Biotechnology</li> <li>• Bio-safety</li> <li>• Ethnobiology</li> <li>• Information and Communications</li> </ul>
<b>Number of staff:</b> 132
<b>Branches, other sites: -</b>
<b>Annual budget (for ICM):</b> 342,000 Birr (22, 401 Euros)
<b>Source of funding:</b> Ethiopian Government

<b>Name of Institution: Institute of Biodiversity Conservation (IBC)</b>
<b>Programme/ projects undertaken:</b> <ul style="list-style-type: none"> <li>• National Information Sharing Mechanisms</li> <li>• Clearing House Mechanisms</li> </ul>
<b>Target audience:</b> <ul style="list-style-type: none"> <li>• Universities and colleges</li> <li>• Research institutions</li> <li>• Private organizations</li> </ul> <p>The website and documents produced are the sole means of reaching clients.</p>
<b>Extent of interaction with CTA:</b> None so far
<b>Appreciation of CTA's products and services: -</b>
<b>Extent of collaboration/ interaction with other institutions:</b> <ul style="list-style-type: none"> <li>• CBOs, information exchange</li> <li>• IPGRI, information exchange and joint projects</li> <li>• FAO, information exchange</li> <li>• GEF, joint projects</li> </ul>
<b>National/ sectoral policies impacting ICT use/ information and communication within the institution:</b> <ul style="list-style-type: none"> <li>• Financial regulations</li> </ul>
<b>How information needs are currently met, and from where and by whom:</b> <ul style="list-style-type: none"> <li>• Development and funding, GEF</li> <li>• Farm problems, MOARD, EIAR</li> </ul>
<b>Main information needs not satisfied:</b> None
<b>Success/main problems faced in terms of ICM:</b> Lack of budget to procure ICTs is the number problem
<b>Success/main problems faced in terms of knowledge management (e.g. list of organizations/ clients using your products, databases, etc.):</b> <ul style="list-style-type: none"> <li>• Universities,</li> <li>• Research Institutions</li> <li>• MOARD</li> </ul>
<b>Why the institution is selected as a key:</b> This institution is unique for its activities on conservation of biological resources to be used for the development of Ethiopian agriculture. It is the major information centre for agro-biodiversity.
<b>Other observations:</b> There seems lack of awareness of CTA's role in issues related to biodiversity and ICM

<b>Name of Institution: National Archives and Library Agency (NALA)</b>
<b>Address:</b> P.O. Box 712, Addis Ababa, Ethiopia Tel:251-11-5516532 e-mail: nale@ethionet.et http://www.nale.gov.et Type of Institution: GoV Role: IN,TR
<b>Mission and objective:</b> Collect, systematically organize, preserve, and make the information resources of the country available for study and research purposes
<b>Field of specialization:</b> <ul style="list-style-type: none"> <li>• Library and Archives</li> <li>• ICM</li> </ul>
<b>Number of staff:</b> 64
<b>Branches, other sites: -</b>

<b>Name of Institution: National Archives and Library Agency (NALA)</b>
<b>Annual budget (for ICM):</b> 6 million birr (393,097.2 Euros)
<b>Source of funding:</b> Government of Ethiopia
<b>Programme/ projects undertaken:</b> None at the moment
<b>Target audience:</b> <ul style="list-style-type: none"> <li>• General public</li> <li>• Researchers</li> <li>• College and university students</li> </ul>
<b>Extent of interaction with CTA:</b> None so far
<b>Appreciation of CTA's products and services:</b> Not known
<b>Extent of collaboration/ interaction with other institutions (name, nature):</b> <ul style="list-style-type: none"> <li>• Addis Ababa University, Information exchange and training</li> <li>• UNESCO; information exchange and funding</li> <li>• Norway; funding</li> <li>• FAO, funding</li> <li>• Religious institutions, material exchange</li> <li>• IFLA, information exchange and training</li> <li>• French archives, Information exchange</li> </ul>
<b>National/ sectoral policies impacting ICT use/ information and communication within the institution:</b> Acquiring ICT equipment is a challenge
<b>How information needs are currently met, and from where and by whom:</b> <ul style="list-style-type: none"> <li>• Published materials, collected from publishers and authors/performers</li> <li>• Old manuscripts form religious institutions such as monasteries, churches and mosques</li> </ul>
<b>Main information needs not satisfied:</b> Digitized information of old manuscripts
<b>Success/main problems faced in terms of ICM:</b> <ul style="list-style-type: none"> <li>• Acquiring a new building of its international standard for our collections is one of the major success</li> <li>• The main problems are shortage of budget to acquire ICT and obtaining background information and basic data from other government institutions.</li> </ul>
<b>Success/main problems faced in terms of knowledge management (e.g.: list of organizations/ clients using your products, databases, etc.):</b> Researchers and students are using our archival resources very frequently.

<b>Name of Institution: Ministry of Agriculture and Rural Development (MOARD)</b>
<p><b>Address:</b>  P.O. Box: 62347, Addis Ababa, Ethiopia  Tel: 251-11-1518040  E-mail: moard@moard.gov.et  Web site: <a href="http://www.moard.gov.et">http://www.moard.gov.et</a></p>
<p><b>Type of Institution:</b> GOV  <b>Role:</b> EX, RU, IN, PP, RG</p>
<p><b>Mission and objective:</b>  To create modern agricultural systems that are highly productive and modern and free the society from poverty by:</p> <ul style="list-style-type: none"> <li>• developing market-oriented modern agriculture</li> <li>• managing the natural resources</li> <li>• establishing modern marketing</li> <li>• intensifying disaster prevention and preparedness</li> <li>• enabling the youth and women to be productive and beneficiary</li> </ul>
<p><b>Field of Specialization:</b></p> <ul style="list-style-type: none"> <li>• Crop and livestock production</li> <li>• Forestry,</li> <li>• Agricultural extension,</li> <li>• Rural development,</li> <li>• Crop and livestock diseases and pests control</li> <li>• Training agricultural development agents,</li> <li>• Early warning systems,</li> <li>• Agricultural marketing,</li> <li>• Wildlife management,</li> <li>• Food security,</li> <li>• Pastoral and agro-pastoral development</li> </ul>
<p><b>Number of staff::</b></p> <ul style="list-style-type: none"> <li>• 2 professional librarians, 5 ICT experts, 5 public relations experts and 3 clerical staff for ICM at the Ministry level,</li> <li>• Over 1000 employees with different specialty such as crop production, animal production, extension, socio-economists, forestry, agricultural marketing, veterinary, soil and water management, wildlife management, information and communication, and management in different technical departments and institutions,</li> <li>• Most of the staff is permanent employees.</li> </ul>
<p><b>Branches, other sites:</b> The major branches are</p> <ul style="list-style-type: none"> <li>• Agricultural Technical and Vocational Colleges (19 in number),</li> <li>• National Animal Health Diagnostic and Investigation Centre,</li> <li>• National Soils Analytical Laboratory,</li> <li>• National Veterinary Institute,</li> <li>• Dairy and Meat Technology Institute</li> </ul>
<p><b>Annual budget (for ICM):</b>  1,000,000 birr (65,500 Euros)</p>
<p><b>Source of funding:</b>  Ethiopian Government, UNDP, and World Bank</p>
<p><b>Programme/ projects undertaken:</b></p> <ul style="list-style-type: none"> <li>• IPMS has assisted us to develop MOARD website/ portal,</li> <li>• FAO/ WAICENT in training staff on Web AGRIS and acquisition of ICM tools</li> <li>• No ICM project</li> </ul>

<b>Name of Institution: Ministry of Agriculture and Rural Development (MOARD)</b>
<p><b>Target audience:</b> Though it is difficult to estimate the number, MOARD has the following categories of audiences:</p> <ul style="list-style-type: none"> <li>• regional states bureaus of agriculture and rural development,</li> <li>• farmers, pastoralists, agro-pastoralists,</li> <li>• agricultural investors,</li> <li>• farmers' cooperatives and unions,</li> <li>• development/ extension agents,</li> <li>• researchers,</li> <li>• NGOs,</li> <li>• CBOs,</li> <li>• agro-industries,</li> <li>• biodiversity conservation institution,</li> <li>• professional associations, and</li> <li>• the media (both government and private owned)</li> </ul>
<p><b>Extent of interaction with CTA:</b></p> <ul style="list-style-type: none"> <li>• Receive <i>Spore</i> magazine regularly,</li> <li>• QAS services mainly through EIAR (which is the national focal point)</li> <li>• Co-seminars sponsored by CTA</li> <li>• CTA training programmes as well as non CTA training programmes</li> </ul>
<p><b>Appreciation of CTA's products and services:</b></p> <ul style="list-style-type: none"> <li>• <i>Spore</i> is useful for clients as it contains several contents of local applicability in Ethiopian condition</li> <li>• Some publications are obtained through individual contacts with CTA are also useful mainly for training purposes</li> <li>• CTA sponsored and co-sponsored training and seminar programmes</li> </ul>
<p><b>Extent of collaboration/ interaction with other institutions:</b></p> <ul style="list-style-type: none"> <li>• Government institutions engaged in agriculture and rural development activities in information exchange,</li> <li>• UNDP and FAO in training on ICM and information exchange,</li> <li>• CGIAR (mainly with locally available ones such as ILRI) in information exchange</li> </ul>
<p><b>National/ sectoral policies impacting ICT use/ information and communication within the institution:</b> Stiff financial regulations and lengthy procurement policies to acquire ICTs, and lack of clear and defined ICM policy</p>
<p><b>How information needs are currently met, and from where and by whom:</b></p> <ul style="list-style-type: none"> <li>• Statistical information from CSA and sample survey by MOARD and FAO Stat,</li> <li>• research information from EIAR,</li> <li>• market information from own survey,</li> <li>• Livestock and crop diseases and pests information from own survey, EIAR, and FAO,</li> <li>• Meteorological information from EMSA,</li> <li>• Early warning information from DPPA,</li> <li>• Improved agricultural technologies from EIAR</li> </ul>
<p><b>Main information needs not satisfied:</b> Online agricultural and rural development information</p>
<p><b>Success/main problems faced in terms of ICM:</b></p> <ul style="list-style-type: none"> <li>• The Ministry is working on a major institutional reform (BPR) including a major shift in ICTs development and use</li> <li>• The main problems are shortage of budget, and lack of professional, experienced ICT/ICM staff because of unattractive remuneration, and regard given by extension agents in ICM particularly seeking information and knowledge from online resources.</li> </ul>

<b>Name of Institution: Ministry of Agriculture and Rural Development (MOARD)</b>
<b>Success/main problems faced in terms of knowledge management:</b> <ul style="list-style-type: none"> <li>• Sustainability of media agricultural programmes using the national radio since the late 1950s</li> <li>• The development of MOARD portal could be considered as an achievement</li> <li>• Organizing national and local agricultural exhibitions has become one of the assets of the Ministry</li> <li>• One of the noted problems is the lack of skills by ICM staff to handle knowledge management</li> </ul>
<b>Why the institution is selected as a key:</b> The Ministry is handling agricultural extension, policy and regulatory activities in the country. It is also responsible for training frontline extension workers.
<b>Other observations:</b> There used to be frequent structural changes in the ICM activities of the ministry hence, sustainability of several ICM activities has been hindered tremendously. However, the Ministry has just completed reforming ICM processes aimed at making the service client-oriented. The need to improve management practices to better develop and sustain ICM was also mentioned. It was also noted that cooperation with different institutions in information exchange and knowledge sharing was also highlighted

<b>Name of Institution: Ethiopian Meteorological Services Agency (EMSA)</b>
<b>Address:</b>  P.O. Box: 1090, Addis Ababa, Ethiopia Tel: 251-11-6615791 E-mail: nmsa@ethionet.et Web site: <a href="http://www.ethiomet.gov.et">http://www.ethiomet.gov.et</a>
<b>Type of Institution:</b> GOV <b>Role:</b> IN, RD
<b>Mission and Objective:</b> By collecting, analyzing and studying data of atmospheric air, provide weather forecast and early warnings on the adverse effects of weather and climate of Ethiopia
<b>Field of Specialization:</b> <ul style="list-style-type: none"> <li>• Agro-meteorology</li> <li>• Hydrometeorology</li> <li>• General Meteorology</li> <li>• Meteorological Statistics</li> </ul>
<b>Number of staff:</b> 800
<b>Branches, other sites:</b> -
<b>Annual budget (for ICM):</b> 100,000 birr (6550 Euro)
<b>Source of funding:</b> GoE
<b>Programme/ projects undertaken:</b> none
<b>Target audience:</b> <ul style="list-style-type: none"> <li>• Government institutions</li> <li>• Public sectors</li> <li>• NGOs</li> </ul> The means of contacting our audiences is through their website, Radio, TV and newsletter. The number of our audiences is very diverse and many so could not be estimated.
<b>Extent of interaction with CTA:</b> None, however, would like to have partnership activities with CTA.
<b>Appreciation of CTA's products and services:</b> N/A

<b>Name of Institution: Ethiopian Meteorological Services Agency (EMSA)</b>
<b>Extent of collaboration/ interaction with other institutions:</b> <ul style="list-style-type: none"> <li>World Meteorological Organization, UNEP, UNDP, MOARD, EIAR, RARDB, and MORWD by way of information exchange</li> <li>ESTA by way of conducting joint projects</li> </ul>
<b>National/ sectoral policies impacting ICT use/ information and communication within the institution:</b> Acquiring ICTs is difficult with the current procurement guidance
<b>How information needs are currently met, and from where and by whom:</b> <ul style="list-style-type: none"> <li>Farm problems, EIAR, MOARD</li> <li>Applications of communication, EICTDA, ETC</li> <li>Grading system, QSA</li> </ul>
<b>Main information needs not satisfied:</b> none so far
<b>Success/main problems faced in terms of ICM:</b> Lack of skilled and experienced personnel
<b>Success/main problems faced in terms of knowledge management (e.g.: list of organizations/ clients using your products, databases, etc.):</b> MOARD, MOWRD, EIAR, Ethiopian Airlines, higher learning institutions are using our information services and is considered as a success
<b>Why the institution is selected as a key:</b> This institution is one of the crosscutting research and development support services and information centre for meteorological issues.
<b>Other observations:</b> The Agency is keen to get involved in information sharing activities with national institutions

<b>Name of Institution: Oromiya Agricultural and Rural Development Bureau (OARDB)</b>
<b>Address:</b> P.O. Box 8770, Finfine, Ethiopia Tel 251-11-5518576 E-mail - Web site -
<b>Type of Institution:</b> GOV, AS-E <b>Role:</b> EX,RU,IN
<b>Mission and Objective:</b> OARDB is committed to reducing poverty and thereby improving the socio-economic wellbeing of the rural people by coordinating and enabling agricultural and rural development institutions to undertake integrated rural development programmes and projects. In due course, we value the empowerment, representation and strong participation of the rural community.
<b>Field of specialisation:</b> <ul style="list-style-type: none"> <li>Rural development</li> <li>Extension</li> <li>Training</li> <li>Research</li> </ul>
<b>Number of staff:</b> A total staff 286 all of them permanent involved in different disciplines. Out of these there 3 librarians and one documentalist
<b>Branches, other sites:</b> 22 branch offices distributed throughout the Regional State
<b>Annual budget (for ICM):</b> There is no specific budget for ICM, however, the annual budget of the bureau is 50 million birr (3,275,000 Euros)
<b>Source of funding:</b> Government Oromiya Regional State and the Federal Government of Ethiopia

<b>Name of Institution: Oromiya Agricultural and Rural Development Bureau (OARDB)</b>
<b>Programme/ projects undertaken:</b> None
<b>Target audience:</b> <ul style="list-style-type: none"> <li>• Farmers</li> <li>• Development agents</li> <li>• Investors</li> <li>• Agro-industries</li> <li>• Researchers</li> <li>• Policy makers</li> <li>• Exporters</li> </ul>
<b>Extent of interaction with CTA:</b> None
<b>Appreciation of CTA's products and services:</b> Not known
<b>Extent of collaboration/ interaction with other institutions d:</b> <ul style="list-style-type: none"> <li>• EIAR, supply of improved technologies, training for farmers, information, and advisory services</li> <li>• OARI, supply of improved technologies, training for farmers, information, and advisory services</li> <li>• Universities, training for farmers, information, and advisory services</li> <li>• MoARD, training for farmers, information, and advisory services</li> </ul>
<b>National/ sectoral policies impacting ICT use/ information and communication within the institution:</b> Budget allocation policy is seriously affecting acquisition of ICTs and their appropriate use
<b>How information needs are currently met, and from where and by whom:</b> <ul style="list-style-type: none"> <li>• Statistical information from CSA,</li> <li>• Research information from EIAR and OARI,</li> <li>• Livestock and crop diseases and pests information from own survey, EIAR, and OARI,</li> <li>• Meteorological information from EMSA,</li> <li>• Early warning information from DPPA or Oromiya Regional State,</li> <li>• Improved agricultural technologies from EIAR, OARI and Haramaya, Jimma Universities, and ILRI</li> </ul>
<b>Main information needs not satisfied (including types and format of information):</b> <ul style="list-style-type: none"> <li>• Journal articles</li> <li>• Statistical information</li> <li>• Market information</li> </ul>
<b>Success/main problems faced in terms of ICM:</b> There is no functional ICM only a traditional library service
<b>Success/main problems faced in terms of knowledge management:</b> The use of different media to transmit information to the target audience is the major issue that could be considered as success
<b>Why the institution is selected as a key:</b> As a regional state bureau of agriculture and rural development, its role in agricultural ICM is very much limited, hence the service it delivers to the target audience needs to be improved by linking it to other ICM services and create partnership all the way
<b>Other observations:</b> The Bureau is very much committed to collaborate with other relevant institutions both local and external with the aim to improve its services.

<b>Name of Institution: Oromiya Region Agricultural Research Institute (OARI)</b>
<b>Address:</b> P.O. Box 81265, Addis Ababa, Ethiopia Tel 251-11-6187346 E-mail oari@ethionet.et Web site -
<b>Type of Institution:</b> GOV <b>Role:</b> RD,IN
<b>Mission and objective:</b> <ul style="list-style-type: none"> <li>• Coordinate research on agriculture and pastoral areas of Oromiya Regional State.</li> <li>• Restore and maintain the natural resources of the Region by adapting, generating and multiplying appropriate agricultural technologies</li> </ul>
<b>Field of Specialisation:</b> <ul style="list-style-type: none"> <li>• Crops research</li> <li>• Socio-economics and extension</li> <li>• Natural resources management</li> <li>• Livestock and fisheries</li> <li>• Agricultural mechanization</li> </ul>
<b>Number of staff:</b> A total of 1250 staff comprising researchers, technical assistants, administrative support staff all of them permanent employees.
<b>Branches, other sites:</b> Holetta (Bee), Bako, Adamitulu, Sinana, Yabello, Asela, Fedis, Jimma, Ziway, and Mechara Research Centres)
<b>Annual budget (for ICM):</b> 32 million birr (2,096,000 Euros) for the institute and no specific budget for ICM
<b>Source of funding</b> (including main donors/ sponsors): Government Oromiya Regional State and the Federal Government of Ethiopia through EIAR
<b>Programme/ projects undertaken:</b> None so far
<b>Target audience:</b> Farmers and pastoralists in Oromiya Regional State
<b>Extent of interaction with CTA</b> ( SPORE SDI, QAS, DORA, Seminars, consultancies, publications, training): None
<b>Appreciation of CTA's products and services:</b> Not well known
<b>Extent of collaboration/ interaction with other institutions</b> (name, nature): <ul style="list-style-type: none"> <li>• OARDB, information exchange</li> <li>• EIAR, information and research material exchange</li> <li>• MoARD, information exchange</li> <li>• ILRI, information and research materials</li> </ul>
<b>National/ sectoral policies impacting ICT use/ information and communication within the institution:</b> None so far

<b>Name of Institution: Oromiya Region Agricultural Research Institute (OARI)</b>
<p><b>How information needs are currently met, and from where and by whom:</b></p> <ul style="list-style-type: none"> <li>• Farm problems, mostly from own survey, OARDB, and MOARD</li> <li>• Non-farm livelihoods, own survey and CSA</li> <li>• Social development issues, OARDB MOARD</li> <li>• Gender issues, own survey, OARDB, and MOARD</li> <li>• Post-harvest technology, own survey, EIAR</li> <li>• Crop varieties, own research, EIAR</li> <li>• Livestock breeds, own research, EIAR, ILRI</li> <li>• Farm mechanization, own research, EIAR, MOARD</li> <li>• Natural resources management, own research, EIOAR, OARDB, MOARD</li> <li>• Meteorology and climate change, NMS</li> <li>• Marketing, SCA, EIAR, OARDB, MOARD</li> <li>• Agricultural policies, OARDB, MOARD</li> </ul>
<p><b>Main information needs not satisfied (including types and format of information):</b></p> <ul style="list-style-type: none"> <li>• Journal articles particularly electronic journals</li> <li>• Statistical data</li> </ul>
<p><b>Success/main problems faced in terms of ICM:</b> There is no strong ICM for lack of ICTs and qualified staff and appropriate and sufficient budget.</p>
<p><b>Success/main problems faced in terms of knowledge management:</b></p> <ul style="list-style-type: none"> <li>• Support from EIAR in publishing research reports and annual reports and scientific writing training</li> <li>• Sufficient use of government and private print and broadcast (Radio) media for disseminating research information to farmers and pastoralists</li> </ul>
<p><b>Why the institution is selected as a key:</b> OARI is responsible for the coordination the agricultural and pastoral research in Oromiya Regional State. It is also responsible to provide agricultural information and knowledge a wide range of audiences in the Region.</p>
<p><b>Other observations:</b> As a regional research institution in the country, OARI lacks ICM support to the research staff and the target audience a large. The institute is very much keen to take part in any agricultural research ICM partnership such as with CTA and FAO</p>

<b>Name of Institution: Amhara Agricultural Research Institute (ARARI)</b>
<p><b>Address:</b> P.O. Box 527, Bahirdar, Ethiopia Tel 251-58-2205200 E-mail arari@ethionet.et Web site <a href="http://www.ar-ari.org.et">http://www.ar-ari.org.et</a></p>
<p><b>Type of Institution:</b> GOV <b>Role:</b> EX,RD,IN</p>
<p><b>Mission and Objective:</b> ARARI is responsible to develop, adapt, and disseminate agro-ecologically sound and improved agricultural technologies based on appropriate management and utilization of the bio-diversity and natural resources for the better living standard of the society in the region.</p>
<p><b>Field of Specialization:</b></p> <ul style="list-style-type: none"> <li>• Crops research</li> <li>• Socio-economics and extension</li> <li>• Natural resources management</li> <li>• Livestock and fisheries</li> <li>• Agricultural mechanization</li> </ul>

<b>Name of Institution: Amhara Agricultural Research Institute (ARARI)</b>
<b>Number of staff:</b> A total of 1250 of this 189 are researchers and 8 ICM staff
<b>Branches, other sites:</b> Adet, Andassa, Fisheries, Mechanization, Debre Birhan and Gonder and Sekota Research Centres
<b>Annual budget (for ICM):</b> The total annual budget of ARARI is 25 Million birr (1,741,310 Euros). There is no specific budget for ICM.
<b>Source of funding (including main donors/ sponsors):</b> Amhara Regional State Government
<b>Programme/ projects undertaken:</b> Website development with the assistance of Improving Productivity & Market Success (IPMS)
<b>Target audience:</b> <ul style="list-style-type: none"> <li>• Farmers of the Amhara Region</li> <li>• Extension agents</li> <li>• Cooperatives</li> </ul>
<b>Extent of interaction with CTA:</b> <ul style="list-style-type: none"> <li>• Spore</li> <li>• CTA publications</li> <li>• Co-seminars</li> <li>• CTA training programmes</li> </ul>
<b>Appreciation of CTA's products and services:</b> Useful and informative
<b>Extent of collaboration/ interaction with other institutions:</b> <ul style="list-style-type: none"> <li>• EIAR, joint research projects, Information exchange, training, research material exchange</li> <li>• ARDB of the Region, technology supply</li> <li>• CSA, information exchange</li> <li>• ILRI through IPMS, joint project in ICM and on-farm research</li> <li>• ESTA, project funding</li> <li>• Local Universities and technical colleges, information exchange and training</li> </ul>
<b>National/ sectoral policies impacting ICT use/ information and communication within the institution:</b> Not much
<b>How information needs are currently met, and from where and by whom:</b> <ul style="list-style-type: none"> <li>• Farm problems, mostly from own survey, AARDB, and MOARD</li> <li>• Non-farm livelihoods, own survey and CSA</li> <li>• Social development issues, AARDB MOARD</li> <li>• Gender issues, own survey, AARDB, and MOARD</li> <li>• Post-harvest technology, own survey, EIAR</li> <li>• Crop varieties, own research, EIAR</li> <li>• Livestock breeds, own research, EIAR, ESGPIP, ILRI, MOARD</li> <li>• Farm mechanization, own research, EIAR, MOARD</li> <li>• Natural resources management, own research, EIAR, OARDB, MOARD</li> <li>• Meteorology and climate change, NMS</li> </ul>
<b>Main information needs not satisfied (including types and format of information):</b> <ul style="list-style-type: none"> <li>• Journal articles particularly electronic journals</li> <li>• Statistical data</li> </ul>
<b>Success/main problems faced in terms of ICM:</b> <ul style="list-style-type: none"> <li>• Unavailability of strong ICM for lack of ICTs and qualified staff and appropriate and sufficient budget</li> </ul>
<b>Success/main problems faced in terms of knowledge:</b> <ul style="list-style-type: none"> <li>• Support from IPMS in developing our website</li> <li>• Support from EIAR in installing local area networks at our HQs and research centers</li> <li>• Support from EIAR in publishing research reports and annual reports and scientific writing training</li> </ul>

<b>Name of Institution: Amhara Agricultural Research Institute (ARARI)</b>
<b>Why the institution is selected as a key:</b> ARARI is responsible to develop, adapt, and disseminate agro-ecologically sound and improved agricultural technologies based on appropriate management and utilization of the bio-diversity and natural resources for the better living standard of the society in the region, which is characterized as one of the food in secured areas
<b>Other observations:</b> ARARI is one of the beneficiaries of CTA's products and services; however, the support from CTA is not that much so far. Thus, the Institute is willing to be involved in any relevant ICM and training-related partnership activities with CTA.

<b>Name of Institution: Sheger FM 102.1</b>
<b>Address:</b> Tel: 251-11-1554545
<b>Type of Institution:</b> MED, PRV <b>Role:</b> IN
<b>Mission and Objective:</b> <ul style="list-style-type: none"> <li>• Informing, entertaining and educating the society</li> <li>• Joining the media market based on the needs of the audience</li> <li>• Address basic social issues in a unique way</li> </ul>
<b>Field of Specialization:</b> <ul style="list-style-type: none"> <li>• News and information</li> <li>• Marketing (advertisement and sales)</li> <li>• Technical programme (composing ,editing, etc)</li> <li>• Programming</li> </ul>
<b>Number of staff:</b> 15 professional permanent staff (journalists, reporters, editors)
<b>Branches, other sites:</b> No
<b>Annual budget (for ICM):</b> No permanent budget
<b>Source of funding:</b> Revenue from airtime sales and advertisement
<b>Programme/ projects undertaken:</b> None
<b>Target audience:</b> Addis Ababa and its surroundings
<b>Extent of interaction with CTA:</b> None
<b>Appreciation of CTA's products and services:</b> not yet known
<b>Extent of collaboration/ interaction with other institutions (name, nature):</b> <ul style="list-style-type: none"> <li>• Ethiopian News Agency, information</li> <li>• Ministry of information, regulatory and experience sharing</li> <li>• Government organizations, NGOs, CBOs and business communities, airtime sales and advertisement</li> </ul>
<b>National/ sectoral policies impacting ICT use/ information and communication within the institution:</b> not much
<b>How information needs are currently met, and from where and by whom:</b> <ul style="list-style-type: none"> <li>• Trade fairs, MOTI, Chamber of commerce, ENA</li> <li>• Industrial profile, from private owners</li> <li>• Marketing, from different sources</li> <li>• Community profiles, NGOs and government institutions</li> </ul>

<b>Name of Institution: Sheger FM 102.1</b>
<b>Main information needs not satisfied</b> (including types and format of information): None so far
<b>Success/main problems faced in terms of ICM:</b> <ul style="list-style-type: none"> <li>• Lack of experience in broadcasting development programmes such as agriculture and rural development</li> <li>• Shortage of skills, budget, stations and equipment to handle a wide range of broadcasting services to help development activities</li> </ul>
<b>Success/main problems faced in terms of knowledge management</b> (e.g.: list of organizations/ clients using your products, databases, etc.): Increasing number of listeners of the station from time to time, particularly the youth and women
<b>Why the institution is selected as a key:</b> As a young station it is attracting a wider audience which include the majority of the active workforce in the development activities
<b>Other observations:</b> The station is very much interested to find and work with partners which are of development and market oriented occupations

## Annex 4. List of Persons Interviewed

Institution and Address	Persons contacted	Responsibility
Ministry of Agriculture and Rural Development P.O. Box: 62347, Addis Ababa, Ethiopia Tel:251-11-1518040	Dr. Abarra Deressa	State Minister, MOARD
	Tirsit Tesfaye	Librarian
	Negasi	Head, ICT/ICM
Ethiopian Meteorological Services Agency P.O. Box: 1090, Addis Ababa, Ethiopia Tel: 251-11-6615791	Genetu Eskezia	Information officer
	Taye Asefa	Information officer
Environment Protection Agency P.O. Box: 12760, Addis Ababa, Ethiopia Tel: 251-11-6465001	Sirak Merid	Network Administrator/ Information Officer
Institute of Biodiversity Conservation P.O. Box:30726, Addis Ababa, Ethiopia Tel: 251-11-6612244	Abyot Berhanu	Information Officer
Ethiopian Seed Enterprise P.O. Box: 2453, Addis Ababa, Ethiopia Tel: 251-11-6612267	Mohammed Ahmed	Information Expert
National Archives and Library Agency P.O. Box: 717, Addis Ababa, Ethiopia Tel: 251-11-5516532	Dereje Tadesse	A/Head, Information Systems Department
Ethiopian Information and Communications Technology Development Agency P.O. Box: 1028, Addis Ababa, Ethiopia Tel: 251-11-5503973	Abyout Bayu	Project Manager, Government Information Systems Expansion and Service Coordination
Oromiya Agriculture and Rural Development Bureau P.O. Box: 8770, Addis Ababa, Ethiopia Tel: 251-11-5518542	Aduugna Kebede	Librarian
	Hana Kinate	Librarian
	Damenu Tullu	Deputy, Head of OARDB
Ethiopian Institute of Agricultural Research P.O. Box: 2003, Addis Ababa, Ethiopia Tel:251-0114462633	Aklilu Wube	Librarian
	Solomon Tsega	Documentalist
	Yitbarek Yisak,	Network Administrator
	Amare Molla	ICM expert
Oromiya Region Agricultural Research Institute P.O. Box: 81265, Addis Ababa, Ethiopia Tel: 251-11-6187346	Dr Dawit Alemu	Head, Department of Socioeconomics Research
	Taye Gudeta	Editor
Amhara Region Agricultural Research Institute P.O. Box: 527, Bahirdar, Ethiopia Tel: 251-58-2205200	Dr Amsalu Ayana	Director of Crop Research
	Abeba Frew	Librarian
	Gebeyehu Derso	Information Officer/ Network Administrator
Ethiopian Development Research Institute P.O. Box: 2479, Addis Ababa, Ethiopia Tel: 251-011-550-6066 E-mail: info@edri-et.org Web site: http://www.edri-et.gov.et	Dr Eshete Dejen	Director, Livestock Research
	Dereje Letyiblu	Librarian
Ethiopian Television and Radio Agency P.O. Box: 1020, Addis Ababa, Ethiopia Tel: 251-11-5505174	Dr. Gezahegn Ayele	Researcher
	Lengus Kiflu	Librarian

<b>Institution and Address</b>	<b>Persons contacted</b>	<b>Responsibility</b>
Faculty of Journalism and Communications, Addis Ababa University P.O. Box: 5646, Addis Ababa, Ethiopia Tel: 251-11-1578553	Aster Gebeyehu	Librarian
	Feyisa Girma	Librarian
Agri-Service Ethiopia P.O. Box: 2460, Addis Ababa, Ethiopia Tel: 251-11-4651212	Selamawit Eshete	Librarian
	Bethlehem Mamo	Librarian
	Abdul Mohamrd	Librarian
Ethiopian International Institute for Peace and Development P.O. Box 18529, Addis Ababa, Ethiopia Tel: 251-11-5531955	Dawit Tefera	Information Officer
Sheger FM Tel: 251-11-1554545	Silleshi	News Head
	Hana Wubshet	Information Officer

## Annex 5. Bibliography

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