10th EDF SPS Project
Support to the Caribbean Forum of ACP States in the Implementation of Commitments
Undertaken Under the Economic Partnership Agreement (EPA):
Sanitary and Phytosanitary Measures (SPS)

ANNUAL REPORT
(October 01, 2015–September 30, 2016)

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<td>AHFS</td>
<td>Agricultural Health and Food Safety</td>
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<tr>
<td>CAHFSA</td>
<td>Caribbean Agricultural Health and Food Safety Agency</td>
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<td>CaribVET</td>
<td>Caribbean Animal Health Network</td>
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<td>CARPHA</td>
<td>Caribbean Public Health Agency</td>
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<td>CCS</td>
<td>CARICOM Secretariat</td>
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<td>CGPC</td>
<td>Coordinating Group of Pesticides Control Boards of the Caribbean</td>
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<td>CNMSF</td>
<td>Comité Nacional para la Aplicación de Medidas Sanitarias y Fitosanitarias</td>
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<td>COTED</td>
<td>CARICOM Council for Trade and Economic Development</td>
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<td>CPHD</td>
<td>Caribbean Plant Health Directors Forum</td>
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<td>CRFM</td>
<td>Caribbean Regional Fisheries Mechanism</td>
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<td>CROSQ</td>
<td>CARICOM Regional Organisation for Standards and Quality</td>
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<td>CVOs</td>
<td>Chief Veterinary Officers</td>
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<td>EDF</td>
<td>European Development Fund</td>
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<td>EPA</td>
<td>Economic Partnership Agreement</td>
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<td>FAO</td>
<td>Food and Agriculture Organization of the United Nations</td>
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<td>GAP</td>
<td>Good Agricultural Practices</td>
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<tr>
<td>GFP</td>
<td>Good Fisheries Practices</td>
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<td>GMA SEF</td>
<td>Grocery Manufacturers Association Science and Education Foundation</td>
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<td>GMP</td>
<td>Good Manufacturing Practices</td>
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<td>HACCP</td>
<td>Hazard Analysis Critical Control Points</td>
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<td>IPPC</td>
<td>International Plant Protection Convention</td>
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<td>ISPM</td>
<td>International Standards for Phytosanitary Measures</td>
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<td>OECS</td>
<td>Organisation of Eastern Caribbean States</td>
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<td>OIE</td>
<td>World Organisation for Animal Health</td>
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<td>OVI</td>
<td>Objective Verifiable Indicator</td>
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<td>PMU</td>
<td>Project Management Unit</td>
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<td>PRP</td>
<td>Prerequisite Programme</td>
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<td>PVS</td>
<td>Performance, Vision, Strategy (Assessment tools for AHFS systems)</td>
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<td>ROM</td>
<td>Results Oriented Monitoring</td>
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<td>SMEs</td>
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<td>Sanitary and Phytosanitary</td>
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<td>TtT</td>
<td>Train the Trainers</td>
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<td>TBT</td>
<td>Technical Barriers to Trade</td>
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<td>TDR</td>
<td>Terms of reference</td>
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<tr>
<td>WTO</td>
<td>World Trade Organization</td>
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CARIFORUM COUNTRIES

ANU  Antigua and Barbuda
BAH  Bahamas, The
BDOS Barbados
BZ  Belize
DOM  Dominica
DR  Dominican Republic
GRN  Grenada
GUY  Guyana
HAI  Haiti
JAM  Jamaica
SKN  St Kitts and Nevis
SLU  St Lucia
SVG  St Vincent and the Grenadines
SUR  Suriname
TT  Trinidad and Tobago
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10th EDF SPS Project


Project Profile

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<th>Date Signed</th>
<th>March 28, 2012</th>
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<tr>
<td>Contribution Agreement</td>
<td>Date Signed</td>
<td>September 03, 2013</td>
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**Overall Objective**

The overall objective of the SPS programme is to facilitate CARIFORUM States to gain and improve market access by complying with Europe’s Sanitary and Phytosanitary (SPS) measures and to help CARIFORUM States to better develop their own regionally harmonised SPS measures.

**Project Components**

- **Legislation**: Establishment of a sound and comprehensive national and regional legislative framework for plant and animal health, including fisheries, food safety, and related environmental monitoring.

- **Coordination**: Development and organisation of an efficient responsive institutional framework and mechanism for coordination of SPS issues at both the national and regional levels.

- **Capacity Building**: Development of the human resources (public and private sectors) to support the SPS regime.

**Executing Agency**

Inter-American Institute for Cooperation on Agriculture (IICA)

**Implementation Period**

42 Months | September 03, 2013–March 31, 2017

**Implementation Partners**

CARICOM Secretariat (CCS)
Caribbean Regional Fisheries Mechanism (CRFM)
Comité Nacional para la Aplicación de Medidas Sanitarias y Fitosanitarias (CNMSF)

**Beneficiary Countries/Region**

Caribbean Forum of the ACP States (CARIFORUM)

**Responsible EU Delegation**

EU Delegation to Barbados and the Eastern Caribbean
Executive Summary

The overall objective of the 10th European Development Fund (EDF) Programme is to support the beneficial integration of the CARIFORUM States into the world economy and the overall objective of the SPS programme is to facilitate CARIFORUM States to gain and improve market access by complying with Europe’s Sanitary and Phytosanitary (SPS) measures and to help CARIFORUM States to better develop their own regionally harmonised SPS measures.

The specific objective of the SPS Project is to increase production and trade in agriculture and fisheries which meet international standards while protecting plant, animal and human health and the environment. The actions of the Project seek to improve the Agricultural Health and Food Safety (AHFS) legislative framework, national and regional coordination and the capacity of private and public sectors to comply with the SPS Regime.

Over the past year, there was significant advancement in the implementation of the technical actions under the Project, in particular in the area of capacity building. The strides made in the implementation of technical actions resulted in: (i) the validation of plant and animal health and food safety Model Bills by CARIFORUM Countries. These Model Bills form the basis of a regionally-harmonised legislative framework; (ii) the initiation of the development of national and regional coordination mechanisms that will improve communication, collaboration and information flow across entities responsible for AHFS; (iii) the strengthening of the three groups and the Regional Agency (Caribbean Agricultural Health and Food Safety Agency - CAHFSA) which seek to coordinate SPS matters in the Region and advance the prioritised programme of work for AHFS; (iv) a 60% increase in the representation of CARIFORUM countries at international AHFS meetings and (v) over 1,350 public and private sector stakeholders being trained in AHFS areas important for complying with the SPS regime, as well as over 25 private sector firms receiving direct technical assistance to improve their food safety systems.

A series of constraints that impacted implementation in the past were addressed. Actions implemented to alleviate the constraints include, in the main, increasing: (i) the staff complement of the Project Management Unit (PMU), (ii) the autonomy of countries implementing national projects, and (iii) the award of large-scale contracts to implement regional and multi-country actions. The competing priorities of countries continue to be a challenge, however, increased collaboration and planning are yielding positive results.

The SPS Project continues to be very important for the economic development of the CARIFORUM Region and is addressing key priorities for improving trade; hence every effort is being made to successfully implement the project actions. The Inter-American Institute for Cooperation on Agriculture (IICA) and its partners continue to be fully committed to the implementation strategy and are working assiduously to ensure the implementation of high-quality actions that will result in the sustained and effective modernisation of AHFS systems, such that there is improved compliance with the SPS Regime within CARIFORUM and the commitments under the Economic Partnership Agreement are met.
1.0 Introduction

The countries of the Caribbean Forum of the ACP States (CARIFORUM) have all signed the Economic Partnership Agreement (EPA) with the European Union (EU). The CARIFORUM-EU EPA is a single negotiated agreement that governs how the two regions will co-operate on a wide range of trade-related issues, including duties charged on imports of goods, the market standards they are required to meet, trade in services, and related policy areas such as competition policy and intellectual property rights.

The countries of CARIFORUM intend to honor commitments made in the EPA and are seeking to take advantage of opportunities created by the Agreement. However, these States face a variety of challenges in implementing the EPA and EPA-related commitments and in fully exploiting the opportunities which may be created.

The 10th European Development Fund (EDF) Project ‘Support to the Caribbean Forum of ACP States in the Implementation of Commitments Undertaken under the Economic Partnership Agreement (EPA): Sanitary and Phytosanitary Measures (SPS)’ seeks to support the beneficial integration of CARIFORUM States into the world economy by facilitating entry and improved market access into the European Union through compliance with their SPS measures. The Project will therefore strengthen the capacity of CARIFORUM States in critical areas with regard to institutional and technical support in sanitary and phytosanitary measures. The tools provided under the action will enhance the competitiveness of CARIFORUM States, enabling them to maintain and/or increase market access by complying with Europe’s SPS measures. The action will also facilitate the development of regional harmonised SPS measures which are critical to the development of the economies.

During the past year (October 01, 2015–September 30, 2016), the SPS Project has sought to strengthen regional and national SPS systems through a systematic focus on alleviating constraints in the areas of legislation, coordination and capacity building. Specifically, constraints being addressed include: (i) fragmented and outdated legislation, (ii) limited national and regional coordination amongst institutions and groups addressing Agricultural Health and Food Safety (AHFS) matters and (iii) limited human resources. As such, the actions undertaken centred on the following:

- **Legislation**: Establishment of a sound and comprehensive national and regional legislative framework for plant and animal health, including fisheries and food safety.

- **Coordination**: Development and organisation of an efficient responsive institutional framework and mechanism for coordination of SPS issues at both the National and Regional level including, the development of programmes and information systems to aid the coordination process.
- **Capacity Building**: Development of the public and private sectors to support the SPS regime. This also includes the strengthening of laboratory systems and development of environmental and residue monitoring systems.

The outcomes of the actions undertaken during the reporting period have assisted in:

- Enhancing AHFS systems;
- Strengthening the legislative framework in the area of plant and animal health, food safety and fisheries;
- Improved national and regional coordination to support the SPS regime;
- Enhanced capacity of regulatory bodies and the private sector to meet the SPS requirements of international trade.

Actions were conducted in collaboration with the CARICOM Secretariat (CCS), Caribbean Regional Fisheries Mechanism (CRFM) and the SPS Committee of the Dominican Republic (Comité Nacional para la Aplicación de Medidas Sanitarias y Fitosanitarias (CNMSF). In addition, key collaborators including Regional AHFS groups and other projects that also undertook actions during the reporting period.

The report presented, provides the status of project implementation under the main four project components; Legislation, Coordination, Capacity Building and Action Management. For each of the main components, the Objective Verifiable Indicators (OVIs), the proposed actions and the progress for the reporting period are presented.
2.0. Technical Actions to Strengthen Agricultural Health and Food Safety Systems and Improve Market Access and Trade

Generally, the actions of the SPS Project seek to increase production and trade in agriculture and fisheries which meet international standards while protecting plant, animal and human health and the environment.

During the past eleven months, actions were undertaken in the main to:
- Initiate the establishment of a sound and comprehensive national and regional legislative framework for plant and animal health, food safety and fisheries;
- Strengthen national and regional coordination of AHFS groups and agencies such as CAHFSA;
- Build the capacity of human resources of the public and private sectors in key areas relating to SPS matters.

Please see Appendix 1 for the cumulative achievements of the Project (actions, outputs and outcomes) for the period October 01, 2013–September 30, 2016.

COMPONENT 1: DEVELOP MODEL LEGISLATION, PROTOCOLS, STANDARDS, MEASURES AND GUIDELINES IN THE AREA OF AGRICULTURAL HEALTH AND FOOD SAFETY (AHFS), INCLUDING FISHERIES

Towards the upgrade and harmonisation of the existing legislative framework in the Region, Component 1 seeks to revise/develop model bills, protocols, measures and guidelines in the areas of plant and animal health, food safety and fisheries. These instruments will be made available to all CARIFORUM States for incorporation into national legislation. The availability of these models will assist countries to be consistent with international standards and bring a degree of harmonisation to the SPS legislation across the Region.

Actions 1.1 and 1.2 Finalisation of Plant Protection and Animal Health and Food Safety Models

OVI
Plant protection and animal health and food safety draft model legislation finalised and available to all CARIFORUM States for incorporation into national legislation.

Specific Actions to Achieve the OVI
- Review existing model legislation with respect to international requirements.
- Send updated draft to countries for review.
- Host regional workshop to validate model legislation.
- Send final model to countries.
- Present model to Heads of Government.
- Determine use of Model Bill in countries.
Progress to Date (Action 85% complete)

Strengthening of Plant and Animal Health, Food Safety and Fisheries Legislative Framework

Existing model bills in the area of plant and animal health and food safety were revised with reference to international standards by international consultants with significant experience working on EU legislation. The revised Model Bills were then reviewed by experts of key International Standard setting Institutions, namely, the Food and Agriculture Organization of the United Nations (FAO) and the World Organisation for Animal Health (OIE).

In order to have national consensus on the Model Bills, the revised models were disseminated to the fifteen CARIFORUM countries, as well as regional technical AHFS groups and agencies for review and feedback (May 2016). The Bills were reviewed by technical (plant health, animal health, food safety) and legal experts from the countries and groups. The comments received were incorporated into the Bills.

A validation workshop was held from June 01 to 03, 2016 to build consensus on the Model Bills at the regional level. Approximately 80 persons from fourteen countries attended the workshop, including 58 legal, plant health, animal health and food safety professionals. There were also senior professionals from international and regional agencies such as the CCS; CRFM; Caribbean Public Health Agency (CARPHA); FAO and the OIE.

The revisions emanating from the workshop were incorporated into the Model Bills and the finalised Bills passed to the CARICOM Secretariat for endorsement by Government officials (Chief Parliamentary Counsels, Attorney Generals and Ministers). The Model Bills have been made available to countries to assist in the process of upgrading their own legislation, thus bringing a degree of harmonisation to the SPS legislation across the Region.

A poll of the legal and technical experts involved in the review and validation of the Model Bills indicated that approximately 37% perceived that there would be increased international and regional trade as a result of updating the existing legislation. In addition, 20% perceived that there would be increased market access. (See Figure 1). This information is encouraging with respect to the impact and sustainability of the action.

Function and Characteristics of Model Laws

- Compliance with international obligations.
- Follows international standards and recommendations.
- In the SPS context – instrumental for harmonisation.
- Consideration of range of countries that will adopt/use the text i.e. range of legal systems, legislative drafting styles => therefore simplicity and flexibility.
- Core technical elements and key legal mechanisms.
- Not prescriptive on enforcement modalities and other aspects that may be very country and jurisdiction specific.
Currently there are two countries that are using the Model Laws to update their existing legislative framework. These are: Trinidad and Tobago (Animal Health Protections Legislation and Regulations) and Barbados (Plant and Animal Health and Food Safety Legislation).

The Dominican Republic (Plant and animal Health Bills) and Haiti (Food Safety - Modernisation of the Sanitary Legislation) are being supported to upgrade their legislative framework.

Quotes from CARIFORUM Countries participating in the Validation of the Model Legislation

- Model Bills developed have “helped us to update our current Animal Health Laws and has upgraded the vision of the Veterinary Services in The Bahamas” (The Bahamas, 2016).
- The activities “enabled sharing of ideas and information that resulted in better legislation at national levels” (St Vincent and The Grenadines, 2016).
- “Model Bills... can assist countries in regulating and monitoring Plant Health, Animal Health and Food safety issues to protect the food industries throughout the value chain...” (Trinidad and Tobago, 2016).
Action 1.3  Development of Fisheries Legislation

OVI
Model legislation for fisheries developed and reviewed by CARIFORUM States.

**Specific Actions to Achieve OVI**
- Conduct national consultations to gather baseline data on existing legislative framework.
- Draft model legislation with respect to international requirements and validate model.
- Send updated draft to countries for review.
- Present model to Heads of Government.
- Determine use of Model Bill in countries.

**Progress to Date (Action 30% complete)**
The initial work conducted on the Fisheries Model Bill in 2015 focussed on the development of an Export Act. However, countries involved in the initial consultations for this Model Bill requested that the instrument be expanded to include all aspects of fisheries production and trade. As such, a consultancy firm from the United Kingdom (Global Law) was contracted to expand the existing Model Bill (August 2016). Once developed, the Model Bill will go through a series of national reviews and validated at a regional workshop carded for December 2016. Similar to the other model bills, endorsement will be sought from Ministerial Bodies. This action is being conducted by the CRFM.

Action 1.4  Relevant Protocols/Standards/Guidelines and Accompanying Regulations Developed

OVI's
At least two Regional protocols/standards/guidelines in each of the areas of plant health, animal health, food safety and fisheries developed and available for adoption by CARIFORUM Member States.

**Specific Actions to Achieve the OVI**
- Draft and or revise existing regulations to accompany model legislation.
- Develop protocols, standards and guidelines that facilitate trade regionally and internationally.

**Progress to Date (Action 50% Complete)**

**NATIONAL ACTIONS**
A series of actions were conducted to assist countries to upgrade their existing legislative framework—Barbados, The Bahamas, Grenada and Trinidad and Tobago. These actions, which included policy development and amendments to existing regulations (plant health), will assist countries to be in alignment with international requirements.

(i) Development of Plant Health and Food Safety and Quality Regulations (The Bahamas)
The lack of a modernised AHFS system has impacted the ability of The Bahamas to sign the World Trade Organization (WTO) Agreement and as such, updating the existing legislative framework is a critical step to advance the process. This action therefore seeks to develop plant health and food safety and quality regulations to accompany the Acts that were enacted by the Bahamian Government in June of this year. Activities to date include the hosting of seven stakeholder meetings to gather baseline data and determine
AHFS priorities and the drafting of the plant health regulations. The action will be completed by the end of the 2016.

(ii) Regulations to support the Plant Protection Act (Barbados)
The action seeks to develop two sets of implementing plant health regulations that will be used in the establishment of a legislative framework that ensures alignment with international standards (WTO/SPS) and reflects Barbados' trade agreements under CARICOM, EU-CARIFORUM EPA and bilateral agreements. The action was initiated in September 2016 and initial activities include discussions with national and international phytosanitary experts to gather baseline information, a review of the national AHFS legislative framework and an analysis of the current national plant health legislative framework.

(iii) Development of AHFS Policy (Grenada)
The action aims to develop a comprehensive policy and action plan on agricultural health and food safety, which provides the framework for improving the agricultural sector in Grenada. It is expected that the policy and action plan generated will be used in the development of relevant legislation, standards and guidelines. The action was initiated in August 2016 and is slated to be completed by the end of the year 2016.

A situational analysis has been completed and involved a review of Grenada’s agriculture sector, including policies, programmes, plans and institutional arrangements relating to the delivery of plant and animal health and food safety services. Two stakeholder workshops were conducted as a means of validating the findings of the assessment.

(iv) Amendment of Honey Act (Trinidad and Tobago)
Based on a request from Trinidad and Tobago, a consultant has been hired (September 2015) to amend the existing Beekeeping and Bee Products Act of 1935. This action seeks to facilitate harmonisation with regional and international standards and guidelines. Initial meetings were held with key public and private sector stakeholders to gather baseline information on the existing legislative framework. Information has also been gathered on existing international, regional and national legislation, as well as regional and international agreements to determine the scope of the obligations assumed by Trinidad and Tobago.

Based on the information collected, amendments were made to the existing Beekeeping and Bee Products Act of 1935 for Trinidad and Tobago. These were reviewed by legal and technical professionals from Trinidad and Tobago and the revised Act was submitted to the Government. The completion of this piece of legislation will greatly assist Trinidad and Tobago with the honey trade regionally and internationally.

(v) International Standards for Phytosanitary Measures (ISPMs) reviewed by CARIFORUM Countries
CARIFORUM Countries were given the opportunity to review draft International Standards for Phytosanitary Measures (ISPMs), which are critical for the trade of plants and plant products. Representatives from 12 countries participated in the International Plant Protection Convention (IPPC) workshop (September 13-15, 2016: Barbados).

The IPPC is recognised under the WTO Agreement on SPS Measures for setting international standards and guidelines on plant-related issues for international trade in agriculture. Along with commenting on the draft standards, the capacity of participants was built in a range of areas related to the IPPC. Three draft standards were reviewed and the comments uploaded on the IPPC’s Online Comment System (OCS). Individual countries also posted national comments on the OCS based on the discussions that took place at the workshop.
(vi) Development of a Regional Standard for Cassava Flour

In order to improve the quality of cassava flour and facilitate its trade in the Region, a standard is being developed for this important product. Towards the attainment of this goal, a literature review of existing international standards for cassava flour has been completed and, based on the review, a draft standard is currently being prepared.

Further actions include: (i) the collection of cassava flour samples from processors in major producing countries (Trinidad and Tobago, St Kitts and Nevis, St Lucia, Grenada, Barbados and Jamaica); and (ii) an analysis of the samples collected against the pre-determined quality parameters outlined in the draft standard. The main output of the study will be recommendations for improving the quality of cassava flour currently being produced. This action is being led by CAHFSA.

## SUMMARY OUTCOMES AND CONCLUSION FOR LEGISLATIVE COMPONENT

- Models Bills were validated by countries in all key areas of plant health, animal health, food safety and fisheries (Export Act).
- Fifteen countries participated in the review of the Model Bills.
- Six countries supported to upgrade legislative framework (BAH, BDOS, DR, GRN, HAI and TT)
- Two countries supported are utilising the Model Bills to upgrade their existing legislative framework (TT and BDOS).
- Two countries are updating the regulations to accompany Acts (BAH and BDOS).
- Twelve CARIFORUM countries participated in the review of international standards governing trade of plant and plant products and, in addition, gained an improved understanding of the IPPC standard setting process.
- The development of a regional standard to facilitate the regional trade of cassava flour in the Region was initiated.

The Model Bills will assist countries in developing measures consistent with international standards and bring a degree of harmonisation to the SPS legislation across the Region; this action being critical for improved trade and market access.

Country adoption and enacting of the Model Bills will serve to create a more inclusive and coordinated system for implementing an improved legal and regulatory framework for SPS and trade.
Plate 1: Strengthening the Legislative Framework of CARIFORUM Countries for Improved Market Access and Trade

Regional Workshop to Validate Model Bills (Plant Health, Animal Health, Food Safety).
Top Picture: EU Representative giving Remarks at the Opening Ceremony.
Bottom Picture: Countries reviewing Model Bills in small groups
COMPONENT 2: DEVELOP EFFECTIVE NATIONAL AND REGIONAL COORDINATION MECHANISMS IN SUPPORT OF THE SPS REGIME

CARIFORUM States have recognised that the establishment of effective national and regional coordination mechanisms is necessary for complying with national, regional and international SPS requirements and also for facilitating meaningful participation in the international SPS standard setting process (e.g. OIE, IPPC, WTO/SPS Committee and Codex Alimentarius). In most CARIFORUM countries, effective SPS measures are undermined by the existence of fragmented legislation, multiple jurisdictions, inadequate enforcement, and chronic underfunding.

The task is therefore to provide an effective AHFS coordination system that transitions countries from operating sectorally—in which animal health, plant health and food safety are viewed and dealt with separately—to a more integrated and comprehensive (entire food chain) manner. The mechanisms for coordination of these elements are key in this transition. Coordination of the SPS functions of the various competent authorities at the national and regional levels will serve to more efficiently and coherently coordinate agricultural health and food safety nationally and regionally, and allow meaningful and active participation and influence in the international arena.

There are four main interlocking actions being conducted that seek to provide a sustainable coordination framework. These include: (i) development of national coordination mechanisms, (ii) participation in international SPS fora, (iii) strengthening of the existing regional AHFS framework, and (iv) development of a regional coordination mechanism.

**Action 2.1 Strengthening or Establishment of National Coordination and Implementing Mechanisms**

**OVIs**

1. Several models for national coordinating agencies/committees compiled and distributed to and considered by Member States.
2. Increased participation of CARIFORUM States in international standard setting process
3. Application of Performance, Vision, Strategy (PVS) tools (assessment and analysis of AHFS services)

**Specific Actions to Achieve the OVIs**

- Develop models to strengthen and establish National coordination mechanisms for animal health, plant health, and food safety issues for both agriculture and fisheries.
- Present models for consideration and adoption by each beneficiary country.
- Support the participation of CARIFORUM States in international SPS forums (Codex, IPPC, OIE, WTO/SPS Meetings)
- Conduct PVS in selected countries.

**Progress to Date**

(i) **Assessment and Design of National Coordination Mechanisms (Action 30% complete)**

An initial assessment was conducted to determine the current level of coordination of AHFS systems in eleven CARIFORUM countries. The assessment focuses on the current functioning of AHFS systems, challenges faced and actions implemented to alleviate the challenges. The information was collected through focus group...
meetings, one-on-one interviews and in-country missions. Stakeholders interviewed included persons from the public sector (Ministries of Agriculture, Health, Environment and Trade), as well as the private sector (food exporters and importers, export association, farmers and farmers’ associations, manufacturers’ associations, chambers of commerce). The technical experts involved in the execution of this action are technical, legal and organisational management specialists.

The data gathered from the situational analysis are being used to develop mechanisms that ensure that the whole food chain covered by the AHFS system are linked, so that there is not only active communication but collaboration to identify needs, joint implementation of planned actions and the sharing of data and infrastructure. The mechanism will be presented to countries at national workshops being held in November 2016. These mechanisms will also be presented to ministers and policy makers for endorsement.

(ii) Participation of CARIFORUM Countries in International SPS Meetings (Action 100% complete)
Towards the strengthening the participation of CARIFORUM countries in the international standard setting process and improving the effective implementation of the SPS Agreement of the WTO, support was provided for country representation at the SPS Committee (SPSC), IPPC Commission on Phytosanitary Measures (IPPC), OIE World Assembly (OIE) and the Codex Alimentarius Commission (Codex).

During the past eleven months, the Project supported over 60 nationals to actively participate in over seven strategic international AHFS meetings (SPS Committee, IPPC, OIE and Codex). This represents a 60% increase in representation of Caribbean countries in the SPS international standard setting process.

Support was provided for the following meetings:
- 64th SPS Committee Meetings in Geneva, Switzerland (October 2015). All CARIFORUM Countries supported.
- Codex Committee on Fish and Fishery Products held in Norway. Two representatives from the CRFM were supported to attend (October 2015).
- 47th Session of the Codex Committee on Food Hygiene held in Boston, USA. Countries supported included Antigua and Barbuda, Dominica, the Dominican Republic, Jamaica, St Lucia, and Trinidad and Tobago, (November 2015).
- 65th meeting of the WTO SPS Committee in Geneva, Switzerland. An important focus of this meeting was the issue of transparency, an area which is important for gaining market access. Another agenda item of importance to CARIFORUM countries is the issue of Private Standard Schemes. This issue was initially raised at a WTO SPS Committee meeting by a CARIFORUM country (St Vincent and the Grenadines) and CARIFORUM countries continue to play an important role in the ongoing discussions at this international forum. Four Countries (Barbados, Belize, Guyana and Jamaica) that have been playing a leading role in the Region in the discussion of these topics were supported. (March 2016)
- 11th Session of the Commission on Phytosanitary Measures (CPM 11). The CPM 11 Meeting was held at the Headquarters of the FAO in Rome, Italy. All CARIFORUM Countries were supported (April 2016).
- 84th World Assembly of OIE delegates, Paris, France. All CARIFORUM countries that are members of the OIE were supported to attend: The Bahamas, Barbados, Belize, the Dominican Republic, Guyana, Haiti, Jamaica, Suriname, and Trinidad and Tobago. (May 2016)
- 39th Session of the Codex Alimentarius Commission; Rome Italy. All CARIFORUM Countries were supported (June 2016).
Outcomes
The active participation of Caribbean nationals in the international AHFS standard-setting process has created an increased awareness within the Region of emerging issues relating to international food trade, as well as an increased understanding among countries of their rights and obligations under the various international SPS agreements, conventions and protocols. It has also increased the opportunity of Caribbean nationals to serve on several international committees and working groups.

Direct polling of representatives attending these meetings indicated the following benefits: (1) strengthening of national positions on certain technical topics, (2) active participation in international standard setting (e.g. able to make interventions, raise issues on the agenda, engage in dispute settlement resolution, etc.), (3) identification of needs for technical assistance related to AHFS and (4) creation/strengthening of formal or informal national SPS and CODEX committees.

![Graph showing benefits from international meetings]

**Figure 2:** Benefits Reported by Public Sector Stakeholders Participating in International Meetings

(iii) Application of PVS Tools [assessment and analysis of AHFS services; St Kitts and Nevis] (Action 90% complete)

As assessment of the plant health and animal health sectors of St Kitts and Nevis was conducted to develop performance indicators, a common vision and strategic plan for the sectors (July 2015). The performance indicators included technical capacity, market access, human and financial capital, and interaction with the private sector. Focus group meetings and individual interviews were conducted from a wide range of stakeholders. Based on the data gathered, a Common Vision Session was held with all stakeholders of the Plant and Animal Health Sectors and a report outlining deficiencies and recommendations for improved AHFS systems is being prepared. This action was led by IICA Technical Specialists.

(iv) Development of Pest Lists (St Kitts and Nevis) (Action 80% complete)

A national pest list is being developed for St Kitts and Nevis, which will contribute to effective export certification, market access and domestic control programmes. Ten priority crops were identified for the preparation of the pest list. The selection of these priority crops was based on a number of factors e.g. export commodity, import substitution, food sufficiency, and nutritional value. Through the collection of secondary data, a preliminary list for each of the crops has been prepared. The finalised list will be submitted to the Government along with recommendations for the way forward.
Action 2.2  Operationalising Regional Coordination and Implementing Mechanisms

OVIs
1. CAHFSA fully operational
2. Increased two-way communication and collaboration among the beneficiary countries

Specific Actions to Achieve the OVIs
- Establish and initiate prioritised programme of work for the regional SPS coordinating mechanisms (such as CNMSF, CAHFSA).
- Support Regional AHFS Groups. Formalise relationships between CNMSF, CFRM, CAHFSA.
- Develop regional coordinating mechanisms.

Progress to Date
(i) Assessment and Design of Regional Coordination Mechanisms (Action 30% complete)
Similar to the methodology being used in the development of national coordination mechanisms, an initial assessment was conducted to determine the current level of coordination of AHFS systems amongst regional AHFS Groups and CAHFSA. The assessment examines the current functioning of the regional technical groups, challenges and future plans. The information was collected through individual interviews with members of all AHFS groups and CAHFSA.

The data gathered from the situational analysis are being used to develop a regional mechanism that will improve coordination of SPS issues regionally. A regional meeting will be held in November 2016 where the information collected as well as the proposed mechanism will be presented. A regional validation workshop will be held for countries and agencies in January 2017.

(ii) Facilitated Regional Coordination through the Operationalisation of CAHFSA (Action 80% complete)
Towards strengthening CAHFSA’s role in regional coordination around SPS issues, support was provided in the following areas: (i) development of the Agency's corporate identity, (ii) hosting of the Annual Board Meeting of the Agency, (iii) attendance of staff at regional and international meetings, (iv) capacity building of staff members in key technical areas and (v) development of a regional AHFS database.

Launch of Logo
CAHFSA as a new agency needed a unique business logo designed to serve as an effective corporate identity which represented the Agency's primary goal and objectives. As such, a regional logo competition was launched. The contest was open to legal residents of all 15 CARIFORUM countries; 12 submissions were received. After two rounds of judging by a team of design and communication professionals from across the region, a winning design emerged. The winning design was submitted by Mr. Sean Ifill of Barbados. The logo, as well as the Agency’s new corporate website (www.cahfsa.org) was launched at the 5th Board Meeting of the Agency held in Suriname (November 2015).

Board Meeting
The Fifth Meeting of the Board of Directors of CAHFSA was supported (November 16-17, 2015; Paramaribo, Suriname).
Representation at Regional and International Meetings

Support was provided for CAHFSA staff members to attend the following Regional and International meetings:

Regional Meetings
- 59th Special Meeting of the CARICOM Council for Trade and Economic Development (COTED) – Agriculture (October 06-09, 2015; Georgetown, Guyana).
- Caribbean Plant Health Directors Forum (CPHD) Annual Partnership Meeting (March 22-23, 2016).
- COTED meeting to present on market access matters for animal products. (April 2016; Georgetown, Guyana).
- Sixteenth Meeting of CARICOM Chief Veterinary Officers (CVOs) and the Eleventh Caribbean Animal Health Network (CaribVET) Steering Committee Meeting. (April 04-08, 2016; Grenada).
- Annual Meeting of the Coordinating Group of Pesticide Control Boards of the Caribbean (CGPC). (June 06-10, 2016; Belize).
- Ninth Annual Meeting of the CPHD Forum and the Fourth meeting of CARICOM Plant Health Directors. (July 04-08, 2016; Trinidad and Tobago).

International AHFS Meetings
- 11th Session of the Commission on Phytosanitary Measures (CPM 11). The CPM 11 meeting was held at the Headquarters of the FAO in Rome, Italy. CAHFSA was present as an observer organisation (April 04-08, 2016).
- 84th World Assembly of OIE Delegates, Paris, France. CAHFSA was present as an observer organisation (May 22-27, 2016).

Capacity Building
- Animal Health Specialist participated in training at the Joint Institute for Food Safety and Applied Nutrition (JIFSAN) in Food Safety Risk Analysis Training in College Park, Maryland, USA (May 30-June 30, 2016). Specific areas of training included: Risk Analysis, Risk Management, Risk Communication, Qualitative Risk Assessment, Quantitative Risk Assessment for Food Safety and Epidemiology of Risk Analysis.
- Plant Health Specialist attended the Meeting of the Technical Panel on Diagnostic Protocols. (July 11-15, 2016; Montego Bay, Jamaica).
- Plant Health Specialist attended the IPPC Phytosanitary Capacity Evaluation (PCE) Facilitators Training (August 08-19, 2016; Thailand).

Development of a Regional AHFS Database

One of the strategic objectives of CAHFSA is to provide a framework to continuously monitor and evaluate national and regional agricultural health and food safety programmes and provide technical support. This objective is to be achieved, in part, by the establishment of databases of reports, studies, assessments, etc., and developing a mechanism for Member States to have access. These databases are intended to be used for decision making by senior agricultural health and food safety personnel in the public sector of Member States as well as regional SPS organisations. In this context, a Regional AHFS database is being developed for improved monitoring, coordination and decision making.

The database has been designed within the framework of CAHFSA’s current website and the development of the following five databases has been initiated:
- Pest Risk Analysis Conducted Regionally and Internationally;
- Regional SPS Import and Export Requirements;
- Regionally Regulated Plant Pest;
- Animal and Plant Health Professionals;
- Regional Trade Issues

The databases are to be populated with data supplied by the CAHFSA Technical Team along with the team trained in the management of this information tool.

**General note:** Through the direct support provided, as well as the actions that are being conducted to develop national and regional mechanisms, CAHFSA’s capacity will be strengthened towards carrying out functions such as: (i) developing programmes and projects for strengthening agricultural and fisheries health and food safety systems in the region; (ii) providing a mechanism for the coordination and integration of technical support to stakeholders by relevant regional and international organisations; (iii) facilitating the development, implementation and use of regional and international standards, measures and guidelines in collaboration with the CARICOM Regional Organisation for Standards and Quality (CROSQ) and other regional and international standard setting bodies; and (iv) establishing the framework and mechanism for achieving regional consensus on SPS issues for presentation at international fora.

(iii) **Strengthening Coordination in the Fisheries Sub-Sector, CNMSF**

Towards improved information access for the fisheries and aquaculture sub-sector in the Dominican Republic, software for an electronic database is being developed. This action is being implemented by CODOPESCA.

(iv) **Regional Technical Groups Strengthened for Improved Coordination of AHFS Issues (Action 100% complete)**

Several interventions were made to strengthen Regional AHFS Groups which play a critical role in improving the capacity of the Region in SPS matters. Groups include, the CARICOM Chief Veterinary Officers (CVOs), the Animal Health Network (CaribVET), the CPHD, and the Coordinating Group of Pesticides Control Boards of the Caribbean (CGPC).

**Annual Meetings of AHFS Groups**

Support was provided for convening annual and working group meetings, which are geared towards improving the coordination of SPS issues and the formulation and implementation of the prioritised AHFS Programme of Work for the Region. Many of the technical issues raised at these meetings will be tabled at the Special Meeting of COTED – Agriculture, for the attention and endorsement by the Ministers of Agriculture and Senior Officials.

Meetings supported included:
- Sixteenth Meeting of CARICOM CVOs (April 04–06, 2016; Grenada)
- Eleventh CaribVET Steering Committee Meeting (April 07–08, 2016, Grenada)
- Annual Meeting of the CGPC (June 06–10, 2016; Belize)
- Ninth Annual Meeting of the CPHD Forum (July 04–07, 2016; Trinidad and Tobago)
- Fourth Meeting of CARICOM Plant Health Directors; (July 08, 2016; Trinidad and Tobago)

**Outcomes**

As a result of the support provided to the Annual and Working Group Meetings of AHFS Groups, as well as funding provided for the technical work, the Executive Members have reported the following outputs/outcomes: (i) regional work plans which reflect international trade requirements, (ii) increased collaboration amongst countries and (iii) increased networking opportunities.
SUMMARY OUTCOMES and CONCLUSION for COORDINATION COMPONENT

- The development of National and Regional Coordination mechanisms initiated through the conduct of a situational analysis.

- 60% increase in representation of CARIFORUM countries at International AHFS meetings. Public sector professionals supported to attend these meetings highlight the two main benefits resulting from participating as: the strengthening of national positions on certain technical topics, and the creation/strengthening of formal and informal national SPS and CODEX committees.

- The three Regional Technical Groups were strengthened for improved coordination of AHFS issues.

- Support provided for the implementation of CAHFSA’s work programme in the Region.

At present, most CARIFORUM States do not have a single agency or a coordination mechanism for handling animal health, plant protection, food safety and fisheries issues at the national level. These areas are handled by several ministries and agencies. Actions have been initiated to develop efficient and effective coordination mechanisms and, as such, address the concerns that result from a lack of efficient coordinating mechanisms (e.g. duplication of activities, inefficient use of resources, absence of or uncertainty regarding the competent authority, etc.). Support for regional groups and agencies greatly assisted in advancing the coordination of SPS issues at the regional level and bringing to the fore critical issues for policy action by ministerial bodies.
Plate 2: Annual Meetings of Regional Technical AHFS Groups
COMPONENT 3: DEVELOP/ STRENGTHEN THE NATIONAL AND/OR REGIONAL REGULATORY AND INDUSTRY CAPACITY TO MEET THE SPS REQUIREMENTS OF INTERNATIONAL TRADE

An effective and efficient regime for agricultural and fisheries health and food safety is dependent on having informed technical expertise supported by strong infrastructural capacity. Creating a cadre of public and private sector professionals that will be able to support the SPS regime is critical for fostering an enabling trade environment.

Component 3 seeks to develop/strengthen the national and/or regional regulatory and industry capacity to meet the SPS requirements of international trade (in areas such as, inspection, import/export certification, diagnostics, risk assessment, surveillance, Hazard Analysis Critical Control Points [HACCP], Good Agricultural Practices [GAP], Good Manufacturing Practices [GMP]). The component also seeks to develop systems and services that are key for supporting trade (i.e. strengthening laboratory systems, development of environmental and monitoring programmes for the fisheries sub-sector).

Actions 3.1 and 3.2  Training Programmes for Animal Health, Plant Health and Food Safety
Developed and Delivered for Competent Authorities and Regulatory Agencies

Training Programmes Developed and Delivered Across the Value Chain for Industry Stakeholders

OVIs
Action 3.1
- Increased number of regulatory professionals and technicians trained.
- Increase in the number of trained personnel available to offer service to stakeholders (HACCP Audit and certification; risk assessment of animal diseases, plant pests, and food contaminants; inspection and certification; diagnostics; surveys and surveillance.
- Manuals, handbooks and other relevant material developed and available for continuous on-the-job training.

Action 3.2
- Increased number of industry professionals and technicians trained in GAPs, HACCP, GMPs, etc.
- Increased number of firms/operations implementing good practices (GAP, GMP, and HACCP).
- Manuals, handbooks, posters and leaflets available for continuous on-the-job training and awareness.
- Increased access to export market and increase in the production of safe, high quality food for national consumption

Specific Actions to Achieve the OVIs

In order to meet the requirements of international trade, critical competences must exist in the areas of surveillance, diagnostics, emergency response capability, quarantine and all aspects of food safety including GAP, HACCP, traceability, and risk. To this end, capacity building actions have sought to develop human capacity in both the public and private sectors to support the SPS regime in these key areas.

Information products are also being developed to enhance training actions and general awareness among stakeholders of international standards and best practices in the global food market.
Approach. Training programmes include exchange programmes, short courses and seminars in collaboration with regional and international tertiary institutions, ongoing projects and AHFS Technical Groups and Agencies. In addition, post-graduate studies at national and regional universities and other academic entities. See Table 1 for the specific trainings conducted under 3.1 and 3.2.

**Progress to Date (Action 90% Complete)**

Trainings were conducted in seven key AHFS areas, the specific trainings conducted are listed in Table 1. For each AHFS area, highlights are provided on the objectives, status and outcomes of the training activity.

Table 1: Specific Trainings Conducted to Build Competencies in Key AHFS Areas

<table>
<thead>
<tr>
<th>Critical Competencies for Market Access</th>
<th>Specific Project Actions</th>
</tr>
</thead>
</table>
| **Diagnostics**                        | - Recognition and response to priority animal, zoonotic and foodborne diseases (public and private sector).  
- Diagnostics of Leptospirosis          |
| **Surveillance**                       | - Development and application of phytosanitary standards (including inspection and certification).  
- Surveillance for Antimicrobial Resistance (AMR), which is an emerging issue for exports intended for European markets. |
| **Emergency response**                 | - Emergency response plans to limit outbreaks (e.g. Highly Pathogenic Avian Influenza (HPAI), which is a threat to the poultry industry in the Region).  
- Emergency response plans for key plant pests of the Region |
| **Food Safety Systems**                | - GAP  
- HACCP  
- Food safety management systems (rum sector) |
| **Traceability**                       | - Establishment of Pilot Study on Traceability  
- Principles and practice of Traceability Systems for SMEs |
| **Risk Analysis**                      | - Pesticide Risk Analysis  
- Pest Risk Analysis |
| **Plant Quarantine**                   | - Principles and practice of inspection and border control |

Trainings seek, in part, to address emerging issues that are critical for the development of local industries, as well as for accessing international markets.
Having adequate diagnostic capacity and capability is fundamental for enforcing proper surveillance and management systems. Many Caribbean countries lack the capacity and capability to accurately recognise and diagnose critical pests and diseases, and, as such, run the risk of not effectively managing these problems when they arise. A need therefore exists to train public and private sector stakeholders in the recognition and response to high priority pests and diseases that impact animal, plant and human health, as well as market access.

Over the reporting period, a series of trainings were conducted to improve the capacity of public sector professionals in key animal health diseases. These actions were conducted in collaboration with the One Health, One Caribbean, One Love, EU Project and the Caribbean Animal Health Network (CaribVET).

**REGIONAL ACTIONS**

**(i) First Responders Training Programme**

Many Caribbean countries lack the capacity and capability to accurately recognise and diagnose priority diseases. There is, therefore, a clear need to train first responders and other relevant stakeholders (including farmers) in the recognition and response to high priority animal and zoonotic diseases specific to their national experience and to stress the need for a robust surveillance network.

A series of First Responders Diagnostic Workshops were supported in collaboration with the UWI/PAHO/EU One-Health Project. The training workshops were held in St Lucia (March 01-02, 2016), Guyana (April 11-13, 2016) and the Dominican Republic (April 20-22, 2016). The training was geared towards improving the ability of Caribbean veterinarians, animal health assistants, livestock keepers and farmers to accurately recognise and respond to priority animal, zoonotic and foodborne diseases.

One hundred and eighty private and public sector professionals attended the workshops; 38 from St Lucia, 57 from the Dominican Republic and 85 from Guyana. At the end of the workshop, participants were able to improve their capacity to anticipate, recognise, identify and respond to priority exotic, endemic and...
zoonotic animal diseases across the Caribbean region. A list of priority animal and zoonotic diseases, by country, was developed for the Caribbean region.

In relation to the way forward:
For the Dominican Republic, the local organising team will carry out a follow-up workshop to evaluate the surveillance protocols that were generated. Given the favorable response to this workshop, the local organising team in the Dominican Republic is in the process of planning another workshop, using the same format, for another four to five priority diseases.

For St Lucia, the Ministry of Agriculture plans to carry out smaller workshops in particular communities in St Lucia, using a similar format as well as the training material that was generated from this workshop.

For Guyana, the local organiser, Guyana Livestock and Development Authority (GLDA) recorded and filmed the workshop and intends to use this material for training and refresher courses for its staff and beneficiaries. The Guyana veterinarians and extension officers plan to use some of the workshop training material to carry out training courses within their respective communities.

(ii) Diagnostics in Animal Diseases - Leptospirosis
Leptospirosis is an endemic zoonotic disease in all Caribbean countries, with human outbreaks frequently occurring in flood situations. The bacteria can infect almost any mammal, including wildlife and rodents. A ‘One Health’ approach is necessary to reduce the prevalence in animals and the risk of transmission in humans. The incidence of disease in the Caribbean is thought to be underestimated due to misdiagnosis. Many veterinary diagnostic laboratories in the Caribbean do not have the capacity to diagnose Leptospirosis from animal samples.

In order to address this challenge, a regional training event was held in collaboration with CaribVET, PAHO and the Ministry of Health (Barbados), to build capacity of professionals on laboratory methods for Leptospirosis diagnosis. Improvements in the capacity of the participants to detect Leptospirosis is expected to provide valuable epidemiological information towards prevention and control of the disease in animals and people in each country. These laboratory technicians are expected to train other personnel in their respective countries.

Sixteen participants from 12 countries attended, as follows: Barbados [3], Guyana [1], Haiti [1], Suriname [1], Trinidad and Tobago [2], Jamaica [2], Dominica [1], Dominican Republic [1], St Kitts and Nevis [2], St Lucia [1], Grenada [1]. These represented Ministries of Health, Agriculture and academia and were mostly laboratory technicians.

(iii) Diagnostics in Animal Diseases - Highly Pathogenic Avian Influenza (HPAI)
Eight laboratory technicians from the Veterinary Services of the Ministries of Agriculture (Dominica, Guyana, Jamaica, St Kitts and Nevis, St Lucia, St Vincent and the Grenadines, and Suriname) were trained in Diagnostics Tests for Avian Influenza Diseases (September 16-19, 2016). This capacity building action seeks to further support countries in strengthening their field surveillance capacity for avian influenza viruses and is linked to the overall strategy for strengthening national and regional animal health systems to mitigate avian diseases in the region (surveillance, emergency response, biosecurity – see below). The action was conducted in collaboration with CaribVET; the One Health, One Caribbean, One-Love (EU funded) Project; and the Ministry of Agriculture (Jamaica).

Each trainee was provided with protocols for conducting the diagnostic tests, an avian influenza ELISA kit and an agar gel cutter. A key follow-up action is the involvement of trainees in an inter-laboratory proficiency testing programme for avian influenza on return to their countries. The proficiency testing is expected to provide some indication of the competence of the technicians in the areas in which they were trained and to identify areas for further training.
**NATIONAL ACTION**

**(iv) Training in PCR Methods (Barbados)**
The capacity of Barbados was strengthened in laboratory diagnostics with special emphasis on the theoretical and practical aspects of real time PCR methods for avian influenza and other viral and bacterial diseases. Capacity was built through a training attachment of two professionals at CIRAD Guadeloupe, Mixed Unit research CIRAD- INRA, Guadeloupe: ‘Control of exotic and emerging animal diseases’ laboratory (October 11–November 20, 2015). As a result of the training, the capacity of the Barbados laboratory has improved in the detection of avian influenza as well as other viral diseases and bacteria involved in food borne illnesses.

**SURVEILLANCE**

**(v) Strengthening Capacity in Anti-Microbial Resistance (AMR)**

**Regional Training Workshop**
A Regional Antimicrobial Resistance Workshop was held at the Ohio State University (USA) for 15 professionals from 14 CARIFORUM Countries (December 07–18, 2015). Participants included public health officers, veterinarians, diagnosticians, epidemiologists and microbiologists. The course sought to:

- Provide foundational and applied knowledge on the use of antibiotics and related antimicrobial agents in different animal production systems.
- Provide an understanding of the emergence and epidemiology of antimicrobial resistance in agriculture and its impact on the health of humans, animals and the environment, as well as on international trade and commerce.
- Identify and apply the principles for the establishment or enhancement of surveillance and monitoring systems for antimicrobial resistance in zoonotic and foodborne pathogens.
- Determine the proportion of Salmonella and its antimicrobial resistance profile in the primary poultry producing countries in the Caribbean (see Pilot Study below).
  - Establish baseline information for Salmonella and its related antimicrobial resistance
  - Improve the laboratory capacity and expertise in AMR in target countries

**Pilot Study**
As an outcome of the training, a Regional Pilot Study was designed to further strengthen the capacity of course participants. Towards the initiation of the Pilot Study, a technical mission was undertaken (January-May, 2016) to the seven countries in which the pilot studies were to be established (Belize, the Dominican Republic, Jamaica and Trinidad and Tobago Barbados, Guyana and Suriname). The main objective of these missions was to create an awareness of the importance of AMR and get buy-in from senior officials in each country.
The specific objectives were to:

- Sensitise the Ministries of Agriculture and Health to the importance of AMR and the pilot surveillance study.
- Tour laboratory facilities that will be used during the pilot study and associated meetings with technicians who will be supporting the study.
- Engage with poultry sector stakeholders to familiarise them with general AMR concepts and seek buy-in for the pilot study.

The overall purpose of these pilots is to determine the incidence of salmonella in poultry and its related antimicrobial resistance, while expanding the laboratory capacity and expertise in each respective country. The internationally-recognised methodology of the WHO Advisory Group on Integrated Surveillance of Antimicrobial Resistance (AGISAR) was utilised in the design of the study.

The pilot projects involve:

(i) gathering baseline data to determine the status of AMR surveillance in each country;
(ii) sampling of poultry products at two Critical Points (CP) of the commercialisation chain—pre-slaughter and retail; and
(iii) testing for the presence of Salmonella and Antimicrobial Susceptibility Testing.

**Significant milestone:** All countries can now perform antimicrobial resistance test; no previous capacity existed before initiating this pilots. Currently, the study is completed in four of the seven countries and the confirmatory tests are being conducted.

As a means of sensitising the private sector to the AMR initiative, the Project Manager participated the Third Technical Symposium of the Caribbean Poultry Association (CPA) in San Ignacio, Belize (September 22-23, 2016). The theme of the symposium was Improving the Competitiveness of the Caribbean Poultry Industry with Special Reference to Challenges and Solutions for Producing Antibiotic-Free Poultry. A presentation was given on the work being conducted under the SPS Project on AMR. The capacity built through the Project in AMR will play an important role in assisting the CPA to achieve their goal of producing antibiotic free poultry.

(vi) Development of Animal Health Surveillance Systems – GIS Workshop (CaribVET)
CaribVET hosted a workshop on Animal Health Surveillance Systems. Seventeen participants from 13 countries—comprising technical officers in the field of epidemiology and veterinary, agricultural or extension officers permanently employed by the national veterinary services—were trained in Geographic Information Systems for improving animal health surveillance programmes in the Region (November 09-12, 2015; Belize). The countries represented were: Antigua and Barbuda, Barbados, Belize, Dominica, the Dominican Republic, Grenada, Guadeloupe, Guyana, Haiti, Jamaica, St Lucia, St Vincent and the Grenadines, and Suriname.

The primary focus of the training was to develop the Geographic Information System (GIS) capacities and upgrade the participants’ skills on the use of new surveillance technologies. At the end of the workshop, each participant received a tablet (Acer, Iconia Tab10) with software that enables data collection and the creation of risk maps based on risk factors. The use of the information is being monitored by the CaribVET and to date five countries have been mapped.

**EMERGENCY RESPONSE**

(vii) Development of National Emergency Response Plans for HPAI
The Caribbean region is at risk from the outbreaks of avian influenza viruses, which started to affect poultry farms in North America from December 2014. In addition to the recent US outbreaks, HPAI viruses (mainly H5N1) continue to seriously affect poultry populations in several regions of the world. Poultry production is an
important contributor to the livelihoods of thousands of people in the Caribbean and poultry meat is the most consumed meat in all the countries in the region. The socio-economic consequences of an outbreak of avian influenza in the Caribbean could be serious and the impact on food and nutrition security could be grave.

Advance planning and preparation at the national and regional levels for animal health emergencies due to avian influenza viruses are advocated and recognised as an important and core function of all national animal health services.

The discovery of avian influenza viruses requires rapid response to contain the virus through quarantine and movement control, along with the elimination of the infection through laboratory testing and depopulation of infected premises. Important components of preparation include the testing of response or contingency plans, their revision and updating, if necessary, training in the execution of the plan and the engagement of all stakeholders who would be called upon during an actual emergency.

Within the above context, and in response to national requests, assistance was provided to countries to develop/revise emergency response plans and conduct field simulations for HPAI. These countries include: Barbados, Dominica, Grenada, Haiti, Jamaica, St Lucia, and St Vincent and the Grenadines.

Specific actions included the development/revision of emergency response plans for HPAI and the conduct of field simulation exercises for HPAI. Baseline information was gathered and visits were made to all target countries by a Technical Expert.

All country emergency response plans have been completed and the following conclusions were made:

- The results of the needs assessment survey and structural benchmarking of existing contingency plans provided a sound basis for the planning and delivery of simulation exercises that are relevant and ‘fit for purpose’;
- Based on the evaluations conducted, the simulation exercises were successful in increasing awareness of the plan and focusing on the major gaps to be addressed;
- The majority of participants became more sensitised to the high impact of avian influenza virus to poultry and humans;
- In response to participant feedback, the updated plans are now designed to be of greater practical use going beyond the scope of a reference document, and should be tested through ongoing component-based exercises;
- Existing One Health initiatives in the region will benefit from the inclusion of two-way and four-way linking for rapid detection and response to all emerging infectious diseases, including avian influenza.

National animal health services in the target countries are now more prepared to mitigate animal health emergencies due to avian influenza viruses.

(viii) Training in On-Farm Biosecurity Measures for Poultry Farmers with an Emphasis on Avian Influenza Viruses (CaribVET)

A series of national biosecurity workshops on the Highly Pathogenic Avian Influenza were held across the Region from February to March 2016. The aim of these workshops was to create awareness within the farming community on HPAI. The specific objectives were to promote improved on-farm biosecurity practices in order to reduce the risk of avian influenza viruses affecting poultry farms in the Caribbean; should the virus be detected in wild birds in the region in the future. The training included lectures and practical demonstrations of some of the common bio-security measures that poultry farmers and any farm visitors should practice on a daily basis.
Over 500 participants were exposed to basic information on the disease and biosecurity measures that should be implemented to reduce the threat of introduction and spread in the Region. These workshops link to wider national and regional efforts to prepare the region to mitigate the threat of HPAI, which is in the USA and has significantly impacted their poultry industry. This action was conducted in collaboration with the CaribVET, which provided technical input and oversight.

<table>
<thead>
<tr>
<th>Countries</th>
<th>Number of Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Antigua and Barbuda</td>
<td>40</td>
</tr>
<tr>
<td>Barbados</td>
<td>96</td>
</tr>
<tr>
<td>Dominica</td>
<td>40</td>
</tr>
<tr>
<td>Guyana</td>
<td>50</td>
</tr>
<tr>
<td>St Lucia</td>
<td>35</td>
</tr>
<tr>
<td>St Kitts and Nevis</td>
<td>30</td>
</tr>
<tr>
<td>St Vincent and the Grenadines</td>
<td>45</td>
</tr>
<tr>
<td>Trinidad and Tobago</td>
<td>147</td>
</tr>
<tr>
<td>Suriname</td>
<td>30</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>513</strong></td>
</tr>
</tbody>
</table>

In relation to the way forward:
The Ministries of Agriculture are to follow-up with farmers on the status of their bio-security practices and conduct audits to ascertain the areas of weakness that have to be corrected, as well as the cost of making the necessary corrections. In addition, follow-up workshops are to be conducted in farming communities to increase the knowledge base of all poultry farmers in each country. The Ministries of Agriculture are to assist farmers in putting in place basic bio-security and avian influenza preventative measures on their farms.

**FOOD SAFETY**

(ix) **Good Agricultural Practice (GAP) Audit Training**

Five national workshops, held in collaboration with the Organisation of Eastern Caribbean States (OECS) Commission between March and April 2016, trained extension and field officers in the principles and practices of auditing farms against GAP Standards. This action sought, specifically, to support national efforts for quality improvement and compliance for international trade requirements.

The training assisted the participants to:
- Better understand the GLOBALGAP certification system and apply the relevant aspects (in particular control points and compliance criteria) for the conduct of a crop-based (fruits and vegetables) audit;
- Understand the role of a GAP audit in measuring the effectiveness of farm practices and for meeting regulatory or other client requirements; and
- Describe the general principles of GAP auditing and apply the methodology for conducting an audit.
A total of 85 persons from the five countries participated in the training.

<table>
<thead>
<tr>
<th>Countries</th>
<th>Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Antigua and Barbuda</td>
<td>18</td>
</tr>
<tr>
<td>Dominica</td>
<td>20</td>
</tr>
<tr>
<td>St. Kitts and Nevis</td>
<td>14</td>
</tr>
<tr>
<td>St. Lucia</td>
<td>22</td>
</tr>
<tr>
<td>St. Vincent and the Grenadines</td>
<td>11</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>85</strong></td>
</tr>
</tbody>
</table>

HAZARD ANALYSIS AND CRITICAL CONTROL POINT (HACCP)

The HACCP system is a management system focusing on the prevention of problems in order to assure the production of food products that are safe to consume. It is based on a common-sense application of technical and scientific principles to the food production process from production/harvest to consumption. The HACCP system identifies specific hazards and the measures for their control to ensure the safety of food. The application of the HACCP system can aid inspection by food control regulatory authorities and promote international trade by increasing buyers' confidence. HACCP has become one of the most widely-used food safety system worldwide. In 2004, the European Union adopted several new regulations on the hygiene of foods, including one mandating that effective January 01, 2006, all food business operators implement procedures based on HACCP principles.

**Capacity Building of Public and Private Sector in HACCP Systems**

The Grocery Manufacturers Association Science and Education Foundation (GMA SEF) was contracted to build the capacity of public sector professionals and private sector stakeholders in HACCP to support the implementation of SPS measures and contribute to increased trade opportunities in CARIFORUM countries. The goal of the HACCP action is to develop sustainable food safety training capacity to support alignment with international SPS Measures within the private and public sectors in the 15 designated CARIFORUM countries. In addition, the action sought to demonstrate the successful application of food safety compliance in a number of key food-processing companies. The more specific deliverables are: (i) at least one certified HACCP trainer for each of the 15 CARIFORUM countries; (ii) raised HACCP awareness and knowledge within the private sector; and, (iii) HACCP plans produced for companies based on demand.

The programme consisted of two phases which were conducted over nine months, starting March 2016. Phase 1 involved the conduct of a Train the Trainers (TtT) Programme and Phase II involved general training of HACCP Practitioners.

**Train the Trainers (TtT) Programme**

Participants were selected from all 15 CARIFORUM countries and 67 applications were received from the public and private sectors. Recruits were carefully screened based on factors that include the number of years in a food safety or regulatory position, previous training experience, current job responsibilities, prior HACCP experience and a letter of support from employer. The letter of support was critical in demonstrating management support for the individual in implementing HACCP at his/her organisation upon completion of the training programme. In total, they were 29 candidates selected: 15 public sector and 14 private sector. Participants' fields of expertise included, small business owners and agri-producers, instructors/lecturers, laboratory technicians, veterinarians, technical advisors and environmental health officers.
The successful candidates commenced training with a self-paced HACCP online introductory course, which provided an overview of prerequisite programmes and introduced the seven principles of HACCP. After completion of the online course, students participated in a two-day face-to-face training in Barbados, where the principles of HACCP were reinforced through hands-on exercises. At the end of the workshop, participants were assigned case studies, which they used to develop HACCP plans (practicum). Approximately one-month following the Barbados workshop, participants attended the Train-the-Trainer workshop in Washington, D.C. At this final workshop, advanced information on HACCP was presented and the projects evaluated. At the end of the workshop, the participants received international certification as HACCP Trainers. Eight of these trainers assisted the expert trainers in the second phase of the HACCP Practitioners Training Programme.

**Phase 1** concluded with 27 participants from the private and public sectors successfully completing all of the training. Participant satisfaction with all three elements of the training programme was high with participants reported as being either, “satisfied” or “very satisfied” with the two-in-person trainings. The majority of students reported an increase in knowledge post training from, “average” to “high”. Pre- and post-knowledge tests administered during the in-person trainings demonstrated an increase in knowledge with most students scoring higher on the post-test. The average (mean) score on the pre- and post-tests during the Barbados training was 74.83 and 83.10 respectively. The average (mean) score on the pre- and post-tests during the D.C. training was 80.31 and 86.35 respectively. The students identified “Organising and Managing HACCP Systems”, as well as “Hazard Analysis” as major training needs. When asked to identify barriers to HACCP implementation in the Caribbean, the most frequent responses were, “personnel not trained in HACCP”, “weak enforcement of regulations”, “lack of adequate laboratory” and “inadequate cold storage”. The major training barrier identified by students was, “lack of prior experience”. Instructors reported that students achieved a majority of the programme’s learning outcomes and were fully engaged but some lacked foundational knowledge on GMPs, which proved to be a barrier to understanding.

An assessment of the training showed that it was relevant, well received by the participants, and that the knowledge was retained. Further opportunities for the participants to deliver training and practice their skills will further reinforce this expertise. Eight of the certified HACCP trainers from Phase 1 (TtT) were invited to assist in the HACCP Practitioners Training; as a first step in fully employing their HACCP TtT certification. Table 2 provides feedback on the impact of the training by participants.

Independent feedback from the participants on the utilisation of the information has been positive and there are indications that the knowledge gained from the training is already being utilised. E.g. The trainers from St. Kitts and Nevis have completed two national one-day introductory workshops in HACCP (August 2016). Both private and public sector personnel were targeted and a total of 43 persons were trained. In Barbados, one trainer is providing training in developing HACCP plans in a competency based training programme for agro-food processors being implemented by IICA. In addition, trainers in Antigua and Barbuda, and Dominica have also planned workshops for the coming months.

**Phase II - HACCP Training for Private Sector Practitioners**

Four sub-regional workshops were successfully executed to train 60 HACCP practitioners (from the private sector) across the CARFORUM region. Similar to the TtT course, the private sector practitioner course was initiated with an online course and, thereafter, a two-day face-to-face training session where the principles of HACCP were reinforced through hands-on exercises. Workshops were conducted in St. Lucia, Jamaica, Grenada and Trinidad and Tobago. Persons receiving training in Phase 1 were mentored to deliver these HACCP trainings. The evaluation of the data from these workshops are currently being analysed.
### Table 2: Testimonials of the Trainees from the IICA-GMA HACCP Train the Trainers 2016

<table>
<thead>
<tr>
<th>Name And Country</th>
<th>Benefits Derived</th>
<th>Future Plans</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ozaye Dobson, Guyana</td>
<td>HACCP training received is relevant and applicable in ensuring quality assurance and food safety of fish and fishery products.</td>
<td>As seafood Inspectors, HACCP Training can be used in the future to train Food Product Processors of meat and seafood products to ensure their products meet food safety/hygiene requirements and compliance with National Fishery Products Regulations and Act.</td>
</tr>
<tr>
<td>Matthew Ramdeen, Jamaica</td>
<td>This training programme has granted me a firmer grasp on how to apply and even teach HACCP principles to local food enterprises; whereas before I only had a vague understanding of what exactly is involved in HACCP. I can now better articulate the importance of HACCP to colleagues in a context with which they can identify.</td>
<td>With the information gleaned from the training course, we now have the capacity to conduct HACCP awareness sessions with local food enterprises that are interested in expanding their export reach. We are also better positioned to join in local food safety committees and play a more integral role in national food safety initiatives.</td>
</tr>
<tr>
<td>Kenly C. Edwards, Grenada</td>
<td>The training received in HACCP has better equipped and prepared me to deal with food safety issues and also showed its relevance and applicability in today's business world.</td>
<td>The knowledge and skills gained through the HACCP training will also allow me to give back to my country, particularly through education by means of workshops, trainings and other forums.</td>
</tr>
<tr>
<td>Melissa Agbeko, Trinidad and Tobago</td>
<td>The HACCP training has concretised my previous knowledge of food safety, and has increased my confidence in the instruction of HACCP to adult learners.</td>
<td>I am grateful to have been afforded such a unique opportunity to undergo this HACCP training. Therefore, in paying it forward, training workshops and seminars targeting various groups within the sector, are planned.</td>
</tr>
<tr>
<td>Janelle Yard-Blackman, Trinidad and Tobago</td>
<td>GMA-IICA HACCP training has enhanced my understanding of HACCP and its applications at the local, regional and international levels.</td>
<td>The training has created an avenue through which I can pilot the development of a HACCP/Food Safety culture among UWI graduates and stakeholders in the Food Manufacturing Sector.</td>
</tr>
<tr>
<td>Name And Country</td>
<td>Benefits Derived</td>
<td>Future Plans</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>----------------------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Stella Murielle Barthe, Haiti</td>
<td>The HACCP training increased my knowledge of food safety and also how to train adults. It will help me to concretise my dreams.</td>
<td>With the knowledge I have now, I am ready to work both with the public and private sectors/all entities in order to increase the knowledge of people working in the agro-industry sector. My plan for the near future is to have a professional school/or training centre in order to train people working in the agro-industry sector in HACCP, HR and Social Compliance.</td>
</tr>
<tr>
<td>Andre Charles, St Lucia</td>
<td>The GMA training was complete and thorough for the HACCP Train the Trainer. I found it well presented with informative and knowledgeable trainers. Also, the adult learning activities presented were insightful with demonstration of transferring knowledge and principles.</td>
<td>Skills and information attained will be used to conduct national HACCP trainings and for full implementation of HACCP at workplace and raw material supply company.</td>
</tr>
<tr>
<td>Kathleen Margo Forde, Antigua and Barbuda</td>
<td>The training received through the IICA/GMA HACCP Training of Trainers course was well presented and provided an opportunity to enhance my understanding of HACCP concepts and adult teaching techniques; the links provided to relevant information sources are invaluable.</td>
<td>It is my intention to share the knowledge gained with persons involved in the food industry in the public and private sectors in Antigua and Barbuda and beyond.</td>
</tr>
<tr>
<td>Graciëlla Troenorendjo, Suriname</td>
<td>The training received in HACCP made me realise the great importance of food safety and has helped me go through evaluation of the current HACCP plan in the company.</td>
<td>The information gained at the training is useful for my upcoming trainings for staff and personnel and will help develop my teaching styles in the various college Institutes in Suriname.</td>
</tr>
<tr>
<td>Sharmine Melville-Edwin, St Lucia</td>
<td>The HACCP training was well organised and delivered by knowledgeable and experienced facilitators. I have gained a better understanding of HACCP and the training has fostered greater competency in the execution of my duties in Veterinary Public Health.</td>
<td>Plans are already unfolding for training exercises to be conducted in Saint Lucia with various stakeholders in the agricultural sector in order to improve food safety and quality in the sector.</td>
</tr>
<tr>
<td>Name And Country</td>
<td>Benefits Derived</td>
<td>Future Plans</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Alisa Martin, St Vincent &amp; the Grenadines</td>
<td>The GMA/IICA training was a good one. It enhances my knowledge of the HACCP principles and their applications. I was able to understand the differences and/or similarities between FDA, USDA/FSIS, FMSA and the EU regulations. As a result I can apply the techniques taught when teaching the various components of HACCP.</td>
<td>Fishing Industry - the Fisheries Division Quality Assurance Staff since we are responsible for inspections of fishery products and fish processing establishments; the Fish Processors or Business Operators in developing their HACCP plans, if there is none in place, or monitoring and review of any existing plans; the Fishers since the factors affecting food safety and the value chain begins with them and their on-board handling.</td>
</tr>
<tr>
<td>Desroy Tate, St Kitts and Nevis</td>
<td>The GMA/IICA training was very beneficial. It has enhanced my understanding of food safety systems in a more formalised manner. It has broadened my scope of knowledge from the concepts of HACCP to legislation pertaining to food safety systems both within the regional framework to an international perspective.</td>
<td>The knowledge gained will be applied to my current job environment and training sessions will be organised at the national level to assist manufacturers and agro processors.</td>
</tr>
</tbody>
</table>
| Misauri Valerio, Dominican Republic | This training helped me understand in a more deep way HACCP plans oriented in more than one subject. Now I have good knowledge about how to develop HACCP plans in several areas of the food industry. It also was an incredible source to learn how to distribute knowledge and practical ways to ensure better production according to international food safety rules. | - Train other people in HACCP in an understandable way.  
- Supervise better, with more efficiency all the procedure and documentation based on HACCP in the area of meat production.  
- Prepare a HACCP plan for a facility (specifically in my area of inlays and meat).  
- Combine easy methods of food safety and follow HACCP principles for small facilities.  
- Work as a facilitator to enhance methods for exportation matters.                                                                                                                                                         |
<p>| Ryan Hopkins, Grenada         | The training by GMA/IICA has helped me to further understand HACCP in a more in-depth manner as it relates to food safety.                                                                                                                                                                                                                           | It will help me implement HACCP in my place of work and any food service establishments that I may be called upon to help implement an HACCP programme and give back to the community after having been afforded the opportunity to learn more about HACCP.  |</p>
<table>
<thead>
<tr>
<th>Name And Country</th>
<th>Benefits Derived</th>
<th>Future Plans</th>
</tr>
</thead>
<tbody>
<tr>
<td>Julie-Ann Laudat, Antigua and Barbuda</td>
<td>The training enhanced my understanding of HACCP principles and I gained more knowledge about training adults. Definitely sharpened my skills in food safety.</td>
<td>I plan to conduct training with agro-processors to help them gain better compliance with food safety systems and, hopefully, improve their market access.</td>
</tr>
<tr>
<td>Leonard King, Barbados</td>
<td>The GMA training was informative and provided a forum for one's continuing professional development and provided a pathway of knowledge and skills approaches. The training also provided effective approaches which should help develop awareness of learning strategies and techniques for targeted groups, keeping in mind the various learning styles of different age groups.</td>
<td>I am hoping to use and apply acquired knowledge and skills across the food industry.</td>
</tr>
<tr>
<td>Kathlyn Robinson, Dominica</td>
<td>The GMA-IICA HACCP Train the Trainer helped formalise my over 10 years of experiential learning of the HACCP system, thus giving credibility to the knowledge I will be passing on to others in the industry.</td>
<td>I feel more competent and confident in passing on this knowledge to persons in the industry, being assured that they will benefit more from the 360 approach I now possess - experience and theory. This training has provided me the boost to catapult my career as a Food Safety expert both locally and regionally.</td>
</tr>
<tr>
<td>Alphonso Clarke, St Kitts and Nevis</td>
<td>The HACCP training has provided me with knowledge in relation to food safety, as a result, I can now make an indelible contribution to my country in food safety issues.</td>
<td>It is my intention to share the information gained from the HACCP training through a series of workshops, not only with my colleagues, but with other key stakeholders in the food industry, to ensure food safety for our people.</td>
</tr>
<tr>
<td>Kent Copiel, Dominica</td>
<td>The GMA training equipped me with the skill sets to train and support the food industry in the area of HACCP.</td>
<td>This opportunity is consistent with IICA's technical cooperation programme, and therefore I will be assisting the industry in Dominica through developing capacities within the private and public sector on HACCP and food safety.</td>
</tr>
<tr>
<td>Name And Country</td>
<td>Benefits Derived</td>
<td>Future Plans</td>
</tr>
<tr>
<td>------------------</td>
<td>------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Ortwin Tzib,</td>
<td>GMA/IICA training in HACCP has enhanced my knowledge, in further understanding and in applying the system in the different sectors of the industry.</td>
<td>The various valuable material and resources shared will be highly used in training stakeholders in improving food safety within their scope of production. It also assisted me in doing audits of HACCP Plans submitted for review to the Authority. I am quite sure that resources and information learned will be used as important tools in the evaluation and approval of plans.</td>
</tr>
<tr>
<td>Belize</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pricilla Torres,</td>
<td>After having gained the training on HACCP food safety, I am better equipped to apply to our operation, and having people working in the factory to understand the importance of food safety.</td>
<td>We have taken the first step in reviewing our existing programme Through the training and implementing the HACCP plan into operation. We as processors will now make efforts to address deficiencies in our operation and more so understanding the food supply chain farm to table.</td>
</tr>
<tr>
<td>Guyana</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(xii) Improved Food Safety Management System for the Rum Sector
Towards building trade competitiveness in the Rum Sector in the CARIFORUM Region, 12 firms within the Rum Sector from seven countries (Barbados, Grenada, Dominica, Haiti, Jamaica, Belize and the Dominican Republic) were selected to enhance their Food Safety Management (FSM) systems. The core activity is to provide technical assistance to the selected firms to establish a FSM system such as HACCP, ISO 22000 or FSSC 22000.

GAP Assessment Checklists were prepared prior to visiting each company to conduct Food Safety GAP Audits against the FSM Standard considered to be most relevant to the Firm.

The company selection process was based on a number of companies completing a questionnaire and submitting a letter of commitment to confirm their interest in the programme. The applications were evaluated based on the following criteria:

- Company does not have a Food Safety Management System in place.
- Company is not certified to a GFSI benchmarked Standard.
- The level of development of Food Safety Support Programmes and a formal Food Safety System.
- Infrastructural support system to facilitate implementation of Pre-requisite programmes, monitoring and testing.

Companies that were selected to participate in the programme were visited and GAP Audited against the FSM considered to be most relevant to the firm. A final determination of the FSM System to be implemented for each company was determined based on the company-specific action plans, which were generated from the GAP Audit Reports. The company specific action plans were developed giving consideration to deficiencies in complying with specific criteria related to food safety controls, good manufacturing practices, training requirements and infrastructural improvement requirements to meet basic food safety conditions for food manufacturing.
Table 3: Companies Benefitting from the Strengthening of Food Safety Management System Development for the Rum Sector

<table>
<thead>
<tr>
<th>Country</th>
<th>Company</th>
<th>No. of Employees</th>
<th>Food Safety Certification Held</th>
<th>FSMS to be Implemented</th>
</tr>
</thead>
<tbody>
<tr>
<td>St Lucia</td>
<td>St Lucia Distillers Group of Companies</td>
<td>169</td>
<td>HACCP</td>
<td>PRPs in preparation for FSSC 22000</td>
</tr>
<tr>
<td>Dominica</td>
<td>Shillingford Estate</td>
<td>6</td>
<td>None</td>
<td>Codex GMP</td>
</tr>
<tr>
<td>Suriname</td>
<td>Suriname Alcoholic Bev.</td>
<td>100</td>
<td>ISO 22000</td>
<td>PRPs in preparation for FSSC 22000</td>
</tr>
<tr>
<td>Barbados</td>
<td>Mt. Gay</td>
<td>120</td>
<td>None</td>
<td>ISO 22000</td>
</tr>
<tr>
<td>Grenada</td>
<td>River Antoine</td>
<td>78</td>
<td>None</td>
<td>Codex GMP</td>
</tr>
<tr>
<td>Grenada</td>
<td>Westerhall Estate</td>
<td>30</td>
<td>None</td>
<td>Codex GMP</td>
</tr>
<tr>
<td>Grenada</td>
<td>Grenada Distillers</td>
<td>53</td>
<td>HACCP</td>
<td>ISO 22000</td>
</tr>
<tr>
<td>Haiti</td>
<td>Societe Rhum Barbancourt</td>
<td>500</td>
<td>None</td>
<td>Codex GMP</td>
</tr>
<tr>
<td>Antigua &amp; Barbuda</td>
<td>Antigua Distillers Ltd.</td>
<td>28</td>
<td>None</td>
<td>FSSC 22000</td>
</tr>
<tr>
<td>Jamaica</td>
<td>Hampden Estate Distillery</td>
<td>73</td>
<td>None</td>
<td>Codex GMP</td>
</tr>
<tr>
<td>Jamaica</td>
<td>Clarendon Distillers Ltd.</td>
<td>58</td>
<td>None</td>
<td>Codex HACCP</td>
</tr>
<tr>
<td>Belize</td>
<td>Travellers Liquors</td>
<td>79</td>
<td>None</td>
<td>Codex GMP</td>
</tr>
<tr>
<td>Dominican Republic</td>
<td>Vinicola Del Norte</td>
<td>429</td>
<td>None</td>
<td>Codex HACCP</td>
</tr>
</tbody>
</table>

At the end of the action, it is expected that there will be:

- Increased awareness by the rum industry (especially smaller operators) regarding food safety requirements in the alcoholic beverages market and particularly in the spirits market.
- Action Plans for the establishment of FSM systems in rum companies (with short and long term goals).
- Food Safety Teams and company staff in the rum sector trained in HACCP/ISO 22000/ FSSC 22000 as appropriate.
- Manuals, handbooks and other relevant material for the rum sector.
- Participating rum-producing companies implementing HACCP and other FSM systems to increase access to export markets and the production of safe, high-quality products.
- Preparation of a detailed Work Plan describing the methodology and project scheduling for a minimum of 10 rum producing companies within CARICOM.
- The systems to be implemented to help the organisation achieve food safety and quality requirements. These will include Standard Operating Procedures (SOPs) and Sanitation Standard Operating Procedures (SSOPs), Prerequisite Programmes (PRPs), GMPs, HACCP Principles and ISO 22000 Food Safety Management Systems.
**National Food Safety Training**

**The Bahamas**

Three training workshops were held to strengthen the national food safety and certification system in The Bahamas. Seventy public sector professionals participated in training actions; 43 in ‘ServSafe Managers Certification Course’ (international course) and 27 in the ‘National Food Handlers Training Workshop’. Stakeholders trained included medical personnel, agriculture officers, marine resources officers, environmental health officers and customs officers.

**Dominica**

Global Food Law. The Head of the Plant Protection and Quarantine Unit, Ministry of Agriculture, Dominica, was selected for partial support to pursue an Online Masters of Science Degree in Global Food Law at the Michigan State College of Law. The programme covers subject areas such as International Food Law and Regulations, US Food Regulations, Food Safety and Labelling, Animal Health, World Trade and Food Safety, Regulation in EU, Codex, Biotechnology Law and Food Products, and Intellectual Property. As a result of this training, the student will be a resource to enhance the capacity in the sub-region to advise on matters relevant to food safety as it relates to international agreements, trade, and legislative modernisation. The programme started in January 2016.

**St Vincent and the Grenadines**

Food Inspection. Two Environmental Health Officers from St Vincent and the Grenadines (Ministry of Health, Wellness and the Environment - Public Health Department) were supported to attend an 18-week course in the inspection of meats and other foods. The programme is designed to equip the practitioner to apply the principles and practice of food quality control in relation to meat, milk, poultry and other foods; and develop the capacity to function within the relevant regulatory framework. The course is being conducted by the University of Technology, Jamaica, and started in March 2016.

**Trinidad and Tobago**

Basic Microbiology. Two professionals from the pack-house in the Division of Agriculture, Marine Affairs, Marketing and the Environment (DAMME) of the Tobago House of Assembly (THA) were supported for a training attachment in Basic Microbiology at the Caribbean Industrial Research Institute (CARIRI) Food Microbiology Laboratory, St Augustine, Trinidad. Follow-up activities by the participants include: conducting private sector awareness training and in-house staff awareness and training in microbiology.

Postharvest Technology Training. Two technical staff attached to DAMME (Packinghouse and Extension) attended a training course on post-harvest technology at the University of California, Davis, USA (June 12–26, 2016). The programme entailed classroom instruction, lab activities and field tours. Several topics were covered with the focus on keeping fresh produce safe. The topics ranged from ripening systems, postharvest diseases, handling, cooling systems and storage for fruits and vegetables, drying of vegetables, and storage of flowers.

Follow-up actions that are being conducted by the trainees include:

- Training of farmers on improved handling and hygienic practices to ensure produce safety;
- Advocate for more complementary Extension Service to transfer new technology;
- Lobby for a dedicated field officer for the packinghouse to monitor farming systems for safe production;
- Work with organisation to lobby Government for legislation or policy on food safety standards; and
- Greater attention must be paid to research and development.
Fresh Produce Safety Training. A two-day interactive training workshop on produce safety was held in Tobago, April 19–20, 2016. Topics covered included: global food safety problems, pre-harvest and post-harvest factors affecting quality and safety of fresh fruits and vegetable harvests and strategies to reduce losses, and food losses and the waste situation. Eighty-two participants benefited from the workshop including agricultural officers in extension and research, marketing officers, farmers, packinghouse operators, food service officers, agro-processors, food caterers, and government food service institutions. As a result of the training, efforts are being made to engage extension officers in more aspects of on-farm produce safety and to sustain the current public awareness campaign on produce safety.

**TRACEABILITY**

One important aspect of any good food safety system is the existence of an effective traceability and recall mechanism. Traceability is a business process that enables trading partners to follow products as they move from the field to retail store or food service operator. Each Traceability Partner must be able to identify the direct source (supplier) and direct recipient (customer) of the product. Traceability as a business process can be utilised for a variety of business purposes, including:

(i) Product Recalls/Market Withdrawals;
(ii) Regulatory Compliance;
(iii) Public Health Tracebacks;
(iv) Food Safety and Quality Assurance; and
(v) Process and Order Management.

The first priority of traceability is to protect the consumer through faster and precise identification of a product under review. This is critical if the product must be withdrawn from the supply chain. Without adequate traceability systems, less developed countries expose themselves to significant risks. The countries run the risk of exposing their populations to food imports/exports under false labeling and foods contaminated from various sources with no way to trace or recall such products at any point throughout the food chain. Traceability is necessary for exporting food to the major markets in Europe and North America but also domestically due to increased consumer awareness. Consumers are demanding the need to know the source of food, as well as the ingredients in their food.

Over the past year, two major actions have been undertaken to establish and or strengthen traceability systems in the public sector and private sector (small- and medium-sized enterprises (SMEs); (i) In collaboration with the FAO, a series of traceability pilot studies for key commodities in four countries have been developed; and (ii) large-scale training to build the capacity of public and private sector professionals in the development of traceability systems to support the implementation of SPS measures and contribute to increased trade opportunities in CARIFORUM countries.

(xiii) Development of Traceability Pilot Studies

Towards strengthening food safety systems for SME’s, the SPS Project collaborated with the FAO to evaluate the effectiveness of a Traceability Guidance Document. This document seeks to strengthen the capacity of the Region to rapidly respond to food safety events and includes: (i) Traceability practices from the supplier’s processing facility to the point of consumer sale; (ii) All levels of the product hierarchy, including pallets, cases and consumer items; and (iii) All supply chain segments including, suppliers, wholesalers, distributors, and retailers.

Based on the Guidance Document, traceability pilot studies were established in more than 15 SMEs across four countries (Dominica, Antigua and Barbuda, Barbados and Grenada) along the fresh produce, poultry, fisheries, condiments and spices value chains. The observations from the pilots were used to refine the guidance document to better address some of the challenges facing small operators.
The Traceability Guidance Document has assisted in improving the capacities of the target SME’s to respond rapidly to food safety events and will serve as a model for implementing traceability systems in other CARIFORUM countries. This document has been disseminated to private sector firms involved in the pilot study.

### Table 4: Traceability Pilots Studies – Participating Entities

<table>
<thead>
<tr>
<th>COMMODITY</th>
<th>COUNTRY</th>
<th>PILOT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cocoa</td>
<td>Grenada</td>
<td>Grenada Cocoa Association (GCA)</td>
</tr>
<tr>
<td>Condiments</td>
<td>Barbados</td>
<td>Choo’s</td>
</tr>
<tr>
<td>Condiments</td>
<td>Barbados</td>
<td>Jays</td>
</tr>
<tr>
<td>Fisheries</td>
<td>Barbados</td>
<td>Morgan Fish House</td>
</tr>
<tr>
<td>Fisheries</td>
<td>Barbados</td>
<td>Shorelinez</td>
</tr>
<tr>
<td>Fisheries</td>
<td>Grenada</td>
<td>Southern Fisherman Association (SFA)</td>
</tr>
<tr>
<td>Fresh Produce</td>
<td>Antigua and Barbuda</td>
<td>Epicurean (Supermarket) with 3 farmers</td>
</tr>
<tr>
<td>Fresh Produce</td>
<td>Dominica</td>
<td>Save a Lot (Supermarket) with 2 farmers</td>
</tr>
<tr>
<td>Fresh Produce</td>
<td>Dominica</td>
<td>Gregory Robin (Farmer)</td>
</tr>
<tr>
<td>Fresh Produce</td>
<td>Dominica</td>
<td>Ricky Joseph (Farmer)</td>
</tr>
<tr>
<td>Nutmeg</td>
<td>Grenada</td>
<td>Grenada Co-operative Nutmeg Association (GCNA)</td>
</tr>
<tr>
<td>Poultry</td>
<td>Barbados</td>
<td>Massy Stores</td>
</tr>
<tr>
<td>Poultry</td>
<td>Barbados</td>
<td>Star Chick Ltd.</td>
</tr>
<tr>
<td>Poultry</td>
<td>Barbados</td>
<td>Sunrise Chicks Inc.</td>
</tr>
<tr>
<td>Poultry</td>
<td>Barbados</td>
<td>The Chicken Stop Inc.</td>
</tr>
</tbody>
</table>

(xiv) **Capacity Building of Public and Private Sector in Traceability Systems**

The Institute for Food Technologists-Global Food Traceability Center (IFT-GFTC) was contracted to build the capacity of public and private sector professionals in the development of traceability systems to support the implementation of SPS measures and contribute to increased trade opportunities in CARIFORUM countries. The action consists of two Phases; the first targeting public and private sector personnel at the managerial and decision making levels and the second targeting private sector personnel operating in SMEs.

**Phase 1: Regional Workshop on the Principles and Practice of Traceability** (Specifically, decision makers, owners, plant managers, supervisors and team leaders in food safety, quality assurance, quality control).

A regional workshop was successfully completed in Barbados (July 26-27, 2016) for line managers and decision makers. A total of 25 food industry professionals from public and private sectors representing 12 countries participated. Entities represented included: SMEs (processors, producers), AHFS Agencies, Ministries of Agriculture, Bureaus of Standards, and Marketing Cooperatives. The disciplines of the participants were varied and comprised of, Chemistry, Food Safety, Food Production, Quality Control/Assurance, Agriculture, and Fisheries.

This regional workshop was aimed at addressing the principles and competitive advantage of implementing traceability systems and utilised examples and case studies on traceability best practices specific to processing facilities. Of note was the presentation by a representative of one of the SME’s involved in the
pilot studies, who outlined the benefits, lessons learnt and constraints faced through the implementation of the traceability systems in their operation.

**Phase 2: National Traceability Workshops for Private Sector** (August - November, 2016). Over the past three months, four of eight planned national workshops, geared towards private sector personnel across the CARIFORUM region, were held in Suriname (22), Belize (45), St Vincent and the Grenadines (26) and St Kitts and Nevis (36). The topics covered during these workshops are similar to the Phase I training, however the material presented is at a more practical level. It is hoped that through this capacity-building action, there will be an increased number of industry professionals trained in traceability and, as such, an increased number of firms/operations implementing traceability systems such that there is increased access to export markets and the production of safe, high-quality food.

**RISK ANALYSIS**

Risk analysis is the principal tool that countries are encouraged to use in assessing the level of risk associated with importing any commodity that may pose a sanitary or phytosanitary risk to the country. Risk analysis is the process that includes risk assessment, risk management and risk communication. Undertaking risk analysis for plant and animal and food safety is critical for meeting obligations under the SPS agreement.

Over the past year, efforts have been made to increase the cadre of professionals within the region that are skilled in risk analysis. The areas of focus have been pest risk analysis, pesticide risk analysis and food safety risk analysis. The first action was conducted at a national level, however the outputs from this training will be disseminated for use across the Region. Post-graduate training was also offered to two persons; in Pesticide Risk Management at the University of Cape Town, South Africa and regional training in Food Safety Risk Analysis, at the University of Nebraska, USA. It is hoped that in the coming months, additional training actions will be conducted in food safety risk analysis.

**REGIONAL ACTION**

(xv) **Medium Term Training in Pesticide Risk Analysis**

Through a competitive process, two CARIFORUM nationals from the Barbados Pesticide Control Board, Ministry of Agriculture, Food, Fisheries and Water Resource Management; and the Jamaica Pesticide Control Authority were selected to pursue a post-graduate diploma programme in Pesticide Risk Management (DPRM) at the University of Cape Town (UCT), South Africa. The DPRM is a part-time, flexible, learning programme with a substantial distance learning component using internet-based educational technology. It includes a mandatory two-week residential session at UCT at the beginning of the two-year cycle. The primary purpose of this qualification is to strengthen regulators and others in their ability and capacity to effectively manage, regulate and reduce pesticide risks. The programme began in February 2016 with two weeks of on-campus lectures at the University of Cape Town and thereafter the course will run online.

(xvi) **Food Safety Risk Analysis**

Towards supporting the implementation of SPS Measures, capacity building of public and private sector stakeholders in Food Safety Risk Analysis was initiated. Twenty-eight private and public sector stakeholders were selected from CARIFORUM countries to participate in a training course at the University of Nebraska, Lincoln (UNL) (Department of Food Science and Technology). The course which spans a five-month period (September 2016 to January 2017) seeks to: (i) raise the awareness and understanding of the importance of risk analysis in food safety, and (ii) build capacity to develop and utilise a risk analysis framework in science-based decisions in food and agriculture.

The course has two phases. The first phase involved a one-week workshop conducted at the UNL which primarily introduced participants to risk analysis principles applied to food safety issues, current applications
of risk analysis framework in national and international food safety authorities and international trade (September 26–29, 2016). The second phase of the course is the conduct of group projects, which span a fourteen-week period. Technical assistance and guidance is being provided by a Technical Team from the UNL. At the end of the fourteen weeks, each group is expected to give a presentation and deliver a project report via a distance learning platform. Once participants finish both the lectures and projects, certificates of completion of the training programme will be issued.

**NATIONAL ACTION**

(xvii) **Jamaica - Pest Risk Analysis (PRA) training**

A national training workshop was executed for 13 plant health officials in the discipline of pest risk analysis in Jamaica (February 15–19, 2016). The training aimed to generate qualified and effective Pest Risk Analysts who are sufficiently informed of the pest risk analysis process, improve the conduct of pest risk analyses including risk management assessments, and improve transparency in the application of phytosanitary measures. A critical aspect of this action is the development of a PRA Handbook that can be used in the Region.

The trainees were from the Plant Quarantine Unit, the Research and Development Division, and the Rural Agricultural Development Authority, which all reside in the Ministry of Agriculture and Fisheries. These organisations comprise the National Plant Protection Organisation (NPPO). As such, the training has strengthened Jamaica’s position as one of the NPPOs in the Region that uses pest risk analysis (PRA) for providing the rationale for implementing phytosanitary measures concerning the entry of plants and plant products, and to determine whether official controls should be applied.

The knowledge gained during the training will greatly enhance the confidence and skills of the NPPO’s existing pest risk analysts, and has equipped the local pest risk review team with the needed insights to facilitate informed and guided peer reviews as part of the local PRA process. Using the framework provided by ISPMs, the trainees crafted a criteria ranking and a PRA decision scheme which will be included in a PRA Handbook for Jamaica.

**PLANT QUARANTINE**

(xviii) **Regional Training Course on Plant Quarantine Principles and Procedures**

Support was provided for the UWI, USDA, IICA and FAO Regional Training Course on Plant Quarantine Principles and Procedures in Trinidad and Tobago (August 01–12, 2016). The main objective of the Course was to improve the phytosanitary capacities and capabilities of Caribbean countries so that they meet their obligations under the international agreements to which they are signatory, notably the International Plant Protection Conventions (IPPC) and the World Trade Organisation Agreement on the Application of Sanitary and Phytosanitary Measures (the SPS Agreement). Such improvements also serve to increase the credibility of countries with their trading partners, with respect to the transparent application of phytosanitary measures.

The plant quarantine course is unique in nature, in that, it was designed by the UWI, USDA, IICA and FAO to meet the specific needs of the Caribbean Region. Currently, there is no other course being offered by any other University/Institution in the Region that extensively covers the topic of plant quarantine. Plant Quarantine Officers from twelve countries were supported to attend the workshop; Antigua and Barbuda, The Bahamas, Barbados, Belize, Dominica, the Dominican Republic, Grenada, Haiti, St Kitts and Nevis, St Lucia, St Vincent and the Grenadines, and Trinidad and Tobago.
ONE HEALTH

One-Health Leadership Series (UWI/PAHO)
The One Health Leadership Series, a sub-component of the One Health, One Caribbean, One Love Project funded by the EU, seeks to train and connect a core regional group of One Health Leaders across twelve countries. The series strengthens the capacity of the Caribbean veterinary, public health and environmental services to design and manage One Health policies, programmes and projects in order to develop more holistic scientific solutions to emerging and endemic problems that limit food security, public health, environmental health, and food safety. The series consists of five Modules:

- Module I: Introduction to One Health
- Module II: Interconnectivity for Food Security and Food Safety
- Module III: Environment and Health
- Module IV: Society and Health
- Module V: The Way Forward for the Caribbean One Health Network

The approach used in the Leadership Series is ‘learning by doing’. The Modules seek to explain and apply the concepts of human dimensions of health and community in a One-Health context. Besides the five themed workshops, the participants are working in multi-sectoral country teams to develop and manage small-scale projects at the interface between public health, agriculture and the environment.

Over the past two years, the SPS Project has partnered with the One-Health Leadership Series to support the participation of over 20 professionals from 11 countries. Two modules of the Leadership Series were held in December 2015 and June 2016. These modules included: Module III: ‘Environment and Health’ (December 01–04, 2015; Guyana) and Module IV: ‘Society and Health’ was held in Grenada (June 27–July 01, 2016).

Module III - Environment and Health (Guyana)

- Learning foci
  - One Health—environmental aspects of One Health, particularly climate change.
  - Leadership—being an effective agent of change.
- One Health learning goals
  - Understanding how health outcomes are determined by connections and relationships between social, biomedical and ecological factors.
  - Recognising the practical need and value of looking at problems using multiple perspectives, including a systems view.

Module IV: Society and Health (Grenada)

- Learning foci
  - Getting the most of working in teams, groups and communities.
- One Health learning goals
  - Have leaders build skills and comfort with applying key concepts.
  - Prepare leaders to be champions for building One Health Communities of Practice.
  - Building from Guyana, increase the involvement of the leaders in sessions and increase the role for peer-to-peer teaching.

The fifth and final module: The Way Forward for the Caribbean One Health Network, will be held in Trinidad from November 28 to December 02, 2016. This module will provide the One-Health Leaders an opportunity to present their national projects, share lessons learned through peer-to-peer learning, and chart a way forward for One Health in the Caribbean.
INFORMATION PRODUCT DEVELOPMENT

REGIONAL ACTION

(i) GAP and Pesticide Manuals
The GAP Audit manual and training programme curriculum for GAP Farm Audit were completed and used for training extension and field officers in the Eastern Caribbean States in audit techniques. (Refer to the GAP Audit Training workshops previously highlighted.) The Pest Management Operators Manual was also completed and presented at the annual meeting of the CGPC held in Belize (June 06–10, 2016). Both manuals are currently being prepared as e-publications for dissemination to stakeholders.

NATIONAL ACTION

(ii) Jamaica - Food Control Manual
A Manual for the Official Controls of Food Safety is being developed in Jamaica. The Food Control Manual seeks to outline the functions of the food safety regulatory agencies along the food chain from conception to consumption. This is being developed in Jamaica and will assist in strengthening food safety management systems. This action should be completed by the end of 2016.

Action 3.3: Strengthening and Enhancing Laboratory Systems and Networks

OVIs

1. A mechanism exists to network laboratories within the Region offering services to the AHFS and fisheries sectors.
2. Increase in the number of accredited laboratories.
3. Increase in the number of selected laboratories conducting tests and increase in the number of tests related to agricultural and fisheries exports.

Specific Actions to Achieve the OVIs

- Establish/strengthen national and regional laboratory networks for improved rationalisation of use of labs in Region.
- Identify selected laboratories for accreditation and provide technical assistance to assist laboratories with attaining accreditation.
- Support training for laboratory staff in member states.

Progress to Date (Action 30% complete)

(i) Laboratory Accreditation
Two laboratories were selected for assistance to attain accreditation: (i) Fisheries Division Laboratory of the Ministry of Agriculture, Forestry, Fisheries and Rural Transformation, St Vincent and the Grenadines; and (ii) Belize Agricultural Health Authority (BAHA) Laboratory. This action is being done in collaboration with CROSQ, which is implementing the Conformity Assessment Component of the 10th EDF Technical Barriers to Trade (TBT) Project. Since CROSQ is the agency with technical expertise in the area of conformity assessment and laboratory accreditation, it is deemed that this collaboration (mentioned in the Description of Actions of the SPS Project) is the most effective and practical approach.

Selection of the laboratories. The laboratories were selected based on a comprehensive methodology developed by CROSQ to select laboratories for consideration for accreditation under the TBT Project.
The criteria for selection included:
- Contribution to facilitating regional and international trade
- Provision of certificates of conformity
- Evidence of the implementation of a management system
- Availability of resources to facilitate sustainability of accreditation
- Importance to national development plan and interests

The labs will be provided with assistance in the following areas: (i) technical assistance to identify and fill gaps in the laboratory quality management system, (ii) training, (iii) procurement of small pieces of equipment where needed, and (iv) payment of accreditation fee.

Attaining accreditation will be a significant achievement and will assist private sector stakeholders with meeting market access requirements.

**Status** - Initial assessments of the two laboratories were conducted. These assessments benchmarked the laboratories against international standards and identified gaps and areas for intervention. For the laboratory in Belize, equipment has been procured and the consultant made a second visit to determine the process of implementation of the recommended actions. In the case of St Vincent and the Grenadines, the actions have been cancelled due to the inability of the laboratory to meet the critical deadlines that are required for the accreditation to be completed by the end of the SPS Project.

**Action 3.4: Identifying Private Industry Standards Impacting Key Export Areas and Analysing them with a View to Capacity Building**

**OVIs**

1. Report of study to determine external constraints including private standards applicability to key export areas available to all Member States.
2. Increased understanding by Member States of the requirements and implications of private industry.

**Specific Action to Achieve the OVI**

Assess the use of private industry standards in the Region and the opportunities and limitations for adoption, as well as the impact for non-adoption.

**Progress to Date (Action 100% complete)**

An assessment was conducted of the technical (specifications for compliance) and economic impact of implementing private standards on small farmers, processors and exporters in CARIFORUM countries. The assessment included:
- Identifying the types of private standards in the agricultural and fisheries sectors that are likely to affect small farmers, processors and exporters;
- Evaluating the financial cost of implementation and compliance, including certification/verification;
- Determining the associated economic loss (volume and value) of production or exports due to the inability of farmers, processors and exporters to comply with private standards;
- Identifying significant market access criteria and issues affecting the types of products exported, compliance with the private standard, potential exporting opportunities, and raw material inputs;
- Identifying capacity building initiatives and recommendations to address challenges and opportunities for farmers, processors and exporters complying with private standards.
The assessment was done through surveys and country missions to gather data on the impact of private industry standards on CARIFORUM countries, specifically, market access, cost of compliance and poverty alleviation/creation. Countries visited included: Belize, the Dominican Republic, Jamaica, and St Vincent and the Grenadines.

Summary of Findings

Market access

This study differentiates between public and private standards and summarises their importance in national, regional and international trade. While public standards (government to government) have existed for many years, the private standards are a relatively new phenomena focusing on food safety and quality, environmental, ethical and social issues.

Private standards (or company food safety requirements) are often owned and implemented by large retailers (mainly supermarkets) and restaurant chains. They contain very detailed criteria in the form of certification schemes and require significant financial and human resource investments by small- and medium-size enterprises (SMEs) in order to become certified and comply with annual audits. For the most part, there is no price premium received by the SMEs—for those who obtain and maintain certification. The main benefit of certification to SMEs is the security of being in the export market.

Cost of Compliance

Processing facilities often require the largest financial and human resource investment in order to comply with private standards. Expenditures of greater than US$1 million is not uncommon and the hiring of Quality Management and Food Safety staff is typical.

At the SME level, there are numerous barriers to compliance with private standards but the major one concerns the transition from traditional farming methods to modern practices, especially regarding documentation and record keeping. With private certification schemes, the process is as important as the product.

One particularly costly irritant to processors is the need for multiple certifications, which involves separate audits by each company/certification scheme for initial certification and annual compliance audits. The Global Food Safety Initiative has the slogan: ‘Once certified, accepted everywhere’, but this is not working in practice, at least not in CARIFORUM countries. Recommendations are made in this report to encourage SMEs to operate in a collective fashion and reduce their compliance costs by seeking public-private partnerships.

Poverty (alleviation/creation)

Not all agricultural and fisheries production can be absorbed on domestic markets. Exports are therefore essential for foreign exchange, job creation and income to SMEs and their community.

All SMEs are not equal when it comes to the ability to meet public and private standards and many will be satisfied selling to local formal and informal markets. SMEs will not be able to achieve the modern production methods required to comply with private certification schemes without additional assistance. Working in clusters and establishing relationships with exporters and processors is a model that seems to work best.

Conclusions

While the focus of the study was private standards and their certification schemes, serious value chain deficiencies were found to exist in different combinations, in different CARIFORUM countries.
Actions 3.5 and 3.6: Establishing National and Regional Environmental Monitoring Programmes and National (Aquaculture) and Farm Level Residue Monitoring Programmes

National environmental and residue monitoring programmes do not exist in many CARIFORUM countries. Such programmes are necessary in order to guarantee the safety of the raw materials landed in the countries from the sea to produce fisheries products. National and regional environmental monitoring programmes are being established to monitor accidental contaminants such as heavy metals (e.g. mercury, lead, and cadmium), pesticides and herbicides (e.g. chlorinated substances). National and environmental residue monitoring programmes are also being developed for aquaculture operations.

OVIs

National environmental monitoring and residue monitoring plans developed for CARIFORUM countries to support trade within the fisheries sub-sector

Specific Actions to Achieve the OVIs

Environmental monitoring programmes.
- Assess the status of fish quality along the fish value chain and develop a programme for quality assurance and safety;
- Collect data along the value chain; and
- Develop food safety operational manuals (field/environmental, laboratory, market, and trade) to support the activities of designated persons and/or entities responsible for the safety of fishery products in countries.

National (aquaculture) farm level residue monitoring programmes.
- Assess current status of residue monitoring for drugs in the fish and fish products which are used in the aquaculture farm operations.
- Design and implement appropriate programmes.

Progress to Date (Action 35% complete)

With the aim of improving food safety in the fisheries sub-sector, capacity building actions are being undertaken to improve environmental and residue monitoring programmes for fisheries and aquaculture operations. More specifically, this involves the training of regulatory and industry personnel in health and food safety in fisheries and aquaculture to meet the SPS requirements of international trade in areas such as inspection, import/export certification, diagnostics, risk assessment, surveillance and reporting. Such actions will contribute to ensuring safe food standards for fisheries products in the region, while meeting the requirements of the region's trading partners worldwide.

(i) Capacity Building of Public and Private Sector Stakeholders in SPS Measures

Towards the development of the fisheries sub-sector, 20 fisheries professionals with responsibility for SPS management from 12 CARIFORUM Countries, were trained in SPS measures and the institutional arrangements required for optimised performance of the fisheries and aquaculture sectors. Training took place at the United Nations University – Fisheries Training Programme (UNU-FTP) in Iceland (April 7–30, 2016). The course focused on key aspects of SPS measures, in particular, how implementation can be achieved through the development of SPS guidelines, and how proper management of marine resources, pre- and post-harvest, can maximise economic and social benefits. Also included were, the role of SPS measures in enhancing food safety and quality, and how such measures may be implemented, monitored, and
evaluated. Participants were introduced to the elements of a modern fisheries sector. The course consisted of lectures and visits to a range of fisheries companies.

(ii) Capacity Building of Public Sector Stakeholders in SPS Measures
Fellowships were awarded to two public sector professionals from Suriname and Jamaica to participate in a six-month training course in Quality Management of Fish Handling and Processing, at the UNU-FTP (September 2016 to February 2017; Iceland). The selection of candidates was through a competitive process led by the CRFM and the UNU-FTP.

SUMMARY OUTCOMES and CONCLUSION for CAPACITY BUILDING

- Capacity of over 1,350 regulatory personnel and private sector stakeholders strengthened in key AHFS areas such as inspection, surveillance, emergency response, food safety management systems (e.g. GAP, HACCP, traceability).
- Twenty-seven private sector entities received direct technical assistance in Food Safety Management and Traceability.
- 2 manuals and 3 bulletins were completed for improving capacities of public and private sector stakeholders in GAP and pesticide management.

Regulatory personnel and private sector stakeholders were trained across the Region in the various disciplines of animal and plant health, and food safety, thereby allowing them to carry out their functions more effectively and efficiently. The increased capacity provided by the training will lead to an overall improvement of the AHFS systems of the countries and the facilitation of trade intra and extra-regionally.

In addition, the trainings have created an awareness among private sector institutions of the importance of SPS systems.
**Table 5:** Summary of Public and Private Sector Capacity Building Actions in key AHFS Areas (October 01, 2015–September 30, 2016)

<table>
<thead>
<tr>
<th>AHFS AREA</th>
<th>Scale of the Action</th>
<th>Training Workshops</th>
<th>Number of Participants Supported/Beneficiaries</th>
<th>Countries Benefiting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diagnostics</td>
<td>Regional Action</td>
<td>First Responders Diagnostics of Priority Diseases. UWI/PAHO/EU One-Health Project (March–April 2016; SLU, GUY, DR)</td>
<td>180</td>
<td>SLU, GUY, DR</td>
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<tr>
<td>Diagnostics</td>
<td>Regional Action</td>
<td>Leptospirosis Diagnostic Methods. CaribVET, PAHO and the Ministry of Health, Barbados (May 2016)</td>
<td>16</td>
<td>BDOS, GUY, HAI, SUR, TT, JAM, DOM, DR, SKN, SLU, GRN</td>
</tr>
<tr>
<td>Diagnostics</td>
<td>Regional Action</td>
<td>Diagnostics Tests for Avian Influenza Diseases. CaribVET, One-health Project, Jamaica (September 16–19, 2016).</td>
<td>8</td>
<td>DOM, GUY, JAM, SKN, SLU, SVG, SUR</td>
</tr>
<tr>
<td>Diagnostics</td>
<td>National Action</td>
<td>PCR Methods for Avian Influenza and Other Viral and Bacterial Diseases. CIRAD-INRA (October 2015; Guadeloupe)</td>
<td>2</td>
<td>BDOS</td>
</tr>
<tr>
<td>One-Health</td>
<td>Regional Action</td>
<td>One-Health Leadership Series – Four Module Series over two years. Two modules conducted, in collaboration with the EU-funded ‘One Health, One Caribbean, One Love Project’ (December 2015 [Guyana] and June 2016 [Grenada]).</td>
<td>36</td>
<td>BDOS, BZ, DOM, GRN, GUY, HAI, JAM, SLU, SVG, SUR, TT</td>
</tr>
<tr>
<td>Plant Quarantine/Inspection</td>
<td>Regional Action</td>
<td>UWI/USDA/FAO/IICA Plant Quarantine Principles and Procedures Course. (August 2016, Trinidad and Tobago)</td>
<td>12</td>
<td>ANU, BDOS, BHA, BZ, DOM, DR, GRN, HAI, SLU, SKN, SVG, TT</td>
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<tr>
<td>Surveillance</td>
<td>Regional Action</td>
<td>Antimicrobial Use and Antimicrobial Resistance in Agriculture Training. In collaboration with the Ohio State University, Columbus, Ohio, USA (December 2015)</td>
<td>16</td>
<td>ANU, BHA, BDOS, BZ, DOM, DR, GUY, HAI, JAM, SKN, SLU, SVG, TT</td>
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<tr>
<td>Surveillance</td>
<td>Regional Action</td>
<td>Strengthening Animal Health Surveillance Systems with Geographic Information Systems (GIS) (November 2015; Belize)</td>
<td>17</td>
<td>ANU, BDOS, BZ, DOM, DR, GRY, HAI, JAM, SKN, SLU, SVG, SUR</td>
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<tr>
<td>Surveillance</td>
<td>Regional Action</td>
<td>National Biosecurity workshops on Highly Pathogenic Avian Influenza (December 2015–March 2016)</td>
<td>513</td>
<td>ANU, BDOS, DOM, GUY, SLU, SKN, SVG, TT, SUR</td>
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<tr>
<td>Food Safety</td>
<td>Regional Action</td>
<td>GAP Audit Training. Conducted in Collaboration with the OECS Commission (February–April 2016)</td>
<td>85</td>
<td>ANU, DOM, SKN, SLU, SVG</td>
</tr>
<tr>
<td>AHFS AREA</td>
<td>Scale of the Action</td>
<td>Training Workshops</td>
<td>Number of Participants Supported/Beneficiaries</td>
<td>Countries Benefiting</td>
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<tr>
<td>-----------------</td>
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<td>-----------------------------------------------------------------------------------</td>
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<tr>
<td>Food Safety</td>
<td>Regional Action</td>
<td>Principles and Practice of Hazard Analysis Critical Control Points (HACCP) – Practitioner Programme. Four Sub-Regional Workshops conducted by the Grocery Manufacturers Association Science and Education Foundation, (GMA SEF) (July – August, 2016)</td>
<td>59</td>
<td>ALL CARIFORUM COUNTRIES</td>
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<td>Food Safety</td>
<td>National Action</td>
<td>Introduction to Hazard Analysis Critical Control Points (HACCP). Conducted by the newly certified trainers from SKN. (August 2016)</td>
<td>43</td>
<td>SKN</td>
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<tr>
<td>Food Safety</td>
<td>National Action</td>
<td>Food Inspection Course. University of Technology, Kingston, Jamaica. (April 2016)</td>
<td>2</td>
<td>SVG</td>
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<tr>
<td>Food Safety</td>
<td>National Action</td>
<td>Masters of Science Degree in Global Food Law. Michigan State University, USA. (Online programme – partial support) (Initiated in January 2016)</td>
<td>1</td>
<td>DOM</td>
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<tr>
<td>Food Safety</td>
<td>National Action</td>
<td>Basic Microbiology. Caribbean Industrial Research Institute (CARIRI) Food Microbiology Laboratory, St Augustine, Trinidad. (May 2016)</td>
<td>2</td>
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<td>Food Safety</td>
<td>National Action</td>
<td>Post-Harvest Technology. University of California, Davis, USA. (June 2016; USA)</td>
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</tr>
<tr>
<td>Food Safety</td>
<td>National Action</td>
<td>Produce Safety Workshop. (April 2016, Tobago)</td>
<td>82</td>
<td>TT</td>
</tr>
<tr>
<td>Food Safety</td>
<td>National Action</td>
<td>Food Safety Practices</td>
<td>70</td>
<td>BHA</td>
</tr>
<tr>
<td>Traceability</td>
<td>Regional Action</td>
<td>Principles and Practice of Traceability – Managers/Supervisors. Conducted by the Institute of Food Technologists-Global Food Traceability Center (IFT-GFTC). (July 2016)</td>
<td>25</td>
<td>SKN</td>
</tr>
<tr>
<td>Traceability</td>
<td>National Action</td>
<td>Principles and Practice of Traceability – Practitioners. Four national workshops conducted by the Institute of Food Technologists-Global Food Traceability Center (IFT-GFTC). (August-September 2016)</td>
<td>129</td>
<td>SUR (22), BZ (45), SKN (36), SVG (26)</td>
</tr>
</tbody>
</table>

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<table>
<thead>
<tr>
<th>AHFS AREA</th>
<th>Scale of the Action</th>
<th>Training Workshops</th>
<th>Number of Participants Supported/ Beneficiaries</th>
<th>Countries Benefiting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Risk</td>
<td>Regional Action</td>
<td>Post-graduate diploma programme in Pesticide Risk Management (DPRM) at the University of Cape Town (UCT), South Africa. (February 2016).</td>
<td>2</td>
<td>BDOS, JAM (competitive process)</td>
</tr>
<tr>
<td>Risk</td>
<td>Regional Action</td>
<td>Food Safety Risk Analysis. University of Nebraska-Lincoln, USA. (September 2016; USA)</td>
<td>28</td>
<td>ALL CARIFORUM COUNTRIES</td>
</tr>
<tr>
<td>Risk</td>
<td>National Action</td>
<td>Pest risk Analysis Training Workshop. (February 2016; Kingston, Jamaica)</td>
<td>13</td>
<td>J AM</td>
</tr>
<tr>
<td><strong>Total Number of Beneficiaries</strong></td>
<td></td>
<td></td>
<td><strong>1,370</strong></td>
<td></td>
</tr>
</tbody>
</table>

Outcome: 27 Internationally Certified HACCP Trainers

Capacity Building of CARIFORUM Nationals in Traceability - Regional Workshop conducted by the Institute for Food Technologist’s – Global Traceability Center (IFT-GTC). Certificates distributed by the EU Representative. Barbados, July 2016

UWI/USDA/FAO/IICA Plant Quarantine Principles and Procedures Course – Laboratory session, Trinidad and Tobago, August 2016

Plate 3. Capacity Building Actions for Regulatory and Private Sector Professionals in Key AHFS Areas - HACCP, Traceability, Plant Quarantine
Plate 4: Capacity Building Actions for Regulatory Professionals in Key AHFS Areas – Surveillance Utilising GIS and SPS Requirements for Modernisation of the Fisheries Subsector

Training to strengthen animal health surveillance systems with Geographic Information Systems (GIS). Workshop held in collaboration with the CaribVET. Belize, November 2015

Fisheries professionals from 12 CARIForum Countries were trained in SPS measures and the institutional arrangements required for optimised performance of the fisheries and aquaculture sectors at the United Nations University – Fisheries Training Programme (UNU-FTP) in Iceland - April 2016. Participants interact with the Deputy Programme Director at UNU-FTP during the wrap-up session.
Plate 5: Capacity Building Actions for Regulatory and Private Sector Professionals in Key AHFS Areas – One Health, HPAI Emergency Response, Anti-Microbial Resistance, GAP Auditing
COMPONENT 4: ACTION MANAGEMENT

Over the past eleven months, significant actions were undertaken to ensure the accelerated implementation of the Project. Actions included: strengthening the Project Management Unit, issuing large-scale contracts to international and regional consultant teams and firms and increasing the involvement of IICA Delegations in the logistics required for implementation. These actions resulted in increased implementation in all technical areas of the Project.

Programming for the final nine months of the Project, July 2016 to March 2017, was also a major action that was completed in June 2016. Both the Technical Oversight and Technical Advisory Committees functioned optimally and allowed for accountability and transparency of the project implementation processes.

For greater advocacy of project actions, regular updates were provided to countries, as well as to relevant partners and stakeholders.

(i) Project Acceleration
Several measures were undertaken to improve the efficiency and effectiveness of project implementation, namely the strengthening of the Project Management Unit, the issuing of large-scale contracts, and the increased involvement of IICA Offices in the administrative implementation of the actions. The first two actions were recommendations emanating from the mid-term evaluation for the programme, Support to the Forum of Caribbean States in the implementation of the commitments undertaken under the Economic Partnership Agreement (EPA)’ (June 26, 2015) and the Results Oriented Monitoring (ROM) Mission (July 13-21, 2015).

Strengthening of the PMU
Two new staff members were hired to strengthen the Project Management Unit: a Logistics Coordinator and a Procurement Officer. These positions were filled on February 22, 2016 and March 01, 2016, respectively. In addition, a new Communication Consultant was hired as of March 01, 2016. These new positions assisted in streamlining the administrative functioning of the Unit and resulted in the Project meeting its targets for the second and third quarters of 2016.

Contracting of large-scale firms
Over the past year, significant efforts were made to finalise large-scale contracts to implement regional and multi-country actions.

Increased support from IICA Delegations
Towards improving the efficiency of implementation, countries were given autonomy in the execution of national projects. This approach therefore allowed the PMU to focus on the implementation of large-scale regional and multi-country actions; albeit with the necessary support from the IICA offices with respect to the logistics associated with these actions.

In addition to the actions outlined above, project acceleration was achieved through the continued building of synergies with other projects that have a similar focus, enhancement of collaboration with project partners, as well as regional and international agencies and increased advocacy of project actions at the ministerial and policy directorate levels.

(ii) Programming for 2016-2017
The Work Plan accepted by the EU and the Governance Committees on July 01, 2016 addressed the concerns raised by the EU regarding the ability of IICA and the partners to execute the proposed actions within the timeframe remaining on the Project. The Work Plan, which covered the period June 2016 to March
2017, contained the project strategy, compliance with EU standards, impact of the interventions and a reduction of the budget.

**Overview of the work plan**

For each of the strategic areas being addressed under the Project (legislation, coordination and capacity building), the following actions are being conducted in the 2016–2017 cycle.

For the area of **legislation**, models legislation that can potentially result in a more harmonised regulatory system for the implementation of SPS measures will be finalised. In addition, countries will utilise the Model Bills to revise existing bills and develop regulations.

Towards **operationalising national and regional coordination mechanisms**, actions will continue to address: (i) assessing and improving national coordination and regional AHFS systems; (ii) improving the representation of CARIFORUM countries at International AHFS meetings; (iii) supporting the efforts of Regional technical fora; and (iv) operationalisation of CAHFSA.

In order to **strengthen the capacity of the public sector and private sector**, a series of short- and medium-term training events will be conducted in several key technical areas identified by national and regional stakeholders. These include: diagnostics, surveillance (Antimicrobial Resistance and Avian Influenza Emergency Response), risk analysis, traceability, certification and food safety. In addition, select national interventions are planned for individual countries. Actions to strengthen laboratory systems and environmental monitoring for fisheries are also included.

**(iii) Project Governance Processes**

In keeping with the Governance structure, virtual and face-to-face meetings of the Technical Oversight Committee (TOC) and the Technical Advisory Committee (TAC) were held to keep members abreast of the progress of implementation and to discuss the Work Plan for the reminder of the Project. Constraints and recommendations for moving forward were also discussed.

**(iv) Performance Monitoring Exercise Initiated**

Towards measuring the impact of project interventions, scaling up project actions, and determining future programming of AHFS action, a performance monitoring exercise was initiated in July 2016. A three-phased approach to documenting the performance of the Project is being undertaken:

1. collection of baseline data;
2. assessment of impact of project interventions during the programming cycle; and
3. assessment of interventions at the end of the Project.

The first phase of the action was completed at the beginning of implementation of the Project (2014) whereby baseline data were collected to identify agricultural health, food safety and fisheries priorities of CARIFORUM Countries. The data were collected through consultations in the 15 beneficiary countries.

The consultations introduced the Project to stakeholders and determined the status and priority needs of AHFS, Fisheries and SPS. Stakeholders participating included the private sector (farmers, processors, exporters, Chambers of Commerce, farmers’ associations) and public sector (representatives from several departments of the Ministries of Agriculture, Health and Trade). The assessment utilised a modified version of the Performance Vision Strategy Tool (developed by IICA) to assess the views of stakeholders as to priority actions/needs required for improving the three critical areas being addressed under the Project. These National Consultations generated summary reports, which highlighted the priority areas under the SPS Project, specifically, Legislation, Coordination Mechanism and Capacity Building. These reports were used to craft work plans and will be used to assess some aspects of the impact of the interventions.

The second phase of the performance assessment was initiated in July 2016. Several assessment tools were designed to gain the views of primary and secondary beneficiaries regarding interventions under the Project.
The assessment largely seeks to: (i) determine the value of an activity as perceived by project beneficiaries (effectiveness); (ii) to determine the impact of the intervention on the implementation of the SPS regime (efficiency, competency); and (iii) constraints that would have influenced the impact and sustainability of the intervention.

The assessment is ongoing and preliminary results are positive in relation to the utility and application of the knowledge and skills acquired through attendance of meetings, training and/or direct technical assistance received.

The information being generated from the performance monitoring exercise will be used to further define the sustainability strategy for the Project. Throughout the past eleven months, efforts have been made to establish linkages and processes that will assist in sustaining the interventions made. These include, in the main, (i) engaging partners and collaborators with the reputation, expertise and commitment to further deepen the impact of interventions; (ii) training public and private sector stakeholders who will act as multipliers for capacity building; and (iii) incorporating capacities developed under the Project into IICA’s programmes supported by other donors. These actions will be cemented in the coming months to ensure that the medium to long term benefits of the project interventions can be realised.

**SUMMARY OUTCOMES and CONCLUSION for ACTION MANAGEMENT**

- The strengthening of the PMU and an increase in Contract Commitments contributed to accelerated implementation over the past six months of the Project with >80% of actions being initiated.
- The Work plan for 2016–2017 was supported by the European Union and the Governance Committees.
- Greater advocacy of project actions resulted from increased engagement with Ministers, Policy Makers, Beneficiaries and the Donor.
- A performance monitoring exercise was initiated to measure the impact of technical interventions, the data generated will be used to refine the sustainability strategy for the Project.
3.0 Visibility

The Communication and Visibility action seeks to ensure that there is a continuous and substantive flow of information and an awareness of Project actions across all stakeholder groupings. To this end, the main visibility results over the period included: (i) launch of the Project’s website; (ii) mounting an exhibition at the National Agricultural Show in Barbados; (iii) preparation of information products (e.g. posters, banners, leaflets); (iv) preparation of two quarterly e-newsletters; (v) media articles and releases associated with the implementation of technical actions; and (vi) presentations on the progress of implementation of the Project at Ministerial fora.

Press Releases
The links for Biosecurity workshops:
- http://www.barbadostoday.bb/2015/12/02/bird-flu-threat/

Links for First Responders Workshop:

Link for Pest Risk Analysis Workshop (Jamaica):

Leptospirosis workshop:
- https://www.facebook.com/1475641896009333/photos/pb.1475641896009333.-2207520000.1461969063./1728481894058664/?type=3

Model legislation - Validation Workshop:
Fisheries - Environmental and Residue Monitoring:
- CARIFORUM fisheries and SPS professionals participate in unique, interactive training opportunity in Iceland: http://www.thebahamasweekly.com/publish/caribbean-news/CARIFORUM_fisheries_and_SPS_professionals_participate_in_unique_interactive_training_opportunity_in_Iceland47914.shtml
- SPS and Fisheries: https://thedailyherald.sx/regional/57806-caribbean-countries-expanding-share-in-us-130-billion-global-seafood-market

Regional HACCP Workshop:
Newsletters
Two electronic newsletters were developed and sent out to stakeholders (June and August 2016). These newsletters are posted on the SPS Project website (see below).

Information booklets
Leaflets were prepared on the project actions and an infographic designed on the achievements of the Project. These products are posted on the website.

Television
A documentary and advertisements on the Fisheries aspect of the SPS Project developed by the CRFM were aired on local television stations in Belize during the week of 15 to 19 February, 2016, coinciding with the meeting of the CARICOM Heads of Government in Belize. The two local television stations were Great Belize Production and Tropical Vision.

Website
The SPS Project website (spscariforum.org) went ‘live’ on June 01, 2016.

Videos
Two new videos were developed on the project actions and achievements; these are posted on the Website.

Our Project - Outlines the Goals, Objectives and Actions under the SPS Project.

SPS Project Achievements - Provides an overview of the achievements of the Project with special emphasis on the benefits accrued by Barbados.

A video on Safe and Profitable Seafood Through SPS was developed by the CRFM and can be viewed at: https://youtu.be/zOzjie5wXGA
4.0 Conclusion

The SPS Project remains very relevant for the economic development of the CARIFORUM Region and hence every effort was made to successfully implement the Project Actions. Significant strides were made in the implementation of technical actions over the reporting period. Of note was the validation of the Model Bills. Country adoption and enacting of these Bills will serve to create a more inclusive and coordinated system for implementing an improved legal and regulatory framework for SPS and trade. Also of importance was the initiation of the work to develop national and regional coordination mechanisms to support the implementation of the SPS measures in CARIFORUM countries. This action is important for building strategic linkages between and across governmental organisations and/or other public and private entities in the sector. The training of more than 1,350 persons in key priority AHFS areas over the reporting period was a significant milestone that will have medium to long term benefits in relation to the Region’s capacity to comply with the SPS regime.

There is greater awareness of the Project in the countries, this is being demonstrated by the many expressions (through responses to monitoring and evaluation instruments or directly to the Project Management Team) of the positive impact the Project has had on AHFS systems. Countries continue to demonstrate their commitment to the implementation and sustaining of project actions.

Implementation challenges were faced during the reporting period, however, through corrective actions, these challenges were minimised and an increased implementation rate has been realised.

IICA and its partners continue to be fully committed to the Project and are working assiduously to ensure the implementation of high-quality actions that will result in the sustained and effective modernisation of Agricultural Health and Food Safety Systems, such that there is improved compliance with SPS requirements within CARIFORUM and improved market access under the EPA.
### 5.0 Appendix

#### 10th EDF SPS Project Cumulative Achievements

**Progress, Outputs and Outcomes**  
(October 01, 2013–September 30, 2016)

<table>
<thead>
<tr>
<th>OVIs</th>
<th>Activity</th>
<th>Outputs</th>
<th>Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>COMPONENT 1:</strong> Develop Model Legislation, Protocols, Standards, Measures and Guidelines in the Area of Agricultural Health and Food Safety (AHFS), including Fisheries</td>
<td></td>
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</tbody>
</table>
| Plant protection and animal health draft model legislation finalised and available to all CARIFORUM States for incorporation into national legislation | 1.1 Finalisation of Plant protection and animal health model legislation. | (85% complete) Plant and Animal Health Model Legislation – Model Bill validated by CARIFORUM Countries | - Progress made towards the harmonisation of plant and animal health legislation in the Region. The Model Bills are now with the CCS undergoing the final steps towards formal endorsement of the Bills as regional model plant and animal health legislation.  
- Countries utilising Model Bills to upgrade existing legislative framework (BDOS, TI). |
<p>| Model legislation for food safety developed and reviewed by CARIFORUM States. | 1.2 Development of model food safety legislation. | (85% complete) Food Safety Model Legislation – Model Bill validated by CARIFORUM Countries. | - Progress made for towards the harmonisation of Food Safety legislation in the Region. The Model Bill is now with the CCS undergoing the final steps towards formal endorsement of the Bill as a regional model food safety model legislation. |
| Model legislation for fisheries developed and reviewed by CARIFORUM States. | 1.3 Development of Model Fish Health, Fisheries Products and Related Legislation | - (30% complete) Fisheries Model Bill – Export Act validated by CARIFORUM Countries. | - Fisheries Model Bill – Export Act being expanded towards greater harmonisation with international requirements. |</p>
<table>
<thead>
<tr>
<th>OVIs</th>
<th>Activity</th>
<th>Outputs</th>
<th>Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>At least two Regional protocols / standards / guidelines in each of</td>
<td>1.4 Relevant protocols/ standards' guidelines and accompanying regulations</td>
<td>(Overall, 50% complete)</td>
<td>- Guidelines and protocols available for countries to utilise in the</td>
</tr>
<tr>
<td>the areas of plant health, animal health, food safety and fisheries</td>
<td>developed and available for adoption by CARIFORUM Member States</td>
<td></td>
<td>production and marketing of Fish and Fishery Products.</td>
</tr>
<tr>
<td>developed and available for adoption by CARIFORUM Member States</td>
<td></td>
<td></td>
<td>- Updated legislation to facilitate modernisation of the honey trade in</td>
</tr>
<tr>
<td>Modern regulations, protocols and guidelines</td>
<td></td>
<td></td>
<td>Trinidad and Tobago.</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>- Improved understanding of the IPPC standard setting process and the</td>
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<td></td>
<td></td>
<td></td>
<td>importance and benefit of participating in the process. In 2015</td>
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<td></td>
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<td></td>
<td>approximately 50% of the countries in the Region submitted comments</td>
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<td></td>
<td>on draft ISPMs to the IPPC.</td>
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<td></td>
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<td></td>
<td>- Initial steps towards harmonised SPS approach for the movement of</td>
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<td></td>
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<td>food within the OECS.</td>
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<tr>
<td>OVs</td>
<td>Activity</td>
<td>Outputs</td>
<td>Outcomes</td>
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<tr>
<td><strong>COMPONENT 2: Develop Effective National and Regional Coordination Mechanisms in Support of the SPS Regime</strong></td>
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<td></td>
<td>Several models for national coordinating agencies' committees compiled and distributed to and considered by Member States.</td>
<td>(30% complete) Situational analysis on AHFS coordination conducted in ten CARIFORUM Countries.</td>
<td>First step towards improved coordination of SPS systems in countries in the Region.</td>
</tr>
<tr>
<td></td>
<td>Application of the Performance, Vision, Strategy tools in animal health, plant health and food safety in Member States.</td>
<td>- (100% complete) PVS Tool applied in all 15 CARIFORUM States and baseline information on the current status of AHFS and priority needs gathered. - (90% completed) PVS Tool applied to plant and animal health systems in SKN.</td>
<td>A clearer understanding and contextualising by the countries of AHFS priorities and needs.</td>
</tr>
<tr>
<td></td>
<td>Increased participation of CARIFORUM States in international standard setting process.</td>
<td>(100% complete) Over 60 CARIFORUM Nationals supported to attend international standard setting meetings - 14 countries - WTO SPS meetings (Geneva) - 13 countries - 11th CPM meeting (Rome) - 8 countries - Codex Committee meetings (Iceland, Boston) - 9 countries OIE (Paris) - 12 countries - Codex Alimentarius Commission, Geneva, Switzerland.</td>
<td>- Countries have increased their understanding of their rights and obligations under the international SPS Agreements and standard setting bodies. - Active participation of countries in the SPS international standard setting process increased by 50%.</td>
</tr>
<tr>
<td>OVIs</td>
<td>Activity</td>
<td>Outputs</td>
<td>Outcomes</td>
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</table>
| CAHFS fully operational. Increased two-way communication and collaboration among the beneficiary countries | 2.2. Operationalising Regional coordination and implementing mechanisms | (80% complete) Operationalisation on CAHFS through support to:  
- Board meeting (2)  
- Representation at Regional and International meetings [14]  
- Capacity building [4]  
- Visual identity (logo and website (completed).) | - The framework for regional coordination in agricultural health and food safety and fisheries is developed.  
- Increased opportunity for discussing and addressing AHFS issues regionally and more effectively. |
| A coordination mechanism for regional AHFS groups developed         | 2.2. Operationalising Regional coordination and implementing mechanisms | - (30% complete) Situational analysis on AHFS coordination conducted with key regional AHFS entities  
- (100% complete) Annual meetings of the three major AHFS Regional Technical groups supported [7] - CPHD [3], CaribVET [2], CPGC [2].  
- Supported five working group meetings of the Regional AHFS Technical Groups - CPHD (mollusc) [1]; CaribVET (Public Health, Avian Diseases, Epigenesis, Diagnostics) [4]. | - The framework for regional coordination in the areas of agricultural health and food safety and fisheries is developed.  
- Increased opportunity for discussing and addressing AHFS issues regionally and more effectively. |
| Database established for the management, monitoring and evaluation, and reporting needs of Competent Authorities (CA). Increased access to accurate data. | 2.3 Data collection, management, monitoring and evaluation and reporting systems established for the national regulatory agencies | (100% complete) Database for the traceability of cattle completed (Haiti). | Improved ability to manage and monitor livestock in Haiti |
## Component 3: Develop/Strengthen the national and/or regional regulatory and industry capacity to meet the SPS requirements of international trade

<table>
<thead>
<tr>
<th>OVIs</th>
<th>Activity</th>
<th>Outputs</th>
<th>Outcomes</th>
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</table>
|      | Increased number of regulatory professionals and technicians trained. | - (90% complete, ongoing) Strengthened capacity of 1,690 regulatory and private sector personnel in key AHFS priority areas:  
  o Diagnostics [223]  
  o Surveillance [665]  
  o Quarantine [29]  
  o Food Safety Systems [574]  
  o Traceability [154]  
  o Risk Analysis [45] | - Improved capability across the region in important areas of agricultural health and food safety; contributing to stronger AHFS systems, thereby setting the stage for improved market access and strengthened capacity for the production of safer food. |
|      | Increase in the number of trained personnel available to offer service to stakeholders (HACCP Audit and certification; risk assessment of animal diseases, plant pests, and food contaminants; inspection and certification; diagnostics; surveys and surveillance). | - Entities strengthened through direct Technical Assistance  
  o Food Safety - 12 Rum Firms  
  o Traceability - 15 firms  
  o Emergency response - Public sector in 8 countries | - Initial steps towards greater understanding by policy makers of the importance of strong AHFS systems nationally and regionally. |
|      | Manuals, handbooks and other relevant material developed and available for continuous on-the-job training. | Information Products  
  - GAP Audit Manual completed [1]  
  - Pest Management Operators Manual completed [1]  
  - Food Control Manual - ongoing  
  - Pest Risk Analysis Manual - ongoing  
  - Bulletins on Leptospirosis completed [3].  
  - Bulletins and Posters on Rabies completed [2]  
  - Posters on Biosecurity prepared for 10 countries  
  - (20% complete) SPS Non Action Study - data gathering ongoing. | - Greater understanding of private sector of the importance of the application of good AHFS principles. |
<p>|      | Increased number of industry professionals and technicians trained in GAPs, HACCP, GMPs, Good Fisheries Practices (GFP) and animal rearing practices. | | |
|      | Increased number of firms/operations implementing good practices (GAP, GMP, and HACCP). | | |
|      | Increased access to export market. | | |
|      | Increase in the production of safe, high quality food for national consumption. | | |</p>
<table>
<thead>
<tr>
<th>OVI1s</th>
<th>Activity</th>
<th>Outputs</th>
<th>Outcomes</th>
</tr>
</thead>
</table>
| A mechanism exists to network laboratories within the Region offering services to the AHFS and fisheries sectors. Increase in the number of accredited laboratories. Increase in the number of selected laboratories conducting tests. | 3.3 Strengthening and enhancing laboratory systems and networks          | - (30% complete) One Laboratory (BAHA Laboratory, Belize) working towards accreditation (in conjunction with TBT Project/CROSQ)  
- 3 Technicians trained in laboratory testing techniques.            | Initial steps towards increasing accredited laboratory testing capacity in the Region |
| Report of study to determine external constraints including Private standards applicability to key export areas available to all Member States. There is increased understanding by Member States of the requirements and implications of private industry. | 3.4 Identifying Private industry standards impacting key export areas and analysing them with a view to capacity building | - (100% complete) Study on the impact of private standards completed | Steps towards increase in market access and compliance with market requirements for exports to EU and other major markets. |
| Environmental monitoring programmes for fisheries and aquaculture are designed and implemented. | 3.5 Establishing national and regional environmental monitoring programmes | - (30% complete) Baseline data on the status of environmental monitoring programmes collected in all 8 countries targeted and national plans developed.  
- 10 Public sector stakeholders trained and more knowledgeable in SPS Institutional arrangements for the SPS Subsector. | Safer fish and fisheries products available for export and domestic markets. |
<p>| National and regional residue monitoring programmes developed and implemented for aquaculture farms | 3.6 Establishing national (aquaculture) and farm level residue monitoring programmes | - (30% complete) Baseline data collected on the status of residue monitoring programmes in all 8 countries targeted and national plans developed. | Safer fish and fisheries products available for export and domestic markets. |</p>
<table>
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<tr>
<th>OVIs</th>
<th>Activity</th>
<th>Outputs</th>
<th>Outcomes</th>
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</table>
| Improved communication on the SPS Project and the contribution of Project Partners (CCS; CRFM; CNMSF) to stakeholders across CARIFORUM States | 4.1 Promote SPS Project actions, Partners activities and brand throughout CARIFORUM States | - 10 public sector stakeholders trained and more knowledgeable in SPS Institutional arrangements for the SPS Subsector.  
- Fellowship awarded to 2 public sector professionals in quality management of fish handling and processing. | Wider understanding and awareness of the 10th EDF SPS Project and the support provided to improve AHFS in the CARIFORUM region increase market access opportunities. |
| Increased visibility and knowledge of the SPS Project actions in modernising the agricultural and fisheries health and food safety systems across CARIFORUM States | Progress reports presented at COTED meetings and Special Ministerial meetings [8]  
- Exhibition (Caribbean Week of Agriculture 2014; Agro-Fest 2016, Barbados)  
- Regional seminar on AHFS and the role of the SPS Project (at the CWA 2014)  
- Communications strategy developed  
- Media releases on actions [>30]  
- Newsletter (quarterly)  
- Brochure on Fisheries actions under the SPS Project  
- Country Updates (quarterly) [3]  
- Project brief [1]  
- Visual identity of the Project  
- Website live | |