



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

**Country Study: BOTSWANA**

**Final Report**

**Prepared by:**

**Prof. L. O. Aina**

**on behalf of the**

**Technical Centre for Agricultural and Rural Co-operation (CTA)**

**Project: 4-7-41-209-6/e**

**07-11-2007**

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## **Disclaimer**

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Finally I wish to thank the authorities of the University of Botswana for giving me permission to embark on this consultancy.

## List of Acronyms

ACP	Africa, Caribbean and Pacific
AGOA	African Growth and Opportunity Act
BAMB	Botswana Agricultural Marketing Board
BCA	Botswana College of Agriculture
BMC	Botswana Meat Commission
BOCONGO	Botswana Council of Non-Governmental Organizations
BOTEC	Botswana Technology Centre
BTA	Botswana Telecommunications Authority
BTC	Botswana Telecommunications
BTV	Botswana Television
BVI	Botswana Vaccine Institute
CABI	Commonwealth Agricultural Bureau International
CEDA	Citizen Entrepreneurial Development Agency
CSO	Central Statistics Office
CTA	Technical Centre for Agriculture and Rural Cooperation
CUIS	Community User Information Services
EU	European Union
EUSAFTA	European Union-Southern Africa Free Trade Agreement
FAO	Food and Agriculture Organization of the United Nations
GATT	General Agreement on Trade Tariffs
GDP	Gross Domestic Product
HIV/AIDS	Human Immunodeficiency Virus/Acquired Immune Deficiency Syndrome
ICM	Information and Communication Management
ICT	Information and Communications Technology
ISP	Internet Service Providers
NAMPAD	National Master Plan for Agricultural Development
NDB	National Development Bank
NFTRC	National Food Training Research Centre
QAS	Question and Answer Service
RIPCO	Rural Innovation and Production Company
SACU	Southern African Custom Union
SADC	Southern African Development Community
SDI	Selective Dissemination of Information
WTO	World Trade Organization

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# Executive Summary

## *Introduction*

The Technical Centre for Agricultural and Rural Co-operation (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 African Caribbean and Pacific (ACP) countries to produce, acquire, exchange and utilize information in this area. CTA's programmes are organized around three principal activities: providing an increasing range and quantity of information product 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 – 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.

## *Objectives of the Study*

The main objective of the study is to find out the status of ICM and ICT in agricultural organizations in Botswana. Specifically the study aims to achieve the following to:

- (i) ascertain the status of agricultural information services in Botswana;
- (ii) identify the ICM and ICT infrastructure in agricultural Organizations in Botswana;
- (iii) determine the capacity building needs of agricultural personnel in Botswana
- (iv) determine the strategies to be employed in improving agricultural information support in Botswana; and
- (v) identify the potential strategic partners for CTA activities and services in Botswana.

## *Methodology*

Two data collection methods were employed for this study. These are the desk study and field study. The desk study involved the collection of relevant data from local, national and international documentary sources. This was also supported by data from the Internet. An interview schedule constructed by CTA was used as a data collection tool for gathering data on agricultural information support, ICM and ICT status in 10 agricultural organizations in Botswana. This involved face-to-face interviews with personnel of the identified key agricultural institutions.

### *Expected results*

The expected results of the study are as follows;

- 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 areas 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 is expected therefore, to provide updated country profiles on the status agricultural information services and ICM/T in Botswana, which will allow CTA to make informed decisions as the type and mode of intervention as well as partner selection.

### *Findings*

Major findings of the study include the following:

- Agriculture constitutes the highest active labour force in Botswana, as the sector constitutes over 30 % of the country's labour force but the contribution of agriculture to the country's Gross Domestic Product (GDP) is negligible. It is about 2.4%.
- All the agricultural organizations in Botswana are very strong in ICT, as most of information support services are provided by the ICT units. The ICM support in most of the organizations is very weak. Only few organizations have a structured library/ information centre.
- Except for Botswana Agricultural College (BCA) which is a partner of CTA, the activities of CTA are less known by personnel in most of the organizations.
- Information is required by the organizations mainly in the areas of government and international regulations, farm problems, market data, social development issues and packaging.
- None of the organizations had an information policy but a few have ICT policy, which is still mainly in the draft form.
- The major information sources used by agricultural personnel are the Internet, the Ministry of Agriculture and their organizational libraries.
- Agricultural personnel in Botswana mentioned updateness of websites, net working, evaluation of projects, and newsletter and journal production as areas requiring capacity building.

### *Conclusions*

A large proportion of Botswana citizens are involved in agricultural farming. Unfortunately, because of drought, erratic weather and the fact that most of the land in Botswana is covered by Kalahari Desert, agricultural productivity is very low. Thus, the contribution to the Gross Domestic Product of the country is very insignificant. Live stock is the major area of farming in Botswana, crop production is very limited. Fishery and forestry are not well developed. In addition to all the natural problems of agricultural sector in Botswana, HIV/AIDS scourge has ravaged the country, which has considerably reduced the life expectancy of the citizens. All these factors contribute to the declining agricultural productivity in Botswana.

The agricultural sector has not attracted private sector investors because of the limited or non-returns in the agricultural sector, hence the complete dominance of government in this sector. Agriculture as a form of investment is not viable in Botswana because of the strong competition from South Africa. Agricultural products of South Africa are much cheaper than those produced in Botswana. This is because farming is practised on a large commercial scale in South Africa. Also the land is very fertile for crop production, and thus Botswana virtually depends on its food imports from South Africa. All these combine to make agriculture unattractive to the private sector in Botswana. Government agricultural policies are aimed at increasing agricultural productivity. These policies have provided strategies for agricultural institutions on how agricultural productivity could be increased and contribute substantially to the GDP, which at present is abysmal. As a result, government agencies are solely involved in the agricultural sector.

ICT infrastructure in Botswana is very good, hence all the organizations have a well-structured information technology unit. They are all connected to Internet facilities. They provide adequate funding for their ICT infrastructure and they have highly qualified staff in charge of the ICT departments. Unfortunately, ICM is rated very low, as most of the organizations did not have a library or an information unit.

Most of the organizations require local market data to enable them function adequately. This relates especially to organizations that depend mainly on farm products, such as Botswana Meat Commission (BMC), Botswana Agricultural Marketing Board (BAMB), National Development Bank (NDB) and Botswana Vaccine Institute (BVI).

CTA products and services are hardly used by agricultural organizations in Botswana. Spore magazine seems to be most popular information product used, and to a lesser extent, the QAS service.

Capacity building is required in the updateness of websites, evaluation of projects, budget appraisal skills and journal production

### *Recommendations*

Given the fact that most agricultural institutions have invested heavily on ICT, it is expected that most of them would use this infrastructure to effectively disseminate the information generated in their organizations to all agricultural information users in Botswana and beyond. It is therefore expected that agricultural extension workers, agricultural librarians and information specialists would regularly visit the websites of international organizations involved in agriculture, such as CTA, FAO and the commonwealth agricultural Bureau International (CABI) and download relevant information for their clientele.

It is recommended that CTA should form strategic partnerships with BCA, in establishing an agricultural information management centre, for the purpose of collecting agricultural data and information on Botswana, which will be disseminated to agricultural information stakeholders in Botswana. It is also expected that this centre would regularly hold workshops and training for all stakeholders in agricultural information on Botswana. CTA would assist the centre by supplying resources persons

It is also recommended that agricultural organizations that do not have a strong ICM support must create and fund it adequately so as provide regular information to their personnel. It is also recommended that CTA should assist in capacity building of agricultural personnel in Botswana, especially in the areas of agricultural information services management and ICT.

CTA, should through its SDI services, disseminate latest information on farm problems to BCA, BAMB and BVI, whose mandate deal directly with farmers. Also, BCA, through its extension staff, as well the extension officers in the Ministry of Agriculture, should be provided with extension advisory services on farm problems.

# 1. INTRODUCTION

1. 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.
2. 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.
3. CTA's activities are currently distributed among three operational programme departments: Information Products and Services; Communication Channels and Services; information and Communication Management Skills and Systems.
4. This study covers an overview of main agricultural services and actors existing in Botswana (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.

## 2. COUNTRY PROFILE

5. Botswana is a landlocked country, sharing borders with South Africa on the South and East, Namibia on the West; and Zambia and Zimbabwe on the North and North East respectively.
6. It covers an area of approximately 582 000 square kilometres. The population is estimated to be 1,639,830 people. The female population (51.1%) is more than the male population (48.9%).
7. The country is largely desert as a substantial part of the country is covered by the Kalahari desert. It has poor and erratic rainfall. There are two distinct seasons-summer (October/November to March and the Winter season between May and August.) The highest rainfall with high humidity is recorded during the summer period. Temperature could be as high as 40°C during the day and 25°C at night during this period. The winter season is usually dry and cold with annual; rainfall of about 457 mm.
8. Diamond is the main foreign exchange earner for the country. Botswana is the world's largest diamond producer.
9. At independence in 1966, agriculture constituted about 40% of its GDP, and provided employment for about 90% of the active population. As a result of diamond mining, the country's agriculture contribution to GDP declined considerably.
10. Botswana has one of the highest literacy rates in Africa. The literacy rate among the males is 80%, while female is 82%. Education is virtually free in Botswana, so also are health services.
11. Botswana is an African success story because of its multiparty democracy and sincere leadership. Elections are held every five years. In spite of Botswana's success both economically and politically, it is ravaged by HIV/AIDS. It is estimated that Botswana has the highest infection rate (37%) in the world after Swaziland. The Government has faced the problem frontally by providing anti-retroviral drugs readily to the infected patients. The purchase of the drugs has eaten considerably into the country's finances.
12. As a result of the HIV/AIDS pandemic, life expectancy has plummeted from an average of 52.7 years for men and 59.3 years for women in the 1980s to an average of 34 years today. This has resulted in a large number of orphans and the negative effects on the economy are considerable.
13. Even though Botswana is regarded as a rich country, the wealth has not penetrated down to the masses, as poverty is manifest in rural and urban areas of the country.
14. Setswana is the major native language spoken in the country. It constitutes 78.2%. Other minor native languages spoken are Ikalanga (7.9%) and Sekgalagad (2.8%).

## 2. 1 Agricultural, Fisheries, Forestry and Livestock

15. *Agriculture constitutes the largest labour force in Botswana. According to 2005/06 Labour Force Survey by the Central Statistics Office, 548, 594 people were employed in different sectors. Of this number, 169,331 or (30.9%) were involved in agriculture. More males (61.4%) than females (38.6%) were involved in agriculture. The same trend occurs among the youths.*
16. Agriculture in Botswana is completely dominated by government. The private sector has minimum involvement in agriculture because it is very unattractive. It is therefore not surprising that agricultural sector's contribution to the GDP of Botswana is very minimal. In spite of this, the government is actively involved because it provides food and employment to a greater majority of people living in the rural areas.
17. Given the importance of agriculture in Botswana, the Government has provided mechanisms for improving agricultural productivity. The Ministry of Agriculture has the responsibility for developing the livestock, arable agriculture, conservation and co-operative development sectors. Thus, several departments and divisions have been created within the Ministry to ensure that there are bumper harvests in the country. The departments include Crop Production and Forestry; Animal Health and Production; Integrated Agricultural Research; Cooperative Development and Agricultural Resources Board. Also created, are the support divisions of Agricultural Planning and Statistics and Agricultural Information and Public Relations. Other important arms of the Ministry are the National Tree Seed Centre, Denman Rural Training Centre and Livestock advisory centres.
18. Another major key player in the agriculture sector of Botswana is the Botswana College of Agriculture (BCA), which is affiliated to the University of Botswana as the Faculty of Agriculture. This College is responsible for the training of the agricultural sector at all levels in the country. It offers certificate, diploma, undergraduate and postgraduate programmes in agricultural education, agricultural engineering, animal health and production, forestry and range ecology and horticulture. Other major stakeholders include the National Veterinary Laboratory (NVL), Botswana Vaccine Institute (BVI), Botswana Meat Commission, National Development Bank, Botswana Agricultural Marketing Board (BMB), Botswana Livestock Development Corporation (BLDC), Botswana Technology Centre (BTC), Co-Operative Development Trusts (CDT) and farmers unions.
- 19 There are three types of land system in Botswana. These are tribal communal land, state land and freehold land. Tribal or communal land system caters for the majority of the citizens, it constitutes about 74% of the land available for agriculture. Land boards allocate this land to citizens in the rural areas. State land and protected areas are for urban areas, national parks and game reserves and constitutes about 23%. Freehold land can be found along the borders of Botswana with south Africa, Zambia and Zimbabwe. It constitutes about 3%.

20 Agriculture contributes 2.8% to GDP. Livestock is a major agricultural activity in Botswana. It is estimated that it is responsible for 80% of agriculture's contribution to GDP. Botswana Meat Commission sells most its beef products at the international market especially the European Union and South Africa.

### **2.1.1 Agriculture**

21. Because most of the country's area is covered by desert coupled with drought, the farm land is not substantial. Only 377,000 hectares of land is available for farmland, and of this, only 0.8% of the farmland is used for arable agriculture. Generally, farmers cultivate between 0.5 to 5 hectares.
22. Major crops produced in Botswana are: Sorghum, maize, millet, beans and pulses, sunflower, ground nuts

### **2.1.2 Fisheries**

23. The fishery sector is at an early stage of development. Botswana is an arid and semi-arid country, which is landlocked. In addition, most Botswana people are by tradition, non-fish eaters and non-fishermen. As a result the contribution of fishery to GDP and employment is very insignificant. According to Nermark and Mmopelwa (2000), even, where there are dams, people surrounding such dams are mainly interested in farming and livestock herding, which take up considerable time.

### **2.1.3 Forestry**

24. The forest area in Botswana occupies 455,000 hectares. The main forestry products are industrial round wood, wood fuel and wood charcoal. According to Crickmay et al (1996), it is not possible to establish the role of forestry in the GDP of Botswana, because as a policy, it is grouped together with agriculture. This is because forestry industries are small and very weak in Botswana. The Forestry Outlook Study for Africa (FOSA, 2001) –Botswana, revealed that Botswana forestry products cannot compete regionally. Also, it is stated that Botswana citizens are hardly involved in forestry, because traditionally, the Botswana society is an agrarian society, hence forestry is considered secondary.

### **2.1.4 Pastoralism/Livestock**

25. Livestock is the major activity of Botswana citizens. Commercial farmers could use 2,000 to 5,000 hectares for commercial livestock farming. The holdings for small stocks such as chickens, pigs and dairy could vary between 1 and 20 hectares. Ranches vary from 1,600 hectares to about 100,000 hectares. Tribal ranches and cattle posts use about 6,400 hectares (Burgess, 2006).
26. Livestock continues to dominate agriculture in Botswana. The population of cattle and goats is more than that of the citizens of the country. Livestock and animal products remain the main foreign exchange earner in agriculture. Meat and meat products, live animal and hides and skins are the main export products.

According to World Bank (2002), agriculture constitutes 2.5 % of the country's GDP but livestock constitutes 88.7% of the contribution of agriculture to GDP.

## **2.2 Brief Description of the Status of ICT infrastructure and Recent Developments in the Sector**

27. Botswana has one of best ICT infrastructure in Africa. It has advanced ICT technologies, such as Frame Relay, VSAT, Broadband, and Satellite. The average outgoing bandwidth is 14000Kbps. It has between 50 000 and 60 000 Internet users, over 20 000 dialup users. There are 11 information service providers (ISPs). It has over 500 websites.
- 28 Botswana National ICT Policy was developed in 2005. The national ICT policy is called *Maitlamo*, which provides a road map to drive social, economic, cultural and political transformation through the effective use of Information and Communications Technology (ICT). The overall objective of the Policy is to complement and build upon Botswana's Vision 2016 strategy by cultivating an enabling environment for the growth of the country's ICT industry, providing universal service and nationwide access to information and communication facilities, and positioning Botswana as a global competitor in the ICT sector. The other wide-ranging objectives of the policy include providing an efficient and cost-effective ICT infrastructure, establishing universal access to local and relevant information, instituting an unambiguous ICT legal framework, and enhancing government services and health care through the use of ICTs in order to engender a populace that is well prepared to participate, learn and innovate in an information and knowledge based society and an economy that is diversified and attractive to foreign investment.
29. The ICT policy aims to provide Government-On-Line; ThutoNet (development of ICT skills in children and young adults); e-Health Botswana; ICT and Economic Diversification and Connecting Botswana.
30. There is a high digital divide between the rural and urban areas. Thus, Internet usage is low, just about 5% of the population. Some of the factors responsible for this, include the relatively high cost of purchasing personal computers (PCs), the lack of electricity in many rural locations and even in certain areas in urban towns and cities, and the high telephone bills for Internet usage.
31. The primary telecommunications regulator in Botswana is the Botswana Telecommunications Authority (BTA). It provides licences to operators in the country. It has been the driving force in the development of telecommunications infrastructure in the country. There is a greater coverage of services and connections for the local population and also greater access to telecommunications services in the rural areas. The main provider of fixed telephones lines is the Botswana Telecommunications (BTC). Until the establishment of BTA, it had the monopoly for the provision of all public telecommunication services but with advent of BTA, the monopoly has been broken. BTA has licensed two mobile telephone companies. These are Mascom and Orange cellular companies.

32. The National Broadcasting Board established in 1999 is responsible for issuing broadcasting licenses. It exercises control over and supervises broadcasting activities, including the relaying of radio and TV programmes.

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

33. Because of the low contribution of agriculture to the GDP of Botswana, the private sector is not particularly involved in agricultural information provision. The NGOs and civil societies on the other hand, concentrate mainly on the dissemination of information on HIV/AIDS scourge, which is pandemic in Botswana, and to a lesser extent on women empowerment. Therefore, government institutions are responsible for the dissemination of agricultural information in Botswana. Scientific and technical information is generally generated at the Botswana College of Agriculture, University of Botswana and the Department of Agricultural Research, Ministry of agriculture. The two institutions are supported by well- equipped libraries and information centres. They provide researchers with CD-ROM and Internet databases on various aspects of agriculture to researchers in the two institutions.
34. Botswana College of Agriculture is also responsible for providing CTA's Question and Answer Service (QAS) to agricultural stakeholders in the country.
35. The Agricultural Information and Public Relations Division of the Ministry of Agriculture provides agricultural information to farmers, through extension media such as leaflets, agric facts, booklets, photographs, slides, radio programmes, notice boards, exhibitions, public address systems and conducting intensive educational campaigns throughout the country on a variety of agricultural topics. The division is responsible for agricultural broadcasts on Radio Botswana 1 and the Botswana Television (BTV). The division is able to provide this information through its seven sections, namely, graphics and printing, publications, campaigns, photography, audio-visual, broadcasting and carpentry and painting workshop. Private sector, NGOs and civil societies are hardly involved in agricultural information dissemination in Botswana
36. The Agricultural Information and Public Relations Division of The Ministry of Agriculture produces a monthly publication entitled "Agrinews" which is dedicated to inform educate and empower agricultural stakeholders in Botswana on a variety of topics on agriculture. It is distributed free.

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

37. There is no national information regulatory policy that covers all aspects of information in Botswana, although an ICT Policy was developed in 2005, which aims to provide a road map to drive social, economic, cultural and political transformation through the effective use of Information and Communications Technology (ICT).
38. There is also the Botswana Telecommunication Authority that is responsible for issuing broadcasting licenses to broadcasters, mobile telephone companies and ISPs. There is no policy for the establishment and maintenance of libraries and archives, although by the Acts of Parliament, there are the Botswana National

Library Service and Botswana National Archives and Records, which are mandated to develop libraries and archives in government institutions.. However, agricultural institutions maintained largely by government, have established agricultural libraries, information resource centres, etc, to support information provision to all agricultural information users, such as researchers, farmers, students, polity makers, etc.

### 3.2 Operational Aspects

39. Besides, the two main agricultural institutions (BCA and the Ministry of Agriculture) in Botswana that have functional agricultural libraries, majority of the 10 agricultural organizations interviewed have a very weak information infrastructure. About seven of the organizations interviewed have no functional libraries or information centres (BVI, Citizen Entrepreneurial Development Agency (CEDA), Botswana Council of Non-governmental Organizations (BOCONGO), Botswana Meat Commission (BMC), National Food Training Research Centre (NFTRC,) National Development Bank (NDB ) and Botswana Agricultural Marketing Board (BAMB). However, Internet continues to be the major information provider for agricultural information users in Botswana.

#### 3.2.1 Description of Agricultural Information Services

40. The umbrella body for non-governmental organizations in Botswana, BOCONGO, had no library or information unit. The public relations Officer is in charge of their publications. He holds a degree in Media studies. Even though the institution produces many publications such as directories, technical reports, annual reports, etc, there is no professional staff responsible for organising and storing the information products. The Botswana Agricultural Marketing Board also has no information unit. The marketing/public relations officers are responsible for its ICM. Other institutions that had no library/information unit were the National Development Bank (NDB), CEDA, BVI, and NFTRC. BMC has a library but without a qualified librarian. It is manned by the human resource officer. Old books are kept in the library. RIPCO, BCA and BOTECH have functional libraries/information centres with qualified librarians. Table 1 shows the status of agricultural organizations interviewed in Botswana. The agricultural services provided by the agricultural organizations include production of relevant databases, annual reports, technical reports and directories.

*Table 1: Status of ICM in Agricultural Organizations in Botswana*

<b>Status of ICM</b>	<b>Organizations</b>
A separate unit for library /information centre	BCA, RIPCO, Botswana Technology Centre (BOTECH) BMC
ICM with qualified staff	BCA, Rural Innovation and Production Company RIPCO, BOTECH
Production of databases, annual reports, technical reports ,etc	All the 10 Organizations

### **3.2.2 Information Sources Used and Information Service Providers**

41. The Internet, government ministries, libraries and information units of some of the organizations, local producers and the University of Botswana, were considered as the major information sources used and service providers.

### **3.2.3 Information Products and Services Provided**

42. All the organizations produce databases on various aspects of their mandate and annual reports. Some other products include directories and newsletters. Some of the services, especially at BCA include QAS, SDI and current lists of publications in the relevant fields. Some organizations such as BCA, NFTRC, and BMC provide outreach/extension services.

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

43. In most of the organizations interviewed, the number of staff involved in ICM is grossly inadequate. In many of the organizations, ICM staff are subsumed under the marketing unit. Examples of such include RIPCO, BAMB. Others are subsumed under the ICT unit such as CEDA, NFTRC, and NDB. In one instance like in the BMC, there is no ICM staff and the person who oversees the library is the Human Resources officer. While at BVI, reports and directories are kept in the General Managers office. BCA, RIPCO and BOTECH have professionally qualified ICM staff. There are six professional and eight paraprofessional ICM staff with varying years of experience at BCA. So also is BOTECH, where there are two professionally qualified ICM staff and a para professional staff. While there are three professionally qualified ICM staff in RIPCO, they are subsumed under the marketing section.

## **3.3 Interventions Supporting Information and Communications for Agriculture and Rural Development**

44. At the international level, the QAS provided by BCA under the aegis of CTA, is expected to accelerate the dissemination of agricultural information to agricultural stakeholders in Botswana. The Government of Botswana, through its National ICT policy, is expected to provide universal service and nationwide access to information and communication facilities throughout Botswana. It is expected that the use of ICTs by the general population would enhance information and knowledge based society.
45. The Government is about to launch a rural telecommunication policy, the objective of which, is to "bring rural communities into the main stream of society and provide telecommunications infrastructure for potential economic activity outside the major population centres" (Botswana. Ministry of Communications, Science and Technology, 2007).
46. The Botswana Technology Centre (BOTECH) has just launched a Community User Information System (CUIS) in three villages of Botswana (Letlhakeng, Hukuntsi and

Gumare). According to the Project Co-ordinator, Mazhani, (2006), the main objective was to “develop a computer network system that would provide e-mail and on-line information in rural areas with emphasis on collection, processing and distribution of locally generated information”. This project has rural community, health, agriculture, trade and industry information as its coverage. Some of the services performed by these centres include surfing the Internet, accessing locally generated information and information hosting for government, parastatals, individuals and local businesses.

## 4. INSTITUTIONAL NEEDS ANALYSIS

47. There is no doubt that most of the organizations had a variety of institutional needs, some of which are met internally and a large number through a number of external interventions.

### 4.1 Information Needs

48. Apart from information needs that are related to their mandate, many of the organizations expressed information needs in other areas. Table 2 shows the information needs in some of these organizations listed as bottlenecks to their efficient performance. It would be seen from the table that many of the organizations have many common information needs such as, social development issues; government and international regulations, farm problems and market data. Only one organization each out of the 10 organizations mentioned in instant information on members' organizations within its body, commodity profiles, HIV/AIDS, sociological aspects of food, cattle census in Botswana, etc. It should be noted that there was no major private sector organization or NGO that was involved in agricultural information provision in Botswana at the time this study was carried out.

*Table 2. Institutional Information needs*

Type of information needs	Organizations that expressed need in the area
Instant information on member organizations	BOCONGO
Building capacity of member Organizations to manage information	BOCONGO
Social development issues	BOCONGO, BCA, CEDA, NFTRC
Government and international regulations	BOCONGO, CEDA, NFTRC, BMC, RIPCO, NDB, BVI
Conference and meetings	BOCONGO, BCA, NFTRC
Management information decision support	BCA, NFTRC
Farm problems	BCA, BAMB, BMC, NDB, BVI, CEDA
Development and funding programmes	BCA, BOTECH, CEDA
Loan assistance	BAMB
Credit and micro credit	BAMB, CEDA
Market data	BAMB, BMC, RIPCO, NDB
Commodity profiles	BAMB
User needs/information on clients	BOTECH, CEDA, BVI
Patents	BOTECH, RIPCO
Monitoring and funding projects	CEDA
Science an technology information	NFTRC, BVI
Sociological aspects of food	NFTRC

Type of information needs	Organizations that expressed need in the area
Poverty reduction	NFTRC
HIV/AIDS	NFTRC
Research and development	NFTRC, BMC, RIPCO
Packaging	NFTRC, BMC, RIPCO, BVI
Equipment technology/sourcing	NFTRC, BMC
Cattle census in Botswana	BMC
Slaughter statistics in Botswana	BMC
Exchange rate	BMC
Technology tracking	RIPCO
Water utilisation	RIPCO
Finance	NDB, CEDA
Competitive advantage	NDB
Re-alignment of strategies	NDB
Trade fairs	BVI

Table 3 shows the top five information needs of the agricultural organizations interviewed. It is interesting that most of the organizations were interested in government and international regulations. This is not surprising given the fact most of the organizations are either government owned or organizations that depend considerably on government funding, as there is no major private organization involved in agricultural information provision or dissemination in Botswana. Farm problems constitute an important information need because some of the organizations interviewed depend mainly on farm products. Thus, any problems in the farms would adversely affect their organizations one way or the other.

*Table 3. Top Five Information Needs*

Type of Information	Proportion of organizations requesting for information in the area (%)
Government and international regulations	70
Farm problems	60
Market data	40
Social development issues	40
packaging	40

49. Most of the organizations used local and international sources when seeking information. The Internet was the most frequently consulted source. Those that have libraries /information centres also consulted the libraries frequently for information. The sources of information used are shown in table 4. The topmost information sources: Internet, libraries and the Ministry of agriculture are presented in table 5.

*Table 4. Sources of Information*

Source of information	Organizations that used the source
Internet	ALL
World Bank	BOCONGO
Government Departments	BOCONGO, BMC, NDB
University of Botswana	BOCONGO, BCA, CEDA

<b>Source of information</b>	<b>Organizations that used the source</b>
Ministry of Agriculture	BCA, BAMB, CEDA, NDB, BMC
Ministry of Local Government	BAMB
Local producers/millers	BAMB
International producers	BAMB
Radio/TV programmes	BAMB
Farmers magazines	BAMB
Organizational library/information centre/resource centre	BOCONOGO, BCA , BOTECH, RIPCO
Other libraries	NFTRC
Financial institutions	CEDA, BMC, NDB
BIDPA	CEDA, NDB
Local Enterprises Authority	CEDA
Trade journals	BMC
Companies/private sector	RIPCO
BCA	NDB
Ministry of Trade	NDB
International meetings	BVI

*Table 5. Top Three Information Sources*

<b>Source of Information</b>	<b>Proportion of organizations using the information source (%)</b>
Internet	100
Ministry of Agriculture	50
Organization's library	40

50. None of the organizations had information policies, but a few of the organizations indicated that they had an ICT policy but most of them indicated that the draft was still in draft form. Table 6 shows the state of ICM/ICT policies in the organizations interviewed. The fact that none of the organizations had ICM policy indicate the lack of importance attached to ICM by the organizations.

*Table 6. Status of ICM/ICT Policies*

<b>Source of Information</b>	<b>Proportion of Organizations using the information source</b>
ICM Policy only	None
ICT Policy only	BOTECH, CEDA, BMC, NDB
Both ICM/ICT policy	None

## **4.2 Capacity Building Needs**

51. All the organizations have a separate IT unit /department, except BOCONOGO where it is merged with the public relations unit. In all cases, they all have fully qualified IT staff who are highly experienced. The units/departments were adequately budgeted for. The IT units were well equipped with sufficient personal computers, hardware, software, local area networking, etc.

*Table 7. Areas for Capacity-building*

<b>Area</b>	<b>Organizations requiring capacity building</b>
Updateness of website	ALL
Networking	BOCONGO
WebCT Teaching	BCA
E-Learning	BCA, BOTECH
Telemedicine	BOTECH
Newsletter, journal production	NFTRC
Budget appraisal skills	NDB
Evaluation of projects	CEDA, NDB
Technology transfer	BVI

51. Many of the organizations demonstrated the need for capacity building. Most of the areas where capacity building was needed is mainly in ICT. Table 7 shows the areas in which the organizations interviewed would need capacity building. It is not surprising that all the organizations required skills in updating their websites, as most of the websites were not current. In the case of one of the organizations, the details about its website still reflected the office which they had vacated for more than one year.
52. Most of the organizations indicated that they did not lack resources as the budgets for ICT infrastructure were adequately met by government. Thus, equipment such as personal computers, local area network, telephones, adequate bandwidth, hardware and software were readily available. This should be expected given the fact that most of the organizations are well-funded by government. Those that are self-financing have enough resources to purchase any equipment they needed. Only few organizations indicated some resources they would need to enable them achieve their goals. The most prominent being Internet connectivity speed, increase in bandwidth, multimedia, and some specific application software

## 5. CONCLUSIONS AND RECOMENDATIONS

### 5.1 Conclusions

53. A large proportion of Botswana citizens are involved in agricultural farming. Unfortunately, because of drought, erratic weather, and the fact that most of the land in Botswana is covered by Kalahari Desert, agricultural productivity is very low. The contribution of agriculture to the Gross Domestic Product of the country is very insignificant. Live stock is the major area of farming in Botswana, crop production is very limited. Fishery and Forestry are not well developed. In addition to all the natural problems of agricultural sector in Botswana, HIV/AIDS scourge has ravaged the country, which has considerably reduced the life expectancy of the citizens. All these contribute to the declining agricultural productivity in Botswana.
54. The agricultural sector has not attracted private sector investors because of the limited or non-returns in the agricultural sector, hence the complete dominance of government in this sector. Agriculture as a form of investment is not viable in Botswana because of the strong competition from South Africa. Agricultural products of South Africa are much cheaper than those produced in Botswana. This is because farming is practised on a large commercial scale in South Africa, Also the land is very fertile for crop production, and thus Botswana virtually depends on its food imports from South Africa. All these combine to make agriculture unattractive to the private sector in Botswana.
55. Government agricultural polices are aimed at increasing agricultural productivity. These policies have provided strategies for agricultural institutions on how agricultural productivity could be increased and contribute substantially to the GDP, which at present is abysmal. As a result, government agencies are solely involved in the agricultural sector. These agencies have utilised the good ICT infrastructure in the country to provide and disseminate agricultural information. ICT infrastructure in Botswana is very good hence all the organizations have a well-structured information technology unit. They are all connected to Internet facilities. They provide adequate funding for their ICT infrastructure and they have highly qualified staff in charge of the ICT departments. Unfortunately, ICM is rated very low as most of the organizations did not have a library or an information unit.
56. Most of the organizations require local market data to enable their organizations function adequately. This relates especially to organizations that depend mainly on farm products, such as Botswana Meat Commission (BMC), Botswana Agricultural Marketing Board (BAMB), National Development Bank (NDB) and Botswana Vaccine Institute (BVI). The main information providers for agricultural information users are: the Internet, the Ministry of Agriculture, other government ministries and departments, and the agricultural libraries/information units of the various agricultural institutions.

### **5.1.1 Information Needs**

57. As shown in table 3 above, the majority of the organizations needed information on government and international regulations. This is expected because some of the organizations interviewed are involved in agricultural products. For example, BAMB sells grains produced by farmers in Botswana internationally, while BMC sells animal and animal products both locally and internationally. BVI, on the other hand, is responsible for producing animal vaccines which are sold locally and internationally. In addition CEDA and NDB are government organizations created to support agricultural financing in Botswana.
58. All the organizations interviewed are connected with farmers, one way or the other, thus, it is expected therefore that farm problems would be a top priority information need, especially BVI, BMC and BAMB, which are expected to monitor farm problems as it may have grave consequences on their fortunes, if such problems are not addressed. BCA is the main training organization for agriculture at all levels in Botswana. It engages in agricultural research, so it is also interested in farm problems in order to improve agricultural productivity in Botswana. Also, financial houses, such as NDB and CEDA need to monitor farm problems.
59. Since some of the organizations interviewed are involved in commercial aspect of agriculture, it is not surprising that market data was a prominent information need mentioned by BAMB, BMC, RIPCO and NDB. RIPCO is involved in designing agricultural implements which it sells to the inhabitants of rural communities.
60. Social development issues were also considered important information need since agriculture cannot be divorced from social issues. For example, the financial institutions such as NDB and CEDA, which provide loans to farmers, must monitor social development issues in the country. Also, BMC which provides seed money to livestock farmers for livestock production, needs to monitor social development issues.
61. Some of the organizations interviewed are involved in manufacturing products which they need to package. Thus, BMC, BVI and RIPCO require information on improved packaging.

### **5.1.2 Capacity Building Needs**

62. There is no doubt that all the agricultural organizations need capacity building in ICT, especially website design. All the organizations outsourced the design and construction of their websites. Because they lacked the capacity to update their websites, all the organizations were not maintaining their websites. Thus, they were not reliable as many of the websites contained outdated information.
63. Producing information products, such as journals, newsletters, etc. is another major area that would require training. Most of these products are outsourced, even though they have the required equipment to produce these products internally.
64. It is obvious that most of the organizations lacked ICM support. If they are well disposed to having libraries /information units, they need to train staff that would

provide ICM support. For example, organizations that use their public relations, marketing and IT units to provide information support need to have professionally trained staff on how to source information and disseminate information within the organizations.

### **5.1.3 Potential Partners and Beneficiaries**

65. Many of the organizations surveyed did not make use of CTA products and services. Even QAS, that is located in BCA, was hardly known by researchers in the organizations surveyed. *Spore* seems to be a popular product of CTA that is well known. CTA needs to provide publicity on its products and services amongst agricultural institutions in Botswana. This could be achieved, if BCA, the focal centre of QAS, is made as a distribution centre for disseminating information about CTA products and services among agricultural institutions in Botswana.
66. CTA should supply organizations, such as BMC, RIPCO, CEDA, and NDB with current market data through its SDI service. Also, researchers, scientists and policy makers should be regularly supplied with list of abstracts on topics that have been identified by agricultural organizations. CD-ROM data bases on various topics on agriculture should be supplied to agricultural researchers in organizations, such as BCA and NFTRC
67. BCA is the only organization that is currently a partner of CTA, because it is the national focal point for the Question and Answer Service in Botswana. The other agricultural organizations do not have any formal relationship with CTA. Although some of the staff members have been involved with CTA, in one capacity or the other, but there is no doubt that many of the organizations could be potential partners of CTA, especially in the areas of providing relevant agricultural databases, to agricultural organizations (BCA and NFTRC as potential partners) and the training of agricultural information specialists in data collection and information gathering (BCA and the Ministry of Agriculture as potential partners).
68. CTA has to make a formal link with many of the agricultural organizations surveyed in Botswana; there is therefore a need for CTA to sign a Memorandum of Understanding with some of the organizations identified in this study, as potential partners.

## **5.2 Recommendations**

69. Given the fact that most agricultural institutions have invested heavily on ICT, it is expected that most of them would use this infrastructure to effectively disseminate the information generated in their organizations to all agricultural information users in Botswana and beyond. It is therefore recommended that agricultural extension workers, agricultural librarians and information specialists should regularly visit the websites of international organizations involved in agriculture, such as CTA, FAO and the Commonwealth Agricultural Bureau International (CABI) and download relevant information for their clientele.

70. It is also recommended that agricultural organizations that do not have a strong ICM support must fund it adequately so as provide regular information to their personnel. It is also recommended that CTA should assist in capacity building of agricultural personnel in Botswana, especially in the areas of agricultural information services management and ICT.
71. Finally, CTA should facilitate the creation of an agricultural information management centre within BCA to carry out all the intervention activities of CTA in Botswana. This is because BCA is the only agricultural organization in Botswana, that is involved in teaching, research and extension service in agriculture. It is therefore best placed to manage agricultural information in Botswana.

### **5.2.1 Information Needs**

72. The Question and Answer Service focal point in Botswana needs to be publicised widely to all agricultural organizations in Botswana, as many of them could source information from the service. At the moment, majority of the organizations expressed ignorance about the existence of the service. Yet most of the information needs expressed by the organizations surveyed could be met by the QAS service.
73. There is a need for all agricultural organizations in Botswana to strengthen their ICM facilities especially by establishing library/information centres, as most of the organizations surveyed lacked libraries and information centres. It is expected that such centres would be provided with agricultural databases.

### **5.2.2 Capacity Building Needs**

74. CTA should provide regular training programmes for agricultural information specialists, ICT personnel, etc, on different aspects of agricultural Information management and ICT, especially areas of website design- construction and updating.
75. Publishing is a major aspect of information dissemination. Thus CTA in partnership with local agricultural organizations, such as BCA, Ministry of Agriculture and NFTRC should provide training on newsletter production and management of journal publishing. The Ministry of Agriculture regularly produces newsletters on agricultural information. This could be strengthened by CTA through assisting, in the dissemination of the newsletter to agricultural organizations in the ACP countries.

### **5.2.3 Potential Partners and Beneficiaries**

76. Because of climatic conditions and severe drought, Botswana agriculture has not been able to reach the level the government envisaged. However the livestock sector is performing well but not to the optimum. For example, Botswana Meat Commission has not been able to meet the quota on the number of cattle to be slaughtered every day because there are not enough cattle. The organization has closed down its abattoir in Maun. In spite of many incentives by BMC, the quota is yet to be met. CTA can be a strategic partner with BMC, by encouraging farmers in Botswana to produce enough cattle by providing adequate information to farmers through its Question and Answer service. This can also be strengthened if telecentres that are

proposed to be established in several rural communities by the Botswana government, are supported by CTA, through the provision of films, radio broadcasts and TV programmes, that could be projected on a large screen.

77. Also CTA can partner with BOTECH in its Community User Information Services project, by assisting BOTECH in establishing these services in several more rural communities. This project would co-operate with the QAS at BCA. The farmers could use these centres to telephone QAS on any agricultural issue.
78. CTA already has a partnership with BCA in the area of QAS and supply of CD-ROMs. This can be further strengthened by assisting BCA to organise workshops and training programmes on how agricultural information could be sought and obtained through CTA or other sources.
79. There is a need for a journal in Botswana for the purpose of disseminating latest research in Botswana. This could be housed at BCA. CTA could assist in the capacity building of the editorial and marketing staff of the journal. At the moment, there is no agricultural scholarly journal in Botswana. There is a need to provide training on technical editing, marketing of journals, and subscription management.
80. Market data and local information are very useful to BAMB, CEDA, BMC and NDB. They depend so much on this type of information. Unfortunately, this is done haphazardly by the individual organizations. Thus, there is a need to have a central database on agricultural market information in Botswana. CTA could partner the Ministry of Agriculture on how to collect data, create and maintain this database.
81. BVI is the main animal vaccine producer in Southern Africa. CTA could assist BVI in the capacity building of packagers in BVI so that better packaging of BVI products could be achieved and thereby enhance the supply of BVI products to potential clients all over the world.
82. Newsletters production and journal publishing are important in agricultural information dissemination. CTA could assist BCA in organising training workshops and programmes on the efficient production of agricultural newsletters.
83. CTA could partner the Ministry of Agriculture and Radio Botswana, by making available to these organizations; radio broadcasts agricultural problems and topics produced by CTA to rural areas. These organizations, in turn would disseminate the broadcasts to farmers in Botswana.

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

84. There is no doubt that there are problems with agricultural information provision in Botswana; hence many of the information needs of agricultural information users are largely unmet. In addition, many of the agricultural information personnel in Botswana lack skills that would promote effective and efficient agricultural information provision. Specifically, the following factors could be attributed to the inadequate agricultural information problems in Botswana:
- (a) Inadequate trained agricultural information specialists in the gathering of relevant agricultural information and data;
  - (b) Lack of skills in web design, creation and maintenance; hence their websites are out of date;
  - (c) Inadequate skills in newsletter and journal production and management;
  - (d) Lack of awareness of major CTA agricultural products and services, such as QAS and distribution of agricultural databases ,and selective dissemination of information (SDI) service.
85. In order to ameliorate the problems identified, CTA needs to assist agricultural institutions in Botswana by providing a three year action plan 2008-2010.
86. BCA is the only agricultural organization in Botswana that is involved in the training of agricultural personnel at all levels, thus it is expected to play a prominent role in agricultural information management in Botswana. There is therefore a need for CTA to strengthen its collaboration with BCA, by expanding its scope of co-operation. It should not be restricted only to QAS service, but making BCA a centre for capacity building of agricultural information personnel in Botswana, and using it as a link with other agricultural institutions in Botswana for disseminating information on rural farm problems, international market data, etc.
87. In order to fulfil the objectives outlined in (86), an agricultural information management centre should be created within BCA. This centre should be funded annually by CTA for three years, thereafter; the management of BCA will take it over, with the active support of government. In 2008, mechanism for the creation of the centre would be put in place; the requirements needed for the centre to perform will be discussed with CTA, BCA and other agricultural stakeholders in Botswana. Therefore, a consultative meeting would be convened in the first quarter of 2008. The centre, having been established, would have a complement staff of two, an ICM specialist and ICT specialist. CTA would be responsible for the salaries of the staff in the first three years (2008-2010). The centre would be equipped with two personal computers with fast access to the Internet, photocopiers, fax and scanning machines, fixed and mobile telephones and local area network. This would be provided for by CTA.
88. This centre would manage QAS, selective dissemination of information to all the agricultural stakeholders in Botswana, data collection, creation and maintenance of database on market data in Botswana. The centre would liaise with the Central

Statistics Office, Botswana, and other relevant stakeholders that collect agricultural data. This would be made available to all agricultural stakeholders in Botswana on a regular basis. The centre would be responsible for disseminating information on research in Botswana, government and international regulations that affect agriculture. Social development issues would also be collated and made available to agricultural stakeholders. The centre would liaise with print and electronic media, on reporting regularly agricultural information in the newspapers, radio and television programmes. The centre would liaise with the Ministry of Agriculture in providing posters, audio and video cassettes on farm problems and solutions to farmers throughout Botswana in their native languages.

89. The centre would assist BMC, CEDA, and NDB by providing them online information on agricultural market data; especially on international exports that would provide greater efficiencies to these organizations. The centre would be responsible for obtaining agricultural best practices, elsewhere in the world from the Internet, and make them available to the Ministry of Agriculture, on how such practices could be utilised by farmers in Botswana.
90. CTA through its SDI services, should provide list of abstracts and bibliographies to researchers, scientists, and policy makers based on identified areas of needs of these organizations. CD-ROM databases on various topics should be supplied to agricultural research /training organizations such as BCA, NFTRC and BVI.
91. The staff of the centre would on a regular basis, visit agricultural organizations in Botswana, to identify areas where they need capacity building. The centre would mount regular training and workshops on these areas for agricultural staff and other agricultural stake holders in Botswana. CTA would provide funding for organising such workshops
92. BMC is involved in a specialised aspect of marketing livestock and livestock products, while RIIPCO specialises in rural development. It is expected that CTA would assist these organizations in providing capacity building for staff of these organizations in these specific areas. BOCONGO, the umbrella non-governmental organization in Botswana, could be assisted by CTA, through providing training on how NGOS could be better organised to include more NGOS in agriculture. Also, there is the need to assist BOCONGO in providing training to its officers, in order for BOCONGO to assist NGOs in providing agricultural information to farmers in Botswana.
93. This centre shall provide all the logistics needed to produce an agricultural scholarly journal in Botswana. It shall serve as the editorial headquarters of the journal. It shall liaise with the editorial board of the journal. It shall be responsible for promoting and marketing the journal. This centre shall be responsible for promoting CTA services and products throughout Botswana. . The centre would be expected to provide an annual report of its activities to CTA and other stakeholders.

## **ANNEXES**

## **ANNEX 1. TERMS OF REFERENCE**

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

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

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

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

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

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

### **2. Background**

Since 2003, CTA has been systematically conducting needs assessment studies across the Pacific, Caribbean and Africa regions – the regions it has been mandated to serve. These studies have been in direct response to calls for CTA, in various evaluations of its products, services and programmes, to be more strategic in its choice regarding the setting of its own agenda and reacting to demand. In putting together its Strategic Plan

and Framework for Action 2001 – 2005, CTA took a pragmatic view and opted to develop a strategy combining the benefits of both approaches, whereby the need to address the expressed demands of its stakeholders and the potential long-term advantages of developing programmes that address future needs were combined.

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

### **3. Main issues**

CTA works primarily through intermediary public and private partners (research centres, extension services, libraries, NGOs, farmers' organizations, regional organizations and networks,) to promote agriculture and rural development. Under the new strategic plan, the Organizations 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 ICTs, generating and managing information and developing their own ICM strategies. The identification of appropriate partners is therefore of primordial importance, whilst bearing in mind issues such as geographical coverage, decentralisation, regionalisation, thematic orientation and transparent and objective criteria and procedures for partner selection.

### **4. Overall Objective**

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

### **5. Scope of the study**

The study will focus on:

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

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

## 6. Expected results

The expected results of the study are as follow:

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

The study should therefore also provide updated country profiles on the status agricultural information services, the status of ICM/T in the country, which will allow CTA to make informed decisions re type and mode of intervention as well as partner selection. This will be summarised in one (1) main report per country not exceeding 30 pages excluding annexes (cf. section 8 below).

## 7. Methodology

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

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

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

## 8. Reporting

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

### **Main report**

*Acknowledgements*

*List of Acronyms*

*Executive summary*

### **1. Introduction**

### **2. Country profile**

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

2.1.1 Agriculture

2.1.2 Fisheries

2.1.3 Forestry

2.1.4 Pastoralism / Livestock (where applicable)

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

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

#### *3.1 Institutional, regulatory and policy framework*

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

#### *3.2 Operational aspects*

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

3.2.2 Information products and services provided

3.2.3 Information and communication management capacity

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

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

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

3.4.1 Information needs

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

### **4. Conclusions and recommendations**

#### 4.1 Conclusions

4.1.1 Information Needs

4.1.2 Capacity Building Needs

4.1.3 Potential Strategic Partners

#### 4.2 Recommendations

4.2.1 Capacity Building Needs

4.2.2 Information Needs

4.2.3. Potential Strategic Partner Institutions

### **5. Proposed CTA Intervention Strategy and Action Plan**

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

### **Annexes**

#### **1. Terms of reference**

#### **2. Country profile**

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

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

2.1.2 Farmed land, forests, fishing areas

2.1.3 Agricultural systems

2.1.4 Agriculture in the economy (percentage GDP)

2.1.5 Main agricultural produce and secondary products

2.1.6 Main export markets

2.1.7 Trade agreements that include agriculture

- 2.1.8 Sectoral policy related to agriculture, fisheries and forests
- 2.2 *Socio-economic profile (from available documentation)*
  - 2.2.1 Total active population, demographic breakdown
  - 2.2.2 Literacy level and languages
  - 2.2.3 Access to services (health, schools, electricity)
  - 2.2.4 Rural urban drift
- 2.3 *Media and telecommunications (update / check)*
  - 2.3.1 Newspapers, periodicals, magazines, radio stations, television channels,
  - 2.3.2 Telecommunication services (fixed, mobile, etc.)
  - 2.3.3 Computers and Internet access
- 3. Profile of institutions**
  - 3.1 *List of all main institutions involved in agriculture and rural development activities, including private sector and civil society Organizations, with name, contact details, type and role of institution*
  - 3.2 *Select list of key institutions involved in agriculture and rural development, with extensive data and information on the institution, the problems faced and why it is considered a key actor*

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

#### **5. Bibliography**

#### **9. Timing**

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

#### **10. Expertise needed**

The **national consultant** should have a university degree or equivalent by experience. In addition, he/she should have at least 10 years experience in field of agriculture, rural development or social / economic sciences. He/she must have in-depth knowledge of the agricultural sector in his/her country and be able to identify key players and institutions / Organizations 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, have demonstrated experience in coordinating studies with several consultants and in producing synthesis reports.

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

#### **11. Implementation schedule (CTA)**

- Preparation/Finalisation of ToR; Identification/ short-listing of (potential) consultants; Call for offers: July – October 2006;

- Selection of consultants & contractual arrangements: October – November 2006
- Briefing: January 2007
- Start date of contract: 11 December 2006
- Contract implementation period: 11 December 2006 – 31 July 2007
- End date of contract: 31 July 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

## **13. Definition of roles and responsibilities**

### ***Overall Coordinator***

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

### ***Local Consultants***

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

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

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

- Based on comments received from Overall Coordinator, revise country reports and send draft final report to CTA within the specified timeframe
- Finalise country reports based on comments and observations received from CTA and send final report back to CTA

***Role of CTA***

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

## ANNEX 2. COUNTRY PROFILE- BOTSWANA

### 2.1 General Agricultural Profile

Agriculture is the major occupation of inhabitants of Botswana. The agricultural labour force constitutes over 30 % of the active labour force in Botswana. It is the main occupation of rural inhabitants. Although it provides labour to a large number of people, its contribution to GDP is negligible.

#### 2.1.1 Size of Agricultural Population (male/female)

Majority of farmers in Botswana are male. According to CSO 2005/2006 Labour Force Survey Results, 61.4% of the farmers are male. Among the youths, the proportion is even higher according to table 2.

Table 1: Agricultural Population in Botswana 2006

Sex	Number	% of Total
Male	103,924	61.4
Female	65,407	38.6
Total	169,331	100.0

Source: Preliminary 2005/2006 Labour Force Survey Results

Table 2: Youth Agricultural Population in Botswana 2006 (7-17 years)

Sex	Number	% of Total
Male	17503	69.8
Female	7589	30.2
Total	25093	100.0

Source: Central Statistics Office. Preliminary 2005/2006 Labour Force Survey Results

#### 2.1.2 Farmed Land, Forests and Fishing Areas

Because of the climatic conditions in Botswana which are not favourable to arable farming, the land available for arable farming is very limited as shown in table 3 but there is vast land for livestock farming. Fishing is almost non-existent in Botswana. Only a few people are engaged in fishing. Forestry also occupies a substantial proportion of the land (Tables 3-5).

Table 3: Land Areas for Agriculture

Type of Agriculture	No. of Hectares
Farmed land	377 000ha
Pasture	2,560000ha
Forest	455,000ha
Fishing	-

FAO Statistical Yearbook, 2005

Table 4: Forest Area Statistics

Extent of forest and other wooded land			
	1990	2000	2005
Forest	13,718	12,535	11,943
Other wooded land	34,791	34,791	34,791
<b>Forest and other wooded land</b>	<b>48,509</b>	<b>47,326</b>	<b>46,734</b>
Other land	8,164	9,347	9,939
...of which with tree cover	-	-	-
<b>Total land area</b>	<b>56,673</b>	<b>56,673</b>	<b>56,673</b>
Inland water bodies	1,500	1,500	1,500
<b>Total area of country</b>	<b>58,173</b>	<b>58,173</b>	<b>58,173</b>

Data source: FAO, Global Forest Resources Assessment 2005.

Table 5: Fisheries Data (2004-2005)

Production	166 tonnes
Water area	15,000 km <sup>3</sup>
Fishery labour force	3,243

Source: FAO Statistical Year book 2005

According to table 6, Sorghum, maize, millet and beans and pulses are the major crops grown in Botswana.

Table 6: Traditional: Area Harvested By Crop ('000 Hectares)

Year	Sorghum	Maize	Millet	Beans and Pulses	Sunflower	Ground- nuts	Other Crops	Total
1979	43	21	8	14	5	2	7	100
1980	131	47	14	13	7	4	3	218
1981	123	59	13	15	3	4	5	222
1982	37	24	4	4	2	1	4	76
1983	35	20	6	3	1	1	1	66
1984	49	3	8	3	1	2	1	67
1985	83	8	10	3	1	1	0	106
1986	97	9	10	5	0	1	1	123*
1987	114	5	6	3	0	0	1	130
1988	244	33	9	11	1	1	2	300
1989	201	52	12	17	1	1	1	284
1990	153	41	9	12	1	1	1	217
1993	66	22	11	9	1	1	0	110*

Year	Sorghum	Maize	Millet	Beans and Pulses	Sunflower	Ground- nuts	Other Crops	Total
1995	106	20	7	10	5	1	3	152*
1996	164	100	9	25	0	1	2*	301*
1997	64*	79	8	34	1	4	1*	191*
1998	27	24	5	13	0	9	0	78
1999	45	34	5	11	0	1	0	97
2001	13	25	2	8	1	1	1	51
2002	31	35	0	11	0	0	2	79
2003	5	8	1	3	0	0	0	17

Source: Central Statistics Office. 2003 Estimate

There are three main types of land tenure. These are tribal land freehold which constitutes about 74% of the land available for farming, while State land accounts for 23%. Only 3% of the land is freehold.

### 2.1.3 Agricultural Systems

Table 7: Types of Land Tenure

Resources	% of Total
Tribal	74
State	23
Freehold	3

Source: Central Statistics Office Derived from Land Tenure, 1995

Table 8: Land Use by Districts in Botswana (km<sup>2</sup>), 1995

District	State	Tribal	Freehold	Total
Central	20 221	121 893	5 616	147 730
Chobe	16 400	4 080	320	20 800
Ghanzi	81 431	27 371	9108	117 910
Kgalagadi	70 153	36 787		106 940
Kgatleng		7 960		7 960
Ngamiland	42 598	66 532		109 850
Kweneng	9 614	26 276		35 890
Southern	2 887	25 583		28 470
Northeast		1 870	3 250	5 120
Southeast		645	1 135	1 780
Total	243 304	319 797	19 429	582 530
	41.8%	54.9%	3.3%	100%

Source: Environmental Statistics, 2000

### 2.1.4 Agriculture in the Economy

The contribution of agriculture is negligible compared with the industry and service sectors according to table 9.

*Table 9: Contribution of major sectors to the economy*

<b>Sector</b>	<b>Contribution to GDP by sector</b>
Agriculture	2.4
Industry	46.9
Services	50.7

*Central Statistics Office. 2003 Estimate*

### 2.1.5 Main Agricultural Produce and Secondary Products

The main agricultural produce and secondary products are cereals, meat and livestock products as shown in table 10. It is also significant to note that the major forest products in Botswana include industrial round wood, wood charcoal and wood fuel.

Table 12 shows that live stock (cattle and goat) is the major sector of Agriculture in Botswana, The number of cattle, sheep and goats is considerably more than the people living in Botswana.

*Table 10: Agricultural Produce and Secondary Products*

<b>Product</b>	<b>Production In tonnes</b>
Cereals	45,000
Meat	54,000
Fruits and vegetables	27,000
Roots and tubers	93000
Pulses	18,000
Oilseeds	3,000
Milk	105,000
Eggs	3,000
Fiber crops	1,000

*Central Statistics Office.2005*

*Table11: Main Forestry Products*

<b>Product</b>	<b>Production In m3</b>
Industrial round wood	105,000
Wood fuel	655,000
Wood charcoal	65,000

*FAO Statistical Year Book, 2005*

Table 12: Livestock Numbers (000: Average)

Livestock	1983	1993	2004
Cattle	2,818	1820.7	1296.2
Goats	783	1837.7	812.7
Sheep	165	2501	1438.8

Source: Central Statistics Office. Agricultural Census 2005

Table 13: Crops Production

Crop Production in tonnes					
Production* (tonnes)	1997	1998	1999	2001	2002
Sorghum	13,450	3,743	6,658	1,583	15,805
Maize	22,647	2,344	3,796	4,976	16,447
Millet	1,357	507	860	472	54
Legumes	4,467	1,198	1,348	1,280	1,907
Sunflower	444	1,267	2,829	150	2,250
Groundnuts	1,040	121	217	147	137
Other crops	10,133	7,324	8,287	8,962	7,694
<b>Total</b>	<b>53,538</b>	<b>16,504</b>	<b>23,995</b>	<b>17,570</b>	<b>44,294</b>

Source: Central Statistics Office, 2003. \* 2000 data not finalized.

### 2.1.6 Main Export Markets

It is not surprising that the major agricultural exports in Botswana are livestock and livestock products given the number of cattle, sheep and goats. Table 14 shows the amount in pula over the years. Livestock and livestock products contribute 88% of agriculture's contribution to GDP. The main export markets for Botswana livestock and livestock products are the European Union and South Africa

Table 14: Livestock and animal Products (P' 000)

	Meat & Meat Products	Live Animals	Hides & Skins
1996	206,337	1,519	28,573
1997	231,387	2,257	31,973
1998	298,537	2,966	33,602
1999	223,384	1,949	23,992
2000	263,531	1,211	43,806
2001P	366,001	6,909	61,375
2002P	275,873	946	31,228
2003P	285,581	350	32,276
2004P	240,540	56	31,174
2005P	376,363	978	28,529

2006P*	97,138	7	14,885
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*P = Provisional      \* Data only up to June*  
*Central Statistics Office 2006;*

### **2.1.7 Trade Agreements that Include Agriculture**

Botswana has trade agreements with a number of international and regional bodies. Those agreements ensure that the process of imported raw materials and goods are very competitive on a long term basis. Most of these agreements have agricultural components. Southern African Customs Union (SACU) consisting of South Africa, Lesotho, Botswana, Namibia and Swaziland is the largest non-mineral export market for the region. European Union-Southern Africa Free Trade Agreement (EU-SAFTA), Cotonou Agreement, Africa Growth Opportunity Act (AGOA) and World Trade Organization (WTO) specifically favour agricultural produce. The ACP (Cotonou) Agreement with General agreement on Trade Tariffs (GATT) guarantees a market for the sale of livestock production in European Union (EU).

### **2.1.8 Sectoral Policy related to Agriculture, Fisheries and Forest**

#### *Agriculture*

The 1991 National Policy on Agricultural development focused on agrarian reform “ensuring the concept of food security, promoting diversification of agricultural production and incorporating the element of sustainable food production primarily through improved management of production resources” (FAO Country Report, 1991). To improve the effectiveness of its agricultural policies, the national Master Plan for Agricultural Development (NAMPAD) Policy was set up to guide future initiative in the arable scheme. The policy is expected “to make arable and dairy farming profitable and more attractive to farmers thereby create employment opportunities, increase rural income and reduce rural to urban migration.” (Botswana. Ministry of Agriculture, 2006)

#### *Forestry*

At independence there were many forest policy statements. Those statements were very fragmented and included: provision for protection and conservation of indigenous forest and woodlands, creation of exotic plantations, setting up of central forest tree nurseries, setting up of forest industries, promotion of forestry research, etc. All these policies were consolidated in the National Forest Policy during NDP8 (1997/98- 2002/03). The policy “promotes protection, conservation, development and sustainable use of forests and woodlands for socio-economic and environmental benefits of Botswana citizens.” The central thrust of the policy is to “optimize the contribution of the forest sub-sector to the long term and socio-economic development of Botswana by ensuring an enhanced and sustainable flow of benefits from forestry activities to all sectors of the population of present and future generation” (FAO,1991).

Between 1995 and 1997, the country made consultations to review the national forestry policy. It involved stakeholders such as chiefs, councilors, land board members, NGOs, government agencies and village development committees. The report of the consultation is being considered by the National Assembly. The main goal of the policy

is” protection, conservation, development and sustainable utilization of forest land and forest resources for social, economic, ecological and environmental benefits for present and future generation of Botswana (FOSA, 2001)

### **2.1.9 Telecommunications Policy**

Telecommunications Act 1966 (No.15 of 1996) states that BTA should provide telecommunications services including cellular telephony, packet switched data services and paging services. The policy also regulates telecommunications system. It licenses radio transmitter whether operating or not and provides dealer licences for all suppliers of radio equipment. Botswana National ICT policy was developed in 2005 with the overall objective being to complement and build upon Botswana’s Vision 2016 strategy by cultivating an enabling environment for the growth of the country’s ICT industry, providing universal service and nationwide access to information and communication facilities, and positioning Botswana as a global competitor in the ICT sector.

## **2.2 Socio-Economic Profile**

### **2.2.1 Demographics**

Even though Botswana has a vast land area, the population is very small. Most of the population is in the age group of 15-64 as shown in table 15. There are more female than male in the age group (15-64 and over 65 years. But among the youth population there are more males.

*Table 15: Distribution of Population by Age group Sex*

Age group	Male	Female	Total	Male %	Female %	% of Total Population
0-14	322,916	312,735	635,651	50.8	49.2	38.8
15-64	455,183	487,236	942,419	48.3	51.7	57.4
65 years and over	23,914	38,131	62,045	38.5	61.5	3.8
Total	80,2013	838,102	1,640,115	48.9	51.1	100.00

Source: FAO Yearbook 2005;

Table 16: Population by sex and census districts (1991 And 2001)

District	1991 Census Population	2001 Census			
		Households	Male	Female	Total
Gaborone	133,468	58,476	91,823	94,184	186,007
Francistown	65,244	23,124	40,134	42,889	83,023
Lobatse	26,052	8,523	14,202	15,487	29,689
Selibe Phikwe	39,772	15,258	24,334	25,515	49,849
Orapa	8,827	2,578	4,837	4,314	9,151
Jwaneng	11,188	4,681	7,613	7,566	15,179
Sowa	2,228	979	1,570	1,309	2,879
Southern	128,989	24,463	53,810	59,894	113,704
Barolong	18,400	10,348	23,397	24,080	47,477
Ngawketse West		2,391	5,159	5,312	10,471
South East	43,584	14,780	29,125	31,498	60,623
Kweneng East	170,437	43,812	91,045	98,728	189,773
Kweneng West		8,766	20,474	20,088	40,562
Kgatleng	57,770	17,054	35,725	37,782	73,507
Central Serowe/Palapye	128,471	33,969	73,282	79,753	153,035
Central Mahalapye	95,433	23,730	53,318	56,493	109,811
Central Bobonong	53,558	15,057	32,064	34,900	66,964
Central Boteti	35,459	10,363	23,478	24,579	48,057
Central Tutume	100,049	27,168	57,821	65,693	123,514
North East	43,354	10,834	23,164	26,235	49,399
Ngamiland East	55,469	15,615	35,269	37,113	72,382

Ngamiland West	36,723	10,184	23,030	26,612	49,642
Chobe	14,126	4,600	9,395	8,863	18,258
Delta	2,342	514	1,355	1,333	2,688
Ghanzi	23,725	7,666	16,564	15,917	32,481
CKGR	994	110	352	337	689
Kgalagadi South	19,794	5,679	13,037	12,901	25,938
Kgalagadi North	11,340	3,984	8,111	8,000	16,111
<b>Total</b>	<b>1,326,796</b>	<b>404,706</b>	<b>813,488</b>	<b>867,375</b>	<b>1,680,863</b>

Source: FAO Yearbook 2005;

Botswana has one of the highest literacy rates in Africa. The literacy rate has grown from about 70% in 1993 to over 80% in 2003 within a space of 10 years. Education is virtually free in Botswana (table 17). Tables 18 & 19 show the age specific rate by sex for those aged 15 and above in the year 2003. For those in the age group (15-24) the average literacy rate is 94% with the female population more preponderant. Also, the age group 15-29 shows a similar trend. As the age group increases from those in the age group 50-54 and over, the literacy rate decreases. This shows that for those in the younger age groups, the government has been very aggressive in providing education which is virtually free in the country. At the district level the pattern is the same as in towns and cities where the literacy level rate is about 93%. At the district, the rate varies between 58 % in Kweneng district and 89% in Ngamiland East district.

### 2.2.2 Literacy Levels and Languages

Table 17: National Adult (population 15 years and over) Literacy Rates 1993 and 2003

Sex	Percent Literacy Rate	
	1993	2003
Male	66.9	80
Female	70.3	82
Total	68.9	81

*Botswana Literacy Survey: 2003*

Table 18a: Age Specific Adult Literacy Population by Sex for Botswana Aged 15 and over: 2003

Age Group	Survey Population: Aged 15 +			Literate Population: Aged 15 +		
	Male	Female	Total	Male	Female	Total
15-19	98,840	105,980	204,820	91,362	100,388	191,750
20-24	80,212	98,812	179,024	73,296	95,238	168,534
25-29	67,535	78,222	145,757	60,232	74,497	134,729
30-34	50,808	62,538	113,346	43,507	55,287	98,794
35-39	43,797	58,181	101,978	34,582	48,986	83,568
40-44	35,296	46,368	81,664	24,330	33,661	57,991
45-49	27,429	40,344	67,773	17,634	25,740	43,374
50-54	24,076	28,719	52,795	14,347	15,168	29,515
55-59	18,206	24,441	42,647	9,859	11,908	21,767
60-64	12,238	16,563	28,801	4,463	5,759	10,222
65-69	10,389	13,190	23,579	4,014	3,829	7,843
70	1,800	3,185	4,985	269	562	831
Total	470,626	576,543	1,047,169	377,895	471,023	848,918

*Botswana Literacy Survey: 2003*

Table 18 b: Age Specific Adult Literacy Rate by Sex for Botswana Aged 15 and over (%): 2003

Age Group	Male	Female	Total
15-19	92	95	94
20-24	91	96	94
25-29	89	95	92
30-34	86	88	87
35-39	79	84	82
40-44	69	73	71
45-49	64	64	54
50-54	60	53	56
55-59	54	49	51
60-64	36	35	35
65-69	39	29	33
70	15	18	17
Total	80	82	81

*Botswana Literacy Survey: 2003*

Table 19a: District Adult (15 years +) Literacy Population by Sex

District	Survey Population: Aged 15 +			Literate Population: Aged 15 +		
	Male	Female	Total	Male	Female	Total
Gaborone	60,173	72,865	133,038	56,076	69,993	126,069
Francistown	25,474	32,951	58,425	23,323	31,256	54,579
Lobatse	9,262	9,628	18,890	8,558	8,913	17,471
Selibe Phikwe	13,884	15,149	29,033	13,069	13,980	27,049
Orapa	2,491	2,358	4,849	2,429	2,325	4,754
Jwaneng	4,441	5,824	10,265	4,078	5,353	9,431
Sowa Town	971	692	1,663	912	668	1580
Ngwaketse	33,926	46,786	80,712	26,280	36,788	63,068
Barolong	10,079	15,265	25,344	8,480	12,845	21,325
Ngwaketse West	2,606	3,830	6,436	1,738	2,790	4,528
South East	18,761	20,553	39,314	15,901	17,691	33,592
Kweneng East	50,875	59,754	110,629	39,049	50,150	89,199
Kweneng West	8,168	11,005	19,173	5,191	5,863	11,054
Kgatleng	20,056	24,081	44,137	14,081	19,149	33,230
Central Serowe/Palapye	42,073	55,450	97,523	32,463	42,137	74,600
Central Mahalapye	28,765	34,968	63,733	20,063	26,146	46,209
Central Bobonong	19,344	23,959	43,303	14,441	17,877	32,318
Central Boteti	15,344	15,571	30,915	11,213	10,830	22,043
Central Tutume	37,996	47,107	85,103	29,645	36,245	65,890

North East	11,020	11,220	22,240	9,658	9,715	19,373
Ngamiland East	18,852	24,402	43,254	16,993	21,304	38,297
Ngamiland West	11,656	14,933	26,589	7,709	9,752	17,461
Chobe	4,259	5,648	9,907	3,613	4,768	8,381
Ghanzi	8,147	8,437	16,584	5,239	4,694	9,933
Kgalagadi South	8,172	10,295	18,467	5,019	6,963	11,982
Kgalagadi North	3,831	3,812	7,643	2,674	2,828	5,502
Total	470,626	576,543	1,047,169	377,895	471,023	848,918

*Botswana Literacy Survey: 2003*

Table 19b: District Adult (15 years +) Literacy Rate by Sex (%):

District	District Literacy Rate Percent		
	Male	Female	Total
Gaborone	93	96	95
Francistown	92	95	93
Lobatse	92	93	92
Selibe Phikwe	94	92	93
Orapa	98	99	98
Jwaneng	92	92	92
Sowa Town	94	97	95
Ngwaketse	77	79	78
Barolong	84	84	84
Ngwaketse West	67	73	70
South East	85	86	85
Kweneng East	77	84	81
Kweneng West	64	53	58

District	District Literacy Rate Percent		
Kgatleng	70	80	75
Central Serowe/Palapye	77	76	76
Central Mahalapye	70	75	73
Central Bobonong	75	75	75
Central Boteti	73	70	71
Central Tutume	78	77	77
North East	88	87	87
Ngamiland East	90	87	89
Ngamiland West	66	65	66
Chobe	85	84	85
Ghanzi	64	56	60
Kgalagadi South	61	68	65
Kgalagadi North	70	74	72
Total	80	82	81

*Botswana Literacy Survey: 2003*

Setswana is the most spoken native language. It is spoken by 78.2 % of the population. It is the official language of the country along with the English language

*Table 20: Distribution of language groups*

Language groups	Proportion (%)
Setswana	78.2
<u>Ikalanga</u>	7.9
Sekgalagad	2.8
Other	10.7
unspecified	0.4

*Central Statistics Office. Census 2001*

### 2.2.3 Access to Services

*Table 21: Energy Consumption in Household*

Fuel	Proportion (%)
Coal	0.2
LGP	2.2
Parrafin	2.2
Electricity	2.3
Wood	92.9
Solar	0.1

*Central Statistics Office. Census 2001*

As already stated in the introduction, Botswana is highly successful country. It is politically stable and very rich in diamond. The leadership has therefore ensured the provision of basic services such as education and health to the citizens of the country. Basic facilities such as piped water and electricity supply are not widely available in the country. As at 1994/95, wood was the most energy source for the people. According to table 21, it supplied 92.9% of the energy needs. Although the proportion of electricity has considerably increased, nevertheless, wood still dominates as the main energy source in the country. Many rural areas lack electricity supply, even in urban cities, not all the areas have access to electricity. Table 22 shows access to education in Botswana. The primary enrolment rate is 82.1%, while secondary school level enrolment is 60.9%. This is one of the highest in Africa. Table 23 shows the health indicators of Botswana. From table 23 it can be seen that health indicators in Botswana are not cheering. This is not surprising given the HIV/AIDS pandemic coupled with the shortage of health personnel in Botswana.

*Table 22: Education Access Attainment*

Access	Level
Primary level Enrolment	82.1%
Secondary level Enrolment	60.9 %
Primary completion rate	92.0%
Progression to secondary level	98.8%
Ratio of pupils to teachers at primary level	1:26.7
Ratio of pupils to teachers at secondary level	1: 17.3

Source: World Bank Organization- Education Statistics

*Table 23: Health Access Attainment*

Access	Level
Target population vaccinated by antigen	99%
Life expectancy at birth	40 years
Child mortality per 1000	123
Total expenditure on health as percentage of GDP	5.6%
Physicians density per 1000	0.40
Nurses density per 1000	2.65

Source: World Health Statistics 2006

### **2.2.4 Rural-Urban Drift**

Droughts and other factors affect agriculture at the rural level. It is therefore not surprising that the movement of people from the rural areas to urban areas has been astronomical. There has been steady increase in the rural urban migration. As shown in table 24, majority of the people (90.4%) lived in the rural areas in 1971 but by 2004, the rural population has declined to 46%. Thus, there are more people in the urban areas than rural areas in Botswana.

*Table 24: Rural/Urban Population Distribution*

Year	Percentage distribution	
	Urban	Rural
1971	9.6	90.4
1981	18.3	81.7
1991	45.7	54.3
2001	53	47
2003	54	46

*Source: Environmental Statistics, 2000; CSO 2001; 2002*

## **2.3 Media and Telecommunications**

### **2.3.1 Newspapers, Periodicals, Magazines, Radio Stations, Television Channels**

The press in Botswana is very vibrant so there are many newspapers available for the small population. The most prominent newspapers are listed in table 25 Only one of the newspapers is government owned. The rest are privately owned. All the newspapers listed in the table have national coverage. They all have a presence on the Internet. The content of the papers is therefore available online. Generally, newspapers occasionally carry agricultural related stories. Table 26 shows the readership survey carried out in 2002. It shows that a private newspaper *Mmegi* was the most read newspaper.

Periodicals are not common in Botswana so majority of the citizens read South African magazines such as “Drum”, “You”, etc. However, a major agricultural magazine, “AGRINEWS” is published by the Ministry of Agriculture. This magazine is published monthly and it is widely available to all agricultural stakeholders in Botswana.

*Table 25: Newspaper profile in Botswana*

Newspaper	Ownership	Frequency
Mmegi/Reporter	Private	Daily
Daily News	National	Daily
Botswana	Private	Weekly
Guardian		
The Voice	Private	Weekly
Botswana	Private	Weekly
Gazette		
Midweek Sun	Private	Weekly
Sunday	Private	Weekly
Standard		

Source: Individual Newspaper

*Table 26: Newspaper Readership in Botswana*

Newspaper	Readership
	(%)
Mmegi/Reporter	67
Daily News	57
Botswana	38
Guardian	
The Voice	30
Botswana	28
Gazette	
Midweek Sun	16
Sunday	-
Standard	

Source: Thapisa, A.P.N. and Megwa. *Situation Analysis and Profile of Mass Communication in Botswana. 2002*

According to table 25, most of the newspapers in Botswana are privately owned and they are published as weekly newspapers. Only the government owned newspaper, *Daily News* and *Mmegi*, a privately owned newspaper are published daily. Table 26 shows the newspaper readership in a sample study carried out by Thapisa and Megwa (2002). It revealed that *Mmegi*, a private newspaper was the most widely read newspaper out of a sample of 1,700 respondents in city town, urban village and village areas.

There are four radio stations in Botswana as shown in table 27. Two of the radio stations Radio Botswana and Radio Botswana 2 are government owned and they are both national. They cover the whole country. They both operate 24 hours daily. There are two private radio stations that have limited coverage around the capital city of Gaborone. They also operate 24 hours a day. There is a national television station Botswana Television (BTV). It is owned by government. It operates 12 hours a day. There is also a

private television station, Gaborone Broadcasting Company. It covers Gaborone environs. It operates 12 hours daily.

The Ministry of Agriculture broadcast agricultural matters on national television (BTV) and national broadcasting station, Radio Botswana.

*Table 27: Broadcast Media Profile in Botswana*

<b>Station</b>	<b>Ownership</b>	<b>coverage</b>	<b>Hours of transmission</b>
Radio Botswana (RB1)	State owned	National	24 hours
Radio Botswana 2 (RB2)	State owned	National	24 hours
Botswana Television (BTV)	State owned	National	12 hours
Gabz FM	Private	75 kms radius of Gaborone	24 hours
Yarona FM	Private	90 kms radius of Gaborone	24 hours
Gaborone Broadcasting Company (GBC)	Private	75 kms radius of Gaborone	24 hours

*Source: United States Embassy. Country Commercial Guide for Botswana. 2004; Sechele T. Sechele. African Media Development Initiative. Botswana: Research Findings and Conclusions. London: BBC World service Trust, 2006'.*

### **2.3.2 Telecommunication Services**

Tables 28 – 30, show the telecommunications scenario in Botswana. There is only one organization that provides fixed telephone, the Botswana telecommunications (BTC), and it is owned by government. Two private companies (Mascom and Orange) provide mobile services. Both the fixed and mobile services have a national coverage. Generally, the tariffs are very competitive so most people have access to telephone as shown in table 28.

*Table 28: Telecommunication Services' Profile in Botswana*

<b>Telephone company</b>	<b>Type</b>	<b>Ownership</b>	<b>Number of subscribers</b>	<b>Coverage</b>
Botswana Telecommunications	Fixed	State owned	142,000	National
Mascom Wireless	Mobile	Private	435,000*	National
Orange	mobile	Private		National

Mobile cellular subscribers for both Mascom and Orange. \*Both Mascom and orange subscribers

*Source :ITU, 2002*

*Table 29: Cost of Telecommunication services in Botswana (1 minute call)*

	Botswana Telecommunications Corporation	Mascom Wireless	Orange
Fixed to fixed	P0.26 (EUR.03)	-	-
Fixed to mobile	-	P 66(EUR.075)	P0.66(EUR.75)
Mobile - mobile	-	P1.80(EUR.20)	P1.75(EUR.19)

### 2.3.3 Computers and Internet Services

A large number of people have access to computers and Internet in Botswana. There are ten major ISPs in Botswana with preponderance in Gaborone. Majority of the ISPs are privately owned, only one of the ISPs, Botsnet, a subsidiary of BTC is owned by government. The average cost of providing Internet access per month is about P125 or (EUR15). Internet access is through Dial-up.

**Table 30: ICT Profile in Botswana**

Number of Internet users	50-60 000
Number of Dial Up users	20 000+
Number of ISPs	10
Number of websites	500+
Fixed lines per '000	150.3
% of Fixed lines penetration	9.27%
Mobile lines per '000	278
% of mobile lines penetration	16.65%

Source: Department of Information Technology 2005

*Table 31: Internet Service Providers in Botswana*

Name	Address/Phone Number	Cost of Internet access per month
Info Botswana Internet Services, Francistown	Tel 2414400	NA
BBI (PTY) Ltd	Tel 3188902-3 Plot 50381 off Machel Drive Northgate 2 Show grounds Box 21381, Gaborone	P 90 (EUR 10)
BOTSNET	Tel 3953000 Plot 78 Unit 1 & 2 GICP Box 2891 Gaborone	P137.50 (EUR 15)
Gaborone Wireless,	Tel 3930185	P90 (EUR 10)
Info Botswana Internet Services, Francistown	Tel 39188444	P 165 (EUR 18)
Internet café	Tel 3909846	

	Box 1105 Gaborone	
Mega Internet, Gaborone	Tel 3913067	NA
UUNET Botswana (PTY)	Tel 3188967; 3188970	P 125 (EUR 14)
	Plot 50361 UUNet house Dennis Todd Office Park Box 1528 Gaborone	
Compnet Internet	Tel 6864809	NA
	Box 155 Maun	
Cybernet Africa (Internet ca	Tel 4924687 Box 10661 Palapye	NA

Source: Botswana Telephone Directory

List of Newspapers in Botswana

1. Daily News  
Information Services Department  
P/Bag BR139  
Willie Seboni Road  
Gaborone  
Tel: 3653500  
Fax: 3653146  
Website: [www.gov.bw/news](http://www.gov.bw/news)
2. Mmegi/Reporter  
8901,segogwane way  
P/Bag BR 50  
Tel: 3974784  
Fax: 3905508  
Website: [www.mmgi.bw](http://www.mmgi.bw)
3. Monitor  
8901,segogwane way  
P/Bag BR 50  
Tel: 3974784  
Fax: 3905508  
Website: [www.mmgi.bw](http://www.mmgi.bw)
4. Botswana Guardian  
Lot45, Unit 11-12, Commerce park  
P/Bag 00153  
Gaborone  
Tel: 3908408  
Fax: 3908457  
Website: [www.botswanaguardian.co.bw](http://www.botswanaguardian.co.bw)
5. Botswana Gazette

Plot 125, Sedinmosa House  
Millennium park  
P. O. Box 1605  
Gaborone  
Tel: 3912833/3900451/3180701  
Fax: 3972283  
Website: [www.botswanagazette.co.bw](http://www.botswanagazette.co.bw)

6. Midweek Sun  
Lot45, Unit 11-12, Commerce park  
P/Bag 00153  
Gaborone  
Tel: 3908408  
Fax: 3908457  
Website: [www.midweeksun.co.bw](http://www.midweeksun.co.bw)

7. Sunday Standard  
Plot 104, Moores Rowland Unit 21  
Commerce Park  
Private Bag 351  
Postnet Kgale View  
Gaborone  
Tel: 3188784  
Fax: 3188795  
Email: [editor@sundaystandard.co.bw](mailto:editor@sundaystandard.co.bw)  
Website: [www.sundaystandard.info](http://www.sundaystandard.info)

## ANNEX 3. PROFILE OF INSTITUTIONS

### 3.1 List of all Main Institutions Involved in Agriculture and Rural Development

NAME AND CONTACTS	TYPE	ROLE
Chief Executive Officer Botswana Agricultural Marketing Board Nkwe Square Kgale Mews P/Bag 0053 Gaborone Tel: 395134 Fax: 3952926 Email: Website: www.bamb.co.bw	GOV	TM
	TYPE	ROLE
Botswana Chamber of Commerce and Industry P/Bag 00290 Gaborone Tel:3959292	CCI	PP
	TYPE	ROLE
Botswana College of Agriculture Content Farm Sebele P/Bag 0027 Gaborone Tel: 3650100 Fax: 3928753 Email: Website: www.bca.bw	EDU	TR

	TYPE	ROLE
Executive Secretary Botswana Council of Non-Governmental Organisations (BOCONGO) Bonokopila House Plot Machel Road P/Bag 00418 Gaborone Tel: 3911319 Fax: 3912935 Email: <a href="mailto:bocongo@bocongo.org.bw">bocongo@bocongo.org.bw</a> Website: <a href="http://www.bocongo.org.bw">www.bocongo.org.bw</a>	NGO	EX
	TYPE	ROLE
Executive Secretary Botswana Confederation of Commerce Industry and Manpower Plot 5196 Old Lobatse Road P.O.Box 432 Gaborone Tel: 3954359 Fax: 3973142 Email: <a href="mailto:boccim@info.bw">boccim@info.bw</a> Website:	CCI	PP
	TYPE	ROLE
Managing Director Botswana Development Cooperation P. O. Box 160 Gaborone Tel: 3651300 Fax: 39044193; 3903114; 3913567 <a href="mailto:Email-enquiries@bdc.bw">Email-enquiries@bdc.bw</a> Website: <a href="http://www.bdc.bw">www.bdc.bw</a>	BNK	FS; PS-M TM
	TYPE	ROLE
Botswana Export Development and Investment Authority P.O. Box 3122 Gaborone Tel: 3181931 Fax: 3181941	GOV	PS-E

	TYPE	ROLE
Chief Executive Officer Botswana Institute for Development Policy Analysis BIDPA Hse Plot 134 Milleneum Office Park P/Bag BR 29 Gaborone Tel: 3971750 Fax: 3971748 Email: Website: www.bidpa.bw:	GOV	PP

	TYPE	ROLE
Executive Chairman Botswana Meat Commission Plot 612 Khama 1 Avenue P/Bag 4 Lobatse Tel:5330321;5331000 Fax: 5332288 Email: marketing@bmc.bw	GOV	PS-E

Website: www.bmc.co.bw

	TYPE	ROLE
Director Botswana National Library Service Headquarters P/Bag 0036 Gaborone Tel:3952288 Fax: 3901149	GOV	IN

Email: nls@gov.bw

Website:

	TYPE	ROLE
Managing Director Botswana Technology Centre (BOTEC) P/Bag 0082 Gaborone Tel: 3914161 Fax: 3974677 Email: Website: www.botec.bw	GOV	RD
	TYPE	ROLE
General Manager Botswana Vaccine Institute Plot 6385 Lejara Road Broadhurst Industrial P/Bag 0031 Gaborone Tel: 3912711 Fax: 3956798 Email: gmatlho@bvi.co.bw Website: www.bvi.co.bw	GOV	PS-M
	TYPE	ROLE
Executive Secretary Botswana Youth National Council Private Bag 00108 Boting Gaborone Tel: 3913907 Fax: 3180898	AS-Y	EX
	TYPE	ROLE
Chief Executive Officer Citizen Entrepreneurial Development Agency CEDA Plot 204 CEDA Building Industrial avenue Private Bag 00504 Gaborone Tel: 3170895 Fax: 3170896 Email: info@ceda.co.bw Website: www.ceda.co.bw	GOV	FS

	TYPE	ROLE
Executive Secretary Emang Basadi Association Private Bag 00470 Gaborone Tel: 3909335;3959424 Fax: 3909335	AS-W	EX
Director Harry Oppenheimer Okavango Research Centre University of Botswana Maun P/Bag 285 Maun Tel: 686 1833 Fax:686 1835 Email: hoorc@orc.info.bw website: <a href="ftp://orc.ub.bw">ftp://orc.ub.bw</a>	EDU	RD
Permanent Secretary Ministry of Agriculture Headquarters P/Bag 003 Gaborone Tel: 3950500 Fax: 3956027 Email: Website:	GOV	PP
Permanent Secretary Ministry of Communication science and Technology Headquarters P/Bag 00414 Gaborone Tel: 3907230 Fax: 3907236	GOV	PP
	TYPE	ROLE

Permanent Secretary Ministry of Environment, Wildlife and Tourism Headquarters P/Bag BO 199 Gaborone Tel: 3914861 Fax: 3914955	GOV	PP
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	TYPE	ROLE
Moleps Poultry Plot 1277 Old Lobatse Road P.O. Box 404326 Gaborone TEL: 3161191 Fax: 31611193	PRV	PS-P

	TYPE	ROLE
Chief Executive Officer National Development Bank NDB Hse Main Mall Queens Road P.O. Box 225 Gaborone Tel: 3952801 Fax: 3974446;3971044 Email: Website:www.ndb.bw	GOV	FS

	TYPE	ROLE
Managing Director National Food Technology Research Institute Plot 1840 Kanye-Lobatse Road P/Bag 008 Kanye Tel: 5440441 Fax: 5440713 Email: mail@naftec.org Website:	GOV	RD

	TYPE	ROLE
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Nutritional Products Plot14459 Kamushongo Road Gaborone West Industrial Tel: 3909650 Fax: 3908405 Email: nutri@420 agencies.co.bw Website: www.nutri-vite.com	PRV	PS-P
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	TYPE	ROLE
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Executive Secretary Rural Industries Promotion Company Bonokopila House Plot 53957 Machel Road P.O. Box 2088 Gaborone Tel: 3914431 Fax: 3900316 Email: ripco@ripco.bw Website: ww.ripco.co.bw	GOV	RU
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### 3.2. Select List of Key Institutions

NAME AND CONTACTS	TYPE	ROLE
Chief Executive Officer Botswana Agricultural Marketing Board Nkwe Square Kgale Mews P/Bag 0053 Gaborone Tel: 395134 Fax: 3952926 Email: Website: www.bamb.co.bw	GOV	TM
	TYPE	ROLE
Botswana College of Agriculture Content Farm Sebele P/Bag 0027 Gaborone Tel: 3650100 Fax: 3928753 Email: Website: www.bca.bw	EDU	TR
	TYPE	ROLE
Executive Secretary Botswana Council of Non-Governmental Organisations (BOCONGO) Bonokopila House Plot Machel Road P/Bag 00418 Gaborone Tel: 3911319 Fax: 3912935 Email: bocongo@bocongo.org.bw Website: www.bocongo.org.bw	NGO	EX
	TYPE	ROLE

Executive Chairman Botswana Meat Commission Plot 612 Khama 1 Avenue P/Bag 4 Lobatse Tel:5330321;5331000 Fax: 5332288	GOV	PS-E
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Email: [marketing@bmc.bw](mailto:marketing@bmc.bw)

Website: [www.bmc.co.bw](http://www.bmc.co.bw)

	TYPE	ROLE
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Managing Director Botswana Technology Centre (BOTEC) P/Bag 0082 Gaborone Tel: 3914161 Fax: 3974677 Email: Website: <a href="http://www.botec.bw">www.botec.bw</a>	GOV	RD
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	TYPE	ROLE
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General Manager Botswana Vaccine Institute Plot 6385 Lejara Road Broadhurst Industrial P/Bag 0031 Gaborone Tel: 3912711 Fax: 3956798 Email: <a href="mailto:gmatlho@bvi.co.bw">gmatlho@bvi.co.bw</a> Website: <a href="http://www.bvi.co.bw">www.bvi.co.bw</a>	GOV	PS-M
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	TYPE	ROLE
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Chief Executive Officer Citizen Entrepreneurial Development Agency CEDA Plot 204 CEDA Building Industrial avenue Private Bag 00504 Gaborone Tel: 3170895 Fax: 3170896 Email: info@ceda.co.bw Website: www.ceda.co.bw	GOV	FS
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	TYPE	ROLE
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Chief Executive Officer National Development Bank NDB Hse Main Mall Queens Road P.O. Box 225 Gaborone Tel: 3952801 Fax: 3974446;3971044 Email: Website:www.ndb.bw	GOV	FS
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	TYPE	ROLE
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Managing Director National Food Technology Research Institute Plot 1840 Kanye-Lobatse Road P/Bag 008 Kanye Tel: 5440441 Fax: 5440713 Email: mail@naftec.org Website:	GOV	RD
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	TYPE	ROLE
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Executive Secretary  
Rural Industries Promotion Company  
Bonokopila House  
Plot 53957 Machel Road  
P.O. Box 2088  
Gaborone  
Tel: 3914431  
Fax: 3900316  
Email: [ripco@ripco.bw](mailto:ripco@ripco.bw)  
Website: [ww.ripco.co.bw](http://ww.ripco.co.bw)

GOV RU

## **ANNEX 4: LIST OF INSTITUTIONS PERSONS/INTERVIEWS**



**DATA CAPTURE FORM-INSTITUTIONS  
ASSESSMENT OF AGRICULTURAL INFORMATION NEEDS IN AFRICAN,  
CARIBBEAN & PACIFIC (ACP) STATES**

### Institution 1

#### **Botswana**

##### **1. Contact Information**

Name of Institution/Organisation: Botswana Council of Non-Governmental Organisations

Acronym: BOCONGO

Postal address: P/Bag 00418  
Gaborone

Physical address of main location: Bonokopila House, Plot 53957 Machel Road. Country: Botswana

List branches or other sites if applicable, including main focus of each site if different from the main branch: None

Tel: 267-3911319

Fax: 267-3912935

E-mail: [bocongo@bocongo.org.bw](mailto:bocongo@bocongo.org.bw)

Website: [www.bocongo.org.bw](http://www.bocongo.org.bw)

## 2. Type and Role of Institution

### 2. Type and Role of Institution

2a.Type (tick) no more than three  NGO Non-governmental Organisation	2b. Role (tick) as many as are applicable  EX Extension and outreach PP Policy and Planning TR Training (tertiary and vocational level)
--	---

The organisation is a non-governmental organisation. Its roles are policy and planning, Extension services and training

2c Consultant's Comments: The organisation is the co-ordinator of all other non-governmental organisations in different aspects of human activities including agriculture in Botswana.

### 3. Mission and objective

Objective/mission statement Co-ordinate, facilitate and promote capacity building, networking and information dissemination, advocacy and strengthening local NGOs to influence development of policies.
---

#### 4 a. Fields of specialisation (organisation's current programme of work)

- |   |
|---|
| <ol style="list-style-type: none"><li>1. Capacity building of membership organisations</li><li>2. Management and social policy analysis</li><li>3. Policy lobbying and advocacy</li></ol> |
|---|

**4 b. Target audiences (specify if possible) and means of contact with them**

1. Membership organisations –meetings, workshops, e-mail and fax
2. Government- meetings and workshops

**5. Financial data**

- a. Annual budget in local currency with Euro equivalent  
Five million pula (P5m) EUR 610000
- b. Main sources of funding  
Donor partners (local and international)  
Government

**6. Human resources**

- a. total number of staff (size of professional, technical and clerical staff; indicate whether temporary, part-time, project staff, volunteers)
  - i. No. of staff- 9
  - ii. Professional & technical -5
  - iii. Clerical -2
  - iv. Volunteers -2
- b. Specialised skills (list key skills of professional staff and technical staff)  
programme management; finance; public relations.

**7. Name the technical divisions or departments within the institution**

Finance

Human Resource

Project management

**8. Information and communication management (ICM) and information and communication technologies (ICT) use**

**Information and Communication Management (ICM)**

**8 Information and communication management (ICM) capacity**

8a. Is there a department, section or unit responsible for ICM in your institution (specify)? Resource Unit

8b. What resources are available for ICM in your institution – staff (numbers, qualifications, experience), budgets (extent)

a staff member plus a volunteer

b Bachelors in media studies-five years experience

c. Estimated budget- P360 000

8c. What information resources does the institution have/produce (e.g. libraries, publications, databases, ...) – specify where possible.

annual reports

directories

databases

Strategic plan

publications on different aspects of civil societies

8d. What constraints does your institution face with regard to ICM? What improvements are needed?

Trained competent staff

Maintenance of resources

Purchase of publications

8e. What ICM programmes and projects has your institution been able to participate in or has implemented in the last 5 years (current/completed, including training)?

BOCONGO directory

Training of member organisations in different levels of skills such as basic computer skills; information management

8f. Does your institution have an information policy or information strategic plan or both?

None

### **Information and Communication Technologies (ICT)**

9a. Is there a department, section or unit responsible for ICT in your institution (specify)?

None

9b. What resources are available for the management of ICTs in your institution – staff (numbers, qualifications, experience), budgets (extent)?

9c. What ICTs does the institution have (e.g. hardware, software, L/WANs, etc. – see list above...)?

6 personal computers

specialised software

copiers

printers

local area network

9d. What constraints does your institution face with regard to ICTs? What improvements are needed?

Maintenance

Back-up person (technical)

Continuous training

Computer security

9e. What ICT programmes and projects has your institution been able to participate in or has implemented in the last 5 years (current/completed, including training). Indicate target audience against each programme/project.

None

9f. Does your institution have an ICT policy or ICT strategic plan, or both?

None

9g. How does the institution intend to further develop and use ICTs?

9h. What resources and training (from whom) will be needed to assist in achieving these goals?

**10. What is the impact of government policy (or the lack of) in terms of the use of ICTs in your institution? (Include also the impact of private sector initiatives)**

Liberalisation has made computer widely available.

Telecommunications infrastructure existing in the country promotes Internet access

VAT makes computer and other hardware expensive

**Information needs**

**11. What types of information/advice do you need to service the programmes being executed by your institution? (Check guidelines for possible types of information)**

Instant information on member organisations

Building capacity of member organisations on best practices too manage information

Updateness of website

Social development issues

Government and International regulations  
Conference and meetings

**12. Indicate the sources that provide you with information and advice (local, national, regional, international or others) – (check guidelines giving possible sources)**

Internet  
BOCONCO Resource Unit  
World Bank and other partners  
Government departments  
University of Botswana

**13. Identify types or formats of information that you have found difficult to acquire. (Consult guidelines to assist in identification)**

1. Electronic databases

**14. Linkages and collaboration with CTA- None**

**Other collaboration**

15a. Please indicate the names of institutions with which you collaborate. (national, regional and/or international)

IDM –Botswana  
University of Botswana-  
SADC Council of Non-governmental organisations  
Mwengo Zimbabwe (Capacity building for NGOs)  
Netherlands Institute for Southern Africa (NISA)

15b. Indicate the type of collaboration you have with the named institutions (e.g. joint projects, information exchange, etc.)

Training

capacity building

Information exchange

**16. Programme/projects undertaken within the last five years (including training in ICM and ICT)**

Programme/projects	Target audience
Human rights Manual	Civil society
African Capacity Building Foundation, Harare-general support for policy work and research and publication	Member organisations
ICT Development	

**17. Does the organization have an organization-wide strategic plan for the next  2 years  5 years? If so, what are the main areas that are targeted for development?**

Yes

Institutional support for the NGO Council secretariat

Policy advocacy, lobbying and networking

Leadership and organisational development

**18a . What new information activities or information management initiatives have been identified by the institution that would assist in achieving these goals?**

1. Value of information management
2. Infrastructure for information management
3. Skills development
4. Updateness of website

**18b. What resources and training needs have been identified by the institution that would assist in achieving these goals?**

Networking- Internet connectivity speed, increase in bandwidth  
Multimedia projectors  
Public address system

**Name of the institutional representative interviewed:** Baboloki Tlale

**Designation:** Executive Secretary

**Date of Interview:** 27 March 2007

*1. Consultant's Comments*

*2. Why did you select this institution to interview?*

The institution was selected because it co-ordinates all the major NGOs in Botswana. The NGOs are grouped into eleven: Arts and Culture; Development arm of the Church; Disability; Environment and Agriculture; Gender and Development; Health and AIDS; Human Rights; Media; Finance and Credit and Empowerment; Science Technology and Training; and Youth and Children. The Environment and Agriculture unit of BOCONGO consists of 13 NGOs on different aspects of agriculture and environment. Thus, BOCONGO as a partner organisation with CTA, would be in a position to disseminate relevant information to 13 the agricultural organisations.

*2. Other pertinent issues that arose during the interview.*

The organisation does not have a separate ICM and ICT units. The lack of these units has greatly affected the operations of the organisation.



Institution 2

**DATA CAPTURE FORM-INSTITUTIONS  
ASSESSMENT OF AGRICULTURAL INFORMATION NEEDS IN  
AFRICAN, CARIBBEAN & PACIFIC (ACP) STATES**

**Botswana**

**1. Contact Information**

Name of Institution/Organisation: Botswana College of Agriculture

Acronym: BCA

Postal address: P/Bag 0027 Gaborone

Physical address of main location: Content Farm, Sebele , Gaborone Country: Botswana  
List branches or other sites if applicable, including main focus of each site if different form the main branch: None

Tel: 267-3650100  
Fax: 267-3928753

E-mail:

Website:www.bca.bw

**2.Type and Role of Institution**

2a.Type (tick) no more than three	2b. Role (tick) as many as are applicable
EDU Educational institution	EX Extension and outreach
	RD Research and development
	TR Training (tertiary and vocational level)

2c Consultant's Comments

BCA is the main training institution for agriculture at all levels.

### 3. Mission and objective

Objective/mission statement: We, the Botswana College of Agriculture, exist for the agricultural sector, to produce high quality graduates, generate suitable technologies and provide advisory services to improve agricultural productivity through:

- Innovative teaching
- Relevant research
- Customer-driven service

#### 4 a. Fields of specialisation (organisation's current programme of work)

Agricultural economics, education and extension  
Agricultural engineering and land planning  
Animal science and production  
Crop science and production  
In-service and continuing education

#### 4 b. Target audiences (specify if possible) and means of contact with them

Students-face-to-face contact  
Farmers-invitation to come to college; occasional visits to farmers  
Extension workers- face-to-face contact

### 5. Financial data

- a. Annual budget in local currency with Euro equivalent Eighty million pula (P80m) EUR 10m
- b. Main sources of funding  
Government

## 6. Human resources

- a. Total number of staff (size of professional, technical and clerical staff; indicate whether temporary, part-time, project staff, volunteers)

Total number of staff- 440

Academic staff -104

Professional & technical staff- 178

Clerical & industrial staff - 158

## 7. Name the technical divisions or departments within the institution

Academic departments

College Services

Student Services

Academic Services

Finance

Library

Centre for In-service and Continuing Education

## 8. Information and communication management (ICM) and information and communication technologies (ICT) use

### Information and Communication Management (ICM)

### 8 Information and communication management (ICM) capacity

8a. Is there a department, section or unit responsible for ICM in your institution (specify)? Library

8b. What resources are available for ICM in your institution – staff (numbers, qualifications, experience), budgets (extent)

Budget- One million pula P1m

Total staff -18

Professional- 6

Praprofessional-8

Support- 4

Masters, Bachelors and Diploma in library and information science

Experience between 5 and 20 years

8c. What information resources does the institution have/produce (e.g. libraries, publications, databases, ...) – specify where possible.

Annual reports

Quarterly library reports

Library strategic operational plans

8d. What constraints does your institution face with regard to ICM? What improvements are needed?

None

8e. What ICM programmes and projects has your institution been able to participate in or has implemented in the last 5 years (current/completed, including training)?

Question and answer Service

FAO World Food day Commemoration

8f. Does your institution have an information policy or information strategic plan or both?

None

### **Information and Communication Technologies (ICT)**

9a. Is there a department, section or unit responsible for ICT in your institution (specify)?

IT Unit

9b. What resources are available for the management of ICTs in your institution – staff (numbers, qualifications, experience), budgets (extent)?

Total staff-6

Professional -6

Masters, Bachelors and Diploma in computer science

Experience between 1 and 5 years

9c. What ICTs does the institution have (e.g. hardware, software, L/WANs, etc. – see list above...)?

Computers

Hardware,

software,

Local/wide area networks (LAN),

Internet access

9d. What constraints does your institution face with regard to ICTs? What improvements are needed?

Staffing support

Computer literacy among users

Specialisation in IT support

9e. What ICT programmes and projects has your institution been able to participate in or has implemented in the last 5 years (current/completed, including training). Indicate target audience against each programme/project.

Internet security

Anti-virus solution

New website for the College

9f. Does your institution have an ICT policy or ICT strategic plan, or both?

None

9g. How does the institution intend to further develop and use ICTs?

Database development

Business application system

Replacing old equipment

9h. What resources and training (from whom) will be needed to assist in achieving these goals?

**10. What is the impact of government policy (or the lack of) in terms of the use of ICTs in your institution? (Include also the impact of private sector initiatives)**

The ICT infrastructure in the country is very good

**Information needs**

**11. What types of information/advice do you need to service the programmes being executed by your institution? (Check guidelines for possible types of information)**

Management information decision support

Farm problems

Social development issues

Conferences and meetings

Development and funding programmes

**12. Indicate the sources that provide you with information and advice (local, national, regional, international or others) – (check guidelines giving possible sources)**

College Library

Internet

Ministry of Agriculture

University of Botswana

**13. Identify types or formats of information that you have found difficult to acquire. (Consult guidelines to assist in identification)**

None

**Linkages and collaboration**

**14. Linkages and collaboration with CTA**

14a. Are you aware of CTA activities in your countries or the Region?  Yes  No.

**Yes**

14b. If “Yes”, indicate if your institution is a recipient of the following CTA publications and services. Tick all that apply:

- Spore* magazine
- CTA publications
- DORA (Distribution of Reference Books on Agriculture)
- SDI (Selective Dissemination of Information. Lists of abstracts and bibliographies are sent to recipients on the basis of the topics selected by researchers, scientists and policy-makers)
- CD-ROM / Database subscriptions
- Question & Answer Service (QAS)

14c. If “Yes” indicate if your institution has participated in:

- CTA Annual Seminars (international meetings on key topics of interest e.g. soil fertility, food security)
- Co-seminars (i.e. co-sponsored by CTA with other agencies such as IICA, FAO, etc.)
- ICT Observatory (Four day workshop to examine the impact of ICTs in relation to other key issues such as youth, extension and gender)
- CTA training programmes or non-CTA training programmes

**Other collaboration**

15a. Please indicate the names of institutions with which you collaborate. (national, regional and/or international)

University of Botswana

Botswana Agricultural Union

Ministry of Agriculture

Ministry of Education

SADC

UNICEF

UNESCO

USAID

CTA

FAO

15b. Indicate the type of collaboration you have with the named institutions (e.g. joint projects, information exchange, etc.)

Collaborative research

Training

Information exchange

**16. Programme/projects undertaken within the last five years (including training in ICM and ICT)**

Programme/projects	Target audience
ITS system	Staff and students
Research Projects funded by EU	Academic staff
Accounting Packages software –VIP-Human resources	Human resources staff

**17. Does the organization have an organization-wide strategic plan for the next  2**

**years  5 years? If so, what are the main areas that are targeted for development?**

Yes

- Innovative teaching
- Relevant research
- Customer-driven services

**18a . What new information activities or information management initiatives have been identified by the institution that would assist in achieving these goals?**

Institutionalising the Use of ICT

Provide ICT skills to all staff

Increase the use of ICT in WebCT- Teaching

Updateness of website

**18b. What resources and training needs have been identified by the institution that would assist in achieving these goals?**

ICT Training

E-learning

Needs assessment

**Name of the institutional representative interviewed:** Dr. R.G. Chabo

**Designation:** Dean

**Date of Interview:** 27<sup>th</sup> March 2007

*Consultant's Comments*

*1. Why did you select this institution to interview?*

The institution was selected because it provides training at diploma, bachelors, masters and doctoral training for the agricultural sector in Botswana.

*2. Other pertinent issues that arose during the interview.*



Institution 3

**DATA CAPTURE FORM-INSTITUTIONS  
ASSESSMENT OF AGRICULTURAL INFORMATION NEEDS IN  
AFRICAN, CARIBBEAN & PACIFIC (ACP) STATES**

Botswana

**1. Contact Information**

Name of Institution/Organisation: Botswana Agricultural Marketing Board

Acronym: BAMB

Postal address: P/Bag 0053 Gaborone

Physical address of main location Nkwe Square, Gaborone International Finance Park.  
Country: Botswana

List branches or other sites if applicable, including main focus of each site if different from the main branch: Moshupa, Kanye, Pitsane, Gaborone, Mahalapye, Palapye, Francistown, Selebi-Phikwe, Maun, Pandematenga

Tel: 267- 3951341  
Fax: 267- 3952926  
E-mail:

**2.Type and Role of Institution**

<p>2a.Type (tick) no more than three</p> <p>STA Statutory body</p> <p>TE State enterprise</p>	<p>2b. Role (tick) as many as are applicable</p> <p>PS-S Supplier</p> <p>TM Trade and marketing</p>
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2c Consultant's Comments

### 3. Mission and objective

Objective/mission statement: We provide access to marketing services, quality storage and commodities at the right price for a growing agricultural industry while exceeding customer expectations through knowledge and dedicated staff

#### 4 a. Fields of specialisation (organisation's current programme of work)

Marketing of agricultural produce

#### 4 b. Target audiences (specify if possible) and means of contact with them

Millers \_direct communication and advertisement  
Government  
General public  
Other enterprises

### 5. Financial data

- a. Annual budget in local currency with Euro equivalent Twenty seven million pula P27 EUR 3.25m
- b. Main sources of funding  
sales of commodities

### 6. Human resources

- a. total number of staff (size of professional, technical and clerical staff; indicate whether temporary, part-time, project staff, volunteers)

Total number of staff- 119  
Professional & technical staff- 40  
Clerical & industrial staff - 79

- b. Specialised skills (list key skills of professional staff and technical staff)
- Agriculture  
Accountancy  
Marketing

**7. Name the technical divisions or departments within the institution**

Marketing

Human resources

**8. Information and communication management (ICM) and information and communication technologies (ICT) use**

**Information and Communication Management (ICM)**

**8 Information and communication management (ICM) capacity**

8a. Is there a department, section or unit responsible for ICM in your institution (specify)?

Marketing Department

8b. What resources are available for ICM in your institution – staff (numbers, qualifications, experience), budgets (extent)

Two- Marketing/Public Relations Officer

Budget P150 000

8c. What information resources does the institution have/produce (e.g. libraries, publications, databases, ...) – specify where possible.

Newsletter

Annual report

Supplier database

8d. What constraints does your institution face with regard to ICM? What improvements are needed?

Training

Budgeting

8e. What ICM programmes and projects has your institution been able to participate in or has implemented in the last 5 years (current/completed, including training)?

None

8f. Does your institution have an information policy or information strategic plan or both?

None

### **Information and Communication Technologies (ICT)**

9a. Is there a department, section or unit responsible for ICT in your institution (specify)?

Finance Unit

9b. What resources are available for the management of ICTs in your institution – staff (numbers, qualifications, experience), budgets (extent)?

Total staff- 1 (computer technician)

Budget P250 000

9c. What ICTs does the institution have (e.g. hardware, software, L/WANs, etc. – see list above...)?

computers

ACPAC for Window

ISOPOS Pay roll

9d. What constraints does your institution face with regard to ICTs? What improvements are needed?

Website design and update

Computer literacy for staff

9e. What ICT programmes and projects has your institution been able to participate in or has implemented in the last 5 years (current/completed, including training). Indicate target audience against each programme/project.

9f. Does your institution have an ICT policy or ICT strategic plan, or both?

None

9g. How does the institution intend to further develop and use ICTs?

None

9h. What resources and training (from whom) will be needed to assist in achieving these goals?

Remote sensing

**10. What is the impact of government policy (or the lack of) in terms of the use of ICTs in your institution? (Include also the impact of private sector initiatives)**

Good

**Information needs**

**11. What types of information/advice do you need to service the programmes being executed by your institution? (Check guidelines for possible types of information)**

Farm problems

Loan assistance

Credit and micro-credit

Government and International regulations

Market data

Commodity profiles  
Conference and meetings

**12. Indicate the sources that provide you with information and advice (local, national, regional, international or others) – (check guidelines giving possible sources)**

Ministry of Agriculture  
Ministry of Local Government  
South African Future Exchange Prices  
Internet  
Local producers  
Millers  
International producers  
Newsletters from other organisations  
Farmers market  
Farmers weekly  
Radio/TV programmes

**13. Identify types or formats of information that you have found difficult to acquire. (Consult guidelines to assist in identification)**

none

**14. Linkages and collaboration with CTA** None

**Other collaboration**

15a. Please indicate the names of institutions with which you collaborate. (national, regional and/or international)

Ministry of Agriculture  
Ministry of Local Government

South African Future Exchange (SAFEX)

FAO

15b. Indicate the type of collaboration you have with the named institutions (e.g. joint projects, information exchange, etc.)

Information exchange

<b>16. Programme/projects undertaken within the last five years (including training in ICM and ICT)programme/projects</b> None	Target audience
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**17. Does the organization have an organization-wide strategic plan for the next  2 years  5 years? If so, what are the main areas that are targeted for development?**

Strategic plan 2004-2007-

- Marketing and distribution of agricultural produce and related products throughout the country
- Adoption of advanced technologies
- Improvement of operations and service to customers
- Development of a productive workforce

Broadening of services and increasing product lines

**18a . What new information activities or information management initiatives have been identified by the institution that would assist in achieving these goals?**

None

**18b. What resources and training needs have been identified by the institution that would assist in achieving these goals?**

Customer service

IT skills

Information management

**Name of the institutional representative interviewed:** Moruntshi Kemorwale

**Designation:** Public Relations Officer

**Date of Interview:** 30<sup>th</sup> March 2007

*Consultant's Comments 1. Why did you select this institution to interview?*

The institution was selected because it is the main organisation in the country that is responsible for the sales of commodities produced by farmers in Botswana

*2. Other pertinent issues that arose during the interview.*



Institution 4

**DATA CAPTURE FORM-INSTITUTIONS  
ASSESSMENT OF AGRICULTURAL INFORMATION NEEDS IN  
AFRICAN, CARIBBEAN & PACIFIC (ACP) STATES**

Botswana

**1. Contact Information**

Name of Institution/Organisation: Botswana Technology centre

Acronym: BOTEC

Postal address: P/Bag 0082 Gaborone

Physical address of main location: Maranyane House Plot 50654, Machel Drive, Gaborone

Country: Botswana

List branches or other sites if applicable, including main focus of each site if different from the main branch: None

Tel: 3914161/3607500

Fax: 3974677

E-mail:scitec@botec.bw

Website:www.botec.bw

## 2.Type and Role of Institution

2a.Type (tick) no more than three  STA Statutory body	2b. Role (tick) as many as are applicable  EX Extension and outreach RD Research and development INF Information Services
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2c Consultant's Comments

## 3. Mission and objective

Objective/mission statement: To provide solutions for industrial and business development through innovative research and application of science and technology

### 4 a. Fields of specialisation (organisation's current programme of work)

Research and development in science and technology:  
Renewable energy  
Sustainable architecture and housing  
Information communications technologies  
Telemetry and development of data acquisition systems  
Technology transfer of BOTEC developed products to industry

### 4 b. Target audiences (specify if possible) and means of contact with them

General public  
Small business enterprises

## 5. Financial data

- a. Annual budget in local currency with Euro equivalent :Twenty five million pula (P25m) EUR 3m
- b. Main sources of funding:  
Government

## 6. Human resources

- a. total number of staff (size of professional, technical and clerical staff; indicate whether temporary, part-time, project staff, volunteers)
- Total number of staff- 89
- |                    |      |
|--------------------|------|
| Professional staff | - 51 |
| Technical staff    | -20  |
| Clerical staff     | -12  |
| Project staff      | - 6  |
- b. Specialised skills (list key skills of professional staff and technical staff)
- Engineering
  - Marketing
  - Economics
  - Information
  - Finance
  - Information technology

**7. Name the technical divisions or departments within the institution**

Technology Development Department  
Technology Information Department  
Finance and Administration Department

**8. Information and communication management (ICM) and information and communication technologies (ICT) use**

**Information and Communication Management (ICM)**

**8 Information and communication management (ICM) capacity**

8a. Is there a department, section or unit responsible for ICM in your institution (specify)? Library Unit

8b. What resources are available for ICM in your institution – staff (numbers, qualifications, experience), budgets (extent)

Total staff 3

2 professionals (1 master degree and another Bachelors degree in library and information science) 5-15 years experience

8c. What information resources does the institution have/produce (e.g. libraries, publications, databases, ...) – specify where possible.

Research reports

8d. What constraints does your institution face with regard to ICM? What improvements are needed?

No internal information management system

8e. What ICM programmes and projects has your institution been able to participate in or has implemented in the last 5 years (current/completed, including training)?

Kitsong centres-community information based project

8f. Does your institution have an information policy or information strategic plan or both?

None

### **Information and Communication Technologies (ICT)**

9a. Is there a department, section or unit responsible for ICT in your institution (specify)?

Computer unit

9b. What resources are available for the management of ICTs in your institution – staff (numbers, qualifications, experience), budgets (extent)?

Total staff 12

6 professional staff (2 masters' degree, 3 bachelors' degree in computer science and 1 MBA) 5-15 years experience

6 project officers for Kitsong centres

9c. What ICTs does the institution have (e.g. hardware, software, L/WANs, etc. – see list above...)?

LAN

Interne access

Networking

Computers

9d. What constraints does your institution face with regard to ICTs? What improvements are needed? Updating websites

Inadequate network capacity to handle traffic

Bandwidth constraint

9e. What ICT programmes and projects has your institution been able to participate in or has implemented in the last 5 years (current/completed, including training). Indicate target audience against each programme/project.

CUIS Project-Community User Information Service in three villages (Letlhakeng, Hukunsi and Gum are

9f. Does your institution have an ICT policy or ICT strategic plan, or both?

Draft form- e-mail management, Use of Internet

9g. How does the institution intend to further develop and use ICTs?

Further research and application

9h. What resources and training (from whom) will be needed to assist in achieving these goals?

Content development for CUIS

Capacity building

Purchase of new computers

**10. What is the impact of government policy (or the lack of) in terms of the use of ICTs in your institution? (Include also the impact of private sector initiatives)**

Good

**Information needs**

**11. What types of information/advice do you need to service the programmes being executed by your institution? (Check guidelines for possible types of information)**

User needs

Development and funding programmes

Patents

**12. Indicate the sources that provide you with information and advice (local, national, regional, international or others) – (check guidelines giving possible sources)**

Library

Internet

**13. Identify types or formats of information that you have found difficult to acquire. (Consult guidelines to assist in identification)**

Access to online journals

**14. Linkages and collaboration with CTA**

14a. Are you aware of CTA activities in your countries or the Region?  Yes   
No.

**Yes**

14b. If “Yes”, indicate if your institution is a recipient of the following CTA publications and services. Tick all that apply:

- Spore* magazine

14c. If “Yes” indicate if your institution has participated in:

- CTA Annual Seminars (international meetings on key topics of interest e.g. soil fertility, food security)
- Co-seminars (i.e. co-sponsored by CTA with other agencies such as IICA, FAO, etc.)
- ICT Observatory (Four day workshop to examine the impact of ICTs in relation to other key issues such as youth, extension and gender)
- CTA training programmes or non-CTA training programmes
- Seminar Support Programme

**Other collaboration**

15a. Please indicate the names of institutions with which you collaborate. (national, regional and/or international)

University of Botswana

United Nations Development Programme

CSIR-Centre for Scientific and Industrial Research, South Africa

IFLA

Southern African Association of Science and Technology Centre (SAASTEC)

World Association of Industrial and Technological Research Organisation (WAITRO)

Inwent, Germany

Energia, Netherlands

SIRDC- Scientific and Industrial Research and Development Centre, Zimbabwe

15b. Indicate the type of collaboration you have with the named institutions (e.g. joint projects, information exchange, etc.)

**16. Programme/projects undertaken within the last five years (including training in ICM and ICT)**

Programme/projects	Target audience

**17. Does the organization have an organization-wide strategic plan for the next  2 years  5 years? If so, what are the main areas that are targeted for development?**

Yes-

Excellence in science and technology

Competitive advantage of BOTEC products and services for industrial development

To be sustainable

**18a . What new information activities or information management initiatives have been identified by the institution that would assist in achieving these goals?**

Telemedicine

E-learning

Updateness of website

**18b. What resources and training needs have been identified by the institution that would assist in achieving these goals?**

Staff Manpower development

Improvement on infrastructure(Communication links)

Internet connectivity

Local area network

**Name of the institutional representative interviewed:** Suthani K. Mazhani

**Designation:** Principal Computer Engineer

**Date of Interview:** 02/04/07

*Consultant's Comments*

*1. Why did you select this institution to interview?*

The organisation is responsible for application of science and technology in rural areas. It has an ongoing project on community user information service (CUIS) which is driven largely by ICT.

*2. Other pertinent issues that arose during the interview.*



Institution 5

**DATA CAPTURE FORM-INSTITUTIONS  
ASSESSMENT OF AGRICULTURAL INFORMATION NEEDS IN  
AFRICAN, CARIBBEAN & PACIFIC (ACP) STATES**

**Botswana**

**1. Contact Information**

Name of Institution/Organisation Citizen Entrepreneurial Development Agency

Acronym: CEDA

Postal address: Private Bag 00504  
Gaborone

Physical address of main location: Plot 204 CEDA Building Independence Avenue, Gaborone  
Country: Botswana

List branches or other sites if applicable, including main focus of each site if different from the main branch  
None

Tel: 3170895

Fax: 3170896

Email: [info@ceda.co.bw](mailto:info@ceda.co.bw)

Website: [www.ceda.co.bw](http://www.ceda.co.bw)

## 2.Type and Role of Institution

2a.Type (tick) no more than three	2b. Role (tick) as many as are applicable
BNK Bank or credit institution	EX Extension and outreach
	FS Financial Services
	PP Policy and planning

2c Consultant's Comments

## 3. Mission and objective

Objective/mission statement  
To support the development of viable citizen businesses through funding, training and mentoring

## 4 a. Fields of specialisation (organisation's current programme of work)

Provision of financial services to SMMES  
Training and Mentoring services

## 4 b. Target audiences (specify if possible) and means of contact with them

SMMES- Adverts, newsletters  
Exhibitions

## 5. Financial data

a. Annual budget in local currency with Euro equivalent Ninety four million pula. P94m EUR11.8m

b. Main sources of funding  
Government

## 6. Human resources

- a. total number of staff (size of professional, technical and clerical staff; indicate whether temporary, part-time, project staff, volunteers)

Total number of staff- 203

Professional -170

Support staff -33

- b. Specialised skills (list key skills of professional staff and technical staff)

Economics

Legal matters

Accountancy

Management

## 7. Name the technical divisions or departments within the institution

Business Development

Information technology

Internal Audit

Entrepreneurship development

## 8. Information and communication management (ICM) and information and communication technologies (ICT) use

**Information and Communication Management (ICM)**

## 8 Information and communication management (ICM) capacity

8a. Is there a department, section or unit responsible for ICM in your institution (specify)? Research and Public Relations Unit

8b. What resources are available for ICM in your institution – staff (numbers, qualifications, experience), budgets (extent)

1 staff member- Economist

Budget P100 000

8c. What information resources does the institution have/produce (e.g. libraries, publications, databases, ...) – specify where possible.

guidelines

Newsletters

Project reports

Database of clients

8d. What constraints does your institution face with regard to ICM? What improvements are needed?

Information collection

8e. What ICM programmes and projects has your institution been able to participate in or has implemented in the last 5 years (current/completed, including training)?

Enterprise Resource Planning project

8f. Does your institution have an information policy or information strategic plan or both?

No

## Information and Communication Technologies (ICT)

9a. Is there a department, section or unit responsible for ICT in your institution (specify)?

Information Technology Unit

9b. What resources are available for the management of ICTs in your institution – staff (numbers, qualifications, experience), budgets (extent)?

Total number of staff -7 (6 with qualifications in IT)

Budget P3 million

9c. What ICTs does the institution have (e.g. hardware, software, L/WANs, etc. – see list above...)?

Computers

Network

Software

Internet access

9d. What constraints does your institution face with regard to ICTs? What improvements are needed?

9e. What ICT programmes and projects has your institution been able to participate in or has implemented in the last 5 years (current/completed, including training). Indicate target audience against each programme/project.

ICT specific training

9f. Does your institution have an ICT policy or ICT strategic plan, or both?

Yes

9g. How does the institution intend to further develop and use ICTs?

Working towards paperless office

9h. What resources and training (from whom) will be needed to assist in achieving these goals?

Digitisation of documents

Archiving of databases

**10. What is the impact of government policy (or the lack of) in terms of the use of ICTs in your institution? (Include also the impact of private sector initiatives)**

Positive

**Information needs**

**11. What types of information/advice do you need to service the programmes being executed by your institution? (Check guidelines for possible types of information)**

Information on clients  
Monitoring and funding of projects  
Government and international regulations  
Social development issues  
Development and funding programmes  
Credit and micro credit  
Farm problems  
Finance

**12. Indicate the sources that provide you with information and advice (local, national, regional, international or others) – (check guidelines giving possible sources)**

Other financial institutions  
Credit Bureau  
BIDPA  
University of Botswana  
Local Enterprises Authority  
Ministry of Agriculture  
Centre for Development of Enterprises

**13. Identify types or formats of information that you have found difficult to acquire. (Consult guidelines to assist in identification)**

Databases  
feasibility reports  
consultancy reports  
**Linkages and collaboration**

**14. Linkages and collaboration with CTA**

14a. Are you aware of CTA activities in your countries or the Region?  Yes  No.

**Yes**

14b. If “Yes”, indicate if your institution is a recipient of the following CTA publications and services. Tick all that apply:

- Spore* magazine

- CTA publications
- DORA (Distribution of Reference Books on Agriculture)

**Other collaboration**

15a. Please indicate the names of institutions with which you collaborate. (national, regional and/or international)

University of Botswana

Ministry of Agriculture

Credit Bureau

BIDPA

15b. Indicate the type of collaboration you have with the named institutions (e.g. joint projects, information exchange, etc.)

Information exchange

Joint projects

training

**16. Programme/projects undertaken within the last five years (including training in ICM and ICT)**

Programme/projects	Target audience
CEDA Young Farmers Funds Training on appraisal of agricultural projects	Youth Project officers

**17. Does the organization have an organization-wide strategic plan for the next  2 years  5 years? If so, what are the main areas that are targeted for development?**

Sustainability of funded projects

**18a . What new information activities or information management initiatives have been identified by the institution that would assist in achieving these goals?**

Co-ordination of projects

**18b. What resources and training needs have been identified by the institution that would assist in achieving these goals?**

Training on appraisal of agricultural projects

**Name of the institutional representative interviewed:** Tiro Kayawe

**Designation:** Executive Co-ordinator

**Date of Interview:** 04/04/07

*Consultant's Comments*

*1. Why did you select this institution to interview?*

The organisation has just launched a project on financing of agricultural enterprises for youths between the ages of 18 and 35. in Botswana

*2. Other pertinent issues that arose during the interview.*



Institution 6

**DATA CAPTURE FORM-INSTITUTIONS  
ASSESSMENT OF AGRICULTURAL INFORMATION NEEDS IN  
AFRICAN, CARIBBEAN & PACIFIC (ACP) STATES**

Botswana

**1. Contact Information**

Name of Institution/Organisation: National Food Technology Research Centre

Acronym: NFTRC

Postal address: Private Bag 008, Kanye

Physical address of main location: Plot 1840, Mpuutsane, Industrial Area, Kanye Country: Botswana

List branches or other sites if applicable, including main focus of each site if different from the main branch  
None

Tel: 5440441 Fax: 5440713

E-mail: mail@naftec.org

Website: www.naftec.org

**2. Type and Role of Institution**

2a. Type (tick) no more than three	2b. Role (tick) as many as are applicable
GOV Government department	EX Extension and outreach
	RD Research and development
	INF Information Services

**2c Consultant's Comments**

The CEO was enthusiastic in responding to the questions.

### 3. Mission and objective

Objective/mission statement: To enhance national food security, national nutritional economic diversification, import substitution, economic empowerment and job creation by adding value to food materials, in and technological research in food and nutrition

#### 4 a. Fields of specialisation (organisation's current programme of work)

Nutrition  
Extension and training  
Biochemistry  
Microbiology  
Food technology

#### 4 b. Target audiences (specify if possible) and means of contact with them

General public – training, presentations, annual reports and publications  
scientific stakeholders  
press, radio and TV stations

### 5. Financial data

a. Annual budget in local currency with Euro equivalent  
P38 million EUR 4.6m

b. Main sources of funding  
Botswana Government  
Donor agencies, e.g. FAOO and IAEA

## 6. Human resources

b. total number of staff (size of professional, technical and clerical staff; indicate whether temporary, part-time, project staff, volunteers)

Total staff -87

Professionals- 36

Technical- 27

Support staff- 30

b. Specialised skills (list key skills of professional staff and technical staff)

Human resource

Financial management

Information technology

Research and development

## 7. Name the technical divisions or departments within the institution

Research and development division

Finance and administration

## 8. Information and communication management (ICM) and information and communication technologies (ICT) use

### Information and Communication Management (ICM)

### 8 Information and communication management (ICM) capacity

8a. Is there a department, section or unit responsible for ICM in your institution (specify)? IT unit

8b. What resources are available for ICM in your institution – staff (numbers, qualifications, experience), budgets (extent)

None

8c. What information resources does the institution have/produce (e.g. libraries, publications, databases, ...) – specify where possible.

annual reports, newsletters, databases, information booklets

8d. What constraints does your institution face with regard to ICM? What improvements are needed?

No library yet

8e. What ICM programmes and projects has your institution been able to participate in or has implemented in the last 5 years (current/completed, including training)?

None

8f. Does your institution have an information policy or information strategic plan or both?

Draft

security

E-mail service

Internet browsing

password restriction

Hardware and software acquisition

### **Information and Communication Technologies (ICT)**

*Information and communication technology (ICT)* refers to computers, hardware, software, local/wide area networks (L/WAN), mobile phones, internet access, posting website updates or building websites, use of teleconferencing, conference calls, geographic information systems (GIS), etc. ICTs are tools for ICM.

9a. Is there a department, section or unit responsible for ICT in your institution (specify)?

IT unit (comprising extension service)

9b. What resources are available for the management of ICTs in your institution – staff (numbers, qualifications, experience), budgets (extent)?

IT staff – 3 (2 professionals and 1 technical)

extension staff- 3 (All professionals)

P500000

9c. What ICTs does the institution have (e.g. hardware, software, L/WANs, etc. – see list above...)?Servers

Local area network

Computers

Internet access

software

Servers

9d. What constraints does your institution face with regard to ICTs? What improvements are needed?

Capacity building

Website development skills

Project management

9e. What ICT programmes and projects has your institution been able to participate in or has implemented in the last 5 years (current/completed, including training). Indicate target audience against each programme/project.

V-Sat Installation- Satellite Internet system

Conversion of financial information system to ACPAC software

9f. Does your institution have an ICT policy or ICT strategic plan, or both? None

9g. How does the institution intend to further develop and use ICTs?

Hardware-upgrading

Bigger bandwidth

Access to online journals and databases

Video conferencing

Web casting

9h. What resources and training (from whom) will be needed to assist in achieving these goals?

Software for research activity- laboratory information management system (LIMS)

Software for supporting finance, customer relations, supplies on an integrated system (ERP) –Enterprises resource System

**10. What is the impact of government policy (or the lack of) in terms of the use of ICTs in your institution? (Include also the impact of private sector initiatives)**

Good

### **Information needs**

**11. What types of information/advice do you need to service the programmes being executed by your institution? (Check guidelines for possible types of information)**

Science and technology information

Sociological aspects of food

Poverty reduction

HIV/AIUDS

Research and development publication efforts

Social development issues

Government and international regulations

Conference and meetings

Packaging

Equipment sourcing

Management of information within the organisation

**12. Indicate the sources that provide you with information and advice (local, national, regional, international or others) – (check guidelines giving possible sources)**

Internet  
Libraries

**13. Identify types or formats of information that you have found difficult to acquire. (Consult guidelines to assist in identification)**

Databases

**Linkages and collaboration**

**14. Linkages and collaboration with CTA**

14a. Are you aware of CTA activities in your countries or the Region?  **Yes**  No.

14b. If “Yes”, indicate if your institution is a recipient of the following CTA publications and services. Tick all that apply:

- a. Spore magazine**
- b. CTA publications
- c. DORA (Distribution of Reference Books on Agriculture)
- d. SDI (Selective Dissemination of Information. Lists of abstracts and bibliographies are sent to recipients on the basis of the topics selected by researchers, scientists and policy-makers)
- e. CD-ROM / Database subscriptions
- f. Question & Answer Service (QAS)**

14c. If “Yes” indicate if your institution has participated in:

- **CTA Annual Seminars (international meetings on key topics of interest e.g. soil fertility, food security)**
- **Co-seminars (i.e. co-sponsored by CTA with other agencies such as IICA, FAO, etc.)**
- ICT Observatory (Four day workshop to examine the impact of ICTs in relation to other key issues such as youth, extension and gender)
- CTA training programmes or non-CTA training programmes
- **Seminar Support Programme**

**Other collaboration**

15a. Please indicate the names of institutions with which you collaborate. (national, regional and/or international)

BMC

University of Botswana

Ministry of Agriculture

Ministry of Health

BCA

RIPCO

BIDPA

BVI

SADC

FAO

FPA

INICEF

UNDP

CSIR

USAID

SIDA

European Union

Sokoine University of Agriculture

University of Zimbabwe

Food and nutrition centre of Tanzania

15b. Indicate the type of collaboration you have with the named institutions (e.g. joint projects, information exchange, etc.)

training programme

Joint research projects

**16. Programme/projects undertaken within the last five years (including training in ICM and ICT)**

Programme/projects	Target audience
TSABANA-weaning food/development Food fortification using ISOTOPES/nuclear technology Food Centre	General public

**17. Does the organization have an organization-wide strategic plan for the next  2 years  5 years? If so, what are the main areas that are targeted for development?**

Yes  Food technology Biochemistry Microbiology Biotechnology
---

**18a . What new information activities or information management initiatives have been identified by the institution that would assist in achieving these goals?**

NTFRC Newsletter

Food and Nutrition journal

Radio and TV programmes, open day

Leaflets and pamphlets

Updateness of website

**18b. What resources and training needs have been identified by the institution that would assist in achieving these goals?**

A skilful professional team with training at Masters and doctoral levels

Short term training for scientists

networks/linkages

**Name of the institutional representative interviewed:** Dr. Alex Moshia

**Designation:** Managing Director

**Date of Interview:** 11/04/07

*Consultant's Comments*

1. *Why did you select this institution to interview?*

The institution is the main organisation responsible for research on food and food products in Botswana

2. *Other pertinent issues that arose during the interview.*



Institution 7

**DATA CAPTURE FORM-INSTITUTIONS  
ASSESSMENT OF AGRICULTURAL INFORMATION NEEDS IN  
AFRICAN, CARIBBEAN & PACIFIC (ACP) STATES**

Africa

Botswana

**1. Contact Information**

Name of Institution/Organisation <b>Botswana Meat Commission</b>	
Acronym: <b>BMC</b>	
Postal address: <b>P/Bag 4 Lobatse</b>	
Physical address of main location <b>Plot 612 Khama 1 Avenue, Lobatse Country: Botswana</b>	
List branches or other sites if applicable, including main focus of each site if different from the main branch: <b>Francistown</b>	
Tel: <b>5330321;5331000</b>	Fax: <b>5332288</b>
Email: <b>marketing@bmc.bw</b>	
Website: <b>www.bmc.co.bw</b>	

**2.Type and Role of Institution**

<p>2a.Type (tick) no more than three</p> <p>STA Statutory body</p> <p>TE State enterprise</p>	<p>2b. Role (tick) as many as are applicable</p> <p>PS-M Manufacturer</p> <p>TM Trade and marketing</p>
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**2c Consultant's Comments**

### 3. Mission and objective

Objective/mission statement: To purchase, slaughter and process all livestock by producers in Botswana in order to get the best returns for the producer.

### 4 a. Fields of specialisation (organisation's current programme of work)

Abattoir  
Slaughtering,  
Deboning,  
Canning  
Tanning

### 4 b. Target audiences (specify if possible) and means of contact with them

Wholesalers  
retailers  
cattle farmers

- a. Annual budget in local currency with Euro equivalent
- b. Main sources of funding  
Sales

### 6. Human resources

- a. total number of staff (size of professional, technical and clerical staff; indicate whether temporary, part-time, project staff, volunteers)  
Total staff- 1405  
Professional staff- 30  
Technical staff-80  
Support staff- 1295
- b. Specialised skills (list key skills of professional staff and technical staff)  
accounting  
Engineering  
Marketing  
Agriculture  
Human resources management

**7. Name the technical divisions or departments within the institution**

Marketing

Operations

Finance

**8. Information and communication management (ICM) and information and Communication technologies (ICT) use**

**Information and Communication Management (ICM)**

**8 Information and communication management (ICM) capacity**

8a. Is there a department, section or unit responsible for ICM in your institution (specify)? Human Resource Unit

8b. What resources are available for ICM in your institution – staff (numbers, qualifications, experience), budgets (extent)

Human Resource officer

8c. What information resources does the institution have/produce (e.g. libraries, publications, databases, ...) – specify where possible.

publications

8d. What constraints does your institution face with regard to ICM? What improvements are needed?

Funding to operationalise a library

8e. What ICM programmes and projects has your institution been able to participate in or has implemented in the last 5 years (current/completed, including training)?

None

8f. Does your institution have an information policy or information strategic plan or both?

None

**Information and Communication Technologies (ICT)**

9a. Is there a department, section or unit responsible for ICT in your institution (specify)?

Information Services

9b. What resources are available for the management of ICTs in your institution – staff (numbers, qualifications, experience), budgets (extent)?

Total staff- 9

Professional- 5

Support staff- 4

Budget P6 million

9c. What ICTs does the institution have (e.g. hardware, software, L/WANs, etc. – see list above...)?

Local area network

Computers

Internet access

software

Servers

9d. What constraints does your institution face with regard to ICTs? What improvements are needed?

Capacity building

9e. What ICT programmes and projects has your institution been able to participate in or has implemented in the last 5 years (current/completed, including training). Indicate target audience against each programme/project.

Weekly update on producer prices

9f. Does your institution have an ICT policy or ICT strategic plan, or both?

Yes-

usage

security

Access

privacy

9g. How does the institution intend to further develop and use ICTs?

E-Business

9h. What resources and training (from whom) will be needed to assist in achieving these goals?

Training on E-business

**10. What is the impact of government policy (or the lack of) in terms of the use of ICTs in your institution? (Include also the impact of private sector initiatives)**

Good

**Information needs**

**11. What types of information/advice do you need to service the programmes being executed by your institution? (Check guidelines for possible types of information)**

International meat market prices

Cattle census in Botswana

Slaughter statistics in Botswana

Exchange rate

Research and development

Equipment and technology

Farm problems

Government and international regulations

Packaging

Market data

**12. Indicate the sources that provide you with information and advice (local, national, regional, international or others) – (check guidelines giving possible sources)**

Trade journals

Government offices-Ministry of Agriculture

Banks

Internet

**13. Identify types or formats of information that you have found difficult to acquire. (Consult guidelines to assist in identification)**

**Linkages and collaboration**

**14. Linkages and collaboration with CTA-None**

**Other collaboration**

15a. Please indicate the names of institutions with which you collaborate. (national, regional and/or international)

GRM International Australia (Technical Partner)

Institute of Meat, UK

BNPC

IDM

Government ministries and departments

bank of Botswana

NFTRC

CSIR

South African bureau of standards

Botswana Bureau of Standards

BVI

BCA

BIDPA

15b. Indicate the type of collaboration you have with the named institutions (e.g. joint projects, information exchange, etc.)

Information exchange

Training

Research projects

**16. Programme/projects undertaken within the last five years (including training in ICM and ICT)**

**17. Does the organization have an organization-wide strategic plan for the next  2 years  5 years? If so, what are the main areas that are targeted for development?**

Yes

Attracting more cattle to BMC

Best prices in the market

Diversification

Reduction of unit cost

**18a . What new information activities or information management initiatives have been identified by the institution that would assist in achieving these goals?**

Updateness of website

**18b. What resources and training needs have been identified by the institution that would assist in achieving these goals?**

Capacity building in all areas  
Mechanization of BMC operations

**Name of the institutional representative interviewed:** Sonny Molapisi

**Designation:** General Manager (Marketing)

**Date of Interview:** 11/04/07

*Consultant's Comments*

1. *Why did you select this institution to interview?*

This is the main institution buying cattle, slaughtering and exporting livestock products mainly to EU. It also produces animal products such as corned beef and sold both in local and international markets

2. *Other pertinent issues that arose during the interview.*



Institution 8

**DATA CAPTURE FORM-INSTITUTIONS  
ASSESSMENT OF AGRICULTURAL INFORMATION NEEDS IN  
AFRICAN, CARIBBEAN & PACIFIC (ACP) STATES**

Botswana

Botswana

**1. Contact Information**

Name of Institution/Organisation: Rural Industries Promotion Company

Acronym: RIPCO

Postal address: P.O. Box 2088  
Gaborone

Physical address of main location: Bonokopila House Plot 53957 Machel Road, Gaborone  
Country: Botswana

List branches or other sites if applicable, including main focus of each site if different from the main branch: Kanye -Operations

Tel: 3914431

Fax: 3900316

Email: [ripco@ripco.bw](mailto:ripco@ripco.bw)

Website: [ww.ripco.co.bw](http://ww.ripco.co.bw)

## 2. Type and Role of Institution

2a.Type (tick) no more than three  TE     State Enterprise	2b. Role (tick) as many as are applicable  EX     Extension and outreach RU     Rural development RD     Research and Development
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2c Consultant's Comments

## 3. Mission and objective

Objective/mission statement: Exists to undertake research and development to support industrial, entrepreneurial and socioeconomic development in Botswana

## 4 a. Fields of specialisation (organisation's current programme of work)

Agricultural machinery  
Food and feed processing  
Machine design  
Water treatment  
Energy

## 4 b. Target audiences (specify if possible) and means of contact with them

Farmers –meetings, publications, e-mail  
SMES  
SMMES

## 5. Financial data

- Annual budget in local currency with Euro equivalent  
P 42million
- Main sources of funding
- Government
- Sales

## 6. Human resources

- c. total number of staff (size of professional, technical and clerical staff; indicate whether temporary, part-time, project staff, volunteers)
- d. Total staff:220
- e. Professional and technical-110
- f. Support staff: 110
  
- b. Specialised skills (list key skills of professional staff and technical staff)
  - design work
  - energy
  - engineering
  - finance
  - information
  - information technology
  - sanitation

## 7. Name the technical divisions or departments within the institution

Research and development

Business and Marketing department

Finance

IT

## 8. Information and communication management (ICM) and information and communication technologies (ICT) use

## **8 Information and communication management (ICM) capacity**

8a. Is there a department, section or unit responsible for ICM in your institution (specify)?

Information unit made up of extension, marketing and library

8b. What resources are available for ICM in your institution – staff (numbers, qualifications, experience), budgets (extent)

TOTAL STAFF -5

8c. What information resources does the institution have/produce (e.g. libraries, publications, databases, ...) – specify where possible.

multimedia

8d. What constraints does your institution face with regard to ICM? What improvements are needed?

Funding

Wide distribution of materials

8e. What ICM programmes and projects has your institution been able to participate in or has implemented in the last 5 years (current/completed, including training)?

Marketing information strategy

8f. Does your institution have an information policy or information strategic plan or both?

## **Information and Communication Technologies (ICT)**

9a. Is there a department, section or unit responsible for ICT in your institution (specify)?

ICT department

9b. What resources are available for the management of ICTs in your institution – staff (numbers, qualifications, experience), budgets (extent)?

5 professionals P1.5 million

9c. What ICTs does the institution have (e.g. hardware, software, L/WANs, etc. – see list above...)?

Local area network

Computers

Internet access

software

Servers

Hardware

9d. What constraints does your institution face with regard to ICTs? What improvements are needed?

APPAC Accounting system

9e. What ICT programmes and projects has your institution been able to participate in or has implemented in the last 5 years (current/completed, including training). Indicate target audience against each programme/project.

Upgrading network system

9f. Does your institution have an ICT policy or ICT strategic plan, or both?

9g. How does the institution intend to further develop and use ICTs?

9h. What resources and training (from whom) will be needed to assist in achieving these goals?

**10. What is the impact of government policy (or the lack of) in terms of the use of ICTs in your institution? (Include also the impact of private sector initiatives)**

Good

**Information needs**

**11. What types of information/advice do you need to service the programmes being executed by your institution? (Check guidelines for possible types of information)**

Research and development  
technology tracking  
patent-related activity  
marketing extension  
packaging  
government and international regulations  
waster utilisation  
market data

**12. Indicate the sources that provide you with information and advice (local, national, regional, international or others) – (check guidelines giving possible sources)**

Internet  
Library/information unit  
Companies

**13. Identify types or formats of information that you have found difficult to acquire. (Consult guidelines to assist in identification)**

**Linkages and collaboration**

**14. Linkages and collaboration with CTA** None

**Other collaboration**

15a. Please indicate the names of institutions with which you collaborate. (national, regional and/or international)  
UB

DAR

NFTRC

WAITRO

South African bureau of standards

BOBS

MODIMP Pty, Botha Ville, South Africa

SIRDEC Zimbabwe

Ginasena ,Pty Colombo, Sri Lanka

15b. Indicate the type of collaboration you have with the named institutions (e.g. joint projects, information exchange, etc.)

quality management system

technical cooperation

sales of materials

**16. Programme/projects undertaken within the last five years (including training in ICM and ICT)**

**17. Does the organization have an organization-wide strategic plan for the next  2 years  5 years? If so, what are the main areas that are targeted for development?**

**18a . What new information activities or information management initiatives have been identified by the institution that would assist in achieving these goals?**

Research priorities in Botswana

Support for business and economic growth

**18b. What resources and training needs have been identified by the institution that would assist in achieving these goals?**

Capacity building

Consolidation of existing resources

**Name of the institutional representative interviewed:** Pheto Percy Maribe

Designation: General Manager

Date of Interview:04/04/07

*Consultant's Comments*

*1. Why did you select this institution to interview?*

It mainly supports socio-economic development of the rural areas.

*2. Other pertinent issues that arose during the interview.*

Institution 9

**DATA CAPTURE FORM-INSTITUTIONS  
ASSESSMENT OF AGRICULTURAL INFORMATION NEEDS IN  
AFRICAN, CARIBBEAN & PACIFIC (ACP) STATES**

**Botswana**

1. C Name of Institution/Organisation National Development Bank

Acronym: NDB

Postal address P.O. Box 225 Gaborone

Physical address of main location: NDB Hse Main Mall Queens Road, Gaborone  
Country: Botswana

List branches or other sites if applicable, including main focus of each site if different from the main branch

Tel: 3952801                      Fax: 3974446;  
Email:  
Website:www.ndb.bw

**2.Type and Role of Institution**

2a.Type (tick) no more than three	2b. Role (tick) as many as are applicable
BNK    Bank or credit institution	FS      Financial services RU      Rural Development

2c Consultant's Comments

### 3. Mission and objective

Objective/mission statement: To provide financial products and services to entrepreneurs and businesses which promote economic development of Botswana

#### 4 a. Fields of specialisation (organisation's current programme of work)

Industry, manufacturing, processing and mining  
Property development  
Agriculture

#### 4 b. Target audiences (specify if possible) and means of contact with them

Commercial/service industry –Personal contacts and applications  
All industrial, manufacturing, processing and mining  
all property purchase and property development  
All agricultural projects including Game farming

### 5. Financial data

- a. Annual budget in local currency with Euro equivalent
- b. Main sources of funding  
self financing

## 6. Human resources

- a. total number of staff (size of professional, technical and clerical staff; indicate whether temporary, part-time, project staff, volunteers)

Total staff-113

Professional and technical-55

Support staff -56

Part-time staff -2

- b. Specialised skills (list key skills of professional staff and technical staff)

fiancé

Agriculture

Economics

Marketing

Legal affairs

IT

## 7. Name the technical divisions or departments within the institution

Business Development

Information technology

Finance

## 8. Information and communication management (ICM) and information and communication technologies (ICT) use

### 8 Information and communication management (ICM) capacity

8a. Is there a department, section or unit responsible for ICM in your institution (specify)? Publications department

8b. What resources are available for ICM in your institution – staff (numbers, qualifications, experience), budgets (extent)

publications

newsletters

annual reports

financial statistics

databases

8c. What information resources does the institution have/produce (e.g. libraries, publications, databases, ...) – specify where possible.

8d. What constraints does your institution face with regard to ICM? What improvements are needed?

8e. What ICM programmes and projects has your institution been able to participate in or has implemented in the last 5 years (current/completed, including training)?

8f. Does your institution have an information policy or information strategic plan or both?

### **Information and Communication Technologies (ICT)**

9a. Is there a department, section or unit responsible for ICT in your institution (specify)?

IT

9b. What resources are available for the management of ICTs in your institution – staff (numbers, qualifications, experience), budgets (extent)?

TOTAL STAFF-10 (all qualified)

9c. What ICTs does the institution have (e.g. hardware, software, L/WANs, etc. – see list above...)?

Local area network

Computers

Internet access

Software

Servers

Hardware

9d. What constraints does your institution face with regard to ICTs? What improvements are needed?

9e. What ICT programmes and projects has your institution been able to participate in or has implemented in the last 5 years (current/completed, including training). Indicate target audience against each programme/project.

Loan management system

9f. Does your institution have an ICT policy or ICT strategic plan, or both?

Yes-security

9g. How does the institution intend to further develop and use ICTs?

9h. What resources and training (from whom) will be needed to assist in achieving these goals?

Training of staff members in the use of IT  
management information system

**10. What is the impact of government policy (or the lack of) in terms of the use of ICTs in your institution? (Include also the impact of private sector initiatives)**

### **Information needs**

**11. What types of information/advice do you need to service the programmes being executed by your institution? (Check guidelines for possible types of information)**

Market trends

Finance

Competitive advantage

Demand and supply

Farm problems

Government and international regulations

Market data

**12. Indicate the sources that provide you with information and advice (local, national, regional, international or others) – (check guidelines giving possible sources)**

Bank of Botswana  
BIDPA  
Centre for applied research, Botswana  
Internet  
BCA  
Ministry of agriculture  
Ministry of Trade  
Department of Statistics

**13. Identify types or formats of information that you have found difficult to acquire. (Consult guidelines to assist in identification)**

**Linkages and collaboration**

**14. Linkages and collaboration with CTA**

14a. Are you aware of CTA activities in your countries or the Region?  **Yes**  No.

14b. If “Yes”, indicate if your institution is a recipient of the following CTA publications and services. Tick all that apply:

**g. Spore magazine**

**h. CTA publications**

**i. DORA (Distribution of Reference Books on Agriculture)**

j. SDI (Selective Dissemination of Information. Lists of abstracts and bibliographies are sent to recipients on the basis of the topics selected by researchers, scientists

and policy-makers)

- k. CD-ROM / Database subscriptions
- l. Question & Answer Service (QAS)

14c. If “Yes” indicate if your institution has participated in:

- o CTA Annual Seminars (international meetings on key topics of interest e.g. soil fertility, food security)
- o Co-seminars (i.e. co-sponsored by CTA with other agencies such as IICA, FAO, etc.)
- o ICT Observatory (Four day workshop to examine the impact of ICTs in relation to other key issues such as youth, extension and gender)
- o CTA training programmes or non-CTA training programmes
- o Seminar Support Programme

**Other collaboration**

15a. Please indicate the names of institutions with which you collaborate. (national, regional and/or international)

Ministry of Finance

Botswana Export and Credit Institution

BEDIA

BOTEC

BAMB

15b. Indicate the type of collaboration you have with the named institutions (e.g. joint projects, information exchange, etc.)

**16. Programme/projects undertaken within the last five years (including training in ICM and ICT)**

**17. Does the organization have an organization-wide strategic plan for the next  2**

years □ 5 years? If so, what are the main areas that are targeted for development?

**18a . What new information activities or information management initiatives have been identified by the institution that would assist in achieving these goals?**

Website development  
-upgrading and training  
Budget appraisal skills  
Evaluation of projects  
Updateness of website

**18b. What resources and training needs have been identified by the institution that would assist in achieving these goals?**

Human resources capacity building

**Name of the institutional representative interviewed:**

Baboloki Mojalemotho  
Patrick Mafhoko

**Designation:**

Public Relations Manager  
Business Development Director

**Date of Interview:** 04/04/07

*Consultant's Comments*

1. *Why did you select this institution to interview?*  
Provides credits and loans to farmers

2. *Other pertinent issues that arose during the interview.*



Institution 10

**DATA CAPTURE FORM-INSTITUTIONS  
ASSESSMENT OF AGRICULTURAL INFORMATION NEEDS IN  
AFRICAN, CARIBBEAN & PACIFIC (ACP) STATES**

**Botswana**

**1. Contact Information**

Name of Institution/Organisation: Botswana Vaccine Institute

Acronym: BVI

Postal address P/Bag 0031  
Gaborone

Physical address of main location: Plot 6385 Lejara Road Broadhurst Industrial Estate,  
Gaborone Country: Botswana

List branches or other sites if applicable, including main focus of each site if different from the main branch: None

Tel: 3912711 Fax: 3956798

Email: [gmatlho@bvi.co.bw](mailto:gmatlho@bvi.co.bw)

Website: [www.bvi.co.bw](http://www.bvi.co.bw)

**2.Type and Role of Institution**

<p>2a.Type (tick) no more than three</p> <p>PRV Private enterprise, company</p> <p>REG Regional organisation or network</p> <p>STA Statutory body</p>	<p>PS-M Manufacturer (e.g. tannery, bottler, refiner, roaster)</p> <p>PS-S Supplier (e.g. chemicals, seeds)</p> <p>RD Research and development</p>
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2c Consultant's Comments

**3. Objective/mission statement:**

To carry on the business of research and manufacture of all kinds of vaccines and to sell the same throughout the world.

To support the livestock industry, especially food animals by producing relevant and appropriate vaccines of a high quality standard to combat economically devastating diseases such as foot-and-mouth disease (FMD).

To expand the sales of its products beyond the borders of Botswana and play a major role in the production and provision of scarce animal protein food resource to communities.

To encourage and promote environmentally sound and friendly practices in animal production systems.

To guarantee quality assurance and good manufacturing practices of its products for its existence *raison d'être*.

To imbue among members of staff a commitment to the organisation's objectives, and the pursuit of excellence in their implementation.

Foot and mouth disease

Vaccine production

Veterinary medicine

Animal diseases

research and development

engineering

**4b. Target audiences (specify if possible) and means of contact with them**

Government – meetings, communication links

Small farmers

Co-operatives

## 5. Financial data

- a. Annual budget in local currency with Euro equivalent P25 m EUR 3m
- b. Main sources of funding  
Sales

## 6. Human resources

- g. total number of staff (size of professional, technical and clerical staff; indicate whether temporary, part-time, project staff, volunteers)
- h. Total staff- 72
- i. Professionals-12
- j. Technicians- 18
- k. Support staff-42
- b. Specialised skills (list key skills of professional staff and technical staff)  
veterinary medicine  
virology  
chemistry/biochemistry  
biology  
electrical/mechanical engineering

## 7. Name the technical divisions or departments within the institution

### 7 Name the technical divisions or departments within the institution

Production  
Quality control/FMFD Diagnostic research  
Veterinary controls and quality assurance  
Engineering and maintenance

**8. Information and communication management (ICM) and information and communication technologies (ICT) use**

**Information and Communication Management (ICM)**

**8 Information and communication management (ICM) capacity**

8a. Is there a department, section or unit responsible for ICM in your institution (specify)? None

8b. What resources are available for ICM in your institution – staff (numbers, qualifications, experience), budgets (extent)

8c. What information resources does the institution have/produce (e.g. libraries, publications, databases, ...) – specify where possible.

publications

databases

8d. What constraints does your institution face with regard to ICM? What improvements are needed?

Funding

8e. What ICM programmes and projects has your institution been able to participate in or has implemented in the last 5 years (current/completed, including training)?

8f. Does your institution have an information policy or information strategic plan or both?

**Information and Communication Technologies (ICT)**

9a. Is there a department, section or unit responsible for ICT in your institution (specify)?

Outsourced

9b. What resources are available for the management of ICTs in your institution – staff (numbers, qualifications, experience), budgets (extent)?

9c. What ICTs does the institution have (e.g. hardware, software, L/WANs, etc. – see list above...)?

computers

Internet access

local area network

9d. What constraints does your institution face with regard to ICTs? What improvements are needed?

infrastructure

human resource

9e. What ICT programmes and projects has your institution been able to participate in or has implemented in the last 5 years (current/completed, including training). Indicate target audience against each programme/project.

website development

local area network

9f. Does your institution have an ICT policy or ICT strategic plan, or both? No

9g. How does the institution intend to further develop and use ICTs?

videoconferencing facilities

9h. What resources and training (from whom) will be needed to assist in achieving these goals?

capacity building for staff

**10. What is the impact of government policy (or the lack of) in terms of the use of ICTs in your institution? (Include also the impact of private sector initiatives)**

good

**Information needs**

**11. What types of information/advice do you need to service the programmes being executed by your institution? (Check guidelines for possible types of information)**

Updateness on technology  
User needs  
Farm problems  
animal diseases and production  
packaging  
trade fairs

**12. Indicate the sources that provide you with information and advice (local, national, regional, international or others) – (check guidelines giving possible sources)**

International meetings  
Government and international regulations  
Personal  
Internet

**13. Identify types or formats of information that you have found difficult to acquire. (Consult guidelines to assist in identification)**

## **Linkages and collaboration**

### **14. Linkages and collaboration with CTA**

14a. Are you aware of CTA activities in your countries or the Region?  **Yes**  No.

14b. If “Yes”, indicate if your institution is a recipient of the following CTA publications and services. Tick all that apply:

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- q. CD-ROM / Database subscriptions
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14c. If “Yes” indicate if your institution has participated in:

- o CTA Annual Seminars (international meetings on key topics of interest e.g. soil fertility, food security)
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- o ICT Observatory (Four day workshop to examine the impact of ICTs in relation to other key issues such as youth, extension and gender)
- o CTA training programmes or non-CTA training programmes
- o Seminar Support Programme

## **Other collaboration**

15a. Please indicate the names of institutions with which you collaborate. (national, regional and/or international)

Merial Lyon, France  
 National veterinary laboratory, south Africa  
 National veterinary laboratory, UK  
 central veterinary, Zimbabwe  
 ministry=of Agriculture  
 BCA  
 FAO  
 WHO  
 OIE (World animal Health Organisation)  
 African Union International bureau of Animal resources  
 EU

15b. Indicate the type of collaboration you have with the named institutions (e.g. joint projects, information exchange, etc.)

Training  
 Information exchange  
 Production use

**16. Programme/projects undertaken within the last five years (including training in ICM and ICT)**

<p>Programme/projects</p> <p>Training programme on process control-safety quality</p> <p>Quality management system-ISO 9000-certyification</p> <p>ISO 17025-Diagnostic accreditation</p>	<p>Target audience</p> <p>Technical/professional staff</p>
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**17. Does the organization have an organization-wide strategic plan for the next  2 years  5 years? If so, what are the main areas that are targeted for development?**

Draft

**18a . What new information activities or information management initiatives have been identified by the institution that would assist in achieving these goals?**

*Infrastructure*

*Technology transfer*

*Bio security problem*

**18b. What resources and training needs have been identified by the institution that would assist in achieving these goals?**

**Name of the institutional representative interviewed: Dr. Onkabetse George Matlho**

**Designation: General Manager**

**Date of Interview: 10/04/04**

*Consultant's Comments*

*1. Why did you select this institution to interview?*

It supports livestock industry in Botswana by providing vaccine against livestock disease.

*2. Other pertinent issues that arose during the interview.*

## ANNEX 4. BIBLIOGRAPHY

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