



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

SOUTHERN AFRICA

Country Study: Malawi

Final Report

Prepared by:

G.L. Nyali

On behalf of the

Technical Centre for Agricultural and Rural Cooperation (CTA)

Project: 4-7-41-252-7

18/01/2008



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

SOUTHERN AFRICA

Country Study: Malawi

Final Report

Prepared by:

G.L. Nyali

On behalf of the

Technical Centre for Agricultural and Rural Cooperation (CTA)

Project: 4-7-41-252-7

18/01/2008

Disclaimer

This report has been commissioned by the CTA to enhance its monitoring of information needs in ACP countries. CTA does not guarantee the accuracy of data included in this report, nor does it accept responsibility for any use made thereof. The views and opinions expressed in this report are those of the author alone and do not necessarily reflect the views of CTA. CTA reserves the right to select projects and recommendations that fall within its mandate.

(ACP-EU) Technical Centre for Agricultural and Rural Cooperation (CTA)
Agro Business Park 2
6708 PW Wageningen
The Netherlands
Website: www.cta.int
E-mail: cta@cta.int

Acknowledgements

I would first of all like to express my gratitude to CTA for having entrusted me with the challenging task of carrying out this study. In addition, I would like to acknowledge with thanks the support received from the same institution, particularly Christine Webster, who ensured that the study starts and ends as suggested. Many thanks should go to the Regional Coordinator of this study, Mr. Clemence Namponya for his guidance and patience in the course of this study.

Secondly, I express my thanks to all the Institutions who responded to the questionnaire that led to the findings that are presented in this report. Most sincerely, I acknowledge with thanks the support received from staff of the National Library Service and Chitedze Agricultural Research Library who participated in the information gathering phase for the desk study. Three individuals worth mentioning are Mr. Geoffrey Salanje, College Librarian, Bunda College of Agriculture, Mr. Vote Somba Deputy National Librarian, Mr. Haswell Kapeta, and Head of Readers Section for participating in the administration of questionnaire at various institutions.

I would like to thank all individuals who contributed however little to the production of this report.

Gray Lesten Nyali

List of Acronyms

ACB	Agricultural Communications Branch
ACP	African Caribbean Pacific
ACU	Association of Commonwealth Universities
ADD	Agricultural Development Division
ADMARC	Agricultural Development Marketing Corporation
AGLINET	Agricultural Libraries Network
AGORA	Access to Global Online Research in Agriculture
AIDS	Acquired Immune-Deficiency Syndrome
ANAFE	African Network for Agroforestry Education
APRU	Agricultural Policy Research Unit
ARET	Agricultural Research and Extension Trust
ATC	Agriculture Training Company
AVRDC	Asian Vegetables Research and Development Centre
ARV	Anti Retro Viro
BCA	Bunda College of Agriculture
BNL	Blantyre Newspaper Limited
BPP	Blantyre Print and Publishing
CADECOM	Catholic Development Commission of Malawi
CBNRM	Community Based Natural Resources Management
CD-ROM	Compact Disk Read Only Memory
CIAT	International Centre for Tropical Agriculture
CIP	International Potato Centre
CIMMYT	Centro Internacional de Mejoramiento de Maíz y Trigo
COMESA	Common Market for East and Southern Africa
COMPASS	Community Participation for Sustainable Resource Management in Malawi
CSC	Christian Service Committee
CSFLIP	Civil Service Forum for Library Information and Personnel
CTA	Technical Centre for Agricultural and Rural Cooperation
CURE	Coordination Unit for the Rehabilitation of the Environment
DADO	District Agriculture Development Officer
DAHI	Department of Animal Health and Industry
DARS	Department of Agriculture Research Services
DFID	Department for International Development
DORA	Distribution of Reference Books on Agriculture
EPA	Extension Planning Area
ESCOM	Electricity Supply Commission of Malawi
EU	European Union
FAO	Food and Agriculture Organization
FRIM	Forestry Research Institute of Malawi
GDP	Gross Domestic Product
GNP	Gross National Product
GIS	Geographical Information Systems
IARCs	International Agricultural Research Centres
ICM	Information and Communication Management
ICT	Information and Communications Technology
ICRAF	International Centre for Research in Agro forestry
ICRISAT	International Crops Research Institute for the Semi-Arid Tropics
IDEAA	Initiative for Development and Equity in Africa Agriculture
IFLA	International Federation of Library Associations and Institutions
IHS	Integrated Household Surveys
IITA	International Institute of Tropical Agriculture
INIBAP	International Institute for Bananas and Plantains
IRLI	International Livestock Research Institute

IRRI	International Rice Research Institute
ISTA	International Seed Testing Association
JICA	Japanese International Co-operation Agency
LAN	Local Area Network
LARS	Lunyangwa Agricultural Research Station
MACRA	Malawi Communications and Regulatory Authority
MADD	Machinga Agricultural Development Division
MALA	Malawi Library Association
MARC	Machine Access Readable Catalogue
MBC	Malawi Broadcasting Corporation
MCF	Malawi College of Fisheries
MCFW	Malawi College of Forestry and Wildlife
MEGS	Malawi Economic Growth Strategy
MGDS	Malawi Growth and Development Strategy
MIPA	Malawi Investment Promotion Agency
MIRTDC	Malawi Industrial Research Institute of Malawi
MNLS	Malawi National Library Service
MOAFS	Ministry of Agriculture and Food Security
MTL	Malawi Telecommunications Limited
MZADD	Mzuzu Agricultural Development Division
MZUNI	Mzuzu University
NAC	National Aquaculture Centre
NALP	National Adult Literacy Programme
NARS	National Agricultural Research Systems
NASFAM	National Smallholder Farmers Association of Malawi
NEPAD	New Partnership for Africa's Development
NGO	Non Governmental Organisation
NHBG	National Herbarium and Botanical Gardens
NRC	Natural Resources College
NRCM	National Research Council of Malawi
NSREP	National Sustainable and Renewable Energy Programme
PCC	Petroleum Control Commission
PIL	Petroleum Importers Limited
PRSP	Poverty Reduction Strategy Paper
PTA	Preferential Trade Area
SAINET	Southern Africa Agricultural Information Network
SADC	Southern African development Centre
SARNET	Southern Africa Root Crops Research Network
SDI	Selective Dissemination of Information
SDNP	Sustainable Development Network Programme
SOCAM	Society of Chartered Accountants in Malawi
TAMA	Tobacco Association of Malawi
TCC	Tobacco Control Commission
TCRET	Testing and Training Centre for Renewable Technologies
TEEAL	The Essential Agricultural Electronic Library
TNM	Telecomm Networks Malawi
WHO	World Health Organization
WICO	Wood Industry Corporation of Malawi
WTO	World Trade Organization

Exchange rate on 18th January 2008: 1 Euro=213 Malawi Kwacha (MK)

Table of Contents

Acknowledgements.....	iii
List of Acronyms	iv
Tables	viii
Executive Summary	ix
1. INTRODUCTION.....	1
2. COUNTRY PROFILE	3
2.1 Agriculture, Fisheries, Forestry and Livestock.....	4
2.1.1 Agriculture	4
2.1.2 Fisheries	6
2.1.3 Forestry	7
2.1.4 Livestock	9
2.2 Brief Description of the Status of ICT Infrastructure and Recent Developments in the Sector.....	9
3. STATUS OF INFORMATION AND COMMUNICATION FOR AGRICULTURE AND RURAL DEVELOPMENT	11
3.1 Institutional, Regulatory and Policy Framework.....	11
3.2 Operational Aspects.....	11
3.2.1 Description of Agricultural Information Services	11
3.2.2 Information Products and Services Provided	15
3.2.3 Information and Communication Management Capacity	16
3.3 Interventions Supporting Information and Communication for Agriculture and Rural Development	18
4. NEEDS ANALYSIS	20
4.1 Information Needs	20
4.2 Capacity Building Needs	20
5. CONCLUSIONS AND RECOMMENDATIONS.....	24
5.1 Conclusions.....	24
5.1.1 Information Needs	24
5.1.2 Capacity-building Needs	25
5.1.3 Potential Partners and Beneficiaries	25
5.2 Recommendations	26
6. PROPOSED CTA INTERVENTION STRATEGY AND ACTION PLAN	28
ANNEXES.....	29
ANNEX 1. TERMS OF REFERENCE	30
ANNEX 2. COUNTRY PROFILE – MALAWI.....	35
2.1 General agricultural profile	35
2.1.1 Size of agricultural population (male / female / youth)	35
2.1.2 Farmed Land, Forests, Fishing Areas	35
2.1.3 Agricultural Systems	36
2.1.4 Agriculture in the Economy (Percentage GDP)	37
2.1.6 Main Agricultural Produce and Secondary Products	37
2.1.6 Main Export Markets	38
2.1.7 Trade Agreements that include Agriculture	39
2.1.9 Sectoral Policy related to Agriculture, Fisheries and Forests	40
2.2 Socio-economic Profile.....	42
2.2.1 Total Active Population, Demographic Breakdown	42
2.2.2 Literacy Level and Languages	43
2.2.3 Access to Services (Health, Schools, Electricity)	43
2.2.4 Rural Urban Drift	46
2.3 Media and Telecommunications	46
2.3.1 Newspapers, periodicals, magazines, radio stations, television channels,	47
2.3.2 Telecommunication Services (Fixed, Mobile, etc.)	47
2.3.3 Computers and Internet Access	55

ANNEX 3. PROFILE OF INSTITUTIONS.....	57
Annex 3.1 List of Institutions in the Agricultural Sector	57
Annex 3.2 Select List of Key Institutions.....	74
ANNEX 4. LIST OF INSTITUTIONS / PERSONS INTERVIEWED.....	107
ANNEX 5. BIBLIOGRAPHY	108

Figure 1. Map of Malawi



Source: Lonely Planet: <http://www.lonelyplanet.com/maps/africa/malawi/>

Executive Summary

Introduction

Since 2003, Technical Centre for Agricultural and Rural Cooperation (CTA) has been systematically conducting needs assessment studies across the PACIFIC, Caribbean and African regions- the regions it has been mandated to serve. This study is 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 advantage of developing programmes that address future needs were combined.

The Centre's new Strategic Plan covering the period 2007-2010 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; and (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 Information and Communications Technologies and Information and Communications Management strategies more widely available.

Objectives

The objectives of the study are as follows:

1. To describe and analyse the status of infrastructure, information services and ICM capacity of institutions involved in agriculture and rural development.
2. To identify information and capacity building needs in the area of Information Communications Management for key institutions and potential CTA partners involved in Agriculture and rural development.
3. To compile baseline data and status of ICM and ICT in Agriculture and rural development for monitoring purposes and improved outreach
4. To identify potential strategic partners for CTA activities and services. (Paying special attention to e.g. print media, editors, TV.)

Methodology

The information compiled in this country report was produced using a desk study. Through the desk study fifteen key agricultural institutions in Malawi were selected where interviews were conducted. The desk review of available literature and information sources including other donor interventions in the field of agricultural and capacity (human and physical) development were done as part of the study to create a profile of agricultural institutions in Malawi. Face- to- face interviews with relevant stakeholders/concerned parties and group discussions were conducted where it was necessary to capture as much information as possible. The findings, conclusions and recommendations are based on the information gleaned from these fifteen institutions.

Expected results

The study will 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 the type and mode of intervention as well as partner selection.

Findings

Malawi is heavily dependent on the agricultural sector which dominates the national economy and accounts for about 40% of the GDP, 70% of exports, offers employment to about 85% of the people and is the main income generating activity for rural people. The Government of Malawi has not yet approved a Draft National Information and Communications policy that was drafted by various stakeholders.

Agricultural information services are the responsibility of the Ministry of Agricultural and Food Security through the Departments of Agricultural Research and Technical Services and Agricultural Extension Service. Other research work especially on high value crops such as tea, tobacco and sugar cane, is conducted by the Tea Research Foundation (TRF), the Agricultural Research and Extension Trust (ARET) and ILLOVO Sugar Company of Malawi, respectively. The University of Malawi carries out research on various disciplines and commodities

The Department of Agricultural and Research Services library system was established to further agriculture research. Its mandate is to upgrade and improve information systems to enhance research, technology development and management in the department and beyond. Bunda College of Agriculture is another reliable source of information for various stakeholders

The information and communications capacity is not well developed in Malawi. The number of staff who are skilled in the area of ICT is very low. In general, the Ministry of Agriculture and Food Security departments are not well endowed with skilled personnel in data processing. Currently the whole ministry does not have well qualified officers who could be involved in data collection.

Data is scattered across various organizations. Government has also taken note of this as quoted in the Nation Newspaper of 25th April, 2007 where the Principal Secretary in the Ministry of Economic Planning and Development stated that, "there is a need to coordinate and bring together statistical data from all sectors in order to bridge the gaps in data availability and usage."

Interventions in Agriculture Sector have been introduced by National Smallholder Farmers Association of Malawi (NASFAM) and Initiative for Development and Equity in African Agriculture (IDEAA). One such intervention is the Malawi Agriculture Commodity Exchange (MACE), launched in 2004, where a commodity price list for 42 commodities in the three Malawian markets is accessible by SMS and the Internet. This is a good intervention in the agricultural industry especially where the cell phone technology has made rapid in-roads in the rural communities.

Agricultural institutions are facing serious problems in ICT and ICM capacity building due to the fact that there is no national ICT policy in place. It was evident that most of the Government institutions have very serious capacity problems. (Ministry of Agriculture and Food Security, Malawi College of Forestry and Wildlife, Natural Resources College, and Mzuzu Agricultural development Division) The capacity problems in these institutions relate to shortage of equipment, manpower, lack and inadequate training and poor funding.

Semi-government organisations and private agricultural companies such as National Smallholder Farmers Association of Malawi, Agricultural Research and Extension Trust, Radio Maria (RM) and Television Malawi cited poor funding as a major constraint for the implementation of their activities.

With poor funding many other activities can not be run by the institutions because the budget is the important factor in the capacity building initiative of any institution.

There is also lack of special departments/sections for data processing. In most of the organizations interviewed, individuals who are not experts process data. In the absence of a central data processing unit, each officer takes care of their own data collection and processing needs.

Conclusions

In the key agricultural research institutions (DARTS, ARET, and FRIM) in Malawi there is a high demand for scientific and technical information. There was a general need for both print and electronic journals that could provide full text information. It was evident that all forms of information from books, journals, CD-ROMS, annual reports, grey literature were required by the researchers and staff of the various agricultural institutions visited. The advent of ICTs, especially the Internet although not commonly used has led to the demand for agriculture information in electronic format. The electronic information was mainly required in full text format.

Electronic journals were not easy to access due to the low ICT and ICM capacity of most of the institutions. Most of the institutions interviewed are poorly funded and cannot afford online subscriptions to scientific and technical journals. Some institutions needed books on various subjects to be bought. The libraries lacked latest editions of books on various subjects.

Almost 75% of the agricultural institutions interviewed have huge capacity problems due to insufficient training and high labour turn-over to the private sector and lack of incentives in Government institutions. There is a need for training of personnel in data processing and management so that institutions could set up sections/departments for the collection and processing of data. Agricultural libraries have huge capacity problems in terms lack of training in Information and communications Technology, Librarianship, data processing, research methods, especially in the Ministry of Agriculture and Food Security.

There are lots of institutions that have heard or seen products from CTA but have not benefited much from the linkages that have so far been established. Three quarters of the institutions have seen Spore magazine but have not heard about DORA or Question and Answer Service that is operated by a local focal point. The various technical reports that CTA produces ends up in the research libraries but do not get to the media houses. All newspaper publishers, radio stations and television have never received any of the CTA products and services.

Recommendations

The Information and Communication Management Skills Section of CTA should promote awareness on potential of ICT and ICM in the dissemination of agriculture information. It is recommended that CTA should extend its services to the media institutions in Malawi such as radio stations, television (MBC, and TVM) and print media such as newspaper publishers (BNL, NPL). CTA should also try to work with National Library Service that has a wider network of libraries in the rural areas of the country. We further recommend that CTA should explore ways of linking up with NASFAM in Malawi which is a well established private company. These institutions would help in publicising the activities of CTA to the farmers. The farmers would then access the information from CTA for use.

CTA should promote self reliance and sustainability of agricultural institutions. It should assist institutions in Malawi to update their ICT and ICM skills training. Various training courses ranging from software and hardware training should be organised. This would help institutions to upgrade their information management capacity in Malawi. CTA should market its services and products to many institutions in Malawi through the local media houses. Some of its services could be advertised

through the key daily papers (Nation and Daily Times) or the radio stations that have wider coverage. This would lead to its services being accessed and known by many.

CTA should take advantage of the structure of the Ministry of Agriculture and Food Security in Malawi to engage with the different departments that are involved in the technology transfer to the farmers and information dissemination. It is further recommended that CTA should develop a wide range of training courses that should be targeted to various agricultural institutions. These courses should be in form of short courses, seminars and workshops. Training courses should be organized in database management, networking, simple hardware and software trouble shooting solutions, project management, proposal writing and information dissemination in agriculture.

1. INTRODUCTION

1. Since 2003, CTA has been systematically conducting needs assessment Studies across the PACIFIC, Caribbean and African regions- the regions it has been mandated to serve. This study is 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 advantage of developing programmes that address future needs were combined.
2. The Centre's new strategic plan covering the 2007-2010 places emphasis on:
(i) 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. CTA works primarily through intermediary public and private partners research centres, extension services, libraries, NGO's farmers organizations, regional organizations and networks), to promote agricultural and rural development. Under the new strategic plan, the organizations targeted will be extended to include print media, editors, and radio, TV and journalist networks in order to further maximise outreach. Through these partnerships, CTA hopes to increase the number of ACP organizations 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, decentralization, regionalisation, thematic orientation and transparent and objective criteria and procedure for selection.
4. This Malawi report is part of a series commissioned by the CTA in ACP Countries. It is designed to provide the organization with better insight into the agricultural needs of institutions in Malawi and the actions of other agencies in this area. The objectives of the needs assessment study are as follows:
 - To describe and analyse the status of infrastructure, information services and ICM capacity of institutions involved in agriculture and rural development.
 - To identify information and capacity building needs in the area of ICM for key institutions and potential CTA partners involved in agriculture and rural development.
 - To compile baseline data and status of ICM and ICT in agriculture and rural development for monitoring purposes and improved outreach.
 - To identify potential strategic partners for CTA activities and services. (Paying special attention to e.g. print media, editors, TV.)

5. This 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 organisations); to have more informed picture of their needs and aid in the elaboration of a strategy and framework of action.

2. COUNTRY PROFILE

6. Malawi is a small country occupying the Southern part of the East African Rift valley, lying between 9 degrees and 17 degrees south of the equator. It has an area of 118,484 square kilometres, of which approximately 20% is water. It is landlocked and bound by Mozambique in the South and East, Zambia to the West and Tanzania to the East and North. The country's topography is immensely varied, from the rift valley floor almost at sea level to mountains rising to 3,000 meters above sea level.
7. The country is divided into 3 administrative regions and 27 districts. The Southern Region (with 12 districts) is hilly and has the commercial city of Blantyre and an old administrative capital, Zomba, now a university town. The Shire River runs down from the Southern end of Lake Malawi, through Lake Malombe and pours into the Zambezi River finally entering the Indian Ocean. The Central Region (with 9 districts) is predominantly flat, with the country's administrative capital, Lilongwe, at its centre. The Northern Region (with 6 districts) is mostly mountainous, with Mzuzu as its capital.
8. The population of Malawi according to the 1998 population and housing census is 9.8 million. The current estimates as of 2006 are around 12 million people. These figures represent a 24% increase over the 1987 Census, giving an inter-censal annual increase of 2.0%. (United Nations System in Malawi; Common Country Assessment of Malawi: 2001 Report.)
9. Fertility rates have declined but remain at high levels owing to early marriages and the relatively low rate of contraceptive use. The total fertility rate (TFR) is estimated at 6.7 but has fallen to about 6.2 as a result of modest use of contraceptive. According to preliminary results of population census estimated from 14 deaths per 1000 people in 1987 to 22 deaths per 1000 in 1998. However, the census estimated that the crude birth rate fell from 42 births per 1000 people to 37 births per 1000 over the same period of time. (United Nations System in Malawi; Common Country Assessment of Malawi: 2001 Report.) The AIDS impact on Malawi's population as evidenced by morbidity rates of 134 per 1000 live births and estimated to rise to 200 per 1000 live births by 2010, is very severe. By the year 2000, the number of orphans resulting from HIV/AIDS-related deaths was estimated at 300,000. The increasing number of household and community resources as the breadwinner of the breadwinner of the family dies or as an increasingly large proportion of income is spent on care needs.
10. The country is heavily dependent on the agricultural sector which dominates the national economy and accounts for about 40% of the GDP, 70% of exports, offers employment to about 85% of the people and is the main income generating activity for rural people.
11. Crop production accounts for about 90% while the livestock sector contributes about 7% of the GDP and 12% of total estimated value of agricultural output. Tobacco, tea, sugar and coffee make the major portion of exports while maize is the major staple food crop largely produced by smallholder farmers. The agricultural sector comprises farmers, inputs suppliers, transporters, Government and parastatal institutions, donors, non-government organizations, processors and service providers. (Malawi Government (2001), Agricultural Research Strategic Plan:2000-2010, Lilongwe°).

12. The agriculture sector grew by 11.5 percent in 2006 from a contraction of 9.0% in the previous year. The small scale and large scale agriculture subsectors grew by 14.4 percent and 2.3 percent, respectively. The substantial increase in small-scale agriculture reflects impacts of the fertilizer subsidy programme by government, coupled with good rains during 2005/06 planting season. In 2005, small-scale agriculture contracted by 11.7 percent while large-scale agriculture increased by 0.5 percent. (Reserve Bank of Malawi- financial and Economic Review vol.38, No 4, 2006.)
13. A major challenge for the country was food shortage following the poor food crop harvest in 2004, as a result of which inflation rose from 11.4 percent in July 2004 to 13.7 percent by end December 2004 and kept on rising to 14.9 percent in March 2005. The situation improved in 2006, Inflation rate as measured by the percentage increases in consumer price index (CPI) decreased to an average of 10.5 percent during the last quarter of 2006 as compared to 12.8 percent and 16.2 recorded during the previous quarter and in corresponding quarter 2005. (Reserve Bank of Malawi- financial and Economic Review vol.38, No 4, 2006.)

2.1 Agriculture, Fisheries, Forestry and Livestock

2.1.1 Agriculture

14. The Agricultural sector in Malawi is the mainstay of the economy accounting for about 40 percent of GDP, 90% of exports and 85% of employment. Agriculture in Malawi is highly dualistic. Approximately 84 percent of agricultural value added comes from 1.8 to 2 million smallholders who on average own only 1 hectare of land. They typically cultivate maize as the main food crop. One third cultivate cash crop (19% grow burley tobacco), and most grow other crops as well-smallholders produce most of Malawi's cotton and paprika. Approximately 30,000 estates cultivate 1.1 million hectares of land with an average holding size of between 10 to 500 hectares. They produce tea, flue-cured tobacco, coffee, sugar cane and about one third of the total burley tobacco.
15. The Department of Agricultural Research (DARS) is a technical department in the Malawi Ministry of Agriculture and Food Security (MAAFS) and is responsible for conducting research on problems and constraints that beset the country's agricultural sector. The role of DARS has become more important with the realization that Malawi's growth in agricultural output is increasingly becoming dependent on the development of scientific and technical capacity to develop new mechanical, chemical, and biological technologies. This is because the expansion in agricultural land is no longer possible and farm inputs and implements have become increasingly expensive, hence inaccessible to many smallholder farmers.
16. Agriculture research in Malawi can be traced back to the establishment of the four main research stations at Bvumbwe in 1940, principally as a research station for tung nuts; Chitedze in 1948, for research on arable crops such as tobacco, cereals and livestock; Makoka in 1967, as the main center for the Agricultural Research Council of Malawi (ARCM) and Lunyangwa in 1969, for research on arable crops, such as maize and groundnuts. When Malawi attained independence in 1964, the then Department of Agricultural Research Services (DARS) was a relatively small organization that was staffed mainly by expatriate scientists. Research was organized on a project basis, by crop, livestock or discipline.

17. The scope of DARS was enhanced in 1975 when the responsibility for research on cotton, grain legumes and soil productivity was given to DARS following the dissolution of the ARC of Central Africa. In 1980, DARS relinquished its responsibility over tobacco research, and this task was taken over by the Malawi Tobacco Research Authority (MTRA), now called the Agricultural Research and Extension Trust (ARET). The DAR was restructured into the DARS in 1993. (Malawi Government, Agricultural Research Master Plan, September, 1995)
18. DARS has evolved over the years to become a professional institution with about 70 highly qualified and skilled indigenous scientists; a network of 16 research stations, experimental stations and sub-stations; and excellent research infrastructure and facilities that enable it to generate technologies that have impacted greatly on agricultural productivity in Malawi.
19. DARS is currently headed by a Director who is assisted at the Capital Hill headquarters by two Deputy Directors, one responsible for research programmes and the other for technical services and administration.

DARS has undergone a lot of changes in its structure and organization since it was set up. The major change took place in 1985 when the research programmes were restructured from discipline and project based into multidisciplinary commodity groups. At the same time the Agricultural Research Council (ARC) was established to set policy guidelines within which the DARS should operate.
20. The ARC's main function is to: orient the direction of research; approve programmes, budgets, and funding levels; and prepare research strategies and plans. The Council comprises 15 selected members drawn from all the Departments of the Ministry of Agriculture and Food Security (MAFS), other agricultural research institutions and agricultural-related private sector institutions. The ARC has a Technical Sub-committee that reviews research programmes annually. Members of the subcommittee are professional agriculturalists with wide experience in their areas of specialization.
21. Research in DARS is organized into seven commodity groups: cereals; horticulture; livestock and pastures; legumes, fibres and oilseeds; soils and agricultural engineering; technical services; and plant protection. Each commodity group is led by a National Research Coordinator (NRC), who oversees several commodity teams. Each team is headed by a Commodity Team Leader (CTL) and has several scientists under it, depending on its size. The CTL is responsible to the NRC who reports to the Director through one of the two Deputy Directors.
22. The commodity groups operate at three major research stations: Chitedze in the Central Region; Bvumbwe in the Southern Region; and Lunyangwa in the Northern Region. These are supplemented by four experiment stations: Makoka and Kasinthula in the South; Lifuwu in the Centre; and Mkondezi in the North; and nine sub-stations at Baka, Bembeke, Bolero, Chitala, Mbawa, Meru, Nchenachena, Ngabu and Tsangano. Each of the major stations is headed by a Deputy Director, while the experiment stations and sub-stations are headed by Officers-in-Charge.
23. The DARS maintains excellent linkages and works in collaboration with its stakeholders and farmers as well as various Departments in the Ministry of

Agriculture and Irrigation those responsible for crop production, extension services, animal health and industry, land resources and conservation, and irrigation.

24. DARS collaborates with the other research institutions in the National Agricultural Research System (NARS) such as: Bunda College of Agriculture, Agricultural Policy Research Unit (APRU), Centre for Social Research (CSR), National Aquaculture Centre (NAC), The Polytechnic, Chancellor College, National Herbarium and Botanical gardens (NHBG), Malawi Industrial Research and Technology Development Centre (MIRTDC), Tea Research Foundation (TRF), Forestry Research Institute of Malawi (FRIM), Agricultural Research and Extension Trust (ARET), National Research Council of Malawi (NRCM), and ILLOVO Sugar Company.
25. In addition, DARS is involved in collaborative research programmes with a large number of regional, sub-regional and international organizations. One of the strongest areas of collaboration is between DARTS and the International Agricultural Research Centres (IARCs). This collaboration has been strengthened following the setting up of several regional and sub-regional centres at various DARS research stations. The IARCs include, the International Crops Research Institute for the Semi-Arid Tropics (ICRISAT) at Chitedze in 1982, the International Centre for Research in Agro forestry (ICRAF) at Chitedze in 1987 and later at Makoka in 1995, the International Centre for Tropical Agriculture (CIAT)/DFID at Chitedze in 1994, the Southern Africa Root Crops Research Network (SARRNET) under the International Institute for Tropical Agriculture (IITA),
26. DARS also collaborates with the International Potato Centre (CIP), the Asian Vegetables Research and Development Centre (AVRDC), the International Livestock Research Institute (IRLI), The International Institute for Bananas and Plantains (INIBAP), the International Seed Testing Association (ISTA), CIMMYT, the SADC Plant Genetic Resources Centre (SPGRC), the International Plant Genetic Resources Institute (IPGRI), the Technical Centre for Agricultural and Rural Cooperation (CTA), the International Rice Research Institute (IRRI), SADC/SACCAR Southern Africa Agricultural Information Network (SAAINET), the World Agricultural Libraries Network (AGLINET), the Rockefeller Foundation, the UK Department for International Development (DFID), and the Food and Agricultural Organization of the United Nations (FAO).
27. Malawi has one of the highest population densities in sub-Saharan Africa. The amount of arable land per rural inhabitant is lower than in other countries in the region. In Malawi, in contrast to other densely settled developing countries, high population density has not led to agricultural intensification, but rather to rapid depletion of soil nutrients. Current farming systems are in many cases unsustainable and threaten further environmental degradation.

2.1.2 Fisheries

28. The four lakes (Malawi, Malombe, Chiuta and Chirwa) and Shire River form the basis of Malawi's fish production. Annual catch is 50 to 60 tons, with the districts of Salima and Mangochi accounting for 60% of this. It is estimated that 53,000 people derive their livelihoods directly from fisheries. Over-exploitation of fish resources has resulted in the near disappearance of some species and the gradual dwindling of the catch to almost 50% over the decade. (United Nations System in Malawi, Common country assessment of Malawi. 2001 Report)

29. Decline in fisheries production is a critical problem because fish at one time provided as much as 60-70% of the animal protein intake at the household level. Fishing is an important means of livelihood for many Malawians, contributing 10% of GDP. In addition, Malawi has a responsibility to the global community to conserve its unique and diverse fish fauna of more than 600 endemic species.
30. Pressure on fish resources is mainly due to over fishing as reflected in declining catch rates in both artisanal and commercial fishing sectors. Since 1990, total fish production has declined by 20, 000 t/yr, from 70,000 to 50,000 t/yr. In Lake Malombe, for example, annual fish catches dropped from 10,000 tons in 1986 to 200-300 tons in 1994, despite a doubling in the number of fishers. As a consequence of this decline in fish landings, national annual per capita fish consumption dropped from a high 12.3 kg/person in 1972 to as low as 6 kg/person in 2002.(Malawi National Report, The World summit on Summit Development (WSSD): Johannesburg, South Africa 26th August-4th September, 2002)
31. Other factors adversely affecting the fishery resources included increasing levels of nutrients, toxins and sediments, habitat degradation, alteration of water resources, introduction of invasive alien fish species, and excessive growth of invasive alien plants such as water hyacinth. In 1990, Malawi eradicated the introduced varieties of carp in the Lake Malawi watershed as a protective measure.
32. The small-scale, artisanal sector accounts for 95% of fish landings but are under pressure from increased fish demand and over-capitalization. Surveys suggest that offshore stocks could yield an additional 30-35 000 t/yr but Malawi lacks the investment needed for a motorized fleet.
33. Malawi has also made an effort to encourage Community Based Natural Resources Management (CBNRM) in the new Fisheries Policy of 1999 and by 2000 some 267 Beach Village committees (BVC) had been formed throughout the country. These groups are seen as a means of community empowerment to manage and police the resource. Fish farming has been advocated as a means to boost production, but despite efforts since 1959, aquaculture at present stands at 3 000 farmers producing 600 t/yr of fish.

2.1.3 Forestry

34. The total forest cover is about 26,500 sq km of which 7,705 km and 9,770 sq are respectively forest reserves and national parks. Resource use continues to rise due to increasing population, expansion of flue –cured tobacco and the encroachment of smallholder farmers on marginal lands. Wood fuels provide 90% of the national energy requirements.
35. Malawi is party to the statement of Forest Principles adopted at the Rio Summit in 1992. Despite national action programs in the forest conservation in the country, there has been an estimated 56.8% decline in total forest cover in the 25 years preceding 1998. The decline has been 2.5 million hectares, a drop from 4.4 million hectare to 1.9 million hectare. In 1975, 47% of Malawi was classed as forest. Presently, on 28% is forest, of which 21% comprises Forest Reserves, National Parks and Wildlife Reserves, and 7% is under customary land.

36. The estimated rate of deforestation for the whole country is 2.8% per annum, an increase from 2.4%/ year ratio to Rio, further evidence that the forest area is continuing to decrease at an alarming, unsustainable rate. This is the highest rate in the SADC region. This dramatic decline is attributed to various factors including: clearing forests for agriculture, commercial timber logging, and wood-fuel cutting for households, tobacco curing, brick burning, fish curing, charcoal production and beer brewing. An estimated 88.6% of energy supply was attributed to fuel-wood use in 1997, indicating high dependence on this resource for energy. (Malawi National Report, the World summit on Summit Development (WSSD): Johannesburg, South Africa 26th August-4th September, 2002)
37. There was an increase in forest fires in 1995 resulting in a loss of 14,000 hectares. Another 7,500 hectares were burnt down during 1996-1999. The Malawi Report to "The World Summit on Sustainable Development (WSSD) held in Johannesburg, South Africa , 2002" specifies the following depletion rates: Per capital consumption varies from 1.1 m³ for rural people to 2.0 m³ for urban. Tea and tobacco curing account for 20% of fuel-wood energy. Between 1975 and 1990, area under cultivation expanded by 41%, 1.4%/yr, mostly from clearing forests. Biomass energy accounts for 90% of Malawi's energy, 37% from customary land, 26% from forest reserves, 11% from plantations, and 10% from crop residues and 16% other resources.
38. Wood and charcoal are still considered more economic than paraffin. Use of Firewood for commercial purposes is increasing and accounts for 50,000 ha/yr of loss in forest cover. Slash and burn cultivation on steep slopes is still practiced widely, Wild forest fires in plantations have destroyed 10% in 155 fires since 1995. In Karonga, 75% of the area is prone to erosion due to bush fires. Forest reserves are being encroached. In response, Malawi has 71 gazetted natural forests, an estimated 0.9 ha million and 17 state forest plantations covering 130 000 ha, plus an additional 25,000 ha of plantation in the private sector. There is a new Forest Policy of 1996 and Act of 1997 and the National Forest program of 2000 that seeks to empower CBNRM through community management plans. It also encourages private sector involvement in plantations
39. The annual tree planting week in 2000 saw 38 million seedlings planted. This is a big leap from the total 20 million trees planted between 1988 and 1995. The Department of Forestry looks after this sector with some 9,000 staff, mainly forest guards. In 2001, the National Forestry Program was launched identifying 9 key themes for intervention to implement the Act and Policy. The main areas are forest and wood conservation and tree planting or a forestation.
40. Malawi also has an Action Plan on Deforestation. Government has promoted medical plants, dyes, fibres, gums, resins, fodder, rattan, bamboo and works of local artists, as well as low impact use in terms of eco-tourism. These are also coupled with the energy policy that advocates more renewable energy sources like solar power, wind power, biogas, electricity, gel-fuel and alternatives. However, reforestation through tree planting has fallen short of the rate of deforestation. It is estimated that in 1999, 12, 9000 hectares were planted while deforestation totalled approximately 50,000 hectares.

2.1.4 Livestock

41. Livestock accounts for around 7% of agricultural GDP in Malawi. In 2000 it was noted that the animal population was low with 710,000 Malawi Zebu cattle, 12,000 dairy cattle—Freisian and crosses, 110,000 sheep and 1,260,000 goats. It is worth noting that published animal numbers are nearly always extrapolations, and hence different sources will arrive at different figures depending upon the assumptions made. A picture emerges of relatively static cattle numbers but increasing numbers of smallstock. (<http://www.fao.org/ag/AGP/AGPC/doc/Counprof/malawi/Malawi.htm>: Renolds, L. Country Pasture/Forage Resource Profiles)The population of most livestock species has stagnated in the recent times and this should be a cause for concern to all Malawians. Over the past decade, the cattle population has declined steadily from over 800,000 to around 700,000. This was expected as more and more land is being deforested for new settlements and arable cultivation, less and less grazing land will be available and in most cases such land is of marginal value.
42. The other factor that has contributed to the declining cattle population is theft which has been rampant over the past few years. As for the regional distribution, the Northern Region accounts for 31%, the Central Region 40% and the Southern region 29% of cattle production. The goat population stabilized at around 830,000 between 1989 and 1996 and increased dramatically to over 1,500,000. This could be greeted with mixed feelings. On one hand, there is more goat meat and cash income from goat meat and cash income from goats, but on the other hand, goats exert a great impact on the environment implying more overgrazing problems.
43. The Agricultural Research Department (DAR) of MoA is mandated to undertake research on a wide variety of crops and Livestock. DAR has research stations in each district of the country, with 11 research stations, and 20 sub-stations. Chitedze Research Station, near Lilongwe is the centre for pasture and forage work. MoA has mandated the University of Malawi to conduct specific disciplinary research. Bunda College of Agriculture carries out research into beans, rabbits, pigs and socio-economics. The Department of Animal Health and Industry carries out research on poultry and goat breeding.

2.2 Brief Description of the Status of ICT Infrastructure and Recent Developments in the Sector

44. The ICT infrastructure is developing at a very fast pace with all the sectors doing their best to reach all corners of the country. The ICT infrastructure is viewed in terms of the ICT human resources, telecommunications, broadcasting/media, and its infrastructure.
45. The human resources capacity in ICT is still underdeveloped considering the high demand in this sector. A random sample of personnel in the ICT sectors carried out in 1999 representing officers in the civil service, financial institutions, the universities of Malawi, and the tobacco industry came up with figures as shown in the figure below:

Table 1. ICT Human Resources

FIELD	Numbers of Officers
Computer specialists (diploma level and above)	370
Information specialist/scientists (diploma level and above)	60
Computer engineers (software and hardware)	46
Computer specialists/scientists (below diploma level)	403
<p>Note: figure in the above table are not complete. They represent officers in the Civil service, Financial institutions, the Universities of Malawi, and the tobacco industry.</p> <p>Source: http://www.malawi.gov.mw/publications/NICIdoc.htm</p>	

Source: Malawi Government Website, 2007.

46. Malawi Telecommunications Limited (MTL) is the sole provider of fixed telephone services and also provides cellular telephone services through its cellular telecommunications company - Telekom Networks Malawi Limited (TNM). Malawi's second mobile phone operator is Celtel Limited.
47. International direct dialing is available on 98 percent of Malawi's phones. In an effort to bring communications systems in line with the rest of the world, thousands of digital lines are presently being installed in the major cities each year. The Communications Act of 1998 established the Malawi Communications Regulatory Authority (MACRA). MACRA is charged with the responsibility of licensing operators in the areas of posts, broadcasting and telecommunications.
48. There has been considerable growth in the telecommunications sector where a 50.0 percent growth in active subscribers is estimated. The current overall tele-density is 0.39. There is a wide variation in the distribution ranging from 3.72 in largest Cities (e.g. Blantyre and Lilongwe) to the rest of the country at 0.23.
49. The broadcasting/media sector is the fastest growing with a number of Broadcasting and Media houses mushrooming at a fast rate. So far there is Television Malawi, Malawi Broadcasting Corporation, Zodiak, Capital Radio FM, Radio 101, African Bible College Radio, Radio Maria, Radio Alinafe, Radio Islam, Transworld Radio, Joy Radio, MIJ Radio, Mchinji radio, Nkhotakota Community Radio, Mzimwe Community Radio and Star Radio.

3. STATUS OF INFORMATION AND COMMUNICATION FOR AGRICULTURE AND RURAL DEVELOPMENT

3.1 Institutional, Regulatory and Policy Framework

50. The Government of Malawi has not yet approved a draft National Information and Communications policy that was drafted in 1998 by various stakeholders. The wider National Policy document was supposed to map the overall framework for regulating the ICT sector. The Information and Communication Policy is dogged by lack of knowledge and skills by a lot of stakeholders. It is an area that has seen many players coming together but not agreeing on the definition of ICT. Those in the computer hardware and software industry are pushing their side with little regard to the content managers and the media practitioners. Sometimes confusion arises when, for instance, one workshop on ICT will include those in hardware and software leaving out those in content management and media practitioners and vice versa. Yet another group would look at ICT as being synonymous to the Internet leaving out all the other stakeholders. It is therefore imperative that Malawi should first of all arrive at a common definition of ICT as it applies to various sectors of the economy.
51. This lack of a policy framework has led to a situation where institutions are basically using their strategic plans to guide them in implementing their ICT activities. This has resulted in a situation where those institutions that are well resourced have made strides leaving those that are less resourced. It is not surprising, therefore to see large banking institutions, embassies and large NGOs, universities having a well established ICT base than the government departments and ministries.
1. The information and communications regulatory environment was liberalised since the establishment of the Malawi Communications Regulatory Authority in 1998. Under its regulatory activity, competition in mobile telecommunications has opened up. Internet and data services are fully liberalised restrictions on community radio establishment were lifted to pave way to a flurry of radio stations that are now in excess of ten.

3.2 Operational Aspects

3.2.1 Description of Agricultural Information Services

53. Agricultural Information services are the responsibility of the Ministry of Agricultural through the Departments of Agricultural Research and Technical Services and Agricultural Extension Service. The two departments work in a symbiotic manner where the information generated by the research section is passed on to the farmer through the department of Agricultural Extension Service.
54. The overall objective of Agricultural Research and Technical Service (DARS) in Malawi is to plan and conduct applied or production oriented research that will generate information and technologies, which can directly be utilised by estate and smallholder farmers to solve technical production problems. Agricultural research assists in poverty alleviation by providing information

technologies that will minimise production risks and the deterioration of natural resources; reduce over-dependence on a few food and cash crops leading to stable and sustainable yields.

55. The Department of Agricultural Research carries out most of the crops and livestock research work in the country. The emphasis of DARS research is on smallholder farmers rather than on estate farmers. Other research work especially on high value such as tea, tobacco and sugar cane, is conducted by the Tea Research Foundation (TRF), the Agricultural Research and Extension Trust (ARET) and the Sugar Corporation of Malawi (SUCOMA), respectively.
56. The University of Malawi carries out research on various disciplines and commodities: Bunda College of Agriculture carries out research on indigenous vegetables, rabbits, pigs, goats, farm machinery, aquaculture, social economic studies and some work on beans. Chancellor College works together with DARS on research on cassava pests, soil pests, and cassava processing and income surveys in tobacco growing areas of the country.
57. The Department of Animal Health and Industry (DAHI) carry out research on animal diseases. Contract research is sometimes awarded by DARS to other research organizations to utilise research capabilities available in other National Agricultural Research Systems (NARS)
58. The Agricultural Extension Services are under the Controller of Agricultural and Extension Services who is also in-charge of DARS, Department of Animal Health and Industry, Department of Crop Production, Department of Land Resources and Conservation and the Agricultural Development Divisions.
59. For information generated by the other Departments to reach out to the farming communities the Information services are organised based on Agricultural Development Divisions (ADD), District Agricultural Development Office (DADO), Extension Planning Areas (EPAs).
60. Malawi is divided into 8 Agricultural Development Divisions (ADD) each managed by Programme manager and a team of subject specialists (SMS). The ADDs are further divided into 28 DADOs, with each DADO headed by a Project Officer with SMS. The next lower level is the Extension Planning Area (187) headed by a development officer who in his pool of Subject Matter Specialist has a female farm home assistant, a credit assistant, a land husbandry assistant, ox-trainer, and an animal husbandry assistant. The Extension Planning Area is further subdivided into extension sections (3008) with the frontline extension worker responsible for usually about 500-750 farm families in each section.

61. The EPA is the key unit for planning, organization and operation of the extension service. It consists of an extension management unit, headed by the Development Officer and covering a relatively homogenous area with regard to soils, topography, temperature, and rainfall to ensure uniformity of recommended cropping patterns; each EPA has no more than 10,000 farm families; each EPA is no more than 130 square Kilometres so that the Development Officer need not travel more than 27 Kilometres in any direction; the boundaries do conform to district and traditional boundaries.
62. The EPA as a planning model provides for the agricultural marketing, health, education and community services as a growth and service centre for the surrounding communities. Agricultural Extension Service has a mobile unit that disseminates information through its public address system and puppet shows. It is usually deployed in the EPAs prior to field days to make important announcements relating to new technologies. It is also used as a mass communication tool to assemble farmers for a public address.

Agricultural Libraries

63. Malawi does not have a National Agricultural Library like other developed countries. Instead there is a National Library Service that disseminates information of various types including agriculture. The National Library Service was founded by an Act of Parliament no. 31 of 1967 and started its operations in 1968. The mission statement of the National Library Service is: "To ensure that people in Malawi in both rural and urban areas, have access to reading/information materials which they may require in connection with their studies, their profession or other works, for the maintenance of literacy, for recreation and for general enlightenment."
64. The major policy objectives of the National Library Service are to promote a reading culture, reduce illiteracy, maintain literacy, promote the provision of health and agricultural information, support curriculum in education institutions and participate in civic education.
65. The number of service points is currently 12 (branch libraries of the National Library Service including Headquarters all providing reference and lending services. The National Library Service also provides reading materials to schools and community information as shown in the table below.

Table 2. Distribution of School and Community Libraries in the three regions of Malawi.

Region	School Libraries	Community (Rural) Libraries
Southern	289	77
Central Region	301	83
Northern Region	310	30

Source: Malawi National Library Service, 2004

66. The library currently employs 110 people in various capacities. There are two professionals with Masters Degrees in Library and Information Studies, 1 with a Masters Degree in Media Studies, 1 with a Degree in Education, 6 Diploma in Library and Information Studies and more than 30 holders of Malawi Library Association Certificates. DARTS runs the main agricultural library system for the provision of research information.

67. The DARS library system was established to further agricultural research. Its mandate is to upgrade and improve information systems to enhance research, technology development and management in the Department and beyond. Its mission statement is to undertake effective management and communication of information so that awareness and the use of scientific results are fostered to stimulate technology update by agriculturalists in programme development.
68. The vision of DARS library system is to provide a sustainable link and working relationships of scientists and other agriculturists thereby optimizing accessibility of global information by enhanced use of electronic ICT resources and print formats to capture process and disseminate technologies to target beneficiaries.
69. The information system network in DARS, with a capacity of 800,000 reference documents, is aimed at increasing access to global information through the use of ICT systems. The objective of this is to create a comprehensive library, information and documentation network by acquiring both scientific and technical information for the continued support of research and extension programmes in agric sector. The DARS Library system is made up of Bvumbwe Library, Chitedze Library, Lunyangwa Library, Makoka Library, Mkondedzi Research Station Library, and Mbawa Research Station Library.
70. Bunda College of Agriculture is another reliable source of Agricultural information for various stakeholders. Although its mandate is to run training programmes at Bachelor's, Masters and PhD levels, it also plays an active role in research and consultancy in Agriculture. Some of its research findings are published in the Bunda College newsletter. Some of the information products produced by Bunda College of Agriculture library staff are databases and newsletter.
71. Bunda College of Agriculture library has a graduate with a Masters Degree in Librarianship as its College Librarian. In addition there are two graduates with first degrees in Agriculture and Education respectively. One of these graduates attended a one year specialized programme in computer management. There is one member of staff who has a Diploma in Library and Information studies and the rest have a Malawi Library Association Certificate.
72. Some of the products produced by Bunda College are: the MARC (Machine Access Readable Catalogue); a maize database (a list that shows a wide range of documents on maize written by different individuals); a forest database: a database that shows different forest documents/reprints submitted to the library; a women in development database: a database that covers documents to do with women in development and other pertinent issues; a soil fertility database: a database containing reprints of documents on soils; and an aquaculture database: a database that lists all documents/reprints received by the library on aquaculture from researchers in aquaculture.
73. Other information products that can be accessed in Bunda Library are CD-ROMs from International Organizations such as TEEAL (The Essential Electronic Agricultural Library). These are full text CD-ROMS that provide important information on agriculture but they do not dwell much on community

development and aquaculture. The other sources of information that are available in abstract form are CAB abstracts, Tropag and Rural, SOFA State of Agriculture, Fish base etc. The Bunda College Library is also a member of the Malawi Library Consortium through which various electronic journals can be accessed online. Bunda College of Agriculture library is a National Focal Point for the Question-and-Answer Service that is organized by CTA. It is responsible for providing answers to questions that are raised by farmers, scientists and students.

74. Almost all the 8 Agricultural Development Divisions (ADDs) in the Ministry of Agriculture and Food Security have a library that contains various types of information. It was however noted, that only two libraries among the eight have a trained library staff. The Mzuzu Agricultural Development Division and Liwonde Agricultural Development Division Agricultural Libraries have a member of staff each, who is trained at Malawi Library Association Certificate Level. This is a basic qualification in Librarianship and the first entry level into the profession.
75. The Forestry Research Institute has got a Library that specialises in Forestry information. In terms of staff qualifications, the Library Assistant has a Malawi Library Association Certificate (MALA) which a basic qualification in Librarianship. This situation affects the delivery of information services to scientists at the Institution because the library assistant lacks the professional capacity to deliver technical and scientific information. It would have been better if the librarian was recruited at graduate level so that he/she could handle information requests professionally.

3.2.2 Information Products and Services Provided

76. There are various information products and services that are available through the Ministry of Agriculture and Food Security, the University of Malawi and other non-governmental organizations such as NASFAM, Action Aid, and Cure etc that are serving in the agricultural sector. As has already been stated, the Department of Agricultural Research Services produces information products in the form of monographs, thesis and dissertations, research papers, annual reports, newsletters and magazines. Most of the staff in the Department of Agricultural Research Services publishes papers that are presented at local and international workshops. Some of the scientific papers are posted in internationally recognised journals that are available in various agricultural libraries.
77. The Agricultural Research and Extension Trust (ARET) and the Tea Research Foundation complement the efforts of Department of Agricultural Research Services. ARET specialises in tobacco variety research for the estate sector and the smallholder farmer. They organise annual field days where most of their technologies are transferred to the farmers through displays.
78. The Tea Research Foundation situated in Mulanje district also specialises in the growing of tea. The information from both institutions is relayed to the farmers through annual field days. Both organizations are also involved in the production of annual reports and newsletters. Examples of the publications that are produced by various institutions are in Annex 2.3. Please note that most of the magazines listed in Annex 2.3 are the ones that occasionally contain information on an aspect of agriculture.

3.2.3 Information and Communication Management Capacity

79. The information and communications management capacity is not well developed in Malawi. The number of staff skilled in the area of ICT is very low. It is for this reason that many institutions do not have staff that is well versed in the area of ICT. Most of the government institutions do not have staff trained in the area of ICT. Those that are skilled are attracted to big Institutions that are well funded such as banks, foreign missions, universities and NGOs. This leaves the Government with staff that are less competent to cope with issues of ICTs professionally.

Data Collection and Management

80. The overall responsibility for data collection and management is placed on the National Statistical Office located in Zomba in the Southern Region of Malawi. This is a Government institution charged with carrying out all major social surveys in Malawi. This office conducts the population and housing census, which are carried out every ten years. The last population census for Malawi was conducted in 1998. The next survey is expected to take place in 2008. Most of the official reports quote the figures from the 1998 survey.
81. The study has shown that most of the agricultural institutions do not have special data collection and management section. It has been noted that the MOAFS and the DARS have separate sections that deal with ICTs. The responses from the Ministry of Agriculture headquarters show that they mainly used the data processing department for administering the payroll. The responsibility of data collection and management is placed on the professional and technical staff as individuals.
82. Most of the questions related to data collection and processing raised by this study were referred to the library section, an indication that for most officers' data collection and management is synonymous to library work which is a misconception. Several institutions are also involved in data collection and processing. The Centre for Social Research and the Agricultural Policy Research Unit in the University of Malawi are involved in data collection and management for carrying out statistical analysis.
83. In comparison to the private sector the MAFS departments are not well endowed with skilled personnel in data processing. Currently the entire Ministry does not have competent officers who could carry out data collection and analysis. In the research organizations and ADDs (MZADD, LWADD, LRS, and FRIM) visited there was a complete shortage of well-trained staff or staff who are specialists in data collection and management. It became apparent during the interviews that there is a capacity problem as far as data collection and management is concerned. The agricultural development divisions (MZADD, LWADD, FRIM, and ARET) all stated that they did not have separate sections for data collection and management.
84. Generally, almost all institutions interviewed have computers, which are mainly used for word processing purposes. It was common across all institutions that most of the staff has never gone for training in data collection and analysis. The knowledge that is used by many of the staff is acquired on-the-job. Few members of staff have ever attended short courses in computers but the majority were trained on-the-job. In those institutions where there was a LAN network it was mainly for sharing of Internet connection. It was noted

that most of the institutions have an email address but do not have a website. However, other institutions (DARS, ARET, and FRIM) have websites that were not regularly updated. In most cases the websites were created by external institutions and have never been updated since they were launched because the local institutions do not have capacity to update the websites.

85. The general problem that was observed from the interviews is that data is scattered across various organizations. Government has also taken note of this as quoted in the Nation newspaper paper of 25th April, 2007 where the Principal Secretary in the Ministry of Economic Planning and Development stated that, “there is a need to coordinate and bring together statistical data from all sectors in order to bridge the gaps in data availability and usage.”

Publishing and Dissemination Capacity

86. 95% of the institutions interviewed indicated that they produce several publications per year. The common publications in most of the institutions visited were newsletter and institutional bulletins. They all indicated that they produce annual reports for their institutions. The BPP and Nation are two private institutions involved in the production of daily papers. They all have a wider daily circulation that reaches out to the rural and urban areas. They all feature articles on agriculture occasionally in local language e.g. the Chichewa language a local dialect widely spoken in Malawi. In addition, the two publishers produce special weekend edition for Saturday and Sunday. These weekend editions have a large number of pages and internal sections that are featured in local language.
87. Various institutions have newsletters that are produced monthly or quarterly. In most cases, some of these newsletters are produced by local committees that are mandated by management to produce the newsletters. In other cases, the newsletters are produced by individuals that have personal talents but have never gone through any formal production of newsletters.
88. The lack of specialised units for the production of publications in institutions has led to many problems in the production of newsletters. Although other institutions indicated that they have monthly and quarterly newsletter it was observed that production was irregular. The distribution capacity for newsletters in most of the institutions was observed to be very weak. In most of the institutions the newsletters and bulletins are produced for internal use. Due to a lack of funding, institutions were unable to procure the right stationery for newsletter production. Some of the institutions have websites but they are rarely updated. It was not possible to download publications from some of these websites. Due to a lack of ICT capacity, electronic versions of the newsletters and bulletins are not accessible electronically on many of the websites.
89. The radio stations are the most important and popular channels for information dissemination. The advent of multiparty democracy in 1994 has led to the proliferation of radio stations in the country. The Government set up Malawi Communications Regulatory Authority to regulate the radio, TV, and the cell phone industry.
90. MAFS through its department of Agricultural and Extension are mandated to produce easy-to-read agricultural information leaflets in vernacular targeting the farmer in the village. The Ministry of Agriculture through its ADDs has provided for a communication channel that reaches out to the grassroots

through extension workers who operate in an Extension Planning Area. With higher rates of illiteracy it is imperative that messages meant for the farmer should be well-tailored to suit the local person. The Malawi Television is the only Television station that is operating in Malawi and all major events are featured on it. There are some radio stations owned by both Government and Private radio stations that do feature some agricultural programmes.

3.3 Interventions Supporting Information and Communication for Agriculture and Rural Development

91. National Smallholder Farmers Association of Malawi (NASFAM) is an organization which works with smallholder farmers to improve their agribusiness for better income generation and food security. Currently, NASFAM has over 50,000 members who are involved in the growing and marketing different types of crops like tobacco, chillies, cotton, coffee, ginger, turmeric, pigeon peas and groundnuts. Through the Policy Advocacy and Communications unit, NASFAM is analysing all areas affecting the agricultural sector for the benefit of the smallholder farmers and the service providers.
92. NASFAM has created a database which tracks farmer membership and activity. They are also participating in the development of a Geographical Information System that maps organizations to specific location and nature of intervention.
93. In its plans, NASFAM intends to implement tools that assist in providing/disseminating technical information to farmers in a timely manner. In due course, it will also implement tools that will help raise awareness of all services provided by NASFAM to farmers and partners.
94. Another intervention is that undertaken by Initiative for Development and Equity in Africa Agriculture IDEAA Malawi Agricultural Commodity Exchange (MACE), launched in 2004, where a commodity price list for 42 commodities in the three Malawian markets is accessible by SMS and Internet. This is a good intervention in the agricultural industry especially where the cell phone technology has made rapid in-roads in the rural communities.
95. The Malawi National Library Service is planning to establish rural information centres in all parts of the country. In these rural communities, ICT technologies will be set up to help the rural information centres. At one of its rural information centres where there is no electricity, the National Library Service is using an inverter and a 12 volts car battery. Power is then converted to 220 volts to operate a video player and TV screen. This is used to show video on development information including agricultural information messages.
96. The same rural centres have formed radio listening clubs. The people gather regularly especially in afternoon to listen to the radio and pre-recorded cassettes. It was reported that popular radio programmes are those addressing health, agriculture and environmental issues.
97. The other intervention is the liberalising of the environment for the ICT industry. The Government of Malawi set up the Malawi Communications and Regulatory Authority (MACRA). Since its inception, under its regulatory authority, competition in mobile telecommunications has opened up. Internet

and data services are fully liberalised. Heavy restrictions on the licensing of community radio stations have been lifted, thereby paving the way for increased initiatives and investment in the ICT segment. The wider availability of the cell phone technology in the rural areas has made it easier for farmers to purchase them to use to obtain prices for their commodities. There are now two cell phone providers in the country, Celtel Malawi and Telecom Networks.

98. The other intervention is the liberalisation of radio licences by the Government that has enabled an increase in the number of community radio stations as can be seen in the Annex of this document. The large number of community radios will enable a farmer to gain access to the latest agricultural information through the radio.
99. The other intervention in Malawi is the proliferation of Internet service providers. This has led to a gradual growth in the number of Internet users. A lot more organizations can now access information from the Internet than before the liberalisation.

4. NEEDS ANALYSIS

4.1 Information Needs

Table 3 – Frequently Mentioned Current Information Needs

Type of Information for current programmes	Who needs it
Crop Production and Protection	NASFAM, DARS, MOAFS
Market Information	NASFAM, MOAFS, RA, MBC, BNL, NPL
Soil fertility	DARTS, MADD, ARET
Research methods	FRIM, DARS, LARS, MACRA
Waste utilization	BPP/BNL, LARS, MOAFS
Gender mainstreaming in agriculture	MCFW, MOAFS, NPL, RA
Project management	NLS, LARS, MOAFS
Market data	BPP, NASFAM, DARS, MOAFS
Forestry research information	FRIM, MCFW
Entomology	FRIM, DARS
Theory of forestry	FRIM, MCFW
Library management	NLS, NRC, DARS, RA, ARET
ICT management,	NLS, NRC, MCFW, DARS, MZUNI, MCF, TVM, NPL, RA, MADD, MACRA, ARET
Grey literature, reports, studies conducted by CTA, FAO, NGOs	FRIM, DARS, MZUNI, ARET
Non-farm livelihoods	MCFW, MOAFS

4.2 Capacity Building Needs

100. Malawi is facing serious problems in ICT and ICM capacity building due to the fact that there is no national ICT policy in place. Almost all institutions interviewed in this survey lamented the lack of this policy framework. The ICT policy would have set the regulatory rules for ICT development in Malawi. This lack of ICT policy has led to uncoordinated development of ICT capacity in the country. Each Institution is using its own ICT strategic plan that is unique to its own needs and does not match with any other in the country.
101. It was evident that most of the government institutions have very serious capacity problems (MOA, MCF, MCFW, NRC, and MZADD). The capacity problems in these institutions relate to shortage of equipment, manpower, lack and inadequate training and poor funding.
102. Most of the capacity problems originate from the lack of budgets and insufficient funding. During the interviews it was found that the Ministry of Agriculture and Food Security which is the main ministry that deals with agricultural issues is facing funding problems for its activities. This then trickles down to departments and ADDs such as MADD, DARTS and LARS which depend on the support from ministry headquarters.
103. Inadequacy of funds was also noted in the Ministry of Natural Resources and Environment where the forestry and fisheries departments are located.

Interviews with staff at the Forest Research Institute, Malawi College of Forestry and Wild Life and the College of Fisheries pointed out budgetary constraint as affecting their capacity to implement activities.

104. Even among the parastatal organisations and private agricultural companies such as NASFAM, ARET, Radio Maria (RM) and TVM the situation of poor funding was expressed as a major constraint for the implementation of their activities. With poor funding many other activities can not be run by the institutions because the budget is the important factor in the capacity building initiative.
105. One of the greatest needs expressed by the many institutions visited was the lack of special units for data processing. In most of the organizations data is processed by staff who are not specialists in that field. Each officer takes care of their own data collection and processing needs leading to data fragmentation.
106. In institutions where they have a LAN they depend on other service providers to take care of their trouble shooting system problems. As a result of this most of the networks are frequently down especially in institutions experiencing funding shortfalls. During the interviews, NPL, MCF, NASFAM and DARTS which are key institutions that are using ICT in their operations cited poor technical back-up service as a major constraint in their operations. It is always important to have technical back-up services that are readily available so that the systems are kept up-to-date and running.
107. DARS in the Ministry of Agriculture has a LAN that was set up as a project; however they do not have staff with specialist skills in database collection and management. During our visit, it was learnt that 1 member of staff was studying for masters and PhD in the United States. There was no indication that that individual would serve DARS on his return due to a lack of established posts in the system for data analysis experts.
108. The Ministry of Agriculture Headquarters and the Department of Agriculture Research Services are the only ones with a separate section for processing data with information and communications specialists. The Department of Agricultural Research Services has a website that is available online. Due to lack of capacity the website is rarely updated. The information that is there is no longer reliable since most of the information is out-of-date.
109. Almost all libraries visited in the Government-funded research institutions had staff with very poor qualifications in library and information studies. The only exception was at the main agricultural research station library under DARS which has a member of staff with diploma in library and information studies. This big research library could have been better staffed with an individual educated to Masters Degree or PhD in Library and Information Studies for effectiveness. In short, the DARS library system has no professional in library and information studies. The other libraries under the system namely, Lunyangwa, Bvumbwe, Makoka and Mbawa are being operated by staff that have basic O level grades and below. This has led to a lowering of standards of the entire agricultural research library system because they lack the capacity to deliver scientific and technical information professionally.
110. The entire agricultural research library system in the Government has very few computers that are used for information searching. The DARS library at Chitedze has 3 computers that are used for information processing using

packages such as Microsoft Word. Previously these computers were reserved for database creation and searching but the databases that were created by the trained librarians under the World Bank programme have since ceased to function. None of the librarians found in the library on the day of the interviews could explain about the databases. They all did not know about database creation and management.

111. There is a capacity problem in the area of information management in the Ministry of Agriculture. There is only one person with a Diploma in Library and Information Studies obtained from the University of Botswana in the 90s. To make it worse, during the interviews the Department of Agriculture had sent the same of staff for a degree program at Mzuzu University. The other agricultural institutions visited have unqualified staff who are mandated to provide information to technical and professional staff. It is obvious that this kind of situation leads to very poor information delivery.
112. None of the libraries visited in the ministries, departments and research institutions had access to scientific journals online. They do not have the capacity to do so due to the limited capacity of the Internet connections. It was also evident that there was a serious funding problem for the library service. The Library was not able to subscribe to electronic journals. Most of the staff in the libraries had basic library qualification and lacked capacity to deal with complicated information queries. To a large extent this was evident at the Chitedze library where lack of qualified manpower and appropriate equipment was cited as a major constraint.
113. In some of the institutions especially those headed by women (MCFW, MZADD) gender issues were highlighted as a problem. The officers interviewed isolated the need for gender programmes, which in their opinion would help to improve the implementation of programmes

Table 4. Frequently mentioned training needs

Training needed	Which Organization	Target Group
Computer Networking	MZADD LARS, MZUNI, MNLS,NPL MADD	ICT department staff, Librarians
ICT /ICM Management	DARS, RA, TV, MAD, ARET, NPL, MACRA, MZUNI, MNLS, NASFAM	ICT staff, radio
Web Page creation	MNLS, MZUNI, NRC, LARS	
Gender Mainstreaming	MZADD, MCFW, MNLS, NPL	Women Programme Officers
Human Resource Management	LARS,MOAFS,NASFAM	Human Resource management staff
Internet Searching skill	MCFW, MCF,MNLS,MZUNI,DARS	MNLS, MCFW,
Experimental Design	DARS, LARS	Professional Officers, Researchers
Policy Analysis	NASFAM,MOAFS	Technical staff, field staff, programme managers
Data analysis	MCFW, DARS, MNLS,ARET,MOAFS	Monitoring and Evaluation staff, Researchers
Proposal Writing	LARS, MCFW, NPL,NRC	Researchers, libraries, Professional staff, lecturers

Training needed	Which Organization	Target Group
Agricultural Information Management	NRS,MADD,NPL, BNL,TVM ARET, MNLS, NASFAM,RA,MBC,NRC	Library staff, radio programme producer, Television programme producers, Field staff, Monitoring and evaluation Officers
Operation of Communication equipment	MZADD, MACRA, TVM, MBC	Audiovisual staff, TV programme producers, radio programme producers
Library Management	MZADD, MNLS, MCF, DARS	Library staff
Gender roles and responsibilities, Social Construction of Gender	MZADD, RA, MOAFS, MNLS	Women programmes officers

Source: Survey data, 2007

Table 5. Frequently mentioned Resource Needs

Resource Needs	Which organisation
Modern computers , printers and scanners	MNLS, DARS, MOAFS, FRIM, NRC, MZUNI
Local area network	MNLS, FRIM, MZUNI,MADD
Audiovisual equipment	DARS, MNLS, RA, MOAFS
Digitising machine	MNLS, DARS, LARS, MADD
Publishing software	NPL, BNL, MNLS, NRC
Video editing equipment	MZADD, TVM, MBC, RA
CD-ROMs in agriculture	MOAFS, MNLS, DARS, LARS

Source: Survey data, 2007

5. CONCLUSIONS AND RECOMMENDATIONS

5.1 Conclusions

114. This study has shown some gaps in the agricultural and information sector of Malawi. It is evident that a lot of work needs to be done in order to improve efficiency and effectiveness in the management of agricultural information. Most of the respondents did not seem to understand their own information needs that this study was targeting. It was after guiding the various officers interviewed that they were able to present their needs. In most of the institutions they were misconceptions that CTA was about library information needs other than the general information needs of the whole institution.
115. This general picture of the agricultural information needs in Malawi has been established through the desk study and interviews that were conducted. So far the situation is far from being perfect although there is some general knowledge of the ICTs and ICMs. In the absence of an ICT policy it is difficult for the country to coordinate its ICT activities. Although the MACRA was set up to regulate the telecommunications, broadcasting and media activities in the country they needed a regulatory framework that should have been clear to all stakeholders in the agricultural sector.

5.1.1 Information Needs

116. It is evident that the type of information needed by the majority of our respondent institutions varies from one institution to other. In the agricultural research institutions (DARS, ARET, FRIM) there is a high demand for scientific and technical information related to their areas of research. There was a general demand for both print and electronic journals that could provide full text information. It was evident that all forms of information from books, journals, CD-ROMS, annual reports and grey literature was required by the researchers and staff of the various agricultural institutions visited. The advent of ICTs, especially the Internet although not widespread has led to the demand for agricultural information in electronic format. The electronic information was mainly required in full text format.
117. This electronic information was needed because most of them could access information in abstract format using other sources such as CD-ROMs but could hardly access the full text document. It was evident that electronic journals in various subject areas were difficult to acquire due to the low ICT and ICM capacity of most of the Institutions. This was evident when it was discovered that most of the institutions are poorly funded and could not afford online subscriptions to scientific and technical journals. Some institutions needed books on various subjects to be bought.
118. The libraries lacked latest editions of books on various subjects. Funding for the purchase of books was the main constraint in the majority of institutions interviewed. It is apparent that funding for the acquisition of information is taken as a luxury and is considered last. It is amazing that no budgets are devoted to the acquisition of information even in research Institutions. It is very obvious that decision-makers need to be sensitized on the importance of setting aside a budget for the acquisition of information for their institutions.

5.1.2 Capacity-building Needs

119. It was evident that the majority of the agricultural institutions in Malawi have huge capacity problems due to insufficient training and high labour turnover to the private sector and lack of incentives in government institutions. There is a need for training of personnel in data processing and management so that institutions could set up sections/departments for the collection and processing of data.
120. Almost all institutions indicated training as a major constraint. It was also evident that the kind of training needed in most of these institutions is in the form of short courses, seminars and conferences. This would be programmes aimed at the development of specialised skills such database creation, computer maintenance and servicing, gender mainstreaming, information management, web page creation and Internet searching skills, etc. The capacity problems were also observed in the numbers of personnel recruited to perform some important tasks. It was noted that big institutions with staff complements of over 50 persons have only one member of staff recruited to take care of their information needs.
121. In the area of library it was observed that government had only one member of staff who at the time of the interviews was about to leave for a degree in library and information studies. The rest of the agricultural research stations (LARS, DARS, MADD) were relying on staff who have a basic certificate in Library Studies. These calibre of staff are mainly junior staff who cannot manage to articulate policy issues and are not usually included in the decision making committees of the institutions. As a result they are left out of crucial decision-making committees that decide on the budget allocation.

5.1.3 Potential Partners and Beneficiaries

122. There are many institutions that have heard or seen products from CTA but have not benefited much from the linkages that have so far been established. Three quarters of the Institutions have seen Spore magazine but have not heard about DORA or the Question and Answer Service that is operated by University of Malawi's Bunda College of Agriculture. The various technical reports that CTA produces ends up in the research libraries but do not get to the media houses. All newspaper publishers, radio stations and 1 television station have never received any of the CTA products and services.
123. The two major publishers of daily papers in Malawi are Blantyre Newspapers Limited and Nation Publications Limited have no knowledge of CTA yet they carry regular agricultural columns in their papers. The only television station in Malawi is totally ignorant of CTA activities. The Malawi National Library Service which is mandated by the Act of Parliament to set up libraries in urban and rural libraries in Malawi does not participate in CTA activities and programmes. Most of the institutions in Malawi pass on information materials to the National Library Service to disseminate through its network of libraries in all the three regions of Malawi but CTA has not yet taken advantage of this set-up
124. It is therefore obvious that while CTA is maintaining its partners such as University of Malawi Bunda College of Agriculture, and Ministry of Agriculture and Food Security through the Department of Agricultural Research Services (DARS) it is important to cast the net wider to take on board other new potential partners such as media house.

5.2 Recommendations

125. In view of the above issues and findings, the study makes recommendations with specific action areas as follows. The Information and Communication Management Skills Section should promote awareness on potential of ICT and ICM in the dissemination of agricultural information. CTA should also extend its services to the media in Malawi such as radio stations and television (MBC, RA, and TVM) and print media such as newspaper publishers (BNL, NPL). These institutions would help in publicising the activities of CTA to the farmers and other agricultural institutions that would further use the information that is supplied.
126. It is therefore being recommended that Television Malawi should be a partner of CTA. This should also be extended to the Malawi Broadcasting Corporation (MBC) which is our National Broadcasting House. These institutions are able to transmit messages in various local languages that are well understood by many in Malawi.
127. CTA should also help institutions in Malawi to update their ICT and ICM skills through various training courses ranging from software to hardware training. This would help institutions to upgrade their information management capacity in Malawi. The area of ICM is not well understood by many individuals and institutions based on the responses that were provided during the interviews. Institutions such as the University of Malawi, Bunda College of Agriculture, which is already a local focal point for the Question and Answer Services, should be used to engage in ICT and ICM training programmes.
128. CTA should improve access and utilization of its information products and services by working with new partner institutions identified in Annex 3.2. CTA should market its services and products to many institutions in Malawi through the local media houses. Some of its services could be advertised through the key daily papers (Nation and Daily Times) or the radio stations that have wider coverage. This would lead to its services being accessed and known by many private companies and farmers.
129. The study showed that the private companies such as NASFAM, RA, are not benefitting from the services of CTA. The CTA products are not reaching out to these institutions although they play a vital role in influencing the majority of our farmers in the rural areas.
130. CTA should also try to work with National Library Service that has a wider network of libraries in the rural areas of the country. The National Library Service should be given resources to translate some of the CTA products in local languages in order to make an impact among the rural smallholder populations. Publications such as the Spore magazine and the technical bulletins could be better appreciated by the rural communities in local languages.
131. CTA should take advantage of the structure of the Ministry of Agriculture and Food Security in Malawi to engage with the different departments that are engaged in technology transfer and information dissemination to the farmers. One such department is the Department of Agriculture and Extension Services that is mandated by Government to spread information about new technologies to the farmers.

132. CTA should promote self reliance and sustainability of agricultural institutions. It should provide access to a wide range of training courses that should be targeted to various agricultural institutions. These courses should be in form of short courses, seminars and workshops. Training in database management, networking, simple hardware and software trouble shooting solutions, project management, and proposal writing and information dissemination in agriculture.
133. CTA should develop programs in information literacy and life long learning in agriculture. These should be developed jointly with information specialist (librarians) and subject matter specialist (agriculture extension workers). The team will then come up with simplified messages or information packs that can be disseminated to the farmer in a user friendly form.
134. It is further recommended that CTA utilise the well-established chain of libraries that are under the National Library Service in Malawi. Using this network of libraries the information can reach out to the rural communities and small farmer groups. The National Library Service can take advantage of its network to intensify its Information dissemination activities to the farmers. The National Library Service can also strengthen its linkages with the Department of Agriculture Extension Service to work together in the dissemination of agriculture. The National Library Service can also set up small libraries at the EPAs in the different parts of the country.
135. CTA should use a project approach where grants should be made available to agricultural institutions for development of projects that will be targeting the farmers in Malawi. These projects should be offered through project proposals that should be submitted to CTA and reviewed by agricultural experts. The possible areas for funding should be determined by CTA and a sample of its stakeholders in Malawi. It has been noted that the QAS has already been localised but publicity has not been done thoroughly. There is a need to publicise the QAS within Malawi so that agricultural institutions can take advantage of it to resolve some of their agricultural information questions/ problems.
136. The NASFAM and IDEEA project are well placed to help articulate some of the agricultural information issues in Malawi through their different activities. The NASFAM approach to market information and the IDEEA market information system could be used as role models in improving the farmer's environment in Malawi. CTA could explore ways of channelling its information products through these institutions to the farmers and researchers. NASFAM is well funded hence its ICT capacity is up-to-date and the staff are well motivated and can help in the implementation of some of the programmes that are organised by CTA.
137. It is therefore recommended that CTA explore ways of linking up with NASFAM in Malawi which is a well established company. NASFAM is involved in the development of databases that hold information about farmers' activities in Malawi. It is also developing a GIS system that is mapping all agricultural organisations in Malawi in relation to their locality and the nature of their enterprise. This approach will give the true reflection of the agriculture scenario to the farmers' door step in Malawi. It will be wise for CTA to team up with such institutions to assist in resolving some of the agricultural needs of farmers in Malawi.

6. PROPOSED CTA INTERVENTION STRATEGY AND ACTION PLAN 2008-2013

138. The proposed intervention strategy should involve the local institutions that are already working in Malawi. CTA should use the information provided in this study to link up with as many institutions as possible. Some of the institutions listed in the Annex 2 have all their contacts available and could easily be used to assist in the dissemination of vital information.
139. Therefore CTA's first step in its strategy is to study the information provided and identify key partner institutions that it may consider vital in its programmes and activities.
140. Step 2 is to set up linkages with the identified institutions and agree on how they can work together in various programmes. This approach brings in local expertise while injecting new ideas from other corners of the globe. It helps to use the local experts from the country as collaborators to infuse new ideas.
141. Step 3 is to link up with key institutions in Malawi such the University of Malawi, Bunda College of Agriculture, Mzuzu University, Television Malawi, Malawi Broadcasting Corporation and the National Library Service. Heads of these institutions could be invited to the first meeting to work out a plan of action on how they can work together in meeting the information and capacity needs identified in the study.

Table 6. Proposed CTA Intervention Plan 2008-2013 (Next Five Years)

Type of Information needed	Type of Intervention by CTA
Lack of Technical Information on various agricultural aspects	CTA to study the list of institutions provided in Annex 2 of the study. CTA to identify Institutions that it works with. CTA to work with the local focal point to verify the information need of the Institutions CTA to start sending the various information products such as Spore magazine. CTA to start working with the local media houses to market its products and services
Lack of ICT and ICM skills	CTA to introduce ICT training courses in collaboration with the University of Malawi, Bunda College of Agricultural Library. Alternatively CTA can work with the Faculty of Library and Communication Studies at Mzuzu University to run short courses on ICT and ICM.
Lack of Data Processing Skills	Introduce training programmes jointly with local training institutions (Bunda College of Agriculture, Mzuzu University, and Natural Resources College).
Lack of Equipment	Introduce funding mechanism for the acquisition of computer hardware and software.
Lack of Trained Personnel in ICT and ICM	Introduce training programmes jointly with local training Institutions.
Lack of Funding	CTA to introduce training programmes on proposal writing skills. This could help to produce proposals that can attract funding from various International donors

ANNEXES

Annex 1	Terms of reference
Annex 2	Country Profile
Annex 3	Profile of Institutions
Annex 4	List of Institutions/Persons Interviewed
Annex 5	Bibliography

ANNEX 1. TERMS OF REFERENCE

<p style="text-align: center;">ASSESSMENT OF AGRICULTURAL INFORMATION NEEDS IN ACP AFRICAN STATES Phase 2: Southern Africa & Ghana</p>

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 are key as well as the thrust to make ICTs and ICM strategies more widely available.

3. Justification and main issues to be addressed

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 organizations capable of accessing and combining modern and conventional it's, 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, decentralization, rationalization, thematic orientation and transparent and objective criteria and procedures for partner selection.

4. Overall Objective

Collaboration strategies with ACP agricultural organizations and relevance of Cat'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. Methodology

The consultant will use a combination of qualitative and quantitative rapid appraisal methods for the six countries including: The desk review of available literature and information sources including other donor interventions in the field of agricultural information and capacity (human and physical) development. The conduct of face-to-face interviews with relevant stakeholders/concerned parties and if possible, group discussions. The limited use of questionnaires.

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

7. Expected Results/Output

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).

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, sensitization, 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

Malawi

Assessment of Agricultural Information Needs

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
- 2.1.8 Trade agreements that include agriculture
- 2.1.9 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 Télécommunications 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

6. Reporting

The country reports will not exceed 30 pages (excluding annexes). The annexes should include the various sections mentioned above.

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

Ms Christine Webster, Deputy Head, Planning and Corporate Services CTA will carry out the overall coordination of the exercise.

11. Implementation Schedule (CTA)

- Preparation/Finalisation of TOR; Identification/ short-listing of (potential) consultants; Call for offers: July – October 2006;
- Selection of consultants & contractual arrangements: October – November 2006
- Briefing: December 2006 / January 2007
- Start date of contract: 1 December 2006

- Implementation period 1 December 2006 – 31 August 2007
- End date of project: 31 October 2007

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
-

ANNEX 2. COUNTRY PROFILE – MALAWI

2.1 General agricultural profile

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

According to the 1998 Population and Housing Census, the population of Malawi is about 10 million, with a growth rate of about 1.9 per cent as opposed to the 1988 growth rate of 3.2 percent. About 51 percent of the population is female while 49 per cent are males. The population is predominantly rural, with about 86 percent in the rural areas and only 11 percent in urban areas. The majority of the Malawians in all the three regions derive their livelihood from agriculture. Of the 6.8% aged 10 years and over, 4.5 million (66%) are economically active. The majority of the economically active population (78%) are subsistence farmers and the rest are (13%) are employees. About 83% of the economically active population persons are engaged in agriculture, animal husbandry or in the forestry sector and only about 0.2% are in administration and managerial sectors. Since the economy largely depends on agriculture, most of the economically active population finds themselves out of employment half the year (off-farming season). This accounts for the low incomes of a large segment of the population who are so engaged.

Table 7. Persons Aged 10 and over by Economic Activity Urban and Rural at National Level

Economic Activity	MALAWI		
	Total	Urban	Rural
Persons 10 years and over	6,833,108	1,036,464	5,796,644
Economically Active	4,501,290	481,802	4,027,488
Total Working	4,458,929	456,084	4,002,845
Mlimi Subsistence Farmer	3,505,453	68,722	3,436,731
Employee	576,947	255,049	321,898
Family Business Worker	110,277	35,923	74,354
Self-Employed	257,396	94,295	163,101
Employer	8,856	2,095	6,761
Technical	124,424	56,012	68,412
Administrative and Managerial	7,272	5,983	1,289
Clerical and Related	57,785	42,526	15,259
Sales	236,790	111,855	124,935
Service	126,093	76,022	50,071
Agriculture, Animal, Forestry	3,720,261	82,546	3,637,715
Production and Related	183,482	76,687	106,795
Transport Equipment	3,872	2,316	1,556
Operators and Labourers	49,311	27,855	21,458

Source: Malawi: National Human Development Report, 2001

2.1.2 Farmed Land, Forests, Fishing Areas

The predominant crop found in farmed land is maize for smallholder sub sector, the combined hectare for rice, tobacco and groundnuts accounts for less than 25% of maize hectare. In 1995-1999 most farmers grew local variety of maize (an average of 68% of total Maize hectare) compared to (32%) of hybrid varieties.

Table 8. Smallholder Hectarage: by Crop Type 1995/96-1998/999

Thousand hectares ('000)				
Thousand hectares ('000)				
Crop Type	1995/96	1996/97	1997/98	1998/99
Maize	1,243	1,234	1,293	1,322
Local	856	915	913	767
Hybrid	370	299	355	510
Composite	17	20	25	45
Rice	77	42	42	46
Local	41	12	13	12
Faya & Blue Bonnet	33	28	26	28
	3	2	3	66
Tobacco	79	99	114	116
Dark fire	25	29	20	19
Burley	46	67	90	90
Other	8	3	4	7
Groundnuts	72	100	135	170
Chalimbana	63	89	123	148
Mawanga	1.3	1.6	1.8	2.6
CG7	*	*	*	8.9
Malimba	6.7	8.9	10.6	10.7

Source: Government of Malawi: National Statistical Office, Malawi in Figures, 2000

Table 9. Smallholder Crop Production: by Crop Type

1995/96-1998/99		Thousand tonnes		
	1995/96	1996/97	1997/98	1998/99
Maize	1,793	1,224	1,534	2,149
Local	864	667	747	746
Hybrid	903	536	757	1,332
Composite	26	21	30	71
Rice	69	66	57	68
Local	6	12	14	14
Faya	50	44	43	54
Blue Bonnet	13	10		
Tobacco	69	84	94	84
Dark fire	16	15	11	-
Burley	50	66	81	72
Other	3	3	2	-

Source: Government of Malawi: National Statistical Office: Zomba, 2000

2.1.3 Agricultural Systems

The country is dominated by crops and livestock for food security, cash incomes and foreign currency earnings. Therefore, the current agricultural policies are aimed at increasing crop and livestock productivity. The agricultural sector is divided into estate and smallholder sub sectors. The estate sub-sector has been the major sector for economic growth and contributes about 80% of total value of exports and offers employment to only about 11% of the total population. The smallholder sub-sector has been the major producer of food crops, maize in particular. Maize occupies about 80% of cultivated land in the smallholder sub-sector. Agricultural growth in the estate sector has been faster than that of smallholder sector due to the increase in the number of leasehold farms and a shift in labour resources from smallholder to estate sub-sector. Growth in the smallholder sub-sector has been slow because of previously poor government pricing, marketing and crop production policies; low technology adoption rates and utilization; increasing land pressure due to population growth; transfer of land from customary to the leasehold in the estate sub-sectors;

low crop yields and livestock productivity and inefficient market system. However, the current growth rates are reasonable because the smallholder and estate sub-sectors growth rate are at 11% and 7.5% respectively.

The crop production sector accounts for 90% of the value of agricultural output. The agricultural exports comprise of tobacco, tea, sugar, coffee and macadamia nuts. Tobacco is the largest contributor to export earnings. Maize is produced in largest quantities (1.8-2.5 million tones annually) as the major staple food crop for the majority of the people. Other crops produced in relatively large quantities include cassava, sweet potatoes, cotton, pigeon peas, groundnuts, beans, rice, sorghum, pearl millet, paprika, chillies, mango, tomato and cabbage.

Livestock accounts for about 7% of GDP in Malawi and 12% of total Agricultural output. In 1997, per capita consumption of animal protein was estimated at 2.3kg per annum, considerably less than the 12.5 kg average in Africa. Milk production was estimated at 34,000 tonnes, about 40% of the total milk and milk products consumed. Beef production was estimated at 20,000 tonnes, meeting 50% of the total consumption. Pork production was estimated at 11,000 tonnes, goat meat, mutton and lamb at 5,000 tonnes and eggs at 9,610 tonnes leaving a gap of 17.5%. Current various livestock populations are estimated at 600,000 beef cattle, 4,000 dairy cattle, 1,650,000 goats, 300,000 pigs, and 100,000 sheep and 10,365,700 chickens based on the 1998 livestock census

2.1.4 Agriculture in the Economy (Percentage GDP)

Between 2002-2006, the agricultural sector contributed the largest share to GDP increasing every year. (See table 10 below.)

Table 10. Gross Domestic Product by Economic Activity.

	Million kwacha (K'mn)				
	2002	2003	2004	2005	2006
Agriculture	5,026.0	5,313.0	5,469.2	4,976.2	5,547.0
Mining and Quarrying	123.7	146.7	216.5	329.4	366.1
Manufacture	1,453.5	1,500.0	1,603.0	1,725.1	1,826.5
Utilities	185.9	190.2	204.4	228.3.1	247.1
Construction	311.2	352.6	389.3	438.6	465.0
Distribution	2,826.0	2,804.7	2,991.1	3,377.2	3,645.3
Transport and communication	640.9	694.4	744.8	817.0	868.4
Professional services	1,088.9	1,155.4	1,263.3	1,355.5	1,486.0
Ownership and Dwelling	195.0	200.4	205.9	216.8	227.8
Private social and community services	287.1	295.4	303.7	320.7	339.7
Government Services	1,182.9	1,202.9	1,230.7	1,250.2	1,291.8
Unallocable finance	-438.0	-480.2	-556.6	-655.4	-706.0
GDP at 1994 factor cost	12,882.9	13,375.5	14,065.6	14,379.6	15,604.7
Plus net indirect taxes	13,576.8	18,784.2	25,706.2	31,813.2	36,000.6
Adjust. To current prices	121,896.4	139,748.1	167,437.2	199,813.2	266,711.8
GDP at market Prices (K'bn)	148,356.0	171,917.8	207,209.0	246,006.1	302,833.9
GDP per capita (current mkt)	13,246.1	14,949.4	17,412.5	20,000.5	23,656.3

Source: Ministry of Economic Planning and Development, National Statistical Office, Reserve Bank of Malawi and Treasury.

2.1.6 Main Agricultural Produce and Secondary Products

The main agricultural produce for Malawi is tobacco, tea, and sugar, which are grown in the estates. About 60% of estate land area is grown to tobacco, 20% tea and 18% sugar. With access to inputs, credit, agricultural services and markets as well as use of high technology, productivity on the estates is higher than among smallholders. Smallholder agricultural accounts for 80% of Malawi's food production and 65% of

agricultural GDP. Other crops that are grown are cassava, sorghum, rice, pulses, cotton, potatoes, coffee, sunflower, chilli, paprika, pigeon peas and macadamia nuts.

2.1.6 Main Export Markets

The table below shows the main export markets of Malawi.

Table 11. The Main Export Markets (%)

Country	Percentage Share
United States	17.9%
South Africa	11.2%
Egypt	7.6%
Germany	7%
Netherlands	6.9%
Japan	4.8%
Russia	4.6%
Mozambique	4.3%
United Kingdom	4.2%

Source: <http://www.cia.gov/cia/publications/factbook/geos/mi.html>-
The World Fact Book

Table 12. Malawi Agricultural Exports 2004

EXPORTS: Malawi

	Commodity	Quantity	Value (000 US\$)	Unit value (US\$)
1	Tobacco Leaves	Mt 93220 P	257778	2765
2	Sugar (Centrifugal, Raw)	Mt 96943 P	42208	435
3	Tea	Mt 32672 P	39360	1205
4	Cotton Lint	Mt 11098 P	12941	1166
5	Nuts nes	Mt 2198 P	10179	4631
6	Groundnuts Shelled	Mt 8329 P	4109	493
7	Coffee, Green	Mt 2820 P	3488	1237
8	Peas, Dry	Mt 12636 P	3430	271
9	Sugar Refined	Mt 8467 P	2799	331
10	Flour/M meal of Oilseeds	Mt 7227 P	2595	359
11	Rubber Natural Dry	Mt 1670 P	2152	1289
12	Maize	Mt 12583 P	1801	143
13	Cottonseed	Mt 12863 P	1724	134
14	Pimento, Allspice	Mt 593 P	1424	2401
15	Lentils	Mt 1806 P	944	523
16	Pulses	Mt 1970 P	832	422
17	Beans, Dry	Mt 1173 P	407	347
18	Prepared Nuts(Excl.Groundnuts)	Mt 27 P	245	9074
19	Hides Wet-Salted Cattle	Mt 240 P	230	958
20	Coffee Subst Cont Coffee	Mt 125 F	229	1832

F = FAO Estimate | M = Data not available | T = Trend calculation | * = Unofficial figure | Mt = Metric Ton | P=trading partner estimations

Source: <http://www.fao.org/es/ess/toptrade/trade.asp?lang=EN&dir=exp&country=130> (Key statistics of Food and Agriculture : External Trade)

2.1.7 Trade Agreements that include Agriculture

Malawi is currently a member of Common Market for Eastern and Southern Africa (COMESA) and Southern Africa Development Community (SADC), has preferential market access to European Union (EU) and United States, and has bilateral agreements with the Republic of South Africa and Zimbabwe. While the evolving trade agreements present Malawi with opportunities of expanded market access, they contain a number of risks, such as tax losses from the removal of tariffs and increased complexity of customs procedures due to multiple trade arrangements each with its own rules of origin.

The trade agreement between Zimbabwe and Malawi designates their Ministries of Industry and International Trade and Industry, Trade and Private Sector Development respectively as their organs for the purpose of implementing the Agreement. Annex II of the agreement states that the following categories of goods shall be considered as wholly grown or produced in the territory of a contracting party:

- mineral products extracted from its soil;
- agricultural produce harvested or gathered therein;
- live animals born and raised therein;
- products obtained therein from live animals;
- forests products harvested therein;
- fish and other fish products gathered therein or its marine economic zone;
- scrap and waste resulting from manufacturing operations within the contracting parties; and
- Products obtained therein exclusively from products specified in (a) and (g) above.

The Trade Agreement between the Republic of Malawi and the Government of the Republic of Mozambique also covers the same categories of goods as above.

The trade agreement between the Malawi Government and Republic of South Africa states as follows: “subject to the provisions of this agreement, the Government of the Republic of South Africa shall allow all goods grown, produced or manufactured in Malawi to be imported into South Africa free of customs duty.”

In any calendar year import permits shall be issued for quantities of not less than:

- 300,000 kilograms of unmanufactured tobacco;
- 750 metric tons of groundnuts, shelled or in the shell; and
- 100 metric tons of processed groundnuts.

The Government of the Republic of South Africa shall allow rough and uncut diamonds produced in South Africa to be exported to Malawi free of export duty subject to a certificate being issued by the appropriate official of the Government of the Republic of Malawi to the effect that such diamonds are to be imported for industrial use in Malawi.

Table 13. The Table below Summarises Some Bilateral, Regional, and Multilateral Agreements of Malawi.

Agreement	Type (by number of members)	Reciprocity	Degree of Liberalization	Phase-out scheduled
Malawi-South Africa	Bilateral	Non reciprocal (Malawi has duty free access, S.A. enjoys MFN treatment Reciprocal	FTA	In force since 1990, until 2008 (When SADC tariff=0)
Malawi-Zimbabwe	Bilateral		FTA	Since 1968
COMESA	Regional	Reciprocal	FTA to CU	FTA (start: 2000 CU (start: 2004)
SADC	Regional	Reciprocal	FTA	Phase 1:2000-2008 Phase 2:2008
WTO	Multilateral	Non-reciprocal	ITA	Malawi's membership of WTO since 1995
EU-ACP Cotonou Agreement	Multilateral	Non-reciprocal (possibly shifting to reciprocal	PTA to FTA	Signed 2000, prepared for negotiations until 2002, negotiate until 2008, implement by 2018
AGOA	Multilateral	Non-reciprocal	PTA	
EBA	Multilateral	Non-reciprocal	PTA	Proposed 1997 extended 2000, effective from 2001, or 2008 for rice, sugar, and bananas.

Source: Report No. 25293-MAI Malawi Country Economic Memorandum: Policies for Accelerating Growth, June 2004.

2.1.9 Sectoral Policy related to Agriculture, Fisheries and Forests

The new policy document that will guide Malawi development agenda in the next 5 years (2007-2012) is the Malawi Growth and Development Strategy (MGDS). The MDGS provides a policy framework that balances the productive and social sectors of the economy. The MDGS is linked to vision 2020 and the Millennium Development Goals that are long-term development aspirations of the Malawians. The new strategy took note of the weaknesses found in Malawi Poverty Reduction Strategy (MPRS) and the Malawi Economic Growth Strategy (MEGS) and the weaknesses have been strengthened into activities that will be implemented from the MGDS.

Agriculture

Agriculture is the most important sector of the Malawi economy, contributing about 37% to GDP, employing about 80% of the workforce, and contributing to over 90% of foreign exchange. Agriculture is subdivided into smallholder and large scale/estate sub-sectors. The goal for the agricultural sector in the MDGS is to increase the contribution to economic growth from agriculture, increase the profitability of farming, increase of farm incomes and employment in the rural areas evidenced by changes in the sources of household incomes.

There are three medium-term expected outcomes that have been cited and these are as follows:

- (a) To increase the value added to agricultural products by rural farmers and orient smallholder sub sector to greater commercialization and international competitiveness.

(b) Increase smallholder agricultural productivity, increase yields and decrease fluctuations in productivity, including stable food production for smallholders with the most potential, and

(c) Increase livestock production and decrease livestock imports to meet domestic demand.

Key strategies for the Agricultural sector to achieve the medium term outcomes include the following:

- Strengthen linkages of farmers to markets by connecting rural communities, targeting rural roads and developing farmers' organizations and market knowledge. This includes a balance between a focus on domestic markets and export-oriented markets.
- Encourage the expansion and intensification of food staple production by smallholders with most potential through a range of policies. Operation strategies for achieving this increased agricultural productivity include increased land under irrigation and use of water cropping-water harvesting.
- Provide effective extension services, with more decentralized service delivery, for agribusiness skills, increase use of pest resistant varieties and pest management,
- Promote soil and water conservation and farming techniques
- Ensure existing land rights, especially customary rights of smallholders are recognized, clarified and secured by appropriate legislation, devolve land administration, and create land tribunals.

In the MGDS document, fisheries and forestry sectors are considered under the natural resources section. The strategy recognises that sustainable use of natural resources contributes to many of the goals in the MGDS. Thus the goal is to improve the management of fish species, forest and wildlife biodiversity and reduce environmental degradation and conserve the natural resource base, while contributing to economic growth. In the document, weak management of natural resources has been isolated as a considerable problem as it is worsened by the increased population growth. This environmental degradation in Malawi is driven by poverty, which reduces the ability of the poor to survive, thus creating more pressure on the environment, and encroachment of agricultural and settlement activities on forestry and marginal lands, which leads to further resource degradation and depletion.

The overall policy for agricultural productivity is to enhance the social welfare and incomes of farmers and the prosperity and stability of the nation as a whole by improving self-sufficiency in food, expanding and diversifying export receipts from agricultural produce. In nutrition, a further objective is to ensure that families have access to food throughout the year by improving food production, availability, accessibility and utilization. Science and technology should be used for advancing these causes by, in the main, improving overall productivity in the agriculture, food and nutrition sector.

Fisheries

The long-term goal is to maintain fish species and bio-diversity. The medium-term expected outcomes are to ensure sustainable fish availability for food and nutrition security as well as income generation (small-scale and large fisheries). Fish from Lake Malawi is a major source of population's protein requirement, and the industry provides direct and indirect employment. However, this sub-sector is characterized

by low productivity, declining in fishery levels due to over exploitation, poor pre- and post-harvest handling by communities and poor enforcement of legislation and preservation of fish stocks.

Key strategies in MGDS policy document are as follows:

Increasing and sustaining the productivity of small and large scale fisheries for both domestic and export markets. The following actions will be pursued in order to achieve the above strategies:

- Enforcing legislation to ensure sustainable production of fish.
- Promoting the use of modern techniques of fishing
- Capacity building through community training and
- Development of small-scale fish farming and deep-water fishing.

The National Fisheries Policy aims at monitoring and controlling fishing activities with a view to increasing productivity within sustainable yields. The policy also aims at enhancing the quality of the fishing communities and promoting aquaculture as a source of income and as a supplement to fish supplies from the natural waters.

Forestry

The long-term goal as cited in the MGDS is to reduce environmental degradation. The medium expected outcomes for the forestry is to ensure sustainable use and management of forestry resources. Currently there is a high rate of deforestation and uncoordinated management of forestry resources resulting in a lack of policy

The goal of the Natural Forest Policy of Malawi is to sustain the contribution of national forest resources to the improvement of the quality of life in the country by conserving the resources for the benefit of the nation. The Forestry Research Institute of Malawi is the Focal point of Research and Development activities in the forestry sub-sector. The mission of the Institute is to provide timely information to the private and public sectors. The Institute aims at developing technologies for silviculture management and multiple land use systems of sustained wood production reduce risk of losses from timber and tree pests and diseases; and providing advice on the best use of forest products following sound ecological conservation and management principles.

2.2 Socio-economic Profile

2.2.1 Total Active Population, Demographic Breakdown

The population of Malawi according to the 1998 population and Housing Census is 9.8 million. This figure represents a 24% increase over the 1987 Census, giving an inter-censal annual increase of 2.0%. Fertility rates have declined but remain at higher levels owing to early marriages and the relatively low rate of contraceptive use. The total fertility rate (TFR) is estimated at 6.7 but has fallen to about 6.2 as a result of a modest increase in contraceptive use. According to preliminary results of the 1998 Population Census, the crude death rate has increased from 14 deaths per 1,000 people in 1987 to 22 deaths per 1000 in 1998. However, the census estimated that the crude birth rate fell from 42 births per 1000 people to 37 births per 1000 over the same period of time. All indications are that, for the same reason, infant and under -5 mortality estimated in 1992 at 134 and 234 per 1000 live births, respectively, may also have fallen to about 121. According to estimates, life expectancy at birth has significantly dropped from 51 in 1992 to the present 40 for males and from 52.4

to 44.5 for females in 1998. It is therefore evident that the normal expected course for demographic transition (from high fertility/high mortality to high fertility/low mortality) has been jeopardized by epidemic on mortality rates in Malawi. The indicators are one of declining fertility/rising mortality transition, which has significant negative implications for the country's development prospects. Malawi's growth potential has also been severely affected by the onset of the HIV/AIDS crisis. At the end of 1999, the adult prevalence rate was nearly 16 percent placing Malawi among the 16 countries with the highest HIV/AIDS incidence in the world.

The 1998 Census results revealed that population density has increased to 105 persons per square kilometre from 85 in 1987. The Southern Region is the most densely populated, with approximately 146 persons per square kilometre. The density for the Central Region is 113 while that of the Northern Region is 46. At district level, Chiradzulu is the most densely populated, with 307 persons per square kilometre, followed by Thyolo (267), Zomba (209) and Mulanje (208). The least densely populated districts are Rumphu (27), followed by Chitipa (29) and Nkhata Bay (42), which are all in the Northern Region. However, the Census also showed that the region's population growth rate was the highest of all the regions.

2.2.2 Literacy Level and Languages

According to the 1998 National Census, the percentage of the population aged 15 to 24 years that reported being literate in at least one language for individuals aged 5 years and older was 82.1% for men and 70.7 for women nationally. The main languages that were considered in this survey were English and Chichewa, which are the business and national languages respectively.

In the same survey it was found that nationally, 64.1 percent of individuals aged 15 years and older can read. The Northern Region and urban areas showed the highest literacy. The Southern Lakeshore and Lower Shire valley are areas with low literacy rates. Nationally, 20.9 percent more men than women can read. The national rate for men is 74.9 percent, while for women it is 54.0. Much larger differences are seen in lower shire and lakeshore areas of Malawi. (Malawi: An Atlas of Social Statistics 1998)

The National Adult Literacy Programme (NALP) is aimed at reducing adult illiteracy. In 1998/99, a total of 1,983 literacy classes were opened countrywide. Government efforts have focused on recruiting and training adult literacy instructors, producing teaching and learning materials and enhancing participation. Literacy radio programmes have also been introduced.

2.2.3 Access to Services (Health, Schools, Electricity)

Health

Malawi has demonstrated a commitment to providing its population with access to health care. One of the principles of the 1995 Malawi constitution is, "To provide adequate health care, commensurate with the health needs of Malawian society and international standards of health care (Section 13 (c)).

The long-term aspiration as stated in Vision 2020 was the provision of health care for all by the year 2020. However, the World Health Assembly convened by the World Health Organization (WHO) in 1978, had set the goal of "Health for all by the Year 2000". Malawi has not met the target set by the international conference. In fact, approximately 20 percent of the country's population has no access to health facilities. Information provided by the IHS indicates an increase in morbidity and mortality, and that much of the gains in terms of life expectancy expected from the

expansion of improvements in access to health care services appear to have been eroded by the impact of HIV/AIDS.

Lack of facilities and poor quality of services are the major contributory factors to the high incidence of diseases. The country has 503 health facilities, many of which are housed in old buildings that are deteriorating due to lack of maintenance, shortage of piped water and communication facilities. Based on the Integrated Household Survey data, 84 per cent of the population is served by health centres that cover a radius of 8 kilometers, each. It is also estimated that 51 per cent and 12.2 per cent of the rural and urban population, respectively, take over an hour to access a health facility. Apart from inadequate medical doctors (the population/doctor ratio is 5000:1); health service delivery is hampered by shortage of trained personnel and frequent shortages of equipment, drugs and medical supplies.

There are district hospitals in all the 27 districts of the country and central hospitals in the urban centres of Lilongwe, Blantyre and Zomba. These provide general outpatient and in-patient services and specialist treatment. In addition, Lilongwe has a specialist Dialysis Unit and Eye Hospital, Blantyre an Orthopedic Hospital and Zomba a Mental Hospital.

The Christian Hospitals Association of Malawi (CHAM), a non-governmental organisation, runs mission hospitals and clinics around the country. Private health care is available from private doctors in Lilongwe and Blantyre.

Malaria, tuberculosis, HIV/AIDS and the continued presence of malnutrition are the most pressing problems facing the authorities at present.

The Malawi Growth and Development Strategy has singled out the importance of a healthy population as being a pre-requisite for economic growth and development. There is a very close and strong correlation between health status and level of development. That is, countries with good health are highly developed, whereas on the other hand, nations with poor health are underdeveloped.

HIV/AIDS is a big challenge in attaining a healthy nation and seriously affects development efforts in all sectors. The high prevalence of HIV/AIDS has seriously affected the health services delivery systems and subsequently the health status of the country's population.

The MGDS overall goal on health is to increase life expectancy and improve health outcomes in a sustainable manner. This includes achieving targets for the Millennium Development Goals-maternal mortality, infant/child mortality, malaria and TB.

The key strategies to be pursued in the health sector to achieve the overall goals are as follows:

- Increase the number of health workers that are qualified and retained in the health care facilities through targeted program of "salary top ups" for health care workers and improving working environments for health personnel.
- Increase the availability and decrease theft of drug supply (quantities and quality) to clinics and communities including Anti Retro Viral ARVs, bed nets, vaccines)
- Improve health facilities (through targeted facilities infrastructure (roads, water, health buildings, water, communication and medical equipment) ;
- Improve equipment at health care facilities, especially maternity services

- Improve financial management, monitoring and supervision of health care facilities.
- Provide comprehensive health services package that includes treatment of diseases and infections, awareness programmes and education through Government and private hospitals.

Schools

The Government of Malawi considers education as one of the main catalysts to poverty alleviation and a pre-requisite for economic takeoff. The constitution incorporates as a principle of national policy the provision of adequate resources to the education sector in order to, among other, “eliminate illiteracy in Malawi” (and) “make primary education compulsory and free to all citizens of Malawi” (Section 13 (f), pg 14)

The following are key national education goals set by the Government:

- To provide high quality and improved coverage of early childhood education children under 6 years would attend early childhood education by 2000.
- To offer free primary education to all primary school age children, both girls; and,
- To reduce adult illiteracy from 50% in 1990 to 30% in 2000, with attainment of gender parity.

Free primary education was introduced in 1994. Despite the introduction of free primary education, a significant number of primary school-going age children have remained out of school with a high proportion among girls. Enrolment rate rose from 1.9 million to 3.2 million as a result of the change in policy, but later stabilized at 2.9 million. (United Nations Development Assistance Framework Malawi 2002-2006) Non-attendance at school is attributed to lack of awareness of parents to the importance of education, the observed failure of education to improve employment prospects, long distance from place of dwelling to school and poverty, which compel children to seek work instead of attending school.

Based on the integrated household survey, the average distance from school in the rural areas is 3.4 km, while in urban it is 2.7 km. It is estimated that the rural and urban children take 27.5 and 23 minutes on average to reach school, respectively. (United Nations Development Assistance Framework Malawi 2002-2006)

Electricity

Parliament passed new legislation in March 2004 to improve the energy sector’s contribution to economic growth. This partly constituted the legal framework in support of the energy sector reform process. The policy document comprised four acts of which the Energy Regulation Act of 2004 was the umbrella act that has led to the establishment of a sector-wide energy regulator in 2007 which is known as the Malawi Energy Regulatory Authority (MERA). Government has established MERA with financial assistance from the World Bank under the Public Utility Reform Project (PURP) in the Malawi Privatization Commission. Malawi’s previous installed capacity of 284.5 megawatts was expected to meet demands up to the year 2004. In order to meet projected demands thereafter, ESCOM carried out a major hydropower plant project, the 128-megawatt hydropower station at Kapichira Falls on the Lower Shire River. Phase I of 64 megawatts was commissioned in June 2000, and Phase II will need to be commissioned in future.

ESCOM is also looking at other options for generating electricity including hydropower sites in the north, coal-fired plants, gas turbines and interconnection with neighboring countries. In February 1998, the Governments of Malawi and Mozambique signed an agreement on the interconnection of their respective power systems.

Wood fuel continues to be the dominant source of energy in the economy. It accounts for about 93 percent of the total energy consumption. Demand for wood fuel exceeds the available sustainable supply and the deficit is increasing every year.

The National Sustainable and Renewable Energy Programme (NSREP) aims at promoting renewable energy technologies in Malawi. Implementation of the NSREP has been very encouraging since its inception and launch in September 1999. Major achievements under the programme include the following:

- Surtax and duty have been waived on importation of solar PV equipment and materials by certified companies;
- The Test and Training Centre for Renewable Energy Technologies (TCRET) has been established and a degree programme in renewable energy has been introduced at Mzuzu University. Solar PV systems for lighting and entertainment have also been installed in 12 districts across the country. The target is to install the systems in all the 28 districts.

Malawi's oil industry was liberalized in 1999. The Petroleum Control Commission (PCC) stopped importing fuel in April 2000 and reverted to a regulatory role. Importation of fuel is now carried out by the industry's consortium, Petroleum Importers Limited (PIL).

2.2.4 Rural Urban Drift

Trends in urbanization indicate a slowing down of rural-urban migration. Mzuzu, the fastest growing city grew at 10.1% per annum during 1977-1987 and 6.2% during 1987-1998. The second fastest growing city is Lilongwe City, with a 1977-1987 annual growth rate of 6.1% during 1987-1998. The population of Zomba Municipality grew at 5.8% per annum during 1977-1987 and 3.6% during 1987-1998. Finally, the growth of population in Blantyre, the largest city, slowed down from an annual rate of 4.2% (1977-1987) to 3.35 (1987-1998). (United Nation Systems in Malawi, Common Country Assessment of Malawi: 2001 Report) Nevertheless, the four urban conglomerations continue to grow and the growth of population in these urban centres continues to put an increasing pressure on the already over-stretched provision of basic services of education, health, water and sanitation. Congestion resulting from population growth has also posed a growing threat to the environment as unplanned squatter settlements continue to proliferate in major urban areas. In urban areas, the growing number of single males' poses in the growing number of single males poses an increased risk of the spread of HIV/AIDS.

2.3 Media and Telecommunications

Broadcasting/Media

Malawi has only one national Television network, Television Malawi and a number of FM stations. The broadcasting/Media sector is the fastest growing with a number of broadcasting and Media houses mushrooming at a fast rate. So far there is Television Malawi, Malawi Broadcasting Corporation, Zodiak, Capital Radio FM, Radio 101, African Bible College Radio, Radio Maria, Radio Alinafe, Radio Islam, Tran world Radio, Joy Radio, Mlj Radio, Mchinji radio, Nkhotakota Community Radio, Mzimwe Community Radio and Star

Radio.

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

Table 14. Summary of Newspapers, Periodicals. Magazines, Radio Stations, Television

NAME OF NEWS PAPER	OWNERSHIP	WEBSITE/TEL/E MAIL	PRINTERS	QTY.IN CIRCULATION	FREQ	REACH	APPROX . PAGES
Nation	National Publications, Box 30408, BT	http/www.nationmalawi.com 01875186	Nation Publications	14000	Monday to Fri (Daily)	The whole country	30
Weekend Nation	" " "	Same as above	" " "	12000	Saturdays	Whole country	35
Nation on Sunday	" " "	Same as above	" " "	35000	Sundays (Once a week)	Whole Country	27
Daily Times	Blantyre Newspaper Ltd, P/Bag 39, BT	www.dailytimes.bppmw.com 01871181 dailytimes@bnl.bppmw.com	Blantyre Print & Packaging	15000	Monday to Fri (Daily)	Whole country	30
Malawi News	" " "	" " "		25000	Saturdays	Whole country	40
Sunday Times	" " "	" " "		15000	Sunday Only	Whole country	35
Guardian	Guardian Publications Ltd, P/Bag B341, LL	Web creation underway 01762996 guardian@globemw.net		10000	3 Times per week Monday, Wed, Fri.)	Blantyre, Lilongwe and Mzuzu	23
Weekly Courier	Weekly Courier, Publications Ltd, Box 1534, LL	No web. 01 756 180 courier@sdpn.org.mw		9400	Weekly	Blantyre , Lilongwe, Mzuzu, Zomba	15
Weekend Democra tus	Democratus Ltd Box 1100, LL	No Website 08205666		2000	Weekly	Lilongwe, Blantyre and Mzuzu	20
Dispatch	Dispatch Media Group, Box 30365 LL.3	No website 01751639 thedispatchmw@sdpn.org.mw thedispatchmw@hotmail.com		1000	Weekly	Lilongwe, Blantyre and Mzuzu	11

Source: National Library Service: Newspapers Desk Survey (2007)

2.3.2 Telecommunication Services (Fixed, Mobile, etc.)

Malawi Telecommunications Limited (MTL) is the sole provider of fixed telephone services and also provides cellular telephone services through a 40 percent stake in Malawi's cellular telecommunications company - Telekom Networks Malawi Limited (TNM). Malawi's second mobile phone operator is Celtel Limited.

International direct dialing is available on 98 percent of Malawi's phones. In an effort to bring communications systems in line with the rest of the world, thousands of digital lines are presently being installed in the major cities each year.

The Communications Act of 1998 established the Malawi Communications Regulatory Authority (MACRA). MACRA is charged with the responsibility of licensing operators in the areas of posts, broadcasting and telecommunications.

Table 15: Telecommunication Services

Name	Ownership	Cost of 3 minute call	Number of subscribers	Coverage
Malawi Telecommunications Limited (MTL)	Joint Venture	US\$0.06	N/A	National Wide
Telecom Networks Malawi	Private	US\$0.53(local) \$2.11(SADC)	400,000	National Wide
Celstel	Private	N/A	N/A	National Wide

Source: Survey data, 2007.

There has been considerable growth in the telecommunications sector where a 50.0 percent growth in active subscribers is estimated. The current overall tele-density is 0.39. There is a wide variation in the distribution ranging from 3.72 in largest Cities (e.g. Blantyre and Lilongwe) to the rest of the country at 0.23.

As of 2002 the average cost for a 3-minute call was 0.06 Dollars.

Table 16. Technical Journals and Bulletins that Contain Agricultural Information

Name	The Tea Research Foundation of Central Africa Newsletter
Ownership	Tea Research Foundation
Circulation	Quarterly
Topics	Scientific Research and Technology
Website	N/A
Delivery Outlets	TRFCA

Name	MASIP Quarterly Newsletter
Ownership	MASIP Secretariat
Circulation	Quarterly
Topics	Agriculture
Website	N/A
Delivery	MASIP Project Areas

Name	Environmental News
Ownership	FECO Malawi
Circulation	N/A
Topics	Environment
Website	N/A
Delivery	N/A

Name	Informatura
Ownership	Ministry of Natural Resources
Circulation	biannual
Topics	Natural resources management
Website	N/A
Delivery	N/A

Name	FRIM Newsletter
Ownership	Forestry Research Institute
Circulation	Monthly
Topics	Forestry management, Agro forestry
Website	N/A
Delivery	N/A

Name	Titukulane Newsletter
Ownership	NASFAM
Circulation	Monthly/quarterly
Topics	Agriculture, Tobacco management
Website	http://www.nasfam.org/
Delivery	Farmers /general public

Name	Boma Lathu
Ownership	Ministry of Information
Circulation	Monthly
Topics	Agriculture, Social events
Website	http://www.malawi.gov/information1/
Delivery	

Name	Biotechnology update
Ownership	Biotechnology-Ecology Research and Outreach Consortium
Topics	Biotechnology, Ecology and Agricultural
Website	N/A
Delivery	N/A

Name	Horticulture in Malawi
Ownership	GTZ Horticulture Project
Circulation	Quarterly
Topics	Horticulture
Website	N/A
Delivery	GTZ project sites

Name	The Malawi journal of Agricultural Sciences
Ownership	DARS
Circulation	Annual
Topics	Agriculture
Website	N/A
Delivery	N/A

Name	Bunda College Newsletter
Ownership	University of Malawi, Bunda College of Agriculture
Topics	Agriculture, Forestry, nutrition, Agricultural Engineering, Agricultural Economics, Extension, Aquaculture
Website	http://www.bunda.unima.mw/
Delivery	N/A

Name	Sapitwa: Official Newsletter
Ownership	Mulanje Mountain Conservation Trust
Circulation	Quarterly
Topics	Environment, Forestry
Website	http://en.wikipedia.org/wiki/Mulanje_Mountain_Conservation_Trust
Delivery	

Table 17. List of Other Magazines That Do Publish Articles on Agriculture

PUBLICATION NAME	ADDRESS	PRINTERS	FREQUENCY	ESTIMATED PAGES	ARTICLES ON AGRICULTURE
Lamp Magazine	Mont fort Media, Box 280, Balaka E-mail: montfortmedia@malawi.net	Montfort Media	Bi-Monthly	34	None
Together Magazine	" " " " " together@sdpn.org.mw	" " "	Quarterly	32	None
Zikomo Magazine	Box 144, Lunzu	Montfort Media	Quarterly	26	None
Pride Magazine	Box 51668, Limbe Tel.: 01 640569	Corporate Graphics	Quarterly	88	Covers Agriculture topics
Moni Magazine	Box 5592, Limbe	Popular Publications	Monthly	32	Occasionally
Environmental News	F.E.C.O. Box 32386, Chichiri, Blantyre 3 Tel.: 01830229 feco_malawi@yahoo.co.uk	Forum for Environmental Communicators	Quarterly	20	Covers Agricultural topics
MCTU Newsletter	Box 1271, Lilongwe Tel.: 01755614	Alpha Printers	Monthly	8	Occasionally Published
JICA Malawi Now	JICA	JICA	Monthly	2	Covers Agricultural topics
SOCAM Update	Box 1, Blantyre Tel.: 01620301 socam@malawi.net	-----	Quarterly	40	Rarely Publishes agriculture topics
This is Malawi	Department of Information Box 494, Blantyre Tel.: 01824071 URL://:www.information.gov.mw	Kris Offset Printers	Bi-monthly	32	Sometimes Agriculture topics are Published

PUBLICATION NAME	ADDRESS	PRINTERS	FREQUENCY	ESTIMATED PAGES	ARTICLES ON AGRICULTURE
FRIM Newsletter	Box 270, Zomba Tel.:01524866 frim@clcom.net gmeke@frim.clcom.net	Forestry Research Institute of Malawi	Monthly	4	Published
Malawi Agro forestry News	Box 2440, Lilongwe Tel.: 01742496/406	National Agro forestry Steering Committee	Bi-Monthly	15	Occasionally Published
Inspiration	Box 30408, Chichiri, Blantyre 3 Tel.: 01673703 nation@nationmalawi.com	Nation Publications	Quarterly	80	Published
UNIMA Magazine	Box 278, Zomba unionform@yahoo.co.uk http://www.unima.mw	University of Malawi	Bi-Annual	28	Rarely covers agricultural topics
Quest Magazine	Box 794, Blantyre questmag@sdp.org.mw	Montfort Media	Quarterly	48	Rarely covers agricultural topics
Economic Frontlines	Box 732, Lilongwe Tel.:01756548 esgmalawi@malawi.net	Economic Strategy Group	Quarterly	23	Published
Mau Magazine	Malawi Writers Union Box 32734, Chichiri, Blantyre 3 Tel.:01644793 maumagazine@yahoo.com	Kris Offset & Screen Printers	Bi-Annual	56	Occasionally Published
European Union Newsletter	Box 30102, Lilongwe 3 Tel.: 01773199 delegation-malawi@ec.europa.eu http://www.delmw.ec.europa.eu	European Union	Quarterly	4	Published
Morden Farming	Private Bag 9, Lilongwe Tel.:01762066/212 director@aret.org.mw	Design Printers	Quarterly	11	Published
Export News	Malawi Export Promotion Council, Box 1299, Blantyre Tel.:01620499	Kris Offset & screen Printers	Quarterly	22	Occasionally Published
Bunda College Newsletter	Box 219, Lilongwe http://www.bunda.sdp.org.mw	Bunda College of Agriculture	Monthly	4	Published

PUBLICATION NAME	ADDRESS	PRINTERS	FREQUENCY	ESTIMATED PAGES	ARTICLES ON AGRICULTURE
The Malawi Journal of Agricultural Science	Box 219, Lilongwe agri-research@sdp.org.mw http://www.bunda.sdp.org.mw	" " " " "	Quarterly	87	Published
Titukulane	NASFAM Box 30176, Lilongwe 3 Tel.: 01772866 nasfam@nasfam.org	NASFAM	Quarterly	12	Published
Sapitwa	Box 139, Mulanje Tel.: 01466282 Mmct@malawi.net www.mountmulanje.org.mw	Mulanje Mountain Conservation Trust	Quarterly	12	Partially
Biotechnology Update	Box 403, Zomba Tel.:01524831 Wchanga@chanco.unima.mw	Biotechnology-Ecology research & Outreach Consortium	Monthly	4	Published
AgriTech	Box 30779, Lilongwe 3 Tel.: 01789033 Agricresearch@sdp.org.mw	Min. of Agriculture. Dept. of Agriculture Research & Technical Service	Quarterly	4	Published
MIPA News	Private Bag 302, Lilongwe 3 Tel.: 01780800 Mipa@eo.wn.apc.org Mipall@malawi.net	Malawi Investment Promotion Agency	Quarterly	18	Occasionally features agricultural topics

Source: CTA Agricultural Needs survey, 2007

Table 18. Radio Stations showing their Ownership and Coverage

Name	Malawi Broadcasting Corporation
Contact Details	Mr. Patrick Khoza, Director General Address: P.O. Box 30133/Private Bag 308, Chichiri, Blantyre 3. Tel: (265) 1 Fax: (265) 1 871 257
Ownership	Malawi Government
Broadcasting hours	18 hours
Agric& RD Focus	Yes
Website	N/A
Reach of broadcast	The whole country

Name	Capital FM
Contact Details	Postal Address: Private Bag 437 Chichiri Blantyre 3 Malawi C.Africa Tel: (265) 1 820 858 Fax : (265) 1 823 382 E-mail:
Ownership	Private- Alaudin S Osman
Broadcasting hours	24 hours
Agric& RD Focus	Sometimes
Website	http://www.capitalradiomalawi.com/
Reach of broadcast	Blantyre, Lilongwe, Mzuzu

Name	Zodiac
Contact Details	
Ownership	Private
Broadcasting hours	24hours
Agric& RD Focus	Farming News
Website	N/A
Reach of broadcast	Whole country

Name	MIJ
Contact Details	P.O. Box 30165 Blantyre 3 Tel : +265 1 675 087 Fax: +265 1 675 649 E-mail: mij@eo.wn.apc.org
Ownership	University of Malawi, Polytechnic
Broadcasting hours	12 Hours
Agric& RD Focus	Agricultural Announcements
Website	N/A
Reach of broadcast	Blantyre, Zomba, Lilongwe

Name	Radio Islam
Contact Details	P.O. Box 51516 Limbe Tel : +265 641 408 Fax: +265 1 642 408 E-mail: zakaat@malawi.net
Ownership	Private-Moslem Association of Malawi
Broadcasting hours	N/A
Agric& RD Focus	Occasionally
Website	N/A
Reach of broadcast	Mangochi, Blantyre, Zomba, Lilongwe

Name	Star
Contact Details	N/A
Ownership	Private
Broadcasting hours	Blantyre, Zomba, Lilongwe
Agric& RD Focus	
Website	N/A
Reach of broadcast	

Name	Radio Maria
Contact Details	P.O. Box 409 Mangochi Tel : +265 594 217 Fax: +265 1 594 552 E-mail: radiomaria@malawi.net
Ownership	Private- Catholic
Broadcasting hours	16 hours
Agric& RD Focus	Yes
Website	http://www.radiomaria.mw/
Reach of broadcast	Mangochi, Blantyre, Zomba, Lilongwe

Name	Radio Alinafe
Contact Details	P.O.Box 631 Lilongwe Tel : +265 752 971 Fax: +265 1 752 767 E-mail: radioalinafe@sdpn.org.mw
Ownership	Private- Catholic
Broadcasting hours	
Agric& RD Focus	
Website	
Reach of broadcast	Lilongwe

Name	ABC Radio
Contact Details	P.O. Box 1028 Lilongwe Tel : +265 761 965 E-mail: abiblecollege@malawi.net
Ownership	Private- African Bible College
Broadcasting hours	
Agric& RD Focus	
Website	http://africanbiblecolleges.org/
Reach of broadcast	Lilongwe, Blantyre, Zomba

Name	FM 101
Contact Details	P.O. Box 761 Blantyre Tel : +265 641 582 Fax: +265 1 644 101 E-mail: fm101@malawi.net
Ownership	Private- Thomson
Broadcasting hours	24 hrs
Agric& RD Focus	
Website	http://www.fm101.malawi.net/
Reach of broadcast	

Name	Joy Radio
Contact details	Joy Radio 89.6 FM Private Bag 17 Blantyre Tel : +265 1 621 827 Fax: +265 1 621 616 E-mail : joyradio@globemalawi.net
Ownership	Private- Bakili Muluzi
Broadcasting hours	24 hrs
Agric& RD Focus	
Website	N/A
Reach of broadcast	Lilongwe, Blantyre

Name	Transworld Radio
Ownership	Private
Broadcasting hours	
Agric& RD Focus	
Website	http://www.twrafrica.org/
Reach of broadcast	Whole country

Name	Mzimwe Radio
Ownership	Private
Broadcasting hours	
Agric& RD Focus	
Website	N/A
Reach of broadcast	Mchinji

Name	Nkhota-kota Community Radio
Ownership	Private
Broadcasting hours	
Agric& RD Focus	Yes
Website	N/A
Reach of broadcast	Nkhota-kota

2.3.3 Computers and Internet Access

The ownership of computers per individual households in Malawi is very negligible. Due to low incomes most families can not afford to buy a desk/lap top computer. The statistics for computers per 1,000 inhabitants in Malawi as of 2003 was 1.5. This figure may have changed because of an influx of computers into the country.

The penetration of computers within the private sector is fairly high. All banks are computerized; most of the large public sector organizations use computers to support some of their activities. A number of NGOs (in particular the international ones) and the international agencies operating in Malawi are reasonably computerized.

Most of the Government Ministries are computerized, although the level of penetration of computers to support organizational activities and operations is very low. In most cases computers are being used for basic computing work like word-processing. Not many of these organizations are utilizing their computer systems for high-end value-added applications like: information systems (MIS, DSS), databases, and personnel management systems, accounting and budgeting.

In the area of computer related services, there are a number of computer hardware vendors in Malawi- most of these are distributors or agents of computer companies operating outside the country. They mainly sell computers assembled outside the country.

Table 19. Internet service Providers

Name	Number of subscribers	Cost of 10 hours dial up	The cost of DSL per month
MalawiNet Limited	Broadband +500 Dial up +4000 VSAT+10	US\$20.00	N/A
Globe Internet	Broadband 785 Wifi 675 Dial up +3000	US\$20.00	N/A

Name	Number of subscribers	Cost of 10 hours dial up	The cost of DSL per month
SDNP		US\$ 20.00	N/A
Skyband	Broadband 500	US\$250-2400	N/A
AfricanOnline	Dial up N/A	US\$28.00	N/A

There are a number of Internet Service Providers in Malawi, the key ones are Malawi Net, SDNP, Epsilon and Omega; Global Internet, Africa Online among others. A number of organizations within the civil and public service are connected to the Internet. In most of these cases the Internet is used to support the organizational activities of these organizations. The main use is for e-mail and occasional Web browsing.

A number of business organizations in the private sector including, the banks are connected to the Internet mainly by dial-up access a number do have leased line access (cable-based or wireless system). A fair number of organizations in the NGO, diplomatic and the international agency communities are connected to the Internet.

ANNEX 3. PROFILE OF INSTITUTIONS

Annex 3.1 List of Institutions in the Agricultural Sector

Name and Contact	Type	Role
Org: Action Aid-Malawi (AAM) Name: B. Msiska- Country Director Address: P.O. Box 30735, Lilongwe 3. Tel: (265) 1 757 500/504/508 Fax: (265) 1 757 330 Email: Website	NGO	EX, RU
Org: ADRA Name: Country Director Address: P.O. Box 951 Blantyre Tel: (265) 1 620 016 Fax: (265) 1 624 893 Email: Website:	CHU	EX
Org: Africa Leaf (MW) LTD Address: P.O. Box 40012, Kanengo, Lilongwe 4 Tel: (265) 1 71 1111 Fax: (265)1 712 417 Email: Website	PRV	PS-E
Org: Africare- Malawi Name: Address: P.O. Box 2346, Lilongwe Tel: (265) 1 742 237 Fax: Email:	NGO	EX
Org: Agricultural and Auto supplies Ltd Name: Address: P.O. Box 872, Lilongwe Tel: (265) 1 754 750 Fax: (265) 1 759 317 Email: Website:	PRV	PS PS-S
Org: Agricultural Development and Marketing Corporation (ADMARC) Name: Dr. C. Matabwa (Chief Executive) Address: P.O. Box 5052, Limbe, Malawi Tel: (265) 1 640044 Fax: (265) 1 640 486 Website:	STA	TM
Org: Agricultural Mechanization Company Ltd (AGRIMECH) Name: Address: P.O. Box 31275, Blantyre 3. Tel: (265) 1 644 375 Fax: (265) 1 644 021 Email; agrimech@malawi.net	PRV	PS-S

Name and Contact	Type	Role
Org: Agricultural Research & Extension Trust (ARET) Address: P/ Bag 9, Lilongwe Tel: (265) 1 761 148 Fax: (265) 1 761 615 Email: Website:	STE	RD EX IN
Name and Contact	Type	Role
Org: Agricultural Trading Company Ltd. Name: Address: P.O. Box 5150, Limbe Tel: (265) 1 640917 Fax: (265) 1 640 768 Email: Website:	STE	TM
Name and Contact	Type	Role
Org: Agri Hort Name: Address: P.O. Box 1787, Blantyre Tel: (265) 1 641 220 Fax: (265) Email: Website:	PRV	TM
Name and Contact	Type	Role
Org: AGRIMAL (MW) LTD Name: Address: P.O. Box 143, Blantyre, Malawi Tel: (265) 1 670 933 Fax: (265) 1 670 651 Email; Website:	PRV	PS-S
Name and Contact	Type	Role
Org: Agro-Engineering Name: Address: P.O. Box 5781, Limbe Tel: (265) 1 640212/919 Fax: - Email: Website:	PRV	PS-S
Name and Contact	Type	Role
Org: Agrosack Industries Name: Address: P.O. Box 5525, Limbe Tel: (265) 1 671 345 Fax: (265)1 640 123 Email: Website;	PRV	PS-M
Name and Contact	Type	Role
Org: AGRU-HORT Supplies Limited Name: Address: P.O. Box 1787, Blantyre Tel: (265) 1 673 357 Fax: Email: Website:	PRV	PS-M
Name and Contact	Type	Role
Org: Alliance One Tobacco (Malawi) Limited Name: Address: (north) P.O. Box 30522, Lilongwe 3. Tel: (2650 1 710 600 Fax: (265)1	PRV	PS-E

Name and Contact	Type	Role
Org: Anti pest (Pvt) LTD Name: Address: P.O. Box 5135, Limbe Email: Tel: (265) 1 640 735 Fax: (265) 1 645 606 Email: Website:	PRV	TM
Org: Auction Holdings Limited Name Address: P.O. Box 40035, Kanengo, Lilongwe Tel: (265) 1 710 954/384 Email: Web site:	STE	TM
Org: BAT (Malawi) Limited Name: Address: P.O. Box 428, Blantyre Tel: (265) 1 670 808 Email: Website;	PRV	TM PS-E
Org: Beekeepers Association of Malawi (BAM) Name: Address: P.O. Box 569 Mzuzu Tel: (265) 1 333 340 Fax: Email: Website	AS-F	PS-P
Org: Baptist Mission in Malawi Name: Address: P.O. Box 494, Zomba Tel: (265) 1 524029/527 050 Email: Website:	CHU	RU EX
Org: Blantyre Print and Publishing Limited Name: Sales Department Address: Private Bag 39, Blantyre, Malawi Tel: (265) 1 671 070 Fax: (265) 1 671 114	PRV	IN
Org: Border Zone Development Project (Malawi) Address: P.O. Box 20550, Mzuzu Tel: (265) 1 335 202/ 1 332 135 Fax: (265) 1 Website:	NGO	EX
Org: British Cotton Growing Association Name: Address: P.O. Box 475, Blantyre Tel: (265) 1 670 808 Fax: (265) 1 Email: Website:	AS-F	EX

Name and Contact	Type	Role
Bunda College of Agriculture, University of Malawi Name: Prof. George Kanyama-Phiri (Principal) Address: P.O. Box 219, Lilongwe Malawi Tel; (265) 1 277 260 Fax: (265) 1 277251 Email; Website	EDU	TR
Name and Contact	Type	Role
Org: Bvumbwe Agricultural Research Station Name: Address: P.O. Box 5748, Limbe Tel: (265) 1 471 522 Fax: (265)1 471 323 Email: Website:	GOV	RD
Name and Contact	Type	Role
Org: CADECOM Name: Address: P.O. 30384, Lilongwe 3 Tel: (265) 1 752 487/256/262 (265) 1 754 776 Website:		
Name and Contact	Type	Role
Org: Canadian Physicians for Aid & Relief Name: Address: P.O. Box 30998, Lilongwe Tel: (265) 1 744 242 Fax: (265) 1 744 206 Email: cpar@unima.wn.apc.org Website:	NGO	EX
Name and Contact	Type	Role
Org: Chamwavi Group Name: Address: P.O. Box 90, Kasungu Tel: (265) 1 253 721		
Name and Contact	Type	Role
Org: Chitedze Agricultural Research Station Central Library (Department of Agricultural Research) Name: P.O. Box 158, Lilongwe Tel: (265) 1 767 222 Fax: (265) 1 Email: Website;	GOV	RD
Name and Contact	Type	Role
Org: Christian Service Committee (CSC) Name: Address: P.O. Box 30123 Tel: (265) 1 732 400 Fax: (265) 1 731 729 Telex: 44365 CSC ML Website:	CHU	EX/RU
Name and Contact	Type	Role
Org: Churches Action for Relief and Development (CARD) Name: Address: P.O. Box 2733, Blantyre Tel: (265) 1 652 013 Fax: (265) 1 652 999 Website:	CHU	EX/RU

Name and Contact	Type	Role
Org: Concern Universal Name: Address: P.O. Box 1535, Blantyre Tel: (265) 1 623 761/ 623 874 Fax: (265) 1 623 846 Email: 104470.3065@compuserv.com	NGO	RU
Name and Contact	Type	Role
Org: Conforzi (Tea& Tobacco) LTD Name: Address: P.O. Box 1 Thyolo Tel: (265) 1 473 400 Fax: (265) 1 473 467 Email: Web site:	PRV	PS-P
Name and Contact	Type	Role
Org: CURE Name: Address: P.O. Box 1429 Blantyre Tel: (265) 1 621 451 Fax: (265) 1 621 468 Email: cure.malawi@unima.wn.apc.org Web site:	NGO	RU
Name and Contact	Type	Role
Org:Central Veterinary Services Name: Address: P.O. Box 527, Lilongwe Tel: (265) 1 722 644 Fax: Email: Web site:	GOV	RD
Name and Contact	Type	Role
Org: Dairboard Malawi Name: Address: P.O. Box 30647, Chichiri, Blantyre 3. Tel: (265) 1 670 258 Fax: Web site:		
Name and Contact	Type	Role
Org: Eastern Produce (MW) Ltd Name: Address: P.O. Box 53 Mulanje Tel: (265) 1 466 377/346 Fax: (265) 1 466 421 Email; Web site:	PRV	PS-P
Name and Contact	Type	Role
Org: Enterprise Development and Training Agency(EDETA) Name: Address: P.O. Box 2683, Blantyre Tel: (265) 1 623 896 Email: Web site:	NGO	TR
Name and Contact	Type	Role
Org: Evangelical Alliance for Relief and Development (EVAR)) Name: Address: P.O. Box 1208, Blantyre Tel: (265) 1 643 173 Fax: (265) 1 643 859 Email: Web site:	NGO	RU

Name and Contact	Type	Role
Org: Evangelical Lutheran Development Program/ Lutheran World Service Name: Address: P.O. Box 2467, Blantyre Tel: (265) 1 675 469 Fax: (265) 1 Email: Web site:		
Org: Fisheries Research Station /Library Name: Address: P.O Box 27, Monkey Bay Tel: (265) 1 Fax: (265) 1	GOV	RD
Org: Forestry Research Institute of Malawi Name: Address: P.O. Box 270, Zomba Tel: (265) 1 522 866 Email: Web site:	GOV	RD
Org: GTZ-Integrated Food Security programme Name: Address: P.O. Box 438, Mulanje Tel: (265) 01 466 279/369 Fax: (265) 1 466 435 Email; Web site:	REG	EX
Org: Habitat for Humanity (HFT) Malawi Name: Address: P.O. Box 2436, Blantyre Tel: (265) 1 622 591 Fax: (265)1 624 604 Email: Web site:	NGO	EX/RU
Org: Hills of Dowa Enterprise Zone Association (HODEZA) Name: Address: P.O. Box 166, Dowa Tel: (265) 1 282 390 Fax: (265) 1 282 290 Email: vezahodeza@unima.wn.org Web site:	AS-F	EX
Org: Hunger Project- Malawi Name: Address: P/Bag 665, Limbe Tel: (265) 1 664 699/654 Fax: (265) 1 Web site	NGO	EX, RU, IN
Org: ICRAF Name: Address: Makoka Agricultural Research Status, P.O. Box 134, Zomba. Tel: (265) 1 534 277 Fax: (265) 1 Email: Web site:	GOV	RD,IN,EX

Name and Contact	Type	Role
Org: ICLARM/GTZ Africa Aquaculture Project Library Name: Address: P.O. Box 229, Zomba Tel: (265) 1 531 215 Fax: (265) 1 Email: Web site:	REG	IN
Name and Contact	Type	Role
Org: Kaporo Foundation for Rural Development Name: Address: P.O. Box 325 ,Karonga Tel: (265) 1 362 533 Fax: Email Web site:	NGO	EX, RU
Name and Contact	Type	Role
Org: Karonga Agricultural Development Division Library. Name: Address: Karonga A.D.D. P.O. Box 43, Karonga Tel: (265) 1 632 244 Email: Web site	GOV	EX/IN
Name and Contact	Type	Role
Org: Kasungu Agricultural Development Division Library Name: Address: Kasungu A.D.D. P.O. Box 92, Lilongwe Tel: (265) 1 733 300 Fax: (265) 1 Email: Web site:	GOV	EX/IN
Name and Contact	Type	Role
Org: Lauderdale Estate Name: Address: P.O. Box 6, Mulanje Tel: (265) 1 466 222/01 4666 357 Fax: (265) 1 466 242 Email: Web site	PRV	PS-P
Name and Contact	Type	Role
Org: Limbe Leaf Tobacco Company LTD Name: Address: P.O. Box 40044, Lilongwe 3 Tel: (265) 1 710 355/702 Fax: (265) 1 710 119 Email: Web site:	PRV PSE TM	
Name and Contacts	Type	Role
Org: Liwonde Agricultural Development Division Technical Library Name: Address: Liwonde A.D.D. Private Bag 3, Liwonde Tel: (265) 1 532 410 Fax: Email: Web site:	GOV	EX RU

Name and Contact	Type	Role
Org: Lujeri Tea Estates LTD Name: Address: P.O. Box 133, Mulanje Tel : (265) 1 466 255 Fax: (265) 1 Email: Web site;	PRV	PS-P
Name and Contact	Type	Role
Org: Lunyangwa Agricultural Research /Library Name: Address: Lunyangwa Agricultural Research, P.O. Box 59, Mzuzu Tel: (265) 1 332 633	GOV	RD/IN
Name of Contact	Type	Role
Org: Makoka Agricultural Research Station Name: Address: Web site	GOV	RD/IN
Name and Contact	Type	Role
Org: Malawi Association of Spices & Herbs (MASH) Name: Address: P.O. Box 51724, Limbe Tel: (265) 1 634 661 Email:N/A Web site: N/A		
Name and Contact	Type	Role
Org: Malawi Broadcasting Corporation Name: Mr. Patrick Khoza, Director General Address: P.O. Box 30133/Private Bag 308, Chichiri, Blantyre 3. Tel: (265) 1 Fax: (265) 1 871 257 Email: N/A Web site:N/A	STA	IN
Name and Contact	Type	Role
Org. Malawi Bureau of Standards Name: Address: P.O. Box 946 , Blantyre Tel: (265) 1 01670 488 Fax: (265) 1 670 488 Web site:	STA	RG
Name and Contact	Type	Role
Org: Malawi Chamber of Commerce and Industry Name: Address: P.O. Box 258 , Blantyre Tel: (265) 1 671 988/ 431 Fax: (265) 1 671 147/01 673 211 Email: Web site:	CCI	RG
Name and Contact	Type	Role
Org: Malawi Communications Regulatory Authority Name: Address: P/Bag 261, Blantyre Tel: (265) 1 623 611/677 912/674 924/675 497 Email: Web site:	STA	RG
Name and Contact	Type	Role
Org: Malawi Export Promotion Council Name: Address: P.O. Box 499, Blantyre	STA	RG

Tel: (265) 1 620 499 Fax: (265) 1 Web site:		
Name and Contact	Type	Role
Org: Malawi Nazalene Development (Programme) Name: Address: P.O. Box 60612, Blantyre 6 Tel: (265) 1 641 789 Fax: (265) 1 Email: Website:		
Name and Contact	Type	Role
Org: Malawi Tea Factory Co LTD Name: Address: P.O. Box 135, Mulanje Tel : (265) 1 466 257/ 01 466 244 Fax: (265) 1 466 239 Email: Website:	STE	TM
Name and Contact	Type	Role
Org: Mikolongwe Veterinary Training School Name: Address: P.O. Box 5196, Limbe Tel: (265) 1 584 422 Fax: (265) 1 Email: Web site:	GOV	TR
Name and Contact	Type	Role
Org: Ministry of Agriculture and Livestock Development Name: Address: P.O. Box 30134, Lilongwe 3 Tel: (265) 1 733 300 Fax: Email: Web site:	GOV	PP IN
Name and Contact	Type	Role
Org: Monsanto (Malawi) LTD Name: Address: P.O. Box 30050, Capital City, Lilongwe 3 Tel: (265) 1 710 144 Fax: (265) 1 713 547 Email: Web site.	PRV	PS-P TM
Name and Contact	Type	Role
Org: Mpwepwe Fisheries Training Centre Name: Address: Private Bag 7, Mangochi Tel: (265) 1 584 422 Fax: (265) 1 Email: Web site;	GOV	TR
Name and Contact	Type	Role
Org: Mulanje Mountain Conservation Trust (MMCT) Name: Address: P.O. Box 139, Mulanje Tel; (265) 1 466 282/179 Fax: (265) 1 466 241 Email: Web site:	NGO	EX
Name and Contact	Type	Role
Org: Mzuzu Agricultural Development Division Name: Address: Mzuzu A.D.D. P.O. Box 131, Mzuzu	GOV	EX TM

Tel: (265) 1 332 066 Fax: (265) 1 Email: Web site:		
Name and Contact	Type	Role
Org: Mzuzu University Name: Address: Private Bag 1, Luwingu Tel: (265) 1 333 722 Fax: (265) 1 334 505 Email: Web site:	STA	EDU TR IN RD
Name and Contact	Type	Role
Org: Namingomba Tea Estate Name: Address: P.O. Box 2, Thyolo Tel: (265) 1 473 300/321/354/374/392/346 Fax: (265) 1 473 316 Email: Web site:	PRV	PS-P
Name and Contact	Type	Role
Org: Nation Publications Name: Address: P.O. Box 30408, Chichiri, Blantyre 3 Tel: (265) 1 674 419 Fax: (265) 1 674 343 Email: Web site: http://www.nationmalawi.com	PRV	IN
Name and Contact	Type	Role
Org: National Herbarium & Botanical Gardens of Malawi. Name: Address: P.O. Box 528, Zomba Tel: (265) 1 525 388/118/145 Fax: (265) 1 524 108/01 524 164 Email: Web site:	STA	RD
Name and Contact	Type	Role
Org: National Food Reserve Agency Name: Address: P/Bag B450, Lilongwe 3 Tel: (265) 1 713 092 Fax: (265) 1 712 131 Email: Web site:	STE	TM
Name and Contact	Type	Role
Org: National Library Service Name: Gray L. Nyali (National Librarian) Address: P.O. 30314, Lilongwe 3. Tel: (265) 1 773 700 Fax: (265) 1 771 616 Email: gnyali@nlsmw.org / gnyali@hotmail.com Web site: http://www.nationmalawi.com	STA	IN
Name and Contact	Type	Role
Org: National Research Council of Malawi Name: Dr. Phiri (Director) Address: P.O. Box 30745, Lilongwe 3. Tel: (265) 1 774869 Fax:(265) 1 771 487/772 431 Email: Web site: http://www.malawi.gov.mw/NRCM/NRCM.htm	GOV	RG

Name and Contact	Type	Role
Org: National Smallholder Farmers Association of Malawi (NASFAM) Name: D. Chibonga (Director) Address: P.O. Box 30716, Lilongwe 3. Tel: (265) 1 772 866/860/2 808/887/883 Fax: (265) 1 770 858. Email: Web site:	AS-F	FS/EX
Name and Contact	Type	Role
National Media Institute of Southern Africa Name: P.O. Box 30463, Lilongwe 3 Tel : (265) 1 758 090/091 Fax: (265) 1 753 520 Email: Web site:	REG	IN
Name and Contact	Type	Role
Org: Natural Resources College Name: Address: P.O. Box 143, Lilongwe Tel: (265) 1 766644/007 Fax: (265) 1 766 652 Email: Website:	EDU	TR
Name and Contact	Type	Role
Org: Nchima Tea & Tung Estate Limited Name: Address: P.O. Box 52 Thyolo Tel: (265) 1 473 211/235 Fax: (265) 1 473 502 Web site:	PRV	PS-P
Name and Contact	Type	Role
Ngabu Agricultural development Division Name: Address: Private Bag Ngabu, Chikwawa Tel: (265) 1 426 211 Web site	GOV	EX
Name and Contact	Type	Role
Org: Paprika Association of Malawi Name: Address: P/Bag 365, Lilongwe 3 Tel : (265) 1 770 146/ 772 262/770 708 Fax: (265) 1 770 103 Email: Web site:	AS-F	EX
Name and Contact	Type	Role
Org: Plan International- Malawi Name: Address: P.O. Box 2035, Lilongwe Tel: (265) 1 741 430 Fax: (265) 1 741 518 Email: Web site:	NGO	RU
Name and Contact	Type	Role
Org: Planters Tea Agency Name: Address: P.O. Box 70 , Thyolo Tel: (265) 1 473 322 Fax:- Email: Web site:	PRV	EX

Name and Contact	Type	Role
Org: Press Corporations LTD Name: Address: P.O. Box 30238, Lilongwe 3. Tel: (265) 1 01 774 411 Fax: (265) 1 771 345 Email: Web site:	STE	PS-P
Org: Rab Processors Limited Name: General Manager Address: P.O. Box 5338, Limbe, Malawi. Tel: (265) 1 641498 Fax: (265) 1 644 927 Web site: http://rabmalawi.com/	PRV	TM
Org: Raiply Malawi LTD Name: Address: P/Bag 1, Chikangawa, Mzimba Tel: (265) 1 01758 036/037/038 Fax: (265) 1 758 039 Email: Web site:	PRV	TM
Org: Rice Milling Co. (Pvt) Ltd Name: Address: P.O. Box 198, Blantyre, Malawi Tel: (265) 1 Fax: (265) 1 Email: ricemill@malawi.net Web site:	PRV	TM
Org: SADC/GEF Lake Malawi/ Nyasa Biodiversity Conservation Project. Name: Address: P.O. Box 311, Salima Tel: (265) 1 584 752/ (265) 1 263 151 Email: Web site:		
Org: SADC-ICRAF Agro forestry Project Name: P.O. Box 313 000 Lilongwe 3 Tel : 01 772 686 Fax: Email: Web site:		
Org: Saopampeni Cane Rat Farming Organisation Name: Address: P.O. Box 30131, Lilongwe 3. Tel: (265) 1 740 367/1 723 340/676		
Org: Sasakawa Globe 2000 Name: Project Manager Address: 30721, Lilongwe 3 Tel: (265) 1 01771 364/182 Fax (265) 1 772 835 Email: Web site:	REG	EX/RD

Name and Contact	Type	Role
Org: Satemwa Tea Estate Name: Estate Manager Address: P.O. Box 6 Thyolo Tel: (265) 1 472 368 Fax: Email: Web site	PRV	PS-P
Name and Contact	Type	Role
Org: Save the Children Fund Name: Address: P.O. Box 30010, Blantyre Tel: (265) 1 674 523 Fax: - Email: Web site:	NGO	EX
Name and Contact	Type	Role
Org: SEBA Foods (Malawi) LTD Name: Address: P.O. Box 30403, Lilongwe 3. Tel: (265) 1 710 632 Fax: (265) 1 710 584 Email: Web site:	PRV	TM
Name and Contact	Type	Role
Org: Seed Co. Malawi LTD Address: P/Bag 421, Kanengo, Lilongwe4 Tel: (265) 1 712 074 Fax: (265) 1 712 312 Email: Website:	PRV	PS-S
Name and Contact	Type	Role
Org: Shire Highlands Organic Growers (SHOGA) Name: Address: P.O. Box 920, Blantyre Tel: (265) 1 672 634/ 1 671 355/182 Email: Web site	NGO	EX RU
Name and Contact	Type	Role
Org: Shupi Tobacco Grading Company. Name: Address: P.O. Box 653, Lilongwe. Tel: (265) 1 01 761 970/220 Fax: Email: Web site:	PRV	PS-P
Name and Contact	Type	Role
Org: Smallholder Farmers Fertilizer Revolving Fund of Malawi. STE Name: Address: P/Bag 404, Lilongwe 4 Tel : (265) 1 710 090 Fax: (265) 1 Email: Website:	STE	TM
Name and Contact	Type	Role
Org: Smallholder Tea Company LTD Name: Address: P.O. Box 135, Mulanje Tel: (265) 1 466 244/257/374 Fax: (265) 1 466 239 Email: Web site:	STE	TM

Name and Contact	Type	Role
Org: South Africa Root Crops Research Network (SARRNET) Name: Address: P.O. Box 30258, Lilongwe. Tel: (265) 1 707 014 Fax(265) 1 707 014 Email: Web site:	REG	RD
Org: STANCOM Tobacco Company Name: Address: P.O. Box 48, Kanengo, Lilongwe Tel: (265) 1 710 044 Fax: (265) 1 Email: Web site:	PRV	PS-E TM
Org: Tea Research Foundation of Central Africa Name: Address: P.O. Box 51 Mulanje Tel: (265) 1 467 556 Fax: (265) 1 467 209 Email: Web site:	PRV	RD TM TR
Org: Tama Leaf Holdings Limited Name: Address: P.O. Box X85, Lilongwe. Tel: (265) 1 776 272 Fax: (265) 1 776 276 Email: Web site:	PRV	TM
Org: Tea and Coffee Brokers LTD Name: Address: P.O. Box 30222, Blantyre Tel: (265) 1 683 737 fax: (265) 1 Email: Web site:	PRV	PS-E TM
Org: Tea Blenders and Packers LTD Name: Address: P.O. Box 559, Blantyre Tel: (265) 1 671 151 Fax: (265)1 Email: Web site:	PRV	PS-E TM
Org: Tea Brokers Central Africa LTD Name: Address: P.O. Box 5543, Limbe Tel: (265) 1 640 462 Fax: (265) 1 Email: Web site:	PRV	PS-E
Org: Television Malawi Name: Address: P.O. Box 30370, Lilongwe 3 Tel: (265) 1 01 675 033 Fax: (265) 1 672 627 Email:	STA	IN/EX

Web site:		
Name and Contact	Type	Role
Org: Thandizani Ana (SCFM) Name: Address: P.O. Box 30010, Blantyre Tel: (265) 1 630 010 Fax: (265) 1 Email: Web site:	NGO	EX
Name and Contact	Type	Role
Org: The Development of Malawian Enterprises Trust (DEMAT) Name: Address: P.O. Box 555, Lilongwe Tel: (265) 1 756 376 Fax: - Email: Website-	STA	FS TR IN
Name and Contact	Type	Role
Org: Thuchila Farm Institute Name: Address: P.O. Box 5, Thuchila Tel: (265) 1 478 211 Fax:- Email: Web site	GOV	TR
Name and Contact	Type	Role
Org: Tiyende Women in Development Name: Address: P.O. Box 431, Balaka Tel: (265) 1 545 432 Fax: (265) 1 Email: Web site:	NGO	AS-W EX TR RU
Name and Contact	Type	Role
Org: Tobacco Association of Malawi Name: Address: P.O. Box 31360, Lilongwe 4 Tel: (265) 1 773 099 Fax: (265)1 773 493 Email: Web site:	AS-F	TM RG
Name and Contact	Type	Role
Org: Tobacco Control Commission Name: Address: P.O. Box 40045, Lilongwe 4. Tel: (265) 1 710 305 Fax: (265) 1 710 676 Email: Web site;	STA	RG
Name and Contact	Type	Role
Org: Tobacco Exporters Association of Malawi Name: Address: P/Bag 403, Kanengo, Lilongwe Tel: (265) 1 795 037 Fax: (265)1 795 053 Email: Web site:	AS-F	PS-E

Name and Contact	Type	Role
Org: Tobacco Handlers LTD Name: Address: P.O. Box 5361, Limbe Tel: (265) 2 643 690 Fax: (265) Email: Web site:	PRV	PS-M
Org: Tobacco Marketing Limited Name: Address: P.O. Box 5113, Limbe Tel: (265) 1 645 242 Fax: (265) 1 Email: Web site:	PRV	PS-E TM
Org: Tobacco Services Name: Address: P.O. Box 5180, Limbe Tel: (265) 1 640 186 Fax: (265) 1 Email: Web site:	PRV	PS-E TM
Org: Tobacco Supplies Company LTD Name: Address: P.O. Box 12, Kanengo, Lilongwe Tel: (265) 1 710 242 Fax: (265) 1 Email: Web site:	PRV	PS-E TM
Org: UNDP Name: Address: P.O. Box 30135, Lilongwe 3 Tel: (265) 1 773 637 Fax: (265) 1 Email: Web site:	REG	FS RG
Org: Upper Ten Tobacco Limited Name: Address: P.O. Box 31213 Tel: (265) 1 676 355 Fax: (265) 1 Email: Web site:	PRV	TM
Org: USAID Name: Address: P.O. Box 30455, Lilongwe 3 Tel: (265) 1 754 892 Fax: (265) 1 Email: Web site:	REG	EX RU TR
Org: Village Enterprise Zone Association (VEZA) Name: Address: P.O. Box 166, Dowa Tel: (265) 1 282 290 Fax: Email: Web site:	AS-F	EX TM TR

Name and Contact	Type	Role
Org: World Vision International Name: Address: P.O. Box 2050 Tel : (265) 1 670 311 Fax: (265) 672 030 Telex: 44778 Email: Web site:	NGO	EX/RU
Name and Contact	Type	Role
Org: Zipatso Association of Malawi Name: Address: P.O. Box 258, Mwanza Tel: (265) 1 432 341/ 432 353 Fax: (265) 432 353 Email: Web site:	AS-F	TM

The following abbreviations are used

Type

AS-F Farmers' Association (Includes co-operatives)
AS-W Women's Association
AS-Y Youth Association
BNK Bank or Credit institution
CCI Chamber of Commerce and Industry
CHU Church- based group
EDU Educational Institution
GOV Government Department/Ministry
NGO Non-government Organization
PRV Private Enterprise, Company
REG Regional Organization, Project or Network
STA Statutory body
STE State enterprise
OT Other

Role

EX Extension and Outreach
IN Information Services
FS Financial Services
PP Policy and Planning
PS-E Private Sector- Exporter (Fresh, frozen and dried produce)
PS-M Private Sector- Manufacturer (e.g. tannery, bottler, refiner, roaster)
PS-P Private Sector- Producer (e.g. commercial farm, fishing company)
PS-S Private Sector- Supplier (e.g. Chemicals, equipment, seeds)
RD Research and Development
RG Regulation (Compliance, standards)
TR Training (at secondary, tertiary and vocational level)
TM Trade and marketing (Include market development)
RU Rural Development
OT Other

Annex 3.2 Select List of Key Institutions

<p>Name of Institution: 1 Ministry of Agriculture and Food Security</p>
<p>Objective/ Mission Statement:</p> <ul style="list-style-type: none"> - To promote agricultural productivity and sustainable management of land resources to achieve food security, increased incomes and ensure sustainable socio-economic growth and development
<p>Field of Specialization:</p> <ul style="list-style-type: none"> - Conducting research and providing agricultural regulatory services in agricultural production and processing initiatives. - Promoting appropriate crop and livestock production technologies, plant and animal health services - Promoting efficient, diversified and sustainable use of land based resources - Coordination and provision of guidance on agricultural policy programme, planning, implementation and reviews. - Providing extension service
<p>Number of staff professional, clerical, technical, etc, Permanent/ temporary:</p> <ul style="list-style-type: none"> - Over 200 Professionals - 2500 Technical staff, administrative and accounting staff, project and volunteers.
<p>Branches, other sites</p> <ul style="list-style-type: none"> - Department of agricultural Research Services - Department of Crop Production and Development - Department of Agricultural Extension Services - Department of Animal Health and Industry - Department of Land resources and Conservation - Agricultural Investment Programs
<p>Annual budget: (in local currency with Euro equivalent):</p> <p>-MK17,101,345,006 (2006/2007), Euro 80,288,004</p>
<p>Source of funding, incl. main donors/sponsors:</p> <ul style="list-style-type: none"> - Government - Donor
<p>Programme/ projects undertaken:</p> <ul style="list-style-type: none"> - Fertiliser Subsidy Programme
<p>Target audience (plus number, actual or estimated):</p> <ul style="list-style-type: none"> - Farmers - Extension Workers - Agricultural Produce Traders - Farm Input Suppliers

Name of Institution: 1 Ministry of Agriculture and Food Security
Extent of interaction with CTA-Spore Magazine, SDI, QAS, DORA, Seminars, consultants, publications, training, ...: <ul style="list-style-type: none"> - Spore Magazine, CTA Publications
Extent of collaboration/ interaction with other institutions (name , nature): <ul style="list-style-type: none"> - The MOAFS collaborates with all the institutions named above through implementation of joint projects, information exchange, funding of projects, programs and training.
National/ Sectoral policies impacting ICT use/information and communication within the institution: <ul style="list-style-type: none"> - These are not available
How information needs are currently met, and from where or by whom: <ul style="list-style-type: none"> - Organizations(National, Regional International) - Publications: Booklets/bulletins, Research papers - Electronic Media: Radio, TV, Video, Internet - Others: Fairs, and Exhibitions , Conferences, Colleagues
Main information needs not satisfied(including types and format of information): <ul style="list-style-type: none"> - Technical Information - Post Harvest Technology - Crop Varieties - Integrated Pest Management - Equipment Sourcing - Training Needs - Application of Communication technologies in extension services - Participative methodologies - Economic Information - Credit and Micro credit - Identification of markets - Crop Insurance Systems - Broad rural development information - Gender issues - Government and International regulations - Development and funding programs - Available agricultural, development networks.
Main problems faced in terms of information and communications management: <ul style="list-style-type: none"> - Obsolete Equipment - -Inadequate skills in some specific fields - -Inadequate funding
Why institution selected as a key:
Other observations: None.

Name of Institution: 2 Malawi College of Forestry and Wildlife
Objective/ Mission Statement: <ul style="list-style-type: none"> - To provide high quality training, research and consultancy to serve the needs of communities, groups, individuals and organizations in the effect and profitable sustainable management of their forest, trees and wildlife resources.
Field of Specialization: <ul style="list-style-type: none"> - Training in forestry of wildfire management - Research
Number of staff professional, clerical, technical, etc, Permanent/ temporary: <ul style="list-style-type: none"> - 56 (5 professionals and 7 technical) - (Professionals)Degree Holders in Forestry, Wildlife Management, Education - (Technical staff) Diploma in forestry and Wildlife Management
Branches, other sites None -
Annual budget (in local currency with Euro equivalent): <ul style="list-style-type: none"> - MK 20,000,000.00
Source of funding, incl. main donors/sponsors: <ul style="list-style-type: none"> - Subvention donors
Programme/ projects undertaken: N/A
Target audience (plus number, actual or estimated): <ul style="list-style-type: none"> - School Leavers - Technical Assistants (TA) for upgrading to Technical Officers (TA).
Extent of interaction with CTA-Spore Magazine, SDI, QAS, DORA, Seminars, consultants, publications, training, ...: <ul style="list-style-type: none"> - Spore Magazine, Questions and Answers Service (QAS)
Extent of collaboration/ interaction with other institutions (name , nature): <ul style="list-style-type: none"> - Bunda College - Mzuzu University - National Resources College - National Botanic Herbarium - ANAFE - COMPASS - CURE - WESM (Wildlife and Environmental Society of Malawi) - WICO - TSP

<p>Name of Institution: 2 Malawi College of Forestry and Wildlife</p>
<p>National/ Sectoral policies impacting ICT use/information and communication within the institution:</p> <ul style="list-style-type: none"> - These are not available
<p>How information needs are currently met, and from where or by whom:</p> <ul style="list-style-type: none"> - Staff of the Institution browses the Internet to access electronic literature through web sites of other research and donor institutions. - The College of Forestry Library situated at the campus has a wide variety of Books and Periodicals. Newspapers are also accessed through the Library. - The Parent Ministry of Natural resources provides some of the policy information that is used for day today activities. - Some of the information is acquired from the University of Malawi. Through its links with colleges such NRC and Bunda College of Agriculture information the college is able to acquire additional information - The staff of the college attend workshops and seminars where they present papers and take part in the deliberations.
<p>Main information needs not satisfied(including types and format of information):</p> <ul style="list-style-type: none"> - Information on Gender Issues and mainstreaming - Up to date information on Non-Farm Livelihoods
<p>Main problems faced in terms of information and communications management:</p> <ul style="list-style-type: none"> - No budget for the library to purchase additional books and electronic journals. - Inadequate staff to carry out some of the activities effectively. - Space
<p>Why institution selected as a key:</p> <p>The institution was selected as a key because it is the only government institution that trains Malawian scientist on Forestry and wildlife. Even if the University of Malawi's Bunda College offers forestry programs this college has a long history in training of Foresters.</p>
<p>Other observations:</p> <p>None</p>

Name of Institution: 3 Malawi College of Fisheries
Objective/ Mission Statement: The main objective of the college is to provide training in Natural Resources Management (NRM), especially in fisheries.
Field of Specialization: <ul style="list-style-type: none"> - Running of fisheries programs - 1. Technical Assistants, who undergo a 2 year certificate course in Fisheries Management. - 2. Induction and Refresher courses for Department of fisheries staff. - 3. Training for community groups. - Boat Building department
Number of staff professional, clerical, technical, etc, Permanent/ temporary: <ul style="list-style-type: none"> - 3 professionals - 4 technical - 2 clerical
Branches, other sites: <ul style="list-style-type: none"> - Technology and Development - Rural Building - Resource Management
Annual budget: (in local currency with Euro equivalent): <ul style="list-style-type: none"> - Malawi Kwacha 2 million for ORT
Source of funding, incl. main donors/sponsors: <ul style="list-style-type: none"> - Government of Malawi - IGA's – hire out of facilities, fishing
Programme/ projects undertaken: <ul style="list-style-type: none"> - Boat Building - Fishing Gear Specialists - Fisheries Biology
Target audience (plus number, actual or estimated): <ul style="list-style-type: none"> - School leavers - Serving Officers (TA's) - Communities
Extent of interaction with CTA-Spore Magazine, SDI, QAS, DORA, Seminars, consultants, publications, training, ...: <ul style="list-style-type: none"> - The institution has been a recipient of Spore Magazine and other CTA publications for a long time. - It has participated in QAS activities in the past although its participation has been a very scale. Some of the reasons provided were the delays in the acquisition of full text documentation from the local focal point.

Name of Institution: 3 Malawi College of Fisheries
Extent of collaboration/ interaction with other institutions (name , nature): N/A
National/ Sectoral policies impacting ICT use/information and communication within the institution: - These are not available
How information needs are currently met, and from where or by whom: <ul style="list-style-type: none"> - Internet - National Aquaculture Centre - Fisheries Research Unit - Own Library
Main information needs not satisfied(including types and format of information): <ul style="list-style-type: none"> - Information on Internet – Training needs. Basically the institution does not pay subscription to online electronic journals and as a result it's not able to access some of the important full text articles that would help in carrying out research. - Need for qualified people
Main problems faced in terms of information and communications management: <ul style="list-style-type: none"> - No budget - No qualified staff - Publications not current - No database - No computers - Problems faced the Institution - Lack of operational Budget and the under-utilization of the facilities and services. - Funding for basic teaching materials, - Lack of exposure of staff to similar initiatives in the sub-region
Why institution selected as a key: The institution was selected because it is the only government Institution that specializes in fisheries and natural Resources management. It generates information and offers opportunity to members of the community to appreciate the importance of fish farming.
Other observations: N/A

<p>Name of Institution: 4 Mzuzu University</p>
<p>Objective/ Mission Statement:</p> <p>To provide quality education, training, research, and complementary services to meet the technological, social and economic needs of individuals and communities in Malawi.</p>
<p>Field of Specialization:</p> <p>There are 7 faculties at Mzuzu university.</p> <ul style="list-style-type: none"> - Teaching and Research (and Outreach ad a third thrust) - Education - Environmental Sciences - Information and Communication Technology (ICT) - Health Sciences - Tourism and Hospitality Management - Security Studies
<p>Number of staff professional, clerical, technical, etc, Permanent/ temporary:</p> <p>Mzuzu University Library: Professionals (5 bachelors Degree; 1 Masters, 1 PhD</p>
<p>Branches, other sites</p> <ul style="list-style-type: none"> - Library and Learning Resources Centre - Information and Communication Technology (ICT) - Training and Testing Centre fro Renewable Technologies - Centre for Environmental Education, Training and Research - Centre for Security Studies
<p>Annual budget: (in local currency with Euro equivalent):</p> <ul style="list-style-type: none"> - Malawi Kwacha 1.2 Billion
<p>Source of funding, incl. main donors/sponsors:</p> <ul style="list-style-type: none"> - Government Subvention
<p>Programme/ projects undertaken:</p> <ul style="list-style-type: none"> - Forestry - Land Management - GIS & Remote Sensing - Renewable Energy Technologies - Security Studies - Information and Communications Technology - Information Science - Education - Biomedical Sciences.

<p>Name of Institution: 4 Mzuzu University</p>
<p>Target audience (plus number, actual or estimated):</p> <ul style="list-style-type: none"> - School Leavers through generic degree programs - Serving officers through upgrading Diploma & Degree programs - Community at large through open and distance learning - Community Day Secondary School Teachers through special upgrading programme to strengthen content and methodology (yearly for 3 months during University vacation)
<p>Extent of interaction with CTA-Spore Magazine, SDI, QAS, DORA, Seminars, consultants, publications, training, ...:</p> <ul style="list-style-type: none"> - None
<p>Extent of collaboration/ interaction with other institutions (name, nature):</p> <p>The college collaborates with the University of Malawi as one of the oldest Universities. It shares its research activities with various government ministries such Ministry of Education and Vocational Training.</p>
<p>National/ Sectoral policies impacting ICT use/information and communication within the institution:</p> <ul style="list-style-type: none"> - These are not available
<p>How information needs are currently met, and from where or by whom:</p> <ul style="list-style-type: none"> - The College has a well developed Library that is funded by Malawi Government. It has well trained staff including one PhD holder in library and Information studies. - The University is a member of the Malawi Library Consortium as such it participates in the joint subscription to electronic journals in various disciplines. - The University has a collection of CD-ROMs in various disciplines that are accessed through the Library. - Grey Literature in from local research Institutions such Chancellor College, Bunda College of Agriculture, Department of Agricultural Research and Services etc. and International bodies such as: CTA, FAO, NGOs reports Studies etc.
<p>Main information needs not satisfied(including types and format of information):</p> <p>N/A</p>
<p>Main problems faced in terms of information and communications management:</p> <ul style="list-style-type: none"> - Funding fro new equipment and accessories from donors - Further staff training in ICT – networking, bandwidth management - Manpower to manage - Lack of equipment and infrastructures

Name of Institution: 4 Mzuzu University
Why institution selected as a key: The Institution was selected because it is the only university that has introduced a faculty of Library and Information studies at various levels in addition to other traditional programs in the country. It has placed emphasis on Information and Communications programs at various levels.
Other observations: None

Name of Institution: 5 Mzuzu Agriculture Development Division
Objective/ Mission Statement: To increase agricultural productivity, food security and sustainable usage of natural resources in partnership with the private sector by encouraging investment, diversification and utilization of appropriate technologies in order to improve incomes and employment thereby contributing to poverty reduction in the nation
Field of Specialization: There are 5 departments: <ul style="list-style-type: none"> - Extension - Livestock Development - Crop Development - Irrigation Engineering - Land resources management
Number of staff professional, clerical, technical, etc, permanent/ temporary: <ul style="list-style-type: none"> - 124 (25 professionals, 99 technical and clerical staff, 1 volunteer)
Branches, other sites <ul style="list-style-type: none"> - Extension - Livestock - Crop - Irrigation - Food and Nutrition - Agribusiness - Agris – HIV/Aids, Gender - Agriculture Communication Branch
Annual budget: (in local currency with Euro equivalent): <ul style="list-style-type: none"> - Malawi Kwacha 49, 489, 302 Million
Source of funding, incl. main donors/sponsors: Government Subvention

<p>Name of Institution: 5 Mzuzu Agriculture Development Division</p>
<p>Programme/ projects undertaken:</p> <ul style="list-style-type: none"> - Field Extension - Agribusiness - Management - Accounting - ICT - Food and Nutrition - Gender Issues - Communication
<p>Target audience (plus number, actual or estimated):</p> <ul style="list-style-type: none"> - Small Holder farmers through meetings, workshops, field days, radio, TV, message developments, leaflets, posters, calendars, video graphing
<p>Extent of interaction with CTA-Spore Magazine, SDI, QAS, DORA, Seminars, consultants, publications, training:</p> <p>The institutional library is a recipient of Spore Magazine and other CTA publications that were seen in the Library during the visit. Some, of the staff indicated that they have participated in the QAS project and have received information from the local focal point.</p>
<p>Extent of collaboration/ interaction with other institutions (name , nature):</p> <ul style="list-style-type: none"> - The Librarian and the Manager indicated that they collaborate with the National Library Service in the acquisition of various types of books. - They also collaborate with Mzuzu University which is within the same locality. - NICE (National Initiative for Civic Education) was mentioned as a collaborating partner. - The members in their library were registered members of MALA – (Malawi Library Association) and CSFLIP – Civil Service Forum for Library Information and Personnel.
<p>National/ Sectoral policies impacting ICT use/information and communication within the institution:</p> <ul style="list-style-type: none"> - These are not available
<p>How information needs are currently met, and from where or by whom:</p> <p>The institution has got a library that is charged with the responsibility of procuring, processing, storing and dissemination of information. This Library collaborates with various institutions such CTA, FAO, UNDP, CIAT, etc to repackage information for use at the institution.</p>
<p>Main information needs not satisfied(including types and format of information):</p> <ul style="list-style-type: none"> - Journal articles in both electronic and hard copy - Books

Name of Institution: 5 Mzuzu Agriculture Development Division
Main problems faced in terms of information and communications management: <ul style="list-style-type: none"> - Shortage of trained staff and funds. Funds are very crucial in the acquisition of equipment and training of staff. The main problem was that the budget allocation was not adequate for the manager to carry out some of the essential developmental activities.
Why institution selected as a key: Mzuzu Agricultural Avelopment Division is the largest institution in the Northern Region of Malawi that represents a large number of stakeholders in Agriculture. It carters for a wider population in that region and boosts a wide variety of crops such as coffee, banana, cassava, rice, millet, maize, beans and tobacco.
Other observations: None

Name of Institution:6 Machinga Agriculture Development Division
Objective/ Mission Statement: Same as Ministry
Field of Specialization: <ul style="list-style-type: none"> - Agriculture Extension
Number of staff professional, clerical, technical, etc, Permanent/ temporary: <ul style="list-style-type: none"> - 1,400 (20 professionals, 58 technicians)
Branches, other sites It has 6 Departments namely: <ul style="list-style-type: none"> - Land resources Management - Crop Production - Animal Health - Extension - Irrigation - Planning & Evaluation
Annual budget: (in local currency with Euro equivalent): <ul style="list-style-type: none"> - Malawi Kwacha 53 Million for ORT
Source of funding, incl. main donors/sponsors: <ul style="list-style-type: none"> - Government Subvention

<p>Name of Institution:6 Machinga Agriculture Development Division</p>
<p>Programme/ projects undertaken:</p> <ul style="list-style-type: none"> - Agriculturalists - Extension - Planning - Environment - Animal Health - Irrigation
<p>Target audience (plus number, actual or estimated):</p> <ul style="list-style-type: none"> - Farmers - General Public
<p>Extent of interaction with CTA-Spore Magazine, SDI, QAS, DORA, Seminars, consultants, publications, training, ...:</p> <p>The Institution is a recipient of -Spore Magazine and other CTA Publications and these were available in their library at the time of the visit. The institution has participated in QAS and were quiet aware of its advantages.</p>
<p>Extent of collaboration/ interaction with other institutions (name , nature):</p> <ul style="list-style-type: none"> -NGO's on food security -Government Departments
<p>National/ Sectoral policies impacting ICT use/information and communication within the institution:</p> <ul style="list-style-type: none"> - These are not available
<p>How information needs are currently met, and from where or by whom:</p> <ul style="list-style-type: none"> - Own Library - Departments and Ministry of Agriculture - Books & periodicals - CTA Publications - Meeting with beneficiaries - International Research Institution (ICRISAT) - Agricultural fairs
<p>Main information needs not satisfied(including types and format of information):</p> <ul style="list-style-type: none"> - It is lack of access to electronic journals which is mostly compounded by a very poor information and communication Technology Infrastructure. It is almost impossible to access Electronic information in that environment. Similarly some Visual or Pictorial Information is very scarce.

Name of Institution:6 Machinga Agriculture Development Division
Main problems faced in terms of information and communications management: <ul style="list-style-type: none"> - No budget - Unavailability of books - Inadequate staff - No computer - Inadequate space
Why institution selected as a key: <p>The Institution was selected because it represents a large agriculture area in the northern region of the Country.</p>
Other observations: <p>None</p>

Name of Institution: 7 Chitedze Agricultural research Station
Objective/ Mission Statement: <p>To generate and disseminate applied or product oriented agricultural technologies and provide technical support and advisory services that can be directly utilized by the farming community and other stakeholders for increased agricultural productivity</p>
Field of Specialization: <ul style="list-style-type: none"> - Cereals, Horticulture, Grain Legumes, Oilseeds and Fibres, Livestock have and pasture Soils and Agricultural Engineering, Plant Protection and Quarantine Services, Technical Services.
Number of staff professional, clerical, technical, etc, Permanent/ temporary: <ul style="list-style-type: none"> - 869 (120 professionals, 489 technical staff and 260 temporary staff)
Branches, other sites: <ul style="list-style-type: none"> - Bvumbwe Agricultural Research Station in the Thyolo District - Kasinthula Agricultural Research Station in the Lower shire Valley - Mkondezi Agricultural Research Station in Salima - Makoka Agricultural Research Station in Zomba District - Mbawa Agricultural Research Station - Lifuwu Agricultural Research Station - Lunyangwa Agricultural Research Station - Baka Agricultural Research Station - Chitala Agricultural research Station
Annual budget: (in local currency with Euro equivalent): <ul style="list-style-type: none"> - Malawi Kwacha 166 Million

Name of Institution: 7 Chitedze Agricultural research Station
Source of funding, incl. main donors/sponsors: - Government Revenue Funds
Programme/ projects undertaken: -Research, data analysis, information dissemination.
Target audience (plus number, actual or estimated): - Extensionists, Farmers, Farmers Associations, NGO's
Extent of interaction with CTA-Spore Magazine, SDI, QAS, DORA, Seminars, consultants, publications, training,...: - Spore Magazine, - CTA Publications - DORA (Distribution of Reference Books on Agriculture) - SDI (Selective Dissemination of Information) - CD-ROM/Database subscriptions - Questions & Answer Services (QAS)
Extent of collaboration/ interaction with other institutions (name , nature): Maintains excellent linkages and works in collaboration and with its stakeholders and farmers as well as various Departments in the Ministry of Agriculture and Irrigation those responsible for crop production, extension services, animal health and industry, land resources and conservation, and irrigation. Other research institutions in the National Agricultural Research System (NARS) such as: Bunda College of Agriculture, Agricultural Policy Research Unit (APRU), Center for Social Research (CSR), National Aquaculture Centre (NAC), The Polytechnic, Chancellor College, National Herbarium and Botanical gardens (NHBG), Malawi Industrial Research and Technology Development Centre (MIRTDC), Tea Research Foundation (TRF), Forestry Research Institute of Malawi (FRIM), Agricultural Research and Extension Trust (ARET), National Research Council of Malawi (NRCM), and ILLOVO Sugar Company. Collaborative research programmes : International Agricultural Research Centres (IARCs). International Crops research Institute for the Semi-Arid Tropics (ICRISAT), the International Centre for Research in Agro forestry (ICRAF), the International Centre for Tropical Agriculture (CIAT)/, the Southern Africa Root Crops Research Network (SARRNET), International Institute for Tropical Agriculture (IITA). Others: International Potato Centre (CIP), the Asian Vegetables Research and Development Centre (AVRDC), the International Livestock Research Institute (IRLI), The International Institute for bananas and Plantains (INIBAP), the International Seed Testing Association (ISTA), CIMMYT, the SADC Plant Genetic Resources Centre (SPGRC), the International Plant Genetic Resources Institute (IPGRI), the Technical Centre for Agricultural and Rural Cooperation (CTA), the International Rice Research Institute (IRRI), SADC/SACCAR Southern Africa Agricultural Information Network (SAAINET), the World Agricultural Libraries Network (AGLINET), the Rockefeller Foundation, the UK Department for International Development (DFID), and the Food and Agricultural Organisation of the United Nations (FAO),The Rockefeller

Name of Institution: 7 Chitedze Agricultural research Station
Foundation, SAID, CTA.
National/ Sectoral policies impacting ICT use/information and communication within the institution: - These are not available
How information needs are currently met, and from where or by whom: DARS at Chitedze has the largest Agricultural Information Library outside the University system in Malawi. It boasts a large collection of Grey Literature, book and journals. It was once funded by the World Bank for a five year period and was the first to set up large computer databases in Malawi. - It interacts with a lot International Agricultural Research institutions with which it shares information. e.g. CIAT, IRRI, ICRAF, etc. - International Information Systems e.g. CABI, CTA, Internet
Main information needs not satisfied(including types and format of information): The institution is not a member of the Malawi Library Consortium as such as the staff at its research institutions does not have access to a wide variety of electronic journals. - Subscription to printed journals was abandoned as soon as the World Bank project was concluded therefore there is a shortage of information from printed journals.
Main problems faced in terms of information and communications management: - Funding for the acquisition of computers and other accessories. - Technical expertise - Hardware equipment - Availability of the above
Why institution selected as a key: It is the largest and oldest Agricultural Research Institution in Malawi. It controls activities in all the Agricultural Research Institution. It runs more research programmes than any other institution in Malawi. There are a lot of donor funded researches Activities at Chitedze and it is a well known station in the SADC region.
Other observations: N/A

<p>Name of Institution: 8 Natural Resources College</p>
<p>Objective/ Mission Statement:</p> <ul style="list-style-type: none"> - Providing practical client-oriented quality training, consultancy and research services in agriculture, environment and natural resources management to achieve food security and reduce poverty for sustainable social, economic development through strategic linkages with stakeholders, state of the art technologies, highly competent and motivated personnel and financially viable strategies.
<p>Field of Specialisation:</p> <ul style="list-style-type: none"> - Agriculture - Food and Nutrition and Livelihoods - Environment & Natural resources - Livestock (Health & Production) - Land Administration & management - Irrigation
<p>Number of staff professional, clerical, technical, etc, Permanent/ temporary:</p> <ul style="list-style-type: none"> - Professional (Teaching 17) - Professional (Other) 3 - Professional (Teaching Part-time) 30 - Technician (academic) 5 - Technician (Other) 5 - Clerical/Support (12)
<p>Branches, other sites:</p> <p>It several Departments as Follows:</p> <ul style="list-style-type: none"> - Irrigation - Rural Development - Environment - Crop Science - Animal Science - Land Management - Nutrition
<p>Annual budget: (in local currency with Euro equivalent):</p> <ul style="list-style-type: none"> - Malawi Kwacha 166 Million
<p>Source of funding, incl. main donors/sponsors:</p> <ul style="list-style-type: none"> - Tuition fees - Malawi Government
<p>Programme/ projects undertaken:</p> <ul style="list-style-type: none"> - Training – Irrigation, food & Nutrition - Farm Business Management - Environmental Management - College Farms - Accounts

Name of Institution: 8 Natural Resources College
Target audience (plus number, actual or estimated): <ul style="list-style-type: none"> - School Leavers to be trained as frontline technicians contact through advertisements - Farmers – through tailor – made sponsored courses.
Extent of interaction with CTA-Spore Magazine, SDI, QAS, DORA, Seminars, consultants, publications, training,...: <p>The Library at the NRC is a recipient of CTA Publications such as Spore magazine NRC participates in the DORA Project (Distribution of Reference Books on Agriculture) The staff of the Institution have benefited from -SDI (Selective Dissemination of Information) services that are run by CTA It also participates in the QAS (-Questions & Answer Service) Some of the staff have participated in CTA organized workshops and Seminars.</p>
Extent of collaboration/ interaction with other institutions (name , nature): <p>NRC collaborates with Bunda College of Agriculture in the University of Malawi because of there similar interests in Agricultural programmes. It also works closely with DARS at Chitedze and they both belong to the Ministry of Agricultural and Food Security. They also get book donations from the National Library Service. Which is the major distributor of books in Malawi?</p>
National/ Sectoral policies impacting ICT use/information and communication within the institution: <p>- These are not available</p>
How information needs are currently met, and from where or by whom: <p>Natural Resource College has its own library that has got sizeable collection of books and journals. Most of the collection is outdated and does not really represent modern thought. The Library is a member of the Malawi Library Association and hence it enjoys an inter library loan arrangement with the Libraries of the University of Malawi and Mzuni.</p>
Main information needs not satisfied(including types and format of information): <ul style="list-style-type: none"> - Production of pamphlets or teaching materials - Proposal writing information - Webpage Creation information
Main problems faced in terms of information and communications management: <ul style="list-style-type: none"> - Computers - Publishing Software - Training Course for Librarian - Inadequate computers
Why institution selected as a key:
Other observations: None

Name of Institution: 9 Blantyre Print & Publishing Company
Objective/ Mission Statement: - To be a leading supplier of all printing, publishing, packaging products, books, magazines and newspapers, in Malawi.
Field of Specialisation: - Newspapers - Toilet Tissue - Labels
Number of staff professional, clerical, technical, etc, Permanent/ temporary: - 220
Branches, other sites - Editorial - Accountants - Printers
Annual budget: (in local currency with Euro equivalent): - Malawi Kwacha 673 Million
Source of funding, incl. main donors/sponsors: - Bank loans
Programme/ projects undertaken: N/A
Target audience (plus number, actual or estimated): - General
Extent of interaction with CTA-Spore Magazine, SDI, QAS, DORA, Seminars, consultants, publications, training, ...: - No
Extent of collaboration/ interaction with other institutions (name , nature): - University - Ministry of Agriculture - Meetings - Research Institutions - Internet
National/ Sectoral policies impacting ICT use/information and communication within the institution: - These are not available

Name of Institution: 9 Blantyre Print & Publishing Company
How information needs are currently met, and from where or by whom: <ul style="list-style-type: none"> - Waste Utilization (Technical Information) - Market Data (Economic Information) - Management of Information within the Organization (Training needs)
Main information needs not satisfied(including types and format of information): <ul style="list-style-type: none"> - Journals Articles - Materials for Mass Circulation
Main problems faced in terms of information and communications management: <ul style="list-style-type: none"> - Lack of Computers
Why institution selected as a key:
Other observations:

Name of Institution: 10 Agricultural Research and Extension Trust
Objective/ Mission Statement: <ul style="list-style-type: none"> - ARET will develop and disseminate research technologies and information, and provide farmer training and technical services for sustainable production of tobacco and other high value crops to increase agricultural productivity.
Field of Specialisation: <ul style="list-style-type: none"> - Research Work - Extension Work - Formal Farmer Training - Technical and Advisory Services - Stakeholder Linkages
Number of staff professional, clerical, technical, etc., permanent/ temporary: <ul style="list-style-type: none"> - 263 (Executive Management 8) - Research and Technical Services (73) - Extension Training Services (2) - Media Services (3)
Branches, other sites: There are 4 departments at the institution: <ul style="list-style-type: none"> - Administration and Human Resources - Research and Technical Services - Extension and Specialist Services - Finance and Economic Planning Departments

Annual budget: (in local currency with Euro equivalent):
- Malawi Kwacha 304,146,284 Million
Source of funding, incl. main donors/sponsors:
- Levy on Tobacco Sales from farmers (Tobacco Levy) -
Programme/ projects undertaken: N/A
Target audience (plus number, actual or estimated):
- Small Scale Farmers: Field days, farmer training - Large Scale Farmers: visits, Field Days, Researchers
Extent of interaction with CTA-Spore Magazine, SDI, QAS, DORA, Seminars, consultants, publications, training,...
- Spore Magazine , - Question & Answer Service (QAS)
Extent of collaboration/ interaction with other institutions (name , nature):
- CORESTA – France - TRB – Tobacco Research Board – Zimbabwe - TCRI – Tobacco and Cotton Research Institute – South Africa
National/ Sectoral policies impacting ICT use/information and communication within the institution:
- These are not available
How information needs are currently met, and from where or by whom:
N/A
Main information needs not satisfied(including types and format of information):
N/A
Main problems faced in terms of information and communications management:
N/A
Why institution selected as a key:
Other observations:

Name of Institution: 11 Malawi College of Forestry and Wildlife
Objective/ Mission Statement: <ul style="list-style-type: none"> - To provide high quality training, research and consultancy to serve the needs of communities, groups, individuals and organizations in the effect and profitable sustainable management of their forest, trees and wildlife resources.
Field of Specialisation: <ul style="list-style-type: none"> - Forestry - Wildlife Management
Number of staff professional, clerical, technical, etc, Permanent/ temporary: <ul style="list-style-type: none"> - 245 permanent (12 professionals)
Branches, other sites <ul style="list-style-type: none"> - Forestry Department - Wildlife Department
Annual budget: (in local currency with Euro equivalent): <ul style="list-style-type: none"> - Malawi Kwacha 70 million
Source of funding, incl. main donors/sponsors: <ul style="list-style-type: none"> - Government funding
Programme/ projects undertaken: <ul style="list-style-type: none"> - Teaching (Training) - Facilitation
Target audience (plus number, actual or estimated): <ul style="list-style-type: none"> - Students - Communities
Extent of interaction with CTA-Spore Magazine, SDI, QAS, DORA, Seminars, consultants, publications, training, ...: <ul style="list-style-type: none"> - Spore Magazine - Question & Answer Service (QAS)
Extent of collaboration/ interaction with other institutions (name , nature): <ul style="list-style-type: none"> - Forestry Research Institute of Malawi - Bunda College of Agriculture - Mzuzu University - Natural resources College

Name of Institution: 11 Malawi College of Forestry and Wildlife
National/sectoral policies impacting ICT use/information and communication within the institution: - These are not available
How information needs are currently met, and from where or by whom: - Newspapers - Magazines - Journals - Radios
Main information needs not satisfied(including types and format of information): - How to search on Internet - How to service the LAN
Main problems faced in terms of information and communications management: - Number of gadgets fro collection of data and information - Trained staff on ICM
Why institution selected as a key:
Other observations:

Name of Institution: 12 Lunyangwa Agricultural Research Station
Objective/ Mission Statement: - To develop technologies and provide technical services for increased agricultural productivity by conducting demand driven research
Field of Specialisation: - Dairy research services - Horticultural research (coffee, root crops) - Technical services
Number of staff professional, clerical, technical, etc, Permanent/ temporary: - Professional 7 (PhD, Masters) - Clerical 9 - Volunteer 1 - Technical 40 - Temporary 30 -
Branches, other sites -

Name of Institution: 12 Lunyangwa Agricultural Research Station
Annual budget: (in local currency with Euro equivalent): MK20 Million Malawi Kwacha
Source of funding, incl. main donors/sponsors: Malawi Government
Programme/ projects undertaken:
Target audience (plus number, actual or estimated): Small holder farmers in crops and livestock
Extent of interaction with CTA-Spore Magazine, SDI, QAS, DORA, seminars, consultants, publications, training: <ul style="list-style-type: none"> - Recipient of Spore magazine - Participated in SDI - Recipients of CD-ROM databases
Extent of collaboration/ interaction with other institutions (name , nature): <ul style="list-style-type: none"> - Bunda College of Agriculture Library –SDI services and QAS - Mzuzu Agricultural Division- sharing research data and information - Mzuzu University sharing research data and information
National/sectoral policies impacting ICT use/information and communication within the institution: <ul style="list-style-type: none"> - These are not available
How information needs are currently met, and from where or by whom: <ul style="list-style-type: none"> - Information is provided by the DARS Library which is the main library for the whole Government Research network. - National Library service – provision of Books. - Mzuzu University - Non Government organization such as CTA, SARRNET, CIAT, ICRISAT etc.
Main information needs not satisfied(including types and format of information): Electronic information- This is due to the poor ICT and ICM capacity of the research centre
Main problems faced in terms of information and communications management: <ul style="list-style-type: none"> - Insufficient computers - Insufficient and poorly trained staff in ICT - No ICT infrastructure (Network at the research station.

Name of Institution: 12 Lunyangwa Agricultural Research Station
Why institution selected as a key:
Other observations: None

Name of Institution:13 National Publications Limited
Objective/ Mission Statement: - To promote and safeguard a democratic culture through objective reporting, free expression of opinion and critical database and assist in the nation building by offering innovative services that meet the needs of all stakeholder in Malawi and beyond by using advanced technology and expertise of dedicated result oriented staff.
Field of Specialization: - Gathering and disseminating news and information
Number of staff professional, clerical, technical, etc., permanent/ temporary: 200
Branches, other sites: None
Annual budget: (in local currency with Euro equivalent): N/A
Source of funding, incl. main donors/sponsors: - Circulation and advertisements
Programme/ projects undertaken: N/A
Target audience (plus number, actual or estimated): - Readers and advertisers through the newspapers and web site.
Extent of interaction with CTA-Spore Magazine, SDI, QAS, DORA, Seminars, consultants, publications, training, - None

Name of Institution:13 National Publications Limited
Extent of collaboration/ interaction with other institutions (name , nature): <ul style="list-style-type: none"> - Malawi News Agency (MANA) - Reuters
National/sectoral policies impacting ICT use/information and communication within the institution: <ul style="list-style-type: none"> -
How information needs are currently met, and from where or by whom: <ul style="list-style-type: none"> - Training in proposal writing - ICT training - Editing of manuscript - Training in gender
Main information needs not satisfied(including types and format of information): <ul style="list-style-type: none"> -
Main problems faced in terms of information and communications management: <ul style="list-style-type: none"> - No internet connection
Why institution selected as a key: <p>It is a selected as a key because it one of the Newspaper that feature agriculture information in some of its editions.</p>
Other observations: <p>None</p>

Name of Institution: 14 Radio Alinafe
Objective/ Mission Statement: <ul style="list-style-type: none"> - To be an effective instrument of establishing communities that will bring about justice, peace, love and unity in the light of the word of God.
Field of Specialization: <ul style="list-style-type: none"> - Broadcasting various programmes
Number of staff professional, clerical, technical, etc., permanent/ temporary: <ul style="list-style-type: none"> - 3 Announcers - 2 Technicians - 31 Volunteer Announcers -

Name of Institution: 14 Radio Alinafe
Branches, other sites: - None
Annual budget (in local currency with Euro equivalent): - MK 1,800,000
Source of funding, incl. main donors/sponsors: - Donations from well wishers - Sponsored Programmes
Programme/ projects undertaken: None
Target audience (plus number, actual or estimated): - Urban and Rural listeners living within the jurisdiction of Radio Alinafe i.e. the central region of Malawi (Lilongwe Diocese)
Extent of interaction with CTA-Spore Magazine, SDI, QAS, DORA, Seminars, consultants, publications, training, - None
Extent of collaboration/ interaction with other institutions (name , nature): - EWTN – Global Catholic Radio Network Programme – USA - SIGNIS – Rome - Radio Maria – Malawi
National/ Sectoral policies impacting ICT use/information and communication within the institution: - None
How information needs are currently met, and from where or by whom: - Malawi News Agency (Mana) - Browsing the Internet - Programme contributors - Clergy - Local Publications e.g. Newspapers
Main information needs not satisfied(including types and format of information): - Source of material in a hard copy - Development and funding programmes - Equipment and financial resources to keep programmes aired

Name of Institution: 14 Radio Alinafe
Main problems faced in terms of information and communications management: <ul style="list-style-type: none"> - Funding - Training on ICM
Why institution selected as a key:
Other observations: None

Name of Institution: 15 Malawi Television
Objective/ Mission Statement: <ul style="list-style-type: none"> - To adequately broadcast information, advance knowledge and understanding of relevant socio-economic issues through quality crosscutting programs that promote and preserve the cultural values of Malawi
Field of Specialization: <ul style="list-style-type: none"> - Informing, educating and entertaining
Number of staff professional, clerical, technical, etc., permanent/ temporary: <ul style="list-style-type: none"> - Professional 25 - Technical 24 - Clerical 20 - Support Staff 26 - Support staff temporary 10
Branches, other sites: N/A
Annual budget: (in local currency with Euro equivalent): <ul style="list-style-type: none"> - Not disclosed
Source of funding, incl. main donors/sponsors: <ul style="list-style-type: none"> - Government Subvention - Sales Proceeds (airtime, documentary programmes and projects)
Programme/ projects undertaken: N/A

Name of Institution: 15 Malawi Television
Target audience (plus number, actual or estimated): -Viewers from all walks of life (Youth – youth magazine programmers) (Adult – through viewer ship documentaries and programs) (Aged – where adults and aged people are lectured)
Extent of interaction with CTA-Spore Magazine, SDI, QAS, DORA, Seminars, consultants, publications, training: None
Extent of collaboration/ interaction with other institutions (name , nature): Malawi Television collaborates with many stakeholders in Malawi because it is the only television that is accessible to all Malawians free of charge: <ul style="list-style-type: none"> - Government and all parastatals - Private Sector - NGOs - Civil society - Academic institutions
National/ sectoral policies impacting ICT use/information and communication within the institution: - None
How information needs are currently met, and from where or by whom: <ul style="list-style-type: none"> - Information service - State enterprise - Media
Main information needs not satisfied(including types and format of information): - Research and development
Main problems faced in terms of information and communications management: <ul style="list-style-type: none"> - Library not properly organized, need to be automated - Training of staff in ICT and ICM - Limited budget resources for the acquisition of the right ICT equipment.
Why institution selected as a key: Malawi Television is the only Television that beams TV programmes to all Malawians. In order to capture the situation as far as TV programming is concerned it is important that the Television Malawi should feature in the analysis of needs of agriculture in Malawi.

Name of Institution: 15
Malawi Television

Other observations:

There are commercial Television stations that feature agriculture news from around the globe. There are times when Malawi is also featured on some of these major news channels.

Name of Institution: 16
Malawi Communication Regulatory Authority

Objective/ Mission Statement:

- To be a reputable communication regulator I Africa that promotes the adoption and diffusion of information and communication technologies (ICT's) in Malawi.
- To ensure that sound and TV broadcasting is made available
- To ensure effective management of radio spectator

Field of Specialization:

- Telecommunications
- Broadcasting
- Postal Services

Number of staff professional, clerical, technical, etc, Permanent/ temporary:

- 40

Branches, other sites:

It is the only communications regulatory authority in Malawi.

Annual budget: (in local currency with Euro equivalent):

Not disclosed

Source of funding, incl. main donors/sponsors:

- Licensing
- Government of Malawi

Programme/ projects undertaken:

N/A

Target audience (plus number, actual or estimated):

- Broadcasters
- Telecommunication operators
- Postal services operators

<p>Name of Institution: 16 Malawi Communication Regulatory Authority</p>
<p>Extent of interaction with CTA-Spore Magazine, SDI, QAS, DORA, seminars, consultants, publications, training:</p> <ul style="list-style-type: none"> - None
<p>Extent of collaboration/ interaction with other institutions (name , nature):</p> <p>As a communications regulator it collaborates with the following institutions that are the main players in the communications sector:</p> <ul style="list-style-type: none"> - Malawi Telecom Limited - Celtel - Telecom Networks Limited (TNM) - Burco Electronics - Globe Internet - Malawi Net - International Telecoms Union (ITU) - Telecoms Association of Southern Africa (TRASA)
<p>National/sectoral policies impacting ICT use/information and communication within the institution:</p> <ul style="list-style-type: none"> - These are not available
<p>How information needs are currently met, and from where or by whom: The regulatory authority acquires its information through the following stakeholders: Service Operators:</p> <ul style="list-style-type: none"> - Companies - Government - Non-government Organization - Universities/College
<p>Main information needs not satisfied (including types and format of information):</p> <p>N/A</p>
<p>Main problems faced in terms of information and communications management:</p> <ul style="list-style-type: none"> - Collecting late from service providers - Having meeting with customers is rather difficult - Questionnaires sent to customers does not come back on time
<p>Why institution selected as a key:</p> <p>MACRA is the communication regulatory Authority in Malawi that regulates all aspects of information and Communications. It was therefore proper to feature MACRA because it is the key to the improvement to the growth of the information industry in Malawi.</p>
<p>Other observations:</p> <p>None.</p>

<p>Name of Institution: 17 National Smallholder Farmers Association of Malawi</p>
<p>Objective/ Mission Statement:</p> <ul style="list-style-type: none"> - To improve the lives of smallholder farmers. Through a sustainable network of smallholders –owned business organization. NASFAM develops the commercial capacity of its members and delivers programs that enhance their productivity.
<p>Field of Specialization:</p> <ul style="list-style-type: none"> - Agribusiness Marketing - Inputs and Outputs - Association Development and Management - Policy Advocacy - Training
<p>Number of staff professional, clerical, technical, etc., permanent/ temporary:</p> <ul style="list-style-type: none"> - 425 staff, of which 12 are temporary
<p>Branches, other sites:</p> <ul style="list-style-type: none"> - NASFAM has offices in various parts of the
<p>Annual budget: (in local currency with Euro equivalent):</p> <ul style="list-style-type: none"> - MK 1 billion
<p>Source of funding, incl. main donors/sponsors:</p> <ul style="list-style-type: none"> - Commercial Trading - Government of Norway
<p>Programme/ projects undertaken:</p> <ul style="list-style-type: none"> - Bringing Farmers Financial Services - Opening Markets - Training farmers on collective marketing power and economies of scale. - Creating marketing centres where appropriate - Improving rural infrastructure - Encouraging members to get involved with self-help and food-for-work projects to build their own roads. - Seeking donors who can provide raw material for road repair and other rural facilities. Promoting adult literacy and numeracy classes. - NASFAM Advocacy through other Organizations

<p>Name of Institution: 17 National Smallholder Farmers Association of Malawi</p>
<p>Target audience (plus number, actual or estimated):</p> <ul style="list-style-type: none"> - Smallholder farmers
<p>Extent of interaction with CTA-Spore Magazine, SDI, QAS, DORA, seminars, consultants, publications, training, ...:</p> <p>None</p>
<p>Extent of collaboration/ interaction with other institutions (name , nature):</p> <p>In order to spread the word through advocacy and joint action NASFAM collaborates with other organisations and associations such as:</p> <ul style="list-style-type: none"> - Malawi Export Promotion Council - Malawi Chamber of Commerce and Industry - Malawi Investment Promotion Agency - Natural Resources College, Board of Trustees - Paprika Association of Malawi - Horticultural Development of Malawi - International Crops Research Institute for the Semi-Arid Tropic(ICRISAT) - MUSSCO - ARET - MASIP - Farmers Union of Malawi - Ministry of Agriculture - National Aids Commission <p>Internationally NASFAM collaborates with the following:</p> <ul style="list-style-type: none"> - Agribusiness Forum – Zambia - Tanzania Federation of Cooperatives - Uganda Cooperative Alliance - Agricultural Research & Extension Trust - ICRISAT etc.
<p>National/ sectoral policies impacting ICT use/information and communication within the institution:</p> <ul style="list-style-type: none"> - These are not available
<p>How information needs are currently met, and from where or by whom:</p> <ul style="list-style-type: none"> - Local: NASFAM members and other stakeholders - National : through other information systems such the University of Malawi Libraries and national Library service - Regional through the networks in which NASFAM participates.
<p>Main information needs not satisfied(including types and format of information):</p> <ul style="list-style-type: none"> - Market/Marketing Information including commodity demand and price - Business Management Information - Policy Analysis Methods

Name of Institution: 17 National Smallholder Farmers Association of Malawi
<ul style="list-style-type: none"> - Farm Business Management - Post Harvest Handling Technologies
<p>Main problems faced in terms of information and communications management:</p> <ul style="list-style-type: none"> - Limited copies of publications produced to limited resources. These are produced in English, Chichewa and Tumbuka - Lack of access to books and Journals In Agriculture - Limited accesses to training in ICM (current issue)
<p>Why institution selected as a key:</p> <p>NASFAM is a key private institution that is teaching farmers to treat farming as a business. Most of the farmers are accessing information on their products through NASFAM. It is one of the organizations that has revolutionalised farming in the rural areas of Malawi. It works in close collaboration with the Ministry of Agriculture and food Security plus a whole host of stakeholders.</p>
<p>Other observations:</p> <p>None</p>

ANNEX 4. LIST OF INSTITUTIONS / PERSONS INTERVIEWED

Name	Function	Institution	Telephone	E-mail &/Website
Mr. Gray Nyandule-Phiri	Director of Crops	Ministry of Agriculture and Food Security	(265) 1 789 033 (265) 1 789218	N/A
Professor J.J. Uta	Dean of the Faculty of Library and Communications Technology	Mzuzu University	(265) 1 333 722	juta@sdpn.org.mw
Mr. Chirwa	Technical Officer	Malawi College of Fisheries	(265) 1 594422	N/A
Ms Sengani Malunje	Principal	Malawi College of Forestry and Wildlife	(265) 1 580066	macofo@malawi.net
Mr. Edward Misanjo	Deputy Principal	Malawi College of Forestry and Wildlife	(265) 1 223 077 (265) 1 223 053	N/A
Mr. K.H.K. Mhlanga	Human Resource Officer	MZADD	(265) 1 332 066	N/A
M.L. Katsonga	Librarian	DARS	(265) 1 767 222	Agric-research@sdpn.org.mw http://www.Agric-research.gov.mw
Mr. Sam Botha	Director of Programmes and Planning	Natural Resources College	(265) 1 766644/007	nrc@malawi.net sbota@nrc.mw
Mr. Banda	Librarian	Natural Resources College	(265) 1 766644/007	
Gerald Meke	Principal Forestry Research Officer	Forestry Research Institute	(265) 1 522 866	gmeke@frim.org.mw
Tembo Chanyenga	Principal Research Officer	Forestry Research Institute	(265) 1 522 866	
Dr. Chilima	Director	Forestry Research Institute of Malawi	(265) 1 522 866	
Mr. Mussa	Programmes Manager	Machinga ADD	(265) 1542451	Pm-madd@malawi.net
Mrs Candida Nakhumwa		NASFAM	(265) 1 772 866/860	
Dr. Chilembwe	Director	Agricultural Research and Extension Trust	(265) 1 761 148	director@aret.org.mw www.aret.malawi.net

ANNEX 5. BIBLIOGRAPHY

Coordination Unit for the Rehabilitation of the Environment, 1997, 1997 Directory of Non-Governmental Organizations involved in Natural Resources Management Activities in Malawi.

Malawi Government, 2002, Malawi National Report to the World Summit on sustainable Development, Johannesburg, South Africa.

Malawi Government, Ministry of Natural Resources and Environmental Affairs, 2000, State of the Environment Report for Malawi 2000.

Malawi Telecommunications Limited, 2006, Malawi Telephone, Telex, Telefax and Yellow Pages Directory.

Ministry of Agriculture and Irrigation, Department of Agricultural Research and Extension 2001 Agricultural Research Strategic Plan: 2000-2010

National Statistics Office (1998), Malawi: An Atlas of Social Statistics,

National Statistical Office 2004 . Malawi Demographic and Health Survey 2004.

Republic of Malawi, 2005, National Plan of Action: For Orphans and Other Vulnerable children.

Reserve Bank of Malawi 2006. Financial and Economic Review vol.38, no. 4, 2006.

United Nations Systems in Malawi, 2002-2006, United Nations Development Assistance Framework: Malawi.

United Nations System in Malawi 2001. A Report on Common Country Assessment of Malawi.

United Nations System in Malawi: Common Country Assessment of Malawi, Lilongwe: The Development Centre, 2001.

World Bank 2001, Malawi Public Expenditures: Issues and Options, Africa Region, Macroeconomics.

World Bank, 2004, Malawi: Country Economic Memorandum: Policies for Accelerating Growth.

United Nations Systems in Malawi (2002), 2002-2006, United Nations Development Assistance Framework: Malawi.

United Nations System in Malawi (2001), Common Country Assessment of Malawi, Lilongwe: The Development Centre, 2001

United Nations System in Malawi (2001), A Report on Common Country Assessment of Malawi.

World Bank (2001), Malawi Public Expenditures: Issues and Options, Africa Region, Macroeconomics.

World Bank (2004), Malawi: Country Economic Memorandum: Policies for Accelerating Growth.

