

FINAL REPORT

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Support for the Forum of Caribbean ACP States (CARIFORUM) In the Areas of Agriculture and Fisheries in Relation to the Implementation of the Commitments Undertaken, and Opportunities Created by the Economic Partnership Agreement (EPA)

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Phase 2

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ACRONYMS AND ABBREVIATIONS	
ACP	ASSOCIATION OF CARIBBEAN STATES
BOS	BUREAU OF STANDARD
CAHFSA	CARIBBEAN AGRICULTURAL HEALTH AND FOOD SAFETY SYSTEM
CARTFF	CARIFORUM AGRICULTURAL AND TECHNOLOGY TRANSFER FUND
CEAT	CENTRE OF EXCELLENCE FOR AGRICULTURAL TECHNOLOGY
CET	COMMON EXTERNAL TARIFF
CFF	CARIFORUM FISHERIES FUND
CITES	INTERNATIONAL COMMISSION FOR THE TREATMENT OF ENDANGERED SPECIES
DFQF	DUTY FREE QUOTA FREE
DR	DOMINICAN REPUBLIC
EPA	ECONOMIC PARTNERSHIP AGREEMENT
EDP	EUROPEAN DEVELOPMENT FUND
EU	EUROPEAN UNION
FAO	FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS
FCOR	FRENCH CARIBBEAN OUTERMOST REGION
FLO	FAIR-TRADE LABELLING ORGANIZATION
FTA	FREE TRADE AREA
GAP	GOOD AGRICULTURAL PRACTICE
GDP	GROSS DOMESTIC PRODUCT
GMO-	GENETICALLY MODIFIED ORGANISMS
HACCP	HAZARD ANALYSIS CRITICAL CONTROL POINT CRITICAL CONTROL POINT
HS	HARMONISED SYSTEM
ICCAT	INTERNATIONAL COMMISSION FOR THE CONTROL OF ATLANTIC TUNA
IMP	INTERNATIONAL MONETARY FUND
ISO	INTERNATIONAL STANDARDS ORGANIZATION
IUU	ILLEGAL UNREGULATED AND UNREPORTED
LDC	LEAST DEVELOPED COUNTRY
NAHFSA	NATIONAL AGRICULTURAL HEALTH AND FOOD SAFETY SYSTEM
NGO	NON-GOVERNMENTAL ORGANIZATION
OTA	OCHRATOXIN A
WTO	WORLD TRADE ORGANIZATION
RTC	READY TO COOK
RTE	READY TO EAT
SME	SMALL AND MEDIUM ENTERPRISE
SPS	SANITARY AND PHYTO-SANITARY SYSTEM
ST/RD	SCIENCE AND TECHNOLOGY/ RESEARCH AND DEVELOPMENT
SVG	SAINT VINCENT AND THE GRENADINES
TBT	TECHNICAL BARRIERS TO TRADE
TT	TRINIDAD AND TOBAGO
USA	UNITED STATES OF AMERICA
USD	UNITED STATES DOLLAR
WTO	WORLD TRADE ORGANIZATION

Executive Summary

Main Findings and Recommendations

1.1 Executive Summary

1.1.1 Objectives

The objectives of this study as outlined in the Terms of Reference are as follows:

1. Conduct an assessment of the needs of CARIFORUM agriculture and fisheries sectors with regards to taking advantage of the opportunities created by the EPA;
2. Survey existing support activities in these areas (self-financed or financed by the European Community, its member States or other donors);
3. Propose, design and quantify a programme of cooperation and support activities and addressing CARIFORUM needs that are not already being addressed;
4. Draft a proposal for the funding of programmes and projects identified under (c)

1.1.2 Scope of the Consultancy

The study was conducted throughout the forum of Caribbean ACP states (CARIFORUM) comprising 15 Caribbean member states (Antigua and Barbuda, The Bahamas, Barbados, Belize, Dominica, Grenada, Guyana, Haiti, Jamaica, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines, Suriname, Trinidad and Tobago, and the Dominican Republic).

1.1.3 Focus

The study covers a wide range of issues relative to the needs assessment in each country for ensuring implementation of the commitments of EPA Chapter 5 on Agriculture and Fisheries. The main themes are as follows;

- Establishing what are the priority needs in the countries
- Identification of the major existing support activities in agriculture and fisheries
- Identification of the existing gaps and opportunities for coordination of developmental activities and support
- Developing a prioritized list of short and medium term programmes and projects at the national and CARIFORUM levels relative to:
 - Fostering the development of National sectors
 - Promoting Intra-regional investment and trade
 - Supporting external trade development

1.1.4 Methodology

The study was conducted in 5 phases or components viz; inception phase; Desk phase; Field phase/needs assessment and data collection; analysis and synthesis; Report finalization. Following the submission of the inception and desk reports the consultants conducted country visits to assess the needs of agriculture and fisheries and analyzed the available information with respect to the following critical determinants viz:

- The requirements for participation in the liberalized trading regime created by the EPA
- An analysis of the Protocol 1 and the annexes to help determine opportunities and challenges for agriculture and fisheries.

In pinpointing the main opportunity areas, the Consultants conducted the following analyses:

- Analysis of the EU market access commitments and the list of newly liberalized products to determine what additional opportunities now exist for Caribbean exporters.
- Examination of PROTOCOL 1 and ANNEXES relating to Origin Criteria
- Examination of export development strategies for the individual countries where available
- Analysis of the treatment of agriculture and fisheries products in CARIFORUM commitments for tariff eliminations. In this regard it is noteworthy that some regionally important products have been excluded such as poultry and most meat and meat products, fisheries products, most fruits and vegetables, beverages, sauces, condiments; Rum, other alcoholic and non-alcoholic beverages, ethanol, vegetable oil and ornamental plants and flowers

- Examination of those products which are to be liberalized over the agreed timeframes
- Review of National Agriculture and fisheries development plans to identify priority products for the domestic, regional and international markets and the priority programmes to address the development agenda

During the country visits the list of opportunities were cross referenced with those commodities/enterprises identified in the specific countries as offering the best potential for agri-food expansion in order to maximize opportunities for supplying domestic, intra-regional, as well as the traditional export markets of North America and Europe.

In concert with the above approach the consultants also sought information on the following matters during the country visits;

- Steps being taken to implement the EPA
- Status of sector policy and plans (National development plan; agricultural policy rural development strategies ;export development strategies; country strategies for commodities ; food security etc)
- Priority industries and their competitiveness
- Business development and facilitation arrangements/processes
- Management and coordination of agriculture and fisheries activities
- Policy support for the industry
- Human resource capacity – need for training & skills development
- Public Facilities (eg labs) needed to support production, processing and marketing
- Public infrastructure such as drainage/irrigation, packinghouses/processing facilities, cold storage.
- Key Services such as SPS, Certification of GAP.
- Marketing support – market intelligence, market facilitation, availability of efficient and cost effective transport.
- The status of legislation and regulatory frameworks
- Technology – R&D, introduction of appropriate technology, technology backstopping and training.
- Stakeholder collaboration & cooperation.
- Development of clusters and cooperatives
- The development and management of the fisheries

The analysis and synthesis phase involved the further analyses as follows;

- An examination of the EU SPS and entry requirements for the commodities with potential for development

- An assessment of the EU and CARIFORUM markets with a view to determining the demand, growth potential, level of competition and the specific requirements for developing competitive products for the markets (domestic; intra-regional; USA; CANADA and the EU)
- An assessment of the opportunities for increasing production for domestic and export markets.
- GAP analysis for determining the requirements and needed interventions for transforming the productive capacity and achieving competitiveness and the business and marketing support required to develop effective export platforms in CARIFORUM member states.

The consultants made several efforts without success to get the support of the officials of the Haitian Authorities to arrange a visit to that country. In the end several unforeseen circumstances including weather conditions in the Caribbean and the recent outbreak of cholera in that country intervened, hence Haitian country report was constructed from secondary information and the emergency plan for agricultural rehabilitation which was supplied courtesy of IICA Office in Haiti.

1.2 MAIN FINDINGS

1.2.1. Overall assessment of the EPA and the opportunities in agriculture and fisheries

Fifteen Caribbean Countries negotiated and signed an Economic Partnership Agreement (EPA) with the EU in December 2007. They include: Antigua and Barbuda, Bahamas, Barbados, Belize, Dominica, Dominican Republic, Grenada, Guyana, Haiti, Jamaica, St. Kitts and Nevis, St. Lucia, St. Vincent and Grenadines, Suriname, Trinidad and Tobago. These fifteen countries are part of the Caribbean Forum of ACP states (CARIFORUM). The CARIFORUM was created in 1992 for the purpose of coordinating and monitoring the delivery and planning of European Development Fund (EDF) resources to the region.

The CARIFORUM region has a cumulated market size of around 24.9 million people and an average annual population growth rate of 0.82% (2005). The regional GDP is US\$81.4 billion with an average GDP per capita of US\$8,687. The economy of the European Union generates a GDP of over €11,805.66 billion (\$16,447.26 billion in 2009) according to the IMF, making it the largest economy in the world. The EU economy consists of a single market and is represented as a unified entity in the WTO. When compared, the above figures conjure up a picture of significant asymmetry between the two regions.

This EPA which is anchored in the principles of the predecessor COTONOU AGREEMENT between the EUROPEAN UNION and the ACP States portends both benefits and challenges for CARIFORUM Agriculture and Fisheries Sectors, consequent on the principles of reciprocity and trade liberalization which are fundamental bases of the agreement. The EPA is a legal document as well as a developmental mechanism geared at assisting CARIFORUM's immersion into the world economy.

The EPA covers a wide range of trade related issues, including a chapter in support of agriculture and fisheries, which is aimed at supporting the capacity of CARIFORUM member states in facing the challenges and in taking advantage of the opportunities created in those critical sectors.

The COTONOU Agreement had as its objective the promotion of economic growth and development for the partners and in essence it afforded non-reciprocal trade for all ACP countries. Under the regime there were commodity protocols affecting sugar, bananas, rice, beef and rum. In fact under the COTONOU Agreement the EU maintained tariffs against ACP agricultural products including sugar, meats, dairy products, a range of fruits and vegetables among others. Under COTONOU, the results attained by many of the ACP Member States have been less than spectacular and overall the group experienced a loss of market share in the EU markets for traditional commodities, the erosion of preferences and the lack of export diversification.

The EPA Agreement has now opened the EU markets for larger and more diversified regional exports on the one hand and on the other it has opened the domestic and regional markets for larger quantities of EU exported products. The EPA poses both challenges and opportunities for agriculture and fisheries product. Some key challenges are preference erosion; the increased competition envisaged from EU agricultural products in the domestic and regional markets; the loss of potential revenue to the government and the fact that the increased competition may retard the development of intra-regional trade in agriculture and fisheries. Note should be taken of the fact that many CARIFORUM countries now supply a wide range of agriculture and fisheries products to the French Caribbean Outermost Regions (FCORs). It is envisaged that in time the existing barriers to an expanded trade with that segment of the EU market can be removed considering the proximity to market and related factors.

Opportunities

The main opportunities for CARIFORUM Agriculture and fisheries lie in the improved market access afforded in the short term as the EPA now provides the region with opportunities for exporting additional products which hitherto now were denied access. The improved rules of origin also provide CARIFORUM with opportunities especially in value-added agro-processed and value-added fisheries products and hence the possibility for developing further forward and backward linkages in the more integrated sectors. In this regard the issue of “cumulation” as it relates to the prohibition of certain sugar containing products and for rice until after October 1, 2015 is noted especially in relation to the confectionery industry and the possible negative effects on sugar producing states which are seeking to diversify into sugar based valued added processing. Overall the potential opportunities for agriculture and fisheries are bolstered by the following features of the agreement:

- For agricultural products, most sectors have been either excluded from liberalization or subject to long transition periods (up to 25 years). The Dominican Republic having already made commitments in its free-trade agreement with the United States, has granted better conditions to EU products than the general CARIFORUM treatment.
- For all products originating in CARIFORUM countries and exported to the EU (other than rice and sugar), the Agreement has brought about a Duty and Quota Free Access (DFQF) regime as from 1 January 2008. This is a major improvement compared to the preferential treatment granted under the COTONOU Agreement for some agricultural products, in particular for bananas.

- Access for CARIFORUM rice will be DFQF after a transition period of 2 years ending on 31 December 2009. In 2008 and 2009 the rice quota will be 187 000 tonnes and 250, 000 tonnes, compared to the former quota of 125, 000 tonnes. The in-quota duty will be eliminated.
- For sugar, access will be DFQF as from 1 October 2009, subject to a transitional automatic safeguard mechanism until 30 September 2015. For the period from 1 October 2008 to 30 September 2009, while the Sugar Protocol remains in force, a quantity of 60 000 tonnes of sugar at zero duty (additional to the quantities under the Sugar Protocol) has been granted to CARIFORUM countries. 30 000 tonnes of this tariff rate quota have been reserved for the Dominican Republic which has so far had no preferential access under the Sugar Protocol.

Improved arrangements for origin criteria will allow CARIFORUM to extract greater value added through the further processing of goods before final exports into the EU. The main drawback however relates to the “non-cumulation” of a list of sugar based products up to 2015. The rules allow for regional collaboration in the use of raw materials to develop value-added products. Detailed discussions of the opportunities in the member states have been presented in Section 4 of the main Report.

The fact however is that CARIFORUM production and productivity levels with a few exceptions are low and the region will be unable to grasp the opportunities without a renewed and continued commitment by governments and the private sectors to the development of the regional agriculture and fisheries to their full potential. It is envisaged that the EPA can help to accelerate this process.

With respect to CARIFORM/FCOR trade, the country assessments affirm the findings of recent studies which reported on the ongoing trade between CARIFORUM States and the French Caribbean Outermost Regions (FCORs)”. The reports revealed that apart from mineral exports which are dominated by large multinational companies and may not be open to SMEs, the greatest export opportunities for CARIFORUM are to be found in agricultural and seafood products; agro-processing (sauces, spices, condiments, jams, jellies, etc); food stuffs (food preparations, mineral waters, beers, aerated waters, etc) among other products. The reports identified a number of barriers to be overcome if export opportunities to the FCORs are to be optimized.

1.2.2 Requirements for effective participation in the EPA

The Consultants investigated and highlighted some of the major EU regulatory requirements that must be satisfied in order for countries to enter the market as well as to retain market share. The information presented includes general Health Control (food law, hygiene, microbiological criteria, contaminants, pesticides) as well as Plant Health Control (harmful organisms), Marketing Standards and Other

requirements¹. The onus is placed on the countries to ensure the entry requirements are satisfied. Specific information has been provided with respect to the following requirements:

- Food safety
- Traceability
- Food hygiene
- Requirements for fishery products
- Microbiological criteria
- Contaminants
- Maximum levels of certain contaminants and pesticide residues (MRLs)
- Other non tariff barriers; (market driven agri-food regulations and quality assurance certification schemes; EurepGap and GlobalGap; other regulations and conditions)

1.2.3 Needs assessment

The consultants analyzed the constraints, opportunities and the expressed needs of the countries in relation to the requirements for enhancing the national and regional development of agriculture and fisheries under the EPA, and categorized the issues under the following heads viz:

- Governance and coordination
- Enhancement of Competitiveness via Supply-side Interventions
- Building technical competences/institutional capacity
- Infrastructure and services to support the productive sectors of agriculture and fisheries
- Business development and export promotion related issues
- Trade regulatory related issues

1.2.3.1 Governance and coordination

Outside of the traditional commodities of sugar, bananas, rum and rice, the governance and coordination of the agriculture and fisheries sector need much improvements if the sectors are to be put on a platform for sustained development. In the non-traditional agricultural sector, the predominance of a small farmer subsistent approach has stymied the attempts to the development of better coordination at the product level. However with greater accent now being placed on commercial development in some member states, improvements are underway via the development of clusters and more focused attention to forge development along the entire product chain to enhance

¹ Source: International Symposium on Fresh Produce supply chain Management.,m Chiang Mai – Thailand., 6 - 10 December 2006., Denis.de-Froidmont@ec.europa.eu, http://ec.europa.eu/agriculture/markets/fruitveg/publi/requirements_en.pdf

competitiveness. In this context, governance and coordination refer to a continuing process through which governments, institutions and stakeholders of the Agriculture and fishery sectors – Administrators, politicians, farmers, fishers, processors, exporters, distributors and those in affiliated sectors – elaborate, adopt and implement appropriate policies, plans and management strategies to ensure resources are utilized in a sustainable and responsible manner.

In general the following interventions related to governance and coordination of the agriculture and fisheries sectors are considered germane to future expansion and growth:

1. Legislative reform to reflect the codification into domestic laws and regulation, the new requirements of the international trade regime and regulatory frameworks and the agreements, rules and regulations pursuant to such same.
2. Policy development and Institutional reform to reflect the need for improving the business development processes and to support greater commercialization in the sector.
3. Reform of commodity management and marketing arrangements e.g. commodity Boards, in order to foster greater efficiency and innovativeness in order to ensure greater flow of benefits to the producers.
4. Develop policies and programmes for the focused development of viable scale businesses including private companies and cooperative organizations in Fisheries to improve the commercial prospects of fisher-folk and develop efficiencies in effort and marketing.
5. Develop policies and programmes to enhance the formation of clusters in order to form more self sustaining business units as well as to accelerate production and export development in targeted non-traditional export sectors.

1.2.3.2 Enhancement of Competitiveness via Supply-side Interventions

The removal of productive supply-side constraints and the building of the productive sector to achieve economies of scale are of paramount importance to economic development in the region generally. With the possible exception of the DR where good progress is being made in developing agribusiness, the Region lacks the scale of production and level of organization to meet market requirements even in market segments where it has comparative advantages or niche market recognition.

The countries have emphasized the need for tangible support to substantially improve productivity, efficiency and competitiveness as well as to expand production in agriculture and fisheries. In particular they have highlighted the need for resources to enable the following:

- To enhance export-production capabilities and competitiveness in commodities, agro-processing and services such as agro-tourism linkages. This would include the diversification (vertically and horizontally) into alternative and dynamic exports (so called new agriculture), as well as the development of the support policies, infrastructure and regulatory mechanisms to facilitate entry into and beneficial participation in global supply chains to the key markets. In this regard

the countries require a significant injection of capital to facilitate new investments in agriculture and fisheries activities by making available low cost capital to provide credit for existing producers who are constrained by the inadequacy of funds to expand production and marketing

- The provision of technology support and training, including Agribusiness Management.
- Enhance institutional capacity for sustained technology support and innovation.
- Both capital and technical assistance support are needed for the development of productive clusters. In this regard the formation of sector/subsector specific producers associations and cooperatives for information sharing on best practices for success in the specific sector, for input procurement and for output marketing is of critical importance.
- Capital will be required to facilitate the reduction of input costs for small producer; to assist business start-ups, export marketing facilitation (including the logistics of getting goods from points of production to points of sale in export markets, as well as export promotional activities) tailored to the needs of producers in specific export sectors.
- Agro-industry expansion and modernization-resources are needed to retool and modernize this sub-sector and should focus on factory design and HACCP compliance, energy efficiencies; new processing technology and product development; equipment; training; food technology and standards; food hygiene; packaging ; labeling and traceability.

1.2.3.3 Building technical competences/institutional capacity

Building the technical capacities in the Ministries of agriculture and fisheries and the strengthening and reorientation of the national extension services and technology facilitation arrangements for producers are also critical for increasing production and marketing efforts. Similar capacity building is required among producers and exporters and the participants along the entire product chain. To enhance sustainable rural development and livelihoods, greater emphasis should be placed on building the capacity of Ministries and agencies to implement rural diversification strategies and programmes. The aging population of farmers and the current uncertainties in the sector which dissuades youth participation pose a significant challenge which requires innovative solutions through the provision of incentives to build entrepreneurship in the sector and the provision of support to develop innovative new enterprises.

1.2.3.4 Infrastructure and services to support the productive sectors of agribusiness and services

There is a wide range of infrastructural problems which impede the development of trade on the domestic intra-regional and international markets. These must be resolved if the sectors are to be developed to achieve full potential. The main infrastructural needs are as follows:

Physical infrastructure (e.g. Access roads, ports, landing sites and fish processing and marketing facilities, sea transport, telecommunication, energy and electricity, water supply and sanitation, irrigation and drainage, post harvest facilities including packing houses and airport and seaport facilities to facilitate trade, cold storage, modern abattoirs, factory space, etc.)

Trade support institutions –Allied to the above infrastructural need is the absence in many countries of adequately developed trade support institutions - (e.g. customs, trade finance, marketing and distribution, research, standards and monitoring, etc). Upgrading of the physical infrastructure is of particular urgency as many producers see this as a major impediment to their competitiveness.

1.2.3.5 Business development related issues

The Business and trade development related issues concern access to business and transport Information; market intelligence; identifying the requirements for new export goods; intellectual property protection issues; product design and quality assurance; formation of strategic alliances and partnerships; customs procedures and trade facilitation; effective use of information and computer technology; investment promotion; analysis and institutional support for trade in services; business support services and institutions; public-private sector networking; e-commerce; trade finance; and trade promotion.

Developing export platforms—Increasing exports to the EU market will pose significant challenges to producers who are accustomed to a less demanding set of requirements even when exporting to North American markets. The high cost of tailoring goods for the EU market – e.g. developing certification standards e.g. EUREPGAP; GLOBAL GAP organics and fair-trade standards, special accreditation for seafood exports, special labeling and packaging, retooling factories are significant barriers to increasing trade to the EU markets.

1.2.3.6 Trade regulatory related issues

The EPA offers the possibility of tariff and quota free access into the EU markets for all CARIFORUM exports. This notion however masks the significant non-tariff barriers which CARIFORUM exporters must overcome to develop a sustainable export thrust. A significant challenge in this regard is the region's ability to meet the stringent SPS standards and the level of certification required for entry into the EU markets. Here it is important to note that the development of an appropriate and adequate SPS infrastructure is a pre-requisite for expanding domestic and intra-regional trade as evidenced by the fact that the failure to implement harmonized Sanitary/Phyto-Sanitary protocols for agricultural

commodities has been singled out as creating a barrier to the growth of the intra-regional trade in these commodities

Intellectual property and geographical Indicators-In addition to the SPS issues highlighted above, the EPA includes specific provisions related to development-related issues such as:

- traditional knowledge, biodiversity or transfer of technology such as:
 - o A provision that allows farmers to save, use and exchange farm-saved seed or propagating material rather than buying new seed each year;

A summary of the major challenges, status, gap analysis and the requirements for developing CARIFORUM agriculture and fisheries is presented in Annex 4.

1.3 Survey of existing support activities (self-financed or financed by the European Community, its member States or other donors)

A number of regional and national projects are being implemented across CARIFORUM to address some of the binding constraints to agriculture and fisheries development. These projects are being supported by International Development Partners (IDPs) the most prominent of which are the EU; DFID; USAID; CIDA; JICA; UN Agencies; World Bank and its affiliated MIF; IDB; CFC; and CDB. Donors also include individual countries such as Belgium, France, Spain, Sweden, China and Venezuela which have cooperation programmes impacting the sectors in some countries.

There are also projects and programmes being funded by the individual CARIFORUM Member states from their own budgets in tandem with their national development plans for the sector.

The largest funded programmes and projects related to the EU Special Framework of Assistance (SFA) are for ACP Bananas in Jamaica, DR, Belize, Suriname, St Lucia, Dominica, St Vincent and the Grenadines (the Windward Islands); and the EU Multi- annual assistance for the adaptation of the sugar industry which will run until 2013 and will benefit Jamaica, Guyana; Barbados; Belize and the DR principally. The region has also benefited from the EU funded rice competitiveness programme consisting of 24 Million Euro in support to the Caribbean Rice Industry with Guyana and Suriname being the major beneficiaries. The EU has also provided 70 Million Euro for a programme of support to improve the competitiveness of Caribbean Rum. The regional food security project is currently into a second phase.

The support for banana and sugar emphasizes the development of competitive industries and agricultural diversification including rural diversification in areas affected by the rationalization of these traditional industries. This approach has led to the development of agricultural diversification efforts in countries such as Guyana, Jamaica, Barbados, DR, St. Lucia, Belize Dominica and the St Vincent and the Grenadines.

At the regional level the CARICOM Secretariat has embarked on a number of consultancies to address critical aspects of the policy framework for the sector development including the Common Agriculture

Policy, Common Fisheries Policy, Food Security and Nutrition Policy; Strategy and Operational Plan for the CAHFS. There are numerous studies and analyses already done to assist forward planning for the sector.

At the sub-regional level the OECS Ministers of Agriculture and Tourism recently mandated the OECS Secretariat to further develop the programme priorities for the agriculture sector, paying special attention to a number of important cross-cutting requirements, including the need to:

- i) identify a set of agricultural products in which the OECS region has a competitive production and trading advantage;
- ii) identify and target appropriate private sector operators, including financial institutions, for the establishment of partnerships;
- iii) reduce the high costs of agriculture inputs, in particular fertilizers and feeds, through joint procurement;
- iv) develop risk management, including introducing and strengthening of insurance arrangements for crops, livestock and fisheries;
- v) put measures in place to ensure preservation of environmental integrity.

As an immediate practical measure, the Ministers also mandated the OECS Secretariat to formulate regional projects for submission under the European Union Aid for Trade initiative to support the implementation of the new agriculture priorities, in particular the establishment of an OECS Quality Seal for agriculture-tourism products and the implementation of recommendations for the expansion of intra-regional transportation services and facilities. Ministers also supported the call from the OECS Secretariat for the provision of additional resources to build the capacity of the Secretariat to manage, monitor and evaluate an expanded programme of work, and to more intensively pursue the development of synergies with agriculture development and trade at the CARICOM level.

During the field visits information on existing projects was gathered and is presented in Annex 7 of the report. The list of projects is not exhaustive.

1.4 Programme of cooperation and support activities to address CARIFORUM needs that are not already being addressed

The development of appropriate priority programmes to access development cooperation assistance took into consideration the focus of the development cooperation assistance which pinpoints the following areas where interventions can be made:

- (i) Improvement in the competitiveness of potentially viable production, including downstream processing through innovation, training, promotion of linkages and other support activities, in agricultural and fisheries products, including both traditional and non- traditional export sectors;
- (ii) Development of export marketing capabilities, including market research, both for trade between CARIFORUM States and between the Parties as well as the identification of options for the improvement of marketing infrastructure and transportation, and the identification of financing and cooperation options for producers and traders;
- (iii) Compliance with and adoption of quality standards relating to food production and marketing, including standards relating to environmentally and socially sound agricultural practices and organic and non-genetically modified foods;
- (iv) Promotion of private investment and public-private partnerships in potentially viable production;
- (v) Improvement in the ability of CARIFORUM operators to comply with national, regional and international technical, health and quality standards for fish and fish products;
- (vi) Building or strengthening the Institutional capacity for the coordination of the Region's agriculture and fisheries scientific resources. It also strengthens the technical, human and institutional capability at the regional level for sustainable trade in fisheries products, including aquaculture; and
- (vii) Supporting the process of dialogue referred to above.

The ongoing programmes at the national and regional levels, while addressing some of the political dimensions of the sector development, are invariable relatively small projects in terms of financial provision. The scale of the problems in the countries suggests that a significant injection of funds is required to propel the sector towards greater production and competitiveness. The countries require interventions to address the following priorities as follows:

1. Develop grades, standards and SPS protocols; implement Good Agricultural Practices and regional/sub-regional/national certification programmes as desirable and feasible
2. Support capacity-building initiatives to include legislative reviews and modernization, the provision of supporting facilities, training and exchange of expertise.
3. Specific resources to support technology generation and transfer in agriculture
4. Support for the private sector and individual farm/processing enterprises to establish the necessary protocols for design and management of the enterprises as well as to employ the

various measures and guidelines for improving farm infrastructure and the implementation of the various codes for sanitary and phyto-sanitary measures in the production/rearing, processing activities, transportation and shipping activities (*from farm to fork*).

5. Support for strengthening human, financial and technical resources to accelerate production, productivity and export market development in the sector. Resources should be provided to construct, equip and staff the required laboratories, abattoirs, packing facilities, fish landing sites and marketing complexes; modernization of agro-processing and for business development and export promotional support.
6. Specific financial and technical assistance to develop the Fisheries sector

Details concerning the determination of additional support required for CARIFORUM agriculture and fisheries and the strategic framework and action plan for cooperation assistance are presented in Annex 5.

1.5 RECOMMENDATIONS

The additional support required and the strategic action plan for accessing development cooperation support for agriculture and fisheries are presented in section 9 of the main report.

The additional support for developing the agriculture and fisheries sector of CARIFORUM have been determined from the forgoing assessments of country needs; the analysis of the EU requirements for fresh fruit, vegetables and seafood; and the available marketing opportunities for CARIFORUM. This support has been formulated into Concept notes for the development of programmes, the details of which are included in Annex 6. They are as follows:

1. Programme to increase competitiveness and productivity in CARIFORUM Agriculture and fisheries production.

These programmes which would be implemented at the national level and would comprise three (3) components viz:

Component 1: Technical Assistance to Enhance the Capacity of Producers & Marketers

This Component is intended to enhance the capacity of producers / fishers in Agriculture and Fishery to adjust to the challenges of the new market realities through improved operational efficiency and adoption of practices and technologies to improve productivity and competitiveness. The programme would provide grants and revolving loan funds for the expansion of orchard crops; greenhouse vegetable production; root crops; spices and condiments; livestock; agro-tourism linkages; farm mechanization; sea transportation to enhance intra-regional trade; support for cross border investments; financial support to develop production clusters.

Component 2: Scholarship for Advanced Specialized Training in Key Areas

The programme would also support Post graduate training for specialists; internal restructuring of Ministries; strengthening of fisheries technical personnel; training and reorientation of extension staff; youth entrepreneurship; Rural diversification strategies and action plans.

Component 3: Strengthening Key National Institutions Supporting Production

This Component is intended to ensure that producers/ fisher folks are provided with critical business support including the following:

- Market advisory, intelligence and market facilitation
- Credit
- Business advisory services

Total cost for the three components would be 110 million Euros.

The programme would last for approximately 6 years with annual increments of the funding provided according to a predetermined implementation plan.

2. Programme for upgrading critical fisheries infrastructure and capacity building- CARIFORUM Fisheries Fund (CFF)

- The Fisheries Fund (CFF) is intended to help secure a sustainable and profitable fisheries industry. It grants financial support with a view to helping the industry adapt to changing circumstances. Interventions would include: modernizing fishing vessels; developing landing sites;
- Improving product quality; investment in aquaculture and diversification of farmed species;
- Marketing fisheries products;
- Improvements to processing and port facilities;
- Pilot and collective actions by industry;
- The development of sustainable fisheries; and development support towards fisheries-dependent communities.

This programme would be aligned to the CRFM Second Medium Term plan and would comprise 2 components viz:

A. Fisheries Infrastructure

For the infrastructure fund, a total grant of €135 million should be provided. (In the absence of an industry audit these figures are rough estimates based on the realistic cost for effecting fundamental changes to the existing regional industry given the plethora of challenges to be addressed).

B. Technical Assistance

For the technical assistance component an initial sum of €40 million should be provided. This programme would be implemented over a 5-6 year period.

3. Establishment of Agro-processing modernization programme

The agro-processing modernization programme will support the development of value added through the provision of financial and technical support for product development, food standards and certification; HACCP and other international standards application; packaging and labelling; retooling of factories; training and technology development; and provision of market support.

The project will comprise two components:

- (i) Revolving low interest fund for retooling and design changes to agro-processing entities in order to meet the required quality standards
- (ii) Technical assistance grant funding to facilitate the modernization programme

The total cost of the programme would be as follows:

- A. For the technical assistance component an initial sum of 6 million Euros should be provided.
 - B. For the revolving low interest fund an initial sum of 120 million Euros should be provided.
- (In the absence of an industry audit these figures are rough estimates based on the realistic cost for effecting fundamental changes to the existing regional industry given the plethora of challenges to be addressed)

This programme would be implemented over a 5-6 year period to allow for parallel development in the production of greater quantities of regional raw materials for processing.

4. CARIFORUM Institution for Science, Research and Innovation in Agriculture and a Contestable Fund to facilitate science, technology and innovation

This proposal is for financial support to establish a **CARIFORUM Institution for Science, Research and Innovation in Agriculture** that would establish Policy, Coordinate the R&D and Scientific resources and capacity of the Region, including the Private, Public and NGO institutions. It is also for the establishment of a Contestable Fund to support contractual research in strategic areas.

Research should be relevant and of high priority in developing product chains. The Fund should also support the commercialization of research and development findings to develop new industries and improve technology transfer

Component 1: Funding for the Establishment & Operation of a CARIFORUM Council for Science, Technology and Innovation (CCSTI)

Given the limited resources available for R&D in CARIFORUM, it is critical that R&D resources, scientific and financial, be allocated in such a way so as to maximize returns. This calls for setting priorities with respect to the R&D initiatives which must be pursued. Additionally, there is the need to establish a competitive system for the allocation of R&D grants among R&D providers in the system, including a rigorous and transparent system for evaluation. Among the various criteria for the award of research grants, the heaviest weighting must be placed on the institution's ability to deliver high quality R&D outputs at acceptable cost.

Proposed Funding: It is proposed that a Fund be established that would be sufficient to provide adequate investment returns that would meet the administrative cost of the Council on an Annual basis. This would ensure the sustainability of the institution.

A block sum of **Euro 20 million is proposed.**

Component 2: Funding of a Contestable Fund to facilitate Science, Technology and Innovation

Purpose: The purpose of this fund is to support the development and innovation of technology to improve the competitiveness of agriculture and agro-industry. Funds would be used to support research and technology innovation in high priority areas. Allocation would be on a contestable basis for contracted research. It is proposed that both Regional and EU Institutions or consortiums (EU and CARIFORUM) be eligible to bid for contracts.

Funding: Funding is proposed for a ten year period at **Euro 10 million / year**. After each two year period subsequent funding will be conditioned on a critical review of outputs / deliverables.

5. Programme for Business & Export Development

This programme recommends strengthening of the DR business model as well as its replication in countries of the Region. The focus of the intervention may include the institutional development of Business Clusters, provision of institutional development support for exporters who are desirous of developing private sector groups and sector-specific associations beyond the major industries (i.e. Rice, rum, poultry, sugar and bananas) where functional associations currently exist. Planned interventions in this regard should include the provision of services to conduct ongoing strategic market research, subscription to marketing information databases; provision of training and network mechanisms and provision of direct market support for pre-shipment financing and export and market insurance to name some of the possible interventions.

The development of export platforms could be opportune for areas such as fisheries; vegetables; spices and condiments; root-crops; tropical fruits e.g. papaya, mango; ornamental horticulture; snack foods among others. The fundamental principles are geared to highlight opportunities and reduce business

risks to entrepreneurs. The programme will also seek to foster movement to higher levels in the value chain.

The project will consist of three components as follows:

1. Strengthening of organizational and technical capacities in the area of export promotion
2. Export Promotion /Trade & Business Facilitation
3. Development of Export Platforms for Agriculture & Fisheries Exporters

The overall cost of the programme is € 22 million comprised as follows:

Component 1: € 10.0 million

Component 2: €10.0 million

Component 3: €2.0 Million

The first phase of the programme would begin immediately with assistance provided to existing exporters and companies ready to export.

6. Agriculture Health and Food Safety Infrastructure (SPS/FS) Programme

The focus of this programme would be to assist countries to develop grades, standards and SPS protocols; implement Good Agricultural Practices and Regional/Sub-Regional/National Certification Programmes as desirable and feasible; support for the development of NAHFSA; support to operationalize the CAHFSA; support for strengthening of the Bureau of Standards (BOS); support capacity-building initiatives to include legislative and regulatory reforms; the provision of supporting facilities, training and exchange of expertise. Support for the development of Geographical Indicators and the protection of Intellectual Property Rights.

This programme should be aligned with the operational plan and support framework for the CAHFSA. The consultants are aware of an ongoing consultancy to develop the strategic framework and operational plans for CAHFSA. At any rate the EPA has specified that support for SPS will be directed through the regional CAHFSA.

Strategic framework and action plan for development cooperation assistance for agriculture and fisheries

A Strategic framework and action plan for development cooperation assistance for agriculture and fisheries has been suggested and outlines the expected outcomes, strategies, proposed actions, responsible agencies and stakeholders and proposed timelines for their implementation. Details are presented in Annex 6.

The details of the Individual country reports are located in Annex 3 of the report and the requirements for exporting to the EU are located in Annex 2.

SECTION 1

TERMS OF REFERENCE

1.1 Background on EPA and implications for Agriculture and Fisheries in CARIFORUM

The Caribbean Forum of ACP states (CARIFORUM) ³ and the European Union (EU) concluded negotiations of the economic partnership agreement (EPA) in December 2007.

This agreement which is anchored in the principles of the COTONOU AGREEMENT between the EUROPEAN UNION and the ACP States portends both benefits and challenges for CARIFORUM Agriculture and Fisheries Sectors, consequent on the principles of reciprocity and trade liberalization which are fundamental bases of the agreement. The EPA is a legal document as well as a developmental mechanism geared at assisting CARIFORUM's immersion into the world economy.

The EPA covers a wide range of trade related issues, including a chapter in support of agriculture and fisheries, which is aimed at supporting the capacity of CARIFORUM member states in facing the challenges and in taking advantage of the opportunities created in those critical sectors.

Under the EPA, there are a number of liberalized products that could pose some level of competition for CARIFORUM producers and in addition there are implications for revenue earnings from border charges. Some of these liberalized commodities include meat parts, fruits, vegetables, legumes, tobacco, ornamentals, edible oils, and fish. In terms of the CARIFORUM tariff commitments, the region has managed to secure long transition periods, a phased introduction of tariff dismantling, exemptions from liberalization for sensitive products and a strong asymmetry between EU and CARIFORUM.

In relation to export opportunities created by the EPA, it should be noted that under the predecessor COTONOU AGREEMENT there was a variety of agricultural products that either attracted duty, or were limited by quota. These (with the exception of sugar and rice, which will be subject to short transition periods) will now be duty and quota-free into the EU market. They included almost all meat and dairy products, a range of fruits (including citrus), vegetables and cereals. The removal of restrictions on these products has provided CARIFORUM with the opportunity to exploit previously untapped possibilities, or to improve returns on existing production. The immediate opportunities and challenges for CARIFORUM as full partners in the EPA are not only related to improved market access for the parties, but also the reality of increased competition and more stringent regulations for exporting to the EU.

In the case of Fisheries, consensus on acceptable fishing (production) practices and trade requirements (e.g. SCM, SPS, etc.) open new possibilities for collaboration on joint ventures within the established policies. Meeting these requirements however, continues to be a major challenge to CARIFORUM and other ACP nations. Other opportunities for CARIFORUM exist in creating opportunities for distant-water fishing fleets and partaking in "cash for access" fisheries agreements. However there are numerous

problems relating to violation of the rules of fisheries conservation, regulations and standards concerning management, safety and labour, which warrant further consideration. An intuitive aspect of these relations is the need of CARIFORUM members to give increased priority to fisheries development, which traditionally has not been the case.

1.2 Broad Objective

The general objective of the consultancy is to support the adaptation of the CARIFORUM Agriculture and Fisheries sector to changes implied by the establishment of the EPA at both regional and national levels. The work undertaken by the consultants includes an assessment of needs at three levels - national, Regional and Sub Regional. With respect to national level assessment, the scope of coverage includes all CARIFORUM countries. Assessment at the Regional or Sub Regional levels was examined with respect to identification of those needs that are best addressed at these levels. Special attention was paid to the needs of Haiti.

1.3 Specific Objectives

The Terms of Reference (TOR) identifies the following four immediate objectives:

1. Conduct an assessment of the needs of CARIFORUM agriculture and fisheries sectors with regards to taking advantage of the opportunities created by the EPA;
2. Survey existing support activities in these areas (self-financed or financed by the European Community, its member States or other donors);
3. Propose, design and quantify a programme of cooperation and support activities and addressing CARIFORUM needs that are not already being addressed;
4. Draft a proposal for the funding of programmes and projects identified under (c)

Though it is not stated in the TOR, the study also required a fact finding mission as countries have not yet synthesized the implications of the EPA, the opportunities that lie therein, the strategies to deal with the fallout such as revenue losses from the more liberalized trading arrangement, issues relating to the list of sensitive items, the opening up of the fisheries to be exploited and accountability during the sale of flags to name a few. The study also addresses the front-end implications such as infrastructure and human resources in order to actualize the benefits of the EPA.

1.4 Scope of Consultancy

The study was conducted throughout the forum of Caribbean ACP states (CARIFORUM) comprising 15 Caribbean member states (Antigua and Barbuda, The Bahamas, Barbados, Belize, Dominica, Grenada, Guyana, Haiti, Jamaica, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines, Suriname, Trinidad and Tobago, and the Dominican Republic).

1.5 Focus

The study covers a wide range of issues relative to the needs assessment in each country for ensuring implementation of the commitments of EPA Chapter 5 on Agriculture and Fisheries. The main themes are as follows;

- Establishing what are the priority needs in the countries
- Identification of the major existing support activities in agriculture and fisheries
- Identification of the existing gaps and opportunities for coordination of developmental activities and support
- Developing a prioritized list of short and medium term programmes and projects at the national and CARIFORUM levels relative to;
 - Fostering the development of National sectors
 - Promoting Intra-regional investment and trade
 - Supporting external trade development

Section 2

Key Issues in CARIFORUM Agriculture and Fisheries Sector

The development of Caribbean Agriculture & Fisheries Sector is constrained both on the production/supply side and the marketing/value chain. Sustainable development of Regional Agriculture and Fisheries Sectors therefore calls for measures that would address the binding constraints throughout the respective value chains. This discussion highlights some of the key issues /challenges faced both on the production side and on the marketing side.

Firstly, with respect to agricultural production in the Region, it is important to reflect on some of the salient features of Caribbean Agriculture. In this regard, we must take note of the fact that in many of our territories, small farmers and fisher folks constitute the largest group of entrepreneurs involved in primary production/resource exploitation. Entrepreneurial activities are therefore critical for rural incomes, food security, livelihoods and the development of rural communities. Although small entrepreneurs constitute an important socio-economic group, they operate under a number of constraints which challenge their ability to survive in a competitive market environment. Accordingly, attempts to transform these sectors must necessarily focus on the inherent challenges including the following:

- Weak technology support (S&T/R&D support).
- Limited/weak extension support.
- Limited availability or the absence of critical public infrastructure, including access roads, irrigation/ drainage, landing facilities, processing and cold storage.
- Fragmented spatial distribution of production (challenges for working with clusters of farmers).
- Limited market information and market facilitation support.
- Fragmented spatial distribution of production (challenges for working with clusters of farmers).

In the case of agriculture, access to arable land is generally limited to soils of low capability (e.g. low fertility, hilly terrain); in the case of fisheries, over exploitation of some of these resources as well as resource degradation and the emergence of invasive species which are threatening the sustainability of enterprises that depend on them.

Generally, on the marketing side, domestic agricultural/fish markets in the Caribbean are poorly developed. Market operations are characterized by limited intelligence, operational inefficiency (thus resulting in wide market spreads - farm gate to wholesale to retail) and significant losses through the

value chain (quality deterioration or outright loss). In such a scenario, both consumers and producers are worse off. Further, inefficiencies in the operations of domestic agricultural and fish markets give importers and the Hotel/tourism sector the incentive to source competing products from extra-regional supply chains.

To date, intra-regional trade in agricultural products has been limited with the largest trade taking place amongst countries in the southern Caribbean. A number of constraints have operated to restrict the development of intra-regional and export trade in agricultural products. Most important amongst these are the following:

- Limited uncompetitive production levels and low productivity
- Failure to implement harmonized Sanitary/Phyto-Sanitary protocols for agricultural commodities
- Limited and costly intra-regional and extra-regional transport
- Absence of a CARIFORUM wide Market Intelligence System (one that could assist in identifying opportunities for trade and improve overall market operational efficiency)
- Limited availability of infrastructure that are critical to facilitating intra-regional trade (e.g. cold storage, packinghouses, shipping and handling facilities)
- Absence of a Regional quality assurance standard e.g. Global GAP.
- The relative ease and /or preference to trade with extra-regional suppliers.

SECTION 3

Methodology and Strategies

The study was conducted in 5 phases or components viz; inception phase; desk phase; field phase/needs assessment and data collection; analysis and synthesis, and report finalization. Following the submission of the inception and desk reports the consultants conducted country visits to assess the needs of agriculture and fisheries and analyzed the available information with respect to the following critical determinants viz:

- The requirements for participation in the liberalized trading regime created by the EPA
- An analysis of the Protocol 1 and the annexes to help determine opportunities and challenges for agriculture and fisheries.

In pinpointing the main opportunity areas, the Consultants conducted the following analyses:

- Analysis of the EU market access commitments and the list of newly liberalized products to determine what additional opportunities now exist for Caribbean exporters.
- Examination of PROTOCOL 1 and ANNEXES relating to Origin Criteria.
- Examination of export development strategies for the individual countries where available.
- Analysis of the treatment of agriculture and fisheries products in CARIFORUM commitments for tariff eliminations. In this regard it is noteworthy that some regionally important products have been excluded such as poultry and most meat and meat products, fisheries products, most fruits and vegetables, beverages, sauces, condiments; Rum, other alcoholic and non-alcoholic beverages, ethanol, vegetable oil and ornamental plants and flowers.
- Examination of those products which are to be liberalized over the agreed timeframes
- Review of National Agriculture and fisheries development plans to identify priority products for the domestic, regional and international markets and the priority programmes to address the development agenda.

During the country visits, the list of opportunities were cross referenced with those commodities/enterprises identified in the specific countries as offering the best potential for agri-food expansion in order to maximize opportunities for supplying domestic, intra-regional, as well as the traditional export markets of North America and Europe.

In concert with the above approach, the consultants also sought information on the following matters during the country visits:

- Steps being taken to implement the EPA
- Status of sector policy and plans (National development plan; agricultural policy rural development strategies ;export development strategies; country strategies for commodities; food security, etc)
- Priority industries and their competitiveness
- Business development and facilitation arrangements/processes
- Management and coordination of agriculture and fisheries activities
- Policy support for the industry
- Human resource capacity – need for training & skills development
- Public Facilities (e.g. labs) needed to support production, processing and marketing
- Public infrastructure such as drainage/irrigation, packinghouses/processing facilities, cold storage.
- Key Services such as SPS, Certification of GAP.
- Marketing support – market intelligence, market facilitation, availability of efficient and cost effective transport.
- The status of legislation and regulatory frameworks
- Technology – R&D, introduction of appropriate technology, technology backstopping and training.
- Stakeholder collaboration & cooperation.
- Development of clusters and cooperatives
- The development and management of the fisheries

The analysis and synthesis phase involved the further analyses as follows:

- An examination of the EU SPS and entry requirements for the commodities with potential for development
- An assessment of the EU and CARIFORUM markets with a view to determining the demand, growth potential, level of competition and the specific requirements for developing competitive products for the markets (domestic; intra-regional; USA;CANADA and the EU)
- An assessment of the opportunities for increasing production for domestic and export markets.
- GAP analysis for determining the requirements and needed interventions for transforming the productive capacity and achieving competitiveness and the business and marketing support required to develop effective export platforms in CARIFORUM member states.

Based on the expressed need of the countries and the analyzed requirements for enhancing the national and regional development of agriculture and fisheries under the EPA, focus was given to the following priorities viz:

- Governance and coordination
- Enhancement of production
- Building technical competences/institutional capacity
- Infrastructure and services to support the productive sectors of agriculture and fisheries
- Business development related issues
- Trade regulatory related issues

The development of appropriate priority programmes to access development cooperation assistance took into consideration the focus of the development cooperation assistance which includes the following areas where interventions can be made.

- a. Improvement in the competitiveness of potentially viable production, including downstream processing through innovation, training, promotion of linkages and other support activities, in agricultural and fisheries products, including both the traditional and non- traditional export sectors.
- b. Development of export marketing capabilities, including market research, both for trade between CARIFORUM States and between the Parties as well as the identification of options for the improvement of marketing infrastructure and transportation, and the identification of financing and cooperation options for producers and traders.
- c. Compliance with and adoption of quality standards relating to food production and marketing, including standards relating to environmentally and socially sound agricultural practices and organic and non-genetically modified foods.
- d. Promotion of private investment and public-private partnerships in potentially viable production.
- e. Improvement in the ability of CARIFORUM operators to comply with national, regional and international technical, health and quality standards for fish and fish products.
- f. Building or strengthening the scientific and technical human and institutional capability at regional level for sustainable trade in fisheries products, including aquaculture, and
- g. Supporting the process of dialogue referred to above.

SECTION 4

MARKET ASSESSMENTS

4.1 OVERVIEW OF THE CARIFORUM MARKET FOR AGRICULTURE AND FISHERIES PRODUCTS

Fifteen Caribbean Countries negotiated and signed an Economic Partnership Agreement (EPA) with the EU. They include: Antigua and Barbuda, Bahamas, Barbados, Belize, Dominica, Dominican Republic, Grenada, Guyana, Haiti, Jamaica, St. Kitts and Nevis, St. Lucia, St. Vincent and Grenadines, Suriname, Trinidad and Tobago. These fifteen countries are part of the Caribbean Forum of ACP states (CARIFORUM). The CARIFORUM was created in 1992 for the purpose of coordinating and monitoring the delivery and planning of European Development Fund (EDF) resources to the region.

The region has a cumulated market size of around 24.9 million people and an average annual population growth rate of 0.82% (2005). The regional GDP is USD 81.4 billion with an average GDP per capita of USD 8,687. The Dominican Republic and Trinidad & Tobago are the bigger economies and make up for 56% of the CARIFORUM region GDP. Dominica is the smallest economy in the region, with a GDP of USD 299.8 million. Only one country, Haiti, is a LDC. Aside from Jamaica (13%), Bahamas (6%) and Haiti (6%), the remaining nine countries collectively account for only 11% of the regional GDP. Dominica, on the other extreme, represents less than 1% of the region's GDP. (EPA -Analytical Note -SC/AN/TDP/EPA/12-January 2008).

The CARIFORUM membership overlaps with the Caribbean Community and Common Market (CARICOM), which, however, does not encompass the Dominican Republic. Since January 1991, CARICOM countries have applied the CARICOM Common External Tariff (CET) to imports from non-CARICOM members. Imports originating in one CARICOM state and entering other CARICOM members are duty free, although each member is allowed to impose import duties on imports of scheduled products from other members. A four-phase schedule of CET tariff reductions was established at the outset, starting in 1993. The final Phase IV of full implementation, with a tariff ceiling of 20% for non-exempt industrial goods, and 40% for non-exempt agricultural goods, was to have been reached by members on 1 January 1998. Only a limited number of CARICOM countries have entered Phase IV of full implementation.

Since December 2001, the economic relations between CARICOM and Dominican Republic are framed by the free trade agreement (FTA) originally signed in 1998.

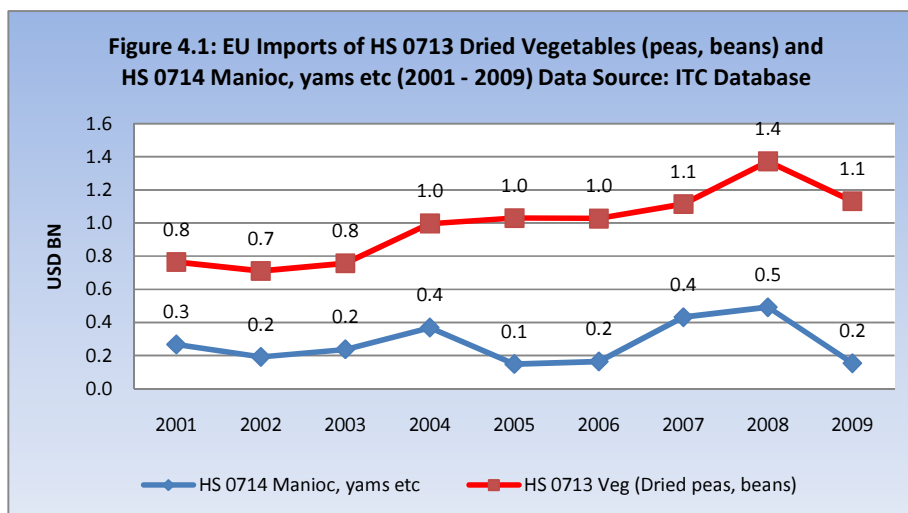
Most peas, beans, and many vegetables that go into industry and form part of the staple of CARIFORUM diets have been liberalized. This perhaps reflects concerns about rising food prices. The liberalized

products are those such that CARIFORUM has no particular comparative advantage in and is very unlikely to develop one in the near future

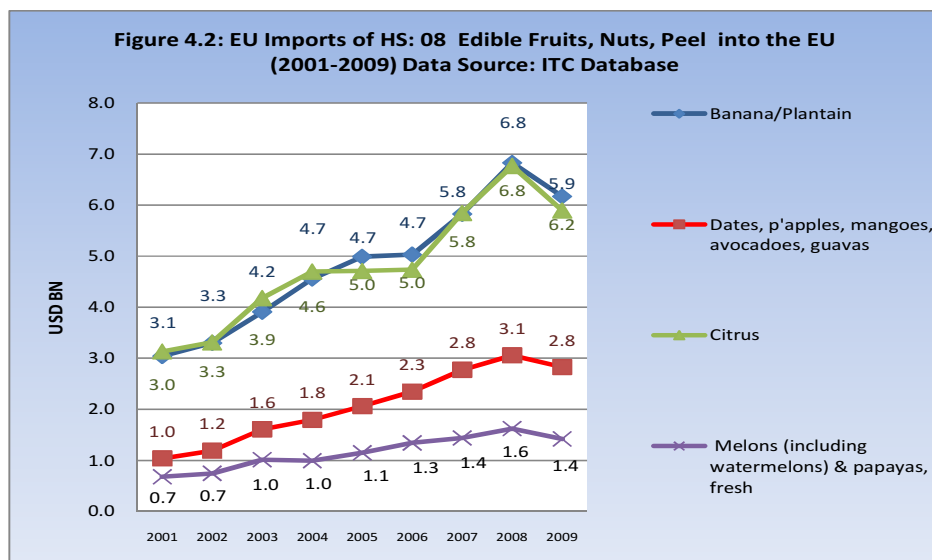
4.2 THE EU MARKET FOR TROPICAL AGRICULTURAL AND FISHERY PRODUCTS

This section presents a brief insight into the EU 27 market for tropical agricultural products as well as those for fish/seafoods. The insight presented here is based only on size of the market and general trend. In order to obtain a more detailed insight into this market, individual products as well as competitiveness issues will have to be examined.

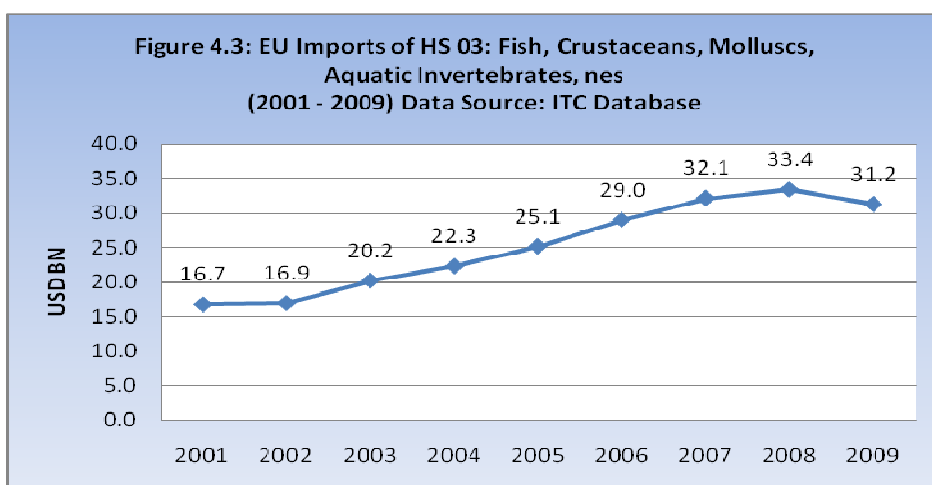
The EU represents a large and growing market for HS 07 Edible Vegetables and Certain Roots and tubers. Tropical commodities such as HS 0713 Dried vegetables, shelled increased from USD 0.8 bn in 2001 to USD 1.4 bn by 2008 (Figure 4.1). Value of imports of HS 0714 Manioc, arrowroot, yams, etc. almost doubled over the same period, from USD 0.3 bn to USD 0.5 bn over the same period.



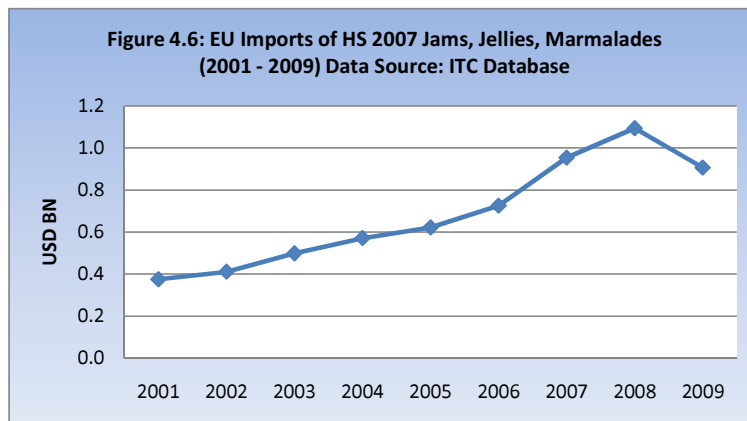
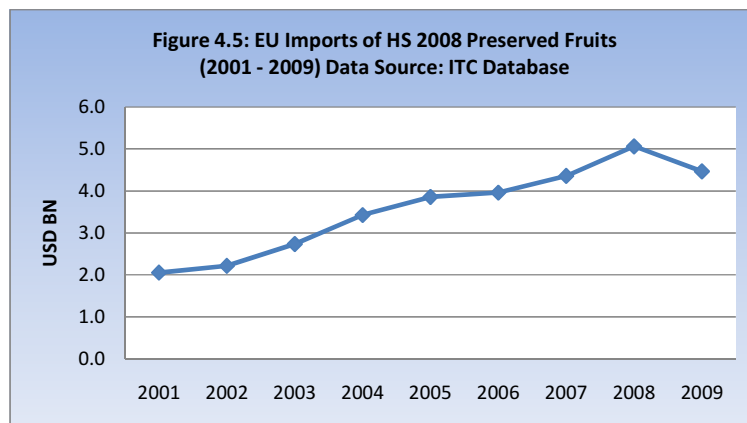
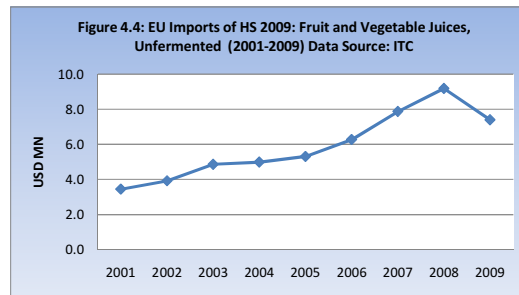
The market for fresh fruits has also shown substantial expansion during the decade. Banana and plantains HS 0801 exports, while decreasing export levels are seen in the region, have been increasing in terms of EU imports from USD 3.1 bn in 2001 to USD 6.8 bn in 2008 and declining marginally thereafter (Figure 4.2). Citrus imports HS 0805, also doubled by 2008 to USD 6.8 bn; HS 0804 which include tropical fruits – pineapples, mangoes, avocados is now estimated at USD 3.1 bn and HS 0807 Melons, including papayas at USD 1.6 bn by 2008.



The EU imported USD 16.7 bn of fresh/frozen fishery products in 2001, increasing to USD 33.4 bn in 2008 and declining marginally in 2009 (Figure 4.3). This import value represents 40% of world imports, Spain being the top EU importer at 7% of global imports, France 6% and Italy 5%. In the top ten EU importers, The Netherlands recorded 3% of global but 16% growth between 2005 and 2009; Sweden with a marginally smaller market share growth rate was 15%.



Imports of fruit juices and preserves have also been on the increase in the EU. In 2001, imports of HS 2009, fruit and vegetable juices, unfermented increased from USD 3.5 bn to USD 9.2 bn in 2008 but declined marginally to USD 7.4 in 2009 (Figure 4.4). HS 2008 Preserves fruits represented the next largest market, increasing from USD 2.1 bn to USD 4.5 bn over the same period (Figure 4.5). Other food preparations such as HS 2007: Jams, fruit jellies & marmalades represented a USD 1.0 bn market in 2008/9 (Figure 4.6).



Despite the presence of other EU-OCT's, many CARIFORUM countries also expressed a keen interest in entering and / or expanding export trade with the French Caribbean Outermost Regions (FCORs). Opportunities for trade development / expansion as well as challenges lie in a number of areas, for example:

1. There is an estimated 60,000 - 100,000 Surinamese living in French Guyana representing an excellent Diaspora market. Given Suriname's geographical proximity to French Guiana, goods can move easily across the borders.
2. Shipping routes to Martinique and Guadeloupe, St Marten/St Marteen are served by various shipping lines including CMA-CGM's and Tropical Shipping. However rates can be substantial in some cases.
3. The demographics indicate good market opportunities in the FCORs: GDP per capita is USD 24,120 in Martinique and 398,000 persons, while in Guadeloupe, its USD 21,703 and 401,000 persons in Guadeloupe².
4. French Guiana's early engagement with Suriname and Brazil through the PO Amazonia entails initiatives to facilitate cross-border movement of goods and persons. This can lead to eventual market expansion and other synergies (and / or competition).
5. Guadeloupe agro-processing may represent a market for primary products from CARIFORUM in segments such as biotechnologies, organic foodstuff, cosmetics and medicines.

While there are opportunities, there are also challenges to be overcome to enter the markets or expand market share.

Barriers/Weaknesses

1. Business licences to operate in the FCORs may be difficult to obtain.
2. Surinamese truckers cannot drive their vehicles to Cayenne.
3. Labelling requirements can be a barrier to trade with the FCORs.
4. Specification standards for food products are very high in FCORs
5. SPS norms and standards remain a non-tariff barrier: FCORs are under the obligation to apply EU standards.
6. Sea transport: freight costs between Antigua and Guadeloupe and Martinique for example are twice as high as freight costs from France to Guadeloupe.
7. Frequent social conflicts in the FCORS deter foreign investors from targeting these markets.
8. Lack of information and understanding of 'English / Spanish' Caribbean business cultures.
9. FCORs business culture is also different.
10. There is a general lack information and understanding of the FCOR markets.

4.3 Priority Goods Export Opportunities for CARIFORUM (2006-08)

This section of the study shows the main goods exported to the FCORs from CARIFORUM countries as well as those with good export potential. From examining the export data, certain opportunities can be identified in terms of criteria including the following:

² Economic data are figures from INSEE, online statistics 2010. Source GDP 2006 data: IEDOM and estimations by INSEE et CEROM (Comptes Economiques Rapides de l'Outre-mer) / Source distances: <http://www.levoyageur.net/distan.php>

If a product is exported to the FCOR by at least any CARIFORUM country, this indicates that there is demand in the FCOR market, which could possibly be further exploited by (other) CARIFORUM countries. If a product is exported to the FCORs by any CARIFORUM country but not by a neighbouring country with similar production capabilities, then export possibilities could exist in the country that is not exporting to the FCOR. (This could also be due to not finding distributors).

Products with export opportunity based on the fact that at least four CARIFORUM Countries Export them to the FCORs

- Crustaceans (shrimp, lobsters)
- Fish
- Cereals
- Citrus fruits (Oranges fresh or dried or frozen / grapefruits)
- Roots and tubers
- Beer / liqueurs & cordials
- Bread, pastry, cakes, biscuits and other bakers' wares
- Rum and tafia
- Food preparations / sauces

Products with export opportunity based on the fact that at least one CARIFORUM Country exports them to FCORs and other CARIFORUM Countries have similar production capabilities/resources

- Meat (bovine)
- Other vegetables
- Spices
- Soap, hygiene products

It is also worth noting that it is usually acknowledged that informal trade takes place between the FCORs and their closest neighbours: for example fruits and vegetables, garments and textiles from St Lucia and Dominica to Martinique; and similar products from Antigua & Barbuda and Dominica to Guadeloupe.

SECTION 5

The assessment of opportunities in CARIFORUM

Agriculture and Fisheries under the EPA

5.1 Introduction

The predecessor COTONOU Agreement had as its objective the promotion of economic growth and development for the partners and in essence it afforded non-reciprocal trade for all ACP countries. Under the regime there were commodity protocols affecting sugar, bananas, rice, beef and rum. In fact under the COTONOU Agreement the EU maintained tariffs against ACP agricultural products including sugar, meats, dairy products, a range of fruits and vegetables among others. Under COTONOU, the results attained by many of the ACP Member States have been less than spectacular and overall the group experienced a loss of market share in the EU markets for traditional commodities, the erosion of preferences and the lack of export diversification. In fact that over the life of the LOME and COTONOU Agreements respectively, the ACP countries including CARIFORUM States have failed to diversify their exports to the EU much beyond the traditionally exported products. In recent times also various facets of the COTONOU Agreement were subjected to Challenges in the WTO, the resolution of which have been disastrous for many of the countries in CARIFORUM. The European Centre for Development policy management contends that the ACP imports into the EU actually declined from 7.4% IN 1976 to about 3% in 2001. With respect to export diversification under the COTONOU agreement, five products including petroleum, diamonds, cocoa, fish and sugar accounted for roughly 60% of ACP overall trade.

Against this background therefore the EU/CARIFORUM EPA Agreement has opened the EU markets for regional exports on the one hand and also opened the domestic markets for EU exports on the other. It poses both challenges and opportunities for agriculture and fisheries product. Some key challenges are preference erosion; the increased competition envisaged from EU agricultural products in the domestic and regional markets; the loss of potential revenue to the government and the fact that the increased competition may retard the development of intra-regional trade in agriculture and fisheries. The opportunities for agriculture and fisheries are bolstered by the following features of the agreement;

- a. For agricultural products, most sectors have been either excluded from liberalization or subject to long transition periods (up to 25 years). The Dominican having already made commitments in its free-trade agreement with the United States, has granted better conditions to EU products than the general CARIFORUM treatment.
- b. For all products originating in CARIFORUM countries and exported to the EU (other than rice and sugar), the Agreement has brought about a Duty and Quota Free Access (DFQF) regime as from

1 January 2008. This is a major improvement compared to the preferential treatment granted under the COTONOU Agreement for some agricultural products, in particular for bananas.

- c. Access for CARIFORUM rice will be DFQF after a transition period of 2 years ending on 31 December 2009. In 2008 and 2009 the rice quota will be 187 000 tonnes and 250, 000 tonnes, compared to the former quota of 125, 000 tonnes. The in-quota duty will be eliminated.
- d. For sugar, access will be DFQF as from 1 October 2009, subject to a transitional automatic safeguard mechanism until 30 September 2015. For the period from 1 October 2008 to 30 September 2009, while the Sugar Protocol remains in force, a quantity of 60 000 tonnes of sugar at zero duty (additional to the quantities under the Sugar Protocol) has been granted to CARIFORUM countries. 30 000 tonnes of this tariff rate quota have been reserved for the Dominican Republic which has so far had no preferential access under the Sugar Protocol.

Sugar shortfalls in the framework of Sugar Protocol will be reallocated within the CARIFORUM region, as stipulated in a joint declaration on the "reallocation of undelivered quantities under the Sugar Protocol". In addition, imports of CARIFORUM sugar will be subject to a minimum price (not lower than 90% of the EU reference price) between 1 October 2009 and 30 September 2012. In order to avoid trade circumvention, certain products with high sugar content are subject to a special surveillance mechanism from 1 January 2008 to 30 September 2015 (if imports increase by 20% in volume during a period of 12 consecutive months, the Commission may analyze trade patterns and, in case of circumvention, suspend preferential treatment for these products).

- e. Improved arrangements for origin criteria will allow CARIFORUM to extract greater value added through the further processing of goods before final exports into the EU. The main drawback however relates to the "non-cumulation" of a list of sugar based products up to 2015. The rules allows for regional collaboration in the use of raw materials to develop value-added products.

5.2 OPPORTUNITIES

The main opportunities for CARIFORUM Agriculture and fisheries lie in the improved market access afforded in the short term as the EPA now provides the region with opportunities for exporting additional products which hitherto now were denied access. The improved rules of origin also provide CARIFORUM with opportunities especially in value-added agro-processed and value-added fisheries products and hence the possibility for developing further forward and backward linkages in the more integrated sectors. In this regard the issue of "cumulation" as it relates to the prohibition of certain sugar containing products and for rice until after October 1, 2015 is noted especially in relation to the confectionery industry and the possible negative effects on sugar producing states which are seeking to diversify into sugar based valued added processing.

For the long term the region can rely on the promise of development cooperation assistance to boost the international competitiveness of the sectors, improve its trade regulatory regime through

development of appropriate and efficient Sanitary and Phyto-sanitary standards and facilities as well as to commit to the long overdue reform of the sectors including the development of appropriate business models to enhance the commercialization of products and markets. Importantly also the EPA sets the stage for increased investments to help expand existing production, diversify and streamline production of a range of niche market products including organics and fair-trade and gain efficiencies in all facets of the agro-food sector.

Fisheries

Generally speaking, CARIFORUM countries' fishing capacities are relatively limited and the fishing industries mainly supply local markets. Few countries have developed an export-oriented fish sector, among which are Belize and Guyana. Jamaica, the Bahamas, Antigua and Grenada have exported lobster and conch into the EU while Suriname exports shrimp. In Antigua and Barbuda, The Bahamas, Belize, Guyana and Suriname, fishing activity and its importance for the GDP and total exports has increased remarkably in the last 10 years. In Guyana, for example, trawled shrimps (seabob) accounted for 12% of total exports in 2005 (compared to 1% in 1995). Belize has specialized in farmed shrimps and is currently experimenting with aquaculture and mariculture (cobia) and currently fish exports account for only 1.3% of its total exports to the principal destination markets in the United States and Mexico. Nonetheless for all CARIFORUM countries, the European Union is perceived as a potentially lucrative market following the certification allowing the signatory CARIFORUM countries to export to the EU. In this domain, specific attention should be focused on the creation of assistance schemes aimed at targeting unsustainable fishing practices that can lead to output reductions and deterioration of the environment. Further, significant investments in fish-related facilities (ice, marketing, transportation...) can render the export oriented fishing industry an attractive option in the diversification strategies of the smaller countries.

The fact however is that CARIFORUM production and productivity levels with a few exceptions is low and the region will be unable to grasp the opportunities without a renewed and continued commitment by governments and the private sectors to the development of the regional agriculture and fisheries to their full potential. It is envisaged that the EPA can help to accelerate this process in terms of the following:

- Improvement in the competitiveness of potentially viable production, including downstream processing through innovation, training, promotion of linkages and other support activities, in agricultural and fisheries products, including both traditional and non-traditional export sectors;
- Development of export marketing capabilities, including market research, both for trade between CARIFORUM States and between the Parties as well as the identification of options for the improvement of marketing infrastructure and transportation, and the identification of financing and cooperation options for producers and traders;

- Compliance with and adoption of quality standards relating to food production and marketing, including standards relating to environmentally and socially sound agricultural practices and organic and non-genetically modified foods;
- Promotion of private investment and public/private partnerships in potentially viable production.

In pinpointing the main opportunity areas, the Consultants conducted the following analyses:

- Analysis of the EU market access commitments and the list of newly liberalized products to determine what additional opportunities now exist for Caribbean exporters
- Analysis of Protocol 1 and annexes regarding rules of origin
- Examination of export development strategies for the individual countries where available
- Analysis of the treatment of agriculture and fisheries products in CARIFORUM commitments for tariff eliminations. In this regard it is noteworthy that some regionally important products have been excluded and include poultry and most meat and meat products, fisheries products, most fruits and vegetables, beverages, sauces, condiments; Rum, other alcoholic and non-alcoholic beverages, ethanol, vegetable oil and ornamental plants and flowers
- Examination of those products which are to be liberalized over the agreed timeframes
- Review of Agriculture and Fisheries development plans to identify priority products for the domestic, regional and international markets.
- Review of existing trading arrangements and the potential for increased trade with the French Caribbean territories (FCORS)

With respect to CARIFORM/FCOR trade, a recent study conducted by A-Z Information Jamaica Limited “Opportunities for doing business between CARIFORUM States and the French Caribbean Outermost Regions (FCORs)”, revealed there are exports in all categories of goods from CARIFORUM to the FCORs. In addition there are commodity exports from each of the CARIFORUM countries to at least one of the FCORs. Apart from mineral exports which are dominated by large multinational companies and may not be open to SMEs, the greatest export opportunities for CARIFORUM are to be found in agricultural and seafood products; agro-processing (sauces, spices, condiments, jams, jellies, etc); food stuffs (food preparations, mineral waters, beers, aerated waters, etc.); and paper and paperboard products.

Dominica and Jamaica export significant amounts of agricultural and seafood products to Guadeloupe and Martinique. Other CARIFORUM countries including Barbados, Antigua and Barbuda, DR, Guyana, Suriname, St Lucia; St. Vincent and the Grenadines (SVG), and Trinidad and Tobago export a range of products including rice, honey, cut flowers, baked products ,vegetables, root-crops, fresh fruits and fruit

juices, nuts, beer, non-alcoholic beverages, cocoa products, coffee, pulses, edible preparations of animal and vegetable fats and oils just to demonstrate the range of possibilities.

In terms of outward trade, the FCORs trade almost exclusively with continental France and to a lesser extent with the rest of the EU, while doing little business with the Caribbean (main FCOR clients being St Lucia, Trinidad & Tobago, the Dominican Republic). Moreover, even though this small amount of regional trade takes place in virtually all product categories, it is largely dominated by mineral based products (in 2006, over 90% of total FCORs exports accounted for refined oil, and mostly from Martinique). From 2007 onward, overall exports of goods from the FCORs to CARIFORUM have experienced a drastic decline from \$100,017,659 in 2006 to \$16,218,092 in 2008, the most significant drop occurring in products derived from oil and minerals; and to a lesser extent in the electrical machinery, metals and transportation sectors.

Another recent study on Product Identification for St. Lucia has reported excellent opportunities for a range of agricultural exports to St. Marten and other Caribbean territories including the US and British Virgin Islands. The above referred study by A-Z Information Jamaica Ltd provided details of commodity exports in the Individual Country Reports where data was provided at the HS 6-digit level for all CARIFORUM countries. The study revealed numerous barriers to trade across CARIFORUM and the FCORs, the main ones included:

- language problems both spoken and written
- Inadequate transport – lack of availability and cost of service
- Challenges in meeting French/EU standards – both quality and documentation requirements
- Lack of knowledge of the French system (tax structure, market structure, etc.), and
- Lack of on the ground representative/distributor.

During the country visits the list of opportunities were cross referenced with those commodities/enterprises identified in the specific countries as offering the best potential for agri-food expansion in order to maximize opportunities for supplying domestic, intra-regional, as well as the traditional export markets of North America and Europe.

5.3 Clusters of Agriculture enterprises for export development

Opportunities were created for primarily all exports, with some temporary restrictions for Sugar, Rice, Banana and Rum. From our initial review as well as expertise in the EU markets, the following agricultural industry clusters are recommended for export focus:

1. Traditional products: Sugar, Rice, Banana and Rum
2. Seafood products: fresh, processed
3. Exotic Tropical Fruits

4. Root Crops: Yams, dasheen, fresh, processed, RTC, RTE
5. Exotic tropical fresh fruits and single strength tropical juice blends, fruit preserves
6. Spices, condiments, sauces and preserves
7. Vegetables
8. Pulses & grain (peas, beans, corn, peanuts)
9. Beef & Dairy products
10. Small Ruminants
11. Pork and Pork Products
12. Poultry (Meat & Eggs)
13. Coconut (beverage, oils, animal feed, industrial products- cosmetics, fibers etc)
14. Coffee & Cocoa
15. Ornamental Horticulture
16. Medicinal Plants
17. Agro-processed products, baked products and Snack foods

The above clusters also recognize the potential for supplying the domestic and intra-regional markets. In relation to services it is recognized that a wide range of services covering both professional and business related aspects of agriculture and services are now open notwithstanding the fact that the negotiations on services are yet to be concluded. These have been highlighted in Table 2. Our findings are summarized in Tables 1 and 2 below.

Table 1: Opportunities for agriculture and Fisheries development under the EU/CARIFORUM EPA

OPPORTUNITIES	COMMENTS	CARIFORUM MEMBER STATES WITH BEST POTENTIAL
1. Traditional: Sugar, Rice, Banana, Rum	<p>-All these are currently being addressed under separate Programmes. The development opportunities include Value Added which are more long term and should be accommodated under the accompanying measures for facilitating the competitiveness of these commodities. The rules of origin especially as they relate to “cumulations” may impact the pace of value addition.</p> <p>-Developments in the organic and fair-trade markets are of relevance to the banana, sugar and rice industries.</p>	<p>DR, Belize, Jamaica ,Windward Islands (Banana)</p> <p>DR, Guyana, Belize, Jamaica Barbados (sugar)</p> <p>Guyana, Suriname, Haiti, DR (Rice)</p> <p>Guyana, Jamaica, Barbados, TT (Rum)</p>
2. Seafood Products	<p>Good export currently for Lobster, Conch and Shrimp. Opportunities exist for fresh fish and processed fish/seafood products.</p> <ul style="list-style-type: none"> • Good fishery resources (marine & captured) • Tradition of harvesting / exploitation • Very good markets for fresh, frozen , dried / processed fish products –Domestic and intra-regional markets (including tourism) and export to neighbouring French Territory , North America and Europe • High import levels of dried fish/opportunities for import substitution 	<p>Bahamas; Guyana; Suriname; Belize; Antigua and Barbuda; Jamaica (current exporters to the EU)</p> <p>All countries have capacity for reorganization rehabilitation or expansion of the fisheries</p> <p>Good potential for aquaculture development in DR, Guyana Suriname, Belize, Jamaica, TT, Dominica, Haiti</p>
3. Exotic Tropical Fruits and fruit juices, purees and concentrates	<ul style="list-style-type: none"> • Fresh fruit one of the fastest growth segments • Exotic tropical fruits fastest growth • Excellent domestic and export demand • Some comparative advantages in production – climatic conditions • Tradition of a citrus industry but only smaller orchards of other exotics • Focus on fresh vs processed • While the citrus is developed (industry needs rehabilitation and replanting as a result of disease threats, Tristeza and Greening diseases) the other exotics require integrated development including marketing. • Limitation of perishability and the need to develop the joint production of juices, purees and other semi-processed or end products • Challenge of penetrate markets 	<p>Potential exists in all countries with largest commercial possibilities in Suriname, Guyana, DR, Belize, Haiti, Jamaica and TT, The Bahamas</p> <p>For citrus the countries with best potential are DR, Jamaica, Belize, Guyana, Dominica, Trinidad and Tobago, The Bahamas</p> <p>Problems with pests such as fruit flies may stymie the growth of the industry in some countries.</p>

**Table 1: Opportunities for agriculture and Fisheries development under the EU/CARIFORUM EPA
(cont'd)**

OPPORTUNITIES	COMMENTS	CARIFORUM MEMBER STATES WITH BEST POTENTIAL
4. Root Crops – Yams, Dasheen, Cassava (fresh, processed, RTC, RTE)	<ul style="list-style-type: none"> • Limitation is that the product is limited to the fresh product • Export market – mainly ethnic • Limited penetration of the tourist and fast food 	<p>Important to all member countries both from the perspective of national food security and for non-traditional exports to EU, North America and intra – regionally</p> <p>Opportunities for developing convenient packs to expand scope in marketing</p>
5. Spices, Condiments, Sauces (Pimento, Nutmeg, Cloves, Mace, Cinnamon, Hot Pepper, Ginger, Bay)	<ul style="list-style-type: none"> • Good growth potential – domestic & export • Tremendous opportunities for value added due to blending into unique products, cottage industry, small scale operation • Good domestic and export market • Niche market opportunities 	<p>Most Member States but the industry is particularly important to Jamaica, Grenada, Guyana, Trinidad and Tobago where there has been a tradition of production albeit on a small scale. The region already has world renowned products some of which are classified as gourmet.</p>
6. Vegetables	<ul style="list-style-type: none"> • Unsatisfied regional demand, including food service, the tourism / cruise ship market, out of seasonal supply • Challenges – seeds/varieties, GAP, post-harvest, transport, storage, pre-processing e.g. fresh cut 	<p>All member states –the development of green houses and modified environment agriculture has expanded opportunities for increasing production to supply global markets</p>
7. Pulses & grain (peas, beans, corn, peanuts)	<ul style="list-style-type: none"> • Unsatisfied regional demand • Potential for livestock feed –corn 	<p>Countries with some capacity are Guyana, Belize, DR, Suriname, Haiti and Jamaica. The main markets are Domestic and regional. In respect of peas and beans, Belize has dominated the intra-regional market. Both Guyana and Jamaica have targeted peanut production for domestic and intra-regional markets.</p> <p>There is little prospect for grain (corn and rice production) for animal feeds in the immediate future as it is more lucrative to produce same for human consumption.</p>
8. Beef & Dairy	<p>Region has some indigenous suitable breeds of dairy and beef cattle</p>	<p>Best commercial potential is in Guyana, DR, Belize, Jamaica, Haiti and TT. Belize Guyana and the DR have good prospects for developing the intra-regional trade, while Jamaica, Trinidad and Haiti will focus on supplying a percentage of national consumption. The improved rules of origin may open opportunities for value added and horizontal cooperation in developing value added in Dairy and beef products among the CARIFORUM member states</p> <p>Ice cream and other dairy products may be limited due to rules of origin affecting “cumulation” in sugar containing products up to year 2015</p>

**Table 1: Opportunities for agriculture and Fisheries development under the EU/CARIFORUM EPA
(cont'd)**

OPPORTUNITIES	COMMENTS	CARIFORUM MEMBER STATES WITH BEST POTENTIAL
9. Small Ruminants	<p>Unsatisfied regional demand</p> <p>Available good genetic stock</p> <p>Technology available for increased production.</p>	Main focus would be on domestic and intra-regional trade
10. Pork	<p>Development will be limited by the dependence on imported feed components</p> <p>Genetic improvements in breeds</p> <p>Processing facilities of international standards</p>	<p>Main producers would be Jamaica, Guyana, DR, TT, Belize, Bahamas where development programmes are underway</p> <p>Focus should be on supplying the Domestic and intra-regional for fresh and processed products including the tourism and food services industry.</p>
11. Poultry (Meat & Eggs)	<p>All countries</p> <p>Focus on food security</p> <p>Export potential in value-added poultry parts will depend on the efficiencies in production given the nature of the industry and its high import content.</p>	The industry focus is on re-defining the product range to shift regional production to those chicken products where the threat from imported poultry meat is less acute. Requires investment in the development and marketing of value added chicken products where import penetration is limited.
12. Coconut (beverage, oils, animal feed, industrial products- cosmetics, fibers etc)	<p>- Growing demand for coconuts in the region</p> <p>- Potential for coconut water and other coconut based products</p> <p>- Disease incidence and invasive species threaten the industry which has seen the gradual reduction of coconut palms in several countries</p>	<p>Guyana, Jamaica, TT, DR, St Lucia, Dominica</p> <p>Possibility for expansion in other member states</p>
13. Coffee & Cocoa	<ul style="list-style-type: none"> • Good demand for regional premium products • Niche markets – fine flavoured & organics • Tremendous opportunities to be exploited via value added but requires development • Tradition of growing these in the region with a market presence 	<p>DR and Jamaica have mature industries and are best positioned to increase exports</p> <p>Further room for developing organic coffees in countries not now exporting.</p>

**Table 1: Opportunities for agriculture and Fisheries development under the EU/CARIFORUM EPA
(cont'd)**

OPPORTUNITIES	COMMENTS	CARIFORUM MEMBER STATES WITH BEST POTENTIAL
14. Ornamental Horticulture and value-added bouquets and arrangements ,plant parts and planting material	<ul style="list-style-type: none"> • Growing domestic market but a very competitive export market • Challenges in marketing as well as technology • Some interests by entrepreneurs and some R&D capacity • Under exploited tourism market / events • High cost of investments • New research capabilities eg (UWI -colour manipulation in anthuriums) • Prior experiences in exporting ornamentals 	<p>All countries have potential in this area</p> <p>Need to develop facility for commercial planting material to replace expensive imported stocks</p> <p>Market study to identify varieties with export potential</p> <p>Unfulfilled demand in regional tourism industry</p> <p>Increased opportunities for value added eg Bouquets</p>
15. Medicinal Plants	<ul style="list-style-type: none"> - Tradition of exporting a wide range of plant medicinal products and raw materials to the EU - Region is a hotspot for biodiversity 	<p>All countries</p> <p>Need to develop biodiversity policy and strategies that will foster bio-prospecting to identify and focus development of products with commercial potential</p> <p>Need to assist and augment existing efforts among small entrepreneurs to develop sustainable export business</p>
16. Agro-processed products and snack foods Beer, non-alcoholic beverages; baked products; confectionery; preparations of animal and plant oils and fats, sauces, condiments and gourmet processed products	<p>-Improved rules of origin make it possible for producing a wide range of products from material produced within and outside of the region subject to the condition imposed in Protocol 1 and accompanying annexes.</p> <p>Opportunities for products such as ,cooking sauces, packaged beef cuts and processed meats (such as sausages), packaged dehydrated fruits, packaged snacks (such as. plantain chips and peanuts), bottled blended juices, fruit wines, and jams and jellies; new value added products such as pre-cooked shrimp, conch, lobster, and shrimp cocktail mixes, pre-fried breaded fillets, and roes and caviar.</p> <p>-Countries are constrained by deficiencies in the agro-processing sectors and the relative incapacity for product development</p>	<p>All countries but countries with best immediate potential are ; TT; Barbados ;DR; Jamaica; Guyana; Belize</p>

Table 2: Agriculture and Services

WTO Service Sector Classification	Relationship with Agriculture and Fisheries
1.Business Services	<p>(A) Professional</p> <p>Farm Management and Accounts, Audits; landscaping; turf agronomy; golf course design and maintenance; Veterinary Services</p> <p>(B) Computer elated services;</p> <p>Livestock data system; breeding records; farm accounting models</p>
	<p>Other business services RELATED TO Agriculture and fisheries</p> <ul style="list-style-type: none"> ➤ Advertising for produce and food ➤ Market research and public opinion polling (produce ,health, safety, environmental) ➤ Managing consulting ➤ Technical testing and analytical services (SPS, pests, fertilizers) ➤ Placement and supply services (seasonal agricultural workers) ➤ Security-(electrical fencing, traceability systems, identification systems) ➤ Photographic services ➤ Packaging ➤ Related scientific and technical consulting services: (cultivation and production) ➤ Distribution services-wholesale and retail trade; farm supplies ➤ Educational services- agricultural colleges; distance education ➤ Environmental services- bio composting ;waste disposal ➤ Financial services- agriculture insurance; micro-credit; lease financing ➤ Tourism - hotel and restaurants; agro-tourism; Tour guide services ➤ Recreational /cultural/sporting- ➤ Transport services

SECTION 6

Overview of Requirements for effective participation in the EPA

This section of the report highlights some of the major EU regulatory requirements that must be satisfied in order for countries to enter the market and also to retain market share. The information presented here includes general Health Control (food law, hygiene, microbiological criteria, contaminants, pesticides) as well as Plant Health Control (harmful organisms), Marketing Standards and Other requirements³. The onus is placed on the countries to insure the entry requirements are satisfied. The information is presented in brief.

6.1 Food Safety

This subsection presents some general aspects of food safety that must be met in order for exporters to gain entry and retain market share in the EU market.

1. Traceability: It is the responsibility of the Food Business Operator to insure Traceability requirements are met⁴.

2. Food Hygiene: food business operators are required to monitor the food safety of products from primary production growing, harvesting and 1st transport. Registration of food businesses of plant origin is required and also information about accepted suppliers in third countries. General implementation of procedures based on the HACCP principles, after primary production is required⁵.

3. Fishery Products: Clean water may be used with whole fishery products and clean seawater may be used with live bivalve mollusks, echinoderms, tunicates and marine gastropods; clean water may also be

³ Source: International Symposium on Fresh Produce supply chain Management.,m Chiang Mai – Thailand., 6 - 10 December 2006., Denis.de-Froidmont@ec.europa.eu., http://ec.europa.eu/agriculture/markets/fruitveg/publi/requirements_en.pdf

⁴ (General Food Law Regulation (EC) No 178/2002 of the European Parliament) (Official Journal L 31 of 1.2.2002, p.1).

⁵ (Source: Food Hygiene Regulation (EC) No 853/2004 of the European Parliament and of the Council of 29 April on the hygiene of foodstuffs, (Official Journal L 226 of 25 June 2004, p. 3).

used for external washing. Adequate facilities and procedures are to be available to ensure that water is not contaminated⁶.

4. Microbiological criteria: Regular testing against the criterion is not useful in normal circumstances for fresh, uncut and unprocessed vegetables and fruits, excluding sprouted seeds. *Escherichia Coli* and *Salmonella* are important in the case of pre-cut fruit and vegetables (ready-to eat) and un-pasteurized fruit and vegetable juices and *Salmonella* for sprouted seeds⁷.

For foodstuffs, such as dried infant formulae and dried dietary foods, a process hygiene criterion should be laid down in addition to good practices designed to reduce delay between preparation and consumption. In the case of *carcasses of cattle, pig, sheep and goats*, areas most likely to be contaminated with *Salmonella* should be selected for sampling and that the total sampling area should be increased from 100 cm²⁸.

5. Contaminants: maximum levels for certain contaminants in foodstuffs have been set. These include:

- *nitrate in spinach and lettuce*
- *Aflatoxins in groundnuts, nuts, dried fruit, some species of spices*
- *Ochratoxin A in dried vine fruit*
- *Patulin in fruit juice, apple product*
- *Lead in fruit and vegetables, fruit juice*
- *Cadmium in fruit and vegetables*
- *Tin in canned food*⁹

6. Maximum levels for certain contaminants has been set for ochratoxin A (OTA) in Liquorice & Spices because very high levels of OTA have been observed at several occasions and there were also no prevention measures and official controls are in place to control the presence¹⁰.

7. Pesticides residues: new regulation 09/2008 sets the following:

- MRLs for 315 fresh products and their processed form.
- Where a pesticide is not specifically mentioned, a **general default MRL of 0.01 mg/kg applies**¹¹.

⁶ Source: Amendments to In Chapter VII of Annex II to Regulation (EC) No 852/2004, point 1(b) (official Journal of the European /union pg 277/7 18/10/2008.) <http://faolex.fao.org/docs/pdf/eur83609.pdf>

⁷ Source: Commission Regulation (EC) No 2073/2005 of 15 November 2005 on microbiological criteria for foodstuffs, (Official Journal L 338 of 22 December 2005, p. 1)

⁸ Source: Amendments to Regulation (EC) No 2073/2005 on microbiological criteria for foodstuffs (Official Journal L 338 of 7 December 2007, p. 12)

⁹ Contaminants Commission Regulation (EC) No 466/2001 of 8 March 2001 setting maximum levels for certain contaminants in foodstuffs + amendments

¹⁰ Amendments to Regulation (EC) No 1881/2006 setting maximum levels for certain contaminants in foodstuffs as regards ochratoxin A (Official Journal L 35 of 6 February 2010, p. 7)

6.2 Other Non Tariff Measures (TBT'S)

In addition to the food safety requirements, there are a number of other non tariff measures that must be met. Some of these are now presented.

6.2.1. Market-driven agri-food regulations and quality assurance and certification schemes

There are many reasons for retail chains and some producers to create or develop their own standards. Retail companies may require private food certification of their national and third-country suppliers to assure consumers that the products they sell are safe and to shield the business from liability in case of unsafe foods sold through their outlets.

Private standards are part of commercial agreements between voluntary parties in a free market, and as such are not subject to state intervention and fall outside the jurisdiction of the WTO. This is the case of the Fair-Trade standard of the NGO Fair-trade Labelling Organizations International (FLO-I) and the EurepGAP and BRC global standards. Whenever a voluntary standard is taken into consideration for (full or partial) inclusion within a country's legislation, the standard should not conflict with SPS and TBT Agreements. In other words, it should not become a disguised barrier to trade (Wilson, 2003; FAO, 2004b; FAO, 2003b).

Private, voluntary standards can have a very strong impact on international trade as entry barriers, this because private sector often sets standards that supersede public ones (Caswell, Bredahl and Hooker, 1998). These private standards frequently affect exports from developing countries, exacerbating their problems for greater involvement in international trade. Costs of compliance with these private standards may be high, and many suppliers in developing countries, especially small farmers cannot afford the luxury of private certification. Table 5.1 presents a list of private standards used in the EU.

Table 6.1: List private standards used in the EU Market

Pre-farm gate	Post farm gate	Retail outlets & Supermarkets
<ul style="list-style-type: none">• SQF 1000¹²• EurepGAP• Freshcare Code of Practice (Australia)• Tesco (Nature's choice)• Carrefour	<ul style="list-style-type: none">• SQF 2000• BRC Global Std.• Dutch HACCP• International Food Standard (IFS)• ISO 22000	<ul style="list-style-type: none">• SQF 3000

¹¹New rules on pesticide residues in food 09/2008 factsheet.
http://ec.europa.eu/food/plant/protection/pesticides/explanation_pesticide_residues.pdf

¹² SQF : Safe Quality Food

More generally, food companies are finding it difficult to simultaneously manage overlapping quality standards. They are either becoming too expensive or, as a result of “simplifying” efforts made by so-called global standards, may undermine the efficiency of the food companies’ quality strategies and drive those strategies under the control of large, multipurpose retail chains. The regulatory environment have been ever-emerging and evolving, some of the main EU standards are presented in Table 5.2

Table 6.2: Implementation dates of Various EU Standards

Standard	Year established	Year amended
Eurep GAP	1997	2009 (Global GAP)
SQF 1000	2000	
ISO 9000	1994	2000, 2008
ISO 22000	2001	2005, 2007
Tesco Natures Choice	1991	
Dutch HACCP	1996	
British Retail Consortium (BRC)	1998	

6.2.2 Eurep GAP and GlobalGAP

EurepGAP began in 1997 as an initiative of large European retailers belonging to Europe to respond to consumer concerns about food safety, environmental protection, workers’ health, safety and welfare and animal welfare (mad cow disease, use of pesticides, genetically modified organisms (GMOs), etc.). The challenge of globalizing markets has now lead to the implementation of GLOBALG.A.P, establishing itself as a key reference for Good Agricultural Practices (G.A.P.) in the global market place.

6.2.3 Other Regulations and Conventions

Appendix 2 presents details of other regulations and conventions that countries are required to satisfy to be able to enter the EU market. These include:

1. Conservation and Management of straddling fish stocks and highly migratory fish stocks management of high seas fisheries (ICCAT)
2. Illegal Fishing (IUU)
3. Rules of Origin
4. FAO Code of Conduct for Responsible Fisheries
5. CITES

Section 7

**Individual country Reports/need assessments and the major projects
now underway to develop the sector**

SUMMARY matrices presented on next page

See Full Country Report in Annex 3

Table 1: Assessment of CARIFORUM Facilities and Resources

ANTIGUA	VERY FAVORABLE													FRUITS AND VEGETABLES, FISHERIES					
	FAVORABLE					FISHERIES						FISHERIES							
	NEUTRAL																		
	UNFAVORABLE	FISHERIES, FRUITS AND VEGETABLES	FISHERIES, FRUITS AND VEGETABLES	FRUITS AND VEGETABLES					FISHERIES	FISHERIES			FRUITS AND VEGETABLES	FISHERIES	FRUITS AND VEGETABLES	FRUITS AND VEGETABLES	FRUITS AND VEGETABLES		
	VERY UNFAVORABLE				FRUITS AND VEGETABLES				FISHERIES	FISHERIES			FRUITS AND VEGETABLES			FRUITS AND VEGETABLES	FRUITS AND VEGETABLES	FRUITS AND VEGETABLES	
		TRADE ENHANCING REQUIREMENTS	PRODUCTION MANAGEMENT (GAP, IUU)	MARKET ENTRY REQUIREMENTS (SP5)	POST HARVEST/ PACKHOUSE INFRASTRUCTURE	AGRO-PROCESSING TECHNOLOGY	LAND SITES/ PORTS	COLD CHAIN INFRASTRUCTURE	FREIGHT AVAILABILITY	MARKET CORDINATION /LINKAGES	HUMAN RESOURCES	LAB FACILITIES/ INSPECTION CAPABILITY	R&D SUPPORT	FINANCE/ INSURANCE					
BAHAMAS	VERY FAVORABLE	FISHERIES	FISHERIES						FISHERIES	FISHERIES									
	FAVORABLE	CITRUS	CITRUS	CITRUS				FISHERIES			FISHERIES	FISHERIES	FISHERIES	CITRUS					
	NEUTRAL																		
	UNFAVORABLE															FISHERIES	FISHERIES	FISHERIES	
	VERY UNFAVORABLE					FISHERIES, CITRUS													
		Trade Enhancing Requirements	PRODUCTION MANAGEMENT (GAP, IUU)	MARKET ENTRY REQUIREMENTS (SP5)	POST HARVEST/ PACKHOUSE INFRASTRUCTURE	AGRO-PROCESSING TECHNOLOGY	LAND SITES/ PORTS	COLD CHAIN INFRASTRUCTURE	FREIGHT AVAILABILITY	MARKET CORDINATION /LINKAGES	HUMAN RESOURCES	LAB FACILITIES/ INSPECTION CAPABILITY	R&D SUPPORT	FINANCE/ INSURANCE					

BARBADOS	VERY FAVORABLE	FISHERIES	FISHERIES				FISHERIES	FISHERIES	FISHERIES	FISHERIES		FISHERIES	FISHERIES		FISHERIES
	FAVORABLE				FISHERIES						FISHERIES	FISHERIES			FISHERIES
	NEUTRAL													FISHERIES	
	UNFAVORABLE	VEGETABLES FRUITS													
	VERY UNFAVORABLE														
		Trade Enhancing Requirements	PRODUCTION MANAGEMENT (GAP, IUU)	MARKET ENTRY REQUIREMENTS (SPS)	POST HARVEST/PACKHOUSE INFRASTRUCTURE	AGRO-PROCESSING TECHNOLOGY	LAND SITES/ PORTS	COLD CHAIN INFRASTRUCTURE	FREIGHT AVAILABILITY	MARKET CORDINATION /LINKAGES	HUMAN RESOURCES	LAB FACILITIES/ INSPECTION CAPABILITY	R&D SUPPORT	FINANCE/ INSURANCE	

BELIZE	VERY FAVORABLE	FISHERIES	FISHERIES			FISHERIES, CITRUS	FISHERIES	FISHERIES	FISHERIES, CITRUS, HONEY	FISHERIES		FISHERIES, CITRUS, HONEY	FISHERIES, CITRUS	FISHERIES, CITRUS, HONEY
	FAVORABLE	CITRUS, HONEY	CITRUS, HONEY							CITRUS, HONEY	FISHERIES, CITRUS, HONEY		HONEY	
	NEUTRAL													
	UNFAVORABLE													
	VERY UNFAVORABLE													
		Trade Enhancing Requirements	PRODUCTION MANAGEMENT (GAP, IUU)	MARKET ENTRY REQUIREMENTS (SPS)	POST HARVEST/ PACKHOUSE INFRASTRUCTURE	AGRO-PROCESSING TECHNOLOGY	LAND SITES/ PORTS	COLD CHAIN INFRASTRUCTURE	FREIGHT AVAILABILITY	MARKET CORDINATION /LINKAGES	HUMAN RESOURCES	LAB FACILITIES/ INSPECTION CAPABILITY	R&D SUPPORT	FINANCE/ INSURANCE

DOMINICA	VERY FAVORABLE					BANANA, LIME		BANANA, LIME					
	FAVORABLE	LIME	BANANA	BANANA,				BANANA				BANANA	
	NEUTRAL			LIME					LIME				
	UNFAVORABLE	FISHERIES, BANANA	FISHERIES, LIME				FISHERIES			FISHERIES, LIME			LIME, FISHERIES
	VERY UNFAVORABLE												
	Trade Enhancing Requirements	PRODUCTION MANAGEMENT (GAP, IUU)	MARKET ENTRY REQUIREMENTS (SPS)	POST HARVEST/ PACKHOUSE INFRASTRUCTURE	AGRO-PROCESSING TECHNOLOGY	LAND SITES/ PORTS	COLD CHAIN INFRASTRUCTURE	FRIEGHT AVAILABILITY	MARKET CORDINATION /LINKAGES	HUMAN RESOURCES	LAB FACILITIES/ INSPECTION CAPABILITY	R&D SUPPORT	FINANCE/ INSURANCE

DOMINICAN REPUBLIC	VERY FAVORABLE	BANANA, VEGETABLES, POULTRY	BANANA, MANGOES, VEGETABLES	BANANA, MANGOES		MANGOES, VEGETABLES, POULTRY		BANANA, MANGOES, VEGETABLES, POULTRY		BANANA, MANGOES, VEGETABLES, POULTRY	MANGOES, VEGETABLES		BANANA, MANGOES, VEGETABLES, POULTRY
	FAVORABLE	MANGOES			MANGOES				BANANA, VEGETABLES MANGOES			VEGETABLES MANGOES	
	NEUTRAL		POULTRY		POULTRY					POULTRY			
	UNFAVORABLE		FISH	FISH	FISH	FISH	FISH		FISH	FISH	FISH	FISH	FISH
	VERY UNFAVORABLE												
	Trade Enhancing Requirements	PRODUCTION MANAGEMENT (GAP, IUU)	MARKET ENTRY REQUIREMENTS (SPS)	POST HARVEST/ PACKHOUSE INFRASTRUCTURE	AGRO-PROCESSING TECHNOLOGY	LAND SITES/ PORTS	COLD CHAIN INFRASTRUCTURE	FRIEGHT AVAILABILITY	MARKET CORDINATION /LINKAGES	HUMAN RESOURCES	LAB FACILITIES/ INSPECTION CAPABILITY	R&D SUPPORT	FINANCE/ INSURANCE

GRENADA	VERY FAVORABLE		NUTMEG					NUTMEG, COCOA						
	FAVORABLE	COCOA, FISH		COCOA	NUTMEG, COCOA	NUTMEG, COCOA, FISH	FISH	FISH	NUTMEG, COCOA					
	NEUTRAL	COCOA, NUTMEG												
	UNFAVORABLE	NUTMEG,			FISH					NUTMEG, FISH	NUTMEG, FISH	NUTMEG, FISH	COCOA, NUTMEG, FISH	
	VERY UNFAVORABLE													
	Trade Enhancing Requirements	PRODUCTION MANAGEMENT (GAP, IUU)	MARKET ENTRY REQUIREMENTS (SPS)	POST HARVEST/ PACKHOUSE INFRASTRUCTURE	AGRO-PROCESSING TECHNOLOGY	LAND SITES/ PORTS	COLD CHAIN INFRASTRUCTURE	FRIEGHT AVAILABILITY	MARKET CORDINATION /LINKAGES	HUMAN RESOURCES	LAB FACILITIES/ INSPECTION CAPABILITY	R&D SUPPORT	FINANCE/ INSURANCE	

GUYANA	VERY FAVORABLE	FISHERIES, RICE	FISHERIES, RICE											
	FAVORABLE	LIVESTOCK	LIVESTOCK		RICE, LIVESTOCK		FISHERIES	RICE	FISHERIES, RICE					
	NEUTRAL													
	UNFAVORABLE	FRUITS & VEGETABLES	FRUITS & VEGETABLES	FRUITS & VEGETABLES,	FISHERIES, FRUITS & VEGETABLES,	FISHERIES, RICE, FRUITS & VEGETABLES,		FISHERIES, FRUITS & VEGETABLES, LIVESTOCK	FRUITS & VEGETABLES, LIVESTOCK	FISHERIES, RICE, FRUITS & VEGETABLES, LIVESTOCK	FISHERIES, RICE, FRUITS & VEGETABLES, LIVESTOCK	FISHERIES, RICE, FRUITS & VEGETABLES	FISHERIES, RICE, FRUITS & VEGETABLES,	
	VERY UNFAVORABLE													
	Trade Enhancing Requirements	PRODUCTION MANAGEMENT (GAP, IUU)	MARKET ENTRY REQUIREMENTS (SPS)	POST HARVEST/ PACKHOUSE INFRASTRUCTURE	AGRO-PROCESSING TECHNOLOGY	LAND SITES/ PORTS	COLD CHAIN INFRASTRUCTURE	FRIEGHT AVAILABILITY	MARKET CORDINATION /LINKAGES	HUMAN RESOURCES	LAB FACILITIES/ INSPECTION CAPABILITY	R&D SUPPORT	FINANCE/ INSURANCE	

HAITI	VERY FAVORABLE												
	FAVORABLE												
	NEUTRAL												
	UNFAVORABLE	GEN. AGRICULTURE	GEN. AGRICULTURE	GEN. AGRICULTURE	GEN. AGRICULTURE	GEN. AGRICULTURE	GEN. AGRICULTURE	GEN. AGRICULTURE	GEN. AGRICULTURE	GEN. AGRICULTURE	GEN. AGRICULTURE	GEN. AGRICULTURE	GEN. AGRICULTURE
	VERY UNFAVORABLE												
	Trade Enhancing Requirements	PRODUCTION MANAGEMENT (GAP, IUU)	MARKET ENTRY REQUIREMENTS (SPS)	POST HARVEST/ PACKHOUSE INFRASTRUCTURE	AGRO-PROCESSING TECHNOLOGY	LAND SITES/ PORTS	COLD CHAIN INFRASTRUCTURE	FRIEGHT AVAILABILITY	MARKET CORDINATION /LINKAGES	HUMAN RESOURCES	LAB FACILITIES/ INSPECTION CAPABILITY	R&D SUPPORT	FINANCE/ INSURANCE

JAMAICA	VERY FAVORABLE													
	FAVORABLE	FISHERIES	FISHERIES	*				FISHERIES	FISHERIES	FISHERIES		FISHERIES		
	NEUTRAL													
	UNFAVORABLE				FISHERIES	FISHERIES	FISHERIES				FISHERIES			
	VERY UNFAVORABLE													
	Trade Enhancing Requirements	PRODUCTION MANAGEMENT (GAP, IUU)	MARKET ENTRY REQUIREMENTS (SPS)	POST HARVEST/ PACKHOUSE INFRASTRUCTURE	AGRO-PROCESSING TECHNOLOGY	LAND SITES/ PORTS	COLD CHAIN INFRASTRUCTURE	FRIEGHT AVAILABILITY	MARKET CORDINATION /LINKAGES	HUMAN RESOURCES	LAB FACILITIES/ INSPECTION CAPABILITY	R&D SUPPORT	FINANCE/ INSURANCE	

ST LUCIA	VERY FAVORABLE											
	FAVORABLE											
	NEUTRAL											
	UNFAVORABLE											
	VERY UNFAVORABLE											
Trade Enhancing Requirements												
PRODUCTION MANAGEMENT (GAP, JULU)												
MARKET ENTRY REQUIREMENTS (SPS)												
POST HARVEST/ PACKHOUSE INFRASTRUCTURE												
AGRO-PROCESSING TECHNOLOGY												
LAND SITES/ PORTS												
COLD CHAIN INFRASTRUCTURE												
FREIGHT AVAILABILITY												
MARKET COORDINATION /LINKAGES												
HUMAN RESOURCES												
LAB FACILITIES/ INSPECTION CAPABILITY												
R&D SUPPORT												
FINANCE/ INSURANCE												

ST VINCENT	VERY FAVORABLE															
	FAVORABLE		FISHERIES, FRUITS AND VEGETABLES	FRUITS AND VEGETABLES				FISHERIES	FISHERIES, FRUITS AND VEGETABLES	FISHERIES	FISHERIES, FRUITS AND VEGETABLES	FRUITS AND VEGETABLES				
	NEUTRAL															
	UNFAVORABLE		FISHERIES	FRUITS AND VEGETABLES	FRUITS AND VEGETABLES							FISHERIES	FISHERIES, FRUITS AND VEGETABLES	FISHERIES, FRUITS AND VEGETABLES	FISHERIES, FRUITS AND VEGETABLES	FISHERIES, FRUITS AND VEGETABLES
	VERY UNFAVORABLE															
	Trade Enhancing Requirements	PRODUCTION MANAGEMENT (GAP, IUU)	MARKET ENTRY REQUIREMENTS (SPS)	POST HARVEST/ PACKHOUSE INFRASTRUCTURE	AGRO-PROCESSING TECHNOLOGY	LAND SITES/ PORTS	COLD CHAIN INFRASTRUCTURE	FRIEGHT AVAILABILITY	MARKET COORDINATION /LINKAGES	HUMAN RESOURCES	LAB FACILITIES/ INSPECTION CAPABILITY	R&D SUPPORT	FINANCE/ INSURANCE			

SURINAME	VERY FAVORABLE	FISHERIES, RICE	FISHERIES					FISHERIES, LIVESTOCK, RICE		FISHERIES	FISHERIES		
	FAVORABLE		LIVESTOCK, RICE		LIVESTOCK,	FISHERIES, LIVESTOCK, RICE	FISHERIES		FISHERIES, RICE				
	NEUTRAL												
	UNFAVORABLE	LIVESTOCK			FISHERIES, RICE				LIVESTOCK	LIVESTOCK	LIVESTOCK	FISHERIES, LIVESTOCK, RICE	FISHERIES, LIVESTOCK, RICE
	VERY UNFAVORABLE												
	Trade Enhancing Requirements	PRODUCTION MANAGEMENT (GAP, IUU)	MARKET ENTRY REQUIREMENTS (SPS)	POST HARVEST/ PACKHOUSE INFRASTRUCTURE	AGRO-PROCESSING TECHNOLOGY	LAND SITES/ PORTS	COLD CHAIN INFRASTRUCTURE	FREIGHT AVAILABILITY	MARKET CORDINATION /LINKAGES	HUMAN RESOURCES	LAB FACILITIES/ INSPECTION CAPABILITY	R&D SUPPORT	FINANCE/ INSURANCE

TRINIDAD AND TOBAGO	VERY FAVORABLE												
	FAVORABLE			GEN AGRICULTURE	FISHERIES, GEN AGRICULTURE			FISHERIES, GEN AGRICULTURE	GEN AGRICULTURE	GEN AGRICULTURE	GEN AGRICULTURE	FISHERIES, GEN AGRICULTURE	FISHERIES, GEN AGRICULTURE
	NEUTRAL										FISHERIES		
	UNFAVORABLE	FISHERIES, GEN AGRICULTURE	FISHERIES, GEN AGRICULTURE			GEN AGRICULTURE	FISHERIES, GEN AGRICULTURE		FISHERIES	FISHERIES			
	VERY UNFAVORABLE					FISHERIES							
	Trade Enhancing Requirements	PRODUCTION MANAGEMENT (GAP, IUU)	MARKET ENTRY REQUIREMENTS (SPS)	POST HARVEST/ PACKHOUSE INFRASTRUCTURE	AGRO-PROCESSING TECHNOLOGY	LAND SITES/ PORTS	COLD CHAIN INFRASTRUCTURE	FREIGHT AVAILABILITY	MARKET CORDINATION /LINKAGES	HUMAN RESOURCES	LAB FACILITIES/ INSPECTION CAPABILITY	R&D SUPPORT	FINANCE/ INSURANCE

Table 2 : Priority Programmes - Summary of Country Needs Under the Priority Programmes

PROGRAMMES	Antigua & Barbuda	Bahamas	Barbados	Belize	Dominica	Grenada	Guyana	Haiti	Jamaica	St Kitts & Nevis	St Lucia	St Vincent	Suriname	Tdad & Tobago	Dominican Republic
1. Improving Competitiveness & Productivity				Fish	Fish	Fish	Fish		Fish			Fish	Fish	Fish	Fish
			Cotton	Meat					Root Crops						Rice
	Pineapple	Fruits	Dairy products	Grains	Fruits	Fruits	Fruits		Fruits			Fruits	Fruits		Fruits
	Hot Peppers	Vegetables	Vegetables	Juices	Vegetables	Spices	Vegetables	ES	Vegetables	ES	ES	Vegetables	Vegetables	ES	Vegetables
	Onions			Fruits		Cocoa	Rice		Juices			Juices	Frozen Veg		Juices
				Citrus			Meat		Spices				Meats		Meats
				Banana											
2. Establishment of the CARIFORUM Fisheries Fund															
				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓
3. The Agro-Processing Modernization Programme				Fish	Fish	Fish	Fish		Fish			Fish	Fish	Fish	Fish
				Meat					Root Crops						
				Grains	Fruits	Fruits	Fruits		Fruits			Fruits	Fruits		Fruits
				Juices	Vegetables	Spices	Vegetables		Vegetables			Vegetables	Vegetables		Vegetables
				Fruits		Cocoa	Rice		Juices			Juices	Frozen Veg		
				Citrus			Meat		Spices				Meats		Meats

ES - Entire Sector

Table 2 : Priority Programmes - Summary of Country Needs Under the Priority Programmes

PROGRAMMES	Antigua & Barbuda	Bahamas	Barbados	Belize	Dominica	Grenada	Guyana	Haiti	Jamaica	St Kitts & Nevis	St Lucia	St Vincent	Suriname	Tdad & Tobago	Dominican Republic
4. CARIFORUM Agricultural Research & Technology Programme															
	Fish	Fish	Fish	Fish	Fish	Fish	Fish		Fish	Fish	Fish	Fish	Fish	Fish	Fish
	Hot Pepper	Citrus		Meat					Root Crops						
	Onions			Banana	Fruits	Fruits	Fruits		Fruits		Fruits	Fruits	Fruits	Spices	Fruits
			Dairy	Juices	Vegetables	Spices	Vegetables		Vegetables		Vegetables	Vegetables	Vegetables		Vegetables
				Fruits		Cocoa	Rice		Juices			Juices	Frozen Veg		Frozen Veg
				Citrus			Meat		Spices				Meats		Meats
5. Business and Export Development Programme															
	Fish	Fish	Fish	Fish	Fish	Fish	Fish		Fish	Fish	Fish	Fish	Fish	Fish	Fish
	Hot Pepper	Citrus		Meat					Root Crops						
				Banana	Fruits	Fruits	Fruits		Fruits		Fruits	Fruits	Fruits	Spices	Fruits
			Dairy	Juices	Vegetables	Spices	Vegetables		Vegetables		Vegetables	Vegetables	Vegetables		Vegetables
				Fruits		Cocoa	Rice		Juices			Juices	Frozen Veg		Frozen Veg
				Citrus			Meat		Spices				Meats		Meats
6. Agricultural Health & Food Safety Infrastructure Programme															
	ES	ES	ES	ES	ES	ES	ES	ES	ES	ES	ES	ES	ES	ES	ES

ES - Entire Sector

Section 8

GAP ANALYSIS – (THE NEEDS OF AGRICULTURE & FISHERIES IN CARIFORUM ONGOING PROJECTS AND PROGRAMMES IN CARIFORUM AGRICULTURE AND FISHERIES AND SUMMARY OF ADDITIONAL SUPPORT REQUIRED FOR AGRICULTURE AND FISHERIES DEVELOPMENT)

8.1 THE NEEDS OF AGRICULTURE AND FISHERIES IN CARIFORUM

Analysis of the individual country reports reveals that the CARIFORUM countries are experiencing a wide range of problems which can be conveniently grouped into categories as follow:

1. Governance and coordination
2. Enhancement of Competitiveness via Supply-side Interventions
3. Building technical competences/institutional capacity
4. Infrastructure and services to support the productive sectors of agriculture and fisheries
5. Business development related issues
6. Trade regulatory related issues

8.1.1 Governance and coordination

Outside of the traditional commodities of sugar, bananas, rum and rice, the governance and coordination of the agriculture and fisheries sector need much improvements if the sectors are to be put on a platform for sustained development. Other commodities such as coffee, citrus, cocoa and spices et al have historically been subjected to some level of industry organization, principally on the basis of commodity board legislation and collective marketing in some member states but the inherent inefficiencies in these models have been exposed in recent times thereby signifying the need for a new approach to develop sustainable growth of these commodities.

In the non-traditional agricultural sector, the predominance of a small farmer subsistent approach has stymied the attempts to development better coordination at the product level. However with greater accent now being placed on commercial development in some member states, improvements are underway via the development of clusters and more focused attention to forge development along the entire product chain in order to enhance product competitiveness. A good example of this approach is seen in the new attempts to reorganize and expand vegetable and root

crop production in some countries. In this context, governance and coordination refer to the “act or means of governing, the office or function of governing, sway or control.” It is a continuing process through which governments, institutions and stakeholders of the Agriculture and fishery sectors – administrators, politicians, farmers, fishers, processors, exporters, distributors and those in affiliated sectors – elaborate, adopt and implement appropriate policies, plans and management strategies to ensure resources are utilized in a sustainable and responsible manner. It could be at global, regional, sub-regional, national or local levels. In the process, conflicting or diverse interests may be accommodated and cooperative action may be taken.

With respect to the agricultural products, greater levels of governance and coordination are needed in terms of the policy, organizational, regulatory, business development and marketing support structures being provided to assist development. In relation to the fisheries sector, governance priorities for maintaining the effectiveness of the sector as a major means of livelihood as well as to develop and exploit the commercial capacity requires the following measures viz:

1. development of national research and management capacity;
2. improving and strengthening data collection, handling and dissemination;
3. addressing new issues such as fleet capacity, technology, capital and management to exploit offshore fishery resources;
4. adopting management measures and resolutions relating to such issues as effort reduction, gear type, minimum sizes, mesh sizes, etc;
5. adopting rules and procedures for boarding, inspection and enforcement;
6. reducing the potential for overfishing, over-capacity and overcapitalization of the sector;
7. taking measures to enable implementation of recent international legal instruments.

The FAO¹ observes that Fisheries governance is more than “conservation and management” or “sustainable development” of a mobile resource. It is a process which values the fisheries resources and anticipates and seeks to manage the existing and future needs and challenges. Second, fisheries governance is a “system”. It is carried out at all levels, and knits into a global network. At one level, international agreements and instruments provide a common framework for regional and national standards, laws, policies and processes. At another level, national governments directly provide for detailed management standards, laws, policies and processes over the fishery resources within their areas of jurisdiction. The experience of all CARIFORUM countries suggests that the Fisheries sector including both marine and aquaculture sub-sectors is stymied principally by the inadequate human and financial resources to enable Fisheries organizations in the region to carry out their mandates satisfactorily.

In general the following interventions related to governance and coordination of the agriculture and fisheries sectors are considered germane to future expansion and growth:

1. Legislative reform to reflect the codification into domestic laws and regulation, the new requirements of the international trade regime and regulatory frameworks and the agreements rules and regulations pursuant to such same.
2. Policy development and Institutional reform to reflect the need for improving the business development processes and to support greater commercialization in the sector
3. Reform of commodity management and marketing arrangements eg, commodity Boards, in order to foster greater efficiency and innovativeness in order to ensure greater flow of benefits to the producers
4. Develop policies and programmes for the focused development of cooperative organizations in Fisheries to improve the commercial prospects of fisher-folk and develop efficiencies in effort and marketing
5. Develop policies and programmes to enhance the formation of clusters in order to accelerate production and export development in targeted non-traditional export sectors

8.1.2 Enhancement of Competitiveness via Supply-side Interventions

The removal of productive supply-side constraints and the building of the productive sector to achieve economies of scale are of paramount importance to economic development in the region generally. With the possible exception of the DR where good progress is being made in developing the agribusiness, the region lacks the scale of production and level of organization to meet market requirements even in market segments where it has comparative advantages. Good examples of this are seen in the case of some spices, condiments eg. hot peppers and tropical fruits.

With the pace of trade liberalization increasing since the 1990s, the region has been experiencing substantial contraction of its major national export sectors. The forces of liberalization and preference erosion are best seen in the bananas and sugar industries respectively but the overall impact has affected all segments including production targeted for domestic consumption eg. dairy and beef production.

The comprehensive assistance required for developing the non-traditional agriculture and fisheries exports sectors in CARIFORUM are not dissimilar to that already provided to the traditional sectors of rum, rice, bananas and sugar. Here however the vast differences in the levels of development and coordination in the traditional industries compared to that in the non-traditional sector has to be recognized as posing an inherent challenge.

The countries have identified a formidable list of issues to be resolved as follows:

(A) Crop and livestock Production related requirements

- Technology (seed and planting material; know-how and technological backstopping; crop nutrition; mechanization; GAP; post-harvest).
- Training along the entire value chain (institutional capacity building to include the training of specialists).
- General support services (financing and improved access to capital; risk management and agricultural insurance; laboratory services; transportation; extension and training).
- Physical infrastructure(irrigation; drainage; access roads; utilities ;
- Labour related –attracting youth; developing entrepreneurship
- Improved marketing services (market intelligence; market promotion; marketing infrastructure (packing houses ,transportation; cold storage);certification; grades and standards)
- Improving value-added in the sectors (technology; product development; factory space; equipment; industry modernization; training; certification; quality standards; packaging and labeling).

(B) Fisheries production related requirements

- Technology related to offshore fishing, aquaculture and Mariculture development
- Training and institutional capacity building
- Resources assessment and management including sustainable resources exploitation; abundance surveys; managing treaty obligations; surveillance and enforcement)
- Capital (vessels, equipment; gears; marine insurance)
- Development of landing sites and appropriate fish markets (Jetty; safe harbours; processing facilities; quality assurance systems)
- Export certification (legislation, regulations; cold chain; inspection; microbial and residue testing)

Targeted support under development cooperation would be needed as follows:

- (a) To enhance export-production capabilities and competitiveness in commodities, agro-processing and services such as agro-tourism linkages.** This would include the diversification (vertically and horizontally) into alternative and dynamic exports (so called new agriculture), as well as the development of the support policies, infrastructure and regulatory mechanisms to facilitate entry into and beneficial participation in global supply chains to the key markets. In this regard the countries require a significant injection of capital to facilitate new investments in agriculture and fisheries activities by making available Low cost capital to provide credit for existing producers who are constrained by the inadequacy of funds to expand production and marketing. The predominance of uncompetitive small farmers producing on hillsides in many countries of the Region also suggests the need for a new commercial thrust in which capital should be provided to enable the start-up of large scale production through cross border investments including joint ventures and the support of Small and Medium Enterprises (SMEs);
- (b) Both capital and technical assistance support are needed for the development of productive clusters.** In this regard the formation of sector/subsector specific producers associations and cooperatives for information sharing on best practices for success in the specific sector, for input procurement and for output marketing is of critical importance. This need is amply demonstrated in the fisheries sector in particular but the intervention would be relevant to all the productive sectors. The development of clusters is already taking shape in some of the countries and is best demonstrated in the DR where the model for agribusiness and the development of export platforms makes cluster development a central component. As demonstrated in the DR clusters should include not only producers but all stakeholders along the entire product chain.
- (c) Capital will be required to facilitate the reduction of input costs for small producer; to assist business start-ups, export marketing facilitation** (including the logistics of getting goods from points of production to points of sale in export markets, as well as export promotional activities) tailored to the needs of producers in specific export sectors.
- (d) Agro-industry expansion and modernization**-resources are needed to retool and modernize this sub-sector and should focus on factory design and HACCP compliance, energy efficiencies; new processing technology and product development; equipment, training; food technology and standards; food hygiene; packaging ;labeling and traceability

8.1.3 Building technical competences/institutional capacity

Building the technical capacities in the Ministries of agriculture and fisheries and the strengthening and reorientation of the national extension services and technology facilitation arrangements for producers are also critical for increasing production and marketing efforts. Similar capacity building is required among producers and exports and the participants along the entire product chain.

Given the greater level of competitiveness required to operate successfully in the sector there will be increased attrition especially among small farmers .To enhance sustainable rural development and livelihoods, greater emphasis should be placed on building the capacity of Ministries and agencies to implement rural diversification strategies and programmes. Here it is also recognized that the aging population of farmers and the current uncertainties in the sector which dissuades youth participation pose a significant challenge which requires innovative solutions through the provision of incentives to build entrepreneurship in the sector and the provision of support to develop innovative new enterprises.

8.1.4 Infrastructure and services to support the productive sectors of agribusiness and services

There is a wide range of infrastructural problems which impede the development of trade on the domestic intra-regional and international markets. These must be resolved if the sectors are to be developed to achieve full potential. The main infrastructural needs are as follows:

Physical infrastructure (e.g. Access roads, ports, Landing sites and fish processing and marketing facilities; sea transport, telecommunication, energy and electricity, water supply and sanitation, irrigation and drainage; post-harvest facilities including packaging houses and airport and seaport facilities to facilitate trade ;cold storage; modern abattoirs ; factory space etc.).

Trade support institutions –Allied to the above infrastructural need is the absence in many countries of adequately developed trade support institutions - (e.g. customs, trade finance, marketing and distribution, research, standards and monitoring, etc.). Upgrading of the physical infrastructure is of particular urgency as many producers see this as a major impediment to their competitiveness. Given the high cost involved priority has to be given to building those critical aspects that are immediately required for trade development e.g. landing sites for fishery development ,irrigation and drainage, packaging and post-harvest and facilities which will immediately impact competitiveness.

8.1.5 Business development related issues

The Business and trade development component would include accessing business and transport Information; market intelligence; identifying the requirements for new export goods; intellectual property protection issues; product design and quality assurance; formation of strategic alliances and partnerships; customs procedures and trade facilitation; effective use of information and computer technology; investment promotion, analysis and institutional support for trade in services, business support services and institutions, public-private sector networking, e-commerce, trade finance, and trade promotion.

Developing export platforms- Increasing exports to the EU market will pose significant challenges to producers who are accustomed to a less demanding set of requirements even when exporting to

North American markets. The high cost of tailoring goods for the EU market – e.g. developing certification standards e.g. EUREPGAP; GLOBAL GAP organics and fair-trade standards, special accreditation for seafood exports; special labeling and packaging, retooling factories are significant barriers to increasing trade to the EU markets.

To complement and support the development of Cluster and cooperatives, a programme aimed at developing export platform for targeted commodities and markets should be developed to assist the private sector to grasp the new trading opportunities. Already this approach is being taken in the DR in which clusters formed around greenhouse vegetable production; mango; pineapple; coffee; cocoa and other commodities are supported to mount export platforms for penetrating targeted markets.

The focus of the intervention could be on providing institutional development support for exporters who are desirous of developing private sector groups and sector-specific associations beyond the major industries (i.e. Rice, rum, poultry, sugar and bananas) where functional associations currently exist. Planned interventions in this regard could include the provision of services to conduct market research and develop market entry strategies; subscription to marketing information data bases; provision of training and network mechanisms and provision of direct market support for pre-shipment financing and export insurance to name some of the possible interventions. The development of export platforms could be opportune for areas such as fisheries; vegetables; spices and condiments; root-crops; tropical fruits eg. papaya, mango; ornamental horticulture ; snack foods among others.

The building of export platforms will require support in other areas such as the analysis of EPA protocols and annexes; developing negotiating skills, supporting attendance at trade shows and familiarization tours to the EU markets.

8.1.6 Trade regulatory related issues

As observed previously the EPA offers the possibility of tariff and quota free access into the EU markets for all CARIFORUM exports. This notion however masks the significant non-tariff barriers which CARIFORUM exporters must overcome to develop a sustainable export thrust. A significant challenge in this regard is the region's ability to meet the stringent SPS standards and the level of certification required for productions into the EU markets. Here it is important to note that the development of an appropriate and adequate SPS infrastructure is a pre-requisite for expanding domestic and intra-regional trade as evidenced by the fact that the failure to implement harmonized Sanitary/Phyto-Sanitary protocols for agricultural commodities has been singled out as creating a barrier to the growth of the intra-regional trade in these commodities. This speaks to the urgent need for building the SPS infrastructure with special emphasis on the development of National agricultural health and food safety systems (NAHFSAs). In this regard the countries have reported varying levels of preparedness towards revamping their SPS regime. Belize with its functional BAHAM model and Suriname with its recent efforts to implement well needed SPS infrastructure are ahead in terms of

the required development .Other countries including Jamaica, Antigua and Barbuda, Guyana and the Bahamas which currently export seafood to the EU still have some way to go in establishing fully functional NAHFSAs.

Outside of countries such as the DR where organic export production of bananas and other crops is highly developed; the Windward island group where fair- trade bananas and other fresh produce are being developed, and with the possible exception of commercial enterprises in assorted member states, the region lags behind the developed world with respect to the development and certification of standards. Exporters have highlighted the high cost of gaining certification and have been calling for a regional laboratory testing and certification to be established within the region according to the various EU standards (e.g. Hazard Analysis and Critical Control Points (HAACP), Global Good Agricultural Practices (GLOBALGAP)) relating to export products, especially food products. This need is more acute in fisheries including aquaculture, fruit production, agro-processing; dairy and livestock industries.

Major intervention should be targeted as follows:

1. Develop grades, standards and SPS protocols; implement Good Agricultural Practices and regional/sub-regional/national certification programmes as desirable and feasible
2. Support capacity-building initiatives to include legislative reviews and modernization, the provision of supporting facilities, training and exchange of expertise.
3. Support for the private sector and individual farm/processing enterprises to establish the necessary protocols for design and management of the enterprises as well as to employ the various measures and guidelines for improving farm infrastructure and the implementation of the various codes for sanitary and phyto-sanitary measures in the production/rearing, processing activities, transportation and shipping activities (*from farm to fork*).
4. Strengthen the capacity of CARIFORUM States to implement provisions of the Agreement and the remedial action to be taken will be constrained by the inadequacy of human, financial and technical resources. Resources should be provided to construct, equip and staff the required laboratories, abattoirs, packing facilities, port health facilities, monitoring, inspection and agricultural extension and research services.
5. ***Intellectual property and geographical Indicators***-In addition to the SPS issues highlighted above, the EPA includes specific provisions related to development-related issues such as traditional knowledge, biodiversity or transfer of technology such as a provision that allows farmers to save, use and exchange farm-saved seed or propagating material rather than buying new seed each year;

A key objective of the Agreement is the strengthening of regional capacity for dealing with intellectual property issues. Priority in co-operation provisions is placed on improving the regional intellectual property regulatory capacity in the CARIFORUM countries and supporting the regional implementation of intellectual property commitments undertaken. With regards to other Intellectual Property rights for which there are no major international conventions, i.e. geographical indications (GIs) and designs, as well as on enforcement, the Agreement sets out important provisions. With respect to Geographical Indications (which protect the use of name or sign which corresponds to a specific geographical location or origin) there is a rendezvous clause according to which the CARIFORUM States will establish a system of protection of GIs by 2014. In the meantime provisions aim at fostering cooperation to identify and promote GIs in CARIFORUM via the active involvement of the EPA Trade and Development Committee. During the country visits it became apparent that many of the countries have not yet embarked on any developments in this area.

The region will need to take advantage of the Enforcement provisions which are the most elaborated provisions covering the measures and procedures to be put in place to ensure effective protection and enforcement of (existing) IPRs by the authorities or before the courts to ensure CARIFORUM and EU right holders benefit from the rights conferred in the Agreement.

The agreement expressly states that their enforcement should take into account the development needs of the CARIFORUM countries and provide for an adequate balance of rights and obligations between right holders and users.

The major challenges, status, Gap analysis, ongoing programmes and projects and summary of the additional support required are presented in ANNEX 4.

8.2 DETERMINATION OF ADDITIONAL SUPPORT REQUIRED FOR AGRICULTURE.

Additional support for developing the agriculture and fisheries sector of CARIFORUM have been determined from the forgoing assessments of country needs; the analysis of the EU requirements for fresh fruit, vegetables and seafood and the available opportunities for CARIFORUM. The details together with the strategic framework and action plan for development cooperation assistance for CARIFORUM agriculture and fisheries are presented in Annex 5.

Section 9

Priority Programmes

9.1 Introduction

Priority programmes to support agriculture and fisheries development have been determined in accordance with the thematic framework for provision of Development Cooperation Assistance under the EPA for Agriculture and fisheries as follows:

- Improvement in the competitiveness of potentially viable production;
- Development of export marketing capabilities;
- Compliance with and adoption of quality standards;
- Promotion of private investment and public-private partnerships in potentially viable production;
- Compliance with national, regional and international technical, health and quality standards for fish and fish products;
- Strengthening the scientific and technical human and institutional capability at regional level for sustainable trade in fisheries products, including aquaculture;
- The process of dialogue.

The EPA offers the opportunity for the Caribbean countries to improve the competitiveness of potentially viable production, including downstream processing, through innovation, training, promotion of linkages and other support activities, in agricultural and fisheries products, including both traditional and non-traditional export sectors. Within the framework of European Community funding instruments, both Parties will decide on the programming of funds, in complementarity to the actions already funded, and with respect to the still available funds under the Special Framework of Assistance (SFA), to help the CARIFORUM banana industry to further adjust to the new challenges, including activities aimed at increasing the productivity and competitiveness in areas of viable production, the development of alternatives both within and outside the banana industry, addressing social impact arising from changes in the sector and for disaster mitigation.

While the needs of the countries are great, a pragmatic approach for delivering urgent assistance requires that these needs be prioritized. Consequently the following priority programmes are considered critical to the development and expansion of agriculture and fisheries in the region. The overall thrust of the programmes

would be to expand the range and diversity of agricultural and fisheries products; enhance productivity and develop economies of scale in production; restructure and Strengthen Government Institutions and Farmers' Organization; Extension services and research; post-harvest and agro-processing and crop marketing facilities. The additional resources being sought will supplement resources already programmed under SFA and other commodity support programmes. It is envisaged that timely implementation of these programmes will improve the competitiveness and market orientation of the sector, increase export earnings ,reduce income fluctuations resulting from crises, promote consumption thereby contributing to improved public health and enhance environmental safeguards. With respect to agricultural insurance the consultants recommend the Development of a CARIFORUM Risk Insurance Facility for Agriculture and Fisheries as a good practical approach to the problem, given the high cost of agriculture insurance and the level of risk involved. This is a long term programme for which a policy framework and consensus among the countries are needed in order to design and implement same.

9.2 Programme to increase competitiveness and productivity in CARIFORUM Agriculture and fisheries production.

Grants and revolving loan funds for the expansion of orchard crops; greenhouse vegetable production; root crops; Spices and condiments; livestock; agro-tourism linkages; farm mechanization; sea transportation to enhance intra-regional trade; support for cross border investments ; financial support to develop production clusters

9.3 Programme for upgrading critical fisheries infrastructure and capacity building- CARIFORUM Fisheries Fund (CFF)

The Fisheries Fund (CFF) is intended to help secure a sustainable and profitable fisheries industry. It grants financial support with a view to helping the industry adapt to changing circumstances.

Modernizing fishing vessels; Developing landing sites; Improving product quality; Investment in aquaculture and diversification of farmed species; Marketing fisheries products; Improvements to processing and port facilities; Pilot and collective actions by industry; The development of sustainable fisheries; and development support towards fisheries-dependent communities.

9.4 Establishment of Agro-processing modernization programme

The agro-processing modernization programme will support the development of value added through the provision of financial and technical support for product development, food standards and certification; HACCP and other international standards application; packaging and labeling; retooling of factories; training and technology development; provision of market support.

9.5 CARIFORUM Council for Science, Technology and Innovation and a contestable fund for science technology and innovation

The proper planning and coordination of agriculture research, science technology and innovation. Competitive grant funding to support priority research and development activities in public and private research institutions as well as on individual farms and in production clusters. Research should be relevant and of high priority in developing product chains. Fund should also support the commercialization of research and development findings to develop new industries and improve technology transfer.

9.6 Business development and Export Promotion Programme

Market studies; market entry strategies; export platforms; Intellectual property protection issues; Product design and quality assurance; Formation of strategic alliances and partnerships; Customs procedures and trade facilitation; effective use of information and computer technology; investment promotion, analysis and institutional support for trade in services; business support services and institutions; Public-private sector networking, e-commerce, trade finance, and trade promotion; Developing export platforms (training to product clusters; validation of product in targeted markets; insitu marketing negotiations). Establish comprehensive marketing database that is accessible, user friendly and constantly updated.

9.7 Agriculture Health and Food Safety Infrastructure (SPS/FS) Programme

Develop grades, standards and SPS protocols; implement Good Agricultural Practices and Regional/Sub-Regional/National Certification Programmes as desirable and feasible; Support a programme for the implementation of Good agricultural practices (GAP); Support for the development of NAHFSA's; Support to operationalize the CAHFSA; Support for strengthening of the Bureau of Standards (BOS); Support capacity-building initiatives to include legislative and regulatory reforms; the provision of supporting facilities, training and exchange of expertise. Support for the development of Geographical Indicators and the protection of intellectual property rights

The details of the programmes are presented in the form of Concept Notes in Annex 6.

APPENDICES

APPENDIX 1

MEMBER STATES PRIORITY LIST OF COMMODITIES

Appendix- 1

(Blue) List of Commodities from literature and CARICOM (M Kallo)

Country	Traditional Export	Non traditional Export	Priority List of Commodities Domestic Food Security/ Investments	Major imports
Antigua and Barbuda			1. Bell Pepper 2. Carrot 3. Hot Pepper 4. Melon 5. Onion 6. Pineapple 7. Sweet Potato 8. Tomato	Fruits, vegetables, meats, dairy
The Bahamas	Rum, fish		Poultry	Beef, poultry, eggs, dairy, fruits, vegetables
Barbados			1. Bananas 2. Beans 3. Beef 4. Cotton 5. Crucifers (Cabbage, Chinese Cabbage, Cauliflower and Broccoli) 6. Cucurbits (Cucumbers, Pumpkins, Melon, Squash and Christophene) 7. Fish 8. Fresh Herbs 9. Fresh Milk 10. Hot Peppers 11. Lamb 12. Okras 13. Onions 14. Pork 15. Poultry (Chicken and Turkey) 16. Root Crops (Sweet Potatoes, Yams, Cassava and Eddoes) 17. Sugar 18. Sweet Peppers 19. Table Eggs 20. Tomatoes	banana
Belize	Sugar, banana, citrus	Papaya, hot pepper Cashew Sapodilla Soursop Pitahaya	Coconut, poultry, mutton, corn, beans, rice, sugar cane, citrus, livestock - poultry, pork, dairy, beef, sorghum, 1. Fruits (Pineapple, Papayas, Pitahaya, Cacao and Avocado) 2. Grains Cereals(Beans(Different varieties), Corn and Rice) 3. Spices (Hot Pepper) 4. Tubers Roots(Plantain)	Irish potato, Celery, Onion, Broccoli, Carrots, Cauliflower Garlic, Grapes
Dominica	bananas,	plantains, dasheen, avocados	plantains, dasheen and avocados, plantain, coconut oil, oranges, mangoes, root crops, fish	

Dominican Republic	coffee, cocoa, sugar		rice, beans, bananas, fruits, vegetables, milk, coffee, cocoa, and sugar, fish	
Grenada	Nutmeg, cinnamon, clove, pimento, bay leaf	Cocoa, fish	tropical fruits, vegetables and root crops, poultry , pork, small ruminants, fish	poultry , pork, small ruminants
Guyana	Sugar, rice	Fish- prawn, seabob, fin fish	oil palm, coconuts, green vegetables, ground provision, fruits and flowers, livestock (beef, pork, small ruminants, poultry meats and eggs), aquaculture, agro-processing, honey, peanuts, cocoa, cashew, cassava, coffee	
Haiti		Mango	Fruits, poultry, cocoyam	Beef, poultry
Jamaica	Sugar, bananas, coffee, citrus, cocoa, pimento, rum	Yams, dasheen and sweet potatoes, hot peppers, ackee, papaya	Yams, dasheen, sweet potatoes, milk, beef, mutton / chevron, fish, pork, poultry – eggs, meat, honey, herbs & spices 1. Cassava 2. Dasheen 3. Ginger 4. Hot Pepper 5. Irish Potato 6. Onion 7. Red Peas 8. Sorrel 9. Sweet Potato 10. Yam	Rice, wheat, soya, maize, milk, beef, mutton / chevron, fish, pork
Montserrat			1. Honey 2. Meat (Goat and Sheep)	
St. Kitts and Nevis			banana, arrowroot, flowers and foliage plants, fruits, vegetables, plantains, sweet potatoes	
St. Lucia	banana		Fruit and vegetables- Cocoa beans, Banana, Copra, Avocado, Grapefruit, Breadfruit, Spinach, Lime, passion fruit, Mango, Paw paw, Watermelon, Musa, Cabbage, Lettuce, sweet pepper, Tomato, Chinese cabbage, Cucumber, eggplant, carambola, cantaloupe, guava, christophene, okra pumpkin, beans, seasoning pepper, snow peas, dasheen, sweet potato, yams/banja, chive. Fish and sea-foods- Tuna, dolphin fish, king fish, flying fish, shark, lobster Meats - Sheep, pork, mutton, chevron, poultry	Fish, dairy
St. Vincent	banana			
Suriname*	banana	Fish- finfish, sea bob, shrimp, prawns, bananas, rice	Banana, fruits, vegetables 1. Fruits (Bananas, Lemon, Passion Fruit, Mango, Pineapple and Orange) 2. Rice 3. Small Ruminants 4. Vegetables(Bean Carilla, Cowpeas, Eggplant and Lady	

			Finger)	
Trinidad and Tobago	Cocoa,	Cassava, Sweet Potato, Pumpkin Hot & Seasoning pepper, Papaya Dwarf pommecythere Coconut, Herbs Rabbit, Tilapia	Yam, Dasheen, Tomato Lettuce, Ochro, Cucumber, Melongene Eddoes, Cabbage Green pigeon peas, Carrots, String beans 1. Black-eye Peas 2. Cabbage 3. Cucumber 4. Dasheen 5. Eddoe 6. Pumpkin 7. Red Kidney Bean 8. Sweet Pepper 9. Sweet Potato 10. Tomato 11. Yam	Rice, wheat, soya, maize, milk, beef, mutton / chevron, fish, pork, Irish potatoes, citrus, banana, root crops

SOURCE: M. KALLOO, DEPUTY PROGRAMME MANAGER, AGRICULTURAL DEVELOPMENT, CARICOM SECRETARIAT

APPENDIX 2

1.0 Eurep GAP -1997

Is a quality standard that began in 1997 as an initiative of large European retailers belonging to Eurep to respond to consumer concerns about food safety, environmental protection, workers' health, safety and welfare and animal welfare (mad cow disease, use of pesticides, genetically modified organisms (GMOs), etc.). The objective was to develop voluntary standards and procedures for the global certification of GAPs. It works by:

- Encouraging adoption of commercially viable Farm Assurance Schemes, which promote the minimization of agrochemical inputs;
- developing a GAP framework for benchmarking existing assurance schemes and standards, including traceability;
- providing guidance for continuous improvement and the development and understanding of best practice;

EurepGAP certification covers the whole agricultural production process of the certified product, from before the plant is in the ground (seed and nursery control points) to non-processed end product (produce handling control points).

EurepGAP stresses the importance of residue screening, setting up a standard on MRLs and developing guidance notes to help farmers and growers be better able to demonstrate that their produce meets destination MRL requirements.

- establishing a single, recognized framework for independent verification; and
- communicating and consulting openly with consumers and partners, including producers, exporters and importers.

2.0 Global GAP – 2009:

The challenge of globalising markets is nowhere greater than in the primary food sector. GLOBALG.A.P (formerly known as EUREPG.A.P) has established itself as a key reference for Good Agricultural Practices (G.A.P.) in the global market place.

GLOBALG.A.P, a private sector body, sets voluntary standards for the certification of agricultural products around the globe. The aim is to establish ONE standard for Good Agricultural Practice (G.A.P.) with different product applications capable of fitting to the whole of global agriculture. GLOBALG.A.P is a pre-farm-gate standard, which means that the certificate covers the process of the certified product from farm inputs like feed or seedlings and all the farming activities until the product leaves the farm. GLOBALG.A.P is a business-to-business label and is therefore not directly visible to consumers. The GLOBALG.A.P standard is subject to a three year revision cycle of continuous improvement to take into account technological and market developments.

3.0 Safe Quality Food (SQF 1000)

The SQF 1000 Code of the year 2000 is designed for Primary Producers. It enables Producers to demonstrate that they have implemented responsible production practices to deliver safe food that meets the quality standards specified by their customer.

Certification of SQF 1000 Systems by a Certification Body is not a statement that the Certification Body guarantees the safety of a Supplier's food or service. It is not a guarantee that all food safety regulations are being met, or will continue to be met, at all times. It is a statement that the Supplier's Food Safety Plans have been implemented in accordance with the HACCP Method and applicable regulatory requirements and that they have been validated and verified and determined effective to manage food safety¹³.

¹³ http://www.sqfi.com/documentation/SQF1000_Code.pdf

4.0 : ISO 9000

ISO-9000 of the year 2004 currently has three quality standards: the ISO-9000:2000, the ISO-9001:2000, and the ISO-9004:2000. Of these, only the ISO-9001:2000 outlines specific requirements for compliance, while the ISO-9000:2000 and the ISO-9004:2000 merely present information or guidelines¹⁴.

All of these quality standards are process-oriented, and not product-oriented. This means that ISO-9000 is more particular about how a company conducts its processes, and not what products it ships or level of product quality it has. The main objective of ISO is to facilitate international trade by providing a single internationally-accepted set of standards for everybody's reference.

5.0: ISO 22000

ISO 22000 of the year 2005 is a management system based on ISO 9000:2000, which enables a food business to plan, implement, operate, maintain and update a system to provide safe end products and demonstrate conformity with applicable regulatory requirements¹⁵. It defines responsibilities which include management and encompasses commitment for food safety policy and management system planning. In 2001 ISO initiated the family of ISO 22000 (2001) standards, which are:

- ISO 22000:2005 – *Food safety management system – Requirements*
- ISO 22003:2007 - *Requirements for bodies providing audit and certification of food safety management systems*
- ISO TS 22004:2005 - *Guidance on the application of ISO 22000*
- ISO 22005 – *Traceability in the feed and food chain (to be published in July 2007)*

6.0 Tesco Natures Choice

Tesco Nature's Choice of 1991 is a private standard established by a supermarket chain, it provides requirements which all fresh produce growers around the world must achieve in order to supply them with produce¹⁶. The standard was developed to ensure top quality fresh produce comes from growers who use good agricultural practices, operate in an environmentally responsible way and with proper regard for the health and well being of their staff. Therefore growers have to demonstrate that they operate in the manner which meets these requirements, laid down by Tesco in the Nature's Choice Code of Practice. The **Tesco Natures Choice** standard is made up of sections which focus must be directed by producers, which are:

- | | |
|--|--|
| <ul style="list-style-type: none">• Rational use of crop inputs such as fertilisers and plant protection products• Recycling, re-use and energy conservation• Protection of human health | <ul style="list-style-type: none">• Pollution prevention• Wildlife and landscape conservation |
|--|--|

7.0 International Food Standard (IFS)

German and French food trade associations developed the International Food Standard (IFS)¹⁷. The standard focuses the various requirements of retailers on one standard. Benefits of the standard include enhanced transparency along the food chain and a reduced number of customer

¹⁴ <http://www.siliconfareast.com/iso.htm>

¹⁵ (www.iso.org ppt)

http://search.wto.org/search?q=ISO+9000+standard&site=English_website&btnG=Search&entqr=0&output=xml_no_dtd&sort=date%3AD%3AL%3Ad1&client=english_frontend&numgm=5&ud=1&oe=ISO-8859-1&ie=ISO-8859-1&proxystylesheet=english_frontend&proxyreload=1

¹⁶ <http://www.tescofarming.com/tnc.asp>

¹⁷ <http://www.bsi-emea.com/Food+Safety/Standards/IFS.xalter>

audits resulting in cost savings. Certification to IFS is done by BSI Management Systems, an independent third-party and helps suppliers demonstrate to retailers that their product safety, and quality and legal obligations have been fulfilled.

IFS is divided into five chapters and the following lists the subject requirements you need to meet to comply with the standard:

• Senior Management responsibility	• Production process
• Quality management system	• Measurements, analysis and improvements
• Resource management	

The structure of IFS corresponds to ISO 9001, but with a focus on food safety, HACCP, hygiene, the manufacturing process and business surroundings.

8.0 Dutch HACCP-based Food Safety System Standard

In 1996, this certification scheme was launched and accepted by RvA, and ISACert was the first certification body to be accredited for that scheme. The scheme has particular value for food business operators that grow from small businesses into larger more industrially oriented companies. In 2006, the scheme owner (SCV), together with Dutch government, began a project to modify this scheme so as to gain official recognition from the Dutch government. International food industry and certification bodies confirm the importance of this development.

Requirements include:

• Management responsibility	• Parameters and Critical Limits
• Product Information	• Monitoring and measuring
• Process information	• Corrective Actions
• Pre-requisite program	• Validation
• Hazard Analysis	• Verification
• Control Measures	• Documentation and records

9.0 British Retail Consortium (BRC) 1998

In 1998 the British Retail Consortium (BRC), responding to industry needs, developed and introduced the BRC Food Technical Standard to be used to evaluate manufacturers of retailers own brand food products. It is designed to assist retailers and brand owners produce food products of consistent safety and quality and assist with their 'due diligence' defence, should they be subject to a prosecution by the enforcement authorities. Under EU food Law, retailers and brand owners have a legal responsibility for their brands.

10. Conservation and Management of straddling fish stocks and highly Migratory fish stocks management of high seas fisheries (ICCAT)

It is recognized that in many areas, some resources are overutilized and that there are problems of unregulated fishing, over-capitalization, excessive fleet size, vessel reflagging to escape controls, insufficiently selective gear. Thus, Cariforum states are expected to adopt the Agreement for the implementation of the provisions of The United Nations convention on the Law of the Sea of 10 December 1982 relating to the conservation and Management of straddling fish stocks and highly Migratory fish stocks management of high seas fisheries. States are to commit themselves to responsible fisheries, and the conservation and management of straddling fish stocks and highly migratory fish stocks beyond Areas under national jurisdiction¹⁸ and to collaborate with the International Commission for the Conservation of Atlantic Tunas (ICCAT).

¹⁸ Source: United Nations Conference On Straddling Fish Stocks And Highly Migratory Fish Stocks Sixth Session., New York, 24 July-4 August 1995 Distr.General., A/CONF.164/37., 8 September 1995., Agreement For The Implementation Of The Provisions Of The United Nations Convention On The Law Of The Sea Of 10 December 1982 Relating To The Conservation And Management Of Straddling Fish Stocks And Highly Migratory Fish Stocks

The International Commission for the Conservation of Atlantic Tunas is responsible for the conservation of tunas and tuna-like species in the Atlantic Ocean and adjacent seas. About 30 species are of direct concern to ICCAT including Atlantic bluefin, skipjack, yellowfin, albacore and bigeye tuna; swordfish and white and blue marlin, sailfish and spearfish and mackerels¹⁹. Through the Convention, it is established that ICCAT is the only fisheries organization that can undertake the range of work required for the study and management of tunas and tuna-like fishes in the Atlantic²⁰.

Cariforum States are thus expected to apply the precautionary approach widely to conservation, management and exploitation of straddling fish stocks and highly migratory fish stocks and to participate in collection and provision of information and cooperation in scientific research. Further, states shall ensure that fishing vessels flying their flag must collect and submit in a timely manner, scientific, technical and statistical data with respect to fisheries for straddling fish stocks and highly migratory fish stocks²¹.

11. Illegal Fishing

Illegal, unreported and unregulated (IUU) fishing is considered a threat to the sustainable exploitation of living aquatic resources. The European Commission (EC) Regulation 1005/2008 ('the IUU Regulation') was designed to prevent, deter and eliminate Illegal, Unreported, and Unregulated (IUU) fishing. It requires Fisheries Management Authorities to provide a '**catch certificate**' for wild-caught seafood imported into the European Union (EU). The catch certificate has been designed to demonstrate that the fish and fisheries products have been obtained in compliance with established conservation and management measures. The EC have released Commission Regulation (EC) No 1010/2009 of 22 October 2009 laying down detailed rules for the implementation of Council Regulation (EC) No 1005/2008 establishing a Community system to prevent, deter and eliminate IUU fishing. The regulation came into effect in January 2010²².

12. Rules of Origin

The basic requirement under the "Rules of Origin" criteria is that a product must not contain more than 15% to 30% of its final value or "ex-works" price from another State for it to receive preferential access. This is so particularly when it comes to "cumulation". Cumulation is a deviation from basic rules of origin which promotes and enhances trade among free trade partners. Basic origin rules specify that only products entirely produced in one country, using only materials from that country, or products which have been treated in a regulated way in that country, can be regarded as originating products. These products are eligible to benefit from preferential treatment under the EPA. In other words, this creates the potential for the CARIFORUM region to extract more value-added as goods can be further processed within before final export to the EU²³.

13. FAO Code of Conduct for Responsible Fisheries

The EU subscribes and requires countries wishing to enter their fish market to conform to the FAO Code of Conduct for Responsible Fisheries. This voluntary code, adopted in 1995, provides principles and standards applicable to the conservation, management and development of all fisheries among others. It also reflects many of the provisions of UNCLOS and the Agreement for the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks. Further impetus was given to the Code when the FAO Ministerial Meeting on Fisheries (Rome, March 1999) adopted the Rome Declaration on the Implementation of the Code of Conduct for Responsible Fisheries²⁴.

¹⁹ <http://www.iccat.int/En/>

²⁰ Ibid

²¹ **Source:** United Nations Conference On Straddling Fish Stocks And Highly Migratory Fish Stocks Sixth Session., New York, 24 July-4 August 1995 Distr.GENERAL., A/CONF.164/37., 8 September 1995., Agreement For The Implementation Of The Provisions Of The United Nations Convention On The Law Of The Sea Of 10 December 1982 Relating To The Conservation And Management Of Straddling Fish Stocks And Highly Migratory Fish Stocks

²² Full details of the regulation can be found in < http://www.daff.gov.au/__data/assets/pdf_file/0019/1453411/fish09-11.pdf>.

²³ http://www.ilocarib.org.tt/trade/documents/understanding_epa/overview/L.181.pdf

²⁴ <http://www.ilo.org/public/english/dialogue/sector/techmeet/tmfir99/tmfir1.htm>

14. CITES

The EU subscribes and also requires countries wishing to enter their fish market to conform to the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). Their aim is to ensure that international trade in specimens of wild animals and plants does not threaten their survival. For example, The Bahamas is a party to CITES and has listed the Queen Conch as an endangered species²⁵. The Department of Fisheries of the Bahamas also restricts / prohibits sales of the Nassau Grouper from the first of December to the end of February (the spawning season) as part of a measure to ensure sustainability of the commercial fishery for the benefit of present and future generations. The species is on the International Union for Conservation of Nature and Natural Resources (IUCN) Red List as endangered and is only managed in a few countries at the national level with poor to little enforcement. The Bahamas made a commitment to further assess the status of the species and it appears that the country retains the largest remaining fishery of this species. The Nassau grouper is also addressed in the Specially Protected Areas and Wildlife (SPAW) protocol, the regional equivalent of CITES in the Caribbean.

- Appendix I include species threatened with extinction.
- Appendix II includes species not necessarily threatened with extinction, but in which trade must be controlled in order to avoid utilization incompatible with their survival.

²⁵ <http://www.cites.org/eng/disc/how.shtml>

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Project Funded Under the European Development Fund



FINAL REPORT

Annex 2: Technical Annexes

Support for the Forum of Caribbean ACP States (CARIFORUM) In the Areas of Agriculture and Fisheries in Relation to the Implementation of the Commitments Undertaken, and Opportunities Created by the Economic Partnership Agreement (EPA)

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Caribbean Trade and Private Sector Development Programme

Phase 2

Submitted to:

Caribbean Export Development Agency on Behalf of the CARIFORUM
Directorate of the CARICOM Secretariat

By

A-Z Information Jamaica Limited

December 21, 2010



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Annex 1

Major Tenets of the EPA; the Chapter on Agriculture

2.1 Main Objectives:

The European Community – Caribbean Region, Regional Strategy Paper and Regional Indicative Programme (2008-2013) states that the EPA main objectives of the EPA are to strengthen the regional integration process and assist with economic development in the region through commitments and improving access to the EU market via a duty-free, quota-free trade regime and simplified rules of origin for CARIFORUM goods, including unprecedented access for certain services and service providers.

In addition to market access in goods and services, the agreement covers a comprehensive set of provisions on trade rules and disciplines (e.g. Technical Barriers to Trade, Sanitary and Phytosanitary Measures, Agriculture and Fisheries, Competition).

2.2 Market Access: In market access terms, the EPA established a WTO-compatible free trade area between the EU and the CARIFORUM countries. This implies significant trade liberalization, even though the need for an element of asymmetry both in terms of schedules and cover has been recognized through provision of transition periods up to 25 years, and for the exclusion of a number of sensitive products.

2.3 Transition Programme: Already the preparatory phase (2002-2007) has been used for capacity-building, supporting regional integration, strengthening of regional organizations and enhancement of competitiveness, inter alia through a range of activities under the 9th EDF Regional Programme, all-ACP programmes as well as sector-specific programmes, for instance to facilitate transition in the banana, sugar, rice or rum industries¹.

2.4 New CARICOM/DR Relations and the EPA: CARIFORUM focuses on the regional cooperation dimension of Caribbean development with an emphasis on improving economic and other forms of cooperation between CARICOM and the Dominican Republic. In addition, emphasis will be placed on policy formulation to promote deeper and expanded cooperation between the Dominican Republic and CARICOM. Cooperation is taking place on two levels:

The first level of cooperation is the CARICOM/Dominican Republic Free Trade Agreement (FTA), the objective of which is to develop trade in goods and services and the promotion and protection of investments between CARICOM and the Dominican Republic.

At the second level, the focus is on possible forms of deepened and widened cooperation between the Dominican Republic and CARICOM.

¹ Review of the European Community – Caribbean Region, Regional Strategy Paper and Regional Indicative Programme (2008-2013)).pp23

In the medium term, the CARIFORUM policy is to complete negotiations on the CARICOM/Dominican Republic FTA and seek its full implementation. In addition, emphasis will be placed on policy formulation in respect of possible forms of deeper integration between the Dominican Republic and CARICOM.

Further, given the special circumstances of Haiti and its geographic proximity to the Dominican Republic, CARIFORUM economic cooperation policies aim to strengthen Haiti/Dominican Republic cooperation particularly in respect of trans-border trade, services including labour, tourism and joint².

2.5 Required Institutional Reform

Short Term: The CARIFORUM States will face the need to undertake a variety of reforms in the implementation of the EPA. The most immediate challenge will involve (i) the development of national and regional institutional,

(ii) legal and regulatory and human resource capacities to implement commitments made in the EPA.

For instance, non-harmonized SPS constitutes a significant trade barrier. Harmonized SPS will provide a mechanism for addressing regional food safety, helping to prevent plant and animal disease across the borders.

² Review of the European Community – Caribbean Region, Regional Strategy Paper and Regional Indicative Programme (2008-2013)).pp24

Agricultural Export Development under the EPA

3.1 Introduction

The Economic Partnership Agreement (EPA) between the CARIFORUM and the European Union is intended to introduce non-reciprocal trade relationships between the parties that are compatible with WTO guidelines. As a successor agreement to the COTONOU, the EPA Agreement also includes a developmental component under development cooperation in addition to trade in goods, trade in services, and trade related issues. It is anticipated that on implementation, it will facilitate a more dynamic export and import market for the Region.

3.2 Major Tenets of the Agreement

The agreement is fundamentally different from the previous COTONOU AGREEMENT and is characterized by the following elements:

Reciprocity: Unlike the COTONOU Agreement, reciprocity has been included in the Economic Partnership Agreement (EPA). The EPA is WTO-compatible and covers "essentially all trade" and is to be implemented over 10 to 12 years. Countries were invited to sign as groups, or as individual countries.

Trading partners instead of development partners: With the aim of being non-discriminatory, the agreement is open to all developing countries, thereby effectively ceasing the existence of the previous 'ACP group' in favour of bilateral agreements which should help to foster trading partners instead of development partners. Regional exporters have secured duty free and quota free access to the markets of the EU for almost all products with the exception of rice and sugar.

Market Liberalization: Caribbean markets will now have to open up to EU goods, removing some duties and quotas, thus liberalizing "substantially all trade" in conformity with the WTO agreement.³ As noted previously the CARIFORUM in its tariff commitments has managed to secure long transition periods, a phased introduction of tariff dismantling, exemptions from liberalization for sensitive products and a strong asymmetry between EU and CARIFORUM.

3.3 Provisions on trade rules and disciplines in the EPA⁴

Provisions on trade rule and disciplines as they relate to Agriculture and Fisheries highlighted below:

Part II: Trade and Trade-Related Matters: Title I: Trade in Goods

Chapter 1: Customs Duties (Articles 9-22)⁵

Article 14 asks for removal of custom duties on originating exports. CARIFORUM has agreed that Guyana and Suriname, which currently apply export duties, will remove these on goods exported under the EPA within three years of the date of application of the EPA.

Article 16 states that the provisions dealing with Market Access for Goods under the EPA allow for the reciprocal grant of tariff preferences by the EC and CARIFORUM with the exception of those listed in Annex III. The EC has maintained its commitment to grant duty-free and quota-free access with respect to goods from CARIFORUM States which meet the agreed Rules of Origin, except with respect to sugar and rice.

³ Trade for Development European Union – Caribbean Economic Partnership Agreement

http://trade.ec.europa.eu/doclib/docs/2006/march/tradoc_124787.pdf

⁴ REFERENCE: DRAWN HEAVILY FROM: IMPLEMENTATION OF THE CARIFORUM-EC ECONOMIC PARTNERSHIP AGREEMENT

⁵ REFERENCE: DRAWN HEAVILY FROM: IMPLEMENTATION OF THE CARIFORUM-EC ECONOMIC PARTNERSHIP AGREEMENT

Chapter 3: Non-Tariff Measures (Articles 26-28)⁶

Article 26 - Import or export prohibitions or restrictions on originating imports or exports

The EPA Chapter on Non-Tariff Measures stipulates that, on entry into force of the Agreement, there should be no import or export prohibitions or restrictions on originating imports or exports, other than customs duties and taxes, and fees and other charges. It also prohibits the introduction by the Parties of any new measures.

Article 28, prohibits the introduction of any new subsidy programme which is contingent upon export, or increase in any existing subsidy programme in respect of agricultural products.

Chapter 4: Customs and Trade Facilitation (Articles 29-36)⁷

The provisions of this Chapter aim to enhance the existing customs and trade facilitation procedures in CARIFORUM States while at the same time maintaining effective control. In a number of cases, the introduction of legislation and procedures based on international instruments and norms is called for, while also seeking to provide for harmonized legislation, practice and procedures across CARIFORUM.

Chapter 5: Agriculture and Fisheries (Articles 37-43)⁸

The Chapter on Agriculture and Fisheries recognizes that ensuring food security and enhancing livelihoods of rural and fishing communities are critical elements of the eradication of poverty and the pursuit of sustainable development in CARIFORUM States. Other objectives address the principles of increased competitiveness of production, processing and trade in the Agriculture and Fisheries sectors, Sustainable Development and diversification. The Parties also recognized the need to avoid major disruption of markets for agricultural, food and fish products in CARIFORUM States.

Article 41: Exchange of Information and Consultation:

The Article states that Parties agree to exchange experiences, information and best practices and to consult on all issues related to the pursuit of the objectives of this Chapter and relevant to trade between the Parties. The Parties agree that dialogue would be particularly useful in the following areas:

- (a) Exchange of information on agriculture production, consumption and trade and on the respective market developments for agricultural and fisheries products;
- (b) Promotion of investment in CARIFORUM agricultural, food and fisheries sectors, including small-scale activities;
- (c) Exchange of information on agriculture, rural development and fisheries policies, laws and regulations;
- (d) Discussion of policy and institutional changes needed to underpin the transformation of the agricultural and fisheries sectors as well as the formulation and implementation of regional policies on agriculture, food, rural development and fisheries in pursuit of regional integration;
- (e) Exchange of views on new technologies as well as policies and measures related to quality.

⁶ Reference: drawn heavily from: IMPLEMENTATION OF THE CARIFORUM-EC ECONOMIC PARTNERSHIP AGREEMENT

⁷ Reference: drawn heavily from: IMPLEMENTATION OF THE CARIFORUM-EC ECONOMIC PARTNERSHIP AGREEMENT

⁸ Reference: drawn heavily from: IMPLEMENTATION OF THE CARIFORUM-EC ECONOMIC PARTNERSHIP AGREEMENT

These areas of agreement may contain major implications for the conduct of business, particularly in the fisheries sub-sector. In this regard, the consultants recommend review of all possible implications of this Article.

Article 42, Traditional Agricultural Products - the EC has committed to endeavour to maintain significant preferential market access in the EC for CARIFORUM's traditional agricultural products (e.g., bananas, rum, rice and sugar) within the multilateral trading system (Art 42.1,2).

ARTICLE 42

Traditional Agricultural Products

(a). The Parties commit to undertake prior consultations on trade policy developments that may impact on the competitive positions of traditional agricultural products, including bananas, rum, rice and sugar, in the market of the EC Party.

(b). The EC Party shall endeavour to maintain significant preferential access within the multilateral trading system for these products originating in the CARIFORUM States for as long as is feasible and to ensure that any unavoidable reduction in preference is phased in over as long a period as possible.

Article 43 Cooperation: There is also commitment to development cooperation in areas such as market development, promotion of investment, downstream processing, development experiences, policy and institutional changes, rural development, new technologies and issues relating to quality as contained in Article 43. The EC has also committed to providing development support, including in the following areas:

- improving competitiveness of both traditional and non-traditional export sectors;
- development of export marketing capabilities;
- compliance with, and adoption of, quality standards;
- promotion of private investment and public-private partnerships;
- improvement in the ability of CARIFORUM operators to comply with national, regional and international technical, health and quality standards; and
- build or strengthening scientific, technical, human and institutional capabilities.

The importance of fisheries in ensuring food security and enhancing the livelihoods of fishers and fishing communities and the need to avoid major disruptions to the market for fish and fish products are taken into account in this Chapter. Subject to interpretation, the following articles are expected to have wider implications:

Article 43 (1) speaks of EU and CARIFORUM States cooperating to promote the transformation of the agricultural, food and fisheries sectors.

Article 43 (2.a) speaks of "Improvement in the competitiveness of potentially viable production, including downstream processing..."

Article 43 (2.b) speaks of "Development of export marketing capabilities, identification of options for the improvement of marketing infrastructure and transportation, and identification of financing and cooperation options.

Article 43 (2.c) speaks of "compliance with and adoption of quality standards".

Chapter 5: Focus on Fisheries

Subject to interpretation, the following articles are expected to have wider implications for the CARIFORUM Fishery:

Article 43 (1) speaks of EU and CARIFORUM States cooperating to promote the transformation of the agricultural, food and fisheries sectors.

Article 43 (2.d) addresses “promotion of private investment and public-private partnerships in potentially viable production”.

Article 43 (2.e) speaks of “compliance of national, regional and international technical, health and quality standards for fish and fish products” as it relate to the fishery export trade.

Article 43 (2.f) speaks of building or strengthening the scientific and technical human and institutional capability at regional level for sustainable trade in fisheries products.

Chapter 6: Technical Barriers to Trade (Articles 44-51)⁹

This Chapter emphasizes enhanced communication and exchange of information on technical regulations, standards, conformity assessment procedures and on products affected by Technical Barriers to Trade (Art 45). It also highlights collaboration and cooperation of the Parties, in order to facilitate trade, improve capacity to identify, prevent and eliminate unnecessary obstacles to trade and to ensure compliance with international standards and with each other’s technical regulations and standards.

(Art 51) These objectives are to be achieved through the:

establishment of arrangements for sharing expertise, including training, to ensure technical competence of bodies engaged in standard setting, metrology, accreditation, market surveillance and conformity assessments’ procedures, particularly in CARIFORUM;

-development of centres of expertise within CARIFORUM for the assessment of goods accessing the EC market;

-development of capacity of enterprises in CARIFORUM to meet regulatory and market requirements; and

- developing and adopting harmonized technical regulations, standards and conformity assessment procedures based on international standards.

Chapter 7: Sanitary and Phyto-sanitary Measures (Articles 52 - 59)¹⁰

This Chapter includes provisions dealing with the demand for enhanced health and food safety capacity of countries to protect plant, animal and public health while facilitating trade among the countries. Capacity-

⁹ Reference: drawn heavily from: IMPLEMENTATION OF THE CARIFORUM-EC ECONOMIC PARTNERSHIP AGREEMENT

¹⁰ Reference: drawn heavily from: IMPLEMENTATION OF THE CARIFORUM-EC ECONOMIC PARTNERSHIP AGREEMENT

building initiatives will include legislative reviews and modernization, the provision of supporting facilities, training and exchange of expertise.

The private sector and individual farm/processing enterprises must also establish the necessary protocols for design and management of the enterprises and use the measures and guidelines for farm infrastructure and implementation of the various codes for sanitary and phyto-sanitary measures in the production/rearing, processing activities, transportation and shipping activities (*from farm to fork*).

The ability of CARIFORUM States to implement provisions of the Agreement and the remedial action to be taken will be constrained by the inadequacy of human, financial and technical resources. These include the absence of adequately staffed laboratories, abattoirs, packing facilities, port health facilities, monitoring, inspection and agricultural extension and research services.

As stated in Chapter 7 of the Agreement, the Parties have agreed as follows:

The Parties agree on the importance of establishing harmonised SPS measures both in the EC Party and between CARIFORUM States and undertake to cooperate to this end.

Reinforcement of regional integration and the improvement of monitoring, implementation and enforcement of SPS measures consistent with Article 56 including training and information events for regulatory personnel. Public and private sector partnerships may be supported for the achievement of these objectives.

Establishment of the appropriate arrangements for the sharing of expertise, to address issues of plant, animal and public health, as well as training and information events for regulatory personnel;

Developing the capacities of enterprises, in particular CARIFORUM enterprises, to meet regulatory and market requirements.

3.4 CARIFORUM commitments on Tariff Liberalization

The coverage of goods liberalized by CARIFORUM countries under this Agreement amounts to 61.1% of CARIFORUM imports from the EU in value over 10 years, 82.7% over 15 years

(84.7 % of tariff lines) and 86.9 % over 25 years (90.2 % of tariff lines) .

The main exclusions and long phase in periods (i.e. up to 25 years) for sensitive products include (this is a non exhaustive list): agricultural products (poultry and other meat, dairy products, certain fruits and vegetables), fishery products, food preparations (sauces, ice cream, syrup), beverages, ethanol, rum, vegetable oils.

For agricultural products, most sectors have been either excluded from liberalization or subject to long transition periods (20 or even 25 years). The only exception is the Dominican Republic which, in the light of the liberalization already committed to in its free-trade agreement with the United States, has granted better conditions to EU products than the general CARIFORUM treatment.

With respect to Other Duties and Charges, including various kind of discriminatory levies and surcharges additional to normal customs duties, which are a major revenue earner for the majority of the CARICOM countries, the Agreement provides for a standstill together with a phase-out starting seven years after signature with a complete elimination within 10 years. All export duties are eliminated immediately upon entry into force (Guyana and Suriname enjoy limited exceptions).

3.5 EU Market Access Commitments

For all products originating in CARIFORUM countries and exported to the EU (other than rice and sugar), the Agreement has brought about a Duty and Quota Free Access (DFQF) regime as from 1 January 2008. This is a major improvement compared to the preferential treatment granted under the Cotonou Agreement for some agricultural products, in particular for bananas.

Access for CARIFORUM rice will be DFQF after a transition period of 2 years ending on 31 December 2009. In 2008 and 2009 the rice quota will be 187 000 tonnes and 250 000 tonnes, compared to the former quota of 125 000 tonnes. The in-quota duty will be eliminated.

For sugar, access will be DFQF as from 1 October 2009, subject to a transitional automatic safeguard mechanism until 30 September 2015. For the period from 1 October 2008 to 30

September 2009, while the Sugar Protocol remains in force, a quantity of 60 000 tonnes of sugar at zero duty (additional to the quantities under the Sugar Protocol) has been granted to CARIFORUM countries. Thirty thousand tonnes (30 000 tonnes) of this tariff rate quota have been reserved for the Dominican Republic which has so far had no preferential access under the Sugar Protocol.

Sugar shortfalls in the framework of Sugar Protocol will be reallocated within the CARIFORUM region, as stipulated in a joint declaration on the "reallocation of undelivered quantities under the Sugar Protocol".

In addition, imports of CARIFORUM sugar will be subject to a minimum price (not lower than 90% of the EU reference price) between 1 October 2009 and 30 September 2012. In order to avoid trade circumvention, certain products with high sugar content are subject to a special surveillance mechanism from 1 January 2008 to 30 September 2015 (if imports increase by 20% in volume during a period of 12 consecutive months, the Commission may analyze trade patterns and, in case of circumvention, suspend preferential treatment for these products).

ANNEX 2

Overview of Requirements for effective participation in the EPA

6.1 Determination of the SPS / TBT Regulations in the European Union

The study found that CARIFORUM countries can exploit a number of opportunities emanating from the EPA. However, there are also a number of challenges to be addressed in order to successfully benefit thereof. Compliance with SPS and TBT measures remain key challenges for both agriculture and fisheries.

With respect to the fisheries, the Commission's Food and Veterinary Office (FVO) has carried out inspections in Antigua and Barbuda, The Bahamas, Belize, Grenada, Guyana, Jamaica, St. Vincent and the Grenadines, and Suriname. The FVO's findings highlight the shortcomings in the countries SPS systems and the need to assist the region in ensuring compliance with SPS standards. The most common challenges relate to legislative and regulatory frameworks and standards, enforcement mechanisms (inspection, certification, monitoring and surveillance, control and communication systems), management structures, laboratories and infrastructure. Improvements in these areas will also benefit the successful integration, diversification and competitiveness of the fishery sector, and will make an important contribution on the role of agriculture as a whole towards rural development, and in turn growth and employment¹¹. With respect to agri-food exports generally table 7:1 below summarizes the criteria and standards to be met

6.2 SPS Measures

With regards to Sanitary and phyto-sanitary (SPS) measures, the EPA proposes the following measures viz: Reinforcement of regional integration and the improvement of monitoring, implementation and enforcement of SPS measures; establishment of the appropriate arrangements for the sharing of expertise, to address issues of plant, animal and public health, as well as training and information events for regulatory personnel; development of the capacity of CARIFORUM enterprises, to meet regulatory and market requirements; and cooperation in the international bodies. Main requirements are summarized in Table 1 below;

¹¹ Review of the European Community – Caribbean Region, Regional Strategy Paper and Regional Indicative Programme (2008-2013)).pp12

TABLE 1: SANITARY AND PHYTO-SANITARY MEASURES (REF. ARTICLES 52 - 59)

ISSUE AREAS	ACTION TO BE TAKEN E.G. POLICY, LEGAL, INSTITUTIONAL.	N/R	IMPLEMENTATION TIMELINE
OBJECTIVES (ARTICLE 53)	RESEARCH: STUDY TO IDENTIFY THE NON-TRADE BARRIERS POLICY: IMPLEMENTATION SCHEDULE FOR REMOVAL POLICY: TO REMOVE CONSTRAINTS – HARMONIZATION OF PROCESS AND PROCEDURE	N/R	UPON APPLICATION OF THE AGREEMENT
▪ CAPACITY TO IDENTIFY PREVENT AND MINIMIZE BARRIERS AND DISRUPTIONS			
▪ RECOGNITION OF EQUIVALENCE	RESEARCH: STUDY FOR ASSESSMENT OF EQUIVALENCE MEASURES EQUIVALENCE MEASURES : ----PRIORITY PEST LIST FORMULATION ----ESTABLISHMENT OF PEST FREE AREAS INSTITUTIONAL: MONITORING MECHANISM CERTIFICATION	N/R	UPON APPLICATION OF THE AGREEMENT
▪ COMPLIANCE WITH SPS	POLICY: ESTABLISHMENT/STRENGTHENING OF SPS NOTIFICATION POINT ESTABLISHMENT OF RISK RESPONSE UNIT - SPS NOTIFICATIONS, INQUIRY AND MANAGEMENT	N/R	
▪ DESIGNATION OF COMPETENT AUTHORITIES BY MEMBER STATES ARTICLE 55	POLICY/INSTITUTIONAL: ESTABLISHMENT AND COORDINATION OF NATIONAL AGRICULTURAL HEALTH AND FOOD SAFETY AGENCIES/COMMITTEES (NAHFA) ESTABLISHMENT OF THE COMPETENT AUTHORITY	N/R	UPON APPLICATION OF THE AGREEMENT
	LEGAL : -ESTABLISHMENT OF THE NATIONAL COMPETENT AUTHORITY -ADOPTION OF CARICOM PLANT; ANIMAL; PESTICIDES; FOOD SAFETY ACTS AND SUPPORTING REGULATIONS	N/R	
	-RATIFICATION OF AGREEMENT SETTING UP THE REGIONAL AGRICULTURAL HEALTH AND FOOD SAFETY AGENCY (CAHFA)	N/R	UPON APPLICATION OF THE AGREEMENT
	INSTITUTIONAL:	N/R	
MINIMISE PLANT, ANIMAL AND PUBLIC HEALTH RISKS	LABORATORY INFRASTRUCTURE DEVELOPMENT PLANT LAB; VETERINARY LAB; FOOD SAFETY LAB	N/R	UPON APPLICATION OF THE AGREEMENT
	TRAINING:		
	TRAINING FOR REGULATORY PERSONNEL AND PUBLIC PRIVATE SECTOR PARTNERSHIP	N/R	UPON APPLICATION OF THE AGREEMENT
	TRAINING AND INFORMATION EVENTS FOR REGULATORY PERSONNEL	N/R	
MINIMISE RISK OF PLANT, ANIMAL AND PUBLIC HEALTH	INFRASTRUCTURE: STRENGTHENING AND ESTABLISHMENT OF RELEVANT INFRASTRUCTURE ABATTOIRS; PORT HEALTH FACILITY; PACKING HOUSES; COLD STORAGE FACILITIES		UPON APPLICATION OF THE AGREEMENT
CAPACITY TO PREVENT AND MINIMISE PLANT, ANIMAL AND PUBLIC HEALTH RISKS	POLICY: DEVELOPMENT OF REGIONAL POLICY AND STRATEGY FOR AGRICULTURAL HEALTH AND FOOD SAFETY	R	
HARMONIZED SPS MEASURES	HARMONIZATION OF REGIONAL PLANT; ANIMAL; PESTICIDES; FOOD SAFETY ACTS AND SUPPORTING REGULATIONS	R	
HARMONIZED SPS MEASURES	DEVELOP DRAFT HARMONIZED PROCEDURES AND MEASURES LABS, INSPECTIONS, CERTIFICATION, BIO-SAFETY.	R	
COOPERATION AND COORDINATION OF REGIONAL POSITIONS	- PARTICIPATION IN INTERNATIONAL STANDARD SETTING BODIES AND MEETINGS (CAHFA)	R	ONGOING
	CAHFA/NETWORK ESTABLISHMENT	R	

TABLE 2 AGRI-FOOD CHAIN MULTI – CRITERIA DECISION MATRIX

Criteria	Existing standard	Prescribed / compliance standard / Benchmark	Gap analysis	Corrective action required
Internal factors				
Cultivation – (pesticide, fertilizer, other inputs)	Good Agricultural management Practices	EUREPGAP	CARIFORUM countries including the Windward Islands, Belize ;DR and to a limited extent Jamaica have experience in implementing this standard	Adoption of EUREPGAP,
Certification and Control		Approved Agency	High cost of certification suggests the need for developing regional capacity	Establishment of Regional Certification body or other appropriate arrangement with the international bodies to reduce cost and enhance compliance
Environmental protection		Waste water treatment	Needs stricter observance and monitoring at all levels but especially in agro-industry	Building greater awareness and implementation of GAP
Animal welfare		Animal process controls	Requires greater emphasis in national livestock development and meat industry legislation	Adoption of the Codex Alimentarius code of Hygiene practice for meats which emphasizes a farm to fork approach including animal welfare issues
Hygienic Measures		Laboratory equipment...	Region has inadequate laboratory system	Requires attention to physical infrastructure, analytical capability and standards both at the national and regional level
Technical (processing and handling) equipment		New machines, plant, equipment, and utilities		Industry modernization; Maintenance, certification And water quality
Documentation/ Administration		Documentation management, Process documentation available for audit	Identification and traceability systems and capability requires further development	Support required for development of traceability systems in plant and animal production. Some countries have been implementing such programmes
Labeling				
Packaging Infrastructure				Requires attention to reduce post harvest losses and enhance product shelf life and presentation
Transport		Vehicle certification		Should be embraced within plant quarantine and veterinary and BOS inspection procedures

TABLE 2 AGRI-FOOD CHAIN MULTI – CRITERIA DECISION MATRIX (CONT'D)

Criteria	Existing standard	Prescribed / compliance standard / Benchmark	Gap analysis	Corrective action required
MRL Certification		MRL		pesticides control authorities should be strengthened
External factors				
Price competitiveness		ECC=1		Production support and low interest capital funding to reduce input cost and increase efficiencies
Freight				Develop economies of scale in production and export to reduce per unit freight cost
Regulations				Improve regulatory regimes
Traceability				Facilitate crisis management
Occupational Health				Need widespread adoption in the sector
Market Access				Establish export platforms to empower exporters and increase market access
Market entry				“ “
Cross compliance				Adherence to EU regulations
Product quality and safety		EUREPGAP		Support for development of NAHFSA's and CAHFSA and BOS
Transactions				Develop export platforms
Market Intelligence				Develop, regional market information system
Transaction support				Support for investments in dedicated regional sea transportation to enhance intra -regional trade

Annex 3

Country Reports

(See Separate Annex)

This section of the Report highlights the pertinent issues raised and observed by the consulting team during the Field Visits and interviews with senior government personnel, technocrats, and stakeholders. The list is by no means exhaustive but provides a good insight of the issues that exists in the respective countries in 2010 as well as those required to be addressed for the countries to be able to benefit from the trade opportunities created under the EPA.

ANNEX 4

SUMMARY OF MAJOR CHALLENGES, STATUS, GAP ANALYSIS AND THE ADDITIONAL SUPPORT REQUIRED FOR CARIFORUM AGRICULTURE AND FISHERIES

Table 1: Improvement in Governance and Sector Coordination

Requirements to improve governance and sector coordination	status	Gap Analysis	Ongoing projects and programmes to support this need	Summary of the additional support required
1. Legislative reform and regulatory frameworks to reflect international trade rules and agreements	All countries require additional work to reform and update relevant legislation and regulatory regime	Need to Finalize and promulgate new policies for the agricultural and fisheries sector, including: Plant Health Policy; Plant protection Policy and legislation; Animal Health Policy; Fisheries Policy; Meat production, processing and inspection for human consumption embracing Codex Alimentarius Code of Hygiene practices for meats; National Food Safety Policy; Organic Policy; Seed policy; Marketing Policy; agricultural insurance and risk mitigation policy ;National Fisheries Legislation; codification of treaty obligations e.g CITES , Bio-safety Protocols into domestic legislation ; Intellectual Property Rights and the development of Geographical Indicators.	MODEL PLANT PROTECTION LEGISLATION FOR THE CARIBBEAN REGION prepared by the Food and Agriculture Organization of the United Nations (FAO) -Rome – September 2002 Legislative reforms underway in some countries e. g Plant Quarantine /Food inspection Act in Jamaica. At the Regional level work has commenced for developing the common agriculture policy and the strategic and operational plan for the CAHFSA; A draft Regional Food Security and Nutrition Policy has been prepared	Technical Assistance to develop and maintain appropriate modernized policy, legislation and regulatory framework for the agricultural sector
2. Reform of commodity management and marketing arrangements	Commodity Boards still operate in some countries but invariably their performance has been poor.	Policies and support mechanisms to reform commodity Boards and Marketing Corporations	Market deregulation has started in coffee ,rice and cocoa industry and may be appropriate for other commodities EU funded multi- annual programme for sugar EU funded SFA for Bananas Other Donor support and self financed projects (see detail country specific and Regional programmes and projects in Appendix 2 Country strategies for sugar and Bananas have been developed and are operational. Minor support being provided for Cocoa rehabilitation in some countries.eg Jamaica, St Lucia, Trinidad and Tobago	Develop appropriate business plans and provide funding mechanisms for accelerating the pace of marketing deregulation and the coordination of developments in the sector
3. Develop policies and programmes for the focused development of cooperative organizations in Fisheries to improve the commercial prospects of fisher-folk and develop efficiencies in effort and marketing	Fisher-folk cooperatives are poorly developed in the region with the possible exception of Belize	Policy and support mechanisms to enhance cluster development and to support Cooperatives in Fisheries Support for Fisheries development and management plans	National Fisher folks organization being developed in most countries as umbrella organization	Resources to develop proper fish landing sites and HACCP certified complexes for proper processing and marketing of fish are critical to the prospect of improving fisher folk cooperatives.

Table 2: Requirements for the Enhancement of Competitiveness via Supply-side Interventions

Requirements to enhance production and productivity	Status	Gap Analysis	Ongoing projects and programmes to support this need	Summary of the additional support required
1. Capital and technical assistance support are needed for the development of productive clusters	CARIFORUM production and productivity levels in agriculture and fisheries are low by world standards. The sectors are invariably constrained by inadequate financial resources to expand and improve production	Both financial and technical assistance is required to enhance export-production capabilities and competitiveness in commodities, agro-processing and services such as agro-tourism linkages Capital development fund for agriculture and fisheries should be established. At the national level Legislative changes should be introduced as appropriate to facilitate the development of lease financing arrangements for acquisition of capital equipment	EU FUNDED PROGRAMMES FOR Sugar ,Bananas ,rum and Rice Other donor and self finance country programmes for specific agricultural diversification and support services (see appendix 2)	Establishment of the Programme to increase competitiveness and productivity in CARIFORUM Agriculture and fisheries production.
2. Technology generation and transfer	With a few exceptions national and regional R&D outfits are not properly resourced to deliver quality support in this area. Greater collaboration between private and public sector networking ,priority setting and a value chain approach are needed to advance the service Spending on R&D has been greatly diminished over the past 2 decades	Requires competitive grant funding to engage public and private research in particular adaptive research – CARTF model appropriate Funding for Technology generation and transfer and the commercialization of appropriate research findings	Regional RD through CARDI and the Universities; National research Divisions and centre of excellence Some Donor funding eg CEAT in Jamaica	Requires the establishment of a CARIFORUM Council for Science Technology and Innovation and a contestable grant fund for research and technology transfer. A model for Technology Transfer (CARTF) was developed under the 7 th EDF with excellent results. The competitive grant funding is to supplement national budgetary and other resources.
3. Seed and planting technology	This area is controlled by the private sector. Input costs are high for the average farmer because seeds are produced by Multi-national companies who engage in expensive research and develop programmes. Seed farm production which was attempted in the 1980,s have discontinued consequent on the reduced public expenditure in agriculture		With the exception of Belize (corn, peas) and Guyana Haiti and Suriname with rice there is little work on seed and planting technology beyond the current practices of the private producers.	The region needs to develop an appropriate policy and strategic framework to deal with this issue. Technical assistance in this regard may be appropriate.

Table 2: Requirements for the Enhancement of Competitiveness via Supply-side Interventions (cont'd)

Requirements to enhance production and productivity	Status	Gap Analysis	Ongoing projects and programmes to support this need	Summary of the additional support required
4. Know-how and technological backstopping	The inability to provide technological backstopping has been one of the factors affecting increased diversification. Eg production of cut flowers and winter vegetables	Requires a larger cadre of trained specialists to support commercial production		Requires support for institutional capacity building and the development of Human resources through appropriately structured scholarship and training programmes, technical assistance and exchanges and scientific collaboration.
5. Crop nutrition	High prices of fertilizers and plant additives throughout the region Little regional production of fertilizer except for Trinidad and the DR	Inadequate budgets to effectively support fertilizer subsidies	Limited support provided through existing national development and donor funded projects in the countries	A productivity enhancement programme and greater regional collaboration in sourcing, storage and distribution of fertilizer. Cluster formation to reduce unit cost
6. Mechanization	Outside of sugar and rice there is an inadequate level of mechanization on farms. Region ranks low when measured In terms of tractors per unit of land.	In addition to budgetary constraints, hilly terrain and other sub-optimal land conditions have hampered the development in farm mechanization. Very little research capability in this area except for sugar and rice	There is minimal support in individual country budgets	A regional fund or provision of budgetary support to develop farm mechanization programmes. Legislative changes at the national level to encourage lease purchase agreements for farm equipment.
7. GAP (EUREPGAP,GLOBALGAP) and farmer certification	Except for countries in the Windward Island group, DR, Belize and to some extent Jamaica countries are behind in implementing these standards. The cost of compliance and certification are high	Requires a dedicated approach to implementing these standards	SFA funding for Bananas EU Multi annual support for sugar and agricultural diversification See appendix 2 for individual country projects in this area	Needs support for implementing GAP standards and for establishing regional certification bodies.
8. Reducing post harvest losses	Up to 30 % of products lost during post harvest in some instances	Developing post harvest protocols for handling ,shipping and transportation and providing appropriate infrastructure are required interventions	USDA and other standards are readily available to guide developments in this area CARDI has some limited expertise in this area This area is being given attention in some national agriculture development plans	Requires support for packaging houses and facilities to support exports at the international ports including airports

Table 2: Requirements for the Enhancement of Competitiveness via Supply-side Interventions (cont'd)

Requirements to enhance production and productivity	Status	Gap Analysis	Ongoing projects and programmes to support this need	Summary of the additional support required
9. General support services (Laboratory; extension and training; transportation)				See section on Trade related regulatory issues
10. Financial and fiscal incentives and access to credit		Need to provide financial and technical assistance to enhance export-production capabilities and competitiveness in commodities, agro-processing and services such as agro-tourism linkages 2. Develop and implement farm mechanization programme (see item 6 above)		(See item 1 above) production. 2. Establishment of the CARIFORUM Fisheries Fund (CFF) 3. Establishment of production clusters support programme 5. Funding support for cross border investments
11. Risk management and agricultural insurance	Except for traditional commodities arranging agricultural insurance is difficult with poorly organized producers Vulnerability of the region to climate linked disasters makes insurance risky and expensive	Requires policy and the development of insurance instruments /mechanisms	Many studies and workshops facilitate by International development partners including IICA ,IDB and the FAO	Requires the establishment of a CARIFORUM AGRICULTURE AND FISHERIES RISK INSURANCE facility akin to the existing CRRIF for infrastructure.
12. Improved marketing services (data collection and market intelligence; market promotion; marketing infrastructure (packing houses ,transportation; cold storage);certification; grades and standards)				See section below on infrastructure and business development related issues
13. Modernization services to enhance agro-processing and improving value-added in the sectors (technology; product development; factory space; equipment; industry modernization; training ;certification; quality standards; packaging and labeling)	With the exception of Trinidad and Barbados ,DR and to some extent Jamaica the regional agro-processing requires modernization	Inability to comply with international product standards; obsolescence of equipment and machinery; product development; insufficient raw material supply sources, packaging labeling, pre-shipment financing ,training and export promotion are some of the constraints to be addressed	In some countries eg Jamaica and Trinidad there are incentives and a modernization programme to assist the sector	Establishment of Agro-processing modernization programme

Table 2: Requirements for the Enhancement of Competitiveness via Supply-side Interventions (cont'd)

Requirements to enhance production and productivity	Status	Gap Analysis	Ongoing projects and programmes to support this need	Summary of the additional support required
14. Technology related to offshore fishing, aquaculture and mariculture development	In most countries fishing is small scale and there is an inability to fully exploit offshore fishing resources	Investment in aquaculture and diversification of farmed species; Marketing fisheries products; The development of sustainable fisheries; and development support towards fisheries-dependent communities. Technology training and support required.	See appendix for specific projects in this area EU sponsored Regional project for improving SPS in the fisheries sector has not been very effective CRFM provided limited support in his area	The Fisheries Fund (CFF) is intended to help secure a sustainable and profitable fisheries industry. It grants financial support with a view to helping the industry adapt to changing circumstances.
15. Aquaculture development			Private investment in Belize Support for aquaculture development in Guyana and Suriname	See 14 above

Table 3: Building Technical Competence/ Institutional Capacity

Requirements for building technical competences /institutional capacity	status	Gap analysis	Ongoing projects and programmes to support this need	Summary of the additional support required
1. Availability of specialists to provide the technical support for sector development	Lack of specialist skills in most countries with the possible exception of the DR, due to attrition of agriculturalist and specialist	Absence of a dedicated scholarship and incentives and reward programmes to train recruit and keep specialists in the sectors	Under the Jagdeo Initiative a HR audit and skills assessment should have been undertaken	Provision of scholarships and training grants to build the technical capacities in the Ministries of agriculture and fisheries
2. Building the technical capacities in the Ministries of agriculture and fisheries	Many ministries lack the appropriate skills to help guide development in the sector	Building the capacity of Ministries and agencies to implement rural diversification strategies and action plans		See above
3. strengthening and reorientation of the national extension services and technology facilitation arrangements for producers	Extension service has been skewed towards support of small subsistence farmers Need to apply ITC solutions to extension training and planning.	Requires a dual approach to developing and supporting commercial enterprises and agribusinesses while providing training and support services to small farmers	Some support is provided through EU funded support especially in banana producing countries under SFA funding	Budgetary Support for Strengthening and reorientation of the national extension services
4. Capacity building is required among producers and exports and the participants along the entire product chain.	Value chain approach not universally practiced for planning development and research	Requires training		Training along the entire value chain (institutional capacity building to include the training of specialists)
5. Development of youth in agriculture/building entrepreneurship	Ageing population of farmers and the high cost of labour is a constraint to industry expansion	Inadequate support for youth in agriculture and youth entrepreneurship building in agro industry	Projects at the national level are invariably small and insignificant in relation to the problem	Requires budgetary support for this activity. Programme should be linked to activities for production enhancement
6. Support for developing innovative enterprises	The new agriculture requires a cohesive and integrated approach to develop innovation creativity and efficiency	Strategies for the Commercialization of research findings Development of Agro-parks and farm business incubators		Capacity building among producers and exports and the participants along the entire product chain. See requirement for funding

Table 4: Infrastructure and services to support the productive sectors of agribusiness and services

Requirements for infrastructure and services to support agribusiness	Status	Gap analysis	Ongoing projects and programmes to support this need	Summary of the additional support required
1. Physical infrastructure				
- Access roads, ports ,sea transport, telecommunication, energy and electricity,;	Several deficiencies in the following; -access roads -improving access to electricity and other utilities -provision of factory space	Require Modernized and Upgraded Infrastructure Supportive Marketing and Distribution Infrastructure and Network Capital development fund for agriculture and fisheries should be established. At the national level Legislative changes should be introduced as appropriate to facilitate the development of lease financing arrangements for acquisition of capital equipment	Budgetary support provided by the EU and other donors Individual infrastructure projects in the countries	Establishment of the Programme to increase competitiveness and productivity in CARIFORUM Agriculture and fisheries production.
- Landing sites and fish processing and marketing facilities;	Landing sites and fish processing and marketing facilities are inadequate; .	.Enabling and Facilitating Framework, Infrastructure and Support Services to improve hygienic handling and marketing of fish products and management f the fisheries	Japanese and Taiwanese support have been harnessed for building fishing complexes in the OECS countries. One such facility has been built in Jamaica	The Fisheries Fund (CFF) is intended to help secure a sustainable and profitable fisheries industry. It grants financial support with a view to helping the industry adapt to changing circumstances
- water supply and sanitation, irrigation and drainage;	Several deficiencies in the following; -irrigation and drainage; -water supply and sanitation,		Some countries have irrigation development plans and programmes Support provided through banana and sugar support programmes as well as EU national indicative programmes for irrigation	
- post harvest facilities including packaging houses and airport and seaport facilities to facilitate trade ;cold storage	Several deficiencies in the following=g ;post harvest facilities including packaging houses ; airport and seaport facilities to facilitate trade ;cold storage;		CDB and IDB have provided in support to some countries	
- modern abattoirs ; factory space etc.	Facilities require substantial upgrading and rationalization in most of the countries	building and equipping modern abattoirs new and improved factory space to expand agro-processing		
2. Trade support institutions				
1. Marketing and distribution				See section on business development related issues
2. Research				ditto
3. Standards and monitoring	Bureaux of standards require strengthening (staff, equipment and financing)			ditto

Table 5: Trade related Business Development Issues – Export Business Platform

Requirements for business development and the development of export platforms	Status	GAP Analysis	Ongoing projects and programmes to support this need	Summary of the additional support required
1. Market Intelligence		Provision of an effective business development and marketing platform for the expansion of CARIFORUM Agricultural, fisheries and agro-processed exports Market studies and intelligence;	CART Fund may be utilized for some of these activities	Programme for business development and export promotion
2. Market Identification		.Identifying the requirements for new export goods; .Intellectual property protection issues; . Product design and quality assurance; Formation of strategic alliances and partnerships; Customs procedures and trade facilitation; effective use of information and computer technology .Business support services and institutions, Public-private sector networking, e-commerce, trade finance, and trade promotion. 11.Developing export platforms	See Appendix 2 for details on each country	
3. Market Representation / Promotion		-Develop and implement the CARIFORUM Agricultural Marketing Information System to automate and integrate the collection, storage and dissemination of marketing information - Generate local primary data for marketing information as needed		
4. Market Entry Strategy eg Branding		-Compile and update local secondary data of market prices, production costs, input prices, market demand for specific commodities, etc. in accessible format for marketing and planning information		
5. Industry Organization to achieve economies of scale in Marketing		Public-private sector networking, e-commerce, trade finance, and trade promotion.		
6. Shipping Logistics- accessing business and transport Information;		Accessing business and transport Information;		
7. Warehousing				
8. In Country market Promotion				
9. Export Financing, Export Insurance				
1. Product design and quality assurance;;investment promotion,		investment promotion, analysis and institutional support for trade in services,		
2. Formation of strategic alliances and partnerships;				
3. Investment promotion, customs procedure and trade facilitation				

Table 6: Trade-related Regulatory Requirements

Trade Enhancing Requirements	EU / EPA Prescribed / compliance standard / Benchmark	Existing Standards	Gap analysis	Corrective action required
PRODUCTION LEVEL				
1. GAP Good Agricultural management Practices	EUREPGAP		The region is deficient in all areas with countries falling behind required standards to varying degrees	Adoption of EUREPGAP, Global Gap Support a programme for the implementation of Good agricultural practices (GAP)
1.1 Selection of Pesticide, Method of Application, Timing etc		Approved Agency		Support for pesticides control authorities
1.2 Environmental protection eg Water Quality, Erosion, Waste Water, Runoff		Waste water treatment		Support capacity-building initiatives to include legislative and regulatory reforms; the provision of supporting facilities, training and exchange of expertise.
1.3 In field Post Harvest Protocols				Support capacity-building initiatives to include legislative and regulatory reforms; the provision of supporting facilities, training and exchange of expertise.
1.5 Field Sanitation eg. Workforce facilities/amenities such as toilets, water, lunch room				GAP
1.6 GAP Certification				Support for the development of NAHFSAs 3.Support for the operationalizing of the CAHFSAs

Table 6: Trade-related Regulatory Requirements (cont'd)

Trade Enhancing Requirements	EU / EPA Prescribed / compliance standard / Benchmark	Existing Standards	Gap analysis	Corrective action required
2. PRODUCT HANDLING & PRE-PROCESSING				
2.1 Transport				See 1 above
2.2 Washing, Grading & Drying				Support for strengthening of the Bureaux of Standards (BOS)
2.3 Packaging & Labelling				
2.4 Documentation for Traceability				
2.5 Storage Requirements				
2.6 Freight & Transportation Requirements				
2.7 Certification of Packinghouse				
3. AGRO-PROCESSING				
3.1 Plant Certification eg HACCP, QMP , ISO				See-Establishment of Agro-processing modernization programme
3.2 Process Technology Standards / Food Standards eg ingredients, raw material, additives				
3.3 Packaging & Labelling				
3.4 Lab Support Services eg Microbial & contaminants				
3.5 Storage requirements				
3.6 Waste Water Management				

Table 6: Trade-related Regulatory Requirements (cont'd)

Trade Enhancing Requirements	EU / EPA Prescribed / compliance standard / Benchmark	Existing Standards	Gap analysis	Corrective action required
4. SEAFOOD – HARVEST				
4.1 Net & Gear reqments				Establishment of CARIFORUM Fisheries Fund
4.2 Practices eg FAO Code of Conduct, Cites, IUU				
4.3 Cold Chain				
4.4 Landing Sites eg Proper facilities for handling fish, waste disposal system, facilities for gear etc				
4.5 Aquaculture – Water Quality issues				
5. SEAFOOD TRANSPORT & PROCESSING				
5.1 Plant Certification eg HACCP, QMP , ISO				
5.2 Process Technology Standards / Food Standards eg ingredients, raw material, additives				
5.3 Packaging & Labelling				
5.4 Lab Support Services eg Microbial & contaminants				
5.5 Storage requirements				
5.6 Waste Water Management				
Intellectual Property Rights and GI				

ANNEX 5

DETERMINATION OF ADDITIONAL SUPPORT REQUIRED FOR AGRICULTURE AND FISHERIES AND STRATEGIC FRAMEWORK AND ACTION PLAN

DETERMINATION OF ADDITIONAL SUPPORT REQUIRED FOR AGRICULTURE AND FISHERIES

Additional support for developing the agriculture and fisheries sector of CARIFORUM have been determined from the forgoing assessments of country needs; the analysis of the EU requirements for fresh fruit, vegetables and seafood and the available opportunities for CARIFORUM. The details together with the strategic framework and action plan for development cooperation assistance for CARIFORUM agriculture and fisheries are presented in Annex 5.

8.2.1 Improving governance and coordination of the sector

1. Legislative reform to reflect the codification into domestic laws and regulation, the new requirements of the international trade regime and regulatory frameworks and the agreements rules and regulations pursuant to such same.
2. Policy development and Institutional reform to reflect the need for improving the business development processes and to support greater commercialization in the sector
3. Reform of commodity management and marketing arrangements eg, commodity Boards, in order to foster greater efficiency and innovativeness in order to ensure greater flow of benefits to the producers
4. Develop policies and programmes for the focused development of cooperative organizations in Fisheries to improve the commercial prospects of fisher-folk and develop efficiencies in effort and marketing
5. Develop policies and programmes to enhance the formation of clusters in order to accelerate production and export development in targeted non-traditional export sectors

8.2.2 Enhancing production in agriculture and fisheries

1. Both financial and technical assistance is required to enhance export-production capabilities and competitiveness in commodities, agro-processing and services such as agro-tourism linkages. This would include the diversification (vertically and horizontally) into alternative and dynamic exports (so called new agriculture), as well as the development of the support policies, infrastructure and regulatory mechanisms to facilitate entry into and beneficial participation in global supply chains to the key markets. In this regard the countries require a significant injection of capital to facilitate new investments in agriculture and fisheries activities by making available Low cost capital to provide credit

for existing and new producers who are constrained by the inadequacy of funds to expand production and marketing.

2. Both capital and technical assistance support are needed for the development of productive clusters. In this regard the formation of sector/subsector specific producers associations and cooperatives for information sharing on best practices for success in the specific sector, for input procurement and for output marketing is of critical importance. This need is amply demonstrated in the fisheries sector in particular but the intervention would be relevant to all the productive sectors. The development of clusters is already taking shape in some of the countries and is best demonstrated in the DR where the model for agribusiness and the development of export platforms makes cluster development a central component. As demonstrated in the DR clusters should include not only producers but all stakeholders along the entire product chain.
3. Capital will be required to facilitate the reduction of input costs for small producer; to assist business start-ups, export marketing facilitation (including the logistics of getting goods from points of production to points of sale in export markets, as well as export promotional activities) tailored to the needs of producers in specific export sectors.
4. 4. For Agro-industry expansion and modernization, resources are needed to retool and modernize this sub-sector and should focus on factory design and HACCP compliance, energy efficiencies; new processing technology and product development; equipment, training; food technology and standards; food hygiene; packaging ;labeling and traceability

8.2.3 Building technical competences/institutional capacity

1. Building the technical capacities in the Ministries of agriculture and fisheries
2. Strengthening and reorientation of the national extension services
3. Technology generation and transfer
4. Capacity building among producers and exports and the participants along the entire product chain.
5. Building the capacity of Ministries and agencies to implement rural diversification strategies and programme
6. Building entrepreneurship in the sector and the provision of support to develop innovative new enterprises.

8.2.4 Infrastructure and services to support the productive sectors of agribusiness and services

Physical and trade support infrastructure :Access roads, ports, Landing sites and fish processing and marketing facilities; sea transport, telecommunication, energy and electricity, water supply and sanitation, irrigation and drainage; post harvest facilities including packaging houses and airport and seaport facilities to facilitate trade ;cold storage; modern abattoirs ; factory space

8.2.5 Business development related issues

1. Accessing business and transport Information;
2. Market intelligence;
3. Identifying the requirements for new export goods;
4. Intellectual property protection issues;
5. Product design and quality assurance;
6. Formation of strategic alliances and partnerships;
7. Customs procedures and trade facilitation; effective use of information and computer technology;
8. Investment promotion, analysis and institutional support for trade in services,
9. Business support services and institutions,
10. Public-private sector networking, e-commerce, trade finance, and trade promotion.
11. Developing export platforms

8.2.6 Trade regulatory related issues

1. Develop grades, standards and SPS protocols; implement Good Agricultural Practices and regional/sub-regional/national certification programmes as desirable and feasible
2. Support capacity-building initiatives to include legislative and regulatory reforms; the provision of supporting facilities, training and exchange of expertise.
3. Support for the private sector and individual farm/processing enterprises to establish the necessary protocols for design and management of the enterprises as well as to employ the various measures

and guidelines for improving farm infrastructure and the implementation of the various codes for sanitary and phyto-sanitary measures in the production/rearing, processing activities, transportation and shipping activities (*from farm to fork*).

4. Construct, equip and staff the required laboratories, abattoirs, packing facilities, port health facilities, monitoring, inspection and agricultural extension and research services.

A strategic framework and action plan for development cooperation assistance for Agriculture and Fisheries is presented in the below matrix.

Table 7: Strategic framework and action plan for development cooperation assistance for agriculture and fisheries

1. Improving governance and coordination of the sector				
OUTCOMES	STRATEGIES	ACTIONS	RESPONSIBLE AGENCIES AND STAKEHOLDERS	COMMENTS
Appropriate Policy, Legislation and Regulations for Long-Term Development and effective organization of the Sector	<p>Develop and maintain appropriate modernized policy, legislation and regulatory framework for the agricultural sector</p> <p>Develop appropriate mechanisms for coordinating developments in the sector</p>	<p>1.Finalize and promulgate new policies for the agricultural and fisheries sector, including:</p> <p>Plant Health Policy; Animal Health Policy; Fisheries Policy National Food Safety Policy; Organic Policy; Seed policy; Marketing Policy; agricultural insurance and risk mitigation policy</p> <p>2.Policy and support mechanisms to enhance cluster development and to support Cooperatives in Fisheries</p> <p>3.Policies and support mechanisms to reform commodity Boards and Marketing Corporations</p> <p>4.Support mechanisms for Private /public collaboration</p> <p>5. Support for Fisheries development and management plans</p>	<p>Ministries of Agriculture</p> <p>Fisheries Departments</p> <p>CARIFORUM SECRETARIAT</p> <p>INSURANCE COMPANIES</p> <p>FARMERS ORGANIZATIONS</p> <p>FISHERMEN COOPERATIVES</p> <p>PRODUCTION CLUSTERS</p>	Country specific Technical assistance may be appropriate as countries are at different stages of implementation

Table 7: Strategic framework and action plan for development cooperation assistance for agriculture and fisheries (cont'd)

2. Enhancement of Competitiveness via Supply-side Interventions				
OUTCOMES	STRATEGIES	ACTIONS	RESPONSIBLE AGENCIES AND STAKEHOLDERS	COMMENTS
<p>1.Increasing the volumes of domestic and export crops and Fishery products and improvement in the productivity and management of enterprises to access the available marketing opportunities</p> <p>2.Removing Financial constraints to investment expansion</p>	<p>1.Provide financial and technical assistance to enhance export-production capabilities and competitiveness in commodities, agro-processing and services such as agro-tourism linkages</p> <p>2.Develop and implement farm mechanization programme</p>	<p>1. Establishment of the Programme to increase competitiveness and productivity in CARIFORUM Agriculture and fisheries production.</p> <p>2. Establishment of the CARIFORUM Fisheries Fund (CFF)</p> <p>3. Establishment of Agro-processing modernization programme</p>	<p>CARIFORUM SECRETARIAT</p> <p>Ministries of Agriculture</p> <p>CRFM</p>	<p>Regional ;sub-regional and individual country programmes.</p>

Table 7: Strategic framework and action plan for development cooperation assistance for agriculture and fisheries (cont'd)

3. Building technical competences/institutional capacity				
OUTCOMES	STRATEGIES	ACTIONS	RESPONSIBLE AGENCIES AND STAKEHOLDERS	COMMENTS
Strengthened Institutions to facilitate the development of the sector	<p>1.Provision of Work Force with Skills, Training and Education to Meet the Dynamic Needs of Sector</p> <p>2.Training along the entire value chain</p>	<p>1.Provision of scholarships and training grants to build the technical capacities in the Ministries of agriculture and fisheries</p> <p>2.Budgetary Support for Strengthening and reorientation of the national extension services</p> <p>3. Budgetary support to encourage participation of youth in agriculture</p> <p>3. Funding for Technology generation and transfer and the commercialization of appropriate research findings./Establishment of competitive grant funding for technology generation and transfer and the CARIFORUM Council for Science ,technology and Innovation)</p> <p>4. Capacity building among producers and exports and the participants along the entire product chain.</p> <p>5.Building the capacity of Ministries and agencies to implement rural diversification strategies and programme</p> <p>(NB; Scholarships and institutional capacity support are factored into 1 above)</p>	<p>Ministries of agriculture</p> <p>Universities</p> <p>Agricultural colleges and schools</p> <p>Regional and national research and development institutions</p> <p>Private sector</p> <p>Banana and sugar industries</p>	Country specific programmes

Table 7: Strategic framework and action plan for development cooperation assistance for agriculture and fisheries (cont'd)

4.Infrastructure and services to support the productive sectors of agribusiness and services				
OUTCOMES	STRATEGIES	ACTIONS	RESPONSIBLE AGENCIES AND STAKEHOLDERS	COMMENTS
1. Modernized and Upgraded Infrastructure 2.Supportive Marketing and Distribution Infrastructure and Network		<ul style="list-style-type: none"> -Landing sites and fish processing and marketing facilities; -irrigation and drainage; -water supply and sanitation, -post harvest facilities including packaging houses -airport and seaport facilities to facilitate trade ;cold storage; -building and equipping modern abattoirs -provision of factory space (see 1&2 above)	MINISTRIES OF AGRICULTURE MINISTRIES OF UINDUSTRY MINISTRIES OF TRANSPORT AND WORKS	Country specific programmes
3.Enabling and Facilitating Framework, Infrastructure and Support Services		<ul style="list-style-type: none"> -Financing for risk management and agricultural insurance; - laboratory services; transportation; extension and training). 	CARIFORUM SECRETARIAT MINISTRIES OF AGRICULTURE	Development of a CARIFORUM Risk Insurance Facility for Agriculture and Fisheries may be a good approach to the problem, given the high cost of agric insurance and the level of risk involved.

Table 7: Strategic framework and action plan for development cooperation assistance for agriculture and fisheries (cont'd)

5. Business development related issues				
OUTCOMES	STRATEGIES	ACTIONS	RESPONSIBLE AGENCIES AND STAKEHOLDERS	COMMENTS
1. Development of Expanded and New Markets for CARIFORUM Agricultural and fisheries Products	Provision of an effective business development and marketing platform for the expansion of CARIFORUM Agricultural, fisheries and agro-processed exports	1. Accessing business and transport Information; 2. Market studies and intelligence; 3. Identifying the requirements for new export goods; 4. Intellectual property protection issues; 5. Product design and quality assurance; 6. Formation of strategic alliances and partnerships; 7. Customs procedures and trade facilitation; effective use of information and computer technology; 8. Investment promotion, analysis and institutional support for trade in services, 9. Business support services and institutions, 10. Public-private sector networking, e-commerce, trade finance, and trade promotion. 11. Developing export platforms	Ministries of Agriculture CARIFORUM SECRETARIAT C EDA National export organizations Investment Promotion Agencies Marketing Companies Bureau of Standards	
Strong and Effective Marketing Information System	Establish comprehensive marketing database that is accessible, user friendly and constantly updated	1. Compile and update local secondary data of market prices, production costs, input prices, market demand for specific commodities, etc. in accessible format for marketing and planning information 2. Develop and implement the CARIFORUM Agricultural Marketing Information System to automate and integrate the collection, storage and dissemination of marketing information 3. Generate local primary data for marketing information as needed	Ministries of agriculture Ministries of trade and commerce CEDA STATISTICAL INSTITUTES EXPORT AGENCIES INVESTMENT PROMOTION AGENCIES	Rationalize ,synchronize and build on existing systems

6.Trade regulatory related issues				
OUTCOMES	STRATEGIES	ACTIONS	RESPONSIBLE AGENCIES AND STAKEHOLDERS	COMMENTS
Updated and Efficient Agriculture Health and Food Safety Infrastructure (SPS/FS)	Implement and enforce health and safety standards on farms and in agro-processing establishments	1.Develop grades, standards and SPS protocols; implement Good Agricultural Practices and regional/sub-regional/national certification programmes as desirable and feasible 2. Support a programme for the implementation of Good agricultural practices (GAP) 2. Support for the development of NAHFSAs 3.Support for the operationalization of the CAHFSA 4.Support for strengthening of the Bureau of Standards (BOS)	Ministries of Agriculture CARIFORUM SECRETARIAT CAHFSA MINISTRIES OF TRADE BUREAUX OF STANDARDS	Country specific assistance based on level and extent of the needs
Regulatory: Updated legislation		5.Support capacity-building initiatives to include legislative and regulatory reforms; the provision of supporting facilities, training and exchange of expertise.		
		5. Support for the development of Geographical Indicators and the protection of intellectual property rights	IPO Ministries of agriculture Ministries of Trade Export developing Agencies Private sector	Country specific assistance based on stage of development of IPO and existing and future needs.

ANNEX 6

PRIORITY PROGRAMMES TO IMPROVE CARIFORUM AGRICULTURE & FISHERIES

PROJECT 1
CONCEPT NOTE
PROGRAMME TO IMPROVE PRODUCTIVITY & COMPETITIVENESS IN CARIFORUM AGRICULTURE & FISHERIES

Background and key issues to be addressed

According to the World Bank report entitled “A time to choose: Caribbean Development in the 21st Century”, the Caribbean is at a development crossroads. Decades of reliance on traditional markets, and on trade preferences, have given way to a new reality, where traditional agriculture plays a much smaller role in most economies, and where a much harsher and more competitive international wind blows. In such an environment, business as usual will no longer suffice. For many of the CARIFORUM countries there has been a decisive move away from dependence on agriculture to more service based economies, with Tourism providing the mainstay in a number of instances. For a plethora of reasons, growth in the agriculture and fisheries sector has been stymied for many decades and the sector now requires a significant boost if it is to be able to make a meaningful contribution to GDP growth and the attainment of food security for the region. The primary goal for the sector is to achieve competitiveness in production of a diversified range of products to satisfy existing markets and improve livelihoods especially in the rural areas thereby adding to regional economic stability.

One of the main drawbacks to agriculture and fisheries development in the region has been the persistent low level of production and productivity in almost every facet of the industry. For the Caribbean economies as a whole, the World Bank has reported a sharp decline in productivity gains between the 1980s and the 1990s, irrespective of methodology employed to measure productivity growth. In fact, after adjustments in the measurement of total factor productivity (TFP) for short-run cyclical fluctuations, the contribution of TFP growth to GDP growth in the 1990s becomes negative for most countries. After cyclical adjustment, only three countries showed a statistically significant and positive TFP growth in the 1990s-the Dominican Republic, Trinidad and Tobago and Guyana. In the 1980s, on the other hand, most estimates show a significant contribution of productivity gains to growth in the Caribbean. In other words, growth in factor inputs contributed more to economic growth in the 1980s than in the 1990s. This decline in productivity growth in the 1990s is due to several factors including the lower productivity of public investments, especially in the OECS countries, which overinvested after 1997, partly in an attempt to compensate for the decline in private investment; the locking in of investments into traditional, low productivity sectors such as agriculture, in part due to preferences and high tariffs; and the large investments in maturing sectors, namely tourism, where productivity improvements are more difficult to come by, and this applied to most Caribbean countries.

This era of low production and productivity in the agriculture and fisheries sector in particular coincided with the period of economic structural adjustments which saw the gradual dismantling of the protective

regime which hitherto buffered the fragile and largely uneconomic agricultural production system. During this period, most CARIFORUM countries experienced severe budgetary pressures which limited public sector spending in the sector with the consequent deterioration of public infrastructure and services. Private capital flow to the sector was also limited as investors opted for more lucrative opportunities.

Generally the main traditional commodities especially sugar and bananas have performed poorly. Sugar exports and production in the Caribbean have declined by about half since 1970 owing to rising costs of production, resulting from rising wages, deteriorating field and factory performance and increasing inefficiencies associated with public sector control and management. Estimated costs of producing and exporting sugar in Guyana and Belize, the lowest cost producers in the Caribbean, are 50 to 60 percent higher than one of the higher cost free market exporter. Similarly, in bananas, the Caribbean countries are amongst the highest cost producers in the world, rooted in low land productivity, and high labor and transportation costs. Land yields in Belize are comparable to those in Ecuador, but St. Lucia, Jamaica and Dominica have yields that are 20-35 percent of Ecuador's. Only Belize surpassed the quota allocation prior to 1999, and preference erosion thereafter has seen falling production in all countries except Belize and the Dominican Republic.

In December 2009, the EU initialled an agreement on bananas with Latin American banana exporting countries laying down a schedule for the reduction of the EU's Most Favoured Nation (MFN) tariff on bananas. MFN tariffs will be reduced from the current €176 per tonne to €114 over a period of seven to nine years. ACP banana-exporting countries will continue to have duty-free, quota-free (DFQF) access to the EU market. However, due to changing trade arrangements, notably MFN liberalization within the WTO, the reduction of the preferential margin for ACP banana-exporting countries will be faster than initially anticipated and this will further impact the competitiveness of CARIFORUM banana industry. Only the most efficient producers in the region will be able to export profitably. Countries such as St. Lucia, St. Vincent and the Grenadines, Dominica and to some extent Jamaica will incur losses at the lower tariff levels.

In most of the CARICOM member states, development of the agriculture sector is important for sustaining and improving food security, diversifying the local economy (e.g., reducing food imports, promoting agro-tourism) and achieving progress towards poverty reduction. In some countries, e.g. the Bahamas, Antigua and Barbuda, the agriculture sector is relatively small. While for others, such as Jamaica, Guyana, Haiti, Belize, Dominica, St. Lucia and St Vincent and the Grenadines, the sector continues to be important source of Employment, Food Security and Rural Livelihoods.

In Guyana the agriculture sector has become more important owing to access to preferential markets for sugar and rice, and the services sector less important. In Suriname, both agriculture and services became more important, at the expense of the industrial sector. In Belize, Jamaica and the DR the agriculture sector is increasing in importance. Finally, in Trinidad and Tobago, the industrial sector remains more prominent than in other countries in the region, a reflection of the country's energy resources (oil and natural gas).

Challenges for Agriculture & Fisheries

The progressive erosion of the competitive position of sugar and banana on the world markets due to changes in the international market quota and tariff systems makes it necessary for CARIFORUM states to diversify agricultural production around these major traditional commodities. The region has recorded some measure of success in this regard. However the sustained growth and competitiveness of these commodities have faced similar constraints due to the fact that production is carried out predominantly by small farmers, who typically face many supply side challenges. Consequently they face competition from increased imports.

Through diversification the countries have managed to open up new marketing opportunities for a range of exotic non-traditional products including fruits, beverages, root-crops, seafood and aquaculture products, vegetables spices, cut flowers and gourmet processed products including jams, jellies, sauces, confectionery and baked products but invariably the volumes produced are small and the region is unable to fully exploit the market opportunities created. Additionally the region lacks the technological backstopping to fully support agricultural diversification efforts.

Despite efforts from Governments and support from donors, diversification-led agricultural growth has not taken off while the region as a whole has lost ground on its traditional agricultural exports. Food insecurity has become a major challenge in some Caribbean countries. Weak linkages exist between agriculture and the tourism sector as well as with the Food Service Industry.

While there is clearly a range of diverse conditions among the countries of the CARICOM/CARIFORUM, many of their agricultural sectors are characterized by a number of similar and often interlocking constraints. These include:

- (i) weak technological and business / marketing support
- (ii) an inadequate incentive and institutional framework to support and mobilize the productive potential of small farmers
- (iii) shortage of skilled human resources
- (iv) weak market systems and linkages
- (v) limited capacity to respond to changes in international trading conditions
- (vi) a high exposure to climate induced risks
- (vii) weak natural resource management
- (viii) lack of appropriate financing mechanisms
- (ix) deteriorated rural productive infrastructure

In the context of the new trading arrangements producers / marketers are further handicapped by:

- (i) general unawareness of the new generation of regulatory instruments including SPS measures, food safety requirements, Euregap, Global GAP, HACCP etc
- (ii) limited access to training to respond to the new market realities
- (iii) no knowledge of the trends in the market, particularly the export market, on consumer preferences, competition, product standards, food safety standards etc

- (iv) lack of access to technology advice on improved / more productive technologies
- (v) absence of policy advice on opportunities in the new market environment
- (vi) absence of critical business support such as credit, appropriate advisory support and facilitation

In an environment where sectoral producers / marketers were already challenged the new generation of competitiveness factors presents a daunting challenge. The above are all contributing to a lack of competitiveness in the international markets.

The Human Resources Challenges

By and large CARIFORUM agriculture and fisheries sector lack the skills set to propel the required level of management, innovation, development and growth if the sector is to be able to grasp the available market opportunities. Over the past decades there has been a steady attrition of specialists and experienced agriculturalists from the sector partly driven by the decreasing importance of the sector, age, reduced public expenditure in real terms and the unattractiveness of the sector in terms of a career development. The existing level of low skills support can also be linked to the relative decline in agriculture training at the tertiary level especially in the English speaking Caribbean and in particular the demise of the faculty of agriculture of the University of the West Indies. More importantly the region has failed to develop an effective policy framework and strategic action plan to address the human resources needs of the sector despite the acknowledgement of same as a key binding constraint to development in the Jagdeo Initiative. Notwithstanding the fact that a limited number of regional students continue to seek training in agriculture and fisheries in North American Universities principally in the USA and Canada, they invariably remain in those countries or often find careers in other fields on their return to the region. This among other factors has contributed to the mismatching of skills which in turn negatively affects wage and labour productivity in the region.

Farmers, fisherfolks and agricultural workers are important stakeholders in the region. To attain meaningful development of the sector and to reverse decades of decline it is essential that farmer organizations and rural societies are provided the means to participate actively in shaping the future of the region. In addition, agricultural productivity is essential for the growth of the other sectors of the economy and the reduction of poverty. An important input for achieving the above objective is the provision development cooperation support through Scholarships, training and institutional development programme.

PROGRAMME RATIONALE

While the region has been making strides to address the political requirements for establishing a framework for the development and coordination of agriculture and fisheries, it is clear that in all the member states there is dire need for an injection of capital to support expanded production. Popular requests suggests that there should be a pool of funds set aside to facilitate Grants and revolving loan funds for the expansion of **orchard crops; greenhouse vegetable production; root crops; Spices and**

condiments; livestock including beef and dairy production; agro-tourism linkages; agro-processing; farm mechanization; sea transportation in order to meet domestic and export market demand and enhance intra-regional trade. There is also the need to

PROGRAMME DESCRIPTION & STRUCTURE

Broad Objective

The broad objective of this Programme is to improve the productivity and competitiveness of CARIFORUM Agriculture and Fisheries through capacity building of key stakeholders in production and marketing/packing.

Specific Objectives

The specific objective of this programme includes:

1. To build capacity among producers and marketers by creating awareness of the requirements of the new trading and regulatory environment and the challenges these impose
2. To provide hands on training on Good Agricultural Practices and food safety practices
3. To provide training to producers (organized along industry Clusters) towards improving productivity and efficiency on the farm through the following:
 - a. Improved management practices with a view to improving operation efficiency
 - b. Introduction of improved technology, particularly labour saving technologies
 - c. Promotion of new products that offer opportunities for improved financial outturn
4. To expand the pool of competent professionals by provide scholarships in key areas for advanced specialized training
5. To develop /enhance the capacity of key institutions at the national level to support the activities in items (1 to 3) above, including:
 - a. Technology support
 - b. Market advisory, intelligence and market facilitation
 - c. Credit
 - d. Business advisory services

Output

The expected outputs from this program include:

- Producers / marketers who are fully aware of the new generation of market regulatory requirements, their importance and the competitive nature of markets for agriculture and fishery products
- Key industries organized into Business Clusters with the goal of becoming self reliant and sustainable
- Producers who are capable of more efficient farm operations and achieving higher levels of productivity, including adoption of labour saving mechanization
- An expanded pool of trained professional with competencies in strategic areas
- Institutional support to producers / marketers strengthened and service oriented to include:
 - Technology support
 - Market advisory, intelligence and market facilitation
 - Credit
 - Business advisory services

Outcomes

The expected outcomes from these outputs are:

- Increased outputs of commodities for the domestic regional and international markets
- Improvement in the level of regional food security
- Increased awareness among producers, agro-processors, exporters of opportunities within domestic and regional markets particularly for targeted commodities
- Enhanced competitiveness of regional agricultural products through realistic gains in productivity and efficiency of production.
- Increased agro-business investments of regional scope through effective public private Partnerships and other individual or joint venture efforts

Components

This project will be comprised of the following three components as follows:

Component 1: Technical Assistance to Enhance the Capacity of Producers &

Marketeers

Component 2: Scholarship for Advanced Specialized Training in Key Areas

Component 3: Strengthening Key National Institutions Supporting Production

Component 1: Technical Assistance to Enhance the Capacity of Producers & Marketeers

This Component is intended to enhance the capacity of producers / fishers in Agriculture and Fishery to adjust to the challenges of the new market realities through improved operational efficiency and adoption of practices and technologies to improve productivity and competitiveness.

The interventions are intended to be immediate given the current state of the sector. The proposal for implemented through a programme of technical assistance given the limited capacity of the Ministries of Agriculture in CARIFORUM states. The key initiatives include:

- Awareness creation of the new generation of regulatory and business requirements
- Awareness of market competitiveness challenges and opportunities and strategies for improving competitive
- Training in Management of farming operations towards achieving improved efficiency
- Awareness on technological options and training / support in adopting improved technology

Component 2: Scholarship for Advanced Specialized Training in Key Areas

Skills shortage reported by the countries

The countries have reported a general shortage of specialists to support development of the sector. While there are persons with general agriculture training they cannot provide the technical expertise to support commercial development in a dynamic sector. The skills most demanded are as follows;

- Agronomy (fruits, vegetables, legumes, grain crops, root crops, spices and medicinal herbs)
- Livestock production (small ruminants; dairy and beef; forage development; animal nutrition; meat science, Veterinary medicine)
- Agro-processing and post harvest technology and food storage
- Integrated pest management, Virology, Entomology and plant pathology ;agricultural health and food safety
- Biotechnology and bio-safety, micro-propagation
- Land husbandry, soil and water management/irrigation
- Project development and planning and marketing
- Geographic Information Systems (GIS) and information technology
- Fisheries biology ; aquaculture ; sustainable resources management

These skills could be grouped in the following Science and Technology Disciplinary areas;

- Agronomy /Horticulture
- Livestock production
- Fisheries and aquaculture development
- Animal and plant health protection
- Biotechnology , Bio-security & Bio-diversity
- Agribusiness Planning and Development and marketing
- Soil and water resources conservation and management

Component 3: Strengthening Key National Institutions Supporting Production

This Component is intended to ensure that producers/ fisher folks are provided with critical business support including the following:

- Market advisory, intelligence and market facilitation
- Credit
- Business advisory services

Funding requirements

Component 1: 60 million EUROS

Component 2: 20 million Euros

Component 3: 30 million Euros

Implementation arrangements

An Agreed portion of the initial pool of funds would be managed through the CARICOM/CARIFORUM Development Fund window for Agriculture and would be disbursed to National Development Banks for un-lending to the productive sector. The remaining funds would be managed under a Trust to ensure that an agreed corpus is appropriately invested and managed for long term sustainability. Income from the corpus would be applied to agricultural modernization purposes on a priority needs basis. Trustees for the fund would be decided by CARIFORUM SECRETARIAT.

A Technical Committee comprised of the public and private sector and CARIFORUM SECRETARIAT representative and chaired by the private sector should be enlisted to provide technical guidance to project selection and implementation.

Synergies between proposed programme and ongoing work in the region

Enhancing agriculture food production and productivity and increasing intra- and extra-regional trade linkages are key objectives in the regional governments' national and agriculture sector strategies and plans for poverty alleviation and economic growth. The goal and objectives of this programme are also aligned with the regional policies and strategies such as the revised Treaty of Chaguaramas, which outlines the Community Agricultural Policy (Article 56); the regional Food and Nutrition Strategy; and the Regional Transformation Programme . They are in tandem with the objectives and purposes of the EPA which seeks to facilitate the regions emersion in the global economy.

All of these policies and strategies have in common the development of the agriculture sector through increasing efficiency and diversity in primary production and agro-processing; improving consumers' access to healthy and good quality food; increasing incomes of sector participants; promotion of private sector investment and participation; promotion of cross border investments to enlarge regional production of goods; Improving the regulatory environment; and export promotion.

This programme also complements other on-going operations and programmes in the region including the EU Banana support programme and the multi-annual sugar reform programme .It would also complement the national development programmes for agriculture and food security and enable the implementation of export development strategies in the countries. The programme would seek to resolve one of the key binding constraints identified in the Jagdeo Initiative and would be aligned with other regional initiative such as the Jagdeo Initiative, Promoting CARICOM/CARIFORUM food security project; the EU-ACP Agricultural Commodities programme among others.

Potential risks and mitigation measures

The major risks to implementing this programme are;

1. The willingness of the EU to fund the programme at a meaningful level given their modus operandi and bureaucratic and budgetary processes and constraints.
2. Required improvements in the business facilitation processes in CARIFORUM Countries are improved to facilitate investments in the sector.

References;

1. Concept note- CARICOM Agribusiness Development Programme
2. World Bank report entitled “A time to choose: Caribbean Development in the 21st Century”
3. Jamaica 20/30 Vision Plan for Agriculture

PROJECT 2

CONCEPT NOTE

PROGRAMME FOR BUSINESS & EXPORT DEVELOPMENT

Background

The Region's agricultural policy seemed to have been grounded on one of capturing global market share on a volume bases rather than on one that focuses on the value dimension. In this regard, the onus has been on exporting traditional agricultural products such as sugar, bananas, coffee and cocoa to the EU markets for adding further value. The onset of the WTO and the erosion of preferences now call for a revision of the way business is conducted. The competitive edge previously held based on volumes is to be replaced by one that is focused /on value. Some high valued exceptions remaining with significant market share include organic bananas from the DR, Rum, rice, citrus concentrates and juices, shrimp, lobster and queen conch.

The food export trade continues to be dominated by the traditional export items even though the aggregate earnings have been affected by the erosion of preferences. For example in 2007, EU imports of bananas from the CARIFORUM countries totaled €219 million or 5.5 percent of total EU imports from CARIFORUM. Data from EUROSTAT shows that in terms of the EU/ACP trade, the CARIFORUM accounted for a small percentage of food imported into the EU. The CARIFORUM also accounted for a relatively small share of the EU export of food to ACP regions

/Although agricultural diversification has been pursued since the 1950's, none of the non-traditional products have made a significant impact on the agricultural trade to the same extent as the traditional ones. At any rate, agriculture diversification itself is limited by virtue of the small scale and fragmented nature of production that is possible as well as other structural problems affecting the productive sector generally. The region is also highly dependent on imported foods with the regional annual food import bill now estimated to exceed USD 3.5 Billion.

The above situation speaks to the urgent need to increase food production to meet food security needs as well as to expand food export development. This is important when it is considered that in many of the countries, agriculture will continue to be a dominant activity for the foreseeable future. Haiti is a case in point. In that country, Agriculture remains the key sector in the economy, accounting for approximately one-quarter of GDP. Forestry and fishing account for a further 7%. The sector is the principal source of employment for about two-thirds of the population. Coffee is by far the most important export crop. Approximately 380,000 peasants are engaged in its production. However, performance has been on the decline; production in 1995/96 was just 13,000 metric tonnes, compared with 27,000 metric tonnes in 1992/93. Both production and export have either remained static or declined over the ensuing period. Earnings from coffee can be as high as 58% of total agricultural export earnings, thereby illustrating the concentration of exports in some of the countries. (Jamaica and the DR have the most diversified agricultural exports). Sugar and rice are also traditionally important

agricultural commodities in Haiti. However, they have both been facing stiff competition from imported commodities.

For the past three decades, the Caribbean has pursued an external trade policy anchored on non-reciprocal preferential access to the European and North American markets. Under the Lomé and Cotonou agreements, Caribbean countries received preferential access to the EU for traditional agricultural exports. Similarly, the region has enjoyed 30 years of preferential access to the United States for certain products under the Caribbean Basin Initiative (CBI) and subsequently through the Caribbean Basin Trade Partnership Act (CBTPA).

These preferential agreements have shaped the Caribbean external trade structure. The economies of CARIFORUM countries are open and they rely on trade to satisfy a large proportion of their needs. The inability to be competitive suppliers in the trade equation therefore could put the region at a significant disadvantage as markets are liberalized under the EPA. Trade measured as a percentage of GDP is highest for Guyana and lowest for Haiti. On average, the OECS countries are more open than the rest of the region. While the region as a whole nearly doubled its merchandise exports between 2000 and 2005, it should be noted that this is driven in large part by the surge in oil and natural gas exports from Trinidad and Tobago. In contrast, over the past 10 years, merchandise exports by Dominica, St. Lucia, and St. Vincent, measured in real US\$ terms, declined by up to 40 percent due to preference erosion. Despite trade preferences, the Caribbean's integration into the world economy has been slow and compares poorly with some Asian countries with similar levels of integration 30 years ago.

The Caribbean's share of world trade has also been declining. Weaknesses in access and low quality of infrastructure, limited and high cost of ocean and air freight faced by many countries together with low labor productivity have resulted in relatively high production costs compared to competitor countries of Asia. Sugar exports and production in the Caribbean have declined by about half since 1970 owing to rising costs of production, resulting from rising wages, deteriorating field and factory performance and increasing inefficiencies associated with public sector control and management. Estimated costs of producing and exporting sugar in Guyana and Belize, the lowest cost producers in the Caribbean, are still high in comparison to the cost attained in the world's leading producer nations. Similarly, in bananas, the Caribbean countries are amongst the highest cost production in the world, principally because of low land productivity, and higher labor and transportation costs. For instance, St. Lucia, Jamaica and Dominica have yields that are 20-35 percent of those obtained in Ecuador/.The less than satisfactory performance of agriculture and fisheries in CARIFORUM global trade is reflected in the overall competitiveness of the region. According to a World Bank report, the region's competitiveness is low reflecting its high costs of doing business, labor market rigidities, tariff dispersion, and trade costs. Most of the Caribbean countries' overall performance of doing business ranks below that of comparable developing countries, including Mauritius, Hong Kong, Malaysia, and Singapore. (CARIBBEAN: Accelerating Trade Integration Policy Options for Sustained Growth, Job Creation, and Poverty Reduction April 2009)

In addition to the factors cited above, other reasons for the poor performance include the following;

- High wages and relatively low productivity.

- Increased concentration of products. (A breakdown of the top 20 exports to the world during 2001-2006 shows that four are agricultural and food products, six are minerals and ores, four are manufactures and six are a fuel-related product).
- The small size of the Caribbean economies also limits the region's competitiveness.
- Economies of scale are limited as production capacity of most of the countries is limited to small scale. As the result, unit costs are relatively higher than those in comparable developing countries.
- While many Caribbean countries (most notably Trinidad and Tobago, Dominica Republic and Jamaica) have undertaken policy measures to improve their trade policy, important weaknesses remain in five major areas: (i) measures affecting imports; (ii) measures affecting exports; (iii) investment incentives; (iv) competition policy; and (v) trade policy formulation and implementation.
- Customs procedures and administration are weak in most Caribbean countries. Customs valuation methods are not effective because of limited capacity at the customs departments in many Caribbean countries. With the exception of Trinidad and Tobago Dominican Republic and Jamaica to some extent, export procedures and financing are not well developed in the Caribbean. Exporters have limited access to credits for exports and credit insurance. Export promotion activities (export facilitation, information, image-building and participation in fairs) are barely developed.

In terms of the intra-regional trade, Trinidad and Tobago has long been the dominant intra-regional exporter, with 85 percent of total exports. Barbados is the second largest exporter with only 6 percent of total exports, followed by Guyana with 4 percent. The OECS countries as a group account for about 5 percent of the value of intra-regional exports. While total intra-regional trade was valued at USD 2.5 billion in 2005, it should be noted that petroleum products accounted for most of this whereas agriculture and fisheries share remain small.

Export promotion

CARIFORUM export promotion strategy have largely focused on niche market development; market differentiation and on product recognition. This is in contrast to the previous period when the regional Export promotion was based on fiscal incentives, a common external tariff (CET) and foreign direct investment flows.

In the case of non-traditional products, the efforts to secure markets have focused on niche-market production. Niche-marketing strategies focus on addressing a need that is not being addressed by mainstream providers. According to some views, niche-market production involves necessarily high value-added content products and as a result does not include the basic agricultural commodity exports. In the region however, products such as blue mountain coffee, organic bananas, citrus fruits including ortanique oranges and ugli fruit and fine flavoured cocoa to name some examples, are regarded as niche products. Niche market production can actually be a risky venture and as a result, some Caribbean policy

makers have sought to concentrate on activities that can minimize the effects of external shocks or unforeseen events. Efforts to secure markets for traditional products such as sugar and bananas have always focused on the retention of preferential market access. However with fair-trade and organics, there is now a dimension for niche marketing of these products.

In terms of product recognition, the guiding principle today, is to distinguish a product by its quality and more importantly by its 'brand name' which makes it a 'recognizable product.' In general the export competitiveness of these products is based on comparative advantage which in the case of the Caribbean, means in some cases, natural resource based products. Particular examples in the Caribbean region include the case of Jamaican Coffee and El Dorado Rum in Guyana. A good example of market segmentation strategy has been the development of fair-trade bananas in the St. Lucia, Dominica and St. Vincent and the Grenadines. Similarly organic bananas in DR and fair-trade sugar in Belize are other examples.

Government institutions in the region have traditionally been at the forefront in export promotion. In many of the countries these agencies typically provide export facilitation services, which include export market research, market identification, market development, and marketing support. Entities such as the (BDIC) in Barbados and JAMPRO in Jamaica offer an Export Grant Incentives Scheme and industry modernization services respectively. At the regional level, Caribbean Export Development Agency (CEDA) provides support mostly to private sector manufacturing and services firms. Countries in the region have in the past benefited from specially designed food export promotion programmes through donor support from the EU e.g. (Target Europe) and from Canada (CAN-EXPORT).

Programme Rationale

The country needs assessment for agriculture and fisheries revealed that CARIFORUM member states will experience severe challenges in increasing exports to the EU market. Producers and exporters have been accustomed to a less demanding set of requirements even when exporting to North American markets when compared to EU market entry requirements. The high cost of tailoring goods for the EU market – e.g. developing certification standards e.g. EUREPGAP; GLOBAL GAP organics and fair-trade standards, special accreditation for seafood exports; special labeling and packaging, retooling factories and market insurance are significant barriers to increasing trade to the EU markets.

The country needs assessment also revealed a renewed interest at penetrating new markets, both within the region as well as in the EU and other metropolis. For example, Suriname wished to move up the value chain with its fishery products before exports. Belize wishes to get into the EU market but is unsure about the market conditions that exist. Jamaica wants to get more of its RTE products into the global market and The Bahamas wants to access cheaper food imports from CARIFORUM. In this regard, to complement and support the calling for expanded production, to facilitate sustainable movement up the value chain, the development of Clusters and Cooperatives a programme aimed at business development and export promotion and in particular for the latter, the development of export

platforms for targeted commodities and markets should be developed to assist the private sector to grasp the new trading opportunities.

This has been the approach of developed countries as they seek to capture larger shares in the global market. Within the Region, initiatives are already being taken in countries such as the DR, in which clusters have been formed around greenhouse vegetable production; mango; pineapple; coffee; cocoa and other commodities and to mount export platforms for penetrating targeted markets. The success of the approach lies in the fact that it provides for economies of scale in production volumes as well the integration of value chain operatives that allows for the critical mass required for market leveraging and the provision of support services. The success can be seen in the growing export volumes of organic bananas, vegetables and other fruits from the DR.

Project Description

The project recommends strengthening of the DR business model as well as its replication in countries of the Region. The focus of the intervention may include the institutional development of Business Clusters, provision of institutional development support for exporters who are desirous of developing private sector groups and sector-specific associations beyond the major industries (i.e. Rice, rum, poultry, sugar and bananas) where functional associations currently exist. Planned interventions in this regard should include the provision of services to conduct ongoing strategic market research,, subscription to marketing information databases; provision of training and network mechanisms and provision of direct market support for pre-shipment financing and export and market insurance to name some of the possible interventions. The development of export platforms could be opportune for areas such as fisheries; vegetables; spices and condiments; root-crops; tropical fruits eg. papaya, mango; ornamental horticulture; snack foods among others. The fundamental principles are geared to highlight opportunities and reduce business risks to entrepreneurs. The project will also seek to foster movement to higher levels in the value chain.

The Business development and export promotion programme is a multi-faceted approach to support the region's technical capacity to promote exports and attract investment in a coordinated, systematic and sustainable way (with a focus on result-based management and income generation). The many facets of the project include: support in organizing industries into Business Clusters, Market studies; market entry strategies / penetration strategies; Intellectual property protection issues; Product design and quality assurance; Formation of strategic alliances and partnerships; Customs procedures and trade facilitation; effective use of information and computer technology; investment promotion, analysis and institutional support for trade in services; business support services and institutions; Public-private sector networking, e-commerce, trade finance, and trade promotion; Developing export platforms (training to product clusters; validation of product in targeted markets; *insitu* marketing negotiations).

Objective and description:

The general objective of the program is to help small and medium-sized enterprises in agriculture, agro-processing and fisheries of the region to capitalize on commercial opportunities by strengthening the capacity to promote exports and develop export businesses not only in respect of the liberalized EU markets but also to the intra-regional and tourism markets; EU-OCT's, Central and Latin America and the traditional markets of USA and Canada.

The specific objectives are:

- (i) to assist with the institutional development / organization of Business Clusters so as to achieve the capacity for sustained and self reliant growth and development
- (ii) to provide customized trade-related business development /entrepreneurial training for potential and current investors
- (iii) to modernize and apply updated technology to the promotion of foreign trade at the national, regional and international levels, and create effective coordination mechanisms;
- (iv) to support the export business development needs of CARIFORUM agriculture and fisheries exporter entities by providing state-of-the-art business development services in the area of exports;
- (v) to help centralize information, services and statistics on foreign trade and establish comprehensive marketing database that is accessible, user friendly, available to exporters on a virtual basis and constantly updated.
- (vi) to promote investment / trade opportunities to CARIFORUM entrepreneurs

COMPONENTS

The project will consist of three components as follows:

1. Strengthening of organizational and technical capacities in the area of export promotion
2. Export Promotion /Trade & Business Facilitation
3. Development of Export Platforms for Agriculture & Fisheries Exporters

1.0 Component I. Strengthening of organizational and technical capacities in the area of export promotion**1.1 Organizational strengthening**

The project will support organizational strengthening through (i) assist with the formation of Business Clusters; (ii) the design of a structure for cooperation, coordination and feedback among national trade promotion agencies and CEDA; (iii) strategic planning for the various public and private sector export

agencies including the definition of roles, functions, objectives, targets, and responsibilities of the agencies involved; (iv) identification of activities, investments, and joint annual work plans; (v) formation of networks to transfer knowledge and information (vi) revamping of internal processes.

1.2.Training

The project will finance training for export promotion officials in the public and private sectors, in the areas including: (i) market intelligence; (ii) foreign trade; (iii) logistics; (iv) market entry strategy; identification of trade opportunities ;(v) policies encouraging export partnership projects; (vi) trade policy promotion tools; (vii) export incentives. It will also finance an internship program for MBA students, to specialize in agribusiness marketing thereby building technical capacity in the region.

1.3 Export promotion

The project will support the implementation of export promotion activities in strategic sectors with export potential. These would be based on the value chain clusters being developed and could include seafood and aquaculture products; vegetables; fruits; root-crops; sauces and condiments.

It will finance the following activities, among others:

a). ***Participation at specialized trade fairs.*** Support will be provided for the participation of businesses currently exporting or those with export potential, as well as a limited number of public sector officials in specialized trade fairs. The fairs should focus on those strategic sectors with the greatest short-term trade development potential.

b). ***The organization and implementation of direct and reverse trade missions.*** In the first case, missions are organized to visit target markets with the intention of selling CARIFORUM agriculture and fisheries products and processed foods. These may be composed of businesses in a single production cluster or several clusters where feasible and practical. Agriculture and fisheries exporters will be given priority in the selection of participants. Reverse trade missions involve attracting foreign buyers to the country so that they can learn about local businesses and products.

In both cases, the project will finance expenses common to all participants in the trade missions/fairs (e.g. translators, stands, logistics at the mission destination point, etc.), follow up activities by the Program Execution Unit.

c). ***Implementation of management, monitoring and customer service systems for the promotion of trade.***

The programme will support the design and development of a customer relationship management (CRM) tool, intended for systematic record-keeping, planning, and management of the contacts made

and potential business identified as a result of the trade promotion activities. The implementation of CRM processes and systems will support the work of the government officials in charge of promotion and Embassies, giving them access to strategic information and orderly monitoring of the outcomes attained.

2.0 Component II: Export Promotion /Trade & Business Facilitation

2.1 Programme coordination

The program will be led by CEDA and the delivery of business development services to the exporters will be arranged according to the following scheme:

(i) CEDA will exercise senior management and coordination of the project, acting through a programme administrator or small Project Implementation Unit.

(ii) The intermediary agencies at the national levels will deal with the businesses directly, including the dissemination of information on business development services (BDS), and support for the design, processing and monitoring of export plans and business proposals. In most cases, these intermediary agencies will be export promotion or development agencies at the country level (OR) services may be provided by suitable and qualified consulting firms or individual consultants registered in the region or elsewhere. Consultants will be vetted by CEDA and the national export promotion agencies. CEDA will be responsible for the monitoring and evaluating the impact of projects and the performance of the intermediary agencies; maintain an updated inventory of potential exporter demand for BDS, and updating of available statistics; dissemination of information on successful production-oriented projects; arrange technical training for the officials in charge of the sector; and provide from project resources hardware and software required for execution of the component at the national level.

2.2 Export plans and business development service

The project will finance the provision of business development service (BDS) and export plans to support the exporters through a public/private co-financing arrangement. Individual Exporters or Cooperatives /Production Clusters interested in accessing assistance will submit business proposals for consideration by the programme. The programme will finance 60% of the cost of the projects selected, with the remaining 40% contributed by the businesses. The principal tools or BDS to be administered under this component can be grouped into the following programmes:

a. **Technical assistance and training program.** business development service training and specialized technical assistance will be offered to build export capacity and increase exports. The development tools to be offered through this programme are:

(i) technical assistance, which will consist of partial, non-reimbursable financial support to help the beneficiary businesses hire specialized consulting or advisory services. The objective of these services will be to implement technological and operations management improvements that help to increase productivity, including sales systems, strategic planning, equipment research and evaluation, product design, introduction of information systems, distribution of equipment and personnel, and others. The consulting services may be in any area of business management, such as strategic development, business training, finance, accounting, institutional design, production processes, marketing, human resources, etc.; and

(ii) Training, which will consist of commissioning training activities for business employees to acquire new knowledge, in order to increase their productivity and competitiveness.

b. *Business partnership programme.* BDS will be offered through this programme to form partnerships among companies that plan to develop joint businesses (partnership projects) and strengthen supply chains (supplier development). Partnership programmes will consist of partial, non-reimbursable financial support for the execution of projects by a group of at least five businesses, to address shared challenges and/or do business as a partnership, in areas such as supplier complementarities to expand markets, centralized purchases to reduce costs, development of joint information and/or marketing systems, and new business development.

The Supplier Development Programme will focus on financial support for the execution of projects, to make supply chains more competitive and strengthen relationships between vendors and larger firms interested in their products, through the execution of technology and management enhancement projects.

c. *Export technology transfer program.* BDS will be offered for:

(i) Technology missions, which will consist of visits to businesses, technology centers, fairs, seminars and workshops of a technical nature held in other countries, for the purpose of acquiring new knowledge applicable to their businesses;

(ii) Specialized external consulting, obtained by contracting highly specialized experts at the international level, in the areas of technology, production processes and products, with the purpose of incorporating, transferring or adapting international knowledge and technologies in the businesses' production processes and products;

(iii) Technology internships, which will consist of training through attendance at courses or internships by professional staff and specialists who have a contract with the beneficiary business for at least six months, and who are fluent in the language of the country where the internship will take place, so that they can gain highly specialized knowledge in new technologies, production processes and products.

d. Market development programme. BDS will be offered to support businesses in their efforts to prospect, enter and consolidate international markets. The BDS to be offered through this programme are:

- (i) Trade missions, which will consist of partial financial support to pay for expenses related to trade visits scheduled by businesses located in Argentina to countries and companies to which they wish to export (direct trade missions), and trade visits scheduled by foreign businessmen to businesses in Argentina that wish to export (reverse trade missions); and
- (ii) Market development, which will consist of partial, non-reimbursable financing to help businesses develop and consolidate foreign markets, and strengthen their management of exports.

3.0 Component III. Development of export platforms for Agriculture and fisheries exporters

The program will support the design and development of an electronic platform (Web portal) to support agriculture and fisheries exporters, where they can access information, statistics, processing and services required for their exporting needs. This platform will include the development of applications and integration of the systems of all relevant ministries and agencies involved in the support of the country's agricultural and fisheries exporters as well as other related businesses. The programme will finance the following activities:

- (i) detailed design of the structure, content, services, processing and statistics to be offered by the portal;
- (ii) identification of the portal's operational, functional and technological requirements;
- (iii) detailed mapping of export procedures, processing and requirements;
- (iv) acquisition of software, hardware and communications for the development, operation, and maintenance of the portal;
- (v) training on the operation and use of the portal, differentiating between government officials and clients; and
- (vi) promotion of the use of the portal. This development will draw on and accentuate the development now taking place in development of national agricultural marketing information systems such as NAMIS (TT); JAMIS (Jamaica).

PROGRAMME COST

The overall cost of the programme is € 22 million comprised as follows:

Component 1 : € 10.0 million

Component 2 : €10.0 million

Component 3 : €2.0 Million

Implementation arrangements

Implementation arrangements are outlined under Component II above.

Synergies between proposed programme and ongoing work in the Region

Business development and export promotion is a necessary intervention to prepare CARIFORUM food exporters to meet the daunting challenges posed by stringent EU market entry requirements and international standards. Together with the other measures proposed and the existing efforts in the countries, it will create value added and increased competitiveness of CARIFORUM Agriculture and Fisheries which are key objectives in the regional governments' national and agriculture sector strategies and plans for poverty alleviation and economic growth. The goal and objectives of this programme are also aligned with the regional policies and strategies such as the revised Treaty of Chaguaramas, which outlines the Community Agricultural Policy (Article 56); the regional Food and Nutrition Strategy; and the Regional Transformation Programme and their ongoing review/revision. They are in tandem with the objectives and purposes of the EPA which seeks to facilitate the regions emersion in the global economy.

All of these policies and strategies have in common, the development of the agriculture sector through increasing efficiency and diversity in primary production, expansion of agro-processing and trade; improving consumers' access to healthy and good quality food; increasing incomes of sector participants; promotion of private sector investment and participation; promotion of cross border investments to enlarge regional production of goods; improving the regulatory environment; and export promotion.

This programme also complements other on-going operations and programmes in the region including the EU Banana support programme and the multi-annual sugar reform programme. It would also complement the national development programmes for agriculture and food security and enable the implementation of export development strategies in the countries. The programme supports ongoing efforts in industry modernization and the strengthening of SME's in the region. The programme also

seeks to resolve some of the key binding constraints identified in the Jagdeo Initiative and would be aligned with other regional initiative such as the Agribusiness Initiative, Promoting CARICOM/CARIFORUM food security project; the EU-ACP Agricultural Commodities programme among others.

Potential risks and mitigation measures

The major risks to implementing this programme are:

1. The willingness of the EU to fund the programme at a meaningful level given their bureaucratic and budgetary processes and constraints.
2. improvements in the business facilitation processes in CARIFORUM Countries are made to facilitate investments in the sector.

References;

1. Concept note- CARICOM Agribusiness Development Programme
2. World Bank report entitled "A time to choose: Caribbean Development in the 21st Century"
3. Jamaica Industry Modernization programme
4. Export promotion policy in the Caribbean – ECLAC publication
1. CARIBBEAN: Accelerating Trade Integration Policy Options for Sustained Growth, Job Creation, and Poverty Reduction April 2009

PROJECT 3
CONCEPT NOTE
ESTABLISHMENT OF AGRO-PROCESSING MODERNIZATION PROGRAMME

Background and key issues to be addressed

For a considerable period, agricultural development in CARIFORUM has been dominated by a few traditional commodities including sugar, bananas, coffee, rum, rice and cocoa. Other export commodities include fruits, vegetables and specialty crops; and value added products. National Accounts statistics however separates the agro-processing industry from agriculture, hence the overall performance of the agricultural sector without the value added component is invariably understated and hence the perception of the lessening of the impact of agriculture.

The production of traditional export commodities has declined due to increased competition, and the inability of the region to be internationally cost competitive. In the CARIFORUM group of countries the most important value added agro-based product is rum. The rum industry is the 4th largest merchandise foreign exchange earner in the region after sugar, bauxite and bananas and provides employment for 10,000 persons directly and an estimated 40, 000 indirectly in 2001. This industry also has many linkages with the dominant tourism industry. There are about 35 rum producers in the region and the regional rum industry has moved from being a commodity rum producer to a supplier of branded products. The rum industry has been singled out for special attention and has been provided with a significant injection of development capital courtesy of the European Union. (Under the 8th EDF 70 million Euros were allocated to the integrated development programme for Caribbean rum industries. The project has 3 components viz. institutional strengthening of WISPA; marketing and distribution strategies; plant modernization and meeting environmental needs).

In other areas of agro-processing, especially food processing the region has great difficulty in reaching acceptable international export standards because of an undeveloped regulatory and support environment. Legislation promoting food safety standards by producers is weak as well as the enforcement powers.

The many attempts at diversification have been partially successful in some countries thereby leading to a wider range of products for the domestic regional and international markets. Consequently the export profile of CARIFORUM has change dramatically with products such as fresh fruit and vegetables, root crops, condiments and spices, cut flowers, Seafood (fish, lobster, conch) and aquaculture products (Tilipia and fresh water shrimp) among others being added to the list. Over time developments in Agro-processing have helped to broaden the scope of agriculture thereby adding value to the narrow production base and opening a new vista of opportunity for the region.

With the possible exception of rum and citrus concentrate which went into the export trade, agro-processing activities by large, were initially geared to providing a range of products for the domestic

markets. In this regard the work of extension services and their home economics units in particular were especially effective in unearthing new food formulations and recipes that were eventually developed into mainstream agro-processed products. Good examples of these products are seen in the hot sauces, jams, jellies and marmalades, jerk seasoning, beverages and other gourmet processed products produced throughout the region and which have received wide acceptance in the international market.

The early period of development in the subsector was characterized by market protection; insufficient linkages with primary agricultural production hence an insufficient throughput of raw materials to develop economies of scale; insufficient investments in plant and machinery among other constraints. During the 1960's the subsector received increased attention and benefited from the industrial thrust which saw the establishment of additional factory space and the development of food technology institutes such as the SRC food technology Unit in Jamaica and CARIRI in Trinidad and Tobago respectively. In later years the Caribbean countries also benefited from work carried out in food technology Unit in the Faculty of Engineering at UWI St. Augustine Campus and in the Chemistry and Natural Science faculty at UWI Mona to name just two of the important contributions to development in the subsector. The result of these efforts has been the establishment of many agro-processing operations (e.g. making jams, jellies, fruit nectars and other beverages) in the region.

There has not been a unified or harmonized approach to developing the region agro-processing subsector which in terms of contribution to GDP is most important in DR, Jamaica, Guyana, Suriname, Barbados, Belize and Trinidad and Tobago. Trinidad and Tobago by virtue of its early decisions to retool the industry and aided by its energy resources has been able to dominate the region in terms of total industry output and efficiencies, though the industry relies heavily on external sources of raw materials. Overall the agro-processing sector in many of the CARIFORUM member states is uncompetitive by international standards due to high production costs, small production volumes, high energy and wage costs and less competitive financing costs. The industry in many instances is not well integrated with primary agriculture and essentially takes of the surplus unmarketable fresh produce as its main source of raw material. Contractual arrangements for raw material supplies are the exceptions rather than the norm.

In many of the countries processing equipment is obsolete and small enterprises in particular are constrained by their inability to meet the stringent product development, packaging, labeling and other food standards such as HACCP demanded by the international market.

By large, the technology utilized in the small-scale processing sector has remained traditional. In some cases, new products have been developed but the countries lack a well articulated policy and support mechanism for their commercialization. With few exceptions, the agro-processing subsector remains rudimentary, underdeveloped and largely without significant institutional, technical and financial support

A new approach to energizing the sector for growth would be one which seeks to address the entire value chain in agro-processing and marketing, including development of the supply chain, market

development and diversification. This approach would aim to forge greater linkages between agro-processing and primary agriculture; build contractual relationships to ensure adequate raw materials; increase the income of farmers through more remunerative prices for their produce; encourage value addition in agriculture produce and reduce post harvest losses. The approach would also seek to introduce new technologies and practices to modernize agro-processing and marketing; to develop export platforms and to build a strong state brand in the domestic and international market; to attract private investment in agro-processing and create new employment opportunities on a large scale.

Programme Rationale

The agro-processing sub-sector is a significant contributor to GDP in many of the countries of the region and has the potential to propel increased production of primary products. Value added production is an important strategy for converting greater value from the relatively limited supply capability given the physical space for agriculture production in the region. Rising world food prices and other concerns such as health and internal food security have made agro industry a priority sector for most CARIFORUM states. The Caribbean region has relatively high labour costs and other challenges in attracting labour to agriculture and therefore programmes in agriculture must encourage the introduction of technology and new mechanism. With respect to the fishing industry there is much scope for development with the processing of seafood products holding out significant opportunities were the region to be able to exploit offshore fishing resources as well as to develop its aquaculture potential.

The region has several strengths which underpin the potential for agro-processing. These include favourable climatic and soil conditions; experience in producing a wide range of agricultural products; skills and supporting institutional and infrastructural systems to support this sector because of the track record of the industry in the region; the region has a positive image as a source of good quality produce with many national branded products having gained international recognition and acceptance; proximity to the major market of North America ; unfulfilled demand in the tourism and hospitality industry and the intra-regional markets.

With few exceptions the agro-processing subsector remains rudimentary, under-developed and largely without significant institutional, technical and financial support. The Bureau of Standards and other regulatory mechanisms of state are invariably under-resourced to fully assist the sub sector; Support laboratories for testing and new product development are few, their capabilities are limited and their services are considered expensive by the smaller producers. All of these are essential to support the industry in surmounting Technical Barriers to Trade, and to meet certification requirements necessary for penetrating export markets. These weaknesses also increase the vulnerability of regional economies to unfair trading, as they do not have the capacity to regulate their imports, placing stress on local producers.

There are also weaknesses at the level of the SME where capacities are also undeveloped. As a result SMEs have difficulty in developing and maintaining Good Manufacturing Practices and Quality Management Systems, and the ability to develop new products to respond to competitive pressures and market opportunities is also restricted.

Other factors that impact on the industry include lack of raw material, expensive labeling and packaging because of economies of scale, and expensive shipping, especially for the smaller islands that rely on feeder routes.

Summary Programme description

Objective

The major objective of the agro-processing modernization programme is the reorientation of agro-processing entities towards the adoption of modern techniques and standards to make them more competitive in the domestic and overseas market. The programme is intended to support the development of value added through the provision of financial and technical support for product development, food standards and certification; HACCP and other international standards application; packaging and labeling; retooling of factories; training and technology development; provision of market support .

Output

In fulfilling the objectives, the programme will do the following:

1. Provide a pool of funds to support development of food standards and certification; HACCP and other international standards application; packaging and labeling; retooling of factories; training and technology development; provision of market support.
2. Through the use of qualified consultants ,Provide technical assistance to target companies at the diagnostic, feasibility, project assessment and implementation stages;
3. Assist in development of technology and personnel, directed toward the achievement of self-sustained growth;
4. Make recommendations on behalf of agro-processing entities and assisting them in obtaining finance for the purpose of upgrading plant and equipment
5. Focus on implementing improved production methods and systems to enable firms to gain competitive advantage in the export_markets
6. Establish an export platform for product grouping to enhance international market penetration.
7. Certify firms and plants as undertaking modernization activities if such activities conform to criteria stated below.

OUTCOMES

The modernization programme should aim to;

- Introduce Measures to reduce operating costs and increase efficiency;
- Modernization of plant and equipment;
- Develop new product lines or expand production of existing product lines
- Introduction of standards to support market access including GMP, Food Safety, Environmental Management, Quality Management.

During the Modernization process, it is expected that the following behavioral objectives would have been met:

1. Targeted entities would have modernized their equipment through any combination of the observed activities:
 - Equipment with new attachments – overhauling of equipment; new equipment
 - renovated and updated equipment
2. Plans would be re-engineered to improve efficiency;
3. Basic quality control features would be in place
4. Productivity improvements – (incremental efficiencies in output) as may be reflected in:
 - cost reduction
 - labour utilization
 - inventory control
 - waste and scrap reduction
 - energy control
5. Priority sub-sector would have clearly identified their product niche which gives them a competitive edge;
6. There should be maximum utilization of local raw material as far as possible.
7. There should be some measurable increased foreign exchange earnings of foreign exchange savings.
8. Having met the above objectives the Entities benefitting under the programme will be certified by the implementing Agency in the countries.

Recommendations

This programme should be linked to the award of fiscal incentives being offered in the countries therefore the importation of equipment would benefit from tax exemption on capital goods where this incentive exists or any other applicable incentives. To receive this benefit, following certification,

invoices will require appropriate validation to the Customs and Excise Authorities by the implementing agency in the countries.

Where similar programmes exist in countries such as Jamaica, funds will be apportioned to augment /and or modify the existing programme to meet the desired objectives.

REVIEW OF CERTIFICATION

Periodically, each company's status will be reviewed. This review will establish that the requirements on which certification was given have been met. It will also ascertain whether targeted performance levels have been achieved.

This assessment will primarily be based on data supplied to the implementing Agency and will aim at ascertaining:

1. increase in output
2. improved productivity
3. improved quality management
4. increased export

Components

The project will comprise two components

1. Revolving low interest fund for retooling and design changes to agro-processing entities in order to meet the required quality standards
2. Technical assistance grant funding to facilitate the modernization programme

Recommendation

The EU should be requested to provide technical expertise and information sharing to augment the pool of regional food technology consultants and other expertise drawn from regional institutions including UWI; UTECH; SRC; CARIRI; NARI Bureaux of standards; the private sector; export and investment promotion agencies in the region.

Funding requirements

A. For the technical assistance component an initial sum of 6 million Euros should be provided

B. For the revolving low interest fund an initial sum of 120 million Euros should be provided.

(In the absence of an industry audit these figures are rough estimates based on the realistic cost for effecting fundamental changes to the existing regional industry given the plethora of challenges to be addressed)

Implementation arrangements

To be effective this programme should be implemented by national agencies. In many of the countries there are capable organizations with good track record in implementing similar programmes. In order to develop a harmonized approach and to encourage cross horizontal cooperation among countries an industry audit should be done in each of the countries. Support from the programme should be apportioned in accordance with industry size and potential; export readiness and performance. Other resources may be required to facilitate the development of micro-business component of agro-processing as this programme should be focused on commercial development. The purpose of the audit would be to identify and quantify the support needed in each country; and the extent to which existing national programmes can be augmented with programmed resources to meet agreed objectives and outcomes. In this way duplication of efforts will be avoided and programme implementation accelerated. Where appropriate factory equipment should be purchased in bulk to achieve savings and reduce time lag for delivery the countries. The development of export platforms should focus on product groupings across countries to reduce cost and encourage regional branding.

In this way it may be possible to develop cross border investments in agro-processing for example with semi processed products such as fruit puree and concentrates from one county being converted into finished products for exports by another country .

Synergies between proposed programme and ongoing work in the region

Modernizing the Agro-processing sub-sector thereby creating value added and increased competitiveness of CARIFORUM Agriculture and fisheries are key objectives in the regional governments' national and agriculture sector strategies and plans for poverty alleviation and economic growth. The goal and objectives of this programme are also aligned with the regional policies and strategies such as the revised Treaty of Chaguaramas, which outlines the Community Agricultural Policy (Article 56); the regional Food and Nutrition Strategy; and the Regional Transformation Programme. They are in tandem with the objectives and purposes of the EPA which seeks to facilitate the regions emersion in the global economy.

All of these policies and strategies have in common the development of the agriculture sector through increasing efficiency and diversity in primary production and agro-processing; improving consumers' access to healthy and good quality food; increasing incomes of sector participants; promotion of private sector investment and participation; promotion of cross border investments to enlarge regional production of goods; Improving the regulatory environment; and export promotion.

This programme also complements other on-going operations and programmes in the region including the EU Banana support programme and the multi-annual sugar reform programme .It would also complement the national development programmes for agriculture and food security and enable the implementation of export development strategies in the countries. The programme supports ongoing efforts in industry modernization and the strengthening of SME's in the region. The programme also seeks to resolve some of the key binding constraints identified in the Jagdeo Initiative and would be aligned with other regional initiative such as the Agribusiness Initiative, Promoting CARICOM/CARIFORUM food security project; the EU-ACP Agricultural Commodities programme among others.

Potential risks and mitigation measures

The major risks to implementing this programme are;

1. The willingness of the EU to fund the programme at a meaningful level given their modus operandi and bureaucratic and budgetary processes and constraints.
2. Required improvements in the business facilitation processes in CARIFORUM Countries are improved to facilitate investments in the sector.

References

1. Concept note- CARICOM Agribusiness Development Programme
2. World Bank report entitled "A time to choose: Caribbean Development in the 21st Century"
3. Jamaica Industry Modernization programme
4. The agro-processing industry and economic development –FAO publication

PROJECT 4
CONCEPT NOTE
Establishment of the CARIFORUM Fisheries Fund (CFF)

Background

The FAO has reported that in 2005 world fish production had reached some 141.6 million tonnes of which aquaculture production contributed 27 %. Trade in fisheries was valued at around USD 71.5 billion in 2004.

Although the Caribbean accounts for a relatively small share of world production, the fisheries sector is nonetheless critical for the Caribbean region since, *inter alia*, it provides employment for many rural communities, represents a food bank for the region as well as enhancing food security and export earnings.

Fisheries are critical in terms of nutrition and food security in the Caribbean region, as these represent vital sources of animal protein. Per capita consumption of fish in the Region ranges between 23 kg and 25 kg per year, which is well above the world average (Haughton, 2007). Per capita consumption of fish is approximately 67 kg in Guyana, representing the highest in the region.

The data indicate that, on average, the fisheries sector contributed from a low of 0.13% to a high of 6.85% to national GDP for Trinidad and Tobago and Guyana, respectively. Regional catch exceeds 200,000 tonnes annually, accounting for about 0.5% of world fishery exports. Exports have been following an increasing trend, increasing from USD 241 mn in 2001 to USD 316 mn by 2009. The Dominica Republic added USD 2.5 mn in 2001 and USD 4.5 mn in 2009.. The region imports a significant quantity of fish products: USD 80.5 mn in 2001, increasing to a maximum of USD 149 mn in 2008, declining marginally to USD 127 the next year. Jamaica accounts for about 50% of this import, Trinidad and Tobago 11% and Haiti 10%.

With respect to fisheries, both CARIFORUM and EU countries acknowledge the economic and social importance of activities relating to fisheries, the utilization of the living marine resources of CARIFORUM States, and the need to maximize those benefits in relation to such factors as food security, employment, poverty alleviation, foreign exchange earnings and social stability of fishing communities. Further, the Agreement states that the fisheries and marine ecosystems of the CARIFORUM States are complex, biologically diverse and fragile. It also indicates that exploitation should take into account these factors through effective conservation and management of fisheries resources and related ecosystems based on sound, scientific advice and the precautionary principle as defined by the FAO Code of Conduct on Responsible Fisheries.

The CARIFORUM industry comprises of capture and culture fisheries with the marine capture component being the most economically important fisheries activity in CARIFORUM countries generally. This is due on one hand to the EEZ that is allocated to CARICOM countries and the low investments in the culture fishery on the other. The marine capture component comprises harvesting of shrimp, prawns, spiny lobsters, conch, reef fishes, deep slope and bank fishes, offshore pelagic, costal pelagic and flying fish. Other species, which are of less importance in the food basket include sea turtles (the capture of sea turtles is being discouraged as these species are viewed as being endangered), sea urchins, whales and porpoises.

There is little available information on the inland capture fisheries which exist mostly in larger countries such as Suriname, Guyana and Jamaica. Culture fisheries are at varying stages of development in the region however these are more established in the larger territories, such as Suriname (tilapia and shrimp), Belize (tilapia, shrimp and cobia) and Jamaica (tilapia, carp, cachama, mangrove oyster).. Guyana has recently been promoting the development of a commercial aquaculture subsector. Less developed food fish culture exists in St. Lucia (sea moss) and Trinidad and Tobago (tilapia).

The ocean environment relevant to CARICOM Member States includes the Caribbean Sea and the central Atlantic region off the coasts of Latin America, from Suriname to Trinidad and Tobago. The Caribbean Sea encompasses a semi-enclosed area of 2.6 million km², while the area from Suriname to Trinidad and Tobago, based on length of coastlines and 200 nautical-mile limit exclusive economic zones (EEZs), covers 310,000 km². The entire area is encompassed within FAO fishing area No. 31, which has a space of 14.5 million km². CARICOM states, because of their EEZs, have sovereign and jurisdictional rights over most of this area, which is endowed with fisheries and other mineral resources.

The magnitude and extent of the stocks in the Caribbean Sea are not well known, as the last extensive survey was carried out by FAO in the 1960's. However, in 1970, estimates of maximum sustainable yields (MSY) for demersal (bottom feeding fish), pelagic (surface feeders which move long distances) and shellfish resources ranged between 400,000 and 800,000 tonnes (CRFM, 2004). The CRFM (2004) also notes that although data on the pelagic resources are limited; a UNDP/FAO study (1976) estimated that stocks in the area are probably as large as the demersal fish resources. This indicates that total sustainable yields from fish stocks in the Suriname, Guyana and Trinidad and Tobago areas are about 260,000 tonnes, about 94% of which are in the Guyana- Suriname area.

The nature of the fisheries of the region, which stretches from Suriname to Belize and The

Bahamas, is varied. It ranges from the crustaceans (shrimp, seabob /prawns) and ground fish stocks off Guyana and Suriname to the pelagic stocks off Trinidad and Tobago. The Region also contains the reef species of the Eastern Caribbean, and the conch and lobster stocks of Jamaica, The Bahamas and Belize. The migratory pelagic such as wahoo, tuna, flying fish and dolphin fish typically roam through the area (CRFM 2004).

Previous studies have reported that within the region, most of the traditional commercially important species and species groups are reported to be either fully developed or over-exploited. These include queen conch, spiny lobster, various species of shrimp, shallow shelf reef-fishes such as snappers, the Nassau Grouper as well as some of the large pelagic species which are managed by the International Commission for the Conservation of Atlantic Tunas (ICCAT). There are however some species that are under-utilized, such as some regionally distributed pelagic fishes, namely, wahoo, dolphin and blackfin tuna, squids such as the diamondback squid, deep-slope snappers and groupers, and some small coastal pelagic species

The regional fisheries consist of the following groupings:

- A large artisanal fisheries sector in which the majority of fisherfolks operate on a small scale basis concentrating on mostly primary production, utilizing small boats and limited technology which is comprised of traps, cast nets and hook and line;
- An industrial fleet sector of large, modern, capital-intensive vessels which operate mainly in offshore areas, largely targeting high priced and valued added species which include spiny lobsters (Jamaica, Belize and The Bahamas), conch (Jamaica, The Bahamas and Belize), shrimp and prawns (Suriname, Guyana and Belize), tuna (wider Caribbean) and flying fish (Eastern Caribbean).
- A processing, distribution and marketing sector, and an un-quantified, recreational fisheries sub-sector spanning various aspects of tourism, including domestic and international sports fishing tournaments, yachting, fishing weekend group and family fishing events. The Caribbean is rated by international magazines as a prime destination for international anglers for billfishes, such as marlins and sailfish, and for several other species of game fishes.

In terms of marketing, artisanal catches are mainly sold on the domestic market through the informal economy in most Caribbean countries. Some amounts of the artisanal catches are sold to fish processing plants, from which these enter various export markets. Processing is limited primarily to the industrial sector and produces output mainly for export, rather than for domestic consumption (tuna and shrimp). Salted and smoked fishery products have been growing in importance in Guyana and Suriname.

Many of the persons employed in the industrial fisheries sub-sector function in the areas of harvesting and marketing. However, a large number of these benefit from related occupations such as boat building and supplies as well as repairs and maintenance. A notable feature of the industry is its high proportion of female workers who are engaged in critical aspects of seafood operations, including but not limited to processing, distribution and retailing in local markets.

Several CARIFORUM Member States provide direct and indirect subsidies to their fisheries sectors. These are aimed at stimulating growth and development of fisheries and aquaculture, primarily by reducing input costs. Measures typically include the provision of subsidized fuel, duty concessions on the purchase of fishing gear and equipment, including fishing boats and engines, and the provision of subsidized loans to fishermen through special credit schemes. The level of incentives and support provided vary from country to country, but is considered negligible overall.

Rationale for the programme

There is much scope for development in the sector but this is stymied by the lack of capital resources and the absence of an appropriate business model for its development.

Numerous challenges exist as follows:

- Inadequate development of landing sites and fish handling and fish marketing complexes which meet international food safety standards
- Lack of capital and technology to exploit offshore fisheries in some countries
- Low levels of education and business skills among fisherfolks
- Poorly organized fisherfolks cooperatives
- Lack of insurance and risk mitigation measures.
- Challenges in the management of the fisheries resources. Capture fisheries resources are fully exploited or over exploited due in part to unsustainable and ineffective management of these resources
- Illegal, unreported and unregulated fishing (IUU) activities by nationals and non-nationals and inadequate delimitation of the Exclusive Economic Zone (EEZ) with implications for fisheries management. The increase in the number of unlicensed fishers also compounds this problem.
- The capacity for effective fisheries management (including systems for monitoring, control and surveillance) varies significantly between the different countries of the Caribbean.

- There are significant institutional and human capacities in some countries for assessing, monitoring and managing fisheries; in others, fisheries are either managed in an elementary manner or unmanaged.
- Caribbean states allocate limited financial, institutional and human resources to fisheries management
- Fisheries management systems in the CARICOM countries, particularly the legal, regulatory and institutional frameworks tend to be weak and ineffective, reside as part of other Ministries. They consequently require upgrading to ensure adequate protection of resources and sustainable fisheries.
- Many CRFM Member States typically have inadequate capacity to formulate and implement appropriate fisheries sector policies and developmental and management strategies.
- Member States also have insufficient the capacity for value chain development in the fisheries sector. The Caribbean imports significant amounts of value added fish products, but produces very little of these. Further, given the oligopolistic nature of other meat-based protein suppliers, they are able to strategically capture larger parts of the animal protein market share. Therefore, the opportunities to implement governance and value added policies should be explored to identify the feasibility of such ventures.
- Climate change and rising sea levels threaten biodiversity and economic livelihoods in the Region.
- High fuel costs, leading to increased operating costs.

Other challenges concern the shared exploitation of resources and include inadequate policy and institutional framework for management; ineffective management of stocks among others. Cognizance is taken of the ongoing projects being implemented at the regional and national levels Including the EU-ACP Fish Project, GEF funded CLME Project, CRFM/JICA Master Plan Study, etc.) to address some of these policy and management issues..Therefore this proposed programme seeks to complement these ongoing initiatives. Mention should also be made of the CRFM *“Project for Strengthening Fishery Products Health Conditions in CARICOM / CARIFORUM Member States and OCT Countries”* which was prepared in 2002/03., but for which the overall results and impacts are uncertain.

Summary Programme description

Objective

The objective of the CARIFORUM Fisheries Fund (CFF) is to help secure a sustainable and profitable fisheries industry. Its purpose is to grant financial support with a view to helping the industry adapt to changing circumstances.

The objective of the programme is aligned to those of the CRFM Second Medium Term Plan (MTP-2008-2011) which seeks to address aspects of the challenges outlined above. The CRFM however is itself constrained by the lack of resources to deal with the enormity of the sector requirements and needs to mobilize resources to implement the Projects identified in the MTP.

Typical interventions will include: Modernizing fishing vessels; Developing landing sites; Improving product quality; Investment in aquaculture and diversification of farmed species; New Product development, Marketing fisheries products; Improvements to processing and port facilities; Pilot and collective actions by industry; HR Capacity building, The development of sustainable fisheries; and development support towards fisheries-dependent communities. Given the wide range of issues to be addressed however, it is suggested that in the first phase of the programme, priority could be given to addressing issues, e.g. SPS (re: competent authority, HACCP on vessels, processing facilities, onshore infrastructure development and capacity building for Fisherfolks Organisations, value added, marketing and market intelligence, and sustainable fisheries development operation for offshore pelagic species that are not being properly dealt with by other projects.

Output

The expected outputs are as follows:

1. The development of adequate HACCP certified landing sites and fish handling and marketing complexes in member countries. In this regard the fund will complement national budgetary and donor resources.
2. Development of offshore fishing capacity in the region and the existence of modernized fishing vessels and trained operators.
3. All-round improvements in fisheries management, product development, quality assurance, marketing and increasing market share both globally as well as the regional consumption market.
4. Improvements to processing and port facilities to meet current and future requirements.
5. Strengthening of fishing cooperatives and development of sustainable fisheries-dependent communities.

Recommendations

The objectives of the programme are aligned to those of the CRFM Second Medium Term Plan (2008-2011). Therefore resources from the programme should be allocated to strengthen the organization for it to provide the Technical support services in tandem with the requirements of an increasingly complex and growing industry. Implementation of the programme should be the responsibility of the National Fisheries Divisions which should also be adequately resourced and empowered. Appropriate arrangement should be made to utilize the available expertise in the region through cross horizontal cooperation in order to ensure harmonized development in the region.

Components

The project will comprise two components

3. Development capital
4. Technical assistance grant funding

The funding requirements are allocated as follows:

Projects	Donor Funding (Required to complement national budgetary resources)
1. The development of adequate HACCP certified landing sites in member countries	€69 mn (23 landing sites * € 3.0 mn ea)
2. The development of adequate HACCP certified fish handling and marketing complexes in member countries	€66 mn (21 complexes * € 3.0 mn ea)
3. Development of offshore fishing capacity in the region and the existence of modernized fishing vessels and trained operators.	€10 mn
4. All- round improvements in fisheries management, product development, quality assurance, marketing and increasing market share both globally as well as the regional consumption market .	€15 mn
5. Improvements to existing processing and port facilities to meet current and future requirements.	€10 mn
6. Strengthening of fishing cooperatives and development of sustainable fisheries-dependent communities.	€5 mn
Total	€175 mn

LS-Landing site, FC-Fishery complex

Key Assumptions

Country	Landing Site (€3.0 mn)	Fishery Complex (€3.0 mn)
Antigua		
Barbados	1	1
Belize	1	
Dominica	1	
Dominica Republic	4	4
Grenada	1	
Guyana	3	4

Haiti	1	1
Jamaica	4	4
Montserrat		
St Lucia		
St Vincent	1	1
St Kitts/Nevis		
Suriname	1	1
Trinidad & Tobago	5	5
No of projects	23	21

A. For the infrastructure fund, a total grant of €135 million should be provided.

(In the absence of an industry audit these figures are rough estimates based on the realistic cost for effecting fundamental changes to the existing regional industry given the plethora of challenges to be addressed)

B. For the technical assistance component an initial sum of €40 million should be provided.

Implementation arrangements

To be effective, this programme should be coordinated by the CRFM and implemented by national agencies. In many of the countries, there are capable organizations with good track record in implementing similar programmes. In order to develop a harmonized approach and to encourage cross horizontal cooperation among countries, an industry audit should be done in each of the countries. Support from the programme should be apportioned in accordance with industry size and potential; infrastructural engineering requirement, export readiness and performance. The purpose of the audit would be to identify and quantify the support needed in each country; and the extent to which existing national programmes can be augmented with programmed resources to meet agreed objectives and outcomes. In this way, duplication of efforts will be avoided and programme implementation accelerated.

It is also possible to develop cross border investments in processing / manufacturing for example with semi processed (salted / smoked, residues) products as well as RTC and RTE from one country being converted into finished products for exports by another country.

Synergies between proposed programme and ongoing work in the region

Support for the development of fisheries is important in order to develop the potential of the sector, maintain livelihoods and contribute to sustainable economic growth in the region. Given the concerns for food and nutrition security in the region, substantial reliance must be placed on protecting this renewable / fishery resource while maintaining a high level of value -added output. In terms of tradable / exportable products from the region, fisheries hold some of the best prospects for the future. Further development in value added and increased competitiveness of CARIFORUM Agriculture and fisheries are key objectives in the regional governments' national and agriculture sector strategies and plans for poverty alleviation, consumption of healthier foods and economic growth. The goal and objectives of this programme are also aligned with the regional policies and strategies such as the revised Treaty of Chaguaramas, which outlines the Community Agricultural Policy (Article 56); the regional Food and Nutrition Strategy; and the Regional Transformation Programme They are in tandem with the objectives and purposes of the EPA which seeks to facilitate the regions emersion in the global economy.

All these policies and strategies have in common, the development of the agriculture and fisheries sector through increasing efficiency and diversity in primary production and agro-processing; improving consumers' access to healthy, nutritional and good quality food; generating increased incomes of sector participants; promotion of private sector investment and participation; promotion of cross border investments to enlarge regional production of goods; improving the regulatory environment; and export promotion. The fishery also holds the potential to supply a healthier form of protein, displacing many other unhealthy forms currently imported in the region.

This programme also complements other on-going operations and programmes in the region including the EU Banana support programme and the multi-annual sugar reform programme. It would also complement the national development programmes for agriculture and food security. It enables the implementation of export development strategies in the countries. The programme supports ongoing efforts in the development of national fishing industries, enhancing the revenue generation capacity of regional businesses, sustainability, protection of cultural lifestyles and the strengthening of fisherfolk organizations. The programme also seeks to resolve some of the key binding constraints identified in the Jagdeo Initiative and would be aligned with other regional initiative such as the Agribusiness / Agroprocessing Initiative, Promoting CARICOM/CARIFORUM food security project; the EU-ACP Agricultural Commodities programme among others.

Potential risks and mitigation measures

The major risks to implementing this programme are:

3. The willingness of the EU to fund the programme at a meaningful level given their modus operandi and bureaucratic and budgetary processes and constraints.
4. Required improvements in the business facilitation processes in CARIFORUM Countries are improved to facilitate investments in the sector.

References:

1. Draft Caribbean Regional Fisheries Mechanism Second Medium Term Plan
2008-2011
2. CRFM. A Common Fisheries Regime for the Sea. July 2004
3. CARICOM Fisheries Unit. Strategic Plan for Regional Fisheries Mechanism. December 9, 2002.
4. ITC Database

PROJECT 5

CONCEPT NOTE

PROGRAMME FOR THE ESTABLISHMENT OF A COORDINATING CARIFORUM INSTITUTION FOR SCIENCE, RESEARCH AND INNOVATION IN AGRICULTURE & THE PROVISION OF A CONTESTABLE RESEARCH FUND

Purpose

This proposal is for financial support to establish a **CARIFORUM Institution for Science, Research and Innovation in Agriculture** that would establish Policy, Coordinate the R&D and Scientific resources and capacity of the Region, including the Private, Public and NGO institutions. It is also for the establishment of a Contestable Fund to support contractual research in strategic areas.

Rationale

The transformation of Caribbean agriculture including the expansion and exploitation of the Regional and Extra-regional market calls for support in a number of strategic areas. Benefits of production integration and market expansion are not restricted to income benefits to producers and the countries that export but also such developments could significantly improve the Region's Food Security status (generally, as well for disaster relief – hurricanes, floods, drought) and the welfare of consumers in food deficit countries. Regional market development also has the potential to capture a larger share of the outlay on food by the regional tourism / hospitality sector.

Given the key binding Constraints (identified in the Jagdeo Initiative) confronting Caribbean agriculture effective **Science, Innovation and Technology** stands out as a Strategic for Regional Agricultural Transformation. Regional agriculture has for some time been handicapped by the virtual absence of effective S&T/R&D support. Productivity continues to decline on account of pest, disease and absence of varietal improvements. Industries are on the decline and dying on account of diseases e.g. coconut. There is urgent need therefore to provide effective, efficient and timely technological support to improve the productivity and competitiveness of agriculture across the region. The existing CARICOM institutional Model for the provision of technology support to agriculture is no longer effective and has failed to meet the challenges of agriculture today.

The importance of Science, Technology Support and Innovations as drivers of agricultural development has been well established. The results of many studies in developing countries, , mainly in Asia and Latin America, have shown average rates of return to investment in agricultural research of over 50 %

(FAO:1991)¹². The nature of agriculture as a biological resource gives rise to complex and dynamic ecosystems within which production takes place and therefore one that is constantly challenging.

The types and range of pest and disease with the potential to affect agriculture is in continuous flux, constituting a major source of risk to agricultural entrepreneurs. Successful production not only calls for science and technological interventions to address known problems of disease and pest, but also a scientific/technological capacity to address new problems as they arise and to foster innovation in value added and entrepreneurial activities along the Value Chain. In essence then, simply maintaining existing levels of productivity requires: (i) technological know-how to address known pests and diseases commonly encountered; and (ii) a scientific/technological capacity to identify and treat with emerging pest and disease eruptions on a “**just-in-time**” basis as they arise. This indeed is the “**Maintenance Role of Science, Technology and Innovation**” in agricultural production.

Today, however, the viability and sustainability of agriculture as a business demands a much greater supporting role be provided by Science, Technology and Innovation (STI). The 1990s ushered in additional challenges with respect to the role of technology for agriculture both in terms of economics and the actual science with respect to the provision of technology. Globalization and the removal of barriers to trade in agricultural goods / commodities have resulted in increasing levels of competition, both with respect to domestic and export markets. This has brought about a shift in economic incentives such that improved technology is now a CRITICAL factor in a country’s ability to exploit its comparative and competitive advantages. Increasing levels of competition in markets is inducing continuous improvements in productivity and quality amongst competing countries and businesses. Additionally, technological needs are changing to more knowledge and skill intensive agriculture and more complex farming systems.

With respect to science, the 1990s have ushered in changes in the technology for research itself including new biotechnologies and informational technologies (World Bank: Byerlee & Alex: 1998)¹³. This latter role of technology for continuous improvement in productivity is critical for growth and business sustainability in today’s competitive markets. Thus STI also has a “**Development Role**”.

A VISION for CARIFORUM Agriculture

The development vision for Caribbean agriculture is a sector that meets the food security needs of the Regional population through the production of wholesome and nutritious foods, based on the judicious and sustainable use of the Regional natural resource base. The sector’s development will be grounded in the innovation, science and management that would enhance competitiveness in all segments of the

¹² FAO: The Role of Universities in National Agricultural Research Systems. Report of the FAO Expert Consultation on the Role of Universities in National Agricultural Research Systems, March 1991.

¹³ . The World Bank: Strengthening National Agricultural Research Systems: Policy Issues & Good Practices by Byerlee, Derek & Gary E. Alex. 1998.

value chain. Growth through market expansion, including domestic, regional and extra-regional, will be the basis for a resilient sector that meets the development needs of rural communities by improving livelihoods and renewing their economic vibrancy.

The Problem: The Untapped Scientific Capacity in CARIFORUM

Within CARIFORUM we have a range of institutions and other entities that are involved in one or more of the following activities: development of agricultural sciences, agricultural technology generation and innovation. They include the several Universities in the Region, the Government Research Stations, the Commodity specific research institutions (e.g. The Sugar Industry Research Institute of Jamaica), Producer Associations, NGOs, Development Agencies (e.g. FAO, IICA, USAID, CIDA), Private enterprise and Science and Technology institutions. In the case of CARICOM countries the Caribbean Agricultural Research and Development Institute (CARDI) is the Institution mandated to provide STI support for the agricultural development.

The pool of scientific personnel and facilities available to the Region for the delivery of STI is quite large but remains untapped / unexploited. While the interest of the individual institutions / entities in the provision of science, technology or innovation in fostering agricultural development varies, their contributions remain fragmented and uncoordinated with minimal impact. In fact the STI related institutions within the Region function as separate individual entities with their own agenda but not as part of a coherent, well coordinated SYSTEM. The deficiencies include:

- there is no focus or priorities
- absence of an overarching coordinating mechanism
- absence of a Policy Framework to support the functioning of an effective Regional Agricultural Research System (RARS)

The current Model for the provision of STI at the Regional level is unable to meet the technological demands for agricultural development today. The Model in practice relies principally on one provider and thus fails to tap the vast pool of scientific and other R&D resources available to the region. There are also major deficiencies in R&D Management System at the Policy Level in that important functions of policy setting, establishing the linkages among R&D institutions, coordinating the R&D efforts of the various institutions, setting R&D priorities and mobilizing funding are not attended as there is no institution mandated to undertake these functions.

Proposed Programme

The Proposed Programme for the development of the capacity of the CARIFORUM Region to provide efficient and effective STI support for improving productivity and efficiency along the agriculture value chain comprises two Components as follows:

Component 1: Funding for the Establishment & Operation of a CARIFORUM Council for Science, Technology and Innovation

Component 2: Funding of a Contestable Fund to facilitate Science, Technology and Innovation

Component 1: Funding for the Establishment & Operation of a CARIFORUM Council for Science, Technology and Innovation (CCSTI)

Justification of the Proposed Model for Council The World Bank (1998) in its Report on *“Strengthening National Agricultural Research Systems: Policy Issues and Good Practice”* noted that “the increasing demand on the research systems (as evidenced in recent years) contrasts with the lack of institutional innovation in research system management and organization and the stagnation or decline in funding for agricultural research”. The report noted that many systems suffer from a crisis of management, top heavy bureaucracy, centralization of decision making and a lack of incentives for the innovation process.

In recognition of the failure to develop effective Research Systems, either at the national or Regional level, there is now a shift in emphasis from strengthening the institution at the hub (eg the NARIs at the national level) to the National Agricultural Research System (NARS). With respect to research at the level of the CARIFORUM this emphasis implies a shift from a focus on strengthening the hub to establishing a Regional Research Institution – the Council.

. The rationale, according to the World Bank includes:

- “A conceptual and increasingly, institutionalized separation of research funding from research execution. The former focuses on policies, setting priorities, funding and administration. Research execution involves the delivery of the R&D products by alternative suppliers / providers – the cost effectiveness and efficiency.
- A recognition of the pluralistic institutional structure of a Region that allows additional scientific skills to be tapped and matched with needs, thus increasing research efficiency.
- A sharper focus on public funding for research on Public Goods and diversification of funding support for public research institutions. Thus there is a strong case for public sector funding of basic and strategic research (long term research with uncertain payoffs and high spillovers).
- A recognition of the complementary roles of Public and Private sector research and development and the potential gains through private-public sector collaboration in both funding and execution of research due to complementary skills and resources

- Increasing flexibility and institutional autonomy in public research institutions combined with increasing accountability
- The involvement of stakeholders, especially clients /beneficiaries
- New models of technology transfer that moves beyond the research-extension chain to involve farmers, NGOs and the private sector.”

The Role of the Council for CARIFORUM STI: Given the limited resources available for R&D in CARIFORUM, it is critical that R&D resources, scientific and financial, be allocated in such a way so as to maximize returns. This calls for setting priorities with respect to the R&D initiatives which must be pursued. Additionally, there is the need to establish a competitive system for the allocation of R&D grants among R&D providers in the system, including a rigorous and transparent system for evaluation. Among the various criteria for the award of research grants, the heaviest weighting must be placed on the institution’s ability to deliver high quality R&D outputs at acceptable cost. Capacity for high quality R&D outputs must be demonstrated by the track record of the scientists who would lead the project as well as that of the institution submitting the proposal /tender.

The imperatives for the management of STI in the CARIFORUM Region call for Institutional Models that:

- Promotes high quality research to generate technologies and innovations to achieve competitiveness on a sustained basis for enterprise along the value chain
- Is inclusiveness: harnesses the entire set of scientific resources in the Region by building strong linkages
- Sets Priorities for R&D: The aim is to focus on strategic R&D so as to generate technologies with:
 - potential for High Impact
 - potential for widespread benefit throughout the Region
 - contribution to food and nutrition security
 - contribution to rural development and the livelihoods of the rural population
 - preserves a quality environment
- Is Cost effective
- Allows for stakeholder participation
- Has built in flexibility and institutional autonomy to pursue excellence in STI

Specific Responsibilities of the Council for STI:

- (i) Establishing policies with respect to:
 - the development of excellence in science, technology and innovation in agriculture-related development activities in the region. The scope of the work of the Centre includes policy and technology with respect to the entire value chain for agricultural based products.
 - funding of research, including the cost of administration and technology transfer

- allocation of research grants to institutions within the research system
- recognition of excellence in STI
- (ii) Setting R&D priorities
- (iii) Establish and strengthen the linkages with R&D providers within CARIFORUM and among these institutions (a Virtual STI System)
- (iv) Establish an effective coordination mechanism for the conduct of research amongst the various R&D institutions
- (v) Develop mechanism to facilitate collaboration among the R&D institutions and between regional institutions and institutions in other countries
- (vi) Establishing and administer a system for competitive bidding with respect to research grants
- (vii) Mobilize financial resources from potential sources – regional governments, donor agencies, the regional private sector, client-based contracts for large agribusiness operations, trust funds etc
- (viii) Create linkages with the global S&T providers e.g. The CGIAR system
- (ix) Propose the establishment of Centres of Excellence as appropriate.

Governance of the Council: The Council must be led by a non Executive Board of Directors with a Chairman. Members should represent a good balance among the following groups: stakeholders, persons with appropriate competencies, especially in science policy formulation and management, and a mix of regional and international persons. In addition to persons with a strong scientific policy and management capability it is desirable to include persons with excellent entrepreneurship development knowledge, a sample of government representatives, representative from selected R&D institutions and representatives of other stakeholders such as agribusiness, commodity associations and farmers' organization.

Staffing: A lean organization is being proposed for the Council and includes the following:

1. A Scientific Director
2. An IT Network Specialist
3. Two Scientific Support Staff
4. An Administrative Assistant
5. A Secretary

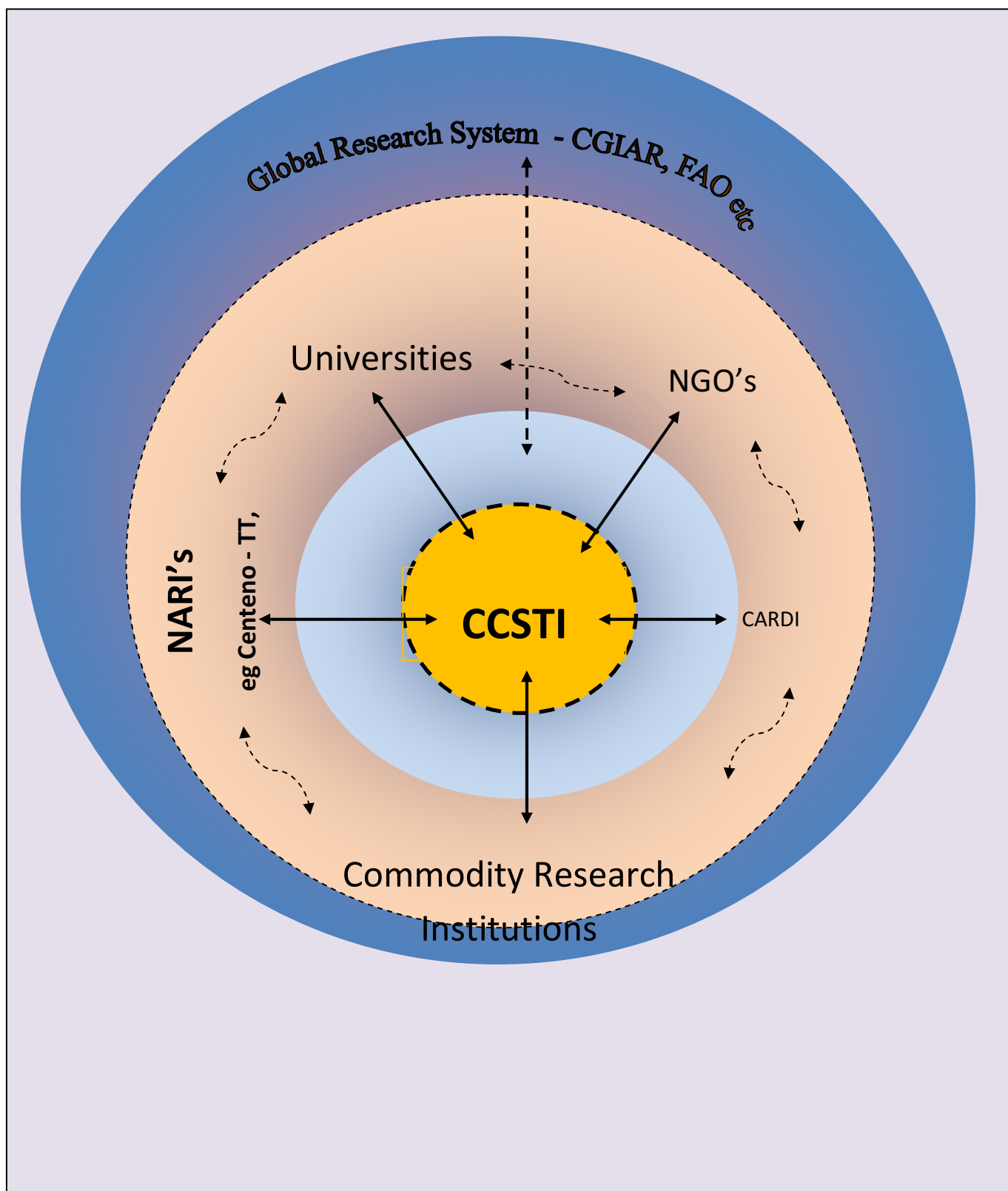
Proposed Funding: It is proposed that a Fund be established that would be sufficient to provide adequate investment returns that would meet the administrative cost of the Council on an Annual basis. This would ensure the sustainability of the institution.

A block sum of **Euro 20 million is proposed.**

Component 2: Funding of a Contestable Fund to facilitate Science, Technology and Innovation

Purpose: The purpose of this fund is to support the development and innovation of technology to improve the competitiveness of agriculture and agro-industry. Funds would be used to support research and technology innovation in high priority areas. Allocation would be on a contestable basis for contracted research. It is proposed that both Regional and EU Institutions or consortiums (EU and CARIFORUM) be eligible to bid for contracts..

Funding: Funding is proposed for a ten year period at **Euro 10 million / year**. After each two year period subsequent funding will be conditioned on a critical review of outputs / deliverables.



ANNEX 7

ONGOING PROJECTS AND PROGRAMMES IN CARIFORUM AGRICULTURE AND FISHERIES

A number of regional and national projects are being implemented across CARIFORUM to address some of the binding constraints to agriculture and fisheries development. These projects are being supported by International Development Partners (IDPs) the most prominent of which are the EU, DFID, USAID, CIDA, JICA, UN Agencies, World Bank and its affiliated MIF, IDB, CFC, CDB. Donors also include individual countries such as Belgium, France, Spain, Sweden, China and Venezuela which have cooperation programmes impacting the sectors.

There are also projects and programmes being funded by the individual CARIFORUM Member states from their own budgets and in tandem with their national development plans for the sector.

The largest funded programmes and projects relate to the EU Special framework of assistance (SFA) for ACP Bananas in Jamaica, DR, Belize, Suriname, and the Windward Islands; the EU Multi annual assistance for the adaptation of the sugar industry which will run until 2013 and will benefit Jamaica, Guyana; Barbados; Belize and the DR principally. The region has also benefited from the EU funded rice competitiveness programme consisting of 24 Million Euro in support to the Caribbean Rice Industry with Guyana and Suriname being the major beneficiaries. The EU has also provided 70 Million Euro for a programme of support to improve the competitiveness of Caribbean Rum. The regional food security project is currently into a second phase.

The support for banana and sugar emphasizes the development of competitive industries and agricultural diversification including rural diversification in areas affected by the rationalization of these traditional industries. This Approach has led to the development of agricultural diversification efforts in countries such as Guyana, Jamaica, Barbados, DR, St. Lucia, Belize Dominica and the St Vincent and the Grenadines.

At the regional level the CARICOM SECRETARIAT has embarked on a number of consultancies to address critical aspects of the policy framework for the sector development including the Common Agriculture Policy, Fisheries policy, food security and nutrition policy; Strategy and operational plan for the CAHFSA. There are numerous studies and analyses already done to assist forward planning for the sector.

At the sub-regional level the OECS Ministers of Agriculture and Tourism recently mandated the OECS Secretariat to further develop the programme priorities for the agriculture sector, paying special attention to a number of important cross-cutting requirements, including the need to:

- i) identify a set of agriculture products in which the OECS region has a competitive production and trading advantage;
- ii) identify and target appropriate private sector operators, including financial institutions, for the establishment of partnerships;
- iii) reduce the high costs of agriculture inputs, in particular fertilizers and feeds, through joint procurement;
- iv) develop risk management, including introducing and strengthening of insurance arrangements for crops, livestock and fisheries;
- v) put measures in place to ensure preservation of environmental integrity.

As an immediate practical measure, the Ministers also mandated the OECS Secretariat to formulate regional projects for submission under the European Union Aid for Trade initiative to support the implementation of the new agriculture priorities, in particular the establishment of an OECS Quality Seal for agriculture-tourism products and the implementation of recommendations for the expansion of intra-regional transportation services and facilities. Ministers also supported the call from the OECS Secretariat for the provision of additional resources to build the capacity of the Secretariat to manage, monitor and evaluate an expanded programme of work, and to more intensively pursue the development of synergies with agriculture development and trade at the CARICOM level.

During the field visits the following information on existing projects was gathered but this is not exhaustive. They are summarized below on a country specific basis.

**TABLE 1: Summary- EXISTING PROJECTS IN CARIFORUM AGRICULTURE AND FISHERIES
SECTOR**

COUNTRY	PROJECT	DATE STARTED	DATE COMPLETED	SECTOR	VALUE	SOURCE OF FUNDING	COMMENTS
Jamaica							
	JCS and Sugar Transformation Unit	2006	2013	SUGAR	Euros 82 M (up to 2010)	EU/Multi-annual assistance	ongoing
	Assistance to the rum industry						Breakdown of amounts and firms being assisted not available
	Banana Support/BAMs	1999	2013	Banana	Euro 43million to date	EU/SFA	ongoing
	Agricultural Support Services Project (ASSP)	2001	2008	Agribusiness	US 35 MILLION	IABD/GOJ	Residual funds put into agro investment Co.
	Dairy Sector Revitalization	2009			J\$ 10 million Seed cap	GOJ	ONGOING
	Eradication of New World Screwworm Project	2001			US \$9 MILLION	Multiple sources	Not completed
	Improving Jamaica's Agricultural Productivity Project Marine/Environmental Greenhouse	2008			J\$ 187 M	CIDA	ONGOING
	Land Administration and Management Project (L.A.M.P)				NA	IADB	ONGOING
	National Irrigation Development Project				US \$106 M	IADB/GOJ	"
	National School Garden Programme					GOJ	"
	Rural Agricultural Development Agency Projects					GOJ	"
	Fisheries Projects					GOJ	ongoing
	Gustav Rehabilitation Project	2008	2010	AGRIC RELIEF	J\$ 271 M	USAID	"
	Post Harvest Development						"
	CEATA	2009		R&D	US\$ 2M	SPAIN	ONGOING
	Citrus Certification project	2000		citrus		FAO	ongoing
	Agric competitiveness programme	2110		agric	US \$15 M	IDB	ongoing

COUNTRY	PROJECT	DATE STARTED	DATE COMPLETED	SECTOR	VALUE	SOURCE OF FUNDING	COMMENTS
BELIZE							
	EU accompanying measures for sugar	2006	2013	SUGAR	BD 131M	EU	ONGOING
	Banana Support Project	2002	2008	Banana		EU	"
	Strengthening the National Extension Services				0.9 M	FAO	"
	Agricultural Services Program				11m	IDB/GOB	"
	Design of Public Investment Supporting Agricultural Competitiveness	2010			0.266m	IDB	"
DOMINICAN REPUBLIC							
The Bahamas							
	Agric sector plan				US 13.5 M	GOB	Six areas targeted as follows; Veg ;root Crops; Orn Hort; Tree crops; livestock; agro-processing
Antigua /Barbuda							
	Restoration and upgrading of 5 Agric Stations		5.5 m		GOAB		Projects proposed in national development plan
	Expansion and modernization of CMC and post harvest		6.5 m		GOAB		
	Strengthen ADC		5.5m		GOAB		
	Food safety system		4.0m		GOAB		
DOMINICA							
	CITRUS CERTIFICATION		EC 3.0 M		EU		
	Agricultural Diversification		EC 25 M		EU		
	Fisheries development		NA		ALBA		FISHERIES INFRASTRUCTURE
	PORTSMOUTH FISHING COMPLEX		NA		Japan		
St. Kitts and Nevis							
	Crop development		EC 14.8 M Proposed for all 3 components		Gov		Proposed in Agricultural development Plan
	Livestock development		"				
	Fisheries development		"				

COUNTRY	PROJECT	DATE STARTED	DATE COMPLETED	SECTOR	VALUE	SOURCE OF FUNDING	COMMENTS
GUYANA							
	EU ACCOMPANYING MEASURES FOR TYHE SUGAR INDUSTRY		US\$790 MILLION		EU/IDB		Includes agric diversification component
	Assistance to the rum industry						Breakdown of amounts and firms being assisted not available
	RICE COOMPETITIVENESS PROJECT		11.7 million Euros		EU		implemented
	Rural Enterprise and Agricultural Development Project (READ)		US\$6.9M		IDB/GOG		
	Agricultural Export Diversification Programme (ADP)		US\$22.9M		IDB/GOG		
	CRFM/ JICA pilot project	2010					Fisheries development
St. Lucia							
	EU Banana support programme /BAMs				EU		
	Agric Diversification and development of fair-trade				EU		
BARBADOS							
	EU ACCOMPANYING MEASURES FOR TYHE SUGAR INDUSTRY						
	Assistance to the rum industry						
St Vincent and the Grenadines							
	EU Banana support programme /BAMs						
	Agric Diversification and development of fair-trade						
Suriname							
	RICE COOMPETITIVENESS PROJECT						
Trinidad and Tobago							
HAITI							
NAIP Emergency agric and fisheries projects			US \$ 790		Multi donors and GOH		Plan is partially financed with donor resources, GOH budgetary support and private sector commitments

Project Funded Under the European Development Fund



**Final Report
Annex 3
Country Reports**

OVERVIEW OF AGRICULTURE AND FISHERIES IN CARIFORUM

2.



SUPPORT FOR THE FORUM OF CARIBBEAN ACP STATES (CARIFORUM) IN THE AREAS OF AGRICULTURE AND FISHERIES IN RELATION TO THE IMPLEMENTATION OF THE COMMITMENTS UNDERTAKEN, AND OPPORTUNITIES CREATED BY THE ECONOMIC PARTNERSHIP AGREEMENT (EPA)

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Submitted to:

**CARIBBEAN EXPORT DEVELOPMENT AGENCY ON BEHALF OF THE
CARIFORUM DIRECTORATE OF THE CARICOM SECRETARIAT**

By

A-Z Information Jamaica Limited.,

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OVERVIEW OF AGRICULTURE & FISHERIES IN ANTIGUA & BARBUDA

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CHALLENGES IN EXPLOITING TRADE OPPORTUNITIES

1. INTRODUCTION

The Consultants visited Antigua during the period July, 2010 to conduct the field work for this Consultancy. The key objectives were to obtain an overview of sectoral policies, strategies and initiatives in taking advantage of trade opportunities in agriculture as well challenges in so doing. Interviews were held with the heads of key institutions in the Public, quasi- public and private sectors, including NGOs.

2. SECTORAL OVERVIEW

Agriculture in Antigua has two broad development objectives – meeting the Food Security needs of the Country and Export earnings. The major commodities produced are listed below. Antigua has been described as being not fully prepared to participate actively in the EPA at this time because of its size, economic status and general vulnerability of the agriculture and fisheries sector. There is a high level of food importation reported at USD 300 mn/yr. There is also a problem of inadequate coordination and coherence of existing service institutions for the agricultural sector.

The Ministry of Agriculture has developed a Policy/Programme and Implementation Plan to address sector production goals; budgetary constraints are hampering implementation. In Fisheries, there are inherent weaknesses in fisher-organizations (cooperatives), equipment and technology. Tourism provides a good internal market.

Commodities for the Export Market:

1. fish
2. lobsters

Commodities Targeted for the Domestic Market:

1. Poultry
2. Small ruminant
3. General Fruits and Vegetable

Planned Expansion of Export Commodities:

The country plans to widen its export base to include the following:

1. Fish products

Profile of the Agriculture and Fishery Industries (See Table 1)

An overview of the Regulatory Support and Compliance Status (with respect to meeting the requirements of export markets - see Table 2). **Recommended Projects** (see Table 3).

Table 1: Antigua & Barbuda – Overview of the Agricultural & Fishery Sector & Proposed Interventions

Industry	Status & Challenges / Constraints	Current Market Focus		Trade / Market Opportunities	Proposed Interventions	Type of Intervention (See Code below Table)	Short – Term (ST) or Medium term (MT)
		Domestic	Export				
Fish	<p>830 active fishers, employing 2% of national workforce. An estimated 1 in 4 persons is involved in fisheries. Safety net to absorb labour when construction and tourism are in decline</p> <p>Vessel, gear, equipment is between ECD 45,000-210,000</p> <p>The fishing landing sites range from beaches with rudimentary or no infrastructure to fisheries complexes with potable water ice-making and chill storage facilities</p> <p>The relatively high cost of production has limited the viability of exploiting alternative markets such as the USA and Canada</p> <p>Presently there is a monitoring programme and a standard set for areas where live lobsters are stored for export</p> <p>Point wharf fisheries complex with organoleptic lab</p> <p>5 out of 32 landing sites are in compliance with EU requirements</p> <p>Process of getting lab accreditation for basic microbial testing. Government has proposed to establish a central facility and do contract processing for the fishers. Need to invite EU to inspect the facility</p> <p>The human resource base is very limited</p> <p>Antigua now imports fish from Guyana</p> <p>Increase export of high value fish products while importing cheaper fish products</p> <p>Illegal trade taking place, especially in relation to the French</p>	X	X (Caribbean French territories)	X (USA, EU, CANADA)	<p>Enforcement capability-boats ,staff</p> <p>Data collection –additional staff</p> <p>Conservation and protection</p> <p>Residue testing facility and consolidation of processing of fish and conch for export</p> <p>Development of seafood standards for imports</p>	<p>4</p> <p>4</p> <p>4</p> <p>2</p> <p>1</p>	<p>ST</p> <p>ST</p> <p>ST</p> <p>MT</p> <p>ST</p>

	<p>Caribbean territories</p> <p>Plans expansion of the pelagic fisheries but will need technical support, equipment, training, management and capacity building</p> <p>Antigua is however insisting on restriction of its reef fishery but interested developing joint ventures for post harvest/processing</p> <p>The human resource base is very limited- 1 extension officer, 1 research officer</p>						
Poultry and Other	<p>Need to develop clusters of farmers and direct support to their efforts</p> <p>There is still need improvements with irrigation and water efficiency, greenhouses, soil laboratory and other support, upgrading of research stations</p> <p>Antigua is in the process of drafting a pest list, the quarantine services have been described as inadequate / no laboratory support / veterinary support laboratory</p> <p>The Information Technology and Communication / Market Intelligence capability has been described as inadequate</p> <p>Compliance with SPS Agreements and standards are adequate</p> <p>Free of fruit flies and can export mango to the USA</p> <p>Lack of export development support</p> <p>Lack of institutional support generally</p> <p>Lack of business advice and facilitation to develop the sector- access to financing and support for SMEs</p> <p>A proposal for developing agro-processing is in place with the emphasis being placed on improving and coordinating the cottage industries in the food processing sub-sector</p>				<p>Enhancement of production infrastructure</p> <p>Capacity building in R&D support</p> <p>HR training in SPS/Food Safety, Quality Assurance, food technology, business management and entrepreneurship</p> <p>Technical assistance to develop a poultry industry</p> <p>Programme to enhance Information technology and communication and SPS infrastructure.</p> <p>Export development and institutional support</p> <p>Access to financing and support for SMEs</p>	<p>1</p> <p>1</p> <p>1</p> <p>3</p> <p>2</p> <p>2</p> <p>3</p>	<p>ST</p> <p>ST</p> <p>ST</p> <p>ST</p> <p>ST</p> <p>ST</p> <p>ST</p>

Table 2: Assessment of Trade-related Regulatory Requirements – Antigua & Barbuda

Trade Enhancing Requirements	EU / EPA Prescribed / compliance standard	Existing Practices / Status	Corrective action required
<p>1. GOOD AGRICULTURAL PRACTICES (GAP)</p> <ul style="list-style-type: none"> Use of approved agrochemicals In field sanitation eg Worker facilities/amenities such as toilets, lunch rooms In field protocols including post harvest Environmental protection eg water quality for irrigation, erosion, waste water management 	<p>EUREPGAP; Globe GAP, Fair Trade; Private Labels</p>	<p>The agrifood system remains underdeveloped.</p> <p>Planned expansion into other agriculture</p>	<ul style="list-style-type: none"> Develop and/or promote SPS, GAP's, and regulations regarding environment. Develop systems for monitoring and enforce SPS, environment regulations. Establish or reformulate agencies to regulate, monitor, enforce regulations and provide certification services. Establish a national traceability system.
<p>2. PACKHOUSE OPERATIONS</p> <ul style="list-style-type: none"> Washing, Grading & Drying Packaging & Labelling Documentation for Traceability Inefficient or insufficient infrastructure of transport: roads, ports, airports, and storage facilities 	<p>SPS & HACCP Certification</p>	<p>Planned expansion of agriculture</p>	<ul style="list-style-type: none"> Upgrade regulations on SPS control. Improve food quality and safety inspection services Encourage investments in infrastructure. Establish public-private partnership programmes for infrastructure investments, management and maintenance services. Promote government investments in essential infrastructure. Review tax structure affecting input costs such as cold storage trucks, boats, storage facilities.
<p>3. AGRO-PROCESSING</p> <ul style="list-style-type: none"> Process Technology Standards / Food Standards 	<p>Plant / Process Certification eg HACCP, QMP, ISO</p>	<p>Limited processed spice products. Good adoption of key technologies.</p> <p>The agrifood system has</p>	<ul style="list-style-type: none"> Continue to improve food quality and safety inspection services Continue to upgrade laboratorial infrastructure to carry out independent and internationally accepted

Trade Enhancing Requirements	EU / EPA Prescribed / compliance standard	Existing Practices / Status	Corrective action required
<ul style="list-style-type: none"> ▪ Packaging & Labelling ▪ Waste Water Management ▪ Lab Support Services eg Microbial, histamine & contaminants 		<p>inadequate laboratorial infrastructure to carry out quality and safety monitoring and certification tests</p> <p>Inadequate diffusion of managerial tools: quality control (ISO, HACCP), environmental control (ISO, certification), information technologies (bar code, traceability, etc.).</p>	<p>tests.</p> <ul style="list-style-type: none"> • Promote public-private partnerships for service provision in agrifood quality and safety testing and certification • Improve support services offered by sector organizations and private consultants. • Provide access to undergraduate and vocational careers to include agro-processing disciplines.
<p>4. SEAFOOD HARVEST</p> <ul style="list-style-type: none"> ▪ Net & Gear requirements ▪ Landing Sites eg Proper facilities for handling fish, waste disposal system, facilities for gear etc 	Practices eg FAO Code of Conduct, Cites, IUU	<p>Landing sites will need upgrade for export to EU.</p> <p>Will need production expansion.</p> <p>Inadequate adoption of food safety technologies, including cold chain</p>	<ul style="list-style-type: none"> • Encourage investments in infrastructure. • Establish public-private partnership programmes for infrastructure investments, management and maintenance services. • Promote government investments in essential infrastructure. • Promote training in post harvest - fish handling, processing technology, adoption of cold chain, governance.

**TABLE 3: ANTIGUA & BARBUDA – PROJECTS TO ADDRESS CONSTRAINTS/CHALLENGES
IN TAKING ADVANTAGE OF TRADE OPPORTUNITIES**

Project Area & Specific Activity	Beneficiary Industry	Duration of Intervention	Potential Benefits	Priority
1. Supply Side Constraints				
1.1 Production Technology – - Technical assistance to introduce improved productivity and competitiveness - Some Short term Scientific Support to evaluate and adapt technology	Fruits (Pineapples, Carrots, Onions, Small Ruminants)	Short term	Improve the international competitiveness by expanding production, achieving economies of scale and reducing the cost of production. Producers and consumers in the country, CARIFORUM and the EU-OCT are the beneficiaries as commodity is targeted primarily for the local, regional and EU-OCT markets.	1
1.2 Technical Assistance in developing Value Added Products including and juices and fresh cut vegetables to meet the Preference and Quality Standards to compete in Local and Export markets	Linked to the fruit and vegetables Industries	Medium term	This intervention would enhance overall competitiveness of these Industries and profitability.	2
2. Developing an Export Marketing Capability				
2.1 Market research to Develop Market Entry Strategies for the Export of Fruits and Vegetables to the Wider Caribbean	Fruit and Vegetable Industry	Short Term	Expansion of Export base/product diversification and the resultant increase in earnings from exports.	2
2.2 Research into Transportation and Product Handling Logistics with a view to reducing cost	All Industries	Short term	Transportation and handling cost to the EU-OCT and CARIFORUM market is exorbitant. A more cost efficient system would improve overall profitability for all industries that export to the EU-OCT and CARIFORUM	1

TABLE 3: (CONT'D): ANTIGUA & BARBUDA – PROJECTS TO ADDRESS CONSTRAINTS /CHALLENGES

Project Area & Specific Activity	Beneficiary Industry	Duration of Intervention	Potential Benefits	Priority
3. Compliance / Adoption of Quality Standards				
3.1 Adoption of EUREPGAP through: - Technical Assistance for the Training of Trainers who would train Farmers - Technical Assistance to provide training for laboratory technicians	All Industries	Short Term	Ensures that products could meet SPS and food safety quality standards as required by export markets	1
3.2 Technical assistance to implement SPS and Traceable System for FRUITS and VEGETABLES – training and establishing procedures	Fruit and Vegetable Industry	Short Term	Market access depends on product satisfying the regulatory and quality standards – benefit of retaining and expanding market share	1
3.3 Technical Assistance to Improve Availability of water used for irrigation in the Production System	Fruit and Vegetable Industry	Short Term	This intervention is necessary to ensure that volumes are produced to meet economies of scale – benefit of retaining and expanding market share	1
4. Promotion of Private Investment				
4.1 Technical Assistance to the Strengthen the Fruit and Vegetable and Livestock Cluster, including the participation of all Stakeholders along a Hybrid Value Chain	Fruit and Vegetable and Livestock Industry	Short Term	This intervention would improve the growth of this Industry through higher operating efficiency from improved coordination; a greater resource base for investment and development	2

OVERVIEW OF AGRICULTURE IN THE BAHAMAS

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CHALLENGES IN EXPLOITING TRADE OPPORTUNITIES

1. INTRODUCTION

The Consultants visited The Bahamas during the period September, 2010 to conduct the field work for this Consultancy. The key objectives were to obtain an overview of sectoral policies, strategies and initiatives in taking advantage of trade opportunities in agriculture as well challenges in so doing. Interviews were held with the heads of key institutions in the Public, quasi- public and private sectors, including NGOs.

2. SECTORAL OVERVIEW

The Northern Islands of The Bahamas are better organised and better resourced; competitiveness much lower in south than north. The central and southern Bahamian islands have higher poverty and low farmer organization / governance. Agriculture is just a small part of the Bahamian economy but is a sole source of income and employment on 24 Bahamian islands. The Bahamas high cost of production impacts on its competitiveness, along with poor land tenure.

Commodities for the Export Market:

1. fish
2. lobsters

Commodities Targeted for the Domestic Market:

1. fresh pork
2. pineapple
3. banana
4. citrus
5. mango

Planned Expansion of Export Commodities:

The Bahamas plans to widen its export base to include the following:

1. conch
2. citrus

Profile of the Agriculture and Fishery Industries (See Table 4)

An overview of the Regulatory Support and Compliance Status (with respect to meeting the requirements of export markets - see Table 5)

Recommended Projects (see Table 6).

Table 4: The Bahamas – Overview of the Agricultural & Fishery Sector & Proposed Interventions

Industry	Status & Challenges/Constraints	Current Market Focus		Trade/Market Opportunities	Proposed Interventions	Type of Intervention (See Code below Table)	Short – Term (ST) or Medium term (MT)
		Domestic	Export				
1. Fish	<p>Good organization; Country earnings / revenue from fisheries exports = \$0.50/lb for crawfish or a revenue total of \$150 million / annum.</p> <p>Poaching by Dominican Republic fishers reported as an ongoing problem</p> <p>Poaching created by recreational fishers, tourist and yachts</p> <p>Foreigners are allowed to invest in Agriculture but not in fishery</p> <p>Undetermined resource assessment, monitoring, control and surveillance serves to limit expansion of the fisheries at this time</p> <p>Prices are the incentives for fishers; lower prices and high fuel costs impacts negatively on the industry</p> <p>Lobster season spans from August-February while the EU market is in Christmas</p> <p>Conch is exported to USA</p> <p>strong lobby against tuna fishing, purse seining and others</p> <p>No direct shipping routes, except to USA</p> <p>No major infrastructure at the landing sites</p> <p>Lobsters are killed, tails are frozen and shipped</p>	X	X (EU &US)	X (EU)	<p>Crab processing/value added, fish processing, sustainable and meaningful programme of training and placement of products into mainstream restaurants</p> <p>Staff training in SPS</p> <p>Need institutional capacity, need equipment lab and personnel</p> <p>Capability in aquaculture required and cage culture in technology</p> <p>Market intelligence to assess other species potential in the market place</p> <p>Poverty alleviation programmes in fishing communities</p> <p>Equipment on boats</p> <p>a centralized processing facility for small scale fishers</p>	<p>3</p> <p>1</p> <p>3</p> <p>5</p> <p>4</p> <p>4</p> <p>4</p> <p>3</p>	<p>MT</p> <p>ST</p> <p>ST</p> <p>ST</p> <p>ST</p> <p>ST</p> <p>ST</p> <p>ST</p>

	<p>to New Providence Island</p> <p>The Fishery Division does HACCP certification</p> <p>Weaknesses in the system include (i) processing on boats, (ii) inspection of vessels and (iii) quality assurance</p> <p>Country is able to access EU market for fish and lobster, but not conch which they classify bi-valve mollusc</p>						
Cirus, and Others	<p>An estimated 5,000 acres was destroyed by citrus canker, it is currently awaiting certification of being disease free.</p> <p>Citrus exports comprise mostly grapefruit (red ruby, star ruby), to The Netherlands</p> <p>Postharvest losses are high with existing transport and handling systems.</p> <p>Seven packing houses is available</p> <p>Most farming in the central and southern islands is rain-fed and shifting cultivation.</p> <p>There is no certifying agency for exports, labs not certified and there is an absence of market intelligence services</p> <p>lack of quality assurance in value chain quality, there is a lack of interest by hotels to buy local produce</p> <p>Tariff removal and high exchange rate impact negatively on agriculture</p> <p>Chemicals and pharmaceuticals: Cascarilla bark used for Campari, found in the wild and grow expansive. Eleuthera has red soils</p>	X		X(EU)	<p>Access to credit and land tenure issues and consolidation of shipment to be able to export</p> <p>staff training in SPS and agronomy</p> <p>Inter-island transportation, land tenure, staff.</p> <p>Need for all skills -- agronomy, post harvest to develop the sector.</p> <p>Resource assessment, management control and surveillance human and tech capacity, lab certification capability</p> <p>Need to develop clusters for fruits and greenhouses</p> <p>Imports would have to be regulated to give agriculture room to grow</p>	<p>1</p> <p>1</p> <p>2</p> <p>1</p> <p>1</p> <p>1</p>	<p>ST</p> <p>ST</p> <p>ST</p> <p>ST</p> <p>ST</p> <p>ST</p>

Table 5: Assessment of Trade-related Regulatory Requirements – The Bahamas

Trade Enhancing Requirements	EU / EPA Prescribed / compliance standard	Existing Practices / Status	Corrective action required
<p>1. GOOD AGRICULTURAL PRACTICES (GAP)</p> <ul style="list-style-type: none"> Use of approved agrochemicals In field sanitation eg Worker facilities/amenities such as toilets, lunch rooms In field protocols including post harvest Environmental protection eg water quality for irrigation, erosion, waste water management 	<p>EUREPGAP; Globe GAP,</p> <p>Fair Trade; Private Labels</p>	<p>With the exception of citrus, most of the agrifood system remains undeveloped.</p> <p>Planned expansion into other agriculture</p>	<ul style="list-style-type: none"> Develop and/or promote SPS, GAP's, and regulations regarding environment. Develop systems for monitoring and enforce SPS, environment regulations. Establish or reformulate agencies to regulate, monitor, enforce regulations and provide certification services. Establish a national traceability system.
<p>2. PACKHOUSE OPERATIONS</p> <ul style="list-style-type: none"> Washing, Grading & Drying Packaging & Labelling Documentation for Traceability Inefficient or insufficient infrastructure of transport: roads, ports, airports, and storage facilities 	<p>SPS & HACCP Certification</p>	<p>Existing packing houses not being utilized due to low production of fruits and vegetables (exception of citrus on one island)</p> <p>Planned expansion into other agriculture</p>	<ul style="list-style-type: none"> Upgrade regulations on SPS control. Improve food quality and safety inspection services Encourage investments in infrastructure. Establish public-private partnership programmes for infrastructure investments, management and maintenance services. Promote government investments in essential infrastructure. Review tax structure affecting input costs such as cold storage trucks, boats, storage facilities.
<p>3. AGRO-PROCESSING</p> <ul style="list-style-type: none"> Process Technology Standards / Food Standards 	<p>Plant / Process Certification eg HACCP, QMP, ISO</p>	<p>High quality of processed fishery products. Good adoption of key technologies.</p> <p>The agrifood system has</p>	<ul style="list-style-type: none"> Continue to improve food quality and safety inspection services Continue to upgrade laboratorial infrastructure to carry out independent and internationally accepted

Trade Enhancing Requirements	EU / EPA Prescribed / compliance standard	Existing Practices / Status	Corrective action required
<ul style="list-style-type: none"> ▪ Packaging & Labelling ▪ Waste Water Management ▪ Lab Support Services eg Microbial, histamine & contaminants 		<p>adequate laboratorial infrastructure to carry out quality and safety monitoring and certification tests</p> <ul style="list-style-type: none"> • Good diffusion of managerial tools: quality control (ISO, HACCP), environmental control (ISO, certification), information technologies (bar code, traceability, etc.). 	<p>tests.</p> <ul style="list-style-type: none"> • Promote public-private partnerships for service provision in agrifood quality and safety testing and certification • Improve support services offered by sector organizations and private consultants. • Provide access to undergraduate and vocational careers to include agro-processing disciplines.
<p>4. SEAFOOD HARVEST</p> <ul style="list-style-type: none"> ▪ Net & Gear requirements ▪ Landing Sites eg Proper facilities for handling fish, waste disposal system, facilities for gear etc 	<p>Practices eg FAO Code of Conduct, Cites, IUU</p>	<p>Approved landing sites available at ports for export to USA. Will need upgrade for export to EU.</p> <p>Inadequate adoption of food safety technologies, including cold chain</p>	<ul style="list-style-type: none"> • Encourage investments in infrastructure. • Establish public-private partnership programmes for infrastructure investments, management and maintenance services. • Promote government investments in essential infrastructure. • Promote training in post harvest - fish handling, processing technology, adoption of cold chain, governance.
<p>5. AQUACULTURE</p> <ul style="list-style-type: none"> ▪ Water Quality issues ▪ Good Production Practices 	<p>Water Quality Certification</p> <p>Production Process Certification</p>	<p>Interest in aquaculture – tilapia, kobia</p>	<ul style="list-style-type: none"> • Improve support services (including financing) offered by sector organizations and private consultants. • Provide access to undergraduate and vocational curricula to include aquaculture based careers • Promote capacity building on management issues.

**TABLE 6: THE BAHAMAS – PROJECTS TO ADDRESS CONSTRAINTS/CHALLENGES
IN TAKING ADVANTAGE OF TRADE OPPORTUNITIES**

Project Area & Specific Activity	Beneficiary Industry	Duration of Intervention	Potential Benefits	Priority
1. Supply Side Constraints				
1.1 Production Technology – - Technical assistance to introduce improved productivity and competitiveness - Some Short term Scientific Support to evaluate and adapt technology	Citrus	Short term	Improve the international competitiveness of citrus in the international market by reducing the cost of production. Producers in the The Bahamas and consumers in the country, CARIFORUM and the EU are the beneficiaries as fruit is targeted primarily for the local, regional and EU markets.	1
1.2 Technical Assistance in developing Value Added Products including juices and seafood to meet the Preference and Quality Standards to compete in Export markets	Linked to the fish, fruit and vegetables Industries	Medium term	This intervention would enhance overall competitiveness of these Industries and profitability.	2
2.1 Adoption of EUREPGAP through: - Technical Assistance for the Training of Trainers who would train Farmers - Technical Assistance to provide training for laboratory technicians	All Industries	Short Term	Ensures that products could meet SPS and food safety quality standards as required by export markets	1
2.2 Technical assistance to implement SPS and Traceable System for FRUITS and VEGETABLES – training and establishing procedures	Fruit and Vegetable Industry	Short Term	Market access depends on product satisfying the regulatory and quality standards – benefit of retaining and expanding market share	1

OVERVIEW OF AGRICULTURE IN BARBADOS & CHALLENGES IN EXPLOITING TRADE OPPORTUNITIES

1. INTRODUCTION

The Consultants visited Barbados during the period October, 2010 to conduct the field work for this Consultancy. The key objectives were to obtain an overview of sectoral policies, strategies and initiatives in taking advantage of trade opportunities in agriculture as well challenges in so doing. Interviews were held with the heads of key institutions in the Public, quasi- public and private sectors, including NGOs.

2. SECTORAL OVERVIEW

Agriculture in Barbados has two broad development objectives – meeting the Food Security needs of the Country and Export earnings. The major commodities produced are listed below. The Fisheries Department is responsible for development and management of fisheries. National fisherfolk organization has received funding from a Commonwealth fund and benefits from technical cooperation. There are five functioning organizations. The level of staffing in the fisheries department is inadequate to facilitate resources assessment. There is a draft proposal for discussion.

The priority commodities of the Ministry of Agriculture include fisheries, dairy, food crops, and agro-processing while work has been ongoing to restructure the Sugar Industry and experimental trials for Sea Island Cotton.

Commodities for the Export Market:

1. Dolphin
2. Flying Fish
3. Other Fish

Commodities Targeted for the Domestic Market:

1. Poultry, beef, dairy

Planned Expansion of Export Commodities:

Barbados plans to widen its export base to include the following:

1. Sugar
2. Rum
3. Ice cream
4. Cotton

Profile of the Agriculture and Fishery Industries (See Table7). **An overview of the Regulatory Support and Compliance Status** (with respect to meeting the requirements of export markets - see Table 8). **Recommended Projects** (see Table 9).

Table 7: Barbados – Overview of the Agricultural & Fishery Sector & Proposed Interventions

Industry	Status & Challenges / Constraints	Current Market Focus		Trade / Market Opportunities	Proposed Interventions	Type of Intervention (See Code below Table)	Short – Term (ST) or Medium term (MT)
		Domestic	Export				
Fish	<p>The current human resource capacity is considered inadequate to manage the resources of the fishery; for optimal data collection, analysis and stock assessment</p> <p>Fishing vessels are inspected for compliance with standards and the Marketing Department collect catch data by weight and species.</p> <p>Barbados record catch levels of 3000-5000 tonnes / annum of which 90% are pelagic species</p> <p>The mainstay of its industry is its offshore landings of dolphin and flying fish. A major focus of the industry is the long line vessels targeting tunas for fresh/chilled export to USA</p> <p>Some small scale fish processing is done at the Bridgetown and Oistins landing sites and there are value added companies with their own facility</p> <p>The processing at landing sites is demand driven</p> <p>The two major landing sites are now overcrowded and there are plans to construct a new facility in the north</p> <p>An estimated 50% of the domestic market is being satisfied from imports from Guyana, Trinidad and North America</p> <p>Aquaculture not a priority as access to affordable, good quality water is difficult</p> <p>There are unconfirmed reports of poaching</p> <p>Traditional exports to EU at this time are frozen and</p>	X	X(EU)	X (USA)	Training of fishery inspectors, processors, biologist, social, economic experts, yield assessment / catching effort).	4	ST

	<p>processed fish and informal in nature</p> <p>The EU has already inspected the fishery facilities in the country and has provided a roadmap for export accreditation</p> <p>Access to the local fisheries is restricted to access by only Barbadian</p> <p>committed to responsible fishing, the conservation and management and to collaborate with the International Commission for the Conservation of Atlantic Tunas (ICCAT)</p>						
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Table 8: Assessment of Trade-related Regulatory Requirements – Barbados

Trade Enhancing Requirements	EU / EPA Prescribed / compliance standard	Existing Practices / Status	Corrective action required
<p>1. GOOD AGRICULTURAL PRACTICES (GAP)</p> <ul style="list-style-type: none"> Use of approved agrochemicals In field sanitation eg Worker facilities/amenities such as toilets, lunch rooms In field protocols including post harvest Environmental protection eg water quality for irrigation, erosion, waste water management 	<p>EUREPGAP; Globe GAP,</p> <p>Fair Trade; Private Labels</p>	<p>The agrifood system remains do not meet national demand.</p> <p>Planned expansion into other agriculture</p>	<ul style="list-style-type: none"> Develop and/or promote SPS, GAP's, and regulations regarding environment. Develop systems for monitoring and enforce SPS, environment regulations. Establish or reformulate agencies to regulate, monitor, enforce regulations and provide certification services. Establish a national traceability system.
<p>2. PACKHOUSE OPERATIONS</p> <ul style="list-style-type: none"> Washing, Grading & Drying Packaging & Labelling Documentation for Traceability Inefficient or insufficient infrastructure of transport: roads, ports, airports, and storage facilities 	<p>SPS & HACCP Certification</p>	<p>Planned expansion of agriculture</p>	<ul style="list-style-type: none"> Upgrade regulations on SPS control. Improve food quality and safety inspection services Encourage investments in infrastructure. Establish public-private partnership programmes for infrastructure investments, management and maintenance services. Promote government investments inessential infrastructure. Review tax structure affecting input costs such as cold storage trucks, boats, storage facilities.
<p>3. AGRO-PROCESSING</p> <ul style="list-style-type: none"> Process Technology Standards / Food Standards 	<p>Plant / Process Certification eg HACCP, QMP, ISO</p>	<p>Good adoption of key technologies.</p> <p>The agrifood system has adequate laboratorial infrastructure to carry out</p>	<ul style="list-style-type: none"> Continue to improve food quality and safety inspection services Continue to upgrade laboratorial infrastructure to carry out independent and internationally accepted

Trade Enhancing Requirements	EU / EPA Prescribed / compliance standard	Existing Practices / Status	Corrective action required
<ul style="list-style-type: none"> ▪ Packaging & Labelling ▪ Waste Water Management ▪ Lab Support Services eg Microbial, histamine & contaminants 		<p>quality and safety monitoring and certification tests</p> <ul style="list-style-type: none"> • Adequate diffusion of managerial tools: quality control (ISO, HACCP), environmental control (ISO, certification), information technologies (bar code, traceability, etc.). 	<p>tests.</p> <ul style="list-style-type: none"> • Promote public-private partnerships for service provision in agrifood quality and safety testing and certification • Improve support services offered by sector organizations and private consultants. • Provide access to undergraduate and vocational careers to include agro-processing disciplines.
<p>4. SEAFOOD HARVEST</p> <ul style="list-style-type: none"> ▪ Net & Gear requirements ▪ Landing Sites eg Proper facilities for handling fish, waste disposal system, facilities for gear etc 	Practices eg FAO Code of Conduct, Cites, IUU	<p>Landing sites will need upgrade for export to EU.</p> <p>Will need production expansion.</p> <p>Inadequate adoption of food safety technologies, including cold chain</p>	<ul style="list-style-type: none"> • Encourage investments in infrastructure. • Establish public-private partnership programmes for infrastructure investments, management and maintenance services. • Promote government investments in essential infrastructure. • Promote training in post harvest - fish handling, processing technology, adoption of cold chain, governance.

TABLE 9: BARBADOS – PROJECTS TO ADDRESS CONSTRAINTS /CHALLENGES

IN TAKING ADVANTAGE OF TRADE OPPORTUNITIES

Project Area & Specific Activity	Beneficiary Industry	Duration of Intervention	Potential Benefits	Priority
1. Supply Side Constraints				
1.1 Production Technology – - Technical assistance to introduce improved productivity and competitiveness - Some Short term Scientific Support to evaluate and adapt technology	Fruits, Vegetables, Cotton, Dairy, small ruminants	Short term	Improve the international competitiveness of fruits, vegetables, cotton by expanding production, achieving economies of scale and reducing the cost of production. Producers and consumers in the country, CARIFORUM and the EU-OCT are the beneficiaries as commodity is targeted primarily for the local, regional and EU-OCT markets.	1
1.2 Technical Assistance in developing Value Added Products including and juices and dairy to meet the Preference and Quality Standards to compete in Export markets	Linked to the fruit, vegetables and dairy Industries	Medium term	This intervention would enhance overall competitiveness of these Industries and profitability.	2
2. Developing an Export Marketing Capability				
2.1 Market research to Develop Market Entry Strategies for the Export of Fruits, vegetables, dairy and Fishery products to the region and EU	Fruits, Vegetables, dairy and Fishing Industry	Short Term	Expansion of Export base/product diversification and the resultant increase in earnings from exports. The country has a good dairy / juice processing capability.	2
2.2 Research into Transportation and Product Handling Logistics with a view to reducing cost	All Industries	Short term	Transportation and handling cost to the EU-OCT and CARIFORUM market is exorbitant. A more cost efficient system would improve overall profitability for all industries that export to the EU-OCT and CARIFORUM	1

TABLE 9: (CONT'D): BARBADOS – PROJECTS TO ADDRESS CONSTRAINTS /CHALLENGES

Project Area & Specific Activity	Beneficiary Industry	Duration of Intervention	Potential Benefits	Priority
3. Compliance / Adoption of Quality Standards				
3.1 Adoption of EUREPGAP through: - Technical Assistance for the Training of Trainers who would train Farmers - Technical Assistance to provide training for laboratory technicians	All Industries	Short Term	Ensures that products could meet SPS and food safety quality standards as required by export markets	1
3.2 Technical assistance to implement SPS and Traceable System for FRUITS and VEGETABLES – training and establishing procedures	Fruit and Vegetable Industry	Short Term	Market access depends on product satisfying the regulatory and quality standards – benefit of retaining and expanding market share	1
3.3 Technical Assistance to Improve Availability of water used for irrigation in the Production System	Fruit and Vegetable Industry	Short Term	This intervention is necessary to ensure that volumes are produced to meet economies of scale – benefit of retaining and expanding market share	1
4. Promotion of Private Investment				
4.1 Technical Assistance to the Strengthen the Fruit and Vegetable and livestock Clusters, including the participation of all Stakeholders along a Hybrid Value Chain	Fruit and Vegetable and Livestock Industry	Short Term	This intervention would improve the growth of this Industry through higher operating efficiency from improved coordination; a greater resource base for investment and development	2

OVERVIEW OF AGRICULTURE IN BELIZE
&
CHALLENGES IN EXPLOITING TRADE OPPORTUNITIES

1. INTRODUCTION

The Consultants visited Belize during the period August 2010 to conduct the field work for this Consultancy. The key objectives were to obtain an overview of sectoral policies, strategies and initiatives in taking advantage of trade opportunities in agriculture as well challenges in so doing. Interviews were held with the heads of key institutions in the Public, quasi- public and private sectors, including NGOs.

2. SECTORAL OVERVIEW

Agriculture in Belize has two broad development objectives – meeting the Food Security needs of the Country and Export earnings. The major commodities produced are listed below. Papaya being successfully exported to USA but limited interest in the EU market at this time due to the strength of the market leader - Brazil. Many products cannot meet EU export quality standard at this time and there is a need for a policy setting body to determine which products will be targeted for the EU market.

Commodities for the Export Market:

1. sugar
2. banana
3. lobsters
4. shrimp
5. citrus and juices

Commodities Targeted for the Domestic Market:

1. Ruminant meat

Planned Expansion of Export Commodities:

Belize plans to widen its export base to include the following:

- | | |
|-----------|-------------------|
| 1. papaya | 2. organic cocoa |
| 3. honey | 4. sheep |
| 5. cocoa | 6. beef |
| 7. Cotton | 8. Other organics |

Profile of the Agriculture and Fishery Industries (See Table 10)

An overview of the Regulatory Support and Compliance Status (with respect to meeting the requirements of export markets - see Table 11)

Recommended Projects (see Table 12)

Table 10: Belize – Overview of the Agricultural & Fishery Sector & Proposed Interventions

Industry	Status & Challenges / Constraints	Current Market Focus		Trade / Market Opportunities	Proposed Interventions	Type of Intervention (See Code below Table)	Short – Term (ST) or Medium term (MT)
		Domestic	Export				
1. Fish	<p>The industry operates open and closed season, no harvest quota is given. The country is a member of CITES; has global quota for country, and quota is given to coop.</p> <p>Only tank-less diving allowed as a limiting / sustainability factor</p> <p>Lack of business culture amongst fishers.</p> <p>Northern Fisheries Coop capacity of processing plant = 150,000 lbs – 200,000 lbs/month while average landing is 285,000 lbs/month</p> <p>Interested in exploiting whole fish – artisanal snappers, barracuda, jacks, mackerel</p> <p>The plants have HACCP and FDA approval and the Coop is partnered with Red lobster of the USA.</p> <p>Sale of flags is still controversial as monitoring capabilities is lacking</p> <p>May need assistance in meeting SPS standards to enter EU</p>	X	X (USA)	X (EU)	<p>Upgrade staff skills to address requirements of EU</p> <p>Training for private sector to implement EU standards</p> <p>All plants to pass HACCP standards</p> <p>Local manufacturing / processing capacity to be consistent for quality assurance</p>	<p>1</p> <p>1</p> <p>3</p> <p>3</p>	<p>ST</p> <p>ST</p> <p>ST</p> <p>MT</p>
Corn, rice, beans, meats, eggs	The country is self sufficient	X					
Citrus	<p>Citrus Juice Concentrates are exported to the USA and ready to drink juice is retail-packed in tetra packs</p> <p>Citrus afforded no preferential treatment—no subsidies like sugar which receives access roads</p> <p>There is a 100 acre lime plantation in Orange Walk and the Fresh Citrus Fruit is estimated at 5% of domestic production</p>	X	X (USA, Germany, Switzerland and The Netherlands)		<p>Management of Invasive Species and to meet technical standards to meet EU requirement and to get into Canadian market</p>	1	ST

	Belize grapefruit is argued as highest quality in the world						
Banana	<p>There exists a potential for expansion through increased productivity from current yields of 11.5 T to 13.0 T/ac (700 boxes (40 lbs) / ac)</p> <p>Problems identified</p> <ol style="list-style-type: none"> 1. Finance cost 2. Drainage and irrigation good, cableway need upgrade 3. Crop insurance required – growers started a disaster fund; need additional input from EU grant 4. Agronomic problems 5. Fertilizer prices 6. Disease – black sigatoka? 7. Lack of more alluvial soils 8. Industry dependence on migrant labour 	X	X(EU)				
Sugar	Industry also producing under Fair Trade	X	X				
Organics					Certification, training and building local capacity to certify organics; need both public and private sector training.	1	ST
Papaya, honey, cocoa	Belize lost its market for honey in Japan due to lack of standards			X(EU)	Honey need residue testing for entry into EU market	3	ST
Sheep and beef	Expansion of beef, small ruminants being pursued. Tracability being implemented			X(MEXICO)	Build capacity in beef to be able to export.	1	ST

Table 11: Assessment of Trade-related Regulatory Requirements – Belize

Trade Enhancing Requirements	EU / EPA Prescribed / compliance standard	Existing Practices / Status	Corrective action required
<p>1. GOOD AGRICULTURAL PRACTICES (GAP)</p> <ul style="list-style-type: none"> Use of approved agrochemicals In field sanitation eg Worker facilities/amenities such as toilets, lunch rooms In field protocols including post harvest Environmental protection eg water quality for irrigation, erosion, waste water management 	<p>EUREPGAP; Globe GAP, Fair Trade; Private Labels</p>	<p>Parts of the agrifood system are not able to meet international standards and requirements regarding sanitary control, environmental issues, etc.</p>	<ul style="list-style-type: none"> Develop and/or promote SPS, GAP's, and regulations regarding environment. Develop systems for monitoring and enforce SPS, environment regulations. Establish or reformulate agencies to regulate, monitor, enforce regulations and provide certification services. Establish a national traceability system.
<p>2. PACKHOUSE OPERATIONS</p> <ul style="list-style-type: none"> Washing, Grading & Drying Packaging & Labelling Documentation for Traceability Inefficient or insufficient infrastructure of transport: roads, ports, airports, and storage facilities 	<p>SPS & HACCP Certification</p>	<p>Packinghouses are rudimentary for fruits such as papaya.</p> <p>No HACCP practices</p>	<ul style="list-style-type: none"> Upgrade regulations on SPS control. Improve food quality and safety inspection services Encourage investments in infrastructure. Establish public-private partnership programmes for infrastructure investments, management and maintenance services. Promote government investments in essential infrastructure. Review tax structure affecting input costs such as cold storage trucks, facilities.
<p>3. AGRO-PROCESSING</p> <ul style="list-style-type: none"> Process Technology Standards / Food Standards 	<p>Plant / Process Certification eg HACCP, QMP, ISO</p>	<p>High quality of processed products. Good adoption of key technologies.</p> <p>The agrifood system has</p>	<ul style="list-style-type: none"> Continue to improve food quality and safety inspection services Continue to upgrade laboratorial infrastructure to carry out independent and internationally accepted

Trade Enhancing Requirements	EU / EPA Prescribed / compliance standard	Existing Practices / Status	Corrective action required
<ul style="list-style-type: none"> ▪ Packaging & Labelling ▪ Waste Water Management ▪ Lab Support Services eg Microbial, histamine & contaminants 		<p>adequate laboratorial infrastructure to carry out quality and safety monitoring and certification tests</p> <ul style="list-style-type: none"> • Good diffusion of managerial tools: quality control (ISO, HACCP), environmental control (ISO, certification), information technologies (bar code, traceability, etc.). 	<p>tests.</p> <ul style="list-style-type: none"> • Promote public-private partnerships for service provision in agrifood quality and safety testing and certification • Improve support services offered by sector organizations and private consultants. • Update undergraduate and vocational course curricula of agro based careers, so as to include agro-processing disciplines.
<p>4. SEAFOOD HARVEST</p> <ul style="list-style-type: none"> ▪ Net & Gear requirements ▪ Landing Sites eg Proper facilities for handling fish, waste disposal system, facilities for gear etc 	Practices eg FAO Code of Conduct, Cites, IUU	<p>Approved landing sites available at ports for export to USA. Will need upgrade for export to EU.</p> <p>Inadequate adoption of food safety technologies, including cold chain</p>	<ul style="list-style-type: none"> • Encourage investments in infrastructure. • Establish public-private partnership programmes for infrastructure investments, management and maintenance services. • Promote government investments in essential infrastructure. • Promote training in sea faring, post harvest - fish handling, processing technology, adoption of cold chain, governance.
<p>5. AQUACULTURE</p> <ul style="list-style-type: none"> ▪ Water Quality issues ▪ Good Production Practices 	<p>Water Quality Certification</p> <p>Production Process Certification</p>	High levels of adoption of appropriate technologies – shrimp, kobia	<ul style="list-style-type: none"> • Improve support services (including financing) offered by sector organizations and private consultants. • Update undergraduate and vocational course curricula to include aquaculture based careers • Promote capacity building on management issues.

TABLE 12: BELIZE – PROJECTS TO ADDRESS CONSTRAINTS /CHALLENGES

IN TAKING ADVANTAGE OF TRADE OPPORTUNITIES

Project Area & Specific Activity	Beneficiary Industry	Duration of Intervention	Potential Benefits	Priority
1. Supply Side Constraints				
1.1 Production Technology – - Technical assistance to introduce improved productivity and competitiveness - Some Short term Scientific Support to evaluate and adapt technology	Fruit and Vegetable (Citrus, banana, Papaya, avocado, coconuts; hot peppers, red beans etc)	Short term	Improve the international competitiveness in the international market by reducing the cost of production. Producers in Belize and consumers in Belize, CARIFORUM, USA and the EU are the beneficiaries as fruits and vegetables are targeted primarily for the local, regional, USA and EU markets.	1
1.2 Technical Assistance in developing Value Added Products including meats, coconut water, fruit cocktails, juices, seafood and pharmaceuticals to meet the Preference and Quality Standards to compete in Export markets	Linked to the fruit, vegetables, meats, seafood and pharmaceutical Industries	Medium term	This intervention would enhance overall competitiveness of these Industries and profitability.	1
2. Developing an Export Marketing Capability				
2.1 Market research to Develop Market Entry Strategies for the Export of Fish, fruits and vegetables to the Wider Caribbean	Fruit, Vegetable, Fishing Industry	Short Term	Expansion of Export base/product diversification and the resultant increase in earnings from exports	2
2.2 Market Research to determine Feasibility / Strategy for the Export of Grains and Ruminant Meat to the wider Caribbean	Grains and Livestock Industries	Short Term	Expansion of Export base/product diversification and the resultant increase in earnings from exports	3
2.3 Research into Transportation and Product Handling Logistics with a view to reducing cost	All Industries	Short term	Transportation and handling cost to the EU and CARIFORUM market is exorbitant. A more cost efficient system would improve overall profitability for all industries that export to the EU and CARIFORUM	1

TABLE 12: (CONT'D): BELIZE – PROJECTS TO ADDRESS CONSTRAINTS /CHALLENGES

Project Area & Specific Activity	Beneficiary Industry	Duration of Intervention	Potential Benefits	Priority
3. Compliance / Adoption of Quality Standards				
3.1 Adoption of EUREPGAP through: - Technical Assistance for the Training of Trainers who would train Farmers - Technical Assistance to provide training for laboratory technicians	All Industries	Short Term	Ensures that products could meet SPS and food safety quality standards as required by export markets	1
3.2 Technical assistance to implement SPS and Traceable System for FRUITS and VEGETABLES – training and establishing procedures	Fruit and Vegetable Industry	Short Term	Market access depends on product satisfying the regulatory and quality standards – benefit of retaining and expanding market share	1
3.3 Technical Assistance to Improve Quality and Availability of water used for irrigation in the Production System	Vegetable Industry	Short Term	This intervention is necessary to ensure that products reaching the market meet the necessary food safety standards – benefit of retaining and expanding market share	1
4. Promotion of Private Investment				
4.1 Technical Assistance to the Strengthen the Fishery, Fruit and Vegetable Cluster, including the participation of all Stakeholders along a Hybrid Value Chain	Vegetable Industry	Short Term	This intervention would improve the growth of this Industry through higher operating efficiency from improved coordination; a greater resource base for investment and development	2

OVERVIEW OF AGRICULTURE IN DOMINICA
&
CHALLENGES IN EXPLOITING TRADE OPPORTUNITIES

1. INTRODUCTION

The Consultants visited Dominica during the period October, 2010 to conduct the field work for this Consultancy. The key objectives were to obtain an overview of sectoral policies, strategies and initiatives in taking advantage of trade opportunities in agriculture as well challenges in so doing. Interviews were held with the heads of key institutions in the Public, quasi- public and private sectors, including NGOs.

2. SECTORAL OVERVIEW

Agriculture in Dominica has two broad development objectives – meeting the Food Security needs of the Country and Export earnings. The major commodities produced are listed below.

Commodities for the Export Market:

1. Banana –being exported to the EU and regional markets.

Commodities Targeted for the Domestic Market:

- | | |
|-----------------|----------------|
| 1. Root Crops | 2. Hot peppers |
| 3. Citrus/Limes | 4. Coconut |
| 5. Avocado | |

Planned Expansion of Export Commodities:

The country plans to widen its export base to include the following:

- | | |
|-----------------|----------------|
| 1. Root Crops | 2. Hot peppers |
| 3. Citrus/Limes | 4. Coconut |
| 5. Avocado | 6. Fish |

Profile of the Agriculture and Fishery Industries (See Table 13)

An overview of the Regulatory Support and Compliance Status (with respect to meeting the requirements of export markets - see Table 14)

Recommended Projects (see Table 15)

Table 13: Dominica – Overview of the Agricultural & Fishery Sector & Proposed Interventions

Industry	Status & Challenges / Constraints	Current Market Focus		Trade / Market Opportunities	Proposed Interventions	Type of Intervention (See Code below Table)	Short – Term (ST) or Medium term (MT)
		Domestic	Export				
1. Fish	<p>The Fishery still underexploited; the capacity exploit further is still lacking and there are reportedly many illegal fishers.</p> <p>The fishery is based on migratory pelagic which accounts for an estimated 83% of production.</p> <p>Major factors affecting the Dominican fishery are declining resources, overfishing, habitat degeneration and climate change</p> <p>There is a need for a total QA system and full cold chain</p> <p>Coop Market all excess fish from Marigot complex</p>	X		<p>X (EU)</p> <p>The market in the USA and UK is also being targeted</p>	<p>Training–</p> <ul style="list-style-type: none"> • seafaring, • processing • value adding <p>Finance–</p> <ul style="list-style-type: none"> • fishing technology • equipment maintenance • construction of facilities for smoking 	<p>4</p> <p>4</p>	<p>ST</p> <p>ST</p>
2. Banana	<p>Banana production has declined from 3000 to about 600-800 (value declined from \$100m to \$20m)</p> <p>Bananas are sold under the Fair Trade arrangement in EU</p> <p>Two multipurpose packhouses were built using EU funds under the Gateway Programme.</p> <p>Quality of produce being exported by the hucksters is very poor.</p> <p>Banana R&D and post harvest are good high cost producer, has low land space, difficult terrain</p>		X (EU & Region)	EU Niche Market	<p>Quality Assurance in the hucksters trade</p> <p>Need to develop a proper centralized packhouse.</p> <p>Post harvest training</p>	<p>2</p> <p>2</p> <p>2</p>	<p>ST</p> <p>ST</p> <p>ST</p>
Yams, dasheen, citrus / limes, avocado	<p>Hucksters are resisting changes requested by EU</p> <p>The National Export Strategy has been targeting root crops: dasheen, hot peppers, coconut</p> <p>Non-traditionals do not get the same level of support as bananas although the segment</p>		X (Guadeloupe/ Martinique)	X (Guadeloupe Martinique, UK	<p>Support to assist with certified citrus in a rehabilitation programme</p> <p>Infrastructure investment:</p> <p>Market Intelligence and</p>	<p>1</p> <p>2</p>	<p>ST</p> <p>ST</p>

	<p>contributes \$21 mn /yr to export earnings.</p> <p>All non-banana exports will soon have to be certified at the existing packhouse operated by Dexia</p> <p>French institutions do not give contracts</p> <p>Poor Post harvest</p> <p>The laboratory is now operational; services include analytical chemistry; metrology; Food microbiology; materials testing</p>				<p>Information</p> <p>Need full export facilities at a proper international airport</p> <p>Incubator facility for agro-processors</p> <p>Export credit and financing pre-shipment</p>	<p>2</p> <p>3</p>	<p>ST</p> <p>ST</p> <p>ST</p>
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Table 14: Assessment of Trade-related Regulatory Requirements – Dominica

Trade Enhancing Requirements	EU / EPA Prescribed / compliance standard	Existing Practices / Status	Corrective action required
<p>1. GOOD AGRICULTURAL PRACTICES (GAP)</p> <ul style="list-style-type: none"> Use of approved agrochemicals In field sanitation eg Worker facilities/amenities such as toilets, lunch rooms In field protocols including post harvest Environmental protection eg water quality for irrigation, erosion, waste water management 	<p>EUREPGAP; Globe GAP, Fair Trade; Private Labels</p>	<p>Parts of the agrifood system is not able to meet international standards and requirements regarding sanitary control, environmental issues, etc.</p> <p>Low level of adoption of food safety technologies.</p> <p>Lack of a traceability system.</p>	<ul style="list-style-type: none"> Develop and/or promote SPS, GAP's, and regulations regarding environment. Develop systems for monitoring and enforce SPS, environment regulations. Establish or reformulate agencies to regulate, monitor, enforce regulations and provide certification services. Establish a national traceability system.
<p>2. PACKHOUSE OPERATIONS</p> <ul style="list-style-type: none"> Washing, Grading & Drying Packaging & Labelling Documentation for Traceability Inefficient or insufficient infrastructure of transport: roads, ports, airports, and storage facilities 	<p>SPS & HACCP Certification</p>	<p>Private packinghouses are rudimentary. Public facilities recently upgraded, but will need upgrade to EU standards</p> <p>No HACCP practices</p> <p>Lack of a traceability system at private packers.</p>	<ul style="list-style-type: none"> Develop regulations on SPS control. Improve food quality and safety inspection services Establish a national traceability system. Establish public-private partnership programmes for infrastructure investments, management and maintenance services. Promote government investments in essential infrastructure. Review tax structure affecting input costs such as cold storage trucks, facilities.
<p>3. AGRO-PROCESSING</p>	<p>Plant / Process Certification eg HACCP, QMP, ISO</p>	<p>Small agro-processing base</p>	<ul style="list-style-type: none"> Promote public-private partnerships for agro-processing, to build national capacity Improve support services offered by sector

Trade Enhancing Requirements	EU / EPA Prescribed / compliance standard	Existing Practices / Status	Corrective action required
<ul style="list-style-type: none"> Process Technology Standards / Food Standards Packaging & Labelling Waste Water Management Lab Support Services eg Microbial, histamine & contaminants 			<p>organizations and private consultants.</p> <ul style="list-style-type: none"> Provide access to undergraduate and vocational course curricula of agro based careers, so as to develop a cadre of agro-processers in vegetables, fruits and fish. Develop business model for use of approved public fishery infrastructure
<p>4. SEAFOOD HARVEST</p> <ul style="list-style-type: none"> Net & Gear requirements Landing Sites eg Proper facilities for handling fish, waste disposal system, facilities for gear etc 	Practices eg FAO Code of Conduct, Cites, IUU	<p>Inefficient or insufficient infrastructure at ports, airports, and storage facilities</p> <p>Low level of adoption of food safety technologies, including cold chain</p> <p>Lack of a traceability system.</p>	<ul style="list-style-type: none"> Encourage investments in infrastructure. Establish public-private partnership programmes for infrastructure investments, management and maintenance services. Promote government investments in essential infrastructure at port and airport. Promote training in sea faring, post harvest - fish handling, processing technology, adoption of cold chain

**TABLE 15: DOMINICA – PROJECTS TO ADDRESS CONSTRAINTS /CHALLENGES
IN TAKING ADVANTAGE OF TRADE OPPORTUNITIES**

Project Area & Specific Activity	Beneficiary Industry	Duration of Intervention	Potential Benefits	Priority
1. Supply Side Constraints				
1.1 Production Technology – - Technical assistance to introduce improved productivity and competitiveness - Some Short term Scientific Support to evaluate and adapt technology	Fruits	Short term	Improve the international competitiveness of fruits in the international market by expanding production, achieving economies of scale and reducing the cost of production. Producers and consumers in the country, CARIFORUM and the EU are the beneficiaries as commodity is targeted primarily for the local, regional and EU markets.	1
1.2 Technical Assistance in developing Value Added Products including and juices to meet the Preference and Quality Standards to compete in Export markets	Linked to the fruit and vegetables Industries	Medium term	This intervention would enhance overall competitiveness of these Industries and profitability.	2
2. Developing an Export Marketing Capability				
2.1 Market research to Develop Market Entry Strategies for the Export of Fruits, vegetables and Fishery products to the Wider Caribbean	Fruits, Vegetables and Fishing Industry	Short Term	Expansion of Export base/product diversification and the resultant increase in earnings from exports. The country has a good fish processing facility that can be easily brought into production.	2
2.2 Research into Transportation and Product Handling Logistics with a view to reducing cost	All Industries	Short term	Transportation and handling cost to the EU-OCT and CARIFORUM market is exorbitant. A more cost efficient system would improve overall profitability for all industries that export to the EU-OCT and CARIFORUM	1

TABLE 15: (CONT'D): DOMINICA – PROJECTS TO ADDRESS CONSTRAINTS /CHALLENGES

Project Area & Specific Activity	Beneficiary Industry	Duration of Intervention	Potential Benefits	Priority
3. Compliance / Adoption of Quality Standards				
3.1 Adoption of EUREPGAP through: - Technical Assistance for the Training of Trainers who would train Farmers - Technical Assistance to provide training for laboratory technicians	All Industries	Short Term	Ensures that products could meet SPS and food safety quality standards as required by export markets	1
3.2 Technical assistance to implement SPS and Traceable System for FRUITS and VEGETABLES – training and establishing procedures	Fruit and Vegetable Industry	Short Term	Market access depends on product satisfying the regulatory and quality standards – benefit of retaining and expanding market share	1
3.3 Technical Assistance to Improve Availability of water used for irrigation in the Production System	Fruit and Vegetable Industry	Short Term	This intervention is necessary to ensure that volumes are produced to meet economies of scale – benefit of retaining and expanding market share	1
4. Promotion of Private Investment				
4.1 Technical Assistance to the Strengthen the Fruit and Vegetable Cluster, including the participation of all Stakeholders along a Hybrid Value Chain	Fruit and Vegetable Industry	Short Term	This intervention would improve the growth of this Industry through higher operating efficiency from improved coordination; a greater resource base for investment and development	2

OVERVIEW OF AGRICULTURE IN THE DOMINICAN REPUBLIC
&
CHALLENGES IN EXPLOITING TRADE OPPORTUNITIES

1. INTRODUCTION

The Consultants visited the Dominican Republic (DR) during the period July 11 -19, 2010 to conduct the field work for this Consultancy. The key objectives were to obtain an overview of sectoral policies, strategies and initiatives in taking advantage of trade opportunities in agriculture as well challenges in so doing. Interviews were held with the heads of key institutions in the Public, quasi- public and private sectors, including NGOs.

2. SECTORAL OVERVIEW

Agriculture in the DR has two broad development objectives – meeting the Food Security needs of the Country and Export earnings. The major commodities produced are listed below:

Commodities for the Export Market:

1. Fruits – mainly Mangoes, Green Avocado, Papaya, Passion Fruits (mainly for juice) and Pineapples with the EU market being the major destination.
2. Banana – with Organic bananas being exported to the EU and non organics to the US market.
3. Organic Cocoa - to the EU market.
4. Vegetables – principally tomatoes, bell peppers, cubanella peppers are grown under shade houses for the US market.

Commodities Targeted for the Domestic Market:

1. Rice - high cost
2. Root Crops – low productivity
3. Coffee – Small Production
4. Broilers – self sufficient
5. Eggs - self sufficient
6. Beef - small
7. Dairy -
8. Small Ruminants – sheep & goats (small but expansion planned for the Hotel Industry and Exports to the Caribbean
9. Seafood - negligible

Planned Expansion of Export Commodities:

The DR plans to widen its export base to include the following:

1. Beef – mainly Hamburger meat to the USA
2. Chicken Breast meat – to the USA market

3. Growth in the Fruit Cluster, including Organics, for Exports
4. Growth in the vegetable Cluster for Export

Profile of the Agriculture and Fishery Industries (See Table 16)

An overview of the Regulatory Support and Compliance Status (with respect to meeting the requirements of export markets - see Table 17)

Recommended Projects (see Table 18)

Table 16: The Dominican Republic – Overview of the Agricultural & Fishery Sector & Proposed Interventions

Industry	Status & Challenges / Constraints	Current Market Focus		Trade / Market Opportunities	Proposed Interventions	Type of Intervention (See Code below Table)	Short – Term (ST) or Medium term (MT)
		Domestic	Export				
1. Rice	High COP – 300 % of World Price Key Challenges include High agro chemical cost & inappropriate technology* Meets 90 % of Domestic Demand Production is mechanized Farms are typically of Medium Size	X		D	Need to improve productivity & competitiveness: -technology - training Problem of pollution of soils & water - introduction of water saving technology - Approp policy & water mgmt	1 1	ST ST
2. Banana - Organic	Competition from Peru & Equador Productivity is good but there is scope of improvement High Cost of certification		X (EU - Niche)	EU Niche Market	Plan to expand production Need to improve productivity - technical assistance	1	ST
Banana – Non Organic	Productivity is satisfactory		X (USA)	X (USA)	nil		
3. Cocoa - Organic			X (EU- Niche)	X (EU- Niche)	Technical support to improve productivity	1	ST
4. Coffee - Organic	Negligible Prod'n			X (Niche)	Technical support to improve productivity	1	ST
Coffee - Regular	Prod'n for the Local Market	X		D	Technical support to improve productivity	1	ST
5. Sugar	Most Sugar Mills Closed Planning to get into Ethanol	X	X		NIL		
6. Mangoes - Regular	Best Opportunities in US – Challenges include competition from Mexico in the USA market Currently producers are organized in a mango Cluster Production is currently fragmented – now in the process of establishing Mango Plantations Focus on variety “Francine” given its capacity to produce year round		X (Mainly the EU with limited exports to NA)	X (EU)	Expansion of production based on large scale pure stand orchards Technical support to improve productivity	1	ST
. Mangoes – Organic	Limited Prod'n currently			X (EU –Niche)	Support required to Implement SPS and Market Traceability Technical Support to improve productivity	1 1	ST ST
7. Pineapple	Focus on the Local & Tourist Markets	X		X D	Opportunities to expand Production for the EU market Technical Support to Improve Productivity	1	ST
8. Avocado	Competition in the USA from Mexican Exports.	X - Eu best for	X (EU)	X(EU)			

	Mostly Green Skin Variety under Prodn for the EU market	Green Avocado					
9. Passion Fruit	Relatively Small Prodn but having market potential mainly for juicing		X – small volumes	D (Juice Export)	Expansion of Production and Processing	1	ST
10. Vegetables – Export & Local Bell Peppers – 400ha Tomatoes- small volumes Cubanelle Hot Peppers Cucumbers	All veg for Export Grown under greenhouse – approx 80 % of Prodn In the past 6 months 100 ha of Green house production has been added. Producers Organized into a Green house Cluster 3 levels of GH Tech - home consumption; domestic & export Challenges: Workers, Birds & Water	X	X (USA)	X (USA) DR has office in NY for distribution for Huntspoint market in NY	Water quality an issue –technical assistance Need to strengthen the Cluster along the chain – inclusion of all Stakeholders along the Value Chain	3 4	ST ST
11. Poultry meat	Self sufficient in the Domestic Mkt Typical large- scale production units Examining Opportunities for Reciprocal Trade with the USA – dark meat vs white	X		X (USA)	Threat of Imports from the USA – Potential Competition Export Opportunities for White Poultry Meat to the USA challenges of HACCP & Traceability -SPS support - market investigation	3 2	ST ST
12. Eggs	Self sufficient Large Scale production units Satisfactory	X			Threat of Imports from the USA		
13. Pork	Self sufficient Large Scale Prodn Concerns about Pollution	X			Technology to mitigate the environmental pollution	1	
14. Sheep & Goat	Current Prodn small but expansion is being attempted Potential to Expand Prodn through Intensive production systems 50,000 goats recently imported from Haiti to augment herd Opportunities in the Hotel Industry and Caribbean Exports	X		X (Potential X to the Caribbean) Opportunities to supply the Hotel Industry	Need to Expand Production & to Implement the Necessary SPS/ Food Safety Measures to meet export regulations	1	ST
15. Beef	Relatively Small Scale production units Scope exists for improving productivity using shrubs etc for forage	X		X (Plan to Export Hamburger Meat to the USA)	Market research	2	ST
16. Dairy	Typically small scale operations Problem in Marketing (Imported powder milk being blended with fresh milk)				Manage the competition from powdered milk	3	ST
17. Root & Tubers	Self sufficient for the domestic market Good quality Produce Need to improve Productivity			D	Technical Assistance to Improve Productivity	1	ST
18. Seafood	This Industry is relatively small Focus is on the Domestic market			D			

Table 17: The Dominican Republic - Assessment of Trade-related Regulatory Requirements

Trade Enhancing Requirements	EU / EPA Prescribed / compliance standard	Existing Practices / Status	Corrective action required
<p>1. GOOD AGRICULTURAL PRACTICES (GAP)</p> <ul style="list-style-type: none"> Use of approved agrochemicals In field sanitation eg Worker facilities/amenities such as toilets, lunch rooms In field protocols including post harvest Environmental protection eg water quality for irrigation, erosion, waste water management 	<p>EUREPGAP; Globe GAP, Fair Trade; Private Labels</p>	<p>Parts of the agrifood system is not able to meet international standards and requirements regarding sanitary control, environmental issues, etc.</p> <p>Low level of adoption of food safety technologies.</p> <p>Lack of a traceability system.</p>	<ul style="list-style-type: none"> Develop and/or promote SPS, GAP's, and regulations regarding environment. Develop systems for monitoring and enforce SPS, environment and labour regulations. Establish or reformulate agencies to regulate, monitor, enforce regulations and provide certification services. Establish a national traceability system.
<p>2. PACKHOUSE OPERATIONS</p> <ul style="list-style-type: none"> Washing, Grading & Drying Packaging & Labelling Documentation for Traceability Inefficient or insufficient infrastructure of transport: roads, waterways, ports, airports, and storage facilities 	<p>SPS & HACCP Certification</p>	<p>Facilities will need upgrade for entry into EU</p> <p>No HACCP practices</p> <p>Lack of a traceability system.</p>	<ul style="list-style-type: none"> Develop regulations on SPS control. Improve food quality and safety inspection services Establish a national traceability system. Encourage investments in infrastructure. Establish public-private partnership programmes for infrastructure investments, management and maintenance services. Promote government investments inessential infrastructure. Review tax structure affecting input costs such as cold storage trucks, facilities Remove import barriers on strategic inputs,

Trade Enhancing Requirements	EU / EPA Prescribed / compliance standard	Existing Practices / Status	Corrective action required
			including high tech inputs.
<p>3. AGRO-PROCESSING</p> <ul style="list-style-type: none"> Process Technology Standards / Food Standards Packaging & Labelling Waste Water Management Lab Support Services eg Microbial, histamine & contaminants 	Plant / Process Certification eg HACCP, QMP, ISO	<p>In some cases, low quality of processed products because of low level of adoption of key technologies.</p> <p>The agrifood system has inadequate laboratorial infrastructure to carry out quality and safety monitoring and certification tests</p> <ul style="list-style-type: none"> In some cases, low diffusion of managerial tools: quality control (ISO, HACCP), environmental control (ISO, certification), information technologies (bar code, traceability, etc.). 	<ul style="list-style-type: none"> Improve food quality and safety inspection services Upgrade laboratorial infrastructure to carry out independent and internationally accepted tests. Promote public-private partnerships for service provision in agrifood quality and safety testing and certification Improve support services offered by sector organizations and private consultants. Create infrastructure and promote capacity building on management issues. Update undergraduate and vocational course curricula of agro based careers, so as to include / expand processing discipline contents.
<p>4. SEAFOOD HARVEST</p> <ul style="list-style-type: none"> Net & Gear requirements Landing Sites eg Proper facilities for handling fish, waste disposal system, facilities for gear etc 	Practices eg FAO Code of Conduct, Cites, IUU	<p>Inefficient or insufficient infrastructure of transport: roads, ports, airports, and storage facilities</p> <p>Low level of adoption of food safety technologies</p> <p>Lack of a traceability system.</p>	<ul style="list-style-type: none"> Encourage investments in infrastructure, adoption of cold chain. Establish public-private partnership programmes for infrastructure investments, management and maintenance services. Promote government investments inessential infrastructure. <p>Training programme in seafaring, fish handling, processing</p>

TABLE 18: THE DOMINICAN REPUBLIC – PROJECTS TO ADDRESS CONSTRAINTS /CHALLENGES

IN TAKING ADVANTAGE OF TRADE OPPORTUNITIES

Project Area & Specific Activity	Beneficiary Industry	Duration of Intervention	Potential Benefits	Priority
1. Supply Side Constraints				
1.1 Production Technology – - Technical assistance to introduce improved productivity and competitiveness - Some Short term Scientific Support to evaluate and adapt technology	Rice	Short term	Improve the Competitiveness of rice in the Domestic market by reducing the cost of rice production which is currently approx 300 % of World price. Producers and consumers are the beneficiaries as rice is targeted primarily for the local market.	1
	Banana (Organic)	Short term	This would enhance competitiveness of Organic Banana export to the EU Market vs competing imports from Peru and Equador. It would facilitate the expansion of exports.	1
	Cocoa (Organic)	Short term	This intervention would allow the DR to improve returns from export of this commodity. It would also improve competitive in this Niche Market in the EU	1
	Mango (Organic)	Short term	Same as above for organic cocoa	1
	Mango (Non Organic)	Short term	This intervention would improve the profitability and competitiveness of exports	1

TABLE 18: (CONT'D): THE DOMINICAN REPUBLIC – PROJECTS TO ADDRESS CONSTRAINTS /CHALLENGES ...

Project Area & Specific Activity	Beneficiary Industry	Duration of Intervention	Potential Benefits	Priority
	Pineapple	Short term	This intervention would improve the profitability and competitiveness both in the Domestic and export markets.	1
	Shade House Agriculture	Short term	Vegetable production for export (mainly to the USA market) is primarily based on shade house production. Given the competitiveness of the vegetable market in the USA this intervention is critical to improving productivity as well as quality so as to support the planned expansion in exports.	1
1.2 Technical Assistance in developing Value Added Products including juices to meet the Preference and Quality Standards to compete in Export markets	Linked to the fruit and vegetables Industries	Medium term	This intervention would enhance overall competitiveness of these Industries and profitability.	2
2. Developing an Export Marketing Capability				
2.1 Market research to Develop Market Entry Strategies for the Export of White Poultry Meat to the USA	Broiler Industry	Short Term	Expansion of the DR Export base/product diversification and the resultant increase in earnings from exports	3
2.2 Market Research to determine Feasibility / Strategy for the Export of Hamburger Meat to the USA	Beef Industry	Short Term	Expansion of the DR Export base/product diversification and the resultant increase in earnings from exports	3
2.3 Research into Transportation and Product Handling Logistics with a view to reducing cost	All Industries	Short term	Transportation and handling cost to the EU market is exorbitant. A more cost efficient system would improve overall profitability for all industries that export to the EU	1

TABLE 18: (CONT'D): THE DOMINICAN REPUBLIC – PROJECTS TO ADDRESS CONSTRAINTS /CHALLENGES

Project Area & Specific Activity	Beneficiary Industry	Duration of Intervention	Potential Benefits	Priority
3. Compliance / Adoption of Quality Standards				
3.1 Adoption of EUREPGAP through: - Technical Assistance for the Training of Trainers who would train Farmers - Technical Assistance to provide training for laboratory technicians	All Industries	Short Term	Ensures that products could meet SPS and food safety quality standards as required by export markets	1
3.2 Technical assistance to implement SPS and Traceable System for mangoes – training and establishing procedures	Mango Industry	Short Term	Market access depends on product satisfying the regulatory and quality standards – benefit of retaining and expanding market share	1
3.3 Technical Assistance to Improve Water Quality in the Shade House Production System	Vegetable Industry	Short Term	This intervention is necessary to ensure that products reaching the market meet the necessary food safety standards – benefit of retaining and expanding market share	1
4. Promotion of Private Investment				
4.1 Technical Assistance to the Strengthen the Vegetable Cluster, including the participation of all Stakeholders along the Value Chain	Vegetable Industry	Short Term	This intervention would improve the growth of this Industry through higher operating efficiency from improved coordination; a greater resource base for investment and development	2

OVERVIEW OF AGRICULTURE IN GRENADA & CHALLENGES IN EXPLOITING TRADE OPPORTUNITIES

1. INTRODUCTION

The Consultants visited Grenada during the period September, 2010 to conduct the field work for this Consultancy. The key objectives were to obtain an overview of sectoral policies, strategies and initiatives in taking advantage of trade opportunities in agriculture as well challenges in so doing. Interviews were held with the heads of key institutions in the Public, quasi- public and private sectors, including NGOs.

2. SECTORAL OVERVIEW

Agriculture in Grenada has two broad development objectives – meeting the Food Security needs of the Country and Export earnings. The major commodities produced are listed below. Grenada indicated the need for a stock / biomass assessment of the fishery which will be used to inform its decision for access to new investors. The current legislation reserves the Fishery for Grenadian nationals. In terms of general agriculture, shortage of expertise was highlighted as being critical for all commodities. There is the need to build local processing capacity to reduce risks associated with default of fresh produce buyers. Guaranteed markets are needed as the farmers had numerous bad experiences, many of whom are averse to new investments.

Commodities for the Export Market:

1. Nutmeg
2. Cocoa

Commodities Targeted for the Domestic Market:

- | | |
|-----------------|---------------|
| 1. golden apple | 2. breadfruit |
| 3. Soursop | 4. avocado |

Planned Expansion of Export Commodities:

Grenada plans to widen its export base to include the following:

- | | |
|---------------|--|
| 1. banana | 2. Fruits: Julie mango, soursop, golden apple, avocado |
| 3. root crops | 4. Fruit juices – single and blends |

Profile of the Agriculture and Fishery Industries (See Table 19)

An overview of the Regulatory Support and Compliance Status (with respect to meeting the requirements of export markets - see Table 20)

Recommended Projects (see Table 21)

Table 19: Grenada – Overview of the Agricultural & Fishery Sector & Proposed Interventions

Industry	Status & Challenges / Constraints	Current Market Focus		Trade / Market Opportunities	Proposed Interventions	Type of Intervention (See Code below Table)	Short – Term (ST) or Medium term (MT)
		Domestic	Export				
General Agriculture	<p>Grenada's general agriculture (crop and livestock) has declined substantially since Hurricane Ivan in 2004 and has not recovered since. There have been more recent concerted effort to bring the industry back to its original level, A number of constraints are however being experienced, some of which are described below.</p> <p>Need to build primary production and post harvest capacity: road infrastructure, packing houses, cold storage, packing and processing capacity.</p> <p>Ocean freight capacity is also limited</p> <p>Need to upgrade / certify its laboratory testing capability, both equipment and human resources. Regulatory requirements need to be put in place with respect to GAP, Certification, Food Safety, Tracability</p> <p>Financing has been identified as a major constraint limiting production expansion</p> <p>Crop, export and moral hazard insurance have been identified as a pre-requisite</p> <p>Need for technical assistance for training of trainers and farmers</p>	X		X (Regional Market, EU, Martinique)	<p>Need HR training, certification capability and laboratory equipment.</p> <p>Need regional market intelligence system, looking at Trinidad, St Lucia, Barbados consumer and tourism markets.</p>	3	ST

Nutmeg	Currently, there is a shortage of nutmeg oil.				Need high support for value added segment; establishment of orchards;	1	ST
	Production has declined from 2,000 T/yr before hurricane Ivan to just about 200 T/yr in 2009.				governance to get farmers organized, R&D in new product development,	2	ST
	Aged farmers are not interested in investing, given the 7 years span before the nutmeg come into bearing.				processor support in business development, biotechnology to reduce age of trees at bearing.	3	MT
	Need for new technology in production has been highlighted and also the need to review the value chain in order to get a bigger value share.						
	R&D is also required for large projects, to develop other products from nutmeg and other crops and technical assistance to graduate small processors at commercialization.						
Cocoa	Production has increased to 1.2 mn lbs, but still under the pre-hurricane levels of 1.8 mn lbs. Production technology is still traditional. The country is in the process of constructing a chocolate manufacturing plant.				Need high support for value added segment, greater diversification into RTE products, packaging;	1	ST
	Very limited pesticide is used. Cadmium may be present in the soil and thus beans may have to be tested for residues.				establishment of farms / expansion to pre-Ivan levels; expansion of nursery,	2	ST
	The flavour / products profile of the country's cocoa will need to be determined.				governance to get farmers organized, technical assistance to maintain quality/ flavour profile of the market and to meet EU standard for heavy metals, quality assurance lab, organic production, establishment of investment capital fund.	3	MT
	The Cocoa Industry has specifically identified the need for investment capital in order to get production levels back to pre-Ivan levels.						
	Cocoa enjoys a good / almost preferential marketing arrangement with the EU and Japan.						
	Identified need for value added capacity building, a chocolate quality assurance evaluation laboratory and to understand the intricacies of the cocoa market in EU and the science / chemistry of cocoa.						

Fish	Grenada exports an average 2000 kg/wk of fish to Martinique.				Need ice boxes outfitted on inshore (18ft) vessels/boats to maintain cold chain. Need to improve insulation in ice hold on bigger boats -- 30 to 50 ft which go out for 4-5 days (120 vessels).	4	ST
	The country observes the code of Conduct for responsible fishing.						
	The EU requires certification of origin and Grenada issues Certificate of Local Origin with exports as third countries fish attract higher tariffs.				Need landing sites in Victoria and Waltham; Victoria has slipway. These are important for livelihood of communities.	4	ST
	Five vessels are currently certified for exporting to the EU and also one of the existing three plants in primary processing.						
	Grenville has problem with certain species; poor shelf life – Bonito specie, need project to utilize 500,000/yr grind, fish meal etc; need pre-processing storage.				Project to utilize underutilized species. Grenville needs to expand cold storage capacity.	4	ST
					Need biomass assessment of the Grenada fishery	4	ST
					Airport need permanent proper cold storage for fish	4	ST
Pharmaceuticals					Need training and visits to factories, ships, processing plants	3	ST
					Technical assistance to maintain fish quality and to meet EU standard, maintenance of cold chain.	3	ST
Pharmaceuticals	The herbal agricultural sector has been identified as one which may have untapped potential				The need for a short term consultant has been identified to open the NTB in the EU market as currently herbal products are sent to Austria to be bottled under their label		
	Need to investigate the potential of herbs as pharmaceuticals and to give official recognition of the herbal sector in regional policy-making						
	Need to capture traditional knowledge and intellectual property gene mapping to lay claim on plants.				Assess other herbs for pharmaceutical potential.	3	MT

Table 20: Assessment of Trade-related Regulatory Requirements – Grenada

Trade Enhancing Requirements	EU / EPA Prescribed / compliance standard	Existing Practices / Status	Corrective action required
<p>1. GOOD AGRICULTURAL PRACTICES (GAP)</p> <ul style="list-style-type: none"> Use of approved agrochemicals In field sanitation eg Worker facilities/amenities such as toilets, lunch rooms In field protocols including post harvest Environmental protection eg water quality for irrigation, erosion, waste water management 	<p>EUREPGAP; Globe GAP, Fair Trade; Private Labels</p>	<p>Some parts of the agrifood system are not able to meet international standards and requirements regarding sanitary control, environmental issues, etc.</p> <p>Heavy metal in cocoa to be assessed.</p>	<ul style="list-style-type: none"> Develop and/or promote SPS, GAP's, and regulations regarding environment. Develop systems for monitoring and enforce SPS, environment. Establish or reformulate agencies to regulate, monitor, enforce regulations and provide certification services. Establish a national traceability system.
<p>2. PACKHOUSE OPERATIONS</p> <ul style="list-style-type: none"> Washing, Grading & Drying Packaging & Labelling Documentation for Traceability Inefficient or insufficient infrastructure of transport: roads, ports, airports, and storage facilities 	<p>SPS & HACCP Certification</p>	<p>Public packinghouse will require upgrade.</p> <p>No HACCP practices</p>	<ul style="list-style-type: none"> Upgrade regulations on SPS control. Improve food quality and safety inspection services Encourage investments in infrastructure. Establish public-private partnership programmes for infrastructure investments, management and maintenance services. Promote government investments in essential infrastructure. Review tax structure affecting input costs such as cold storage trucks, facilities.
<p>3. AGRO-PROCESSING</p>	<p>Plant / Process Certification eg HACCP, QMP, ISO</p>	<p>High quality of processed products – Pepper Sauce. Good adoption of key technologies.</p>	<ul style="list-style-type: none"> Continue to improve food quality and safety inspection services Upgrade laboratorial infrastructure to carry out

Trade Enhancing Requirements	EU / EPA Prescribed / compliance standard	Existing Practices / Status	Corrective action required
<ul style="list-style-type: none"> Process Technology Standards / Food Standards Packaging & Labelling Waste Water Management Lab Support Services eg Microbial, histamine & contaminants – heavy metal deposit in cocoa beans 		<p>The agrifood system has inadequate laboratorial infrastructure to carry out quality and safety monitoring and certification tests</p> <ul style="list-style-type: none"> Good diffusion of managerial tools: quality control (ISO, HACCP), environmental control (ISO, certification), information technologies (bar code, traceability, etc.). <p>Inadequate R&D in new product development.</p>	<p>independent and internationally accepted tests.</p> <ul style="list-style-type: none"> Promote public-private partnerships for service provision in agrifood quality and safety testing and certification Improve support services offered by sector organizations and private consultants. Provide access to undergraduate and vocational careers to include agro-processing disciplines. Encourage public and private stakeholders' joint definition of R&D priorities.
<p>4. SEAFOOD HARVEST</p> <ul style="list-style-type: none"> Net & Gear requirements Landing Sites eg Proper facilities for handling fish, waste disposal system, facilities for gear etc 	Practices eg FAO Code of Conduct, Cites, IUU	<p>Approved landing sites available at designated ports for export, other areas need to be upgraded.</p> <p>Need for other landing sites to be developed.</p> <p>Inadequate adoption of food safety technologies, including cold chain</p>	<ul style="list-style-type: none"> Encourage investments in infrastructure. Establish public-private partnership programmes for infrastructure investments, management and maintenance services. Promote government investments in essential infrastructure. Promote training in sea faring, post harvest - fish handling, processing technology, adoption of cold chain, governance.

TABLE 21: GRENADA – PROJECTS TO ADDRESS CONSTRAINTS /CHALLENGES

IN TAKING ADVANTAGE OF TRADE OPPORTUNITIES

Project Area & Specific Activity	Beneficiary Industry	Duration of Intervention	Potential Benefits	Priority
1. Supply Side Constraints				
<p>1.1 Production Technology –</p> <ul style="list-style-type: none"> - Technical assistance to introduce improved productivity and competitiveness - Some Short term Scientific Support to evaluate and adapt technology 	Fruits and Vegetables	Short term	Improve the international competitiveness of fruits in the international market by expanding production, achieving economies of scale and reducing the cost of production. Producers and consumers in the country, CARIFORUM and the EU including the OCT are the beneficiaries as commodity is targeted primarily for the local, regional and EU markets.	1
1.2 Technical Assistance in developing Value Added Products including fishery products and juices to meet the Preference and Quality Standards to compete in Export markets	Linked to the fishery, fruit and vegetables Industries	Medium term	This intervention would enhance overall competitiveness of these Industries and profitability.	2
2. Developing an Export Marketing Capability				
2.1 Market research to Develop Market Entry Strategies for the Export of Fruits, vegetables and Fishery products to the Wider Caribbean and EU	Fruits, Vegetables and Fishing Industry	Short Term	Expansion of Export base/product diversification and the resultant increase in earnings from exports. The country has a good fish processing facility that can be easily brought into production. Good infrastructure is available for fruit and vegetable processing.	2
2.2 Research into Transportation and Product Handling Logistics with a view to reducing cost	All Industries	Short term	Transportation and handling cost to the EU and CARIFORUM market is exorbitant. A more cost efficient system would improve overall profitability for all industries that export to the EU and CARIFORUM	1

TABLE 21: (CONT'D): GRENADA – PROJECTS TO ADDRESS CONSTRAINTS /CHALLENGES

Project Area & Specific Activity	Beneficiary Industry	Duration of Intervention	Potential Benefits	Priority
3. Compliance / Adoption of Quality Standards				
3.1 Adoption of EUREPGAP through: - Technical Assistance for the Training of Trainers who would train Farmers - Technical Assistance to provide training for laboratory technicians	All Industries	Short Term	Ensures that products could meet SPS and food safety quality standards as required by export markets	1
3.2 Technical assistance to implement SPS and Traceable System for FRUITS and VEGETABLES – training and establishing procedures	Fruit and Vegetable Industry	Short Term	Market access depends on product satisfying the regulatory and quality standards – benefit of retaining and expanding market share	1
3.3 Technical Assistance to Improve Availability of water used for irrigation in the Production System	Fruit and Vegetable Industry	Short Term	This intervention is necessary to ensure that volumes are produced to meet economies of scale – benefit of retaining and expanding market share	1
4. Promotion of Private Investment				
4.1 Technical Assistance to the Strengthen the Fruit and Vegetable Cluster, including the participation of all Stakeholders along a Hybrid Value Chain	Fruit and Vegetable Industry	Short Term	This intervention would improve the growth of this Industry through higher operating efficiency from improved coordination; a greater resource base for investment and development	2

OVERVIEW OF AGRICULTURE IN GUYANA & CHALLENGES IN EXPLOITING TRADE OPPORTUNITIES

1. INTRODUCTION

The Consultants visited Guyana during the period October, 2010 to conduct the field work for this Consultancy. The key objectives were to obtain an overview of sectoral policies, strategies and initiatives in taking advantage of trade opportunities in agriculture as well challenges in so doing. Interviews were held with the heads of key institutions in the Public, quasi- public and private sectors, including NGOs.

2. SECTORAL OVERVIEW

Agriculture in Guyana has two broad development objectives – meeting the Food Security needs of the Country and Export earnings. The major commodities produced are listed below. The Guyana Rice Board (GRB) manages the rice industry in Guyana. Available land for cultivation is estimated at 90,000 ha of which 70-75000 hectare of rice cropped twice per year. The industry is highly mechanized with aircraft used for cultivation/sowing and spraying; harvesting is done by large mechanical harvesters and final products include white and parboiled rice. The annual catch of the Guyana seabob fishery was reported at 25-30 million lbs, most of which enters the export market. The Guyana Agricultural Producers Association (GAPA) works closely with farmers at the “grass roots” level to improve farm technology and marketing. They also arrange access to fertilizers, involved in developing GPS database coordinates of farms and markets.

Commodities for the Export Market:

5. Rice
6. Sugar
7. Fish, Shrimp & Seabob
8. Fresh Fruits and vegetables

Commodities Targeted for the Domestic Market:

10. Rice snack foods

Planned Expansion of Export Commodities:

Guyana plans to widen its export base to include the following:

5. Rice snack foods
6. Livestock: Ruminant meat (awaiting certification)
7. Fruits and vegetables

Profile of the Agriculture and Fishery Industries (See Table 22)

An overview of the Regulatory Support and Compliance Status (with respect to meeting the requirements of export markets - see Table 23). **Recommended Projects** (see Table 24)

Table 22: Guyana – Overview of the Agricultural & Fishery Sector & Proposed Interventions

Industry	Status & Challenges / Constraints	Current Market Focus		Trade / Market Opportunities	Proposed Interventions	Type of Intervention (See Code below Table)	Short – Term (ST) or Medium term (MT)
		Domestic	Export				
Seabob, Shrimp and Fish	<p>The annual catch of the Guyana seabob fishery was reported at 25-30 milion lbs. The seabob comprises 90% of exports.</p> <p>industrial segment has 121 trawlers comprising of 103 seabob vessels, artisanal fishers with 121 boats and 6 industrial processing plant. There are three companies / processing plants that are certified for export of fishery products to the EU</p> <p>The artisanal fishery comprise of shrimp, seabob, bangamary, trout, gilbaka, and snappers. Fish export comprises mostly red snapper; exported frozen</p> <p>An annual licence is given to large fishers. A study is being done to analyze the minimization of by-catch in the trawl fishery. The by-catch of the pinaeid shrimp fishery – the bangamary fish and others are exported primarily to Jamaica and Trinidad</p> <p>In the USA, seabob is battered to enhance product presentation, thus covering the black vein on the back. In EU, this is not battered, therefore seen after cooking. Adequate refrigerated containers / freight are available to the USA. Industrial fleet have their own approved landing sites - EU and do not accept products from the landing site at Georgetown</p> <p>A major diversification programme for export oriented fish products</p> <p>Aquaculture stations and a private hatchery have been established budget \$G or \$US 21.9 million. The segment highlighted the need for development finance for the Agro-Aquaculture Park</p> <p>Guyana is a signatory to the FAO Code of Conduct for Responsible Fisheries (1995) and the International Plan of Action to Prevent, Deter and Eliminate illegal fishing. Piracy is a recurring problem. Suggested the need for a development of a contributory revolving</p>	X	X (EU, USA, CARICOM)	X (Region)	<p>Technical and financial assistance to fishers to facilitate export market development, transportation, regional packaging facilities and refrigerated trucks.</p> <p>Capacity building in fishermen cooperatives.</p> <p>Upgrading of analytical and monitoring services for pesticides, heavy metals, residues, toxins and facilitation of establishing NAHFS</p> <p>Financing for development of aquaculture (Agro-Aquaculture Park); capacity building in organization management, feed technology, water quality; drainage design and fishery biology</p> <p>Value added processing – retooling of existing processors, new product development in fishery and agriculture</p>	<p>3</p> <p>4</p> <p>4</p> <p>5</p> <p>3</p>	<p>ST</p> <p>ST</p> <p>ST</p> <p>ST</p> <p>MT</p>

	<p>fund to deal with piracy in the region</p> <p>The Fisheries department has a tracking system to assist with monitoring and compliance to IUU regulations, for testing of water and product and issuance of Catch Certificate as required by the EU. Guyana is also a cooperating member of ICCAT</p> <p>Further access to the offshore fishery / issuance of licences to foreigners is constrained by resources assessment</p>						
Rice	<p>Last year Guyana produced 359,000 tonnes of rice.</p> <p>The reduction of in the EU's levy and quota system had a positive impact on the country's rice industry. Europe is a big importer and has downward pressure on prices. Export earnings increased in 2010, surpassing sugar earnings</p> <p>Looked at Fair Trade rice market; but was found to be too small for the scale of operation in Guyana</p> <p>Rice competitiveness programmes were funded by EU –investment part implemented but problems accessing technical assistance</p> <p>The Rice Industry plans to look at the feasibility of producing value added rice products such as cereals, snack foods; targeting the Guyana diaspora in USA and UK</p> <p>The Rice Industry highlighted the need to build capacity, to address MRL's, laboratory capability and technology transfer</p> <p>Training and research facilities are needed to include the latest in biotechnology capability</p> <p>Diversification is also taking place with rice and sugar (consumer packs in sugar; product development in rice) and the value chain approach is being used for integrated development to address production and productivity issues</p>	X	X (EU, CARICOM)	X (>EU, Region)	Strengthen the research and technical transfer capability of the rice industry to include the latest in biotechnology capability	3	ST
Fruits and vegetables	<p>The NGMC manages the export portfolio for the Non-traditional agricultural produce. Given the multiple handling which takes place, the postharvest losses are high. Problematic areas also include primary packaging material; infrastructure</p>	X	X (EU, USA, CARICOM)	X (>EU, EU-OCT Cariforum Region, USA, Canada)	<p>Strengthening the human resource capacity and laboratory capability for quality assurance and certification for exports.</p> <p>Building entrepreneurship/ training for general agriculture:</p>	<p>2</p> <p>3</p>	<p>ST</p> <p>ST</p>

					fruits and vegetables Central pack-house for distribution and marketing at Georgetown and Parika Implementation of GAP and Certification Market intelligence / infrastructure and business development support centre Legislative reform to address pesticides and toxic chemicals, use and monitoring of pesticides	2 1 1	ST ST ST ST
Livestock	<p>The Guyana Livestock Development Authority (GLDA), a recently operational semi-autonomous agency, promotes development of all types of livestock</p> <p>Current emphasis is being placed on export of beef, mutton / chevron and pork. Alternatively, poultry meat is driven by the private sector</p> <p>Construction of new abattoir is being done at Georgetown. The old veterinary public lab is being rebuilt and re-equipped but data for the livestock industry has not been updated</p> <p>Training is required in specialist skills, downstream value added, and product exploitation of non traditional species</p> <p>Guyana has been certified free of BSE. In order to continue certification and to build confidence, the country has to implement simulation exercises every two years at the country borders that have not been "certified free" of the disease</p> <p>The Veterinary Public Health is to be the competent authority under an integrated inspection programme</p> <p>An abattoir is being constructed and to be certified for export to the Caribbean</p>	X	X (CARICOM)	X (Region)			

Table 23: Assessment of Trade-related Regulatory Requirements - Guyana

Trade Enhancing Requirements	EU / EPA Prescribed / compliance standard	Existing Practices / Status	Corrective action required
<p>1. GOOD AGRICULTURAL PRACTICES (GAP)</p> <ul style="list-style-type: none"> Use of approved agrochemicals In field sanitation eg Worker facilities/amenities such as toilets, lunch rooms In field protocols including post harvest Environmental protection eg water quality for irrigation, erosion, waste water management 	<p>EUREPGAP; Globe GAP, Fair Trade; Private Labels</p>	<p>Parts of the agrifood system is not able to meet international standards and requirements regarding sanitary control, environmental issues, etc.</p> <p>Low level of adoption of food safety technologies.</p> <p>Lack of a traceability system.</p>	<ul style="list-style-type: none"> Develop and/or promote SPS, GAP's, and regulations regarding environment. Develop systems for monitoring and enforce SPS, environment and labour regulations. Establish or reformulate agencies to regulate, monitor, enforce regulations and provide certification services. Establish a national traceability system.
<p>2. PACKHOUSE OPERATIONS</p> <ul style="list-style-type: none"> Washing, Grading & Drying Packaging & Labelling Documentation for Traceability Inefficient or insufficient infrastructure of transport: roads, waterways, ports, airports, and storage facilities 	<p>SPS & HACCP Certification</p>	<p>Rudimentary facilities No HACCP practices Lack of a traceability system.</p>	<ul style="list-style-type: none"> Develop regulations on SPS control. Improve food quality and safety inspection services Establish a national traceability system. Encourage investments in infrastructure. Establish public-private partnership programmes for infrastructure investments, management and maintenance services. Promote government investments inessential infrastructure. Review tax structure affecting input costs such as cold storage trucks, facilities Remove import barriers on strategic inputs, including high tech inputs.
<p>3. AGRO-PROCESSING</p> <ul style="list-style-type: none"> Process Technology Standards / Food Standards 	<p>Plant / Process Certification e.g. HACCP, QMP, ISO</p>	<p>Low quality of processed products because of low level of adoption of key technologies.</p>	<ul style="list-style-type: none"> Improve food quality and safety inspection services Upgrade laboratorial infrastructure to carry out

Trade Enhancing Requirements	EU / EPA Prescribed / compliance standard	Existing Practices / Status	Corrective action required
<ul style="list-style-type: none"> ▪ Packaging & Labelling ▪ Waste Water Management ▪ Lab Support Services eg Microbial, histamine & contaminants 		<p>The agrifood system has inadequate laboratorial infrastructure to carry out quality and safety monitoring and certification tests</p> <ul style="list-style-type: none"> • Low diffusion of managerial tools: quality control (ISO, HACCP), environmental control (ISO, certification), information technologies (bar code, traceability, etc.). 	<p>independent and internationally accepted tests.</p> <ul style="list-style-type: none"> • Promote public-private partnerships for service provision in agrifood quality and safety testing and certification • Improve support services offered by sector organizations and private consultants. • Create infrastructure and promote capacity building on management issues. • Update undergraduate and vocational course curricula of agro based careers, so as to include / expand processing discipline contents.
<p>4. SEAFOOD HARVEST</p> <ul style="list-style-type: none"> ▪ Net & Gear requirements ▪ Landing Sites eg Proper facilities for handling fish, waste disposal system, facilities for gear etc 	Practices eg FAO Code of Conduct, Cites, IUU	<p>Inefficient or insufficient infrastructure of transport: roads, waterways, ports, airports, and storage facilities</p> <p>Low level of adoption of food safety technologies</p> <p>Lack of a traceability system.</p>	<ul style="list-style-type: none"> • Encourage investments in infrastructure, adoption of cold chain. • Establish public-private partnership programmes for infrastructure investments, management and maintenance services. • Promote government investments inessential infrastructure. <p>Training programme in seafaring, fish handling, processing</p>
<p>5. AQUACULTURE</p> <ul style="list-style-type: none"> ▪ Water Quality issues ▪ Good Production Practices 	Water Quality Certification Production Process Certification	Low levels of adoption of appropriate technologies	<ul style="list-style-type: none"> • Improve support services (including financing) offered by sector organizations and private consultants. • Update undergraduate and vocational course curricula to include aquaculture based careers • Create infrastructure and promote capacity building on management issues.

TABLE 24: GUYANA – PROJECTS TO ADDRESS CONSTRAINTS /CHALLENGES

IN TAKING ADVANTAGE OF TRADE OPPORTUNITIES

Project Area & Specific Activity	Beneficiary Industry	Duration of Intervention	Potential Benefits	Priority
1. Supply Side Constraints				
1.1 Production Technology – - Technical assistance to introduce improved productivity and competitiveness - Some Short term Scientific Support to evaluate and adapt technology	Rice	Short term	Improve the international competitiveness of rice in the international market by reducing the cost of rice production. Producers in Guyana and consumers in Guyana, CARIFORUM and the EU are the beneficiaries as rice is targeted primarily for the local, regional and EU markets.	1
1.2 Technical Assistance in developing Value Added Products including coconut water and juices to meet the Preference and Quality Standards to compete in Export markets	Linked to the fruit and vegetables Industries	Medium term	This intervention would enhance overall competitiveness of these Industries and profitability.	2
2. Developing an Export Marketing Capability				
2.1 Market research to Develop Market Entry Strategies for the Export of Fish to the Wider Caribbean	Fishing Industry	Short Term	Expansion of Guyana Export base/product diversification and the resultant increase in earnings from exports	2
2.2 Market Research to determine Feasibility / Strategy for the Export of Ruminant Meat to the wider Caribbean	Beef and Sheep Industry	Short Term	Expansion of Guyana Export base/product diversification and the resultant increase in earnings from exports	3
2.3 Research into Transportation and Product Handling Logistics with a view to reducing cost	All Industries	Short term	Transportation and handling cost to the EU and CARIFORUM market is exorbitant. A more cost efficient system would improve overall profitability for all industries that export to the EU and CARIFORUM	1

TABLE 24: (CONT'D): GUYANA – PROJECTS TO ADDRESS CONSTRAINTS /CHALLENGES

Project Area & Specific Activity	Beneficiary Industry	Duration of Intervention	Potential Benefits	Priority
3. Compliance / Adoption of Quality Standards				
3.1 Adoption of EUREPGAP through: - Technical Assistance for the Training of Trainers who would train Farmers - Technical Assistance to provide training for laboratory technicians	All Industries	Short Term	Ensures that products could meet SPS and food safety quality standards as required by export markets	1
3.2 Technical assistance to implement SPS and Traceable System for FRUITS and VEGETABLES – training and establishing procedures	Fruit and Vegetable Industry	Short Term	Market access depends on product satisfying the regulatory and quality standards – benefit of retaining and expanding market share	1
3.3 Technical Assistance to Improve Quality and Availability of water used for irrigation in the Production System	Vegetable Industry	Short Term	This intervention is necessary to ensure that products reaching the market meet the necessary food safety standards – benefit of retaining and expanding market share	1
4. Promotion of Private Investment				
4.1 Technical Assistance to the Strengthen the Vegetable Cluster, including the participation of all Stakeholders along a Hybrid Value Chain	Vegetable Industry	Short Term	This intervention would improve the growth of this Industry through higher operating efficiency from improved coordination; a greater resource base for investment and development	2

OVERVIEW OF AGRICULTURE IN HAITI & CHALLENGES IN EXPLOITING TRADE OPPORTUNITIES

1. INTRODUCTION

The Consultants were unable to visit Haiti due to logistical arrangement problems and therefore had to resort to the use of the Emergency Agriculture Plan and Action Plan for National Recovery and Development. The key objectives were to obtain an overview of sectoral policies, strategies and initiatives in taking advantage of trade opportunities in agriculture as well as challenges in so doing.

2. SECTORAL OVERVIEW

Eighty percent of the population of Haiti lives in extreme poverty. Haiti's agricultural sector employs over two thirds of the country's workforce but accounts for only 25 percent of its GDP¹. Chronic malnutrition affects 24 percent of children under five years of age and acute malnutrition affects 9 percent of children under five. Haiti uses about 80 percent of its export earnings to pay for food imports.

Agriculture and fisheries is vital to Haiti's economy and the Ministry of Agriculture, Natural Resources and Rural Development (MARNDR) of Haiti plans to focus on reconstruction projects that support the Emergency and Support Programme for Food Production in Haiti. The sector development is guided by the National Agriculture Investment Plan (NAIP), which synchronizes with the longer term priorities of the Action Plan for National Recovery and Development. The plan addresses the immediate future, which lasts 18 months, covers the end of the emergency period and includes preparation for projects to generate renewal. The second stage has a time horizon of ten years, allowing it to take into account three programming cycles of the National Strategy for Growth and Poverty Reduction.

A short and long-term agriculture strategy developed by the Government of Haiti organized around three axes:

- a. developing rural areas/infrastructure, including watersheds;*
- b. production and developing competitive value chains; and*
- c. strengthening of agricultural services and institutions*

Commodities for the Export Market:

Commodities Targeted for the Domestic Market:

¹ (This section on Haiti was extracted from the emergency agriculture plan and action plan for national recovery and development)

1. fruits
2. livestock
3. tubers
4. fishing

Planned Expansion of Export Commodities:

Haiti plans to widen its export base to include the following:

1. fruits
2. livestock
3. tubers
4. fishing

Profile of the Agriculture and Fishery Industries (See Table 25)

An overview of the Regulatory Support and Compliance Status (with respect to meeting the requirements of export markets - see Table 26)

Recommended Projects (see Table 27).

Table 25: Haiti – Overview of the Agricultural & Fishery Sector & Proposed Interventions

Industry	Status & Challenges / Constraints	Current Market Focus		Trade / Market Opportunities	Proposed Interventions	Type of Intervention (See Code below Table)	Short – Term (ST) or Medium term (MT)
		Domestic	Export				
General Agriculture	<p>The Global Agriculture and Food Security Programme has awarded Haiti \$35 mn to raise the productivity of smallholder farmers through improved access to agricultural inputs, technology, and supply chains</p> <p>Development partners have stressed the importance of prioritizing several cross-cutting issues, specifically gender, nutrition, environment, and the ultra-poor, while strengthening inter-ministerial and donor coordination</p> <p>The USA committed \$25.9 mn to support the NAIP in 2010 and has requested \$76 mn for agriculture and \$10 mn for nutrition in 2011 and has also pledged a minimum of \$100 million after that time</p> <p>The IDB will make \$200 mn in grants over five years to strengthen land tenure rights, boost agricultural production, increase market access for farmers and reinforce food security in Haiti. Accounting for these commitments, the NAIP is 55% resourced</p> <p>The Investment plan for the country has 6 components, which are</p> <p>(1) Integration of agricultural production to humanitarian assistance.</p> <p>(2) Strengthening the access of agricultural inputs and services.</p> <p>(3) Rehabilitation of productive infrastructure.</p>				<p>Devising a long term development and management framework for the sector</p> <p>Expanding production and improving productivity of selected commodities</p>	<p>1, 2, 3, 4,5</p> <p>1</p>	<p>MT</p> <p>ST</p>

	<p>(4) Watershed protection.</p> <p>(5) Support to livestock husbandry.</p> <p>(6) Reinforcing marketing system</p>						
<i>developing rural areas/infrastructure, including watersheds</i>	<p>Clean up and dredging of rivers</p> <p>Rehabilitation of irrigation systems</p> <p>Rehabilitation of 600 km of rural roads</p> <p>Development of facilities for storing, packaging and processing agricultural products</p>				<p>Watershed management ,re-forestation and soil conservation</p> <p>Modernization of equipment for fishing and agriculture and the development of agro-processing</p> <p>Improving irrigation and drainage to support commercial production</p> <p>Improving roads and provision of utilities in farming areas</p>	<p>1</p> <p>3, 4</p> <p>1</p> <p>1</p>	<p>ST</p> <p>ST</p> <p>ST</p> <p>ST</p>
<i>production and developing competitive value chains</i>	<p>Provision of agricultural equipment and implements</p> <p>Construction of greenhouses and hydroponic systems</p> <p>Immediate reactivation of sugar production</p> <p>Reforestation activities</p> <p>the acquisition and distribution of 1000 tons of maize seeds</p> <p>the planting of yam, banana, rice, sorghum, pigeon peas and peas</p> <p>the acquisition of 60,000 tons of urea and complete fertilizer, as well as materials and equipment required for the application of pesticides and other agrochemicals</p> <p>Reintroduction of sweet potato production</p>				<p>Strengthening agricultural health and food safety and the implementation of Good agricultural practices</p> <p>Land tenure</p> <p>Mitigating the environmental impacts of agriculture</p> <p>Building infrastructure to support agricultural trade and enhance food security</p>	<p>1</p>	<p>ST</p> <p>ST</p> <p>ST</p> <p>ST</p>

	<p>Reduction of losses caused by plant pests and diseases</p> <p>Promotion of family poultry production by establishing 1400 production units with breeding hens</p> <p>Strengthening of fisheries and aquaculture activities</p>						
<i>strengthening of agricultural services and institutions</i>	<p>Re-incorporation into rural and agricultural development activities of young students</p> <p>Support for modernizing of 50,000 sustainable family farming livestock units</p> <p>Guaranteed availability of animal feed by acquiring 36,000 tons of soybeans, 60,000 tons of maize and 3,000 tons of pre-mixed vitamins</p> <p>Support for animal health and veterinary assistance for livestock farming</p>				<p>Financial support for the development of agri-businesses</p> <p>Training of specialists to support the sector</p> <p>Modernization of the food processing sector</p> <p>Developing agricultural insurance and other risk mitigation frameworks</p>	<p>3</p> <p>3</p> <p>3</p> <p>1</p>	<p>ST</p> <p>ST</p> <p>ST</p> <p>MT</p>

Table 26: Assessment of Trade-related Regulatory Requirements – Haiti

Trade Enhancing Requirements	EU / EPA Prescribed / compliance standard	Existing Practices / Status	Corrective action required
<p>1. GOOD AGRICULTURAL PRACTICES (GAP)</p> <ul style="list-style-type: none"> ▪ Use of approved agrochemicals ▪ In field sanitation eg Worker facilities/amenities such as toilets, lunch rooms ▪ In field protocols including post harvest ▪ Environmental protection eg water quality for irrigation, erosion, waste water management 	EUREPGAP; Globe GAP, Fair Trade; Private Labels	The agrifood system are not able to meet international standards and requirements regarding sanitary control, environmental issues, etc.	<ul style="list-style-type: none"> • Develop and/or promote SPS, GAP's, and regulations regarding environment. • Develop systems for monitoring and enforce SPS, environment and labour regulations. • Establish or reformulate agencies to regulate, monitor, enforce regulations and provide certification services. • Establish a national traceability system.
<p>2. PACKHOUSE OPERATIONS</p> <ul style="list-style-type: none"> ▪ Washing, Grading & Drying ▪ Packaging & Labelling ▪ Documentation for Traceability ▪ Inefficient or insufficient infrastructure of transport: roads, ports, airports, and storage facilities 	SPS & HACCP Certification	Packinghouse rudimentary for fruits, vegetables, root crops. Others / private packinghouses also rudimentary No HACCP practices	<ul style="list-style-type: none"> • Upgrade regulations on SPS control. • Improve food quality and safety inspection services • Encourage investments in infrastructure. • Establish public-private partnership programmes for infrastructure investments, management and maintenance services. • Promote government investments in essential infrastructure. • Review tax structure affecting input costs such as cold storage trucks, facilities.

Trade Enhancing Requirements	EU / EPA Prescribed / compliance standard	Existing Practices / Status	Corrective action required
<p>3. AGRO-PROCESSING</p> <ul style="list-style-type: none"> Process Technology Standards / Food Standards Packaging & Labelling Waste Water Management Lab Support Services eg Microbial, histamine & contaminants 	Plant / Process Certification eg HACCP, QMP, ISO	<p>Low quality of processed products. Poor adoption of key technologies.</p> <p>The agrifood system has inadequate laboratorial infrastructure to carry out quality and safety monitoring and certification tests</p> <ul style="list-style-type: none"> Poor diffusion of managerial tools: quality control (ISO, HACCP), environmental control (ISO, certification), information technologies (bar code, traceability, etc.). <p>Inadequate R&D in new product development. Public R&D spending on themes that do not always match agrifood chain priorities.</p>	<ul style="list-style-type: none"> Continue to improve food quality and safety inspection services Continue to upgrade laboratorial infrastructure to carry out independent and internationally accepted tests. Promote public-private partnerships for service provision in agrifood quality and safety testing and certification Improve support services offered by sector organizations and private consultants. Provide access to undergraduate and vocational careers to include agro-processing disciplines. Encourage public and private stakeholders' joint definition of R&D priorities.
<p>4. SEAFOOD HARVEST</p> <ul style="list-style-type: none"> Net & Gear requirements Landing Sites eg Proper facilities for handling fish, waste disposal system, facilities for gear etc 	Practices eg FAO Code of Conduct, Cites, IUU	<p>Approved landing sites to be developed</p> <p>Inadequate adoption of food safety technologies, including cold chain</p>	<ul style="list-style-type: none"> Encourage investments in infrastructure. Establish public-private partnership programmes for infrastructure investments, management and maintenance services. Promote government investments in essential infrastructure. Promote training in sea faring, post harvest - fish handling, processing technology, adoption of cold chain, governance.
<p>5. AQUACULTURE</p> <ul style="list-style-type: none"> Water Quality issues Good Production Practices 	Water Quality Certification Production Process Certification		<ul style="list-style-type: none"> Improve support services (including financing) offered by sector organizations and private consultants. Update undergraduate and vocational course curricula to include aquaculture based careers Promote capacity building on management issues.

TABLE 27: HAITI – PROJECTS TO ADDRESS CONSTRAINTS /CHALLENGES

IN TAKING ADVANTAGE OF TRADE OPPORTUNITIES

Project Area & Specific Activity	Beneficiary Industry	Duration of Intervention	Potential Benefits	Priority
1. Supply Side Constraints				
1.1 Production Technology – - Technical assistance to introduce improved productivity and competitiveness - Some Short term Scientific Support to evaluate and adapt technology	Fruits and vegetables	Short term	Improve the international competitiveness of fruits and vegetables in the by expanding production, achieving economies of scale and reducing the cost of production. Producers and consumers in the country and the Region are the beneficiaries as commodity is targeted primarily for the local and regional including EU-OCT markets.	1
1.2 Technical Assistance in developing Value Added Products including and juices to meet the Preference and Quality Standards to compete in Export markets	Linked to the fruit and vegetables Industries	Medium term	This intervention would enhance overall competitiveness of these Industries and profitability.	2
2. Developing an Export Marketing Capability				
2.1 Market research to Develop Market Entry Strategies for the Export of Fruit and Vegetable products to the Wider Caribbean	Fruit and Vegetable Industry	Short Term	Expansion of Export base/product diversification and the resultant increase in earnings from exports.	2
2.2 Research into Transportation and Product Handling Logistics with a view to reducing cost	All Industries	Short term	Transportation and handling cost to the EU-OCT and CARIFORUM market is exorbitant. A more cost efficient system would improve overall profitability for all industries that export to the EU-OCT and CARIFORUM	1

TABLE 27: (CONT'D): HAITI – PROJECTS TO ADDRESS CONSTRAINTS /CHALLENGES

Project Area & Specific Activity	Beneficiary Industry	Duration of Intervention	Potential Benefits	Priority
3. Compliance / Adoption of Quality Standards				
3.1 Adoption of EUREPGAP through: - Technical Assistance for the Training of Trainers who would train Farmers - Technical Assistance to provide training for laboratory technicians	All Industries	Short Term	Ensures that products could meet SPS and food safety quality standards as required by export markets	1
3.2 Technical assistance to implement SPS and Traceable System for FRUITS and VEGETABLES – training and establishing procedures	Fruit and Vegetable Industry	Short Term	Market access depends on product satisfying the regulatory and quality standards – benefit of retaining and expanding market share	1
3.3 Technical Assistance to Improve Availability of water used for irrigation in the Production System	Fruit and Vegetable Industry	Short Term	This intervention is necessary to ensure that volumes are produced to meet economies of scale – benefit of retaining and expanding market share	1
4. Promotion of Private Investment				
4.1 Technical Assistance to the Strengthen the Fruit and Vegetable Cluster, including the participation of all Stakeholders along a Hybrid Value Chain	Fruit and Vegetable Industry	Short Term	This intervention would improve the growth of this Industry through higher operating efficiency from improved coordination; a greater resource base for investment and development	2

OVERVIEW OF AGRICULTURE IN JAMAICA
&
CHALLENGES IN EXPLOITING TRADE OPPORTUNITIES

1. INTRODUCTION

The Consultants visited Jamaica during the period October, 2010 to conduct the field work for this Consultancy. The key objectives were to obtain an overview of sectoral policies, strategies and initiatives in taking advantage of trade opportunities in agriculture as well challenges in so doing. Interviews were held with the heads of key institutions in the Public, quasi- public and private sectors, including NGOs.

2. SECTORAL OVERVIEW

Agriculture in Jamaica has two broad development objectives – meeting the Food Security needs of the Country and Export earnings. The major commodities produced are listed below. The sector has experienced numerous challenges that have resulted in an overall decline in output and direct contribution to GDP over recent years. The contribution of the sector fell from 5.2% of GDP in 2004 to 4.8% in 2008. In 2004 and 2005, the sector declined by 11.2% and 6.8% respectively due to the effects of Hurricanes Ivan, Dennis and Emily, in addition to drought conditions in the first four months of 2005. Other problems include heavy reliance on imports, use of inappropriate technologies, praedial larceny, high cost of capital and inadequate research and development. The sector is extremely vulnerable to shocks including weather conditions, pest infestations, impact of natural disasters, changes in export market prices and also trading regimes.

The goals of the agriculture sector as expressed in the Vision 2030 Jamaica Agriculture Sector Plan are for:

1. Efficient Competitive Diversified Value-Added Agricultural Production
2. Strong Marketing Systems for Domestic and Export Markets
3. Competent and Adequate Human Resources
4. Enabling and Facilitating Framework, Infrastructure and Support Services
5. Contributor to Long-Term Rural Development
6. An Environmentally Sustainable Sector
7. National Food Security

While preparing to implement the many strategies, the country is focused on implementing a number of projects

- Implementation of the Jamaica country strategy for the adaptation of the sugar industry (JCS) through the multi-annual support from the EU and other donor sources.
- The EU funded Banana Support programme with emphasis on rural diversification.

- Production and Productivity Programme with focus on greenhouse production and the rehabilitation of some fishing beaches
- Centre of Excellence for Advance Technology in Agriculture
- The Diary Revitalization Programme
- The EC Food Facility
- Fruit Tree Crop Development Project
- Establishment of an agricultural development fund
- Establishment of a fisheries development fund

Commodities for the Export Market:

- | | |
|----------|------------|
| 1. Sugar | 2. Coffee |
| 3. Yams | 4. Cocoa |
| 5. Fish | 6. Pimento |

Commodities Targeted for the Domestic Market:

- | | | |
|--------------------|---------------|------------|
| 1. Banana | 2. beef | 3. pork |
| 4. yams | 5. dairy | 6. poultry |
| 7. small ruminants | 8. vegetables | 9. fish |

Planned Expansion of Export Commodities:

1. Spices
2. Akee

Jamaica plans to widen its export base to include the following:

- 1.

Profile of the Agriculture and Fishery Industries (See Table 28)

An overview of the Regulatory Support and Compliance Status (with respect to meeting the requirements of export markets - see Table 29)

Recommended Projects (see Table 30)

Table 28: Jamaica – Overview of the Agricultural & Fishery Sector & Proposed Interventions

Industry	Status & Challenges / Constraints	Current Market Focus		Trade / Market Opportunities	Proposed Interventions	Type of Intervention (See Code below Table)	Short – Term (ST) or Medium term (MT)
		Domestic	Export				
General Agricultural sector	<p>The revitalization of the agricultural sector and its increased contribution to the national economy is contingent on the reorganization of the sector on the basis of modern technology and management, in order to achieve greater efficiency and competitiveness.</p> <p>Ffacing the competitiveness of the agricultural sector include relative cost and productivity of labour, high levels of praedial larceny, inadequate infrastructure and marketing systems, high cost of some productive inputs including energy and other utilities, low levels of investment in modern technology and business practices, limited economies of scale, and limited domestic availability and high cost of credit</p>				Financial support for enhancing commercial production and productivity improvements in traditional export crops and livestock as well as non-traditional and value-added products	1	ST
					Financial resources to address the deficits in research and development, transfer of appropriate modern technology and for strengthening extension services and to enable the proper maintenance and upgrade of facilities and equipment	1	ST
					Support for institutional capacity building and the training and deployment of specialist skills in the sector	1	ST
					Support for overhauling the legal and regulatory framework for agricultural health and food safety and the related infrastructure	3	ST
					building of abattoirs, upgrading of plant health and animal quarantine facilities and the requirements for implementing Good agricultural practices across the sector	2	ST
					Support for improving land tenure arrangements and the issuance of land titles to farmers to complement arrangements for improved access to credit.	1	ST
					Support for improving the marketing and distribution systems and the relevant	2	ST

					physical and trade support infrastructure	1	ST
					Cooperatives and other farmer organizations	3	ST
					Financial and technical support for modernization of the food processing sector	3	ST
					Support for developing youth entrepreneurship programmes		
Fisheries	<p>The Ministry of Agriculture has been re-designated as the Ministry of Agriculture and Fisheries, and the Fisheries Division has been transformed into an Executive Agency</p> <p>Fisheries Advisory Board was appointed in 2008 to guide the development and management of this Agency</p> <p>A Fisheries Management Fund has been established and will be funded by a levy on the export of conch</p> <p>The Government has also enacted the Fishing Industry (Spiny Lobster) Regulations 2009 to regulate the sale, storage, importation and export of spiny lobsters.</p> <p>The Ministry is also drafting a Fisheries Bill and has also developed a Draft Fisheries Policy for sustainable production of capture fisheries and aquaculture</p> <p>A major challenge is the protection of the fishery resources from incursions by fishing vessels from other countries including Colombia and Honduras. The development of inland fisheries will require improved research and development, expanded infrastructure and fingerling production, and addressing the environmental impacts of aquaculture.</p>				<p>Support for developing production clusters, fisher-folks</p> <p>Support for fisheries and aquaculture development especially the development of landing sites and appropriate facilities for fish handling storage and marketing</p>	<p>4</p> <p>3, 4, 5</p>	<p>ST</p> <p>ST</p>

Table 29: Assessment of Trade-related Regulatory Requirements – Jamaica

Trade Enhancing Requirements	EU / EPA Prescribed / compliance standard	Existing Practices / Status	Corrective action required
<p>1. GOOD AGRICULTURAL PRACTICES (GAP)</p> <ul style="list-style-type: none"> ▪ Use of approved agrochemicals ▪ In field sanitation eg Worker facilities/amenities such as toilets, lunch rooms ▪ In field protocols including post harvest ▪ Environmental protection eg water quality for irrigation, erosion, waste water management 	<p>EUREPGAP; Globe GAP,</p> <p>Fair Trade; Private Labels</p>	<p>Parts of the agrifood system are not able to meet international standards and requirements regarding sanitary control, environmental issues, etc.</p>	<ul style="list-style-type: none"> • Develop and/or promote SPS, GAP's, and regulations regarding environment. • Develop systems for monitoring and enforce SPS, environment regulations. • Establish or reformulate agencies to regulate, monitor, enforce regulations and provide certification services. • Establish a national traceability system.
<p>2. PACKHOUSE OPERATIONS</p> <ul style="list-style-type: none"> ▪ Washing, Grading & Drying ▪ Packaging & Labelling ▪ Documentation for Traceability ▪ Inefficient or insufficient infrastructure of transport: roads, ports, airports, and storage facilities 	<p>SPS & HACCP Certification</p>	<p>AMC Packinghouse rudimentary for fruits, vegetables, root crops.</p> <p>Others / private packinghouses also rudimentary</p> <p>No HACCP practices</p>	<ul style="list-style-type: none"> • Upgrade regulations on SPS control. • Improve food quality and safety inspection services • Encourage investments in infrastructure. • Establish public-private partnership programmes for infrastructure investments, management and maintenance services. • Promote government investments inessential infrastructure. • Review tax structure affecting input costs such as cold storage trucks, facilities.
<p>3. AGRO-PROCESSING</p> <ul style="list-style-type: none"> ▪ Process Technology Standards / Food Standards ▪ Packaging & Labelling ▪ Waste Water Management ▪ Lab Support Services eg Microbial, histamine & 	<p>Plant / Process Certification eg HACCP, QMP, ISO</p>	<p>High quality of processed products. Good adoption of key technologies.</p> <p>The agrifood system has adequate laboratorial infrastructure to carry out quality and safety monitoring and certification tests</p> <ul style="list-style-type: none"> • Good diffusion of managerial tools: quality control (ISO, 	<ul style="list-style-type: none"> • Continue to improve food quality and safety inspection services • Continue to upgrade laboratorial infrastructure to carry out independent and internationally accepted tests. • Promote public-private partnerships for service provision in agrifood quality and safety testing and certification • Improve support services offered by sector

Trade Enhancing Requirements	EU / EPA Prescribed / compliance standard	Existing Practices / Status	Corrective action required
contaminants		<p>HACCP), environmental control (ISO, certification), information technologies (bar code, traceability, etc.).</p> <p>Inadequate R&D in new product development. Public R&D spending on themes that do not always match agrifood chain priorities.</p>	<p>organizations and private consultants.</p> <ul style="list-style-type: none"> • Update undergraduate and vocational course curricula of agro based careers, so as to include agro-processing disciplines. • Provide access to undergraduate and vocational careers to include agro-processing disciplines. • Encourage public and private stakeholders' joint definition of R&D priorities.
<p>4. SEAFOOD HARVEST</p> <ul style="list-style-type: none"> ▪ Net & Gear requirements ▪ Landing Sites eg Proper facilities for handling fish, waste disposal system, facilities for gear etc 	Practices eg FAO Code of Conduct, Cites, IUU	<p>Approved landing sites available at designated ports for export to USA.</p> <p>Need for other landing sites to be developed.</p> <p>Inadequate adoption of food safety technologies, including cold chain</p>	<ul style="list-style-type: none"> • Encourage investments in infrastructure. • Establish public-private partnership programmes for infrastructure investments, management and maintenance services. • Promote government investments in essential infrastructure. <p>Promote training in sea faring, post harvest - fish handling, processing technology, adoption of cold chain, governance. Provide access to undergraduate and vocational careers to include fishery disciplines.</p>
<p>5. AQUACULTURE</p> <ul style="list-style-type: none"> ▪ Water Quality issues ▪ Good Production Practices 	<p>Water Quality Certification</p> <p>Production Process Certification</p>	Medium / High levels of adoption of appropriate technologies for tilapia	<ul style="list-style-type: none"> • Improve support services (including financing) offered by sector organizations and private consultants. • Update undergraduate and vocational course curricula to include aquaculture based careers; • Promote capacity building on management issues.

TABLE 30: JAMAICA – PROJECTS TO ADDRESS CONSTRAINTS /CHALLENGES

IN TAKING ADVANTAGE OF TRADE OPPORTUNITIES

Project Area & Specific Activity	Beneficiary Industry	Duration of Intervention	Potential Benefits	Priority
1. Supply Side Constraints				
1.1 Production Technology – - Technical assistance to introduce improved productivity and competitiveness - Some Short term Scientific Support to evaluate and adapt technology	Rice	Short term	Improve the Competitiveness of rice in the Domestic market by reducing the cost of rice production. Producers and consumers are the beneficiaries as rice is targeted primarily for the local market.	1
	Banana (including Organic)	Short term	This would enhance competitiveness of Organic Banana export to the EU Market vs competing imports from Peru and Equador. It would facilitate the expansion of exports.	1
	Root Crops: Yams, Sweet Potato	Short term	This intervention would allow the Jamaica to improve returns from export of this commodity. It would also improve competitive in this Niche Market in the EU	1
	Mango (Organic & Non Organic)	Short term	Same as above for organic cocoa	1
	Spices (pimento, scallion, peppers)	Short term	High international market demand; allow for increased forex earnings	1
	Akee	Short term	High international market demand; allow for increased forex earnings	
	Dairy / Beef	Short term	This intervention would improve the profitability and competitiveness and address food security.	1
	Shade House Agriculture	Short term	Vegetable production mainly targets the domestic market. Shade house production helps during the rainy months of the year, eliminating periods of shortages. During the drier months it helps with its lower water demands, particularly important in the bauxite areas. Given the competitiveness of the vegetable market and its close proximity to key exporting countries, this intervention is critical to improving competitiveness, saving forex and as a food security initiative.	1

TABLE 30: (CONT'D): JAMAICA – PROJECTS TO ADDRESS CONSTRAINTS /CHALLENGES ...

Project Area & Specific Activity	Beneficiary Industry	Duration of Intervention	Potential Benefits	Priority
1.2 Technical Assistance in developing Value Added Products including spices, vegetables and juices to meet the Preference and Quality Standards to compete in Export markets	Linked to the fruit and vegetables Industries	Medium term	This intervention would enhance overall competitiveness of these Industries and profitability.	2
2. Developing an Export Marketing Capability				
2.3 Research into Transportation and Product Handling Logistics with a view to reducing cost	All Industries	Short term	Transportation and handling cost to the EU market is exorbitant. A more cost efficient system would improve overall profitability for all industries that export to the EU	1
3. Compliance / Adoption of Quality Standards				
3.1 Adoption of EUREPGAP through: - Technical Assistance for the Training of Trainers who would train Farmers - Technical Assistance to provide training for laboratory technicians	All Industries	Short Term	Ensures that products could meet SPS and food safety quality standards as required by export markets	1
3.2 Technical assistance to implement SPS and Traceable System for mangoes – training and establishing procedures	Mango Industry	Short Term	Market access depends on product satisfying the regulatory and quality standards – benefit of retaining and expanding market share	1
3.3 Technical Assistance to Improve Water Quality in the Shade House Production System	Vegetable Industry	Short Term	This intervention is necessary to ensure that products reaching the market meet the necessary food safety standards – benefit of retaining and expanding market share	1
4. Promotion of Private Investment				
4.1 Technical Assistance to the Strengthen the Fruit and Vegetable Cluster, including the participation of all Stakeholders along the Value Chain	Fruit and Vegetable Industry	Short Term	This intervention would improve the growth of this Industry through higher operating efficiency from improved coordination; a greater resource base for investment and development	2

OVERVIEW OF AGRICULTURE IN ST LUCIA
&
CHALLENGES IN EXPLOITING TRADE OPPORTUNITIES

1. INTRODUCTION

The Consultants visited St Lucia during the period September, 2010 to conduct the field work for this Consultancy. The key objectives were to obtain an overview of sectoral policies, strategies and initiatives in taking advantage of trade opportunities in agriculture as well challenges in so doing. Interviews were held with the heads of key institutions in the Public, quasi- public and private sectors, including NGOs.

2. SECTORAL OVERVIEW

Agriculture in ST Lucia has two broad development objectives – meeting the Food Security needs of the Country and Export earnings. The major commodities produced are listed below. Agriculture sector priorities for St Lucia include support for cooperatives including those associated with the fishery. The country is to focus on capacity building/leadership and development of commodity clusters. As part of the agricultural diversification plan from banana, St Lucia is in the process of examining a range of commodities. Focus is also being placed on expanding the small ruminant national herd as well as retention of the cattle population for beef production.

Commodities for the Export Market:

1. Banana

Commodities Targeted for the Domestic Market:

1. Small ruminant
2. cattle

Planned Expansion of Export Commodities:

St Lucia plans to widen its export base to include the following:

1. large pelagic – dolphins, tuna and sword fish
2. tuna fishery

Profile of the Agriculture and Fishery Industries (See Table 31)

An overview of the Regulatory Support and Compliance Status (with respect to meeting the requirements of export markets - see Table 32). **Recommended Projects** (see Table 33)

Table 31: St Lucia – Overview of the Agricultural & Fishery Sector & Proposed Interventions

Industry	Status & Challenges / Constraints	Current Market Focus		Trade / Market Opportunities	Proposed Interventions	Type of Intervention (See Code below Table)	Short – Term (ST) or Medium term (MT)
		Domestic	Export				
Fish	<p>Draft legal and regulatory frameworks, strategic plan and a management plan have been developed</p> <p>The fishery is small scale, artisanal, with boats of 8 – 9 m in length, 9 major fish landing sites which have been upgraded through assistance from the Japanese government</p> <p>The target fishery are the reef, deep slope bank (snapper), large pelagic as well as the coastal pelagic and conch and lobster.</p> <p>Illegal fishing (poaching) remains a problem</p> <p>The fish handling at sea is rudimentary, with broken cold chain; need for a more organized system for fish handling and marketing and to get the food safety / quality assurance systems in place.</p> <p>The pelagic fishers observe ICCAT. It is recommended that the tuna fishery should also be regional in scope.</p> <p>The country has good diagnostic laboratory but is not staffed</p> <p>The country does not sell flags</p> <p>there is the identified need for training and equipment / technology to develop a cadre of offshore fisheries</p>	X		X (Regional)	Equipment and trained personnel for analytical Lab	4	ST
General Agriculture	<p>There is an agro-processing centre which focuses on convenience food and local market development</p> <p>The agro-industry is still at the cottage level and needs support to develop products from example, cassava and cocoa among others</p> <p>A dedicated packaging and storage centre at the airport is required to support fresh food export</p> <p>The country is building eco and agro-tourism enterprises.</p>	X	X (region & EU)	X	<p>Development of an Agro-processing Training Centre</p> <p>Dedicated packaging centre at Airport to support fresh food exports</p> <p>Building eco and agro-tourism/agr enterprises</p> <p>Scholarships to train a cadre of technocrats / leaders</p>	<p>3</p> <p>2</p>	<p>ST</p> <p>ST</p> <p>MT</p> <p>ST</p>

Table 32: Assessment of Trade-related Regulatory Requirements – St Lucia

Trade Enhancing Requirements	EU / EPA Prescribed / compliance standard	Existing Practices / Status	Corrective action required
<p>1. GOOD AGRICULTURAL PRACTICES (GAP)</p> <ul style="list-style-type: none"> Use of approved agrochemicals In field sanitation eg Worker facilities/amenities such as toilets, lunch rooms In field protocols including post harvest Environmental protection eg water quality for irrigation, erosion, waste water management 	<p>EUREPGAP; Globe GAP,</p> <p>Fair Trade; Private Labels</p>	<p>Some parts of the agrifood system are not able to meet international standards and requirements regarding sanitary control, environmental issues, etc.</p> <p>Banana sold under Fair Trade label.</p>	<ul style="list-style-type: none"> Develop and/or promote SPS, GAP's, and regulations regarding environment. Develop systems for monitoring and enforce SPS, environment. Establish or reformulate agencies to regulate, monitor, enforce regulations and provide certification services. Establish a national traceability system.
<p>2. PACKHOUSE OPERATIONS</p> <ul style="list-style-type: none"> Washing, Grading & Drying Packaging & Labelling Documentation for Traceability Inefficient or insufficient infrastructure of transport: roads, ports, airports, and storage facilities 	<p>SPS & HACCP Certification</p>	<p>Public packinghouse will require upgrade.</p> <p>No HACCP practices</p>	<ul style="list-style-type: none"> Upgrade regulations on SPS control. Improve food quality and safety inspection services Encourage investments in infrastructure. Establish public-private partnership programmes for infrastructure investments, management and maintenance services. Promote government investments inessential infrastructure. Review tax structure affecting input costs such as cold storage trucks, facilities.
<p>3. AGRO-PROCESSING</p> <ul style="list-style-type: none"> Process Technology Standards / Food Standards Packaging & Labelling 	<p>Plant / Process Certification eg HACCP, QMP, ISO</p>	<p>High quality of processed products – Pepper Sauce. Good adoption of key technologies.</p> <p>The agrifood system has inadequate laboratorial infrastructure to carry out quality and safety monitoring</p>	<ul style="list-style-type: none"> Continue to improve food quality and safety inspection services Upgrade laboratorial infrastructure to carry out independent and internationally accepted tests. Promote public-private partnerships for service provision in agrifood quality and safety testing and

<ul style="list-style-type: none"> Waste Water Management Lab Support Services eg Microbial, histamine & contaminants – heavy metal deposit in cocoa beans 		<p>and certification tests</p> <ul style="list-style-type: none"> Good diffusion of managerial tools: quality control (ISO, HACCP), environmental control (ISO, certification), information technologies (bar code, traceability, etc.). <p>Inadequate R&D in new product development.</p>	<p>certification</p> <ul style="list-style-type: none"> Improve support services offered by sector organizations and private consultants. Provide access to undergraduate and vocational careers to include agro-processing disciplines. Encourage public and private stakeholders' joint definition of R&D priorities.
<p>4. SEAFOOD HARVEST</p> <ul style="list-style-type: none"> Net & Gear requirements Landing Sites eg Proper facilities for handling fish, waste disposal system, facilities for gear etc 	<p>Practices eg FAO Code of Conduct, Cites, IUU</p>	<p>Approved landing sites available at designated ports for export, other areas need to be upgraded.</p> <p>Need for other landing sites to be developed.</p> <p>Inadequate adoption of food safety technologies, including cold chain</p>	<ul style="list-style-type: none"> Encourage investments in infrastructure. Establish public-private partnership programmes for infrastructure investments, management and maintenance services. Promote government investments inessential infrastructure. Promote training in sea faring, post harvest - fish handling, processing technology, adoption of cold chain, governance.

**TABLE 33: ST LUCIA – PROJECTS TO ADDRESS CONSTRAINTS /CHALLENGES
IN TAKING ADVANTAGE OF TRADE OPPORTUNITIES**

Project Area & Specific Activity	Beneficiary Industry	Duration of Intervention	Potential Benefits	Priority
1. Supply Side Constraints				
1.1 Production Technology – - Technical assistance to introduce improved productivity and competitiveness - Some Short term Scientific Support to evaluate and adapt technology	Fruits and Vegetables	Short term	Improve the international competitiveness of fruits in the international market by expanding production, achieving economies of scale and reducing the cost of production. Producers and consumers in the country, CARIFORUM and the EU and OCT are the beneficiaries as commodity is targeted primarily for the local, regional and EU markets.	1
1.2 Technical Assistance in developing Value Added Products including and juices to meet the Preference and Quality Standards to compete in Export markets	Linked to the fruit and vegetables Industries	Medium term	This intervention would enhance overall competitiveness of these Industries and profitability.	2
2. Developing an Export Marketing Capability				
2.1 Market research to Develop Market Entry Strategies for the Export of Fruits, vegetables and Fishery products to the Wider Caribbean	Fruits, Vegetables and Fishing Industry	Short Term	Expansion of Export base/product diversification and the resultant increase in earnings from exports. The country has a good fish processing facility that can be easily brought into production.	2
2.2 Research into Transportation and Product Handling Logistics with a view to reducing cost	All Industries	Short term	Transportation and handling cost to the EU-OCT and CARIFORUM market is exorbitant. A more cost efficient system would improve overall profitability for all industries that export to the EU-OCT and CARIFORUM	1

TABLE 33: (CONT'D): ST LUCIA – PROJECTS TO ADDRESS CONSTRAINTS/CHALLENGES

Project Area & Specific Activity	Beneficiary Industry	Duration of Intervention	Potential Benefits	Priority
3. Compliance / Adoption of Quality Standards				
3.1 Adoption of EUREPGAP through: - Technical Assistance for the Training of Trainers who would train Farmers - Technical Assistance to provide training for laboratory technicians	All Industries	Short Term	Ensures that products could meet SPS and food safety quality standards as required by export markets	1
3.2 Technical assistance to implement SPS and Traceable System for FRUITS and VEGETABLES – training and establishing procedures	Fruit and Vegetable Industry	Short Term	Market access depends on product satisfying the regulatory and quality standards – benefit of retaining and expanding market share	1
3.3 Technical Assistance to Improve Availability of water used for irrigation in the Production System	Fruit and Vegetable Industry	Short Term	This intervention is necessary to ensure that volumes are produced to meet economies of scale – benefit of retaining and expanding market share	1
4. Promotion of Private Investment				
4.1 Technical Assistance to the Strengthen the Fruit and Vegetable Cluster, including the participation of all Stakeholders along a Hybrid Value Chain	Fruit and Vegetable Industry	Short Term	This intervention would improve the growth of this Industry through higher operating efficiency from improved coordination; a greater resource base for investment and development	2

**OVERVIEW OF AGRICULTURE IN ST VINCENT
&
CHALLENGES IN EXPLOITING TRADE OPPORTUNITIES**

1. INTRODUCTION

The Consultants visited St Vincent during the period September, 2010 to conduct the field work for this Consultancy. The key objectives were to obtain an overview of sectoral policies, strategies and initiatives in taking advantage of trade opportunities in agriculture as well challenges in so doing. Interviews were held with the heads of key institutions in the Public, quasi- public and private sectors, including NGOs.

2. SECTORAL OVERVIEW

Agriculture in ST Vincent has two broad development objectives – meeting the Food Security needs of the Country and Export earnings. The major commodities produced are listed below. A specialized Agribusiness and Marketing Unit has been set up to deal with trade related issues. With respect to the banana industry, there is a policy towards diversification, emphasizing food security and export led growth while addressing the needs of the tourism sector. In the traditional root crops segment, there is a drive to diversify the product types, establishment of processing facility to produce differentiated products-frozen, concentrates and purees.

Commodities for the Export Market:

- | | |
|---------------------|-------------|
| 1. Banana/ Plantain | 2. Plantain |
| 3. Root Crops | 4. Lobster |

Commodities Targeted for the Domestic Market:

1. Livestock

Planned Expansion of Export Commodities:

The **St Vincent** plans to widen its export base to include the following:

1. Hot pepper products

Profile of the Agriculture and Fishery Industries (See Table 34)

An overview of the Regulatory Support and Compliance Status (with respect to meeting the requirements of export markets - see Table 35)

Recommended Projects (see Table 36)

Table 34: St Vincent – Overview of the Agricultural & Fishery Sector & Proposed Interventions

Industry	Status & Challenges / Constraints	Current Market Focus		Trade / Market Opportunities	Proposed Interventions	Type of Intervention (See Code below Table)	Short – Term (ST) or Medium term (MT)
		Domestic	Export				
Fishery	The fishery comprises of 770 uncovered day boats; artisanal, small scale as well as a few deep water vessels.				Operationalization of NAHFSA, accreditation; capacity building of technical staff at all levels (food technology, agribusiness and marketing, market research, SPS, TBT , technology transfer).	3	ST
	Traditional gears are used, targeting about 80 species: coastal pelagic- jacks, dolphins tuna, wahoo, snapper, mackerel, totalling about 2 mn lbs/yr.				Laboratory need to acquire equipment to support the fishery: residue, heavy metals, ciguatera, toxins, histamine, water quality, microbial as required by the EU market.	3	ST
	Fishers focus primarily the local market; and some amount of conch and lobsters are exported				Development of transportation infrastructure and systems (airports, shipping and road net works) to maintain cold chain and reaching other markets	4	ST
	Extension services training include engine maintenance, navigation, longline technology.				The upgrade of labs to do several tests (MRL, toxins etc) for produce to meet export standards. Development of lab infrastructure(Lab size)	3	ST
	The Fisheries Department does quality assurance at its small laboratory and is currently working with the EU to develop compliance standards.	X	X		Developments of the fishery industry through capacity building, SPS +TBT , 4 entry port develop to meet international standards (EPA), facility upgrade to meet demand (local and international) and fleet upgrades .	4	ST
	Product development (smoke, butterfly, fish burgers).				Development of a resource management plan for the St Vincent Fishery	4	ST
	There are 36 landing sites, categorized as primary, secondary and tertiary.				Revolving fund to provide start up capital for fishers to purchase boats and equipment.	4	ST
	Start up capital to purchase boats has been constraining expansion of the fishery						
	Landing site at Kingstown is well developed, Owia breakwater facilities was recently developed, Bequia was upgraded to international standards, and Union Island, Canouan and Bequia (latter for whale processing) need to be developed. The country						

	<p>is famous for its "Barrouallie Whalers".</p> <p>Through Sale of Flags, the country has a high seas fleet which is based in Trinidad.</p> <p>The country subscribes to ICCAT and IUU. VMS transceivers are required by ocean going vessels and catch certificates are issued in accordance.</p> <p>St Vincent has an open registry, and has an agreement with Trinidad to monitor its landings by flag bearing Taiwanese vessels.</p>						
Fruits and Vegetables	<p>The existing SPS infrastructure, equipment and staff will require ongoing upgrade and improvement for the country to meet EU standards in the marketplace.</p> <p>The export trade has been constrained by the lack of an international airport</p> <p>Export infrastructure – plant quarantine, storage, pre-clearance to the standard that exist in countries such as Colombia and Chile will be required at the new airport to facilitate trade.</p> <p>Market information and intelligence in the public domain is practically non-existent. Existing trade takes place based on long-term personal relationships developed over years in the business.</p> <p>Marketers are unable to identify opportunities emanating from the EPA and they represent the weakest link in the supply chain.</p> <p>Expansion of the production sector is constrained by lack of affordable financial services / specialized development funds for agriculture.</p> <p>R&D has also been inadequate.</p> <p>Capacity building is required throughout the</p>	X	X(Region & EU)	X (USA)	<p>Capacity building and support systems to assist farmers in meeting standards: post harvest technology, quality, food processing, marketing and food safety</p> <p>Capacity building of traffickers in marketing, business development and SPS</p> <p>Investments assistance for non-traditional crops to meet GlobeGAP standards</p> <p>Processing of root crops and fruits</p> <p>Development of standards for all primary production and processed products.</p> <p>Strategies to penetrate regional markets.</p> <p>Enhance food security through the development of the livestock and poultry industry.</p> <p>Development of a market information and intelligence system.</p> <p>Development of an incubator facility for market development, export/import credit financing, training of stakeholders in market research, logistics.</p> <p>Harmonization of the SPS regime in the region</p>	<p>1</p> <p>1</p> <p>1</p> <p>3</p> <p>3</p> <p>3</p> <p>1</p> <p>1</p> <p>2</p>	<p>ST</p> <p>ST</p> <p>ST</p> <p>ST</p> <p>ST</p> <p>ST</p> <p>ST</p> <p>ST</p> <p>ST</p>

	supply chain				to promote intra-regional trade	1	ST
	Existing boats used to transport fresh produce in the inter-island trade are aged and no longer appropriate for the new SPS and quality standards that are emerging. It is recommended that all vessels shipping fresh agricultural produce be equipped with cold storage facilities.				Address banana trade issues	1	ST
	Substantial losses are also experienced along the supply chain, sometimes up to 30% at destination ports.				Development of support systems to help farmers meet Globalgap standards.	1	ST
	Currently the country purchases services abroad to test samples for heavy metals, microbial; however samples sent abroad are not considered reliable as changes may take place with the samples during transit.				Upgrade port facilities at Kingstown and Port of Spain's CARICOM jetty to reduce post harvest losses and enhance trade.	2	ST
	Certification of farms requires infrastructure and support systems in addition to a \$400/yr certification fee.				Development of storage facilities at ports and all vessels shipping fresh agricultural produce be equipped with cold storage facilities.	2	ST
					Financial assistance to shippers to facilitate modernization of fleet / boats used for export of fresh produce in the inter-island trade.	4	ST
					Development and implementation of standards for all commodities and products	1	ST
					Collaboration between local organisations; Fairtrade, Winfa, Winfresh, MOA, Bureau of standards, processors, marketing agents, port authority.	1	ST
					Defining clear responsibility for stakeholder's involving in the implementation and coordination of SPS and TBT.	1	ST
					Linking Agriculture and Tourism.		MT
					Development of a proper website for the ministry.		ST

Table 35: Assessment of Trade-related Regulatory Requirements – St Vincent

Trade Enhancing Requirements	EU / EPA Prescribed / compliance standard	Existing Practices / Status	Corrective action required
<p>1. GOOD AGRICULTURAL PRACTICES (GAP)</p> <ul style="list-style-type: none"> ▪ Use of approved agrochemicals ▪ In field sanitation eg Worker facilities/amenities such as toilets, lunch rooms ▪ In field protocols including post harvest ▪ Environmental protection eg water quality for irrigation, erosion, waste water management 	<p>EUREPGAP; Globe GAP, Fair Trade; Private Labels</p>	<p>Country participates in Fair Trade, thus meeting EU standards for Banana and some other commodities.</p> <p>Some parts of the agrifood system are not able to meet international standards and requirements regarding sanitary control, environmental issues, etc.</p>	<ul style="list-style-type: none"> • Develop and/or promote SPS, GAP's, and regulations regarding environment. • Develop systems for monitoring and enforce SPS, environment regulations. • Establish or reformulate agencies to regulate, monitor, enforce regulations and provide certification services. • Establish a national traceability system.
<p>2. PACKHOUSE OPERATIONS</p> <ul style="list-style-type: none"> ▪ Washing, Grading & Drying ▪ Packaging & Labelling ▪ Documentation for Traceability ▪ Inefficient or insufficient infrastructure of transport: roads, ports, airports, and storage facilities 	<p>SPS & HACCP Certification</p>	<p>Public packinghouses rudimentary for fruits, vegetables, root crops.</p> <p>Others / private packinghouses also rudimentary.</p> <p>No HACCP practices</p>	<ul style="list-style-type: none"> • Upgrade regulations on SPS control. • Improve food quality and safety inspection services • Encourage investments in infrastructure. • Establish public-private partnership programmes for infrastructure investments, management and maintenance services. • Promote government investments inessential infrastructure. • Review tax structure affecting input costs such as cold storage trucks, facilities.
<p>3. AGRO-PROCESSING</p>	<p>Plant / Process Certification eg HACCP, QMP, ISO</p>	<p>High quality of processed products – Pepper Sauce. Good adoption of key technologies.</p> <p>The agrifood system has</p>	<ul style="list-style-type: none"> • Continue to improve food quality and safety inspection services • Upgrade laboratorial infrastructure to carry out

Trade Enhancing Requirements	EU / EPA Prescribed / compliance standard	Existing Practices / Status	Corrective action required
<ul style="list-style-type: none"> Process Technology Standards / Food Standards Packaging & Labelling Waste Water Management Lab Support Services eg Microbial, histamine & contaminants 		<p>inadequate laboratorial infrastructure to carry out quality and safety monitoring and certification tests</p> <ul style="list-style-type: none"> Good diffusion of managerial tools: quality control (ISO, HACCP), environmental control (ISO, certification), information technologies (bar code, traceability, etc.). <p>Inadequate R&D in new product development.</p>	<p>independent and internationally accepted tests.</p> <ul style="list-style-type: none"> Promote public-private partnerships for service provision in agrifood quality and safety testing and certification Improve support services offered by sector organizations and private consultants. Provide access to undergraduate and vocational careers to include agro-processing disciplines. Encourage public and private stakeholders' joint definition of R&D priorities.
<p>4. SEAFOOD HARVEST</p> <ul style="list-style-type: none"> Net & Gear requirements Landing Sites eg Proper facilities for handling fish, waste disposal system, facilities for gear etc 	Practices eg FAO Code of Conduct, Cites, IUU	<p>Approved landing sites available at designated ports for export, other areas need to be upgraded – Union Island.</p> <p>Need for other landing sites to be developed.</p> <p>Inadequate adoption of food safety technologies, including cold chain</p>	<ul style="list-style-type: none"> Encourage investments in infrastructure. Establish public-private partnership programmes for infrastructure investments, management and maintenance services. Promote government investments in essential infrastructure. Promote training in sea faring, post harvest - fish handling, processing technology, adoption of cold chain, governance.

TABLE 36: ST VINCENT – PROJECTS TO ADDRESS CONSTRAINTS /CHALLENGES

IN TAKING ADVANTAGE OF TRADE OPPORTUNITIES

Project Area & Specific Activity	Beneficiary Industry	Duration of Intervention	Potential Benefits	Priority
1. Supply Side Constraints				
<p>1.1 Production Technology –</p> <ul style="list-style-type: none"> - Technical assistance to introduce improved productivity and competitiveness - Some Short term Scientific Support to evaluate and adapt technology 	Fruits and Vegetables	Short term	Improve the international competitiveness of fruits in the international market by expanding production, achieving economies of scale and reducing the cost of production. Producers and consumers in the country, CARIFORUM and the EU are the beneficiaries as commodity is targeted primarily for the local, regional and EU markets.	1
1.2 Technical Assistance in developing Value Added Products including fishery products and juices to meet the Preference and Quality Standards to compete in Export markets	Linked to the fishery, fruit and vegetables Industries	Medium term	This intervention would enhance overall competitiveness of these Industries and profitability.	2
2. Developing an Export Marketing Capability				
2.1 Market research to Develop Market Entry Strategies for the Export of Fruits, vegetables and Fishery products to the Wider Caribbean and EU	Fruits, Vegetables and Fishing Industry	Short Term	Expansion of Export base/product diversification and the resultant increase in earnings from exports. The country has a good fish processing facility that can be easily brought into production. Good infrastructure is available for fruit and vegetable processing.	2
2.2 Research into Transportation and Product Handling Logistics with a view to reducing cost	All Industries	Short term	Transportation and handling cost to the EU and CARIFORUM market is exorbitant. A more cost efficient system would improve overall profitability for all industries that export to the EU and CARIFORUM	1

TABLE 36: (CONT'D): ST VINCENT – PROJECTS TO ADDRESS CONSTRAINTS/CHALLENGES

Project Area & Specific Activity	Beneficiary Industry	Duration of Intervention	Potential Benefits	Priority
3. Compliance / Adoption of Quality Standards				
3.1 Adoption of EUREPGAP through: - Technical Assistance for the Training of Trainers who would train Farmers - Technical Assistance to provide training for laboratory technicians	All Industries	Short Term	Ensures that products could meet SPS and food safety quality standards as required by export markets	1
3.2 Technical assistance to implement SPS and Traceable System for FRUITS and VEGETABLES – training and establishing procedures	Fruit and Vegetable Industry	Short Term	Market access depends on product satisfying the regulatory and quality standards – benefit of retaining and expanding market share	1
3.3 Technical Assistance to Improve Availability of water used for irrigation in the Production System	Fruit and Vegetable Industry	Short Term	This intervention is necessary to ensure that volumes are produced to meet economies of scale – benefit of retaining and expanding market share	1
4. Promotion of Private Investment				
4.1 Technical Assistance to the Strengthen the Fruit and Vegetable Cluster, including the participation of all Stakeholders along a Hybrid Value Chain	Fruit and Vegetable Industry	Short Term	This intervention would improve the growth of this Industry through higher operating efficiency from improved coordination; a greater resource base for investment and development	2

OVERVIEW OF AGRICULTURE IN SURINAME & CHALLENGES IN EXPLOITING TRADE OPPORTUNITIES

1. INTRODUCTION

The Consultants visited Suriname during the period October, 2010 to conduct the field work for this Consultancy. The key objectives were to obtain an overview of sectoral policies, strategies and initiatives in taking advantage of trade opportunities in agriculture as well challenges in so doing. Interviews were held with the heads of key institutions in the Public, quasi- public and private sectors, including NGOs.

2. SECTORAL OVERVIEW

Agriculture in Suriname has two broad development objectives – meeting the Food Security needs of the Country and Export earnings. The major commodities produced are listed below. Suriname is working towards development of “industry columns” instead of “industry clusters” in an effort to develop economies of scale. Inappropriate shade house technology and inadequate rice R&D have been highlighted. Cattle and Aquaculture have been targeted for large-scale development. Lack of investments or financial means to expand production / business remains the greatest challenge. It is easier to export / ship to EU than the Caribbean market given the existing infrastructure. Suriname also has interest in the Latin American market. In terms of market intelligence, little is known of the regional / Caribbean market. There is a need to better formulate standards to facilitate greater N-S and S-S trade; to address the NTB’s that may arise as tariffs have been diluted but TBT has been increasing in importance. Labs for testing are available in Ministry of Health and the B/S co-opts qualified persons into an advisory committee for accreditation purposes.

Commodities for the Export Market:

1. Fish, Shrimp & Seabob
2. Rice
3. Vegetables

Commodities Targeted for the Domestic Market:

1. Livestock and small ruminants

Planned Expansion of Export Commodities:

Suriname plans to widen its export base to include the following:

1. Rice snack foods
2. Livestock: Ruminant meat (awaiting certification)
3. Fruits and vegetables

Profile of the Agriculture and Fishery Industries (See Table 37). **An overview of the Regulatory Support and Compliance Status** (with respect to meeting the requirements of export markets - see Table 38). **Recommended Projects** (see Table 39).

Table 37: Suriname – Overview of the Agricultural & Fishery Sector & Proposed Interventions

Industry	Status & Challenges / Constraints	Current Market Focus		Trade / Market Opportunities	Proposed Interventions	Type of Intervention (See Code below Table)	Short – Term (ST) or Medium term (MT)
		Domestic	Export				
Fish	<p>The Fishing Industry comprises of 76 large trawlers: 20 seabob trawlers (was 30); 25 fish trawlers; 31 shrimp trawlers, all of which operate outside the 12 mile limit</p> <p>Fishery exports: about 60% goes to the EU market and close to 40% to the USA.</p> <p>Two fish landing sites have been upgraded.</p> <p>Smoked fish exports have been banned to the EU due to levels of benzene above the approved MRL. A Smoke House is being constructed through assistance from Venezuela to meet EU standards for Smoke Residues in foods.</p> <p>Suriname exports about 10 - 15 containers of fishery products per month to Jamaica, comprising of cheaper species.</p> <p>The laboratory supporting the fishery is good and the country enjoys an excellent strategic alliance with Brussels.</p> <p>The country has programmes to reduce / stopping illegal fishing and subscribes to IUU. Efforts are being made to certify the MSY of the seabob fishery.</p> <p>HACCP standards have been improving in the national system and housing CAHFA in the country is expected to substantially improve the monitoring and testing capability. From 16 exporting companies, 14 are HACCP certified.</p> <p>The country participates in By-catch reduction programme</p>	X	X(EU, USA, Jamaica)	X	<p>Food processing technology using fishery products to encourage greater utilization of by-catch and factory waste; R&D in new product development of fishery products. fishery processing waste utilization; has 10,000 T/yr available.</p> <p>Improve technology in drying and salting fish.</p> <p>Construction of approved smoke houses in other processing centres/villages.</p> <p>Market intelligence: targeting Caribbean market</p> <p>Development of an Authority to monitor safety at sea as well as IUU fishing and insure sustainability of the fishery</p> <p>Training needs: Food technology, food processing, quality assurance to meet Globe GAP& ISO 22000 "passport" for export to EU; Business / Economics, Fishery Biology.</p> <p>Expert to advise on reduction of bycatch; governance and corporate social responsibility (CSR), project for bycatch reduction.</p> <p>Maintenance of environmental standards</p>	<p>3</p> <p>3</p> <p>4</p> <p>4</p> <p>4</p> <p>3</p> <p>4</p> <p>4</p>	<p>MT</p> <p>ST</p> <p>ST</p> <p>ST</p> <p>ST</p> <p>ST</p> <p>ST</p> <p>ST</p>

	<p>Cold chain: Some trawlers have refrigeration on board while others carry ice.</p> <p>The Fish Inspection Institute is the certifying authority is requesting upgrade of boats to insure tracability and safe food quality.</p> <p>Some poaching is being experienced from fishers of neighbouring countries.</p> <p>IUU: Vessel monitoring system being used and fishers must submit and get approval of their landing forms.</p> <p>The Coast Guard monitoring and surveillance capability very weak.</p> <p>The country is using MSY labeling; is currently testing by-catch devices / uses TED devices to reduce bycatch.</p>						
Livestock and Small Ruminants	<p>This segment is small and now being developed</p> <p>Development of local industry through expansion of the national herd -- large and small ruminants herd</p> <p>All feed inputs imported and faces high tariffs</p> <p>The country is now working with The Netherlands to set up a Meat Inspectors programme at the polytechnic Institute</p> <p>Country certified free from FMD and SF</p> <p>Some regulations are outdated and others are being revised</p> <p>Veterinary and meat inspection laws have been revised and now being harmonized to meet CARICOM, EU and USA regulations</p>				<p>Assistance required in:</p> <ul style="list-style-type: none"> i. Training poultry to reduce cost of production ii. Feed processing technology iii. Require assistance to Train animal disease management and control personnel for monitoring and reporting; on-farm HACCP and biosecurity iv. Equipment for labs for monitoring 	1, 3	ST
Rice	<p>Rice production increased from 23,000 ha/ season in 2005 to 28,000 ha / season (52,000 ha/yr) in 2009</p> <p>The target is to increase rice production to 40,000 ha in 3 years on</p>				<p>Need funding for R&D, training and education, irrigation infrastructure (€ 53mn to spend over 5 years)</p> <p>Post harvest technology for both white and</p>	1	ST

	<p>existing infrastructure.</p> <p>Productivity of 4.5T/ha has been increasing to 4.8T/ha; while the national target is 5.0T/ha av</p> <p>The standing acreage is currently 60,000 ha/yr or 1.5 times/yr and there is the potential to increase to 100,000 – 125,000/yr cultivated acreage</p>				<p>brown rice; Utilization of other products from rice industry; Parboil processing technology</p> <p>Access to credit Euro 15 mn/yr</p> <p>R&D to reduce costs, value added, utilization of husks, upgrade Nickerie Research Station</p>	<p>2, 3</p> <p>1</p> <p>3</p>	<p>ST, MT</p> <p>ST</p> <p>MT</p>
General Agriculture	<p>Implementation of GAP required for fruits / vegetables</p> <p>Significant investments done to upgrade labs; need another upgrade to facilitate meeting international standards.</p> <p>Seeking investment partners in EU and Caribbean</p>				<p>HR training in meeting EU and private standards, WTO trade policy, Mycology, Agricultural technology – operation of greenhouses / hydroponics, Training of trainers and upgrade of technology transfer system</p> <p>Develop Agricultural Information System</p> <p>Quality managers, food technologists and postharvest specialists for fruits and vegetables; supply chain specialists; globegap certifiers before 2012</p> <p>Need to better understand the greater EU market; need Market and transportation studies of the EU market. Market studies of the Latin American and Caribbean market.</p> <p>Trade shows of Suriname products in the Caribbean market</p> <p>Need to develop a cadre of agro-processors</p> <p>Need to do pest risk analysis for entry into the Caribbean market</p> <p>Bureau of Standards Project required</p>	<p>1</p> <p>1</p> <p>2</p> <p>1</p> <p>1</p> <p>3</p> <p>1</p> <p>1</p>	<p>ST</p> <p>ST</p> <p>ST</p> <p>ST</p> <p>ST</p> <p>MT</p> <p>ST</p> <p>ST</p>

Table 38: Assessment of Trade-related Regulatory Requirements – Suriname

Trade Enhancing Requirements	EU / EPA Prescribed / compliance standard	Existing Practices / Status	Corrective action required
<p>1. GOOD AGRICULTURAL PRACTICES (GAP)</p> <ul style="list-style-type: none"> Use of approved agrochemicals In field sanitation eg Worker facilities/amenities such as toilets, lunch rooms In field protocols including post harvest Environmental protection eg water quality for irrigation, erosion, waste water management 	<p>EUREPGAP; Globe GAP, Fair Trade; Private Labels</p>	<p>Parts of the agrifood system is not able to meet international standards and requirements regarding sanitary control, environmental issues, etc.</p> <p>High level of adoption of food safety technologies.</p> <p>Lack of a traceability system.</p>	<ul style="list-style-type: none"> Develop and/or promote SPS, GAP's, and regulations regarding environment. Develop systems for monitoring and enforce SPS, environment regulations. Establish or reformulate agencies to regulate, monitor, enforce regulations and provide certification services. Establish a national traceability system.
<p>2. PACKHOUSE OPERATIONS</p> <ul style="list-style-type: none"> Washing, Grading & Drying Packaging & Labelling Documentation for Traceability Inefficient or insufficient infrastructure of transport: roads, ports, airports, and storage facilities 	<p>SPS & HACCP Certification</p>	<p>Private packinghouses are rudimentary.</p> <p>No HACCP practices</p> <p>Lack of a traceability system at private packers.</p>	<ul style="list-style-type: none"> Develop regulations on SPS control. Improve food quality and safety inspection services Establish a national traceability system. Encourage investments in infrastructure. Establish public-private partnership programmes for infrastructure investments, management and maintenance services. Promote government investments in essential infrastructure. Review tax structure affecting input costs such as cold storage trucks, facilities.
<p>3. AGRO-PROCESSING</p>	<p>Plant / Process Certification eg HACCP, QMP, ISO</p>	<p>High quality of processed fishery products; good level of adoption of key technologies, meeting EU</p>	<ul style="list-style-type: none"> Continue to improve food quality and safety inspection services Continue upgrade of laboratorial infrastructure to

Trade Enhancing Requirements	EU / EPA Prescribed / compliance standard	Existing Practices / Status	Corrective action required
<ul style="list-style-type: none"> Process Technology Standards / Food Standards Packaging & Labelling Waste Water Management Lab Support Services eg Microbial, histamine & contaminants 		<p>requirements.</p> <p>The agrifood system will have adequate laboratorial infrastructure to carry out quality and safety monitoring and certification tests with the establishment of CAHFSA</p> <ul style="list-style-type: none"> Low diffusion of managerial tools: quality control (ISO, HACCP), environmental control (ISO, certification), information technologies (bar code, traceability, etc.). 	<p>carry out independent and internationally accepted tests.</p> <ul style="list-style-type: none"> Promote public-private partnerships for service provision in agrifood quality and safety testing and certification Improve support services offered by sector organizations and private consultants. Update undergraduate and vocational course curricula of agro based careers, so as to include agro-processing disciplines – meats, fish, vegetables, fruits.
<p>4. SEAFOOD HARVEST</p> <ul style="list-style-type: none"> Net & Gear requirements Landing Sites eg Proper facilities for handling fish, waste disposal system, facilities for gear etc 	<p>Practices eg FAO Code of Conduct, Cites, IUU</p>	<p>Efficient and sufficient infrastructure of transport: roads, landing sites, ports, waterways, airports, and storage facilities.</p> <p>High level of adoption of food safety technologies, including cold chain.</p> <p>Smaller boats need to address cold chain.</p> <p>Good traceability system.</p>	<ul style="list-style-type: none"> Encourage investments in infrastructure. Establish public-private partnership programmes for infrastructure investments, management and maintenance services. Promote government investments inessential infrastructure. Promote training in sea faring, post harvest - fish handling, processing technology, adoption of cold chain
<p>5. AQUACULTURE</p> <ul style="list-style-type: none"> Water Quality issues Good Production Practices 	<p>Water Quality Certification</p> <p>Production Process Certification</p>	<p>Medium levels of adoption of appropriate technologies</p>	<ul style="list-style-type: none"> Improve support services (including financing) offered by sector organizations and private consultants. Seek expertise from global leaders such as Vietnam. Update undergraduate and vocational course curricula to include aquaculture based careers. Create infrastructure and promote capacity building on management issues.

TABLE 39: SURINAME – PROJECTS TO ADDRESS CONSTRAINTS /CHALLENGES

IN TAKING ADVANTAGE OF TRADE OPPORTUNITIES

Project Area & Specific Activity	Beneficiary Industry	Duration of Intervention	Potential Benefits	Priority
1. Supply Side Constraints				
1.1 Production Technology – - Technical assistance to introduce improved productivity and competitiveness - Some Short term Scientific Support to evaluate and adapt technology	Rice	Short term	Improve the international competitiveness of rice in the international market by reducing the cost of rice production. Producers in Suriname and consumers in Suriname, CARIFORUM and the EU are the beneficiaries as rice is targeted primarily for the local, regional and EU markets.	1
1.2 Technical Assistance in developing Value Added Products including seafood, frozen vegetables and juices to meet the Preference and Quality Standards to compete in Export markets	Linked to the fish, fruit and vegetables Industries	Medium term	This intervention would enhance overall competitiveness of these Industries and profitability.	1
2. Developing an Export Marketing Capability				
2.1 Market research to Develop Market Entry Strategies for the Export of Fish and frozen vegetables to the Wider Caribbean	Fishing and Vegetable Industry	Short Term	Expansion of Suriname Export base/product diversification and the resultant increase in earnings from exports	2
2.2 Market Research to determine Feasibility / Strategy for the Export of Ruminant Meat to the wider Caribbean	Beef and Small Ruminant Industry	Short Term	Expansion of Suriname Export base/product diversification and the resultant increase in earnings from exports	3
2.3 Research into Transportation and Product Handling Logistics with a view	All Industries	Short term	Transportation and handling cost to the market is exorbitant. A more cost efficient system would improve overall profitability for	1

to reducing cost			all industries that export to the EU and CARIFORUM	
3. Compliance / Adoption of Quality Standards				
3.1 Adoption of EUREPGAP through: - Technical Assistance for the Training of Trainers who would train Farmers - Technical Assistance to provide training for laboratory technicians	All Industries	Short Term	Ensures that products could meet SPS and food safety quality standards as required by export markets	1
3.2 Technical assistance to implement SPS and Traceable System for FRUITS and VEGETABLES – training and establishing procedures	Fruit and Vegetable Industry	Short Term	Market access depends on product satisfying the regulatory and quality standards – benefit of retaining and expanding market share	1
3.3 Technical Assistance to Improve Quality and Availability of water used for irrigation in the Production System	Vegetable Industry	Short Term	This intervention is necessary to ensure that products reaching the market meet the necessary food safety standards – benefit of retaining and expanding market share	1
4. Promotion of Private Investment				
4.1 Technical Assistance to the Strengthen the Seafood, Fruit and Vegetable Cluster, including the participation of all Stakeholders along a Hybrid Value Chain	Fish, Fruit and Vegetable Industry	Short Term	This intervention would improve the growth of this Industry through higher operating efficiency from improved coordination; a greater resource base for investment and development	2

OVERVIEW OF AGRICULTURE IN TRINIDAD AND TOBAGO

&

CHALLENGES IN EXPLOITING TRADE OPPORTUNITIES

1. INTRODUCTION

The Consultants visited Trinidad and Tobago during the period September, 2010 to conduct the field work for this Consultancy. The key objectives were to obtain an overview of sectoral policies, strategies and initiatives in taking advantage of trade opportunities in agriculture as well challenges in so doing. Interviews were held with the heads of key institutions in the Public, quasi- public and private sectors, including NGOs.

2. SECTORAL OVERVIEW

Agriculture in Trinidad and Tobago has two broad development objectives – meeting the Food Security needs of the Country and Export earnings. The major commodities produced are listed below. With the decline of agriculture over the recent past, many farmers' organizations are now inactive, including a number of farmers unions. Efforts are now planned for revamping of the productive sector with greater focus on food security and export development. A value chain development approach is to be adopted to build competitiveness. Major issues for agriculture are (i) water control, both flooding and irrigation, praedial larceny – both loss and as an investment aversion factor. Agricultural input prices continue to escalate and there is minimal linkage between the country's fertilizer manufacturing competitive advantage and primary agriculture.

Commodities for the Export Market:

1. Hot peppers
2. Pumpkin
3. Papaya

Commodities Targeted for the Domestic Market:

- | | | |
|---------------|----------------------|---------------|
| 1. citrus, | 2. small ruminant, | 3. bufflypso, |
| 4. cocoa, | 5. dairy, | 6. fish |
| 7. pineapple, | 8. industrial crops, | 9. poultry |
| 10. honey, | 11. staples | 12. |

Planned Expansion of Export Commodities:

Trinidad and Tobago plans to widen its export base to include the following:

- | | |
|-----------------|-------------|
| 1. pineapples, | 2. cassava, |
| 3. hot peppers, | 4. cocoa |

Profile of the Agriculture and Fishery Industries (See Table 40). **An overview of the Regulatory Support and Compliance Status** (with respect to meeting the requirements of export markets - see Table 41). **Recommended Projects** (see Table 42).

Table 40: Trinidad and Tobago – Overview of the Agricultural & Fishery Sector & Proposed Interventions

Industry	Status & Challenges / Constraints	Current Market Focus		Trade / Market Opportunities	Proposed Interventions	Type of Intervention (See Code below Table)	Short – Term (ST) or Medium term (MT)
		Domestic	Export				
Fish	<p>There is a fishing industry development plan but key stakeholders have not been brought into the plan. Projects include formation of the National Fisher-folk Association which are involved in various value added projects:</p> <p>Fish exporters lost access to the EU market since 1996 due to improper landing sites SPS infrastructure remains weak, moreso in terms of fish landing sites.</p> <p>There are both large number of artisanal fishers and a few larger trawlers</p> <p>Trinidad and Tobago has a quota for sword fish Taiwanese fishers who land their catch at the National Fisheries compound at Sea Lots ship their catch direct to the USA</p> <p>Resources management plan is to be developed and aquaculture is being promoted. The coastal fisheries is said to be over exploited, there is shortage of long lining boats captains and the cold chain is broken and many instances non-existent at the artisanal level</p> <p>Fisheries legislation to be updated to facilitate exports</p>	X	X(USA)	X(EU)	<p>Developing of fish landing sites and other SPS infrastructure</p> <p>Sustainable management of the inshore fishery</p> <p>Technical assistance for aquaculture development</p>	<p>4</p> <p>4</p> <p>4</p>	<p>ST</p> <p>ST</p> <p>ST</p>
General Agriculture	<p>Targeted commodities: pineapples, hot peppers, cassava, cocoa for local consumption, agro-processing and export</p> <p>Cattle, small ruminants, coconut, citrus and rice are on the decline. Strong performers include poultry, pigs and a range of vegetables There has been a persistent increase in the importation of vegetables such as tomato and cabbage, both of which were produced at self sufficiency levels in the past.</p> <p>Major issues for agriculture are (i) water control, both flooding and irrigation, praedial larceny. Input prices continue to escalate</p> <p>Challenges being experienced include optimization of greenhouse technology, shortage of specialized skills. The new thrust in agro-processing is being led by TTABA.</p>	X	X(CARICOM, USA)	X(EU)	<p>Updating of legislations</p> <p>Market Intelligence and information of the EU markets</p> <p>Implementation of GAPs</p> <p>Single electronic window to facilitate trade</p> <p>Single competent authority for food and drugs</p>	<p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p>	<p>ST</p> <p>ST</p> <p>ST</p> <p>ST</p> <p>ST</p>

	<p>NAMDEVCO to develop a programme to boost exports potential in agriculture with focus on value chain management with hot peppers and pumpkin as leaders. Processing industry and exporters experience inconsistent supplies.</p> <p>Continuous problem and ongoing threat of alien invasive species: eg the red palm mite on coconuts</p> <p>Certification of regulatory agencies and coordination into a one-stop concept will need to be addressed.</p> <p>Heavy metals and ocratoxin testing of cocoa will be required for marketing and HACCP for agroindustry to be adopted.</p> <p>Facilities / legal guidance are required to manage new accessions in cocoa and post entry plant quarantine facility needed to manage new introductions. Plant Breeders Rights for Trinidad hybrids TSH and standards for coconut water are required.</p>						
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Table 41: Assessment of Trade-related Regulatory Requirements – Trinidad and Tobago

Trade Enhancing Requirements	EU / EPA Prescribed / compliance standard	Existing Practices / Status	Corrective action required
<p>1. GOOD AGRICULTURAL PRACTICES (GAP)</p> <ul style="list-style-type: none"> Use of approved agrochemicals In field sanitation eg Worker facilities/amenities such as toilets, lunch rooms In field protocols including post harvest Environmental protection eg water quality for irrigation, erosion, waste water management 	<p>EUREPGAP; Globe GAP, Fair Trade; Private Labels</p>	<p>Parts of the agrifood system is not able to meet international standards and requirements regarding sanitary control, environmental issues, etc.</p> <p>Low level of adoption of food safety technologies.</p> <p>Lack of a traceability system.</p>	<ul style="list-style-type: none"> Develop and/or promote SPS, GAP's, and regulations regarding environment. Develop systems for monitoring and enforce SPS, environment regulations. Establish or reformulate agencies to regulate, monitor, enforce regulations and provide certification services. Establish a national traceability system.
<p>2. PACKHOUSE OPERATIONS</p> <ul style="list-style-type: none"> Washing, Grading & Drying Packaging & Labelling Documentation for Traceability Inefficient or insufficient infrastructure of transport: roads, ports, airports, and storage facilities 	<p>SPS & HACCP Certification</p>	<p>Private packinghouses are rudimentary. Public facilities good, but will need upgrade</p> <p>No HACCP practices</p> <p>Lack of a traceability system at private packers.</p>	<ul style="list-style-type: none"> Develop regulations on SPS control. Improve food quality and safety inspection services Establish a national traceability system. Encourage investments in infrastructure. Establish public-private partnership programmes for infrastructure investments, management and maintenance services. Promote government investments in essential infrastructure. Review tax structure affecting input costs such as cold storage trucks, facilities.
<p>3. AGRO-PROCESSING</p>	<p>Plant / Process Certification eg HACCP, QMP, ISO</p>	<p>Low quality of processed products because of low level of adoption of key technologies in</p>	<ul style="list-style-type: none"> Improve food quality and safety inspection services

Trade Enhancing Requirements	EU / EPA Prescribed / compliance standard	Existing Practices / Status	Corrective action required
<ul style="list-style-type: none"> Process Technology Standards / Food Standards Packaging & Labelling Waste Water Management Lab Support Services eg Microbial, histamine & contaminants 		<p>some cases.</p> <p>The agrifood system has inadequate laboratorial infrastructure to carry out quality and safety monitoring and certification tests</p> <ul style="list-style-type: none"> Low diffusion of managerial tools: quality control (ISO, HACCP), environmental control (ISO, certification), information technologies (bar code, traceability, etc.). 	<ul style="list-style-type: none"> Upgrade laboratorial infrastructure to carry out independent and internationally accepted tests. Promote public-private partnerships for service provision in agrifood quality and safety testing and certification Improve support services offered by sector organizations and private consultants. Update undergraduate and vocational course curricula of agro based careers, so as to include agro-processing disciplines.
<p>4. SEAFOOD HARVEST</p> <ul style="list-style-type: none"> Net & Gear requirements Landing Sites eg Proper facilities for handling fish, waste disposal system, facilities for gear etc 	Practices eg FAO Code of Conduct, Cites, IUU	<p>Inefficient or insufficient infrastructure of transport: roads, landing sites, ports, airports, and storage facilities</p> <p>Low level of adoption of food safety technologies, including cold chain</p> <p>Lack of a traceability system.</p>	<ul style="list-style-type: none"> Encourage investments in infrastructure. Establish public-private partnership programmes for infrastructure investments, management and maintenance services. Promote government investments inessential infrastructure. Promote training in sea faring, post harvest - fish handling, processing technology, adoption of cold chain
<p>5. AQUACULTURE</p> <ul style="list-style-type: none"> Water Quality issues Good Production Practices 	<p>Water Quality Certification</p> <p>Production Process Certification</p>	Low levels of adoption of appropriate technologies	<ul style="list-style-type: none"> Improve support services (including financing) offered by sector organizations and private consultants. Update undergraduate and vocational course curricula to include aquaculture based careers Create infrastructure and promote capacity building on management issues.

TABLE 42: TRINIDAD AND TOBAGO – PROJECTS TO ADDRESS CONSTRAINTS /CHALLENGES

IN TAKING ADVANTAGE OF TRADE OPPORTUNITIES

Project Area & Specific Activity	Beneficiary Industry	Duration of Intervention	Potential Benefits	Priority
1. Compliance / Adoption of Quality Standards				
1.1 Adoption of EUREPGAP through: - Technical Assistance for the Training of Trainers who would train Farmers - Technical Assistance to provide training for laboratory technicians	All Industries	Short Term	Ensures that products could meet SPS and food safety quality standards as required by export markets	1
1.2 Technical assistance to implement SPS and Traceable System for FRUITS and VEGETABLES – training and establishing procedures	Fruit and Vegetable Industry	Short Term	Market access depends on product satisfying the regulatory and quality standards – benefit of retaining and expanding market share	1