ASSESSMENT OF AGRICULTURAL INFORMATION NEEDS IN AFRICAN, CARIBBEAN & PACIFIC (ACP) STATES FOR CTA'S PRODUCTS AND SERVICES

Phase 1: Caribbean

Country Study: SAINT LUCIA

Final Report

Prepared by:

AGRICO LTD.

on behalf of the

Technical Centre for Agricultural and Rural Cooperation (CTA)

Project: 4-7-41-204-4/b

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Currency and Equivalents

1.00 EUR	=	1.29636 United States Dollars (USD)
1.00 EUR	=	1.324 Eastern Caribbean Dollars (ECD)
1 metre (m)	=	3.281 feet (ft)
1 hectare (ha)	=	2.471 acres (ac)
1 kilogram (kg)	=	2.205 pounds (lbs)

List of Acronyms

ACP	African, Caribbean and Pacific
BERU	Banana Emergency Recovery Unit
BCSR	Biodiversity Country Study Report for St. Lucia
CAMID	Caribbean Agribusiness Marketing Intelligence & Development Network
CARDI	Caribbean Agricultural Research and Development Institute
CARICOM	Caribbean Common Market
CBD	Convention on Biological Diversity
CCIA	Chamber of Commerce, Industry and Agriculture
CDB	Caribbean Development Bank
CFO	Commercial Farmers Organisation
CFRAMP	CARICOM Fisheries Resource Assessment and Management Programme
CIA	Central Intelligence Agency – US
CIDA	Canadian International Development Agency
CPA	Country Poverty Assessment
CSME	Caribbean Single Market and Economy
CTA	Technical Centre for Agricultural and Rural Cooperation
CTCS	Caribbean Technological Consultancy Services Network
CXC	Caribbean Examination Council
EC	Eastern Caribbean
EU	European Union
EUREP-GAP	European Retail Supermarket Group – Good Agricultural Practices
FAO	Food and Agriculture Organisation – of the United Nations
FTAA	Free Trade Area of the Americas
GDP	Gross Domestic Product

GEF	Global Environmental Fund
GIS	Geographic Information Systems
GOSL	Government of St. Lucia
GPS	Global Positioning Systems
GSA	Guyana School of Agriculture
HACCP	Hazard Analysis and Critical Control Point
ICM	Information and Communication Management
ICT	Information and Communication Technology
IICA	Inter-American Institute for Cooperation on Agriculture
ILO	International Labour Organization
INIBAP	International Network for the Improvement of Banana and Plantain
IPM	Integrated Pest Management
ISO	International Organization of Standardization
JSA	Jamaica School of Agriculture
MAFF	Ministry of Agriculture, Forestry and Fisheries
MIS	Management Information Systems
MTESP	Medium Term Economic Strategy Paper
NA	Not Available
NCSTD	National Council for Science and Technology for Development
NFCCU	National Farmers Cooperative Credit Unit
NGOs	Non Government Organizations
NRDF	National Research and Development Foundation
NTBs	Non-tariff Barriers
OECS	Organization of Eastern Caribbean States
OECS/ESDU	Organization of Eastern Caribbean States / Environment and Sustainable Development Unit
OAS	Organization of American States
S&T	Science and Technology
SALCC	Sir Arthur Lewis Community College

SEDU	St. Lucia Small Enterprise Development Unit
SFA	EU – Special Framework of Assistance
SLBC	St. Lucia Banana Corporation
SLBS	St. Lucia Bureau of Standards
SLMB	St. Lucia Marketing Board
SLFMC	St. Lucia Fish Marketing Corporation
SMEs	Small and Medium Enterprises
SPS	Sanitary and Phytosanitary Measures
STA	Statutory Agency
TQFC	Tropical Quality Fruit Company
TRIPS	Trade-Related Aspects of Intellectual Property Rights
UNCCD	United Nations Convention to Combat Desertification (Land Degradation)
UNDP	United Nations Development Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNFCC	United Nations Framework Convention on Climate Change
UNICEF	United Nations International Children's Emergency Fund
UK	United Kingdom
US	United States
USA	United States of America
USAID	United States Agency for International Development
UWI	University of the West Indies
WIBDECO	Windward Islands Banana Development Company
WINFA	Windward Islands Farmers Association
WTO	World Trade Organization

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Executive summary

Introduction

The Technical Centre for Agricultural and Rural Cooperation (CTA), an ACP-EU body since 1983, and operating within the framework of the ACP-EC Cotonou Agreement since 2000, has had a mandate 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.

The CTA's 2001-2005 "Strategic Plan and Framework for Action identified strategic issues for CTA regarding the improved targeting of its programmes to ensure wider coverage and activities that are relevant to and reach the poor. Further, several of CTA's national and regional partners requested a study to update the earlier studies done to allow them to provide more targeted assistance to their beneficiaries.

Objectives of the study

The objectives of this study are therefore as follows:

- to identify agricultural information needs of key actors / beneficiaries for CTA products and services;
- to identify needs of potential actors / beneficiaries of CTA activities and services in terms of building capacity for information and communication management;
- to identify potential partners / beneficiaries for CTA activities and services;
- to develop some baseline data to facilitate subsequent monitoring activities.

Methodology

The study was conducted in two phases; Phase 1 – a desk study which involved a review of available documents and extensive Internet searches and Phase 2 – field research conducted through consultations/interviews with nine (9) targeted organisations/institutions selected based on a determined potential to facilitate the CTA's work programme at the national level. Interviews were conducted utilizing structured data capture formats provided by the CTA.

Expected results

Findings from this study are expected to inform the CTA priority themes and work programmes for the Caribbean for the next five years. At the same time interviewees will be made more aware of the products and services that are currently available from CTA for institutions and individuals. The needs of the select organisations/institutions will also be assessed in order to update products and services that can support the activities and work programmes of same.

Findings

Agricultural information and communication management in St Lucia is still largely viewed in a context of managing traditional information resources and the conventional media, though there has been increasing recognition and integration of new information resources and modern communications media over the last few years, as a result of an increasing exposure to ICTs.

The policy priority areas of the Government of the St. Lucia (GOSL), namely efficiency and competitiveness, equity, sustainability and livelihood, coupled with the mandate of the Ministry of Agriculture, Forestry and Fisheries (MAFF) to address national economic and social imperatives in respect of rural development, food security, natural resource conservation and gender equity, provide a general indication of the focus for information and capacity building needs of stakeholders in the sector.

When the extent of key problems observed among the institutions visited was compared with those previously identified by each of the three CTA operational departments, it was found that the situation with respect to Information Products and Services had changed marginally. Printed publications however, were still not widely available, though the issue seemed to be one of accessibility and relevance of the available information, due to time taken to access and the fragmentation of documentation. Further, there were few publications already adapted, with respect to translation or formatting of information, for effective knowledge transfer.

With regard to Communication Channels and Services the assessment revealed a growing use of networking services by the institutions, with a combination of both conventional and electronic services utilized for networking, within the organisations and with affiliated regional and international institutions. The human resource constraints of most organisations, however, limited the extent to which electronic information services such as the Internet, websites and discussion groups are utilized. The MAFF though not considered a primary information source, remains a key source, as it continues to spearhead the practice of incorporating networking tools such as GIS in planning and resource use and allocation.

The status of ICM Skills and Systems in the country also showed little improvement, as the general lack of expertise for ICM as well as limited opportunities for training in this regard were indicated. In addition, the absence of ICM policies and strategies continued to hamper the way in which information was managed within the sector. All of the nine institutions interviewed indicated having a basic physical capacity, such as computer hardware and software and Internet access for information and communication management. However, all acknowledged resource availability, primarily financial and human resources, as the most serious constraint to capacity development for meeting agricultural information needs, with the producer organisation, NFCCU, the most affected in this regard.

Conclusions

The current and projected information needs of the institutions though quite diverse can be summarised into the following priority thematic areas, namely, production, marketing, trade, technology, management, and natural resource conservation. Problems associated with managing information needs of the sector however, bear little difference with those identified under the CTA departments. All institutions appear to be constrained by the limited availability of information for decision-making. There is also limited availability of the necessary skills and resources (financial, human and physical) to access information as the capacities of these institutions are still largely underdeveloped.

Further, policies and strategies to facilitate the integration of information and communication resources into the functions of these stakeholders and into the wider sector to meet the challenges of the new global economy, are either inappropriate or non-existent. However, stakeholders in the agricultural and rural sector of St Lucia need to be equipped with the relevant information and appropriate tools if they are to be able to actively participate in the developments of the global network society. There is need therefore, to develop more definitive information management policies and strategies at the national/sector level and institutional levels, to facilitate strategic data and information collection and communication required to foster and guide decision-making at all levels in the sector. The situation therefore

presents considerable opportunity for CTA interventions in the country, in terms of providing access to information, capacity building as well as addressing a key strategic area of partnership and targeting of beneficiaries.

Recommendations

Given prohibitive cost and time factors, the country will need, within the framework of national goals, sector policies and available resources, to develop the capabilities for maintaining information and communication outputs and for tailoring them to the specific needs of stakeholders. Specific recommendations in this regard include:

Information needs

1. Improved accessibility to publications and other information by extending the reach of CTA's products and services to the partners and beneficiaries identified in the study.
2. Information packages specifically tailored to the needs of the partners and beneficiaries.
3. Public awareness programmes aimed at developing local capacity to engender an information culture and an appreciation for the value of information to be undertaken by public and private sector with support from CTA.

Capacity building needs

4. CTA should provide resources, equipment and/or technical assistance, to facilitate the development of cost-effective and participatory ICM systems, such as local and national networks to increase exchanges of experience and other business networking among the actors and stakeholders at the local level, as well as on an international and regional scale.
5. Technical assistance should be short term, while counterpart training is pursued for development of local knowledge and expertise for long term.
6. CTA should assist in sourcing funds for acquiring physical resources such as equipment to improve access to electronic publications and multi-media should be provided to local organisations.
7. CTA could support the participatory development and implementation of information and communication management policies and strategies to promote the use of information products and services for planning and decision-making in the sector.
8. Institutions should assign the critical mass of physical and human resources needed for the management of data and information resources.
9. Stakeholders at all levels in the sector should develop mechanisms to access requisite skills training in the area of information and communication management (ICM). CTA could assist in facilitating ICM and related skills training.
10. CTA could assist select public and private sector institutions in the creation of databases utilizing standardized formats for agricultural information management to facilitate information dissemination, and the development of skills for the management of these databases.

Potential partners and beneficiaries

The following organisations are recommended for CTA partnering initiatives in St. Lucia, the St Lucia Agriculturist Association (SLAA), WIBDECO and a strengthened National Farmers Cooperative Credit Union (NFCCU), as they fulfil all of the criteria outlined by CTA. The other organisations namely, SEDU, NRDF, OECS-SDU, CCIA and to a lesser extent SALCC, as well as the MAFF, meet the criteria for potential CTA beneficiaries.

1. INTRODUCTION

1. The Technical Centre for Agricultural and Rural Cooperation (CTA) established in 1983 under the Lomé Convention between the ACP (African, Caribbean and Pacific) Group of States and the European Union Member States has since 2000, 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 and to formulate information and communication management (ICM) strategies, including those relevant to science and technology (S&T).

2. Following the implementation of CTA's Strategic Plan (2001-2005) in 2002, CTA's activities were 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 a central service known as Planning Corporate Services (P&CS) Unit 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.

3. The "Strategic Plan and Framework for Action – 2001 – 2005" developed by CTA based on the "Evaluation of the Implementation of the Mid-Term Plan (1997 – 2000)" identifies strategic issues for CTA including: improved targeting (including partnerships and beneficiaries), geographical coverage, decentralisation, regionalisation and thematic orientation. Issues related to the extent to which CTA's activities are relevant to and reach the poor, gender awareness and partner identification and selection were also brought to the fore. In addition, various national and regional partners with whom CTA has had a long-standing relationship requested a study which would serve to update the earlier studies done and allow them to provide more targeted assistance to their beneficiaries.

4. The objectives of this study are as follows:
   - to identify agricultural information needs of key actors / beneficiaries for CTA products and services;
   - to identify needs of potential actors / beneficiaries of CTA activities and services in terms of building capacity for information and communication management;
   - to identify potential partners / beneficiaries for CTA activities and services;
   - to develop some baseline data to facilitate subsequent monitoring activities.

5. Nine organisations that interface with key actors/beneficiaries for CTA products and services in St Lucia, namely, the St Lucia Agriculturist Association (SLAA), National Farmers Cooperative Credit Union (NFCCU), OECS- Environmental and Sustainable Development Unit (OECS-ESDU), Small Enterprise Development Unit (SEDU), Windward Islands Banana Development and Exporting Company (WIBDECO), National Research and Development Foundation (NRDF), Chamber of Commerce Industry and Agriculture (CCIA), Sir Arthur Lewis Community College (SALCC), and the Ministry of Agriculture Forestry and Fisheries (MAFF) were interviewed for the purpose of this study.

2. COUNTRY PROFILE

6. Saint Lucia is a small island developing state lying within the Antillean Archipelago or garland of Eastern Caribbean Islands, and is situated near latitude 14 degrees north and 61 degrees west. The island is separated from Martinique to the north by a channel approximately 32 km (20 miles) wide and from its southerly neighbour, St Vincent, by a channel 40 km (25 miles) wide. The island occupies an area of 616 sq km (238 square miles) and is roughly 43 km (27 miles) long and 22 km (14 miles) wide. The island is of volcanic origin and comprises many relatively flat coastal river valleys and a mountainous interior. The population is distributed mainly along the coastal area with most of the economic activities concentrated in same.

7. The Biodiversity Country Study Report of St. Lucia (BCSR, 1998), identifies 35% (approx. 21,741 hectares) of St. Lucia to be covered by natural vegetation, with 7,500 (13%) found under Government reserves. Of the remaining land area, 55% (34,015 hectares) is under agriculture and 9.5% (5,905 hectares) is in urban use, surface water and exposed rock.

8. National Census data for 2001 indicate a population size of 157,490, with year end figures for 2003 estimated at 160,700. Labour Force indicators for 2003 establish the labour force at 86,890, with 69,840 employed. The distribution of the employed Labour Force conveys that agriculture remains the main source of employment, with almost 20% of the work force employed in this sector.

9. Agriculture remains a vitally important sector of Saint Lucia's economy, though tourism and other service-based industries overtook the agricultural sector in the early 1990's as the major contributor to GDP. This is a normal consequence of development as secondary and tertiary sectors expand. However, although agriculture is purported to contribute roughly 6.5% to GDP (2002) the true contribution of the sector is more likely to be much higher when forward and backward linkages to the sector are taken into account[1]. Despite its steadily declining contribution to GDP over the last 10 years, the continuing significant role that agriculture plays in the country's socio-economic development can neither be underestimated nor ignored.

10. St. Lucia is a net-food importing country and is categorised as such within the WTO[2]. Saint Lucia has experienced a growing trade deficit in its food bill for over ten years, by and large corresponding with the decline in the banana industry[3] and the increase in tourism activity. Most locally produced agricultural commodities and their products are consumed domestically with the exception of bananas and to a lesser extent cocoa and coconut products.

11. The restructuring and repositioning or the St. Lucian economy to respond to the challenges and opportunities arising out of globalization and trade liberalization have been identified as key priorities for the Government of St. Lucia (GOSL) towards economic diversification within the mid-term economic strategy.

12. In responding to the challenges facing the agricultural sector, the GOSL embarked on a strategy to diversify the agricultural sector, having as the principal objective, a reduction on the dependence on the single crop (bananas).

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[1] *More than Food on the Table: Agriculture's True Contribution to the Economy*.
[2] *Within the WTO Saint Lucia is categorized as a Net Food Importing Developing Country (NFIDC).*
[3] *Export earnings from bananas have dropped by approximately 50% from 1992 – 2002.*

2.1 Agriculture, Fisheries and Forestry

13. Agriculture's share of Gross Domestic Product (GDP) was less than 5% in 2003. This has been a result of the contracting performance of bananas from 9.7% in 1993 to 1.96% in 2003. Improvement by 5.7% and 3.7% of fisheries and other crops sub sectors respectively were not sufficient to offset the declines of the sector. Growth rate for the sector has declined for the third consecutive year and in 2003 contracted by 10.8%. The banana sub sector, which accounts for 40% of real value-added of the sector, contracted by 25.5%. Similarly the livestock sub sector, which accounts for 12% of value- added in the sector, contracted by 3.2%. Agriculture however, remains the main source of employment, with almost 20% of the country's work force employed in this sector. However, population data for the sector point to a decrease in the size of agricultural worker population of almost 50%, from 19, 009 in 1996 to 10,830 in 2003.

14. Despite the overall decline in the agricultural sector, the other non-banana sub-sectors have steadily increased their contribution to GDP over the last five years, with non-banana crops now the second largest contributor in this sector. The steady growth in the domestic consumption of non-traditional crops resulted in a substantial growth in 1999, declining to 1.23% in 2003, yet maintaining its order in rank. Increased growth rates in fish landings contributed to an expansion of this sub-sector between 1999 and 2001, contracting in the more recent years. The 1999 decline in the livestock sub-sector was partially reversed by an increase in output in the following two years, owing primarily to a substantial growth in chicken production, however, levelling off in 2002-2003.

15. The Ministry of Agriculture, Forestry and Fisheries (MAFF), plays a pivotal role in the policy and planning for all the sub-sectors, as well as in the design and implementation of related projects, having a mandate from the GOSL to support and oversee the development of these sub-sectors. The overall sector vision[4] will be pursued within the broad framework of an imminent liberalized global trading environment and national economy with new realities of more competitive markets and social imperatives in respect of rural development, food security, natural resource conservation and gender equity.

16. In pursuit of these objectives, the government has decided to assume a more facilitative role in providing the environment for private investment in the sector. In this regard, the private sector and non-governmental organisations are being encouraged to assume a greater role in agricultural development. The MAFF which comprises the three departments of Agriculture, Forestry and Fisheries, will continue to deliver its mandate in many areas of shared jurisdiction and responsibility, with the Ministry's annual work programme implemented with support from national, regional and international partners as described in Figure 1 below and outlined in Annex III.

17. Donor and funding support for implementation of the sector's programmes come primarily from the European Union (EU) Stabex (stabilisation of exports) funding resource envelopes and Special Framework of Assistance (SFA) funds with supplementary agricultural development funding from the Caribbean Development Bank (CDB).

2.1.1 Agriculture

18. The agriculture sector is characterized by a banana sub-sector and a non-banana sub-sector. Banana production continues to occupy the largest share of land currently under

[4] *"to sustain a diversified national agricultural income base and enhance the integrity of rural livelihood systems; by generating the capacity for efficiency and the competitive production and marketing of agricultural goods and services"*

cultivation, - 48%. Coconut, the next major crop occupies about 42% of agricultural land. The other crops produced include cocoa, vegetables and herbs, other fruit and tree crops and cut flowers. The livestock sub-sector is small and dominated by the poultry industry. Recent efforts by the MAFF have sought to encourage the production of small ruminants (sheep and goats), swine and rabbits.

19. Small-scale farming, which is generally associated with inefficiency and non-commercial viability, continues to be a distinct feature of agriculture in St. Lucia. Many of the farmers are risk averse, resource deficient farmers with limited access to credit and to other critical production inputs and services. Though an increasing acreage of bananas is now irrigated, non-banana crop production is still carried out mainly under rain-fed conditions, so that during the year, supplies varies as with the rainfall.

20. The banana sub-sector comprises three banana companies, established along with two other banana companies (now defunct) out of the process of privatization of the banana industry towards the end of the 1990's, as government saw a need to play a reduced role in the industry, and promote commercialization for increased efficiency and competitiveness of the sub-sector. The structures of these banana companies are not underpinned by traditional business principles and they appear to be in a state of flux, having much difficulty in achieving viability.

21. The Department of Agriculture under a Director of Agriculture Services (DAS) is responsible for providing technical assistance, regulatory and support services and the policy framework to guide development of agriculture, particularly the non-banana sub-sector.

2.1.2 Fisheries

22. The fisheries sub-sector has shown steady growth in output and in the number of producers over the last 5 years and is emerging as a viable option for further diversification. Fisheries production averaged 1,400 tonnes over the last five years. In 2003, there were 669 registered fishing vessels, with 1,256 fishermen registered as full time and 836 registered as part time.

23. The **Fisheries Department** is the arm of the MAFF with the responsibility for managing the affairs of the marine and coastal environment and consists of four main operational units: extension, data/fisheries resource management, aquaculture development, and administration. This Department, which by comparison with the Department of Agriculture is small but growing, is headed by a Chief Fisheries Officer who reports directly to the Permanent Secretary. The extension unit of the Division is responsible for the transfer of technology and information to and among fishers and other stakeholders.

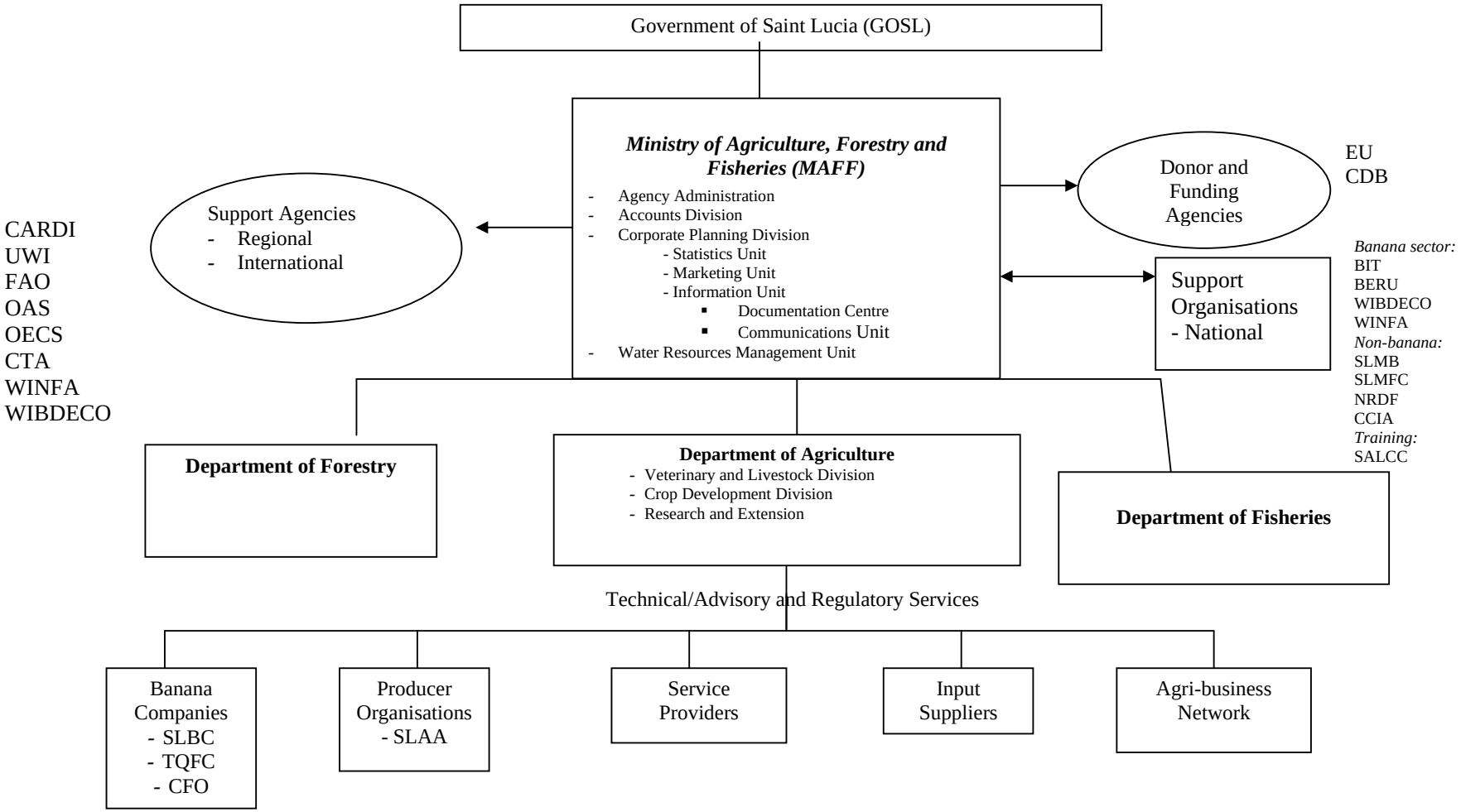
2.1.3 Forestry

24. Forestry is the smallest agricultural sub-sector. Thirty-five percent (approx. 21,741 hectares) of St. Lucia is covered by natural vegetation, with 7,500 (13%) found under national forest reserves (BCSR, 1998). Craft products, mauby and latanyé production along with Christmas tree exports are currently being explored as viable options for the development of the industry.

25. The responsibility for the protection and management of the country's forest resources, including protecting wildlife and the country's watersheds lies with the **Forestry Department** established in 1946. The Department's priorities are the sustainable utilization of the island's forest, wildlife and biodiversity resources; research; technical

advisory, eco-tourism development; and environmental education (advocacy and sensitization).

Figure 1: Structure of Agriculture, Forestry and Fisheries – Institutional Linkages



Other Institutions and Emerging Stakeholders/Actors in the Agricultural Sector

26. There are several other non-governmental organisations whose main role has been one of advocacy, but is now evolving into one of advisory and information servicing of CTA's ultimate beneficiaries; the resource-poor farmers, women and youth. These non-governmental organisations include farmer and agri-producer organisations, whose operational structures for day-to-day functioning tend to be sadly deficient. Other private sector service providers that operate along commercial lines in the sector include input suppliers, financial agencies and related technical support agencies.

27. Over the last few years, a few networking organizations have begun to evolve in response to the changing face and requirements of agriculture. In close association with IICA, the Caribbean Network of Rural Women (CANROP), Caribbean Agricultural Forum for Youth (CAFY) and the Caribbean Agri-business Association (CABA) network have established local chapters in St. Lucia. In addition to playing a key advocacy role, these entities are becoming increasingly important as vehicles for information sharing between and among producers and other agri-business persons. However, these are still fledgling organizations with the structures for information and communication management just evolving.

2.2 Information and Communication Management Capacity

28. In this study, information includes items such as: technical, project & financial reports, files (hard and electronic) and correspondence, collections of books, bulletins, newsletters, photographs, videos, audio cassettes, maps, data sets (e.g. statistical data, market information), advisory services. Communication refers specifically to the mechanisms for the dissemination and exchange of information through various means such as: radio and TV programmes, e-mail, websites, telecentres, electronic discussion groups, meetings, television and publications as defined in the prescribed data capture form.

29. CTA describes two main types of communications tools:

    - conventional or traditional media: radio and television, the press, posters, books, information sheets, cassettes, movies, theatre, telephones, meetings, drums, etc.;
    - new media: cellular telephones, e-mail, the Web, other Internet services, satellite broadcasts, remote sensing systems, etc.

30. Agricultural information and communication management in St Lucia is still largely viewed in a context of managing traditional information resources and the conventional media, though there has been increasing recognition and integration of new information resources and media over the last few years. Information resources within the various agencies operating within the agricultural sector are generally in the form of print media – largely publications including technical, project & financial reports – files (hard and electronic) and correspondence, collections of books, bulletins, and newsletters. Information in electronic and digital formats such as photographs, videos, audiocassettes, maps, data sets (e.g. statistical data, market information), is not widely utilized and its use tends to be limited to the larger institutions that have developed capabilities for using ICTs. The MAFF, Windward Islands Banana Development and Exporting Company (WIBDECO) and the St. Lucia Banana Corporation (SLBC) however, are the only institutions with any substantive capacity for communication management. These institutions prepare for broadcast, weekly radio and television programmes. Most

institutions interviewed have the capacity to communicate information through publications such as fact sheets and newsletters, training materials – hard copy and audio-visual, informal Question and Answer Service. Most information flows are between the institution and the primary beneficiaries, usually producers and processors. The Small Enterprise Development Unit (SEDU) in the Ministry of Commerce, occasionally engages in various public awareness and education programmes in the form of farmers' exchange, workshops and training sessions.

31. There are however, no apparent established mechanisms for information exchange of technical and other related information, among professionals within and across institutions and organisations in the sector. Internal documents and reports prepared by local institutions and other external agency project documents are not widely circulated, in some instances not even among departments/divisions within the same institution.

32. The Information Unit comprising the Documentation Centre and Communications sub-unit in the MAFF has a reasonably well-developed capacity for management of print, photographic, video and audio-type information resources and serves as a national resource for a wide range of agricultural information in print and electronic formats. The statistics unit in the Corporate Planning Division of the MAFF has a well-developed capacity for managing sector related statistical data information. The Fisheries Department in the MAFF also has established capacity for management of statistical information and manages one of the largest fisheries databases in the Caribbean region, primarily statistics on fish landings. Maps and associated information, in hard copy formats, are managed under the Lands and Surveys Division in the Ministry of Physical Development, Sustainable Development, Environment and Housing. The Forestry Department and the Corporate Planning Division in the MAFF has the capacity to utilize Geographic Information Systems (GIS), for planning purposes. The marketing unit in the MAFF has over the last few years of its operations has developed in-house capacity for market information management, with a well-developed ICT interface. The SLBC and to a lesser extent the other banana companies, in conjunction with the sub-regional counterpart WIBDECO, also have established databases on producer and market information for the banana industry.

33. Most of the institutions operating within the agricultural sector, both public and private sector, have some of the basic physical resources required for ICM. However, human resources to facilitate ICT management tend to be limited. Resource availability is viewed as the most serious constraint to capacity development for meeting agricultural information needs. The overall budgets of most institutions are usually quite small, and allocations to agricultural information are often times non-existent. Hence, while the basic technology such as computer hardware and software to source and store information may be available, equipment to utilize and manage information such as reprographic equipment, audio-visual equipment, etc. is not always readily accessible or available. Development of human resource capacity is also constrained by budget limitations, and most institutions, which are already under-staffed with respect to delivery of main programme areas, are unable to allocate specific resources to in-house human-resource capacity for ICM. The producer organisations appear to be the most affected by these resource constraints, particularly with respect to inadequate physical and human resource capacity, for information and communication management.

34. With the exception of the National Farmers Credit Cooperative Union (NFCCU), which lacks adequate physical resources, all of the institutions interviewed had a semblance of a centralized information system, demonstrating an appreciation for information and communication management as a specific function within the institution. Full-fledged, dedicated agricultural information and communication sections/units were present in the four of the institutions interviewed namely, the MAFF, Sir Arthur Lewis Community

College (SALCC), WIBDECO, and to a lesser extent the OECS-ESDU. However, the remaining organisations had the responsibility for ICM shared among the general staff complement, in most instances assigning a designated individual(s), though not fully dedicated, to information and communication management. Management of ICTs in most of the institutions was generally an in-house responsibility, with some components, such as website development and maintenance outsourced to private sector IT outfits, as needed.

35. The public sector, agricultural institutions interviewed comprise professional, technical and clerical staff, the former two categories highly trained, to Bachelors and Masters Degree level, in their specific areas ranging from Marketing, Extension, Agronomy, Engineering, Veterinary Medicine and Livestock Science to Economics, Business Administration, Management and Accounting. The private sector institutions interviewed comprise staff with a basic to high level proficiency in Business Management, Accounting and Finance, Project Management, Environmental Management and Planning, Social Anthropology, Sociology, Maritime Boundary Delineation, Marketing, Advocacy, Extension / Monitoring, Product Development, Post Harvest, Pest and Disease Control, Information Technology and Credit Management.

36. While most of these technical experts and some administrative personnel may be highly proficient in the use of some form of ICTs, most have limited or no training in and/or knowledge of the management of information and communication. Four institutions have specific in-house skills in information and communication services; MAFF in audio/visual-photography, library management and communication/media relations, WIBDECO and the largest banana company (SLBC) in video production and communication/media relations, SALCC – documentalist and library management.

37. All of the organisations interviewed had begun to utilize new and modern communication technologies, such as Dial-up or ADSL technology for Internet access. Key personnel in these organisations had access to Internet services, either through the offices of the organisation or on personal computers at home, in the instances where there were hardware and software constraints at the base office. The community-based arms of some of these institutions such as the St. Lucia Agriculturist Association (SLAA) and NFCCU were also restricted due to critical hardware and software constraints. The two main Internet services used for communication by institutions are E-mail and Web surfing. Other Internet services such as electronic discussion forum are utilized by a few persons involved in management of the sector, usually for the exchange of specific information among collaborating institutions or professional groups such as the regional fisheries network. The use of websites in communication is still limited, as the capacity for developing and maintaining interactive websites is not readily available resulting in the design of websites through which little or no information exchange takes place. Several resource learning centres, with some basic or at least potential for ICT capability have been established by the government in many rural communities. The NRDF has also established an Internet café for use by clients. These provide a vehicle through which information and communication management for the various producer groups and other vulnerable groups (women, youth) can be addressed.

2.3 Agricultural Information Services

38. Current sources for agricultural information services identified at the national level are largely public sector institutions such as the departments and the Statistics Unit in the Ministry of Agriculture and Environment, other government ministries, commodity and

farmer associations (e.g. banana companies), local banks and input suppliers. Attachés at embassies such as the Chinese and Cuban embassies were also identified as an information source, though not a significant one. While the type of agricultural information service delivered varies among the institutions in the sector, these comprise mainly technical information – production and marketing information and statistics – in the form of reproduced literature, print material and technical advice in the form of extension services.

39. All of the stakeholders interviewed identified the MAFF as a key source of agricultural information services at the national level, though not a primary source that is consulted frequently. Many respondents pointed to deficiencies in the extent of the information reach of the MAFF's information services, particularly with regard to its extension services. The MAFF's agricultural information services currently comprise a combination of technical advice often delivered through print media and limited electronic media, mainly television and radio programmes; and sector information, reports and statistics available through the MAFF's website. The study revealed that the MAFF continues to serve as the sole repository for all information on the local agricultural sector, however, the dissemination of this information is restricted due to inadequate management information systems. Hence the information services of the MAFF, such as the Statistics Unit and the website which collates the most up-to-date source on information on the local sector, remain largely under-utilised for decision-making by the key end users of such information.

40. Most of the institutions identified their personal collection of documents as an information source, which was used frequently. Most however, source information from regional and international sources, such as counterpart associations, affiliated bodies, funding agencies, and publications produced by same, for relevant regional and international statistical data and information for programme implementation. Of the four OECS countries assessed during this study, St Lucia appears to be the only island with a proclivity for information sourcing from universities and research institutions. Four out of the ten institutions interviewed indicated links with regional and international universities or research institutions, for sourcing of information specific to their work programmes. For example NRDF sources information from Leicester University-Association of Business Professional – Holborn University in the U.K. for its business training programmes, while WIBDECO sources banana research information from the international research institution, INIBAP. Technical advice in the organisations interviewed was also sought from counterpart or affiliated bodies. For example, the OECS-ESDU links up with the Caribbean Regional Fisheries Mechanisms Secretariat (CRFMSEC) for information related to the fisheries component of its programmes. Resource personnel at workshops and seminars and consultants were also considered important sources of information.

41. Electronic information services such as the Internet, websites and discussion groups are steadily becoming a key information source for institutions in the sector, but due to human resource constraints within the operations of most organisations, this source is not tapped to full potential.

42. It is interesting to note that only one organisation, the National Research and Development Foundation (NRDF), identified newspapers, radio and television as sources of information, though not a main source. Audio-visuals were also not identified as a main source of information, though it was implied that the media, mainly local radio and television programmes provided some information.

43. Table 1 below provides a list of key organisations through which information is tapped by the various agencies in the agricultural sector for the execution of their programmes.

Table 1: List of organisations that serve as main sources of Information at the National, Regional and International

Local/National	Regional	International
▪ MAFF ▪ Internal documents and reports ▪ Banks ▪ Government Ministries ▪ Banana companies ▪ Individual farmers and their collective organisations ▪ Media – newspapers, radio and television programmes ▪ NGOs ▪ Input suppliers ▪ Consultants and resource persons ▪ Colleagues	▪ CARDI ▪ CARICOM - Caribbean Regional Fisheries Mechanisms Secretariat (CRFMSEC) ▪ Cuban Embassy ▪ IICA ▪ University of the West Indies ▪ OECS ▪ NGOs ▪ Windward Islands Banana Companies ▪ WIBDECO ▪ Media ▪ Internet sites ▪ Consultants and resource persons	▪ CTA ▪ Agents and distributors in Miami, USA ▪ FAO ▪ Fair-trade and Fair-trade Assns, ▪ Geest Shipping Lines ▪ INIBAP ▪ NGOs ▪ Universities ▪ U.K. Supermarkets ▪ Internet sites ▪ Book companies – EPSCO – U.K., Baker and Taylor ▪ Consultants and resource persons

3. NEEDS ANALYSIS

44. The GOSL, like many other governments in the OECS, is now assuming a more facilitative role in the agricultural and rural sector, in terms of creating the enabling environment to facilitate the pursuit of the policy objectives of the sector. In this regard, the private sector and non-governmental organisations, in particular farmers/producers and their collective organisations, as well as other service providers in the private sector, are being encouraged to assume a greater implementation role in agricultural and rural development. However, plans and strategies to integrate these stakeholders into the management of agricultural and rural development are still lagging behind the dynamics of this change. As a result, there is a huge divide between the new roles that these stakeholders are required to play and their capacities in terms of necessary skills, resources (financial, human and physical) and information for their effective functioning in this role. Further, policies and strategies for the sector, as they relate to information and communication management for meeting the new global challenges, are either inappropriate or non-existent. A principal need therefore, is the development and implementation of information and communication strategies to create the type of mechanisms, including the access to and use of communication technologies (both new and existing) that will enable stakeholders to effectively function in their new and emerging roles.

3.1 Information Needs

45. Information needs of stakeholders in the agricultural and rural sector of St Lucia are driven by the primary goals of similar small island developing states, which are generally consistent with the three goals of the new partnership agreement between ACP states and the European Union: poverty reduction, sustainable development and the progressive integration into the global economy. The GOSL policy priority issues of efficiency and competitiveness, equity, sustainability and livelihood which reflect these goals thus provide a general indication of the focus for information required to meet the needs of stakeholders in the sector. Further, the MAFF's mandate to also address national economic and social imperatives in respect of rural development, food security, natural resource conservation and gender equity, and which is to be guided by the seven policy objectives detailed earlier in this document and outlined below, provides a basis for information needs of sector policy and hence information themes include:

    - Increasing efficiency and competitiveness of agriculture;
    - Adopting improved/appropriate technological packages;
    - Expanding and diversifying production, value-added agro-processing and general market base;
    - Enhancing national food security status;
    - Generating new opportunities for employment and income-generation;
    - Conservation of the natural resource base;
    - Modernizing legislative and policy framework to optimize agricultural production and trade.

46. Noteworthy is the component of the GOSL-MAFF EDF sponsored Agriculture Sector Institutional Strengthening Project, the development of a National Agricultural Management Information System (MIS) Network, for the input, analysis and dissemination of all relevant national, regional and international statistical data and information for sector planning. The system will also allow for the networking of all

divisions and units in the MAFF, national producer organisations and commodity associations and companies, other government institutions, private sector bodies and other allied external organisations. Additionally the MIS will facilitate the use of Geographic Information Systems (GIS) for land and resource use planning and allocation.

47. Traditionally the MAFF through its extension services served as the principal source of information to producers and other stakeholders in the agriculture and rural sector. Though still considered a key player in information and communication resource, the MAFF role is being substantially reduced, as producers and other stakeholders begin to seek and expect information directly from institutions that provide them with services, in areas such as business development, financing, marketing, input supplies, and other technical support, among others. These are completely new roles for these stakeholders, and the actors in this grouping are only just coming to terms with the new responsibilities and opportunities associated with this expectation. This development however, has begun shaping stakeholders information needs and capacity building requirements for providing ready access to relevant and reliable agricultural information for analysis, policy formulation, developmental planning, investment and decision making.

48. The information needs of these emerging actors/stakeholders though wide and diverse, are ultimately focused on providing a level of information services that meet the specific needs of the ultimate beneficiary, the producer. Consequently the information needs of these groups will be focused on the identification, documentation, accessing and dissemination of agricultural information in their specific roles as technical, business and financial advisers to the producer.

49. An analysis of information obtained from interviews with key institutions with respect to data and information required to execute work programmes, point to a need for types of information to address issues of efficiency and competitiveness for regional and global integration of small producers, within the national and sector development framework to ensure food security, rural development and natural resource conservation.

50. All of the institutions interviewed indicated critical information needs for execution of their programmes in at least one of the following: trade and marketing information, conferences and meetings, trade fairs, regulations and standards, programmes executed by other agricultural agencies, and information to assist in identification of affordable and appropriate technologies and equipment.

51. The specific information needs of the key institutions to service their work programmes during the next few years are further outlined in Table 2.

Table 2. Specific Information Needs of Key Institutions in Agricultural Sector

Organisation/Institution	Information Needs
St. Lucia Agriculturist Association Ltd. **- SLAA**	Technical Information – IPM, Crop varieties, Inputs/seed sources with respect to Bio-Technology; Low-input agricultural technologies, Post-harvest technologies, Grading systems, Packaging, Trade and Market information; Agricultural data – cost of production, commodity and industrial profiles, Conference\Meetings and trade fairs, Regulations and standards, Equipment sources and availability – e.g. cocoa processing;

Organisation/Institution	Information Needs
***National Farmers Cooperative Credit Union* - NFCCU**	Conference/Meetings and trade fairs, Regulations and standards, Trade and market information, Credit history – Link to credit bureau, Crop insurance systems;
OECS – Environmental and Sustainable Development Unit (ESDU)	Social-cultural information – social data; impact of environmental intervention of society and societal impact on the environment; waste utilization; Patents – Intellectual Property, TRIPS; Economic Data – GDP contribution;
Small Enterprise Development Unit - SEDU	Competitiveness Studies, Trade and Market information, Crop insurance systems, Commodity and small business profiles, Programmes executed by Agricultural agencies in the region;
WIBDECO	Banana production data, Trade regulations and standards, e.g. EUREP-GAP standard, post harvest technology, product development and packaging, market data, farm problems, programmes executed by agricultural networks – regional and international, Banana Research, Pest and disease control in bananas;
Chamber of Commerce Industry and Agriculture- CCIA	Trade and market information, Commodity profiles, Industrial profiles, Regulations and standards, Meetings/conferences and trade fairs, Transportation–Shipping routes and rates, Programmes executed by agricultural agencies;
National Research and Development Foundation – NRDF	Market information, Conferences and meetings; Trade Fairs, Regulations and standards – ISO 9000 Series, Equipment sources and availability, Industrial profiles, Farm problems; Micro financing techniques;
Sir Arthur Lewis Community College – SALCC	Waste utilization/waste management technologies (for application at farm/household/community level) in SIDS; Equipment sources and availability; packaging; Trade fairs to optimize participation as they are costly; Farm problems in other areas and solutions applied; Information on programmes executed by other agricultural networks (e.g. JSA; GSA);
Ministry Of Agriculture Forestry and Fisheries – MAFF	Information on natural disasters /phenomena, sources of funding, agricultural data – cost of production, other historical agricultural statistics and data for trending; forestry – forest preservation and management, business investment/ development guide.

52. The organisations interviewed pointed to a need for information to be adapted and packaged in a form that directly relates to their programme areas so as to make it more relevant and appropriate to their needs. They indicated that information should provide immediate answers and recommendations, as well as point to new opportunities and expand their basic knowledge base. The consultant deduced that literacy, gender, educational and cultural factors has to be a prime consideration in devising information solutions, for organisations with varying capacities and different target audiences. For example, the NFCCU found information packages comprising fact-sheets/bulletins, newsletters, statistics and trends, in print format to be quite useful, as these are still considered the simplest means by which information can be made accessible to their primary beneficiaries, the producers; however, the need for more abstracted information

and information notes, as well as Uniform Resource Locators (URLs), that is a reference (address) to a resource on the Internet, provided via electronic media, was preferred by the OECS-ESDU, whose direct beneficiaries were government institutions and other private sector institutions and NGOs including producer organisations. The presentation of information through public education programmes was considered a key means of dissemination for producers. There was general agreement that while traditional A/V media, including radio and television programmes, continued to be acceptable means of dissemination to producers at the field level, due to low literacy levels and a lack of affinity for reading observed in the population, other new electronic media, such as Internet was proving to be more effective means of dissemination for their information needs.

53. Information needed and found difficult to acquire by most institutions, showed little variation from needs indicated in the 1997 Country Agricultural Needs Survey Report. All institutions indicated difficulty in accessing information at the national and regional levels, for example, national research reports, regional research reports, domestic production and domestic and regional market statistics, agricultural research programmes, extension programmes and technology networks and programmes, particularly of regional organizations.

More specific information found difficult to acquire by the key institutions were as follows:

Table 3. Information required but found difficult to acquire by Key Institutions

Organisation/Institution	Current	Future
SLAA	Reasonably good access to information for current needs;	E-commerce, information to support MIS
NFCCU	producer credit history; market access - commodity and agri-product pricing structure;	business development; marketing information;
OECS-ESDU:	Social data e.g. cultural impacts of societal change on environment; social issues that require environmental interventions;	Same as current;
SEDU	Small business profiles; small-business problems related to specific communities, competitiveness studies for different commodities and agri-products, market data – markets for different types of value-added products; programmes executed by other agricultural networks; equipment and agro-processing plant processes;	Same as current; product development; entrepreneurial mentoring programmes;
WIBDECO	Banana research information; new pest and disease control measures in bananas;	changes in market situation, trade updates, trade regulations;
CCIA	Agricultural marketing, patents – Intellectual Property – TRIPS, funding sources;	Same as current;

Organisation/Institution	Current	Future
NRDF	Micro-financing techniques, farm problems; business and industrial profiles;	Same as current; opportunities for training collaboration;
SALCC	Waste utilization / management, appropriate technology / equipment, trade information, programmes executed by agricultural networks; on-line journals for teachers;	Same as current;
MAFF	Information on natural disasters phenomena, sources of funding, historical agricultural and fisheries statistics and data; business investment / development guide	Same as current; information security – e.g. creating secure electronic discussion groups, documentation protocols;

Other priority needs based on government policies and plans as gleaned from information gathered in documents and interviews with policy makers and the management of the institutions are categorized under the following headings:

a) Technical
- New crop production technologies – e.g. greenhouse, hydroponics
- Farm management
- Product Development – particularly value-added agro-processing products
- Natural Resource Conservation – eco-tourism
- Industrial Profiles
- Commodity Profiles
- Land Use Information – GIS geo-spatial data
- Analytical services
- Irrigation
- Agro-forestry
- Water resources management
- ICTs – particularly networking
- Advice on new and up-to-date technologies to assist in development and expansion of agro-processing plants;
- Research tools

b) Socio-economic
- Agricultural Policy and Strategic Planning
- Credit mechanisms - risk management, as well as the general management of micro-credit techniques.
- Demographic data
- Business Information – import statistics, export opportunities, raw material sources and prices, and relevant technologies
- Information on transportation – inter-regional shipping to facilitate better utilization of neighbouring markets.

c) General
- Globalization issues – updates on status of trade negotiations
- Summaries – Trade Agreements – key aspects
- Implications of trade liberalization on sector

- Rural development strategies and approaches for sustainable development/traditional knowledge
- Food security
- Mainstreaming youth in agriculture
- Sources of affordable (no or low-interest) financing for equipment and infrastructural enhancements
- Opportunities and sources of funding for training, internships and exchange visits for agri-business operations

3.2 Capacity Building Needs

54. This section will focus on the specific capacities needed for distinct stakeholders identified in the foregoing discussion.

Current Use of ICTs

55. Current use of ICT's in the sector is varied depending on the type and scale of operation of the institution or organization, and includes:

- Information dissemination/public education through print, photographs, documentaries/video recording;
- Project preparation and implementation;
- Financial management;
- Desktop publishing – preparation of brochures, newsletters, factsheets, flyers;
- Database Management;
- Trends / analysis, etc.;
- Radio and television programmes;
- Informal question and answer service
- Preparation and presentation of training materials;
- Communication – phone (fixed line & mobile), fax, e-mail, Internet;
- Networking – local – LAN, electronic discussion groups – regional and international
- General administrative functions

56. The institutions also envisage future Use of ICTs in the areas of:

- Establishment and management of databases – farmer, clients;
- Databank – harmonize/synchronize databases;
- E-commerce;
- Discussion groups and teleconferencing;
- Financial management;
- Archiving of information;
- Geographic Information Systems (GIS)/Global Positioning Systems (GPS) as planning and decision making tools;
- Digitizing – equipment needs - digitizer and training in use;
- Website development and management;
- Formal / structured question and answer services;
- Public awareness campaigns;
- Presentations at training seminars, workshops, etc – use of computers and LCD projectors etc.

More specific uses of ICTs in the key institutions are outlined in Table 4.

Table 4. Current and Future Use of ICTS in Key Institutions

Organisation/Institution	Current	Future
SLAA	Prepare publications; communication via Internet /LAN, website management, data management;	E-commerce;
NFCCU	Information dissemination, data entry and computation/data management, source information	Website development / construction; computerized loans system; training in small business management – simple book keeping;
OECS-ESDU:	Source information, information dissemination, research, preparation of publications including annual digests, fact-sheets, policy briefs, concept notes, presentations; general IT;	Acquire/provide information for decision making; website management; digital capture of information; standardized document editing;
SEDU	Storage/database management, training;	Website upgrading, data management; on-line registration for training activities;
WIBDECO	Data management, information dissemination, preparation publications, reports, presentations, website management	**N/A**
CCIA	Information dissemination, prepare publications-brochures-newsletters, communication via Internet/LAN;	Discussion forums/groups; teleconferencing, on-line access to information;
NRDF	Organization management/ administration, loan management system, Internet access, training, storage /database management;	Internet access for clients; advanced communication techniques for training; improve access to information; publication of brochures, training material and other relevant information;
SALCC	Accessing information – CD ROMS and Internet, library management, data base management, LAN, electronic bulletin boards, discussion groups/forum;	Web page access to database of library collection in branches in north and south of island; facilitation of non-campus borrowers for a fee; bar coding for use in library management system; audio-visual centre for alternative teaching to make student learning more teacher-independent;

Organisation/Institution	Current	Future
MAFF	Prepare publications-reports-brochures- newsletters - presentations, database management, data storage/back ups, photo-library, GIS, data analysis, surveillance, water quality testing, monitoring , website management;	Website upgrading – newsletter on-line; create harmonize information system across departments/divisions and accessible via Internet-LAN/WAN; digital capture of information, library management system; data archiving; electronic discussion groups; development of customized information packages for clients;

57. The effective implementation of both the current and future programmes of these organisations will require strengthening of the existing, but insubstantial, links between the primary beneficiaries of the programmes, i.e. the producers, NGOs and other private sector bodies, through the development of local, national and regional networks, and the strengthening of institutional capacity to access information. Physical, financial and human resource constraints were however, identified as the main factors impacting capacity for information management in these key institutions, a feature of the many other institutions involved in agricultural and rural development in the country.

58. The NGOs and other service providers (SPs) interviewed have over the last decade begun to play a more integral role in the agricultural and rural sector, and have all begun to place greater weight on having good information resources. Most of these organisations have been able to access a reasonable level of resources and skills to be able to facilitate the access to good information resource. However, many are still unable to allocate a dedicated set of resources to equipment or personnel for the management, or at least oversight, of the information resources which they are able to access. Many of the personnel, assigned information management tasks are not especially trained in this area, a situation which is no different from that in most of the other organisations operating in the sector. However, since the programmes of these NGOs and service providers are usually quite targeted, they are better able to identify and source information resources needed for programme implementation.

59. One major drawback however, to effective information and communication management by the NGOs and service providers is their apparent inability to link to other institutions, especially government agencies, to achieve synergies in this regard. NGOs, and service providers therefore, need to be better integrated into local and national information networks. This will allow them to improve monitoring and coordination of the information needs of their stakeholders. As emerging actors in the area of communication management, they will also need to acquire the skills necessary to better structure and manage information and communication resources.

60. Perhaps the most critical need of all of these organisations is that of developing organisational capacity for networking as the existing organizational structures do not provide a framework to support information sharing and exchange. All the organisations interviewed, including the NFCCU and CCIA, which are for all intents and purposes producer organisations, had established office space with office equipment and full-time paid staff. However, inadequate management of information resources coupled with deficient communication systems, in particular the lack of established mechanisms for information exchange of technical and other related information and collaboration among professionals within and across institutions and organisations in the sector, were viewed

as major factors that hamper the effective implementation of programmes to realize the overall strategic development objective of improving the welfare of the primary beneficiaries, i.e. the producers. There is a demonstrated need to develop capacity for information and communication management for decision-making. This however, must be underpinned by research, a capacity for analysis and synthesis and effective communication within and among these organisations.

61. The need for Geographic Information Systems (GIS) technology has been highlighted by the MAFF to provide the technological underpinning for the national land use/land tenure framework required to improved productivity and facilitate a more structured development of the sector.

3.2.1 Equipment Needs

62. The limited budgets of the institutions have made it difficult for them to avail themselves of a range of tools and equipment required to access and effectively communicate information. Institutions need to be able to draw on the resource of conventional tools and equipment, as well as specialized equipment to effectively manage information and communication activities for the range of programmes currently being undertaken, as well as for future programmes. The need for more non-print resources is also recognized. There may also be a need to conduct surveys to determine the impact of information delivered by these institutions using the current level of ICT, to assist in identifying more specific requirements for systems and equipment upgrading.

63. With the exception of the NFCCU, which is still to be fully computerized in its operations, all of the key organisations were equipped with critical physical resources such as standard computer hardware and software. However, other specialized equipment such as data servers and routers are needed to facilitate networking within and across departments and even across affiliated institutions, to allow stakeholders to access the information resources within these key sources of information. Basic networking of computers within the offices of the organisations is also a critical need for strengthening institutional capacity for universal access to information. The management of records and files for easy retrieval, and analysis of information have been recognized as a prerequisite for decision-making, hence the need to exploit these facilities for electronic data management. Audio visual equipment for production of more and different types of material for the electronic media, including equipment such as digital video cameras, and laptops and LCD projectors for effective delivery of presentations is also required.

64. Issues of copyright are becoming a major concern, particularly with regard to the reproduction of publications and other print media for information dissemination. In addition, the increasing cost of text books begs the need for cheaper information sources for training is highlighted by the SALCC. Hence appropriate and cost-effective equipment to assist in the delivery of training material has been determined a critical need for training institutions such as the SALCC. This may also be beneficial in institutions such as SEDU and the NRDF who also have similar requirements for training. Equipment to facilitate the use of advanced decision-making tools such as GPS and GIS and associated data collection and data entry devices will be required to address future needs for integrated land and resource use planning and allocation for the sector.

3.2.2 Human Resource Needs

65. As indicated earlier, most of the institutions have limited manpower to undertake the full extent of the institutions' work programmes. Few staff are available and skilled enough to undertake the primary function of information and communication management,. The establishment of the much needed local and national information network will require a considerable injection of skills capacity within target institutions in keeping with their emerging roles and responsibilities.

66. All of the institutions assessed will require additional and/or dedicated trained human resource to effectively manage information and communication resources. As inferred earlier in Section 2, most institutions do not have a full-time dedicated individual, or department, designated for information and communication management. This task tends to be spread among the duties of an already inadequate staff complement, with taxing work programmes and schedules, and in most instances ill-equipped with the skills necessary to carry out the increasingly demanding activities required for effective information and communication management. With the exception of the staff in the library facility at the SALCC and the documentalist at the OECS-SDU, all of the staff given responsibility for ICM in the key institutions are generally unfamiliar with the standard requirements for library or documentation facilities, have little training or knowledge of how to use information and communication resources effectively and how to produce effective communication materials or use communication media effectively. With such limited information and communication literacy it is quite difficult for decision-makers both within and outside of these organisations to identify and fulfil their information needs in terms of determining and accessing the type of information and communication resources required to advance agricultural and rural development objectives.

67. Key human resource development and training needs identified by the institutions to assist in this regard have been determined in some order of priority in the areas of:

- Basic IT skills;
- Computer systems maintenance and troubleshooting;
- Document management systems– library management;
- Information management applying ICTs – strengthening systems for managing printed and electronic information such as discussion groups – information security ;
- Information research techniques – assist NRDF to develop research portfolio;
- Communication – technologies and strategies with a focus on audio/visual and electronic media;
- Microsoft Powerpoint and other information presentation skills;
- Networking skills;
- Website development and management;
- Database (product, client and agri-statistics) development and management – work processes and concepts;
- Project management;
- Documentation – development of in-house protocols; to meet requirements for ISO standards;
- Editorial and document proofing skills;
- Desktop publishing skills – Pagemaker, Printshop and MS Publisher;
- Accounting and financial management.

68. Other training areas identified by the institutions which would facilitate more effective information and communication management include:

- General research techniques;
- GIS training;
- Equipment maintenance;
- Strategic planning;
- International Standards – e.g. ISO 9000 quality series;
- Market research;
- Human resource development – customer service;
- Advocacy;
- Economic and trade literacy to assist in identification of appropriate material;
- DPAC^{TN} loan management systems;
- Administering legislation (Small Business Act).

69. Other areas for training and human resource development not specifically identified by institutions but deduced from the needs identified include:

    - Data collection and information gathering techniques;
    - Marketing and promotion;
    - Quality assurance – international standards;
    - Food Handling and Safety standards, e.g. HACCP;
    - Training in gender issues;
    - Organisational behaviour and group dynamics;
    - Training and sensitization in ecotourism;
    - Integrated pest management.

70. In addition, strengthening of the institutional capacity of these organisations to access information will require the promotion of traditional information sources such as libraries, documentation facilities and new sources electronic databases, information networks for application in programme implementation of institutions.

71. There is an expressed need for enterprise/business development training and advisory services, as well as product development support, to agro-producers and other small and micro-enterprises in the rural sector. Mechanisms such as the Small Enterprise Development Unit need to be enhanced to provide requisite skills training for re-tooling producers for employment and increasing efficiency and competitiveness for economic growth and diversification, particularly persons in the sector affected by the fall-out due to contraction in the banana industry. Outreach personnel in the MAFF and other producer-based organisations such as the NFCCU, WIBDECO and SLAA also need to have their skills upgraded with respect to modern and applicable agricultural technologies and the ability to plan and conduct meetings, field days and workshops.

3.2.3 Information and Communication Policy and Strategy

72. While most of the institutions have a general appreciation of the need for good information resources, there appears to be little appreciation within institutions of what constitutes, as a minimum, an effective and credible information and communication service. Most institutions view information and communication services in the limited context of either the conventional library or publications/communications unit with capacity for regular radio and television programmes for dissemination of information, and/or the more modern computer systems with Internet access. Further, there appears to be little appreciation for the utility of information by the potential beneficiaries of these information resources, and there is need for these stakeholders, as well as the direct communicators of information, e.g. the extension/outreach interface in institutions, to be made more information literate.

73. Moreover, there are no definitive information management policies and strategies at either the national/sector level or at institutional levels, to facilitate strategic data and information collection and communication required to foster and guide decision-making at all levels in the sector. Such policies and strategies will of need emphasize the important role of information in decision-making, research, agricultural and rural development, and public education, and engender a culture of documenting information resources and managing these resources in a manner for effective communication to stakeholders. The resulting coordination of communication of information will further ensure consistency in the messages being relayed to the beneficiaries with respect to sector policies and strategies.

4. CONCLUSIONS AND RECOMMENDATIONS

4.1 Conclusions

4.1.1 Extent of 'key problems' in the field*

74. The shaping of new institutional modalities for the sector has resulted in Government's role shifting to that of facilitator and enabler. Consequently there is reduced prominence of the MAFF in its past role as the key information resource for the sector. This however, has placed a tremendous responsibility on the emerging actors/stakeholders such as NGOs, producer organisations and other service providers in the sector to meet the information needs of the primary beneficiaries in the sector. Further, there is an increase in the opportunities for the application of information and communication technologies. However, there is a disconnect between the existence of these technologies, their availability and application at the local level by the institutions in the sector, as the necessary capacities and policies and strategies required to ensure full application are still largely deficient.

75. The extent of key problems observed among the institutions visited is compared below with those previously identified by each of the three CTA operational departments.

Information Products and Services

76. *Limited availability of publications that support decision-making in the agricultural sector*: While all the institutions interviewed indicated their general use of printed publications, it was noted that these were not widely available. However, the issue seemed to be one of accessibility and relevance of the available information. Information is not always readily available or takes time to access due to the fragmentation of documentation. Further, there are few publications already adapted, with respect to translation or formatting of information, for knowledge transfer. All of the nine institutions interviewed indicated that the critical types of information and knowledge which are now required to support decision-making in the agricultural sector, (i.e. technical, socio-economic and marketing data, regulations, agreements, etc.) and required to execute the institutions' work programmes, are generally lacking in terms of availability and relevance. A problem concerning the availability of CTA publications was also identified by these institutions.

77. *Shortage of relevant published information on agriculture and rural development because of weak local publishing infrastructure*: The general requests by the key organisations for information that is already adapted to their work programme areas, points to a general shortage of published information on agriculture and rural development that is considered relevant and directly applicable by the organisations. The local structure to enable documenting and publishing of locally adapted information and knowledge is quite weak, with few publications generated or adapted at the local level to address agriculture and rural issues. Further there is not a culture of publishing among professionals and experts in the sector, so information generated at the local level remains generally unpublished and most times unknown. Despite the demonstrated proclivity for association with universities and research institutions, the organisations are yet to take advantage of opportunities for integrating into a formal publishing network.

78. *Limited access to locally and externally published information on agriculture and rural development, due to weak distribution structure*: The assessment of capacity of the various institutions highlighted a largely underdeveloped infrastructure within and among institutions for distribution of information on agriculture and rural development. The limited use of both conventional (print media, audio visuals) and new communication (electronic media, networking, etc.) technology within these institutions results in restricted access to both locally and externally published information. All of the institutions however, indicated having problems with accessing information, despite the availability of the modern tools of Internet access. The absence of an organized structure for information distribution means that persons and agencies also remain largely unaware of existing local and external sources of information and the types of products and services available, contributing further to their inability to access same.

79. *Limited awareness of the existing local and external sources of information and the type of products and services available*: As indicated in the problem area 2, the issue of the institutions' capability to avail itself of relevant information is not one of limited awareness as much as it is one of limited access. Seventy five (75%) percent of respondents indicated awareness of CTA activities, and of the six (6) institutions that were aware of CTA activities, five (5) appeared to have knowledge of a broad range of CTA's products and services, with the other making specific reference to regular publications and the SPORE magazine. This further highlights the limited capacity of the institutions, in terms of adequacy of structures, to adequately manage and communicate information, particularly with respect to identifying information sources that are capable of providing information that directly match their needs.

Communication Channels and Services

80. *Limited contacts among stakeholders in the sector and between the latter and experts from other countries and region:* All of the institutions interviewed indicated that they utilized the information services of both local and external information sources, demonstrating a reasonable level of contact among stakeholders in the local sector as well as between institutions and external information sources. Collaboration among stakeholders in the sector at the national level, and with other organisations operating at the regional and international level for the implementation of programme activities of mutual interest was also indicated by all institutions. One positive feature observed was the relatively high degree of interface between the local organisations and universities and research agencies which will augur well for future networking to source new and updated agricultural research information.

81. *Weak networking services, such as newsletters, websites, etc.:* Despite a notable lack of coordination among organizations at the national level and the lack of programmes for the information dissemination, a growing use of networking services was indicated by the institutions, with a combination of both conventional and electronic services utilized for networking, within the organisations and with affiliated regional and international institutions. While there are plans by the MAFF to promote the use of available and appropriate communication tools, to facilitate effective networking across institutions at the national level in support of current and future programmes, this initiative will need to be underpinned by strong communication strategies to promote same. The MAFF is also spearheading the practice of incorporating networking tools such as GIS in planning and resource use and allocation.

82. *Limited first-hand experience of pertinent developments in other countries and regions:*

Despite reasonable levels of collaboration among stakeholders and other external experts, the concept of information sharing is still being viewed with reservation by local institutions. As a result, though there is some information exchange between the technical staff of the key institutions and experts in regional institutions that operate at the local level, only three of the institutions (the MAFF and to a lesser extent WIBDECO and the OECS-SDU) have commenced efforts at implementing the type of mechanisms to facilitate the communication of first-hand experience of pertinent developments, both at the local level and in other countries and regions. The aforementioned institutions are seeking to capitalize on those direct contacts or links with experts from other regional and international institutions such as universities, research institutions, to obtain access to primary repositories of agricultural information and knowledge.

Limited use of ICTs for networking and dialogue: All of the nine institutions interviewed utilized ICTs for some form of networking and dialogue either within the institution's departments or with affiliated organisations, indicative of a fair use of ICTs for networking and dialogue in the sector. While new communication channels and services such as cellular phones, e-mail, the Web and Internet services are becoming more widely used, there is still limited use made of satellite broadcasts for voice, video and data communication, etc, for networking and dialogue.

83. *Failure to take full advantage of opportunities for using radio, TV, and other non-print media in communicating agricultural information and knowledge:*

The full appreciation of the multi-functionality of communication channels and services in terms of use for both information seeking and communication/dissemination of information and knowledge is not apparent among the organisations interviewed. Most institutions continue to view these media mainly as channels for information dissemination, and issues of packaging of information in the forms that would be best received by the target audience is not usually taken into account when preparing information for dissemination. Further, budget constraints restrict the range of tools which are available for packaging of information; hence communication tends to be limited to the use of the conventional communication channels and services, of print media (posters, leaflets, etc.), radio and television. Many of the institutions are yet to take full advantage of other non-print media such as satellite broadcasts for voice, video and data communication for communicating agricultural information and knowledge.

ICM Skills and Systems

84. *Lack of expertise in the area of information and communication management (ICM)*

As indicated in section 2.2 of the report, the organisations interviewed were all in one way or another endeavouring to engage in the national agricultural and rural development effort, but are hampered by limited capacity and skills to effectively manage information and communication for planning and execution of their programmes in this regard. Most of the staff with responsibility for ICM in these organisations are generally unfamiliar with the standard requirements for information management in library or documentation facilities, have little training or knowledge of how to use information and communication resources effectively and how to produce effective communication materials or use communication media effectively.

85. *Limited opportunities to acquire relevant ICT skills*

ICT and ICM skills have in the last few years been given a high level of priority among both the traditional and emerging actors/stakeholders in the sector. However, based on the

feedback from the key institutions with respect to expressed needs for training in basic IT skills and various aspects of ICT as it relates to information and communication management, it is clear that opportunities with respect to acquiring those skills are still limited.

86. *Weak ICM policies and strategies*
The current situation of severe deficiencies in information and communication resources and management of these resources is undoubtedly a result of weak or inappropriate policies and strategies in that regard. This is evidenced by the way in which resources, particularly financial and human, have been allocated within various institutions.

87. *Limited knowledge of the design of cost-effective and participatory ICM systems*
Adequate systems to promote participatory information and communication management are lacking, and there is limited knowledge and expertise at the local level for designing the type of systems that are cost-effective taking into account the budgetary and financial constraints of institutions in the sector. It is envisaged that the adoption of participatory ICM systems will pose a challenge, particularly with respect to the conversion of conventional information products and services into electronic form to take advantage of new technologies, as equipment (e.g. digitizers, scanners, etc.) is not readily available.

88. *Limited management techniques for the implementation of ICM products and services*
Given that most of the institutions bear little appreciation of minimum requirements for an effective and credible information and communication service, and are also beleaguered by a lack of ICM skills, it is apparent that the institutions lack the appropriate management techniques for acquiring, analysing and generating agricultural information.

89. *Weak Science, Technology and Innovation (ST&I) policies*
A National Council for Science and Technology for Development (NCSTD) was established in 1997 to foster, promote and strengthen the existing Science & Technology services in the country. While a Science and Technology Policy for the Caribbean provides a point of reference for the NCSTD, a national policy in this regard is yet to be promulgated. However, there is a strong focus on the use of ICTs within the national development framework, and a national ICT policy is in the making.

4.1.2 Information Needs

90. The current and projected information needs of the institutions though quite diverse can be summarised into the following priority thematic areas, namely, production, marketing, trade, technology, management, and natural resource conservation. Information required must at least be adapted for local use, in order to make it relevant and appropriate to the needs of the ultimate beneficiaries, the producers. Literacy, gender, educational and cultural factors must be also be considered when information solutions are being provided. Despite the multifunctional nature of information and communication management, devising information solutions may not be too difficult. What is needed is the development of effective mechanisms to disseminate information, utilizing some of the same mechanisms that currently provide assistance to stakeholders and producers, such as the MAFF information services, as a platform. These can then be built upon using similar type services, provided by the producer associations and other private sector service providers that now present a more direct interface to the producers. Further, information sources such as libraries, documentation facilities, electronic databases, information networks need to be more effectively utilized, as these repositories of local information have immense potential for providing the quality of information for application in programme implementation.

4.1.3 Capacity Building Needs

91. In response to the information needs identified by the study, all institutions need to build capacity in:

- information management – information technologies and management skills
- communication – technologies, strategies and skills
- policy formulation, planning and evaluation
- networking – establishment and management of knowledge-based networks at international, regional and national levels – equipment and skills

4.1.4 Potential Partners and Beneficiaries

92. As indicated in section 3.1 of the report, producers and other stakeholders in the sector are beginning to seek and expect information directly from institutions that provide them with services, such as the eight institutions interviewed, besides the MAFF These institutions can and should play an important role of in the future development of sector, but would need to develop the requisite expertise for managing information and effectively communicating information and knowledge to the primary beneficiaries.

93. In keeping therefore, with CTA's objective to diversify partners and based on CTA's criteria[5] for selecting partners the following organisations are recommended for partnering initiatives in St. Lucia, the St Lucia Agriculturist Association (SLAA), WIBDECO and a strengthened National Farmers Cooperative Credit Union (NFCCU). These three organisations meet all the partnership criteria outlined by CTA.. However, new modalities for CTA's targeting of beneficiaries in the agricultural and rural sector of St. Lucia must be centred on those organisations that are now becoming more closely aligned to the primary beneficiaries. Hence the remaining five (5) organisations, SEDU, NRDF, OECS-ESDU, CCIA and to a lesser extent SALCC, should be targeted as CTA beneficiaries, as they are capable of providing a conduit for directly impacting the ultimate beneficiaries of farmers, women and youth.

94. This arrangement will allow CTA to address strategic issues of geographical coverage, decentralisation and regionalisation and thematic orientation, the latter being realized through the specificity of the organisations needs and its target beneficiaries. The issue of regionalization could be readily addressed in collaboration with those organisations with a regional reach such as WIBDECO and OECS-SDU.

95. The MAFF will need to be a targeted beneficiary of CTA support as this institution still though now focused primarily on areas such as technical advisory services and training and regulation, is expected to remain a major information resource to the sector, through the proposed National Agricultural Management Information System Network.

4.2 Recommendations

96. It is well understood that the most fundamental resource in the modern economy is knowledge and for developing countries like St. Lucia, the comparative advantage that now counts is the application of knowledge, based on timely and relevant information. However, the cost and time factors involved in building these capabilities are often prohibitive given the diverse information needs of stakeholders in the sector. In the final

[5] Criteria for selecting **partners** – CTA Draft Programme of Activities 2005, pg 3

analysis it is evident that St. Lucia may not be able to aggressively begin producing widespread information and communication services, but that the country definitely needs within the framework of national goals, sector policies and available resources, to develop the capabilities for maintaining information and communication outputs and for tailoring them to the specific needs of stakeholders. Hence, after due consideration of the objectives of this study and the scope of functions of the operational departments of the CTA, the following recommendations are made for addressing the information needs, capacity building needs and the selection of potential partners and beneficiaries in St. Lucia.

4.2.1 Information Needs

97. CTA should assist the local organisations in improving accessibility to publications and other information by extending the distribution of its products and services to include the partners and beneficiaries identified in the study. One specific area in which this could be achieved is by including the potential partners identified in this study as new QAS users.

98. CTA should reinforce the use of its QAS in existing operational nodes and centres should be encouraged to work closely with organisations that work closely with farmers/producers such as SLAA, NFCCU and WIBDECO, in developing special information packages for the producers.

99. CTA in collaboration with its local partners and in conjunction with its regional and international partners should seek to develop information packages that are specifically tailored to the needs of the partners and beneficiaries in the local agricultural and rural sector.

100. Given the shift in the role of government and the emerging roles for stakeholders in the agricultural and rural sector of St. Lucia, it is imperative that stakeholders recognize and address the need for effective communication. Public and private sector organisations in the agricultural and rural sector should therefore, undertake public awareness programmes aimed at developing the local capacity to engender an information culture and an appreciation for the value of information in achieving strategic goals. CTA could also provide assistance to catalyse such an initiative.

4.2.2 Capacity Building Needs

101. Most of the organizations interviewed though aware of CTA's programmes and products and services, had difficulty accessing those products and services. Given the strategic objective of the CTA to improve access to information services on agricultural and rural development, several interventions will be required aimed at increasing knowledge of and hence access to CTA information services. These will include increasing the number and range of stakeholders participating in the various services such as QAS and other information portals to include new actors such as SLAA, NFCCU, SALCC, WIBDECO and CCIA; use of SDI to assist NGO's and other organisations working directly with farmers such as SLAA, NFCCU and WIBDECO to develop customized information packages for farmers; the development of an appropriate mix of communication media involving the integration of ICTs and conventional media to improve dialogue and exchange for new actors, particularly organizations with a regional reach such as WIBDECO, which has reasonable access to good communication and the potential to improve capabilities to manage same.

102. All the organisations assessed in this study will require support for the development of local and national networks to increase exchanges of experience and other business networking (e-commerce) among the actors and stakeholders. This should take into

account the introduction of new communication and networking technologies, particularly the use of non-print media and electronic networking such, web sites, electronic discussion groups, etc. for communicating agricultural information and knowledge. CTA could facilitate the extension and support of specific networks on an international and regional scale, preferably on a thematic basis – either industry/commodity/product or information need – i.e. for particular networks such as agro-processing, natural resource conservation, trade and ICT, and assist in the expansion of a network of contacts among stakeholders and between the latter and experts from other countries and regions.

103. CTA should provide resources (equipment and/or skills) to assist in strengthening the local distribution infrastructure – that is for the establishment of networks, LAN, Inter-ministerial and wider regional and international networks to improve access to externally published information on agriculture and rural development. Technical assistance to devise procedures for institutionalising cooperation across departments and institutions could come from the CTA.

104. The Centre could also assist local organisations to source funds to acquire the type of equipment needed to improve access to electronic publications and multi-media.

105. This should also include strengthening of the local publishing structure to facilitate the publication of information by local authors and which have a local orientation. CTA could assist in mobilising resources to provide the necessary equipment and materials required for publishing, as well as reproduction of published information.

106. There is need to initiate the participatory development and implementation of information and communication management policies and strategies to promote the use of information products and services for planning and decision-making at all levels in the sector. CTA could provide support through a strengthened agricultural policy network.

107. National policies should speak to the allocation of a critical mass of physical and human resources for the management of data and information resources. Likewise institutions should assign the critical mass of resources needed.

108. CTA should assist in developing the capabilities of stakeholders such as the SLAA , NFCCU and WIBDECO who work directly with farmers, to utilize existing e-distribution channels to improve dialogue and allow for the communication of first-hand experience of pertinent developments in other countries and regions to assist in decision-making. The SLAA has pointed to a need to establish a structure to generate more business for its members through e-commerce. It is recommended that the Learning Resource Centres established by government in the rural communities be tapped into to provide information centres for the primary beneficiaries. CTA could then assist in developing a broad framework through which the organisations and the centres could be informed and updated on e-distribution channels for the various publications appropriate for their needs. All three organisations and these centres will require human resources to enable information collating and dissemination to beneficiaries.

109. The needs identified cover both the increasing use of conventional tools and the adoption of new tools for integrating new media. The strengthening of institutional capacity with respect to necessary skills, resources and information is paramount therefore, for opening up the possibilities for the use of both conventional and new information and communication technologies. Stakeholders at all levels in the sector will require skills training in several areas, principal of which is the area of information and communication management (ICM) skills. CTA could assist in facilitating training for the acquisition of requisite skills by stakeholders to become effective information managers; areas of focus include skills for undertaking information needs analysis, formulating

communication strategies, implementing communication activities including selection of appropriate communication tools and technologies, moderating and managing networks. Training in management techniques for the implementation of ICM products and services should also be provided.

110. The development of guidelines for the use of communication tools, including an outline of the various tools available and capabilities to assist information and communication managers, is another area in which CTA could provide technical assistance to the local sector.

111. Emerging stakeholders/actors in the sector should to seek to develop mechanisms for accessing training or capacity building opportunities to acquire the relevant information and communication technology (ICT) skills – partnering, co-funding, understudy of consultants sent on local attachments, etc.

112. CTA should assist key public and private sector institutions in the creation of databases utilizing standardized formats for agricultural information management to facilitate information dissemination. The Centre could also facilitate the development of skills for the management of these databases. For example, support could be provided to the proposed National Agricultural Management Information System Network to be developed by the MAFF in the form of technical assistance to develop standard formats to facilitate information gathering and dissemination of agricultural data and statistics in the sector.

113. The GOSL should develop and implement as a minimum, a national information (or ICM) policy and strategy, to promote and encourage the development and implementation of an agricultural information (or ICM) policy and corresponding policies and strategies at all other levels in the sector, down to the institutional level. The development of a strategic approach is required to promote the importance of integrating information into development strategies and create the demand for existing agricultural information services available. This will further enable information services providers to tailor these services to meet the current and emerging needs of the end users.

114. Stakeholders in the agricultural and rural sector of St. Lucia need to be equipped to create the type of environment that would facilitate the increased use of conventional information and communication tools, and at the same time introduce and adopt the new ICTs, in order to be able to actively participate in the developments of the global network society. CTA could provide support for the development of programmes for stakeholders to improve their ability to formulate and implement information and communication policies. Programmes should be aimed at all stakeholders– public and private sector, including policy makers, service providers and producer associations. The primary focus must however be on the emerging stakeholders, in particular the local service providers who play a key supporting role in communicating and channelling information to primary beneficiaries, such as producers, women and youth.

115. Technical Assistance (TA) for the design of cost-effective and participatory ICM systems should be provided to select institutions in the short term, while counterpart training is pursued for development of local knowledge and expertise. CTA could provide support in the area of TA for development of ICM structures and centres.

116. Similarly, Technical Assistance for the application of appropriate management techniques for the implementation of ICM products and services should be provided in the short term, with a medium to long term measure for developing local capacity.

4.2.3 Potential Partners and Beneficiaries

117. The following organisations are recommended for CTA partnering initiatives in St. Lucia, the SLAA, WIBDECO and a strengthened NFCCU as these three organisations meet all the partnership criteria outlined by CTA.. The remaining five (5) organisations assessed during the study, namely, SEDU, NRDF, OECS-ESDU, CCIA, and to a lesser extent SALCC, all meet criteria for potential CTA beneficiaries, as they are capable of providing a conduit for directly impacting the ultimate beneficiaries of farmers, women and youth. The MAFF is also recommended as a potential beneficiary as the institution is expected to continue as a prime information resource to the ultimate beneficiaries in the sector.

ANNEXES

ANNEX I. TERMS OF REFERENCE

ASSESSMENT OF AGRICULTURAL INFORMATION NEEDS IN AFRICAN, CARIBBEAN & PACIFIC (ACP) STATES
Phase 1: Caribbean, Country Studies: Dominica, St. Lucia, St. Kitts & Nevis and St. Vincent & the Grenadines

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[6].

In January 2002, CTA's Strategic Plan (2001-2005) was implemented and CTA's activities were 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**

A comprehensive regional information needs assessment was undertaken in the Caribbean region, by CTA and the Caribbean Agricultural Research and Development Institute (CARDI), over the period 1995-1997. This study detailed the information needs, habits and priorities, of eleven sub-groups of users relevant to the agricultural and rural development sector, presented in sixteen national reports and a regional overview. The results of the studies were followed by a series of national consultations, missions and regional meetings, as well as pilot studies in information and communications management all aimed at arriving at or designing a strategy to meet information needs within the sector. The strategy proposed the development of a Caribbean Agricultural Information Service (CAIS) with a two pronged approach to improving access to information within the Caribbean region:

- Working with institutions at the national level to improve capacity in various aspects of information and communication management (e.g. network development, training, sensitisation).
- Developing information products and services to meet specific information needs identified.

[6] Priority information themes for ACP agriculture have formed the basis of various several studies, workshops and seminars bringing together various stakeholders, organisations and institutions active in the field of agriculture and rural development. The documents (or extracts thereof) will be provided to the consultants.

The CAIS strategy has been implemented since 2001. A number of capacity building exercises were executed including workshops and training courses; provision of technical assistance; network development, policies and systems. Since the implementation of this strategy in 2001, there have also been a number of changes within institutions in the region with respect to their awareness and use of information and communications tools and technologies.

2. Main issues

CTA works primarily through intermediary organisations and partners (non-governmental organisations, farmers' organisations, regional organisations, …) to promote agriculture and rural development. Through partnerships, CTA hopes to increase the number of ACP organisations capable of generating and managing information and developing their own information and communication management strategies. The identification of appropriate partners is therefore of primordial importance.

The "Evaluation of the Implementation of the Mid-Term Plan (1997 – 2000)" emphasised the need for CTA to develop a more pro-active approach and elaborate criteria for decision-making with regard to the choice of partner organisations and beneficiaries. Based on this evaluation, the "Strategic Plan and Framework for Action – 2001 – 2005" identifies strategic issues for CTA being: improved targeting (including partnerships and beneficiaries), geographical coverage, decentralisation, regionalisation and thematic orientation. The Plan also expresses concern about: the extent to which CTA's activities are relevant to and reach the poor, gender awareness and how to identify potential partners especially in the independent sectors.

Besides partner identification and selection issues, the observation has also been made that, the Caribbean region could benefit further from CTA's programme and activities.
Finally, various national and regional partners with whom CTA has had a long-standing relationship have requested the current study which would serve to update the earlier studies done and allow them to provide more targeted assistance to their beneficiaries.

3. Objectives and scope of the study

The objectives of the study are as follows:

- to identify agricultural information needs of key actors / beneficiaries for CTA products and services;
- to identify needs of potential actors / beneficiaries of CTA activities and services in terms of building capacity for information and communication management;
- to identify potential partners / beneficiaries for CTA activities and services;
- to develop some baseline data to facilitate subsequent monitoring activities.

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

4. Methodology

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

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

The rapid appraisal approach will allow a general overview of the key issues and company / organisational profiles on a per country[7] basis and may give rise to more in-depth studies as and when needed in the future.

[7] Out of 16 countries comprising the Caribbean ACP, only selected number will initially be the subject of studies, with domestic consultants conducting country-specific assessments. Country selection will be done by CTA on the basis of specific criteria.

5. Expected outcomes / output
One main report per country not exceeding 20 pages according to the following table of contents:

Main report

1. Executive summary
2. Introduction
3. Country profile – summary structure and economic characteristics with particular attention to agricultural sector (includes fisheries and forestry):
    - Summary of how agriculture, fisheries and forestry is organised in the country
    - Summary of the information and communication management capacity
    - The current source of agricultural information and services (synthesise Annex 3)
4. Needs analysis
    - Information needs
    - Capacity building needs (skills, training, media, ICT, equipment)
5. Conclusions and recommendations
6. References

Annexes

1. *Terms of reference*

2. *Country profile*

2.1 General agricultural profile (*from available documentation*)

- Size of agricultural population (male / female / youth)
- Farmed land, forests, fishing areas
- Agricultural systems
- Agriculture in the economy (percentage GDP)
- Main agricultural produce and secondary products
- Main export markets
- Trade agreements that include agriculture
- Sectoral policy related to agriculture, fisheries and forests

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

- Total active population, demographic breakdown
- Literacy level and languages
- Access to services (health, schools, electricity)
- Rural urban drift

2.3 Media and telecommunications *(update / check)*

- Newspapers, periodicals, magazines, radio stations, television channels,
- Telecommunication services (fixed, mobile, etc.)
- Computers and Internet access

3. *Profile of institutions*

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

It is also expected that the results of this study will lead to identification / update of some priority agricultural information themes which will feed into a possible priority-setting exercise in the region in 2004.

6. Reporting
The country reports will not exceed 20 pages (excluding annexes). The annexes should include a list of acronyms, of persons/institutions interviewed with addresses, phone, fax numbers, e-mail addresses (if any) as well as bibliography.

7. Timing

- Draft final report is to be submitted within three months after contract signature by CTA
- Final report due two weeks after receipt of comments from CTA.

8. Expertise

Consultant	Country
Mrs. Roberta Williams & Mrs. Sue Evan Wong	Antigua & Barbuda
Mr. Kelvin Craig	Guyana
Mrs. Luvette Thomas-Louisy	Dominica, St. Kitts & Nevis, St. Lucia, St. Vincent & the Grenadines
Mr. Steve Maximay	Trinidad & Tobago
Mr. Ricardo van Ravenswaay	Suriname
Mrs. Barbara Gumbs	Regional Coordinator, Overview report

The expert should have a university degree or equivalent by experience. In addition, he/she should have at least 10 years experience in field of agriculture, rural development or social / economic sciences. He/she must have in-depth knowledge of the agricultural sector in his/her country and be able to identify key players and institutions / organisations active in this area. 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.

The overall coordination will be carried out by Ms Christine Webster, Deputy Head, Planning and Corporate Services CTA, assisted by Mrs Lola Visser-Mabogunje, Project Assistant.

9. Implementation schedule (CTA)

- Preparation/Finalisation of ToR; Identification/ short-listing of (potential) consultants; Call for offers: February – October 2004
- Selection of consultants & contractual arrangements: October 2004
- Briefing: 3 – 4 November 2004
- Start date of contract: 2 November 2004
- Implementation period: 3 November – 1 May 2005
- End date of contract: 1 May 2005

10. Key documents to be made available to consultants

Documents include:

- Cotonou Framework Agreement
- Excerpts of relevant sections of CTA's Strategic Plan and Plan of Action (2001-2005)
- Annual Reports
- Documents on priority information themes identified for the Caribbean region
- Documents on products & services provided by CTA
- Information Needs Relevant Country and Regional Reports 1997
- CAIS Stakeholders Meeting Reports

11. Role of Regional Coordinator

- Respect the timeframe as specified in Annex IV (regarding submission of reports)
- Help identify and vet country consultants
- Attend briefing meeting in Trinidad
- Review the terms of reference
- Finalise questionnaires and methodological approach after due consultation with CTA Team
- Draw up briefing notes and guidelines 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 to the local consultants
- Review preliminary country reports and findings and send comments back to local consultants
- Coordinate and ensure consistency of country reports
- Prepare the overall report taking into account the findings and recommendations of all the Caribbean country reports (table of contents to be agreed).

12. Role of Local Consultants

- Respect all the timeframe as specified in Annex IV (regarding submission of reports)
- Attend briefing meeting in Trinidad
- 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 country specified in the contract
- Conduct interviews and gather information in country specified in the contract
- Draft preliminary country reports and send to Regional Coordinator for initial comments
- Based on comments received from 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

13. Role of CARDI

- Assist in the identification and vetting of Local Consultants
- Provide input and feedback for the Terms of Reference
- Make all the logistical arrangements (flights, hotel, venue of meeting, etc) for the briefing session
- Participate in the pre/briefing sessions (in Trinidad)
- Provide backstopping for the Regional Coordinator
- Liaise with CARDI and Regional Coordinator throughout the study
- On receipt of the draft and final reports give comments and observations to the Regional Coordinator with copy directly to CTA

14 Role of CTA

- Draw up initial Terms of Reference and prepare relevant background documents
- Appoint the Regional Coordinator and the ACP Local Consultants
- Attend briefing meeting of consultants in Trinidad
- Liaise with CARDI and Regional Coordinator throughout the study
- Invite the Regional Coordinator and Local Consultants for Briefing Meeting
- Provide input to the Regional Coordinator with regard to fine-tuning terms of reference, questionnaires, interview guide and reporting guidelines for the consultants
- Provide relevant background documents to the Local Consultants & Regional Coordinator
- Elaborate budget and discuss contractual obligations with the Team of consultants & Regional Coordinator
- 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 to Trinidad, hotel accommodation and subsistence allowances during briefing meeting, or during agreed and specified field visits)
- Provide feedback and comments on draft country reports to the Local Consultants
- Give feedback to the Regional Coordinator on the overall report for the Caribbean.

ANNEX II. COUNTRY PROFILE – SAINT LUCIA

PROFILE

OFFICIAL NAME:
Saint Lucia

*Source: Atlas International, http://www.alsintl.com/countries/countrylist.htm Saint Lucia CIA World Fact Book, **www.ciafactbook***

Geography
Area: 619 sq. km. (238 sq. mi.).
Habitable Area: 539.14 sq. km (207.88 sq. mi)
Cities: *Capital*--Castries (pop. est. 67,000); Micoud, Gros-Islet; Vieux Fort; Soufriere.
Terrain: Mountainous.
Climate: Tropical.
People
Nationality: *Noun and adjective*--St. Lucian(s).
Population (est. 2001): 163,300.
Annual growth rate (est. 2001): 5.4%.
Ethnic groups: African descent 90%, mixed 6%, East Indian 3%, European 0.8%.
Religions: Roman Catholic 90%, Church of England 3%, various Protestant denominations.
Languages: English (official); a French patois is common throughout the country.
Education: *Literacy*--85%. *Years compulsory*--ages 5-15. Attendance--more than 80% urban, 75% rural.
Health (2000): *Life expectancy*--74 years female; 68 years male. *Infant mortality rate*--16/1,000.
Work force (2002 est.): *Agriculture*—21.7%. *Industry and commerce*—24.7%. *Services*—53.6%.
Unemployment (2000) 16.5%
Natural resources: Forests, beaches, minerals (pumice), mineral springs.
Imports (2001) $258.7 million: food, fuel, manufactured goods, machinery and transport equipment.
Major suppliers--U.S., CARICOM countries, U.K., Japan.

Source: CIA World Fact Book, www.ciafactbook

Economy Overview

St. Lucia's economy depends primarily on revenue from banana production and tourism with some input from small-scale manufacturing. There are numerous small and medium-sized agricultural enterprises. Revenue from agriculture has supported the noticeable socioeconomic changes that have taken place in St. Lucia since the 1960s. Eighty percent of merchandise trade earnings came from banana exports to the United Kingdom in the 1960s. The recent changes in the EU import preference regime and the increased competition from Latin American bananas have made economic diversification increasingly important in Saint Lucia. An attempt is being made to diversify production by encouraging the establishment of tree crops such as mangoes and avocadoes. A variety of vegetables are produced for local consumption.

The island nation has been able to attract foreign business and investment, especially in its financial services and tourism sectors. The manufacturing sector is the most diverse in the Eastern Caribbean area with the recent addition of small computer driven information technology. The government is trying to revitalize the banana industry. Economic fundamentals remain solid.

St. Lucia is a net-food importing country and is categorised as such within the WTO[8]. St. Lucia has experienced a growing trade deficit in its food bill for over ten years, by and large corresponding with the decline in the banana industry[9] and the increase in tourism activity. Most locally produced agricultural commodities and their products are consumed domestically with the exception of bananas and to a lesser extent cocoa and coconut products.

Agriculture is a vitally important sector of Saint Lucia's economy and despite its steadily declining contribution to GDP over the last 10 years its continuing significant role in the country's socio-economic development must be neither underestimated nor ignored. Tourism and other service-based industries overtook the agricultural sector in the early 1990's as the major contributor to GDP. This is a normal consequence of development as secondary and tertiary sectors expand. However, although agriculture is purported to contribute roughly 6.5% to GDP (2002) the true contribution of the sector is more likely to be much higher when forward and backward linkages to the sector are taken into account[10].

II.1 General agricultural profile

Banana production continues to occupy the largest share of land currently under cultivation - 48% - with production accounting for 41.4% of agricultural GDP. Coconut, the next major crop occupies about 42% of agricultural land. The other crops produced include cocoa, vegetables and herbs, other fruit and tree crops and cut flowers. The livestock sector is small and dominated by the poultry industry. Recent efforts by the MAFF have sought to encourage the production of small ruminants (sheep and goats), swine and rabbits. The fisheries sector has shown steady growth in output and in the number of producers over the last 5 years and is emerging as a viable option for further diversification. Forestry is the smallest agricultural sub-sector. Craft products, mauby and latanyé production along with Christmas tree exports are currently being explored as viable options for the development of the industry.

[8] *Within the WTO Saint Lucia is categorized as a Net Food Importing Developing Country (NFIDC).*
[9] *Export earnings from bananas have dropped by approximately 50% from 1992 - 2002*
[10] *More than Food on the Table: Agriculture's True Contribution to the Economy.*

II.1.1 Size of agricultural population (male / female / youth)

Agricultural census data for 1996 presented in Table 5 indicate a decrease in total population on farm household holdings since the previous census in 1986. The total number of permanent agricultural workers also registered a decline. Recent data from the Government Statistical Department indicate an almost fifty percent (50%) decrease in the size of agricultural worker population.

Table 5. .Agricultural Population Distribution

	1986	***1996***	***2003***
1. Population in Holdings	***58000****	***51553***	***NA***
2. Number of Permanent Agricultural Workers	***19372***	***19009***	***10830*** **
2.1 Household Members	***10832***	***10805***	***NA***
2.2 Non Household Members	***8540***	***8204***	***NA***
3. Total Population	***120000***	***141000***	***157000***
4. Ratio (2)/(3)	***0.16***	***0.13***	***NA***
****Estimated from group data -*** ***** Estimates – Government Statistical Department*** ***NA – Not available***			

Source: 1996 St Lucia Census of Agriculture Final Report

II.1.2 Farmed land, forests, fishing areas

According to the Biodiversity Country Study Report of St. Lucia (BCSR, 1998), thirty-five percent (approx. 21,741 hectares) of St. Lucia is covered by natural vegetation, with 7,500 (13%) found under Government reserves. Of the remaining land area, fifty-five percent (34,015 hectares) is under agriculture and 9.5% (5,905 hectares) is in urban use, surface water and exposed rock.

Table 6 provides a summary of the land use pattern in St Lucia. A categorisation of land under agriculture is provided in Table 7.

Table 6: Categories of Land Use of Watersheds in St. Lucia

Land Use Type	Category	Area (hectares)	Area (percentage %)
Natural	Forest	12,572	20.4
	Scrub Forest	7,515	12.2
	Mangrove	352	0.6
	Open Woodlands	1,302	2.1
	Sub Total	**21,741**	**35.3**
Farming	Intensive	17,576	28.5
	Mixed	16,205	26.3
	Eroded Land	234	0.4
	Sub Total	**34,015**	**55.2**
Others	Settlements	5,384	8.7

Land Use Type	Category	Area (hectares)	Area (percentage %)
	Rock and Exposed Soils	426	0.7
	Water (Marina and Dam)	95	0.1
	Sub Total	5,905	9.5
	Total	**61,661**	**100**

Source: Biodiversity Country Study Report of St. Lucia, 1998

Table 7: Categorization of Land under Agriculture

Major Use/Category (FAO Class)	In-Country Land Use Classification	1996		Rate of Change (Avg. loss or gain in ha/yr)		
		Land Area (sq km)	% of total land area	1974-1986	1986-1996	1996-2000*
Arable land	Productive land Agricultural land	173.54	28.1	-6.03	-241.55	-144.93
	Cultivated land	157.85	25.6	190.30	-336.80	-117.90
	Temporary crops and fallow	18.49	3.0	-168.30	-145.12	-167.56
Land under permanent crops	Permanent crops	139.35	22.6	358.60	-191.66	197.41
Permanent meadow and pasture	Grassland	15.69	2.5	-196.33	95.2	-27.82
Other land	Forest and Woodlands	27.56	4.5	-360.17	-61.2	-55.08
	All other land	6.63	1.1	-74.76	-4.69	4.83
Total Land in Agriculture		207.73	33.7	-441.0	-307.4	-380.0

Source: Biodiversity Country Study Report of St. Lucia, 1998
** Subjective estimates for 1996-2000*

Fisheries production averaged 1,700 tonnes in 1999, peaking at just over 2,000 tonnes in 2000 and declining to just over 1,400 tonnes in 2003. In 2003, there were 669 registered fishing vessels, with 1,256 fishermen registered as full time and 836 registered as part time.

II.1.3 Agricultural systems

Small-scale farming, which is generally associated with inefficiency and non-commercial viability, continues to be a distinct feature of agriculture in St. Lucia. Many of the farmers are risk averse, resource deficient farmers with limited access to credit and to other critical production inputs and services.

Bananas for export are grown under a weed-free monoculture system, with high use of agro-chemicals. Though an increasing acreage of bananas is now irrigated, non-banana crop production is still carried out mainly under rain-fed conditions.

Many of the other traditional crops such as cocoa and coconuts are usually found inter-planted with other tree crops, bananas and plantains in a mixed farming system, comprising a wide array of crops and vegetation. Many farmers keep livestock in an integrated farming system, moving away from the old plantation style monoculture and thus enhancing and diversifying that agro-ecosystem.

Most farm operations are labour intensive and very little mechanization is used. While there is current use of mechanization for land preparation in bananas, most clearing and land preparation operations are still carried out by hand using a cutlass, digging fork, and spade. Planting is done by hand, as is harvesting. The use of agrochemicals is common practice in all crops, with a stronger emphasis in banana production. The materials used include fertilizers, weedicides, rodenticides, fungicides, nematicides and insecticides and involves on-farm investment in crop protection equipment.

Livestock is produced mainly by many small farmers using traditional systems of production, which are part of the wider integrated farming systems practiced island-wide. Pigs (*porcine spp.*), goats (*caprine spp.*), sheep (*ovine spp.*) and poultry (*avian spp.*) are the major domesticated species reared commercially for meat. Other domesticated species include cattle (*bovine spp.*), rabbit (*laprine spp.*), dogs (*canine spp*), cats (*feline spp.*) and horses (*equine spp.*). The technologies introduced over the years (shelters, anthelmintic treatment, cut & carry systems and strategic feed supplementation) are relatively simple and therefore have been easily adopted by farmers.

Organic farming has been practiced in St. Lucia on a small scale within ad hoc programs over the last few years, with the promotion of organic banana production by WIBDECO.

II.1.4 Agriculture in the economy (percentage GDP)

Agriculture is a vitally important sector of Saint Lucia's economy and despite its steadily declining contribution to GDP over the last 10 years its continuing significant role in the country's socio-economic development must be neither underestimated nor ignored. Tourism and other service-based industries overtook the agricultural sector in the early 1990's as the major contributor to GDP. This is a normal consequence of development as secondary and tertiary sectors expand. However, although agriculture is purported to contribute roughly 6.5% to GDP (2002) the true contribution of the sector is more likely to be much higher when forward and backward linkages to the sector are taken into account[11].

Table 8. Saint Lucia Gross Domestic Product by Economic Activity

(At Factor Cost Constant Prices – 1990 Percentage of Total)

SECTORS	1995	1996	1997	1998	1999	2000	2001
Agriculture, Livestock, Forestry, Fishing	11.16	11.10	9.06	9.06	7.21	7.69	5.92
- Bananas	7.52	7.07	4.78	4.89	3.53	3.46	2.15
- Other Crops	2.25	2.37	2.45	2.27	1.82	2.24	2.01
- Livestock	0.53	0.69	0.77	0.81	0.57	0.65	0.89
- Fishing	0.64	0.77	0.88	0.93	1.16	1.22	1.33
- Forestry	0.22	0.20	0.18	0.16	0.14	0.12	0.13
Mining and Quarrying	0.48	0.47	0.53	0.52	0.51	0.52	0.58
Manufacturing	7.02	6.45	6.39	6.13	6.17	5.88	7.04
Construction	8.50	8.05	8.03	8.61	9.39	8.89	10.41
Electricity and Water	3.71	3.70	3.95	4.15	4.75	4.99	5.84
Electricity	2.88	2.89	3.14	3.35	3.90	4.09	4.85
Water	0.82	0.82	0.81	0.80	0.85	0.90	0.99
Wholesale and Retail Trade	13.55	13.41	13.76	13.50	13.42	12.82	13.05
Hotels and Restaurants	11.15	11.85	13.02	12.93	13.03	13.28	14.64

[11] *More than Food on the Table: Agriculture's True Contribution to the Economy*.

SECTORS	1995	1996	1997	1998	1999	2000	2001
Transport	10.63	10.81	10.92	10.89	11.07	10.85	12.55
- Road Transport	6.98	7.09	7.46	7.36	7.31	7.42	9.15
- Air Transport	1.42	1.36	1.45	1.44	1.50	1.54	1.70
- Sea Transport	2.23	2.36	2.01	2.07	2.26	1.90	1.70
- Communications	8.33	8.68	8.57	8.56	8.78	9.19	12.67
Banking and Insurance	8.59	9.06	9.69	9.87	10.38	10.62	13.41
Banking	7.40	7.88	8.41	8.56	9.04	9.21	11.57
Insurance	1.19	1.18	1.28	1.32	1.34	1.40	1.84
Real Estate and Owner Occupied Dwellings	6.85	6.84	6.90	6.99	7.00	7.12	8.98
Producers of Government Services	12.70	12.54	12.52	12.33	12.05	12.12	15.1
Other Services	4.52	4.69	4.81	4.80	4.79	4.91	5.61
Less: Imputed Banking Service Charge	-7.18	-7.64	-8.15	-8.34	-8.55	-8.89	-11.15
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Source: Saint Lucia Economic and Social Review, 2000; *Government Statistics Department - St.Lucia*

Agriculture's contribution (products – bananas, cocoa, coconut, citrus fruits, livestock, fish and forestry) to GDP showed a significant decline from 1995 (11.21%) to 1999 (7.24%) and by 2003 (4.89%), with the performance of the agricultural sector continuing to be overshadowed by both external and domestic developments in the banana industry. Banana production contributed to 7.52% of GDP in 1995, 3.54% in 1999, but by the year 2003 had declined to 1.96%.

Comparison to **Industry:** Manufacturing 20% of GDP (2002 P/); *Types*--garments, electronic components, beverages, corrugated boxes and ***Services***--73% (2002 P/) of GDP.

Table 9. Agriculture Contribution to GDP by Sub-Sector

Agricultural Activity and Percentage Contribution	1999 R/	2000 R/	2001 R/	2002 P/	2003 P/
Bananas – GDP	41.05	43.68	22.37	30.57	22.78
% Contribution to Total GDP	**3.54**	**3.76**	**1.93**	**2.63**	**1.96**
Other crops - GDP	21.14	19.57	20.48	13.50	14.27
% Contribution to Total GDP	**1.82**	**1.69**	**1.76**	**1.16**	**1.23**
Livestock - GDP	6.67	7.67	7.20	6.86	6.64
% Contribution to Total GDP	**0.58**	**0.66**	**0.62**	**0.59**	**0.57**
Fishing - GDP	13.45	13.21	13.64	11.46	11.88
% Contribution to Total GDP	**1.16**	**1.14**	**1.17**	**0.99**	**1.02**
Forestry - GDP	1.59	1.42	1.23	1.20	1.16
% Contribution to Total GDP	**0.14**	**0.12**	**0.11**	**0.10**	**0.10**
Total Agricultural GDP	83.90	85.55	64.92	63.59	56.73
% Contribution to Total GDP	**7.24**	**7.37**	**5.59**	**5.48**	**4.89**

Source: Government Statistics Department - St. Lucia
R/ - Revised Estimates; P/ - Provisional

Despite the decline in the agricultural sector, the other non-banana sub-sectors have steadily increased their contribution to GDP over the last five years, with non-banana crops now the second largest contributor in this sector. The steady growth in the domestic consumption of non-traditional crops resulted in a substantial growth in 1999, declining to 1.23% in 2003, yet maintaining its order in rank. Increased growth rates in fish landings contributed to an expansion of this sub-sector between 1999 and 2001, contracting in the more recent years. The 1999 decline in the livestock sub-sector was partially reversed by an increase in output in the following two years, owing primarily to a substantial growth in chicken production, however, levelling off in 2002-2003.

II.1.5 Main agricultural produce and secondary products

Table 10 shows the main items in domestic exports. The main agricultural products are bananas and plantain; tree crops including coconuts, mangoes, breadfruit, cocoa; and vegetables and root crops, primarily hot peppers; forest and fishery potential not fully exploited. Secondary products include processed coconut products, and other manufactured goods.

Table 10. Main agricultural produce and secondary products

Agriculture - products:	bananas, coconuts, vegetables, hot pepper, breadfruit, mangoes, root crops, cocoa
Industries:	clothing, assembly of electronic components, beverages, corrugated cardboard boxes, tourism, lime processing, coconut processing

Source: www.ciafactbook - CIA Fact Book – last updated January 2005 & MAFF Statistical Department

II.1.6 Main export markets

The principal trading partners, total exports for 2004 and comparative figures for 2002 and 2003 indicative of the level of exports to these markets are provided in Table 11.

Table 11. Domestic Exports with Major Trading Partners

Country	Export Commodities	2004 Total Exports (Tonnes)	2002	2003
			(EC Million dollars)	
United Kingdom	Bananas, fruits; other agricultural products	1049.56	60.52	44.89
United States	Cocoa, coconut oils and fats, other agricultural products; manufactured goods	237.41	13.16	12.01
Barbados	Vegetables, fruits, coconut oils and fats; other agricultural goods	810.14	12.67	12.27
Dominica	Coconut oils and fats; other agricultural products	NA	8.32	7.47
St Vincent & Grenadines	Fruits; other agricultural products	NA	2.80	4.72

Source St. Lucia Statistical Department - http://www.stats.gov.lc
Statistical Unit, Ministry of Agriculture, Forestry

Small quantities of fruits and vegetables are also traded with Anguilla, Antigua, Canada, St. Croix, St. Martin, Tortola and Trinidad.

A comparison of the value of trade in agricultural commodities and other commodities traded is provided in Table 12. .

Table 12. Annual Value of Trade by Section of the SITC as at December 30, 2004

ANNUAL VALUE OF TRADE BY SECTION OF THE S.I.T.C. in Thousands of EC Dollars (as at December 30, 2004)				
2003				
SECTION & COMMODITY	**IMPORTS**	**DOMESTIC EXPORTS**	**RE-EXPORTS**	**TOTAL EXPORTS**
0. Food & live animals	204,008	48,094	482	48,576
1. Beverages and tobacco	41,291	29,283	363	29,647
2. Crude materials, inedible except fuels	24,010	1,112	142	1,254
3. Mineral fuels, lubricants and related materials	123,482	0	16,557	16,557
4. Animal and vegetable oils, fats and waxes	2,033	14	0	14
5. Chemicals and related products, n.e.s.	79,297	1,056	1,471	2,528
6. Manufactured goods classified chiefly by material	16,5772	9,700	4,723	14,422
7. Machinery and transport equipment	285,359	8,024	29,546	37,570
8. Miscellaneous manufactured articles	163,890	8,129	7,343	15,472
9. Commodities & transactions not classified according to kind	263	6	2,200	2,205
Total	**1,089,405**	**105,420**	**62,827**	**168,246**

Source: St. Lucia Statistical Department; *http://www.stats.gov.lc*

II.1.7 Trade agreements that include agriculture

The island is signatory to several trade agreements that impact on agriculture including:

- General Agreement on Trade and Tariff (GATT), 1986Contonou Agreement WTO Doha Development Agenda – Agreement on Agriculture (AOA)WTO; Sanitary and Phyto Sanitary (SPS); Agreement on Trade Related Aspects of Intellectual Property Rights (TRIPs);
- Free Trade Agreement of the Americas (FTAA) - eliminates barriers to trade and investment across the 34 nations the Americas;
- Caribbean Community and Common Market (CARICOM) and CARICOM Single Market and Economy (CSME) - liberalizes trade among CARICOM countries

resulting in increased competitiveness and strengthening the linkages between the agricultural sector and other sectors of the Single Market and Economy;

- Multi-lateral and Bi-lateral agreements particularly with the Japanese Government and CARICOM, under the Caribbean Fisheries Resource Assessment and Management Project and the OECS Fisheries Development Project;
- CARICOM-Costa Rica Free Trade Agreement – March 2004;
- Convention on Biological Diversity (CBD) and the Biosafety Protocol – involves the protection of agricultural biodiversity considered a "global common" from biopiracy (privatization through patents and other intellectual property rights) or the spread of Genetic Use Restriction Technologies (GURTs or Terminator Technologies) and implementation of farmers' rights to a share of the benefits for their contribution to the development of agricultural biodiversity, the two crucial elements in the conservation and sustainable use of agricultural biodiversity;
- International Seed Treaty – The treaty is a binding agreement that gives legal force to the conservation of the world's major agricultural seeds.

Other Agreements and Conventions which may have implications for the sector of which the island is party to include: Biodiversity, International Seed Treaty, Climate Change, Desertification, Endangered Species, Environmental Modification, Hazardous Wastes, Law of the Sea, Marine Dumping, Ozone Layer Protection, Ship Pollution, Whaling signed, but not ratified: Climate Change-Kyoto Protocol.

Other Development Agendas which may impact agriculture include:

- The Millennium Development Goals (MDGs) – global targets for poverty reduction, social development and environmental regeneration agreed to by world leaders at the Millennium Summit of the UN General Assembly in September 2000; and
- Barbados Declaration and Program of Action for Small Island Developing States (SIDS/POA) – built on Rio Declaration and Agenda 21.

II.1.8 Sectoral policy related to agriculture, fisheries and forests

The restructuring and repositioning or the St. Lucian economy to respond to the challenges and opportunities arising out of globalization and trade liberalization have been identified as key priorities for the GOSL towards economic diversification within the mid-term economic strategy. The strategy will focus on the continuous sustainable development of the financial services, education and human resources, technology and a diversified tourism and agricultural sectors.

The GOSL strategy to diversify the agricultural sector has as the principal objective, the reduction on the dependence on the single crop (bananas), with an overall focus to initiate future agricultural development.

The vision of the sector is:

> *"to sustain a diversified national agricultural income base and enhance the integrity of rural livelihood systems; by generating capacity for efficiency and the competitive production and marketing of agricultural goods and services"*

In order to achieve the above, critical policy measures have been put in place. The policy objectives of the GOSL with respect to the agricultural are listed in Table 13.

Table 13. Agricultural Policy Objectives of the Government of St. Lucia

1. To *increase* the efficiency and competitiveness of agriculture;
2. To *promote* the adoption of improved/appropriate technological packages;
3. To *expand* the agricultural production and export base;
4. To *enhance* the national food security status;
5. To *generate* new opportunities for income and employment in rural areas;
6. To *conserve* the natural resource base, and
7. To *modernize* legislative and policy framework for optimal agricultural production and trade.

Source: Draft Policy Framework for the Development of the Agricultural Sector, 2004 – 2014 (2003)

II.2 Socio-economic profile

Table 14 summarizes the main socio-economic indicators of the St Lucian Economy.

Table 14. St. Lucia – Key Economic Indicators

	1996	1997	1998	1999	2000
POPULATION AND DEMOGRAPHY					
Population	147,179	149,666	151,972	153,703	153,819
Population Density – Per sq. ml *1.	708	720	731	739	740
- Per sq. km	273	278	282	285	285
Birth Rate (Per 1000)	21.40	22.10	22.90	18.90	22.20
Death Rate (Per 1000)	6.40	6.50	6.20	6.30	6.20
Infant Mortality Rate	16.70	17.60	14.70	14.10	15.00
CENTRAL GOVERNMENT FINANCE ($m)					
Calendar Year					
Current Revenue	391.30	375.40	418.44	497.60	472.9
Current Expenditure	332.60	314.90	328.91	354.50	390.3
Capital Expenditure	104.00	96.50	138.90	166.50	150.0
Current Account Balance	58.70	60.4	89.53	143.10	82.6
Overall Balance	(27.90)	(22.70)	11.10	41.2	(62.2)
DEBT RATIOS					
Debt Service/Export of Goods and Services	3.33%	3.50%	3.72%	4.10%	4.83%
External Debt Outstanding to GDP	23.27%	25.21%	25.46%	25.40%	29.10%
PRICES					
Inflation Rate	0.90%	0.00%	2.80%	3.50%	3.55%
OUTPUT					
GDP at Factor cost of which:					
- Constant Prices ($m)	1084.51	1,090.73	1,122.05	1,163.60	1,171.90
- Agriculture	120.34	98.77	102.58	83.90	90.13
- Tourism	128.47	142.05	145.40	151.57	155.61

	1996	1997	1998	1999	2000
Rate of Growth	1.37%	0.57%	2.87%	3.50%	0.71%
MONEY AND CREDIT ($m)					
Total Deposits	1,218.40	1,297.50	1,493.17	1,618.52	1,728.81
Money Supply (M1)	225.68	239.26	247.90	267.62	286.05
Money Supply (M2)	832.50	888.56	996.44	1,093.27	1,179.39
Bank Credit to Public Sector	96.90	107.50	158.56	168.79	156.12
Bank Credit to Private Sector	1,071.26	1,171.82	1,258.19	1,349.19	1,493.40
AGRICULTURE (000's tonnes)					
Banana Production	105.55	71.39	73.22	65.23	70.28
Banana Exports	104.80	71.39	73.04	65.20	70.28
TOURISM					
Total Visitor Arrivals	460,009	600,903	666,116	625,269	726,254
of which: - Tourists	235,659	248,406	252,237	263,793	269,850
- Excursionists	5,573	4,963	5,293	10,243	12,853
- Cruise Ship Arrivals	218,777	347,534	408,586	351,233	443,551
MERCHANDISE FOREIGN TRADE ($m)					
Imports	850.19	900.06	905.10	842.42	929.92
Exports	214.68	165.39	167.62	150.33	159.08
Balance (Deficit)	(635.51)	(734.67)	(737.18)	(692.09)	(705.27)
BALANCE OF PAYMENTS ($m)					
Current Account (Deficit)	(176.23)	(218.94	(180.82)	(294.36)	
Overall Balance	(18.68)	13.31	25.67	10.58	
RATE OF EXCHANGE					
US$1	EC$2.70	EC$2.70	EC$2.70	EC$2.70	EC$2.70

Source: Government Statistics Department

Labour Force indicators presented in Table 15 and Table 16. indicate the distribution of the employed Labour Force. The available data show unemployment at an average of 8% of the total population. Agriculture remains the main source of employment, with almost 20% of the work force employed in this sector.

Table 15. Labour Force Indicators

Main labour force indicators	2000	1999	1998	1997	1996	1995
Labour force	76,005	73,070	71,930	70,255	67,765	66,500
Male	40,105	37,895	39,350	38,290	36,815	36,310
Female	35,900	35,175	32,580	31,965	30,950	30,190
Employed labour force	63,470	59,850	56,420	55,875	56,715	55,940
Male	35,030	31,830	32,290	31,500	31,740	32,060
Female	28,440	28,020	24,130	24,375	24,975	23,880
Unemployed labour force	12,535	13,220	15,545	14,380	11,065	10,810
Male	5,070	6,065	7,075	6,780	5,085	4,260
Female	7,465	7,155	8,470	7,600	5,980	6,550
Levels of unemployment						
Youths (under 25 years)	6,200	6,715	7,765	6,670	6,080	6,050
Male	2,920	3,170	3,835	3,110	2,970	2,660

Main labour force indicators	2000	1999	1998	1997	1996	1995
Female	3,280	3,545	3,930	3,570	3,120	3,390
Adults (25 years and over)	6,335	6,505	7,780	7,710	4,985	4,760
Male	2,150	2,895	3,240	3,670	2,115	1,600
Female	4,185	3,610	4,540	4,030	2,860	3,160
Unemployment rate %	16.4	18.1	21.6	20.5	16.3	16.3
Male	12.6	16	18	17.7	13.8	11.7
Female	20.7	20.3	26	23.8	19.3	21.7
Participation rate %	69	69.5	68	68.6	67.3	67.8
Male	75	77	77	78.4	77.6	78.5
Female	62	62	59.5	59.7	58.1	58.2

Source: International Labour Organization, http://www.ilocarib.org.tt/digest/st_lucia/luc50.html

Table 16. Employed Population by Field of Activity

Economic activity	2000	1999	1998	1997	1996	1995	1994	1993
Agriculture, hunting and forestry	12,350	12,335	12,200	10,900	13,620	12,680	12,580	11,720
Fishing	845	645	815	520	655	1,230	1,300	520
Manufacturing	6,200	5,570	5,445	6,190	6,970	5,510	6,330	6,380
Electricity, gas & water supply	685	560	755	815	730	1,130	650	460
Construction	5,995	5,365	4,350	4,290	5,080	7,960	3,920	4,630
Wholesale & retail trade etc.	11,345	10,545	9,450	9,045	7,890	6,780	6,640	8,020
Hotels & restaurants	6,585	5,710	5,260	5,220	4,855	5,710	4,490	4,580
Transport, storage & communication	4,095	4,235	4,120	4,550	3,660	4,060	2,390	3,230
Financial intermediation	985	1,140	1,235	1,305	1,425	1,110	1,090	880
Real estate, renting and bus. act.	1,305	1,525	1,205	1,580	995	970	1,050	890
Public adm. & soc. security	7,530	7,770	7,850	7,875	6,635	7,590	7,100	6,930
Education	1,140	750	550	630	725	420	350	440
Health & social work	600	440	375	250	665	140	150	400
Other comm, soc. and pers. serv. act.	1,505	1,490	1,055	790	850	570	550	640
Private households with empl. Persons	1,455	1,715	1,590	1,765	1,860	1,160	2,030	1,360
Other	165	55	145	150	100	420	1,380	60
Not reported	685	0	20	0	0	0	270	1,340
Total	**63,470**	**59,850**	**56,420**	**55,875**	**56,715**	**57,440**	**52,290**	**52,480**

Source: International Labour Organization, http://www.ilocarib.org.tt/digest/st_lucia/luc50.html

II.2.1 Demographics

The data used to describe the demographic characteristics were obtained primarily from the "Economic and Social Review, 2000" prepared by the Division of Research, Development and Policy of the Ministry of Finance and Economic Affairs, with updated information from the Statistical Unit posted on the government website. Preliminary data estimate an annual increase in population of 0.86 percent in 2000 to a total of 155,032 persons. Mid-year

estimates of population for the period 1993 to 2000 have been updated with data from the Government Statistics Department for 2001 – 2002, and are presented in Table 17.

The average annual growth rate of the population between 1992 and 2000 shows a decrease of 1.37% and is consistent with the overall trend of a declining population growth. At the current rate, future growth rate is likely to be below one percent per annum by the year 2020.

Table 17. St Lucia Estimated Mid-Year Population by District (1993 –2002)

ESTIMATED MID-YEAR POPULATION BY DISTRICT										
AREA	2002	2001	2000	1999	1998	1997	1996	1995	1994	1993
All Castries	64,957	64,404	62,967	61,823	60,934	59,788	58,481	56,725	55,649	54,569
Castries City	1,813	1,814	2,362	2,364	2,301	2,249	2,324	2,156	2,126	2,090
Castries Sub-Urban	11,494	11,377	15,441	15,145	14,510	13,938	13,424	12,139	11,929	11,699
Castries Rural	51,650	51,213	45,164	44,831	44,123	43,601	42,733	42,430	41,594	40,780
Anse-La-Raye	6,136	6,071	6,356	6,203	6,090	5,963	5,817	5,492	5,394	5,284
Canaries	1,789	1,787	1,935	1,923	1,919	1,873	1,836	1,963	1,926	1,888
Soufriere	7,706	7,665	9,075	8,953	8,910	8,809	8,634	8,382	8,219	8,064
Choiseul	6,174	6,139	7,323	7,255	7,169	7,092	6,987	6,988	6,849	6,722
Laborie	7,414	7,365	8,861	8,727	8,630	8,488	8,356	8,173	8,019	7,862
Vieux-Fort	14,904	14,757	14,833	14,624	14,448	14,271	14,082	14,336	14,069	13,791
Micoud	16,143	16,051	17,708	17,423	17,194	16,895	16,616	16,460	16,152	15,834
Dennery	12,876	12,767	12,966	12,778	12,603	12,405	12,203	12,184	11,957	11,721
Gros-Islet	21,034	20,892	13,972	13,994	14,055	14,082	14,050	14,734	14,454	14,174
TOTAL	159,133	157,898	155,996	154,220	151,952	149,666	147,062	145,437	142,688	139,909

Source St. Lucia Statistical Department, http://www.stats.gov.lc

II.2.2 Literacy level and languages

Languages: While the official language is English, the indigenous Kwéyòl (French patois) language is used widely in communication at the community and national level, in commerce, by public sector institutions, and the media to reach selected publics.

Literacy:

Education is partly based on the old British model, and retains the selective 11-plus exam for entrance into high school. Students go on to the University of the West Indies or, increasingly, to colleges in the US and the UK.

A moderately good level of educational attainment is indicated in the data in Table 18. , which shows the majority of young male population to be literate, with the young female population less so. The table however shows the converse for the adult population, with females having very high literacy rates, compared to the relatively low literacy rate for males.

Table 18. Literacy Rate expressed as Percentage of Population Segment

Youth Literacy (age 15 -24 =) 98.6% (2004)
Male = 98.1%
Female = 90.1%
Adult Literacy (Age 15 and above) = 88.6% (2004)
Male = 87.0%
Female = 99.1%

Source St. Lucia Statistical Department, http://www.stats.gov.lc

II.2.3 Access to services

All indicators point to significant improvements in health, education and other areas of social development in the past two decades. Public expenditure in these sectors is high, resulting in important advances and positive trends in education (enrolment in primary and secondary schools - Table 19. and Table 20.), in health (commitment to health, resources, access and services - Table 22), and in housing and human settlements (improvements of public infrastructure and access to public utilities as highlighted in Table 21. Water Production and Consumption.

Table 19. Total Enrolment in Primary School

Year	Enrolment	Male	Female
1994/95	31194	15208	15986
1995/96	31372	15129	16243
1996/97	31548	15161	16387
1997/98	31437	14892	16545
1998/99	29631	14232	15399
1999/00	28975	13984	14991
2000/01	28618	13627	14991
2001/02	27955	13367	14588
2002/03	27175	12852	14323

Source St. Lucia Statistical Department, http://www.stats.gov.lc

Table 20. Actual and Projected Enrolment in Secondary Schools in Relation to School going Population

	Year	Total Population in Age-Group 12 – 16	Secondary School Students
Actual	1995/96	16940	10314
	1996/97	17122	11082
	1997/98	17144	11540
	1998/99	17018	11847
	1999/00	16732	12530
Projected	2000/01	16359	13795
	2001/02	16059	14840
	2002/03	15912	15679
	2003/04	15897	16997
	2004/05	16021	18533
	2005/06	16245	19099

Source St. Lucia Statistical Department, http://www.stats.gov.lc

Table 21. Water Production and Consumption

YEAR	PRODUCTION	CONSUMPTION	WASTAGE/LOSS	NO. OF CONSUMERS ON FILE
1995	2,579	2,115	464	33,752
1996	2,468	2,035	432	37,782
1997	2,739	2,353	386	37,990
1998	2,909	1,997	912	39,416
1999	3,459	1,660	1,799	...
2000	3,641	1,930	1,711	39,618
2001	3,641	2,025	1,616	47,493

Source St. Lucia Statistical Department, http://www.stats.gov.lc

Table 22. Commitment to Health: Resources, Access, and Services

Public health expenditure (% of GDP), 2001	2.9
Private health expenditure (% of GDP), 2001	1.6
Health expenditure per capita (PPP US$), 2001	272
One-year-olds fully immunized against tuberculosis (%), 2002	95
One-year-olds fully immunized against measles (%), 2002	97
Oral rehydration therapy use rate (%), 1994-2002	..
Contraceptive prevalence rate (%), 1995-2002	..
Births attended by skilled health personnel (%), 1995-2002	100
Physicians (per 100,000 people), 1990-2003	58
Population with sustainable access to affordable essential drugs (%), 1999	50-79

Source: United Nations Development Programme, http://hdr.undp.org/statistics/data/cty/cty_f_KNA.html

II.2.4 Rural–urban drift

Table 17. shows Castries to be the most populous district with over 40% of the total population inhabiting in this area. Micoud is the second most populous district, followed by Vieux-Fort and Gros Islet. In contrast, Canaries has the lowest growth rate and is the least populous, inhabited by a mere 1.3 % of the total population.

These data and other data reviewed in several reports suggests that most persons tend to reside in the areas in which they were born, thus internal migration is often not significant, except in the case of Castries which tends to be the main target for out-migrants from all districts. Further comparisons of rural and urban population Table 23, show the decline in rural population in relation to the increase in the urban population over the last decade, strengthening the above deduction that internal migration may not be significant.

Table 23. Rural / Urban population

	1995	2000	2003	2005
Rural Population (% total pop)	72.2	70.7	69.5	68.7
Urban Population (% total pop)	27.8	29.3	30.5	31.3
Migrant Stock (% total pop)		5.5		

Source: Population Division of the Department of Economic and Social Affairs of the United Nations Secretariat, World Population Prospects: The 2002 Revision and World Urbanization Prospects: The 2003 Revision, http://esa.un.org/unup

II.3 Media and telecommunications

II.3.1 Newspapers, periodicals and broadcast media

Table 24 provides a listing of all daily and weekly newspapers, technical journals and popular periodicals, radio stations and television channels available on the island.

Table 24. Newspapers, Periodicals and Broadcast Media

Name	Ownership	Circulation	Broadcast Hours	Agric Column or Programme*	Delivery/Reach
Newspapers/Periodicals:					
Star	Private	3,500- 3 days a week		NS	Island wide www.stluciastar.com
Voice YO magazine -wkends Nationwide	Private	5,000- 2 days 6,000 – 1 day		NS	Island wide No website
One Caribbean	Private	4000 – once a week		NS	OECS www.onecaribbean.com
Crusader				NS	
Mirror	Private	5,000 once a week		NS	www.stluciamirroronline.com
Broadcast Media:					
Helen Television System (HTS)	Private		24-hrs Channel 34,4	NS	Island wide www.htsstlucia.com
Daher Broadcasting Service (DBS)	Private		24-hrs Channel 35, 2, 10	NS	No website
National Television Network (NTN)	Government		Channel 2	S - Banana Bits	No website
Hot FM	Private		24 hrs 105.3, 96.1	NS	Island wide www.caribbeanhotfm.com
The Wave	Private		24 Hrs 94.5 FM, 93.7 FM	NS	No Website
Radio St.Lucia (RSL)	Government		5a.m. – 12. p.m. 97.3, 97.7	S -Banana Bits - Zafir Fig	Island wide www.rslonline.com

Name	Ownership	Circulation	Broadcast Hours	Agric Column or Programme*	Delivery/Reach
			FM 660 AM		
Radio 100	Private		24 (4.a.m.-10 p.m. 100.1, 103.5, 100.3 FM	NS	Island wide www.htsstlucia.com
Radio Caribbean	Private		24 hrs 101.1, 99.1 FM	S - Banana Bits	Island wide www.rcistlucia.com

* S- Scheduled; NS – Not scheduled (only when placed by agricultural institutions)
Source: Consultant interviews and Internet searches

II.3.2 Telecommunication services

Communications data in Table 25 indicate a fairly adequate telephone system on the island with a fully automatic domestic network operated by one fixed line service provider. The international network comprises direct microwave radio relay link with Martinique and Saint Vincent and the Grenadines; tropospheric scatter to Barbados; international calls beyond these countries are carried by Intelsat from Martinique. Mobile services are currently provided by three service providers (types and rates in EC Dollars for service are provided in Table 26 to Table 29.

Radio broadcasts are on two (2) AM frequencies and seven (7) FM frequencies. There is no shortwave band. Television broadcast is beamed from 2 stations, of which one is a commercial broadcast station and one is a community antenna television or CATV channel. There are forty-one (41) Internet hosts utilising an Internet country code ".lc"

Table 25. Telecommunication Services

Service Provider	Type of Service Fixed/mobile/other	Cost of 3 min call EC$	Number of Subscribers	Coverage (geographic) of network/level of access
Cable & Wireless	Fixed	0.15 - 0.21 (F to F) 1.89 -2.25 (F to M)	51,100 (2002)	
	Mobile	2.25 – 2.28		
	Cable TV	$55 per month		
Digicel	Mobile	1.95 – 2.55		80-90%
AT&T	Mobile	1.62 – 2.88 Prepaid 55.00 for 80 mins Minimum- Post paid		80-85%

Source: Cable and Wireless, http://www.candw.lc

Table 26. Cable and Wireless Mobile Rates

bMobile Plans	B75	b150	b300	b500
Monthly Charge – EC$	$49	$95	$155	$245
Included peak minutes	75	150	300	500
OPTION # 1				
Offpeak minutes	100	200	200	300
Free Text Messages	10	10	10	20
Free Picture Messages	5	5	5	10
Family Circle				
Maximum Handsets		2	3	5
Talk Away World				
Talk Away World	2	2	3	3
Talk Away Discount	5%	5%	10%	10%
bComplete Rewards	Yes	Yes	Yes	Yes
OPTION # 2				
Other Operator Minutes	25	45	60	70

Source: Cable and Wireless, http://www.candw.lc

Table 27. Cable and Wireless Telephone Rates

	bFree	bFree Anytime	bFree Anytime Plus
Daily Charge	$0	$0.20	$0.70
Calls to Fixed Line Peak	$0.84	$0.80	$0.80
Calls to Fixed Line Off-Peak	$0.75	$0.65	$0.65
Calls to C&W Mobile Peak	$0.70	$0.60	$0.60
Calls to C&W Mobile Peak Off-Peak	$0.55	$0.55	$0.55
Calls to other mobile operators anytime	$0.80	$0.80	$0.80
Late night rates (11pm - 6am) to C&W fixed line and mobile	-	$0.20	$0.20

Source: Cable and Wireless, http://www.candw.lc

Table 28. Digicel Post-Paid Packages for Mobile Services

Service	Peak Rate	Off Peak Rate	Weekend Rate
Digicel to Digicel	$0.75	$0.65	$0.50
Digicel to National Fixed Lines & Other Mobile Operators	$0.85	$0.80	$0.75

Source: Digicel St. Lucia Limited

Table 29. Digicel Pre-Paid Packages for Mobile Service (EC$)

	Digicel to Digicel			Fixed and Other Mobile		
digiSELECT Packages	Peak Rate	Off Peak Rate	Weekend Rate	Peak Rate	Off Peak Rate	Weekend Rate
digiSELECT 120	0.70	0.55	0.50	0.80	0.65	0.60
digiSELECT 270	0.65	0.55	0.50	0.75	0.65	0.60
digiSELECT 450	0.60	0.55	0.50	0.70	0.65	0.60
digiSELECT 900	0.55	0.55	0.50	0.65	0.65	0.60

Source: Digicel St. Lucia Limited

II.3.3 Computers and the Internet

There are three Internet service providers on the island.

Table 30 shows the number of computers per 1,000 people, the name of Internet service providers in the country and the number of Internet subscribers. Internet costs for dial-up and DSL (by company) are also provided in Table 31.

Table 30. Internet Services

Service Provider	No. of Subscribers	Rate – EC$	Services	Coverage
Cable and Wireless	13,000 (2002)	See Table 28	X-net\ADSL	Only 13% of population\houses have PC
		35.00 monthly (+ 80.00 registration)	10 hrs dial –up Internet	
			ADSL	
Digicel		0.01 per Kilobyte	WAP (Wireless Application Protocol) Technology	
Cingular \ AT&T		12.00 monthly for 1 megabyte (+ 250.00 installation fee)	WAP (Wireless Application Protocol) Technology	

Source: Cable and Wireless: http://www.cwxnet.com, http://www.candw.lc; Digicel St. Lucia Limited, AT&T Cingular

Table 31. Broadband Internet Rates

Plan	Download (kbps)	Cost (Monthly – EC$)	Plan	Download (kbps)	Cost (Monthly EC$)
Ultra	128	$ 179.00	X 256	256	$149.00
Select	256	$ 249.00	X 512	512	$ 199.00
Premium	768	$ 599.00	X 768	768	$ 299.00
Deluxe	1544	$ 999.00	X 1544	1544	$ 599.00

Source: Cable and Wireless, http://www.cwxnet.com

ANNEX III. PROFILE OF INSTITUTIONS

A listing of all institutions involved in agriculture and rural development activities, including private sector and civil society organisations, with name, contact details, type and role of institution is provided in this section.

III.1 List of all institutions

Table III.1: List of institutions in the agricultural sector

Name and contacts	Type	Role
Mr. Peter Lorde Director Small Enterprise Development Unit (SEDU) Ministry of Commerce, International Financial Services And Consumer Affairs CASTRIES Postal address Tel: 1 (758) 468-4220/468-4210/468-4238 Fax: 1 (758) 453-7347 Email mitandt@candw.lc Web site:http://www.sedcostlucia.com/	GOV	RD/TM
Mr Raphael Felix General Manager Belle Vue Farmers Cooperative PO Box 292 SOUFRIERE) Tel: 1 (758) 459-7188 Fax 1 (758) 459-7188 Email Nashishe@hotmail.com Web site N/A	AS-F	PS-P/EX
Mr. George Theophilus Managing Director Financial Investment and Consultancy Services Ltd PO Box 1516 CASTRIES Tel: 1 (758) 453-0225/452-4705 Fax: 1 (758) 453-2303 Email: fics_ltd@candw.lc Web site: N/A	BNK	FS
Ms. Una-May Gordon IICA Representative in the ECS Inter-American Institute for Cooperation on Agriculture (IICA) 4th Floor Sir Stanislaus Anthony James Building, Waterfront, Castries, Saint Lucia P.O. Box 1223, Castries, St. Lucia, West Indies Tel: 1 (758)4516760 / 4516761 Fax: 1 (758) 4516774 Email: iica.lc@iica.int Web site: http://www.iica.int/saintlucia	REG	PP/RU/IN
Dr. George Forde Principal Sir Arthur Lewis Community College The Morne Postal address Tel 1 (758)452 5507 Fax 1 (758)452-7901 Email: gforde@salcc.edu.lc Web site www.salcc.edu.lc	GOV	TR

Name and contacts	Type	Role
Ms. Marcia Philbert-Jules Permanent Secretary Ministry of Physical Development, Environment and Housing Waterfront CASTRIES Postal address Tel: 1 (758) 468-4436 Fax: 1 (758) 452-2506 Email econdept@candw.lc Web site www.stlucia.gov.lc	GOV	RG
President National Youth Council PO Box 1232 CASTRIES Postal address Tel: 1 (758) 452-2626 Fax: N/A Email nyc@candw.lc Web site: N/A	NGO	PP
Kerde Severin General Manager The St.Lucia Agriculturists' Association Mongiraud St. P.O. Box 153 CASTRIES Tel 1 (758) 452-2494 Fax: 1 (758) 453-2693 Email kseverin@slaa.net Web site: N/A	AS-F	PS-S
Mr. Robert Norstrom General Manager Bank of St Lucia Bridge Street P.O. Box 368/1860 CASTRIES Tel 1 (758)457-7532 Fax 1 (758) 457-7299 Email bankofsaintlucia@candw.lc Web site www.bankofsaintlucia.com	BNK	FS
Mr. Martin Satney Permanent Secretary Ministry of Agriculture, Forestry and Fisheries 4th & 5th Floor, Sir Stanislaus James Building Waterfront CASTRIES Tel 1 (758) 468-4104 Fax 1 (758) 453-6314 Email admin@candw.lc Web site www.slumaffe.org	GOV	PP/EX/RD
Ms. Luvette Thomas-Louisy Managing Director Agricultural Consultancy and Technical Services Ltd. (Agrico Ltd.) P.O. Box CP 5978, Castries Tel 1 (758)451-3088 Fax 1 (758)451-3013 Email agrico@candw.lc Web site: N/A	PRV	EX/IN

Name and contacts	Type	Role
Fresh Produce Exporters Association P.O. Box 1717 CASTRIES Tel N/A Fax N/A	OTH	PS-E
Mr. Kenneth Cazaubon General Manager St.Lucia Coconut Growers Association Palmiste Rd, PO Box 269 SOUFRIERE Tel 1 (758) 459-7227 Fax 1 (758) 459-7216 Email slcga1@candw.lc Web site: N/A	PRV	PS-M
Dr. Alison Plummer Director St Lucia Bureau of Standards Bisee Castries, CP 5412 Tel : 1 (758) 453-0049/456-0546 Fax: 1 (758) 452-3561 Email slbs@candw.lc info@slbs.org.lc Web site: www.slbs.org.lc		
Mr. Vincent Peter General Manager St Lucia Fish Marketing Corporation PO Box 891 CASTRIES Tel: 1 (758) 451-7072 Fax: 1 (758) 451-7073 Email slsmc@candw.lc Web site: N/A	STA	TM
Mr. Ronald Pilgrim Country Team Leader Caribbean Agricultural Research & Dev Institute (CARDI) PO Box 971 CASTRIES Tel: 1 (758) 453-3317 Fax: 1 (758) 453-3495 Email cardi@candw.lc Web site www.cardi.org	REG	RD
Mr. Paul Hilaire Chief Executive Officer WIBDECO Manoel Street PO Box 115, CASTRIES Tel: 1(758) 452-2411 Fax; 1 (758) 453-1638 Email wibdeco@candw.lc Web site www.wibdeco.com	PRV	PS-E/REG
Albert St Clair Floral Co-operative Society PO Box GM 687 CASTRIES Tel: 1 (758) 452 4853 Fax: 1 (758)n452-4853 Email: N/A Web site: N/A	AS-F	TM
Mr. Gerald Morris Assistant Executive Director National Research and Development Foundation (NRDF) PO Box 3067 CASTRIES Tel: 1 (758) 452-4253 Fax: 1 (758) 453-6389 E-mail: nrdf@candw.lc Website: www.nrdf.org.lc	BNK	FS

Name and contacts	Type	Role
Ms. Gertrude St. Helene Deputy Permanent Secretary Ministry of Social Transformation 4th Flloor , Greaham Louisy Administrative Building Waterfront CASTRIES Tel: 1 (758) 468-5108 Fax: 1 (758) 453-7921 E-mail: mincomdev@hotmail.com Web site: N/A	GOV	RU
Mr. Peter Serieux General Manager Tropical Quality Fruit Co. (TQFC) P.O. Box 158 CASTRIES Tel; 1 (758) 458-2653 Fax: 1 (75) 458-2653 E-mail: epic.sys@candw.lc Web site: N/A	PRV	EX/TM
General Manager St.Lucia Marketing Board (SLMB) Conway, Box 441 CASTRIES Tel: 1 (758) 452-3214/453-1162 Fax: 1 (758) 453-1424 E-mail slmb@candw.lc Web site: N/A	STE	TM
Mr. Michael Joseph General Manager St Lucia Banana Corporation 7 Manoel Street Box 197 CASTRIES Tel; 1 (758) 452-2251 Fax: 1 (758) 452-7334 E-mail: slbc@candw.lc Web site: N/A	PRV	EX/TM
Mr. Terence Gustave Executive Vice President St Lucia Hotel and Tourism Association (SLHTA) Colony House, John Compton Hwy. P.O. Box 545 CASTRIES Tel: 1 (758) 452-5978/453-1811 Fax: 1 (758) 452-7967 E-mail: slhta@candw.lc Web site www.stluciatravel.com.lc	CCI	PP
Chairman St Lucia Livestock Development Co. PO Box 273 VIEUX FORT Tel: N/A Fax: N/A	PRV	EX/TM
Dr. Vasantha Chase Head of Unit Sustainable Development Unit, OECS Morne Fortune PO Box 1383 CASTRIES Tel: 1 (758) -452- 2537 Fax:1 (758) 453-1628 E-mail: oecsnr@candw.lc Web site: www.oecs.org	REG	PP/IN
Mr. Soeren Hofdahl General Manager River Doree Holdings River Doree CHOISEUL Tel: 1 (758) 459-3565/459-3410 Fax: N/A E-mail miranda@candw.lc Web site: N/A		

Name and contacts	Type	Role
McArthur Fowell C/o Castries Fishermen's Cooperative Society Ltd. PO Box GM 687 CASTRIES Tel: 1 (758) 452-6204 Fax: N/A	AS-F	EX/TM
Mr Patrick Joseph Executive Director St Lucia Industrial & Small Business Association Commercial Street CASTRIES Tel: 1 (758) 451-6056 Fax: N/A	CCI	OT - advocacy
Mr. Andrew Rigobert President St Lucia National Chapter Caribbean Agri-business Association (CABA) c/o IICA 4th Floor Sir Stanislaus Anthony James Building, Waterfront, Castries, Saint Lucia P.O. Box 1223, Castries, St. Lucia, West Indies Tel: 1 (758) 4516760 / 4516761 Fax:1 (758) 4516774 Email: iica.lc@iica.int Website: http://www.iica.int/saintlucia	CCI	PP/IN
Caribbean Agricultural Forum for Youth (CAFY) c/o IICA 4th Floor Sir Stanislaus Anthony James Building, Waterfront, Castries, Saint Lucia P.O. Box 1223, Castries, St. Lucia, West Indies Tel: 1 (758) 4516760 / 4516761 Fax:1 (758) 4516774 Email: iica.lc@iica.int Website: http://www.iica.int/saintlucia	AS-Y	PP/IN
Caribbean Network of Rural Women (CANRW) c/o IICA 4th Floor Sir Stanislaus Anthony James Building, Waterfront, Castries, Saint Lucia P.O. Box 1223, Castries, St. Lucia, West Indies Tel: 1 (758) 4516760 / 4516761 Fax:1 (758) 4516774 Email: iica.lc@iica.int Website: http://www.iica.int/saintlucia	AS-W	PP/RU/IN
Mr. Ronald James Manager National Farmers Cooperative Credit Union (NFCCU) P.O. Box 1717 #7 Manoel Street, Castries Tel: 1 (758) 452 7277/458 1268 Fax: 1 (758) 453 2348 Castries Offices Tel: 1(758) 454 6710/454 8373 Fax: 1(758) 454 9526 Vieux Fort Offices Email: nfccu@yahoo.com Website: N/A	AS-F	FS
Mr. Brian Louisy Executive Director St. Lucia Chamber of Commerce Industry and Agriculture Vide Bouteille P.O. Box 482 CASTRIES Tel: 452 3165/453 1540/453 6907 Fax: 758 453 1290 Email: info@stluciachamber.org website: http://www.stluciachamber.org		

Key:

Type	AS-F	Farmers' association (includes co-operatives)
	AS-W	Women's association
	AS-Y	Youth association
	BNK	Bank or credit institution
	CCI	Chamber of commerce and industry
	CHU	Church-based group
	EDU	Educational institution
	GOV	Government department / ministry
	NGO	Non-government organisation
	PRV	Private enterprise, company
	REG	Regional organisation, project or network
	STA	Statutory body
	STE	State enterprise
	OTH	Other
Role	EX	Extension and outreach
	IN	Information services
	FS	Financial services
	PP	Policy and planning
	PS-E	Private sector – Exporter (fresh, frozen and dried produce)
	PS-M	Private sector – Manufacturer (e.g. tannery, bottler, refiner, roaster)
	PS-P	Private sector – Producer (e.g. commercial farm, fishing company)
	PS-S	Private sector – Supplier (e.g. ag. chemicals, equipment, seeds)
	RD	Research and development
	RG	Regulation (compliance, standards)
	TR	Training (at secondary, tertiary and vocational level)
	TM	Trade and marketing (include market development)
	RU	Rural Development
	OT	Other

III.2 Select List of Key Institutions

Additional information for 'key' institutions is provided below.

Name of institution: **Small Enterprise Development Unit (SEDU)**
Objective / mission statement: To be the lead agency in the area of sustainable development of the small Business Sector.
Field of specialization: ▪ Management Advisory Services ▪ Business Development and training ▪ Market and Product Development ▪ Access to business finance ▪ Advocacy: Co-coordinating and Networking ▪ Monitoring ad Extension Services
Number of staff professional, clerical, technical, etc; permanent / temporary): (7)
Branches, other sites: None
Annual budget: N/A
Source of funding, incl. main donors / sponsors: Government
Programme / projects undertaken: Small Business Development Project (SEDP) Rural Economic Diversification Incentive Project (REDIP) Saint Lucia Rural Enterprise Project (SLREP) Saint Lucia Heritage Tourism Programme
Target audience (plus number, actual or estimated): Micro and small enterprise owners and potential owners
Extent of interaction with CTA – *Spore Magazine*, SDI, QAS, DORA, seminars, consultants, publications: ▪ Spore magazine ▪ CTA publications ▪

Name of institution:
Small Enterprise Development Unit (SEDU)

Extent of collaboration / interaction with other institutions (name, nature)

CTA, SLBS, ILO, CDB CARDI, IICA, Ministry of Planning, NRDF, BELFUND, Credit Unions, NSDC, SALCC, UWI, PMI

Nature of collaboration: information exchange; product development; training, and joint projects.

How information needs are currently met, and from where or by whom:

-Resource personnel such as consultants used in training
-Government Ministries (Socio economic review): *Competitiveness Studies, Market information, Crop insurance Systems, Community\small business profiles, Agricultural programmes in the region*

Main information needs not satisfied:

Relevant information on small businesses, locally and regionally.

Main problems faced in terms of information and communication management:

Upgrade website-to make interactive\to make portal for shopping for clients,

Appropriate Software packages, more electronic networking

Why institution selected as a key:

Institution has an organized structure and currently services agro-producers around the island. Therefore has the potential to be a focal point for information servicing of producers.

Name of institution:
National Farmers Cooperative Credit Union (NFCCU)

Objective / mission statement:

To contribute to the improving the livelihoods by easing the financial burden of persons in the farming and rural community.

Field of specialization:

- Savings
- Loans

Number of staff professional, clerical, technical, etc; permanent / temporary):

(7)

Name of institution:
National Farmers Cooperative Credit Union (NFCCU)

Branches, other sites:

- Castries
- Vieux – Fort

Annual budget:

EC$ 3 million

Source of funding, incl. main donors / sponsors:

- Membership shares
- Deposits
- Interest on Finance for EDF Programme providing loan/grant facility for small manufacturers/ agro processors

Programme / projects undertaken:

- Credit counselling
- EDF Programme which provided loan/grant facility for small manufacturers/ agro-processors

Target audience (plus number, actual or estimated):

Farmers and workers in rural communities

Extent of interaction with CTA – *Spore Magazine*, SDI, QAS, DORA, seminars, consultants, publications:

CTA publications (not currently)

Extent of collaboration / interaction with other institutions (name, nature)

- Banana companies
- MAFF
- Factory workers
- Nature of collaboration: information exchange

How information needs are currently met, and from where or by whom:

- SLMB: *Market information*
- MAFF : *Meetings and Trade Fairs, Regulations and Standards, Equipment Outlets and availability, Industrial profiles*
- Banks: *Micro finance*
- Banana Companies: *Market information*

Main information needs not satisfied:

- Credit History
- Pricing information

Main problems faced in terms of information and communication management:

- Need to install fully computerized accounting system,
- Need dedicated agricultural and marketing Officers,
- Limited financial resources

Name of institution:
National Farmers Cooperative Credit Union (NFCCU)

Why institution selected as a key:

Has a cooperative framework through which services are currently provided to several active members in rural communities. With a strengthened capacity, this framework can be solidified to create a vehicle for more extensive information servicing of producers across the island.

Name of institution:

Windward Islands Banana Development and Exporting Company Limited (WIBDECO)

Objective / mission statement:

To facilitate the diversification of the agricultural sector by providing the necessary institutional marketing support framework for stimulating the commercialization of production and marketing of non- traditional agricultural produce.

Field of specialization:

- Banana production support
- Export and Marketing

Number of staff professional, clerical, technical, etc; permanent / temporary):

- Professional/Technical (6)
- Clerical (3)
- Technical Support (95)

Branches, other sites:

- Dominica,
- St.Vincent
- Grenada

Annual budget:
N/A

Source of funding, incl. main donors / sponsors:

Sale of Bananas

Programme / projects undertaken:

- EUREP-GAP Certified Farmers Programme
- Black Sigatoka Leafspot Sensitization

Target audience (plus number, actual or estimated):

Banana farmers in the Windward Islands

Name of institution:

Windward Islands Banana Development and Exporting Company Limited (WIBDECO)

Extent of interaction with CTA – *Spore Magazine*, SDI, QAS, DORA, seminars, consultants, publications:

Spore magazine

Extent of collaboration / interaction with other institutions (name, nature)

- Ministries of Agriculture
- CARDI
- IICA
- UWI
- INIBAP
- CIRAD

Nature of Collaboration: Programme delivery

How information needs are currently met, and from where or by whom:

- INIBAP publications - *Banana Research, Pest and disease control in bananas*
- Internet sites
- Networking with other institutions - *Banana Research, Pest and disease control in bananas*

Main information needs not satisfied:

Work done or being done on bananas by other institutions; especially on control of pest and diseases of bananas

Main problems faced in terms of information and communication management:
Limited resources

Why institution selected as a key:

Institution has regional reach and therefore is capable of advancing one of the main goals of CTA, with respect to regional integration.

Name of institution:
St. Lucia Agriculturalist Association Ltd. (SLAA)

Objective / mission statement:

SLAA shall engage in:

1) Providing farmers of St. Lucia support in productivity , manufacturing, distribution, marketing and allied services which are developmental in nature and or operationally cost effective, and
2) Where possible in such other activities as are complimentary to the upliftment of the social development as well as economic well-being of agricultural producers.

Name of institution:
St. Lucia Agriculturalist Association Ltd. (SLAA)

Field of specialization:

- Production
- Input Sales

Number of staff professional, clerical, technical, etc; permanent / temporary):

(14)

Branches, other sites:

- Castries, - La Caye

Annual budget:

EC$ 4-5 million

Source of funding, incl. main donors / sponsors:

- Sale of inputs
- Membership fees (insignificant)

Programme / projects undertaken:

Chamber of Agriculture

Target audience (plus number, actual or estimated):

Farmers and other agricultural sector

Extent of interaction with CTA – *Spore Magazine*, SDI, QAS, DORA, seminars, consultants, publications:
None

Extent of collaboration / interaction with other institutions (name, nature)

- MAFF
- IICA
- CARDI (regional and hemisphere)
- Local farmer organizations
- International Cocoa Federation
- International Federation of Farmers Organization

Nature of Collaboration: Information exchange with all institutions0

Name of institution:
St. Lucia Agriculturalist Association Ltd. (SLAA)

How information needs are currently met, and from where or by whom:

- IICA : Technical Information – *(Integrated pest management, Bio-Technology, Post Harvest) Market information, Regulations and Standards, Conference \ Meetings and Trade Fairs*
- CARDI: *Technical Information, Agricultural data (cost of production-commodity profiles)*
- MAFF: *Technical Information, Agricultural data, Market information, Regulations and Standards, Conference \ Meetings and Trade Fairs*
- FAO website: *Technical Information, Agricultural data*
- Input Suppliers*: Equipment Outlets and availability, Regulations and Standards*
- Chinese Embassy:
- Cuban Embassy:

Main information needs not satisfied:

None

Main problems faced in terms of information and communication management:

- Limited financial resources
- Insufficient information delivery-and *access to information*

Why institution selected as a key:

Institution provides a direct interface with producers. Given the nature of the service in input supplies, there is need for stewardship; hence provision of information is already assumed in its functions and this just needs to be strengthened.

Name of institution:
Chamber of Commerce, Industry and Agriculture (CCIA)

Objective / mission statement:

To promote and sustain a healthy political, economic and social environment, in which free enterprise and ethical business practice can flourish in harmony with the development of the Saint Lucian economy.

Field of specialization:

- Advocacy
- Business Support Services
- Information Exchange/dissemination

Name of institution:
Chamber of Commerce, Industry and Agriculture (CCIA)

Number of staff professional, clerical, technical, etc; permanent / temporary):

(5)

Branches, other sites:

None

Annual budget:

EC$ 580,000

Source of funding, incl. main donors / sponsors:

Membership subscriptions

Programme / projects undertaken:

- The Trade Enhancement and Compliance Program – sanitation workshops, lectures, trade publications, policy position development forums, trade shows – local and foreign, trade missions and strategy development.
- Chamber sports program
- A number of programs focuses on Productivity and Human Resource Development such as Dale Carnegie Course, Maximizing Personal Productivity through Effective Time Management, Managing for Productivity, Stress Management Seminar, Human Resource Forum, Corporate Governance, Measuring the Impact of Training

Target audience (plus number, actual or estimated):

- Members
- Football, netball, domino teams, secondary schools
- Business community

Extent of interaction with CTA – *Spore Magazine*, SDI, QAS, DORA, seminars, consultants, publications:

Spore magazine

Extent of collaboration / interaction with other institutions (name, nature):

- Local institutions
- Government Ministry
- OAS
- ITC
- USAID
- UWI

Nature of Collaboration: Joint projects, training and research

Name of institution:
Chamber of Commerce, Industry and Agriculture (CCIA)

How information needs are currently met, and from where or by whom:

CARICOM/OECS organizations: Market information, commodity profiles, industrial profiles, regulations and standards, meetings/ conferences and trade fairs, transportation – shipping routes and rates, programmes executed by agricultural agencies

Main information needs not satisfied:

None

Main problems faced in terms of information and communication management:

Quality of human resource base

Why institution selected as a key:

Institution has developed tremendous information resource capacity and services business community, including agri-business persons island wide; hence has the structure to be a focal point for information servicing of the agricultural stakeholders as well.

Name of institution:
OECS - Environment and Sustainable Development Unit (OECS/ESDU)

Objective / mission statement:

To be a dynamic facilitator for effective utilization and management of natural resources for sustainable development in the OECS sub region through collaboration with and among member states.
Mandate – "Assist member states in matters pertaining to the sustainable management of natural resources to enhance the livelihood and quality of life of the people of the OECS.

Field of specialization:

- Biodiversity management and protected areas
- Environmental management and planning
- Sustainable livelihood
- Corporate services
- Education training and awareness

Number of staff professional, clerical, technical, etc; permanent / temporary):

Clerical - 4
Professional – 5

Branches, other sites:
None

Name of institution:
OECS - Environment and Sustainable Development Unit (OECS/ESDU)

Annual budget:

EC $ 3 – 7 million

Source of funding, incl. main donors / sponsors:

- CIDA/World Bank – GEF
- Government subventions to OECS Secretariat as a whole

Programme / projects undertaken:

- Biodiversity management and protected areas - Protected areas management, Integrated watershed management, Marine resource management
- Environmental management and planning - Review and implementation of St. Georges Declaration (SGD) and OECS Environmental Management Strategy (EMS), preparation of National Environmental Management Strategies (NEMS), application of guidelines for incorporating environmental management into social and economic development, capacity enhancement in sustainable development, provision of environmental management legal services to member states, institutional strengthening for environmental management, energy management, trade and environment, preparation for ten-year review of Barbados plan of Action for Sustainable Development of SIDS, OECS Environmental Capacity Development (ENCAPD) project administration.
- Education, training and awareness - public education & awareness (PEA), social marketing project, training
- Sustainable Livelihoods – Small Projects Facility, civil society participation for environmental management, sustainable tourism for generating livelihoods,
- Corporate services - general administration, financial management, information and records management, travel and workshops, contracts, human resource management

Target audience (plus number, actual or estimated):

OECS regional governments and institutions

Extent of interaction with CTA – *Spore Magazine*, SDI, QAS, DORA, seminars, consultants, publications:

None

Name of institution:
OECS - Environment and Sustainable Development Unit (OECS/ESDU)

Extent of collaboration / interaction with other institutions (name, nature):

AFD – Agence Francaise de Developpement, CANARI - Caribbean Natural Resources Institute, Caribbean Development Bank, CARICOM - Caribbean Community and Common Market, CCA - Caribbean Conservation Association, CEHI - Caribbean Environmental Health Institute, CIDA - Canadian International Development Agency, Commonwealth Secretariat, GTZ - German Agency For Technical Cooperation, EU - European Union, DFID - United Kingdom Department For International Development, OAS - Organization of American States, UNECLAC - United Nations Commission for Latin America and the Caribbean, UNEP-ROLAC - United Nations Environment Program - Regional Office for Latin America and the Caribbean, United States Department of State, NOAA - US National Oceanic & Atmospheric Administration, USAID - United States Agency For International Development, UWI - University of the West Indies, World Bank

Nature of Collaboration: Financial support; technical cooperation

How information needs are currently met, and from where or by whom:

- Universities: Social-cultural information, Environmental information
- Ministries of Agriculture and Environment: Environmental information
- Natural/Research Activities: Environmental information
- Caribbean Regional Fisheries Mechanisms Secretariat (CRFMSEC): Environmental information
- WWF: Environmental information

Main information needs not satisfied:

Social Data

Main problems faced in terms of information and communication management:

- Lack of appropriate web-accessible collaboration tools to allow for effective communication between core staff and project officers.
- Social marketing – utilizing social issues to address sensitization through things of societal impact
- Financial resources
- Human resources

Why institution selected as a key:

Institution has developed tremendous information resource capacity and extensive regional reach. It therefore has the capability to advance the CTA agenda of regional integration.

Name of institution:
Ministry of Agriculture, Forestry and Fisheries

Objective / mission statement:

To develop the agricultural sector to ensure increased production of quality food and other commodities through environmentally sustainable management practices for the benefit of the entire population.

Field of specialization:

- Resource management – Data management licensing
- Assessment/Registration – Caricom Standards
- Licensing/Registration of all Resource users
- Extension
- Agriculture
- Administration
- Research

Number of staff professional, clerical, technical, etc; permanent / temporary):

N/A

Branches, other sites:

- 3 department locations
- 8 regional extension offices island wide

Annual budget: Not available

Source of funding, incl. main donors / sponsors:

Government, EU, CDB

Programme / projects undertaken:

Crop Production and Improvement
Purpose: to produce crops of the quality and quantity required to meet domestic demand in some areas well as regional and international market requirement.

Livestock Production
Purpose: To partially satisfy the protein requirements of the population, while attempting to reduce imports of meat and meat products.

Agricultural Health and Surveillance
Purpose: To prevent the entry of harmful pest and diseases into the country and to manage those of national economic importance.

Land and Water Management
Purpose: To conserve the land and water base for sustainable agricultural production.

Agro-Industry Development
Purpose: To facilitate the domestic production of processed agricultural commodities.

Name of institution:
Ministry of Agriculture, Forestry and Fisheries

Target audience (plus number, actual or estimated):

Farmers/producers (crop\livestock)

Extent of interaction with CTA – *Spore Magazine,* SDI, QAS, DORA, seminars, consultants, publications:

Spore Magazine, QAS, CTA publications

Extent of collaboration / interaction with other institutions (name, nature):

CTA, IICA, CEHI, WIBDECO, SLBC, Royal St. Lucia Police Force, Ministry of Planning, Ministry of Health, Ministry of Tourism, St. Lucia Solid Waste Management Authority, Bank of St. Lucia, St. Lucia National Trust

Nature of Collaboration: Information exchange, joint projects, resource management/sector development and training

How information needs are currently met, and from where or by whom:

Most national, regional and international agricultural information sources

Main information needs not satisfied:

Information on natural disasters / phenomena, source of funding, agricultural data – cost of production, forestry – forest preservation and management, business investment/ development guide

Main problems faced in terms of information and communication management:

Limited access to information, no standard protocol for managing information; need for a universal cataloguing system – all publications and books in institution's departments; limited capacity for maintenance and trouble shooting of hardware\software\networks, limited analytical skills

Why institution selected as a key:

The institution is recognized as a primary information source by all stakeholders in the sector and has introduced the use of ICTs to improve and extend its information management capabilities.

Name of institution:
National Research Development Foundation

Objective / mission statement:

Seeks to identify, promote and implement s developmental activities in order to better the socio-economic conditions of the people of St. Lucia, particularly the marginalized.

Field of specialization:

- Micro finance
- Training
- Consultancy services

Number of staff professional, clerical, technical, etc; permanent / temporary):

(14)

Branches, other sites:

None

Annual budget:

EC$ 1,000,000

Source of funding, incl. main donors / sponsors:

Self financing; loans interest , training

Programme / projects undertaken:

Training Programs

Target audience (plus number, actual or estimated):

General Public

Extent of interaction with CTA – *Spore Magazine*, SDI, QAS, DORA, seminars, consultants, publications:

Spore magazine

Extent of collaboration / interaction with other institutions (name, nature):

- UWI
- Leicester University
- Association of Business Professionals
- Holborn University

Nature of Collaboration: Information exchange, training and joint project/programme

Name of institution:
National Research Development Foundation

How information needs are currently met, and from where or by whom:

- Internet, radio, newspapers, and television programmes: *Market information, Meetings and Trade Fairs, Equipment Outlets and availability*
- Consultants, commodity/farmer organisations, government ministries - *Regulations and Standards, , Industrial profiles, Micro finance, Market Information*
- UWI - Leicester University
- Association of Business Professionals
- Holborn University

Main information needs not satisfied:

Micro financing techniques, business/industrial profiles, farming problems

Main problems faced in terms of information and communication management:

Deficient areas: MIS, library development, management, human and financial resource, work/office space

Why institution selected as a key:

Institution has developed tremendous information resource and training capacity and services small and medium enterprises (including agri-business) island wide; hence has the structure to be a focal point for information servicing and training of the agricultural stakeholders.

ANNEX IV. PERS0NS/INSTITUTIONS CONTACTED AND/OR INTERVIEWED[12]

ORGANISATION	NAME & DESIGNATION
Small Enterprise Development Unit – Ministry of Commerce, Investment and Consumer Affairs.(SEDU)	Mr. Peter Lorde *Director*
WIBDECO	Mr. Bernard Frampton *Communications Officer*
National Research and Development Foundation(NRDF)	Mr. Gerald Morris *Executive Director*
National Farmers Cooperative Credit Union(NFCCU)	Mr. Ronald James *Manager*
Sustainable Development Unit, OECS	Mr. Peter Murray *OECS Programme Officer/ Function Manager ETA*
Sir Arthur Lewis Community College(SALCC)	Mr. Anthony Bonaparte *Actg. Dean of Division of Agriculture* Ms Jacqueline Auguste *Information Systems Librarian/Actg. Librarian*
St. Lucia Agriculturist Association Ltd	Kerde Severin *General Manager*
Chamber of Commerce Industry and Agriculture	Mr. Brian Louisy *Executive Director*
Ministry Of Agriculture Forestry and Fisheries	Dr. Christopher Cox *Chief Agricultural Planning Officer* Dr. Darius Gabriel *Deputy Director of Agricultural Services* Mr. Rufus Leandre *Chief Extension Officer* Mr. Worrel St. Louis *Agricultural Information Officer* Ms. Anselma Fadlien *Documentalist* Mr. Michael Bobb *Deputy Chief Forestry Officer* Ms. Sarah George *Deputy Chief Fisheries Officer*

[12] Contact information for organisation provided in Annex 3.1.

ANNEX V. REFERENCES

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