

TRANSPORT AND INFRASTRUCTURE EXPERTISE GROUP



FINAL REPORT

Final Evaluation of the Economic Partnership Agreement (EPA) Capacity Building II

Contracting authority: Delegation of the EU to Jamaica

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ABBREVIATIONS AND ACRONYMS

AB Accreditation Body

ACP Agricultural Competitiveness Programme

BSJ Bureau of Standards Jamaica

BMO Business Membership Organization

BSO Business Support Organization

CEDA Caribbean Export Development Agency

CIB Coffee Industry Board

CSME Caribbean Single Market Economy

EDF European Development Fund

EPA Economic Partnership Agreement

EU European Union

EUD Delegation of the European Union

FA Financing Agreement

FRATS Farmer Registration and Activity Tracking System

IDB Inter-American Development Bank

IFC International Finance Group

JACRA Jamaica Agricultural Commodities Regulatory Authority

JAMPRO Jamaica Promotions Corporation

JCC Jamaica Chamber of Commerce

JANAAC Jamaica National Agency for Accreditation

JCEA Jamaica Coffee Exporters Association

JEA Jamaica Exporters Association

JMA Jamaica Manufacturers Association

JMEA Jamaica Manufacturers and Exporters Association

MICAF Ministry of Industry, Commerce, Agriculture & Fisheries

NAO National Authorising Officer

NCBJ National Certification Body of Jamaica

NPHL National Public Health Laboratory

OVI Objectively Verifiable Indicator

PE Programme Estimate

PIOJ Planning Institute of Jamaica

PRL Pesticide Research Laboratory

QI Quality Institute

RADA Rural Agricultural Development Authority

SPS Sanitary and Phyto-Sanitary

SWEDAC Swedish Board for Accreditation and Conformity Assessment

TA Technical Assistance

TAT Technical Assistance Team

TBT Technical Barriers to Trade

ToR Terms of Reference

UWI University of the West Indies

VSD Veterinary Service Division

1.1. Preamble

Signed in 2008, the Economic Partnership Agreement (EPA) represents more than a traditional trade agreement setting the framework within which the trade of goods and services between the two regions (CARIFORUM and European Union) will operate. At the centre of the EPA is the creation of an integrated regional market in the Caribbean. It promotes the progressive harmonisation of the external tariffs of the CARIFORUM countries building on the liberalisation of the flow of goods between the economies of the Caribbean. This will help local businesses create economies of scale and make the region much more attractive as a market for investment and trade.

Aware of the challenges faced by the Caribbean Region in terms of financial and human resources, the EPA entails a development cooperation declaration in which the EU member states endeavour using its Aid for Trade financial support and the European Development Fund to support Caribbean countries implementing the EPA.

In this context, the EPA Capacity Building II Programme (EPA II) was approved under the 10th EDF NIP for an amount of EUR 5 million, and the Financing Agreement (FA) signed on the 13th of December 2013 for a 67 months operational duration.

Objectives of the Final Evaluation

With respect to the aims / ToR (see Annex 1) of the Final Evaluation, the main objectives of the evaluation are to provide the relevant services of the European Union, and the interested stakeholders with:

- An overall independent assessment of the performance of the EPA Capacity Building
 II Programme paying particular attention to its results measured against its objectives;
- Key lessons and recommendations in order to inform future Actions.

In this context, the evaluation activities were set out to:

- review the original project' design with respect to achievements/failures to achieve expected objectives and results;
- assess the extent to which defined objectives and results have been attained or the likelihood that they will be attained;
- assess the sustainability of the achievements and if these are not sustainable, to recommend how to improve sustainability;
- review constraints, lessons learnt and successes which could strengthen institutional capacity of those implementing the Programme;
- gauge projects' management competencies and processes; and
- appraise if crosscutting issues were adequately addressed.

The evaluation mission to Jamaica was realized between 07 October and 06 November 2019, starting with a one-week Inception Phase, and then followed by a Field Phase. During the entire period, meetings with more than 30 stakeholders (see also the complete "List of Persons Consulted" in Annex 7) have been held in Jamaica (Corporate Area, St. Thomas, St. Andrew, Clarendon, Trelawny, Manchester and St. Elizabeth – see also Annex 6 "Geographical Map of Jamaica), including

- Delegations of the European Union (EUD)
- Planning Institute of Jamaica (PIOJ)

- International Finance Corporation (IFC)
- All laboratories supported through EPA II (and EPA I)
- Jamaica National Agency for Accreditation (JANAAC)
- Sauces & Spices processors
- Coffee processors & traders
- Private Sector Organizations
- Public and Private Sector participants in trainings, study tours etc.

Main purpose of these interviews was to obtain first hand and unbiased comments from all categories of stakeholders concerning their perception of the Programme and their measures' design, implementation and results, as well as to verify preliminary conclusions and recommendations formulated by the evaluator. In order to facilitate an open and critical discussion, the evaluator has assured the interviewees that their comments (and especially the critical ones) would only be used in a "neutralized" form, without disclosing the individual source of the information.

Comments made during the de-briefing session were subsequently included in the Final Report. Further details as regards the methodology are outlined in the approved Inception Report.

The mission was assigned to the consortium led by TIEG and executed by one consultant (see also CV in Annex 2): Dr. Nico van Tienhoven.

1.2. Programme environment and set up

Programme Environment

The Development Co-operation context has been well described in the Financing Agreement (FA), more recently in the background information for the EPA Capacity Building (EPA) II Programme, and in the ToR for this Final Evaluation. Consequently, this in-depth analysis will not be repeated at this particular point.

However, in order to illustrate the EPA Capacity Building (EPA) II Programme being fully in line with the national Jamaican development priorities, the following is worth to be noted:

- The target priority sectors of the 2015 to 2019 National Export Strategy (NES2) include Agro-Processing/Agro-Business, which is of critical importance to the Jamaican economy. The crosscutting issues that have been identified and agreed are those that have the potential to underpin the priority sector's success or block its potential. These crosscutting issues include export financing; market access and trade information; standards and quality management and capacity building.
- The level of achievement of selected areas of the NES over the three-year period 2010 to 2012 include higher value addition in the Agriculture, Forestry and Fishing industries with the value moving from USD 43,818 million in 2010 to USD 49,376.6 in 2012; and the increase in the current value of non-traditional exports of goods from USD 599.1m in 2010 to USD 828.3m in 2012. NES2 states that whereas the NES 2010 -2013 was more supply driven, NES2 2015-2019 will be driven by market trends and developments that increasingly influence the success, competitiveness

and profitability of business thus recognizing the critical importance of understanding consumer drivers in key traditional and emerging markets.

The Agro-processing/Agro-business Sector has the potential to be a very lucrative export sector for Jamaica but export output from the agro-processing and agro-business sector is not growing as fast as other sectors.

This high significance of facilitating a better utilisation of the export potential of agro-based products is also reflected by various development co-operation activities, which have a high degree of complementarities with the EPA Capacity Building II Programme (see further below Section 4 and Figure 4).

Programme Set Up

The overall objective of the Agreement was to support the Government of Jamaica in addressing the trade deficit, accelerating exports, enhancing competitiveness and integrating the economy into global markets.

The purpose of the project was to improve conditions for better access of Jamaican products to the rest of the world.

The activities were grouped under two Components:

Component 1: "Strengthening the supply side in accessing export markets"
 This component was implemented through an administrative agreement signed with the International Finance Cooperation (IFC) entitled "EPA Support to Jamaican Food Exports ("EPA Exports")

Result Area "Sauces and Spices"

- Result 1: Increase access to market information and opportunities for food processing MSMEs
- Result 2: Strengthen Business Membership Organizations to serve food processing MSME members
- Result 3: Increase quantity and quality of food products by MSMEs
 Result Area "Coffee"
- Result 4: Increase quantity and quality of crops by farmers/associations to food processing firms
- Component 2: "Strengthening the quality and standards control environment". This component was implemented through Programme Estimates (PE0 and PE1) and a TA contract with Instituto de Calidad -Quality Institute. The 29 months implementation period for this component ended in December 2017.
 - Result 1: Laboratories offering a wider scope of services that meet international requirements and standards on food safety
 - Result 2: International acceptance of test results and Conformity Assessment services
 - Result 3: Monitoring programmes for pesticide residues and food contaminants enhanced

Main beneficiaries the Programme were various departments and agencies of the Ministry of Agriculture, the Ministry of Industry and Commerce (the Ministry of Agriculture and the Ministry of Industry and Commerce were merged 2016 into a single Ministry – Ministry of Industry

Commerce Agriculture and Fisheries) and the Pesticide Research Laboratory of the Chemistry Department of the University of the West Indies, Mona:

- Ministry of Agriculture
 - o Plant Quarantine/Produce Inspection Unit,
 - Veterinary Services Division.
- Ministry of Industry & Commerce
 - Bureau of Standards,
 - National Certification Body of Jamaica,
 - o Food Storage and Prevention of Infestation Division.

Other key stakeholders include the Jamaica National Agency for Accreditation (JANAAC) and the National Agricultural Health and Food Safety Coordinating Committee (NAHFSCC), Jamaican exporters, coffee producers and spices and sauces producers.

The Planning Institute of Jamaica (PIOJ), which is also the Office of the National Authorising Officer of Jamaica, had direct responsibility for the execution and administration of the project.

Major final beneficiary has been the private sector with its (potential) exporters of agro-based products.

2. EVALUATION QUESTIONS AND ANSWERS

Shown below are the answers to the eight Evaluation Questions of the ToRs and the Inception Report. They summarise the Overall Evaluation of the Programme (see below Section 3) and include a few of the Recommendations / Lessons Learnt (see below Section 4).

Evaluation Question

Relevance & Design

EQ 1: To what extent has the EPA II Project addressed the needs of Jamaica and been consistent with and supportive of the policy objectives and priorities of the Government of Jamaica?

Key findings / answers

Relevance

EPA II is fully in line with Jamaica's National Export Strategy (NES).

Design

The design for the Sauces & Spices has been appropriate. While companies have no major problems with their raw material supply, the major bottlenecks are the development of exportable products and market access in export destinations. Consequently, the Programme's concentration on product development and market access has been appropriate.

The design of the Quality Infrastructure component has been appropriate, too, mainly continuing and finalizing activities already initiated by the predecessor programme (EPA I): Upgrading and accreditation of laboratories.

The design for the Coffee component targeted the supply side, which is unanimously confirmed to be a major bottleneck for the industry's development. Unfortunately, a decline in coffee prices during the implementation period negatively impacted the investment-readiness and the acceptance of the promoted Typica variety on farm level. Also, it has been frequently stated during interviews with stakeholders that final beneficiaries' (i.e. coffee farmers) priorities and incentives / motivation, which limited the implementation success (low acceptance of promoted Typica variety) have not been sufficiently taken into account during the design phase.

Efficiency

EQ 2: What has been the appropriateness and quality of inputs provided by the technical assistance, both short and long-term experts as well as the quality of the outputs produced?

Sauces & Spices

Quality of inputs and outputs produced has been appropriate. Quality of experts and their ability to adapt their hands-on recommendations to country and company specific conditions has been highlighted during all meetings with beneficiaries. This refers to both, improvement of quality and food security as part of the production process, and product development of products for export markets.

Coffee

Quality of the produced outputs has been critical. Promotion of Typica variety (promotion / distribution of seedlings, combined with corresponding strengthening of extension services) has not achieved the intended outputs. Positive: Support to a verifiable registration of coffee farms.

Quality Infrastructure

Quality of inputs and outputs produced has been appropriate. Quality of both short and long-term experts has been highlighted by stakeholders during all meetings with beneficiaries. It has been especially appreciated that experts have remained in contact with beneficiaries beyond their missions to Jamaica, providing additional advice.

Efficiency

EQ 3: To what extent have the various activities of EPA II transformed the available resources into the expected and intended results, in terms of quality, quantity and timeliness?

Sauces & Spices

Market knowledge, product development of export-ready products and establishment of an umbrella company to combine forces of shareholders has been successful. However, the process has been too lengthy, which did not leave enough time to realize the final key activity: Exporting the newly developed products.

Coffee

A major part of the originally intended results have not been achieved (increase of quality and quantity of produced coffee).

The processors' / exporters' support of promoting the Typica variety has been fading during the implementation period, due to a supporter (Mavis Bank Coffee Factory) having been taken over by a skeptic (Wallenford).

As mentioned above, on farm level, a decline in coffee prices during the implementation period negatively impacted the investment-readiness and the acceptance of the promoted Typica variety on farm level. Also, it has been frequently stated during interviews with stakeholders that final beneficiaries' (i.e. coffee farmers) priorities and incentives / motivation, which limited the implementation success (low acceptance of promoted Typica variety) have not been sufficiently take into account during the design phase.

Quality Infrastructure

Good achievement of majority of intended results (upgrading of equipment and accreditation of laboratories). Equipment has been installed and all supported laboratories except Bodles have been accredited and subsequently have renewed the accreditation without further project-support. Not achieved: Establishment of enhanced monitoring programmes for residues including pesticides, veterinary medicinal products and environmental contaminants, mainly due to institutional responsibilities still being insufficiently defined.

Efficiency

EQ 4: What challenges have been experienced in the implementation of the Project and what strategies have been employed to solve these challenges?

Sauces & Spices

Identification and selection of companies with export potential and their establishment of a joint umbrella company took much more time than expected. Also product development took more time than anticipated. Imitation on very few (but able and willing) companies came too late.

Coffee

Acceptance of promoted Typica variety has been much lower than expected, due to farmers' priorities and external factors (drought, low prices, and Coffee Leaf Rust disease). Redirection of (some) activities to support verifiable registration of farm(er)s has been a very positive move.

Quality Infrastructure

No major challenges. Activities have been a logical continuation of the predecessor project (EPA I)

Effectiveness

EQ 5: To what extent have the objectives (intended outcomes) been achieved? More specifically, what are the major factors influencing achievement or non-achievement of EPA objectives?

Sauces & Spices

Export-ready products have been developed, market knowledge has been improved (especially concerning the UK) and an umbrella company has been established to combine forces of its three shareholders. However, exports have not yet started. A major reason for the non-achievement of the final target (increased exports of the participating companies) has been the underestimation of the time needed to identify and select export-capable companies, willing to invest in this process and the time needed for product development as well as for the establishment of the umbrella company (Catiki)

Coffee

Increasing quantity and improving quality of harvested coffee has not been achieved. This has been mainly due to the farmers being non-receptive to the promoted Typica variety. On the one hand, this has been due to a decline in coffee prices, which have always been fluctuating during the last 20 years. On the other hand, missing economic incentives on farm level include Typica-specific characteristics, like lower yield, more labour intensity and no price premium for this variety on farm level.)

Quality Infrastructure

Strengthening of the supported laboratories has been achieved. Their equipment has been improved to meet international standards' requirements and all except one have been accredited.

The establishment of enhanced monitoring programmes for residues including pesticides, veterinary medicinal products and environmental contaminants has not been achieved (although the corresponding systems have been developed) mainly due to unsolved institutional responsibilities.

Impact

EQ 6: To what extent has the EPA II Project contributed to facilitating increased and more diversified exports of agricultural and agri-processed products to the EU markets.

Sauces & Spices

Although export-ready products have been developed and an umbrella company has been established to facilitate export activities, real exports have not yet started and it is unlikely that Catiki will be able to start exporting without further support.

Coffee

Jamaican Blue Mountain Coffee is almost exclusively exported to Japan, and so far Europe is no target market. Corresponding (marketing) activities have not been foreseen in the project.

Quality Infrastructure

With support of the project, Jamaica's quality infrastructure has been significantly improved. Accredited laboratories are able to facilitate compliance with corresponding quality and food-safety requirements. This is a pre-condition for export of agri-processed goods.

Sustainability

EQ 7: To what extent can the achievements of the EPA II Project be considered sustainable

Sauces & Spices

Overall, the sustainability of measures implemented under this result area can be qualified as low, because the umbrella company, Catiki, is unlikely to continue the marketing activities required to export the newly developed products.

Unfortunately, guidelines for the establishment of an umbrella company, which could serve as a "blue print! For similar future approaches, have not been prepared and disseminated among BSOs.

Coffee

Overall, the sustainability of measures implemented under this result area can be qualified as low. Promotion of the Typica variety has not been successful. However, the continuation of supported activities for a verifiable registration of coffee farms is likely to continue.

Quality Infrastructure

In general, it can be stated that all supported laboratories do have a very high likelihood to institutionally survive all laboratories which have been upgraded and accredited with EPA I and EPA II support have recently renewed their accreditation for ISO 17025, version 2017.

Lessons learned

EQ8: What lessons can be drawn from the implementation of the EPA Capacity Building II Project to inform the design and establishment of future EPA related programme / private sector development programme in Jamaica?

Sauces & Spices

At the end, the project ran out of time and resources to implement the (crucial) export-marketing plan for sauces & spices. At the beginning, time was lost due to "too participative" approach in selecting the final companies. Follow a more rigorous selection criteria for "eligible" companies during the beginning.

Coffee

Both, implementing agencies / contractors as well as EU need to be flexible and adapt project focus to new conditions, which in this case has led to inclusion of new project activities (i.e. farm registration). This has been positively demonstrated by including support to farm registration when originally envisaged promotion of Typiva variety did not proceed as planned.

Make sure that final beneficiaries' interests are in accord with project activities and targets. Additionally to a coffee price decline, limited motivation of coffee farmers to support increased growing of Typica variety had some major reasons inn Typica's general characteristics (more labor intensive, more susceptible to diseases, lower yields).

Quality Infrastructure

Negative experience with the implementation / utilisation of enhanced monitoring programmes for residues. Make sure that the institutional setup is in place for later implementation and utilization of newly developed systems and databases before starting their development.

3. OVERALL ASSESSMENT

3.1. Relevance

The Programme is highly relevant, and the main arguments given in the Financing Agreement (FA) are still valid: Jamaica is a Small Island Economy with limited human, financial, technical and institutional capacity to implement the commitments made in the EPA Agreement. This limits its possibilities to take advantage of the opportunities provides by the agreement.

Consequently, the Programme's high level of relevance has been unanimously underlined by all interviewed stakeholders. This refers to all three components / result areas:

Blue Mountain Coffee

Jamaica Blue Mountain Coffee is a well-known premium coffee, still mainly sold to Japan (although some new markets like China are being targeted to for diversification), generating foreign exchange revenues in the range of USD 20 mio p.a. (see Figure 1).

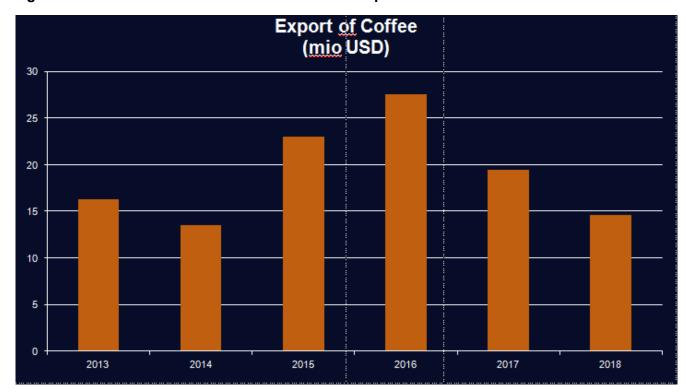


Figure 1: EPA II: Jamaica's revenues from coffee exports

Source: Statistical Institute of Jamaica (STATIN)

The processing and export industry relies on the supply of approximately 7.000 registered coffee farmers, the vast majority being smallholder operations in remote areas, were coffee is almost the only source of income. According to coffee processors, a stable supply of coffee beans – referring to both, quantity and quality - is their major bottleneck for expansion. On the world market, the price paid for Blue Mountain Coffee is approximately 5 times higher as compared to standard qualities from other regions (see Figure 2). Without this price premium, Jamaican coffee would not be competitive on the world market, due to higher production costs as compared to the main competitors (small farms scattered in remote areas with extreme slopes and higher labour cost).

Consequently, activities with the objective to secure and expand the supply of high quality coffee are highly relevant.

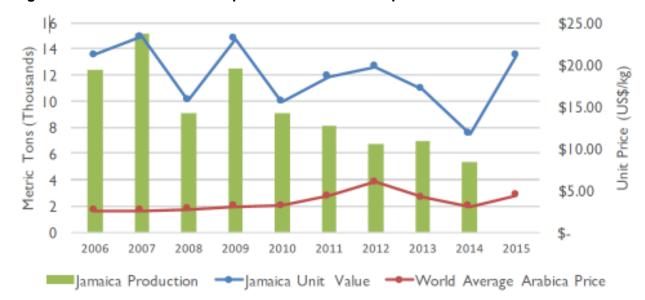


Figure 2: Jamaica's coffee unit price vs. world market price

Source: Jamaica in the Arabica Coffee Global Value Chain; Duke Global Value Chains Center; April 2018

Sauces and Spices

During the past five years, the export of spices and sauces has been steadily but slowly increasing to a level of approximately USD 20 mio p.a. (see Figure 3).

A major bottleneck for further expanding exports is the fragmentation of the corresponding agroprocessing industry, which (with the exception of very few processors) lack competitive products (including packaging, labelling and design) and targeted marketing activities to successfully establish their products in export markets, beyond some occasional sales to the ethnic community (Caribbean Diaspora, mainly in Canada, USA and UK). Contrary to Blue Mountain Coffee, the supply side is not a major bottleneck for spices and sauces processors.

Consequently, the focus to support product development and marketing related activities in the spices and sauces sector is highly relevant and responds well to the needs of the industry.

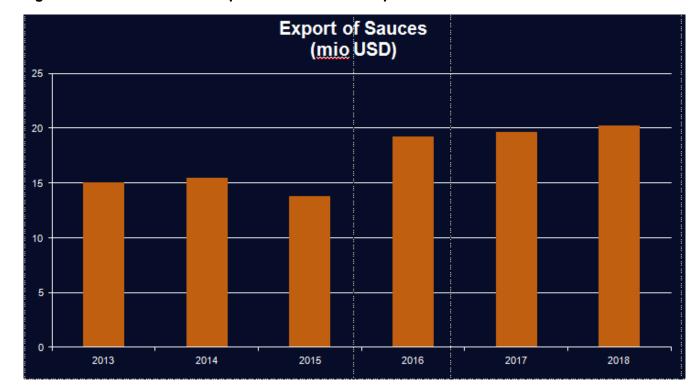


Figure 3: EPA II: Increased importance of sauces exports

Source: Statistical Institute of Jamaica (STATIN

Quality Infrastructure

An appropriate capacity for product testing and certification for compliance with international standards is a precondition for successful exports, especially as regards food products. Consequently, the corresponding EPA II Programme Component 2 is highly relevant and fully in line with this requirement. The increasing level of utilisation of these local laboratory facilities by Jamaican food processing companies confirms the relevance of this approach, which has also been confirmed during the interviews on firm level during the evaluation assignment.

3.2. Complementarity

The Agro-processing/Agro-business Sector has the potential to be a very lucrative export sector for Jamaica but export output from the agro-processing and agro business sector is not growing as fast as other sectors.

This high significance of facilitating a better utilization of the export potential of agro-based products is also reflected by development co-operation activities financed by various agencies (see Figure 4). This includes, among other programmes targeting the same sector, two major EU-programmes with an extremely high degree of complementarities with the EPA Capacity Building II:

- - Sanitary and Phyto-Sanitary Measures (SPS)
 - Technical Barriers to Trade (TBT)

- Institutional Support Focal sectors
- The ongoing 11th EDF Regional Private Sector Development Programme, implemented by the Caribbean Export Development Agency (CEDA), which is focused on:
 - Build Private Sector Capacity at the firm level
 - Strengthen Business Support Organizations (BSOs) to better support the Private Sector
 - Increase Public-Private Dialogue to facilitate the Private Sectors, in particular MSMEs, engagement in moving towards an improved business-enabling environment.

This embedding of the EPA Capacity Building II Programme positively underlines the importance and priority, which is given to the establishment of (a) corresponding quality infrastructure and its implementation / utilization, and (b) the focused support to selected value chains and get them in a first step export-ready and then exporting on commercial (non-subsidized) terms.

Concerning the complementarities of the EPA II Programme in view of other programmes targeting similar area (see Figure 4), these have been excellently utilised. Avoiding overlapping activities, these programmes have been utilised to complement EPA II activities, thus increasing the overall effectiveness.

For the Final Evaluation of the EPA Capacity Building II Programme, however, this tight interlocking with other, complementary programmes has been challenging as regards the clear attribution of activities and achievements to one or another programme.

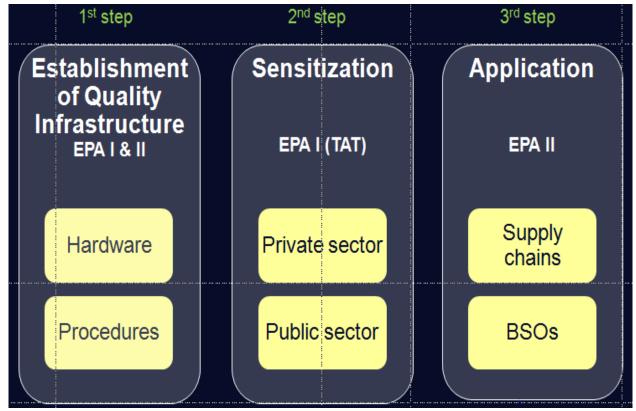
NES EPA **CSME** Growth & Compete Competitive-Caribbean (IDB) ness (WB) **EPA CRIP EPAI** (EU) **EPÀ II** (EU) **ACP** Expo Max (JAMPRO) (IDB) **CEDA EDES JBF** (EU) (EU) (WB)

Figure 4: EPA II: Supporting policy objectives and complementing other projects

3.3. Design / concept

The design of the EPA II Programme is well complementary to the activities and achievements of its predecessor Programme EPA I. Both programmes constitute a meaningful combination of components and sequence of implementation (see Figure 5).

Figure 5: EPA II: Logical sequence of main components



As regards the three components / result areas of the Programme, the design / concepts can be summarized as follows:

Sauces and Spices

The concept for the sauces and spices result area has been logical and adequate to address the key bottlenecks of the sector and the needs of the industry:

- Market intelligence
- Product development
- Export marketing / product placement of competitive products in selected markets
- Multiplication of through BSOs (later on limited to BMOs).

However, during the course of the Programme, activities originally planned to strengthen BSOs in their capacity to support SMEs beyond the Programme and replicate achievements and positive experiences have been considerably limited. First, originally targeted Business Service Organisations (BSOs) have been restricted to Business Membership Organisations (BMOs), thus excluding one of Jamaica's major service provider for SMEs, JAMPRO. Later on, BMO-support has been concentrated on the three partner companies of the Catiki consortium. However, as a private enterprise, Catiki is designed to provide services only to its partners /

shareholders and not sharing them with a wider community of agro-processors in the sauces and spices sector.

On the one hand, it has been positive, how this flexibility of the programme reacted to participants' responsiveness and ability to participate, also relevance of the interventions and clearer understanding of requirements to capitalize on market access/demands/drivers. However, on the other hand, the low level, of support to the BSOs, especially towards the end of the Programme, has been a weak point.

Coffee

Coffee production in Jamaica has been declining over the past decade (see also Figure 2) and all interviewed processors / exporters confirm that the supply side is their main bottleneck. This refers to Blue Mountain Coffee and other qualities. It is also unanimously confirmed that Jamaica's coffee industry's survival depends on the price premium achieved on the export market (mainly Japan), based on its quality standards and limited availability. Consequently, strengthening the supply side to secure and increase quality (to ensure the quality for Blue Mountain Coffee) and quantity of on-farm coffee production has been an adequate concept.

This was envisaged through two main lines of activities:

- Provision of discounted seedlings of the traditional Typica variety to coffee farmers. This
 action has been planned and implemented in close cooperation with coffee processors /
 exporters, who have cultivated the plants at their cost in their nurseries, then selling
 them to the farmers at half-price.
- Capacity building of coffee farmers in close cooperation with extension services provided by coffee processors and the Jamaica Agricultural Commodities Regulatory Authority (JACRA).

However, it turned out that the concept had a major weakness concerning the acceptance of the promoted Typica variety:

- Coffee processors / exporters are split in their opinion if and to what degree the premium price for Jamaican Blue Mountain coffee depends on the traditional Typica variety. This situation has turned further against the programme when one of the major protagonists was taken over by the major processor / exporter, who is not convinced of this approach.
- Coffee farmers prefer alternative varieties, such as Catimor, which give higher yields and need less plant care input (labor and pesticides). Also, it is assumed that Typica is more perceptible to the Coffee Leaf Rust Disease.
- Payment for coffee cherries on farm level is the same for all varieties. A price differentiation to stimulate cultivation of Typica is not practiced in the Blue Mountain Coffee industry, as it is extremely difficult to introduce, due to mixed variety plantations and the cherries being non-distinguishable.

At a later stage of the Programme, support to JACRA concerning the verifiable (i.e. GPS-based) registration of coffee farm(er)s has been included in the concept. This Farm Registration and Activity Tracking System (FRATS) is unanimously regarded as a major precondition for future support activities on farm level.

Quality Infrastructure

The design and concept of the Quality Infrastructure component (component 2) is straightforward and a logical and meaningful continuation of activities initiated under the predecessor programme EPA I. It includes a final upgrading of laboratory equipment as a precondition for their accreditation, the corresponding training of laboratory staff and coaching of laboratories towards their accreditation.

3.4. Efficiency

Utilisation of funds

Concerning the utilization of funds it can be stated that all three components / result areas have fully allocated / spent the available budget.

As regards result area 2 (coffee), a meaningful and well justified reallocation of funds has been undertaken by IFC: Upon realizing that further investment in supporting on-farm activities and the promotion of Typica seedlings would be inefficient and not effective under the prevailing circumstances, funds have been redirected to support JACRA's farm registration activities with the Farm Registration and Activity Tracking System (FRATS). This allowed the resources to be spend more efficient and effective in the establishment of a highly needed database, facilitating future on-farm support activities (beyond the Programme) to be more focused and efficient.

Timing

Concerning the timely implementation of Programme activities, this has been most problematic for result area 1 (sauces and spices), while the other components / result areas did not face major time constraints.

Due to a lengthy and participatory approach to identify and select companies for further in depth support, this "identification phase" stretched much longer than anticipated. Finally, only three companies have been able and willing to participate in the joint umbrella company, Catiki. Further, the delays at the beginning were a major reason for the project not being able to launch marketing and export activities within the implementation period. However, without concrete, countable exports, the project activities are left with a loose end. This is even more problematic as a realization of further marketing activities by Catiki cannot be expected without new external funding, which also would entail the foregoing project investments in product development and market research being at least partly diluted.

3.5. Effectiveness

This Chapter analyses the Programme's achievements, measured based on the Objectively Verifiable Indicators (OVIs). As agreed during the Inception Phase, the Final Evaluation as regards Component 1 refers to the LogFrame in its modified version from November 2015 (see Annex 5b), while Component 2 is evaluated against results, activities and OVIs, which have remained unchanged in the original LogFrame derived from the Financing Agreement (see Annex 5a).

The below detailed analyses of achievement is based on the evaluator's observations and interviews, and on reported activities and results in various project documents.

Overall Objective

In its LogFrame, the Overall Objective is defined as follows:

"To support the Government of Jamaica in addressing the trade deficit, accelerating exports, enhancing competitiveness and integrating the economy into global markets".

<u>Indicator OO.1:</u> *Increased export and local market revenue (USD – selected items).*

→ As usual with OVIs on the Overall Objective level, they are formulated in a general way and their achievement depends on numerous factors, and not specifically on those influenced by the Programme. In spite of this restriction, it can be put on record that the activities supported through the different EPA II activities were definitely suitable to contribute to this objective, although their concrete share cannot be quantified. All envisaged results and the corresponding activities are clearly targeted to facilitate an increase of more exports of agro-food products (see Figure 6).

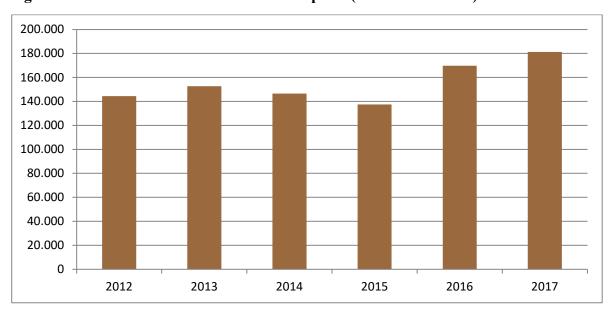


Figure 6: Value of Non-Traditional Food Exports (in thousand USD)

Source: Statistical Institute of Jamaica (STATIN

<u>Indicator OO.2:</u> *Increased volume of improved / certified goods processed (%).*

→ Data for the volume of improved / certified goods processed are not available. However, according to information provided by the Jamaica National Agency for Accreditation (JANAAC), between 2013 and 2017 the number of ISO 9001 certified companies has increased from 34 to 43, and this can be taken as an indicator that the volume improved / certified goods has increased, too. This is further supported by statements of interviewed agro-processors, which in their clear majority confirm that they have improved their products, including an increased level of certification, due to corresponding requirements from their customers.

Component 1 – Sauces & Spices and Coffee

 Specific Objective 1: Identify quick success areas that link available market opportunities with food processing MSMEs

- o OVI SO 1.1: Number of new markets identified
 - → Four new markets have been identified for the Spices & Sauces processors: US East Coast, US Central, US West Coast and Europe. Although the split of the US market into three sub-regions might look artificial at a first glance, the size of the market and partially different eating habits justify this approach. However, identifying a market is only a very first step and it needs much more investment to get into the market, which has not yet been achieved by the three participating firms.
- OVI SO 1.2: Global buyers/distributers identified to participate in Trade Mission and provide in-depth market feedback buyers/distributors
 - → A Buyer Trade Mission had been organized with four participants (three distributors / importers and one broker) visiting Jamaica. This included both, an industry-wide presentation in Kingston (JAMPRO), and one-to-one meetings with seven selected companies. Based on companies' feedback and on the evaluator's experience from other projects, this activity is highly useful, always under the condition that participating / visited companies are already export-ready and not just export-dreaming. Companies tend to listen much better to potential buyers (who have "a check-book in their pockets") as compared to consultants' recommendations.
- o OVI SO 1.3: Value of new market opportunities identified
 - → According to IFC reporting, the value of new market opportunities identified is reported to be of USD 4.558.112 (as compared to the targeted USD 6.500.000). Although this is an impressive value, it remains rather fictitious as long as a clear and realistic plan to access these market opportunities is not in sight. Based on interviews on company level and on the evaluator's experience, it seems to be unrealistic that the required next steps and investments will be done by the companies without additional external resources.
- OVI SO 1.4: Number of Jamaican food processing sectors prioritized
 - → Two sectors have been prioritized: Spices & Sauces and Blue Mountain Coffee. As regards the Spices & Sauces sector, in depth support has been given to a core group of three processors and additional support to others. Concerning Blue Mountain Coffee, the support was rather given to the suppliers (coffee farmers), which made sense also in view of the processors, coffee supply being a major bottleneck for their progress.
 - Concentrating project resources on two processing sectors instead of spreading the resources over a larger number of sectors has definitely been a good decision.
- OVI SO 1.5: MSMEs participating in Trade Mission with global buyers/distributors
 As planned and laid down in the OVI, seven companies have participated in the trade mission with buyers from overseas: Canco, Grace Foods, King Pepper, Tijule, Spur Tree Spices, and Central Food Packers. A general positive assessment of such buyer missions has been made already above (OVI SO 1.2).
- o OVI SO 1.6: Number of working groups, training/events and/or conferences

- → According to IFC reporting 17 working group sessions (target: 10), including tasting sessions with expert market feedback, have been realized. The topics have been well focused and appreciated by participants. This includes especially the following activities, whereby some of them have been spitted into several sessions.
- o Identification of top priorities: marketing and certification,
- Presentation and discussion of potential activities in marketing and certification,
 Various working group sessions to prepare and realize the in-bound trade mission,
- o Presentation and discussion of export guidelines / checklists,
- Food safety gap assessment, marketing,
- o Presentation and buy-in on marketing consultancy.
- OVI SO 1.7: Number of participants in working groups, training/events and/or conferences
 - → Altogether 66 participants (target: 60) from various companies of the food processing sector have attended working groups, training/events and/or conferences. The activities included especially the following activities, whereby some of them have been spitted into several sub-sessions:
 - o Identification of top priorities: marketing and certification,
 - Presentation and discussion of potential activities in marketing and certification,
 Various working group sessions to prepare and realize the in-bound trade mission,
 - o Presentation and discussion of export guidelines / checklists,
 - Food safety gap assessment, marketing,
 - Presentation and buy-in on marketing consultancy.
- OVI SO 1.8: Number of women participants in working groups, training/events and/or conferences
 - → Slightly more than 1/3 of the aforementioned participants have been women (25 in total). Additionally, it needs to be mentioned that the majority of employees in the sauces producing firms are female. During follow-up visits of the consultants to individual firms, a larger number of women has therefore benefitted indirectly from these activities.
- OVI SO 1.9: Participants reporting satisfied or very satisfied with working group, training and events
 - → Although no surveys or questionnaires for participants' feedback have been available, participants have confirmed during interviews being (very) satisfied with these activities.

This is also being indirectly confirmed by the companies' consistent and continued participation in these activities. The professionally managed companies would definitely not have seconded their staff to participate repeatedly, in case that they would not have been convinced of its usefulness.

A critical remark referred to the participation of too many less qualified companies without export potential at the beginning of the project. This has been improved later on, when focusing on more advanced companies with better export potential.

- OVI SO 1.10: Demonstration effect: similar interventions implemented by other relevant stakeholders/projects/donors replicating project approach in other sectors
 → If limiting this replication to the buyer missions to Jamaica, there have been similar activities initiated / funded through JAMPRO and World Bank projects.

 Unfortunately, a replication of the establishment of an "umbrella company" (Catiki), representing various firms of a specific sector has not been observed. This is also due to the fact that corresponding experiences of the project have not been sufficiently shared with BSOs. During interviews with the evaluator, BSOs have especially criticized the lack of documented guidelines for the successful establishment of an umbrella company (Catiki), which might be of interest to
- OVI SO 1.11: Demonstration effect: value chains prioritized and supported by other projects/donors in project prioritized sectors

replicate in other sectors, too.

→ Beneficiary groups of the project (selected Spices & Sauces processors; Blue Mountain Coffee processors) have received the following support through other donor-funded programmes:

Coffee: The Jamaica Business Fund (JBF)-funded programme has also supported the coffee farmers through technical advice and strengthening of the extension services.

Sauces & Spices: Currently, an application has been submitted to the IDB-financed Compete Caribbean Programme to further support Catiki in their efforts to market their products abroad.

- OVI SO 1.12: Number of new relevant export business deals closed by MSMEs
 - → So far, no concrete business deals resulting from project activities have been closed by MSMEs. Unfortunately, the implementation of concrete marketing / sales activities of the spices & sauces sector through the newly established umbrella company "CATIKI" did start neither during the project implementation phase, nor in the time following until realization of the Final Evaluation (November 2019).

Based on interviews with the participating companies it seems to be very unlikely that these activities will be implemented without further external support. The three shareholders are not able / willing to invest the corresponding financial resources required for this next step to be successful. Currently, an application for support has been submitted to the IDB-financed Compete Caribbean Programme.

- Specific Objective 2: Build capacity of BMOs to better serve their food processing MSME members.
 - OVI SO 2.1: Number of BMOs selected to become a champion in the Spices and Sauces sector
 - → All efforts of the project have been concentrated on Catiki, which is a consortium formed by three shareholders and not a BMO. Based on the fact that the establishment of a corresponding "umbrella company" had been a pilot character, this is a fully justified approach. Rather get the corresponding experience through

one pilot project then replicate, if successful, instead of duplicating experiences during this exercise.

However, the positive experience in creating Catki should have been documented and shared with BSOs for potential future replication in other sectors. Unfortunately, this has not been done.

- OVI SO 2.2: Number of working groups and related events held in the Spices and Sauces sector including BMO participation
 - → Altogether, 17 working group sessions were held (target: 10), albeit exclusively for Catiki and its founding companies (King Pepper, Canco and Tijule). A wider BMO participation has not been pursued and consequently, the activities had no major multiplication effect.
- OVI SO 2.3: BMO receiving advisory services on how to improve their service offer to their food processing members
 - → Only Catiki has received the corresponding advisory services. Other BMOs (or BSOs) have not benefitted from this experience.
- OVI SO 2.4: Number of workshops, training/events and/or conferences for institutional strengthening
- OVI SO 2.5: Number of participants in working groups, training/events and/or conferences for institutional strengthening
- OVI SO 2.6: BMO approach to provide improved services to their MSME members developed
 - → All three OVIs above (2.4; 2.5 and 2.6) refer to project contributions to institutional strengthening of BMOs. In this respect, the project has made no major efforts. All activities have been focused on Catiki. As reported during interviewing BMOs, no major outreach to BMOs has been achieved. Especially the lack of a guideline on how the establishment of the umbrella company (Catiki) has been prepared and achieved has been criticized.

This must be qualified as a major shortfall of the project.

- OVI SO 2.7: Online platform/coordination tool launched
 - → It was expected that Catiki would launch its website in the 1st quarter of 2019. This has not been realized, also due to Catiki's activities having almost come to a stop, since the end of project support and funding.
- OVI SO 2.8: BMO included in overall approach for capacity building within the Sauces and Spices sector for coordination efforts and sustainability purposes
- OVI SO 2.9: BMO that implemented recommendations from IFC facilitated sessions (eg. improved training curricula, online platform
 - → Only at the very beginning of the project JEA and JMA (who later merged into JMEA), as well as JCC and JAMPRO (although the latter not being a BMO) have participated, albeit to a very limited degree. An improvement of BMOs' services provided to the sector (sauces & spices) has not been triggered by the project.

- OVI SO 2.10: MSMEs reached with improved BMO's service offer (eg. training, Cluster Information Platform)
 - → No MSMEs other than the three founding partners of Catiki have been reached. Furthermore, Catiki does not have any of their own know how or resources, but this is located within the founding partners' companies and their staff- Catiki does not employ any staff. Therefore, also in future, beyond the project, Catiki will not provide services to other firms in the sector, unless they formally join Catiki.
- Specific Objective 3: Original version: Increased product offering and increased quality of selected MSME's food products.
 - o OVI SO 3.1: Action Plan for the Spices and Sauces sector intervention developed
 - → An action plan has been developed. However, due to time lost at the beginning until establishment of Catiki, time constraints did not allow the marketing / sales component of the plan to be implemented.
 - OVI SO 3.2: Number of working groups, food safety standards training or export related workshops, training events, seminars, conferences related to overall export requirements compliance. The number of five such working groups has been defined in the LogFrame.
 - → Five such activities have been realized, which is exactly the targeted number. With regards to the contents of these working groups, they were designed around the following topics: Product development, Good Manufacturing Practice (GMP), and internal audits / pre-audits.
 - OVI SO 3.3: Number of participants in food safety standards training or export related workshops, training events, seminars, conferences
 - → According to IFC reporting, a total of 23 participants have been reported, thus meeting the target of 20. This range has been confirmed to the evaluator during incompany interviews Furthermore, these trainings / workshops have been commented by participants as very useful and well adapted to the specific Jamaican conditions and limitations.
 - OVI SO 3.4: Percentage of participants satisfied with trainings, workshops, seminars, conferences
 - → As mentioned before, the participants have been fully satisfied. This is confirmed through the following:

All five sauces and spices companies visited during the evaluation mission have confirmed their satisfaction with both, the topics covered during these events and the experts who delivered the services.

This is also being indirectly confirmed by the companies' consistent and continued participation in these activities.

In one case (King Pepper), the company has confirmed its satisfaction by mail.

- OVI 3.5: Number of business/marketing needs identified
 - → This OVI, with a target of three needs identified, is formulated in a very general way. Nevertheless, it can be qualified as achieved, with exactly three needs having

been identified: (a) All-natural products; (b) Packaging for all-natural products to facilitate an adequate shelf life; (c) Food Safety third-party certification.

- OVI SO 3.6: Number of knowledge sharing events, workshops, training events, seminars, or conferences related to overall export markets in the food processing sector (with a special focus on Spices and Sauces)
 - → Two such events have been realized (focused on food safety topics) during the Jamaica Export Forum in Jun 2016. Although these events might be useful to contribute to a better / wider sensitization of smaller companies, the input should be rather limited, focusing the resources on more specific activities (see also below OVSO 3.7).
- OVI SO 3.7: Number of participants in knowledge sharing events, workshops, training events, seminars, or conferences related to overall export markets in the food processing sector (with a special focus on Spices and Sauces)
 - → According to IFC-reporting, an approximately 120 participants (targeted OVI: 100) have been counted during a knowledge sharing event (focused on food safety) at the Jamaica Export Forum in Jun 2016. However the efficiency / effectiveness of such events is doubtful and, according to the evaluator's experience and comments received from companies a more focused approach (concentrating on one company or a small group of similar companies) would be more likely to render "visible" results.
- OVI SO 3.8: MSMEs participating in the project and receiving advisory services to implement export-oriented action plans
 - → It has been confirmed during interviews carried out by the evaluator that six sauces & spices producing MSMEs (plus Catiki, which is also owned by three of the firms) have received advisory services, which they have qualified as very good and useful. Especially, the hands-on consultancy approach has been mentioned by all companies. Consultants have been able to provide realistic advice, appropriately adapted to the specific technical and financial situation of each company, avoiding recommending overdesigned solutions, beyond the companies' technical and financial possibilities.
- OVI SO 3.9: MSMEs/firms that implemented recommended food safety standards or complied with export related requirements
 - → Altogether 6 companies (which is more than the initially targeted 4 companies) have implemented recommended food safety standards during the course of the project: Tijule (FSSC 22000), Canco (SQF), Spur Tree (SQF), Gray's Pepper (FSSC 22000), Grace Agro Processors (HACCP), Pickapeppa (FSSC 22000)
- OVI SO 3.10: Number of marketing/business initiatives implemented to address identified needs
 - → Major bottlenecks / needs identified were (a) products adapted to export market demand; (b) attractive packaging, which also allows for an adequate shelf life; and (c) food safety certification as a pre-requisite for exporting.

These needs have been successfully addressed and product development, packaging design and certifications have been realized.

- Specific Objective 4: Original version: Increase quantity and improve quality of harvested crops supplied by farmer groups to selected food processing firms.
 - Overall, the level of achievement of this Specific Objective can be classified as low. Some interviewees have even regarded it as a failure.
 - As already mentioned above, it turned out that the concept had a major weakness concerning the acceptance of the promoted Typica variety:
 - Coffee processors / exporters are split in their opinion if and to what degree the premium price for Jamaican Blue Mountain coffee depends on the traditional Typica variety. This situation has turned further against the Programme when one of the major protagonists has been taken over by the major processor / exporter, who is not convinced of this approach.
 - Coffee farmers prefer alternative varieties, such as Catimor, which give higher yields and need less plant care input (labor and pesticides). In addition, it is assumed that Typica is more perceptible to the coffee leave rust disease.
 - Payment for coffee cherries on farm level is the same for all varieties. A price differentiation to stimulate cultivation of Typica is not practiced and would be extremely difficult to introduce, due to mixed variety plantations and the cherries being non-distinguishable.
 - OVI SO 4.1: Number of processing firms receiving advisory services)
 - → During the first stage of the result area 2 (coffee), the targeted four processing firms have participated in the project, as envisaged: Jamaica Standards Products, Coffee Traders, Mavis Bank Coffee Factory, Jamaica Coffee Corporation. The latter pulled out of the project later on, due to internal financial reasons, before the major part of the implementation began (preparation and selling of seedlings to small holder farmers, combined with training packages).
 - OVI SO 4.2: Number of workshops, training, events, seminars, conferences etc.
 - → According to data presented in IFC's Preliminary Final Report, only 5 of the originally envisaged 16 events etc have been realized, due to the problematic situation of the coffee sector (draught, decline of prices, coffee leaf rust disease), which had a negative impact on the receptiveness of the foreseen activities. The realized activities concentrated on the following coffee working group sessions:
 - Discussions of findings of the assessment with the key coffee stakeholders,
 - Presentation and discussion of recommendations to address current quality and production challenges,
 - Revealing and discussion of general agreement on findings,
 - Presentation and discussion of importance of adequate selection of varieties and better practices in nursery management,
 - •Promotion of collective action by the group that to protect Jamaica's coffee quality.
 - OVI SO 4.3: Number of trainers/technicians trained to provide improved skills

- → According to IFC reporting, the target number 24 trainers / technicians / extension officers trained has been exactly achieved. This includes extension staff from four coffee processors and JACRA (formerly CIB), which has been confirmed during meetings with the evaluator.
- OVI SO 4.4: Number of participating technicians reporting satisfied or very satisfied with workshops, training, seminars, conferences, etc.
 - → Although no data is available, if the target of 90% has been achieved, interviews with representatives of coffee processors / exporters and the Jamaica Agricultural Commodities Regulatory Authority (JACRA) lead to the conclusion that they are in their clear majority satisfied. This is also underlined by the observation that training materials (booklets) are regarded as useful and they are still being used to for training of farmers.
- o OVI SO 4.5: Number of training modules and new training materials developed
 - → The development 5 such training modules / materials had been defined as OVI, and it is reported that one training manual has been developed for extension staff and a set of five training materials (one-page flyers on pruning, fertilization, tree training and pest management) for farmers.

Nevertheless, as regards the quality of these manuals / materials, two important limitations have to be made:

- The five one-page flyers are mainly copies out of the manual and can hardly be classified as additional outputs.
- Processors have commented that the training material and corresponding training of the extension staff did not lead to any new insights, although a refreshment of the extension officers' knowledge through these activities has been confirmed.
- o OVI SO 4,6: Number of coffee plants sold
 - → Altogether, the project reports having sold slightly above 300.000 plants as compared to its own target of 500.000. Additionally, a review undertaken by an evaluation team contracted by IFC (Market Research Services Ltd MRSL) did hardly find any plants even at those farms, which according to project data had received seedlings. This is explained (a) due to the extreme draught following the planting activity, killing a large number of seedlings, and (b) the farmers' strong adversary against the promoted Typica variety, due to the higher costs involved (labour, fertilizer, pesticides, combined with lower yields).
- OVI SO 4.7: Number of coffee farmers trained on improved practices by technicians participating in the project
 - → The target set by IFC for this OVI has been of 500 coffee farmers. According to IFC reporting, this number has been achieved with 668 farmers, who have participated in 43 workshops organized by JACRA (then still known as CIB). This number, however, is questioned by the internal evaluators (MRSL), who estimate the number being rather below 300.

Additionally, it needs to be mentioned that this OVI is just input-based and does not give any indication in how far the training contents / "messages" have been

implemented on farm level. According to information received during interviews with various stakeholders, it must be assumed that the degree of implementation is rather low, due to farmers' general reluctance concerning introduction of new technologies and the costs involved for inputs (fertilizer) in a period of drastically declining coffee prices and hence income on farm level.

- OVI SO 4,8: Number of coffee farmers trained on improved practices by technicians participating in the project (women)
 - → The target of 100 women being trained in the project (i.e. 20 of all participants) has not been achieved, neither in numbers (51) nor as percentage (8%). However, this is mainly due to the vast majority of coffee farmers being male, and it does not imply a bias towards male farmers in project implementation.
- OVI SO 4.9: Coffee area upgraded by infilling or replanting of good quality plantlets (acres)
 - → Unfortunately, no data is available concerning this indicator. However, it can be taken for sure that reaching the envisaged area of 1.500 acres has been failed by far. This is due to two main reasons:

On the one hand, the number of seedlings handed over to the farmers has only reached approximately 60% of the targeted 500.000 plants, due to a reduced demand for the Typica variety.

On the other hand, a considerable number of the seedlings have died during the first year following their planting on the farms, due to a severe draught and possibly also due to insufficient care by the farmers.

Component 2 – Laboratory Infrastructure

Summarizing, the achievement of the envisaged results concerning the upgrading of Jamaica's laboratory infrastructure can be categorized as high.

A summarizing overview of the support provided through this component is given in Table 1. Thereby, support provided under both projects, EPA I and EPA II are included in this table, due to their complementarily and EPA II having continued EPA I activities.

Table 1: Upgrading of Laboratories

	Upgrading of facilities	Upgrading of facilities	
Laboratory	(equipment) *	(works)	Training
Bureau of Standards (BSJ)Microbiology	EPA I		EPAI & EPA II
Bureau of Standards (BSJ) Chemistry	EPA I		EPAI & EPA II
Pesticide research Laboratory (PRL)	EPA I	EPA I	EPAI & EPA II
Bodles Virology	EPA I	EPA II	EPAI & EPA II
Bodles Plant Protection	EPA I		EPAI & EPA II
Veterinary Service Division (VSD)	EPA I		EPAI & EPA II
Microbiology	L17(1		
Veterinary Service Division (VSD)	EPA I		EPAI & EPA II
Parasitology			
Veterinary Service Division (VSD) Residue	EPA I		EPAI & EPA II
Plant Quarantine			EPAI & EPA II
National Public Health Laboratory (NPHL)			EPAI & EPA II

^{*} EPA I project beneficiaries have received essential laboratory equipment and related supplies under this project. Therefore, EPA II has only supplied minor complementary equipment to the laboratories, which has not been supplied under EPA I (e.g.: microscopes, IT equipment etc)

Below, the achievement of each result and the corresponding OVIs is presented and commented in detail.

- Result 5.1: A wider scope of laboratories services that meet international requirements and standards on food safety.
 - OVI R 5.1.1: Increase in number of accredited laboratories
 - → This target has been achieved. Since beginning of the EPA I project, which thereafter had been "continued" by the EPA II project, altogether 5 laboratories have been accredited. Thereby, the process finally leading to accreditation included support through technical upgrading, technical training of laboratory staff and training / coaching of laboratory staff concerning accreditation procedures. The latter included the different steps from application via document review, on-site assessment, and follow-up verification activities until final approval.
 - Pesticide Residue Laboratory (PRL) at UWI to conduct tests for pesticide residue in foods
 - Bureau of Standards Jamaica (BSJ)
 - Chemistry Pesticide Residue Laboratory to conduct tests for pesticide residue in foods for a wide range of items
 - BSJ Microbiology in 15 Food Tests
 - Veterinary Service Division (VSD)
 - Heavy Metals
 - o Amnesic Shellfish Toxins

Still problematic is the accreditation status of the laboratories at Bodles. The accreditation for the Plant Virology Laboratory has not yet been achieved. Although the application had been submitted and most of the required preparation /

documentation for have been done, the accreditation is still not accomplished, and it will take more time, due to procedures having changed in between (see below). Taking into account that EPA I has already started in 2012, and Bodles having been a clear target laboratory since then, this is definitely unsatisfactory.

A major delay for the Bodles Plant Pathology Laboratory was due to the situation that the physical upgrading of the laboratory, initially done under the IDB/GOJ Agricultural Competitiveness Programme (ACP), was not compliant with the with ISO/IEC 17025 accreditation standards. However, now the physical upgrading of the laboratory has been finalized since more the 18 months, supported by the EPA II project, but the accreditation has still not been accomplished. This is mainly due to the late completion of the laboratory facilities, entailing the delayed installation of the equipment, and thus not being able to benefit from the project's coaching towards final successful accreditation. Due to these delays, the laboratory has now to renew its applications for accreditation, because in the meantime, the criteria for the new version 2017 are applicable for ISO 17025.

- OVI R 5.1.2: Operation of system for proficiency testing (PT) and inter-laboratory comparisons (ILC)
 - → On JANAAC level, staff has been trained and proficiency testing has been put into operation together with SWEDAC. However, on laboratory level such system was not developed and put into operation. This has been mentioned by laboratory management during interviews with the evaluator as shortcoming. They would have liked this being included in the project activities to further facilitate future their laboratories' technical capabilities on international standards level.

On laboratory level, trainings have been provided on participation in proficiency testing. However, laboratories mentioned that they would have preferred if this training had been followed by a realization of proficiency testing activities. Unfortunately, this has not been part of the project.

- o OVI R.5.1.3: Efficient use of new, upgraded equipment and materials in laboratories
 - → While the laboratories operated by PRL, BSJ and VSD are appropriately utilized, the equipment at Bodles is still under-utilized or even not yet fully connected and put in operation. This is mainly due to the late completion of the laboratory facilities and the consequently delayed installation of the equipment, but also supported by the missing accreditation.

A setback has to be reported for the PRL laboratory at Mona: Their downstairs facilities have been severely damaged during a fire in October 2018. Nevertheless, the upstairs facilities continue working satisfactory and have taken over activities previously done downstairs. The decision of the insurance concerning the coverage of the damage is still outstanding.

OVI R 5.1.4: Operational, upgraded laboratories providing more effective services
 The provision of appropriate technical services can be confirmed for PRL, BSJ and VSD. In case of PRL and BSJ, this has also been confirmed by sauces & spices as well as by coffee processors interviewed by the evaluator.

However, these clients have also made some clearly critical comments concerning the laboratories performance. While satisfied with the technical performance, their commercial performance is regarded as clearly deficient: Often, they are more expensive and – what is more important for the clients - require much more time for the analyses, as compared to services provided by US-based laboratories (even including additional time and costs required for shipping the samples). Furthermore, a lack of business approach and customer care has been reported. What needs to be improved is the accessibility of laboratory staff (by phone) and after sales follow-up, as well as recommendations from laboratories on how to overcome possible problems at processors' level.

- Result 5.2: International acceptance of test results and Conformity Assessment services.
 - o OVI R 5.2.1: Demonstrably enhanced skills and capacity of JANAAC
 - → JANAAC staff has benefitted from various capacity building measures (trainings, practicing assessments). This included expansion of JANAAC's scope of accreditation services to cover also accreditation of IBs in accordance with the international standard ISO/IEC 17020. Also, JANAAC staff has been trained and involved in activities for laboratories on issues related to accreditation for the sake of improving harmonization of requirement interpretation (e.g. training courses and Ex-Ex-Group)

Interviewed laboratories have confirmed their perception that JANAAC's skills and capacity have improved during the project period, although EPA I and EPA II influence on this cannot be clearly distinguished.

It can also be positively reported that key staff of JANAAC has been very stable over the last few years with a low turnover rate.

- OVI R 5.2.2: Establishing a benchmark partnership with an European AB (Accreditation Body)
 - → By August 2017, a benchmark partnership between JANAAC and the Swedish Board of Accreditation & Conformity Assessment (SWEDAC) has been established.
- OVI R 5.2.3: Assistance from a benchmark partner
 - → Based on the aforementioned benchmark partnership with SWEDAC, JANAAC has received support through ongoing exchange of experience (good practice) and witnessed audits. The support included trainings of JANAAC staff at SWEDAC's offices in Sweden. The close contact that has been established between SWEDAC and JANAAC is still continuing through frequent "remote coaching" and support upon request.
- Result 5.3: Enhanced monitoring programmes for residues including pesticides, veterinary medicinal products and environmental contaminants.
 - → Major efforts and investments have been made by the Programme to develop a database infrastructure and provide corresponding training for enhanced monitoring programmes for residues including pesticides, veterinary medicinal products and

environmental contaminants. However, these have never been put in operation and applied, mainly due to unsolved and overlapping institutional responsibilities and major concerns concerning the confidentiality of data resulting from inspections on company level.

- OVI R 5.3.1: Design and implementation of training programme
 - → A corresponding training programme has been designed and initially implemented. However, the application of these skills as been very limited, due to the aforementioned institutional problems
- o OVI R 5.3.2: Effective work by trained inspectors
 - → Inspectors have been trained by the project. However, the application of these skills as been very limited, due to the aforementioned institutional problems,
- o OVI R 5.3.3: Reduced level of shipment rejections
 - → No data is available concerning this OVI.
- o OVI R 5.3.4: Establishment of the database
 - → A ready to use database structure incl. a web-based user-interface for upload and compilation of data on food contaminants has been established. However, until November 2019, the database has not been utilized and is currently not further supported.

3.6. Impact

Sauces and Spices

During implementation of this result area, an umbrella company (Catiki) has been formally established as a joint operation to concentrate export new activities by three sauces and spices processors. In this context, new products meeting export standards have been developed and market access opportunities have been identified, especially for the US market.

However, a measurable impact of these activities would require the implementation of export initiatives by Catiki. This has not been achieved during the Programme implementation period. And unfortunately, it cannot be expected that the three Catiki shareholders will be able to mobilize the necessary funding for this next step without further external support.

Consequently, any possible direct impact in form of export revenues can only be expected in case that Catiki manages to mobilize additional funding, which they are currently try via the IDB-financed Compete Caribbean Programme.

Coffee

Unfortunately, no major impact can be expected from the promotion of the traditional Typica coffee variety. This is due to the aforementioned very limited acceptance of the promoted traditional coffee variety on farm level, and further hampered by the skeptical position of processors / exports concerning the necessity of this variety to defend their price premium.

As a side activity, the Programme has supported JACRA in its efforts to further extend the coverage for a verifiable registration of coffee farm(er)s. This activity is currently continued by JACRA beyond the Programme. In the medium term a verifiable registration of coffee farm(er)s will be a valuable precondition for efficient and effective support of coffee growers with a positive impact on coffee production on farm level:

- Access to finance
- Better targeted and faster control of diseases
- Better targeted and focused support of farmers in case of local climatic challenges (flooding, hurricanes, draught etc)

Quality Infrastructure

It is difficult to measure the true impact of the interventions so soon after the end of the Programme. Especially the envisaged positive impact and stimulus on non-traditional food and other agro-based products can be measured rather in a medium-term perspective. Also, improved laboratory services are just one element in the value chain, being a link between production / processing on one side and sales / marketing on the other side.

However, it can be foreseen that providing internationally recognized laboratory and certification services will definitely have several positive impacts on Jamaican agro-based production and exports:

- Locally available laboratory services could provide their services much quicker as compared to international laboratories, which require time consuming and expensive air transport, including often complicated customs procedures, especially concerning the USA. However, according to interviews on company level (i.e. clients of laboratories) a fast turnover time is still not guaranteed by most laboratories. This major critical aspect still needs to be improved to strengthen local laboratories" competitive position vs. USbased laboratories.
- Direct and personal contact between local laboratories and their customers (in this case mainly agro-processing companies) can provide a more in-depth feedback to clients, thus contributing to a more focused development of products and processing methods, which are compliant with international standards.
- Local laboratory facilities are much likely to be consulted by less experienced smaller companies. Their geographical proximity and the "same language" spoken by the laboratory staff is regarded as a major advantage by (potential) new exporters and results in a lower entrance barrier.
- The importance of an improved and internationally recognized laboratory infrastructure, as well as a certification of (potential) exporters is an important precondition to further increase agro-based exports, building on a momentum, which has already started.

Hence, the potential medium to long-term impact at the beneficiary level can be rated as average or good.

3.7. Sustainability

Sauces & Spices

Overall, the sustainability of measures implemented under this result area can be qualified as low, because the umbrella company, Catiki, is unlikely to continue the marketing activities required to export the newly developed products.

Below, the sustainability-aspect concerning two major lines of activity will be further outlined:

- Improvement production process / quality standards
- New products and markets

Improvement production process / quality standards

All interviewed processors have unanimously underlined the hands-on quality of the provided consultancy through various short-term experts (STEs). This has entailed both: On the one hand, higher quality standards and the conviction concerning the necessity of certifying their companies and on the other hand a pragmatic – albeit quality focused – optimization of the production process.

It can be assumed that this pragmatic approach towards combining increased striving for high quality standards (also through corresponding certification), with production efficiency aspects will be further pursued by the beneficiary companies.

This (sustainable) "change of mindset" has been achieved through the experts'

New products and markets

Concerning the development of a new product line and the opening up of new markets, the project has focused its activities on the newly created "umbrella company" CATIKI. The formal establishment of CATIKI by three competing sauces & spices processors is by itself a success. In addition, the newly developed product line is convincing and appealing.

However, the opening up of and entry into new markets, which has been the implicit target of the project and CATIKI, will require substantial additional resources. However, CATIKI as legal entity has no own financial resources and as newly created company with no collateral, it will have no chance to qualify for commercial bank credits. And apparently, the three co-founders and shareholders of CATIKI don't seem to be able and willing to invest the required funds.

Consequently, this operation must be seen as not being economically viable. Its only chance for economic survival and implementation of the ambitious marketing / sales plans seems to be the mobilization of external funding opportunities. In this context, CATIKI has currently prepared an application for funding through IDB's Compete Caribbean Programme.

Coffee

Overall, the sustainability of measures implemented under this result area can be qualified as low.

Below, the sustainability-aspect concerning three major lines of activity will be further outlined:

- Trainings and extension services
- Seedlings
- · Registration of farmers

Trainings and extension services

Training and extension service for coffee farmers is provided by JARCA (with a team of seven extensionists) and the coffee producers. It can be assumed that these are sustainable operations, which have been in operation already before the project, and which will continue beyond the project without major changes. Training material (including brochures and leaflets to be distributed to farmers) developed and introduced by IFC-experts are still being utilized by extension officers, although the additional value of these, as compared to previously used training material, has been qualified as low / marginal.

Seedlings

JARCA has advocated strongly for promoting the traditional Typica variety, because it is one of the key decisive factors which makes out the specific character of the Blue Mountain Coffee, and which is therefore crucial to maintain the price premium for Blue Mountain Coffee.

However, this argument is being discussed and challenged even by (at least some major) processors. Furthermore, the farmers get the same price for their coffee cherry, regardless from which variety they are.

In addition to this, to the farmers' experience the Typica variety is producing lower yields, being more demanding (labour, inputs,) and more susceptible to diseases (especially roya / coffee leave rust).

Therefore, as a logical consequence, coffee farmers rather plant other varieties (like Catimor or Geisha) instead of Typica.

Due to these circumstances, the promotion of Typica seedlings has to be qualified as non-sustainable.

Registration of farmers

This activity has entered the project at a later stage, when the implementation of the foregoing mentioned activities faced increasing adversities.

The project supported JACRA in its efforts to establish a registry of coffee farmers, based on verifiable data including GPS documentation of farms' location, size etc.

This activity had already been started by JACRA before beginning of the project and is being continued also beyond the project, albeit at a slower pace. Consequently, it can be qualified as sustainable It is definitely suitable to be an excellent – if not indispensable - basis for future activities to further support and develop the coffee producing sector.

This important baseline data is also a fundamental contribution to facilitate the sustainability of the Jamaican coffee sector. Based on verifiable and exact (GPS / GIS supported) data

concerning coffee farms, better targeted measures can be more efficiently and effectively organized, for example

- to organize focused support programmes in response to local climatic hazard (hurricanes, flooding etc);
- to respond to local outbreak of phyto-sanitary problems (e.g. roya / coffee rust);
- to (pre)finance coffee farmers' activities.

Laboratories

In general, it can be stated that all supported laboratories do have a very high likelihood to institutionally survive. With exception of the PRL, which is a well-managed private operation, all other laboratories and accreditation /certification bodies are public entities, and their continuity is ensured for the upcoming years.

All laboratories which have been upgraded and accredited with EPA I and EPA II support have recently renewed their accreditation for ISO 17025, version 2017. This has been done without further donor support.

However, and in spite of this general institutional survival, several challenging aspects still need to be addressed in order to ensure that the laboratories will be able to sustainably provide their services in line with technical quality standards and their (potential) clients' (i.e. especially agroprocessing companies) requirements. Otherwise, the sustainability of achieved quality standards at the laboratories concerning equipment, accreditation and procedures will not be sustainable:

- Keeping laboratory staff up-to-date with new developments requires a continuous training. So far, a major part of this training is financed through international projects, but in a medium- to long-term strategy, such trainings have to be included in the institutions' core budgets. This is even more important, taking into account the fluctuation of experienced technical staff, which requires appropriate training of the new staff.
- Several public laboratories have expressed their complaints concerning the lengthy procedures to release resources to purchase spare parts in case of repair needs for their equipment. This results in delays and sometimes lengthy periods, during which no services can be provided to their clients. However, the Jamaican processors of export goods need reliable services to be able to meet their clients' requirements concerning product quality and delivery time. If not being able to provide a reliable service, exporters might rather prefer services from laboratories abroad, albeit these are more expensive.
- Similar bottlenecks are likely to come up, when major future investments are needed for upgrading and replacement of equipment, which is a precondition to keep up with developing international standards and laboratory technology.

Summarizing, the aforementioned challenges refer in their quintessence to the observation that an appropriate "Business Approach" is not yet sufficiently internalized by the laboratories', except for PRL. Although this deficit is known and currently being addressed, its overcoming is not yet assured and still needs considerable efforts by the laboratories themselves, but also a political decision to allow for a reliable financial basis to facilitate a long-term laboratory infrastructure meeting international requirements.

3.8. Crosscutting issues

Gender

The inclusion of women and more so the inclusion of women at all levels has not been consequently measured and documented for all different kind of activities. Statistics were not always kept. Nevertheless, available data and observations made during the evaluation mission indicate that (implicit) gender targets have been met and women are major beneficiaries of the Programme. Based on interviews during the evaluation mission it can be taken as granted that especially trainings provided for the sauces & spices sector and upgrading of laboratory infrastructure have been attended by a majority of women. Concerning the coffee sector, the vast majority of farms are owned / operated by men and only an approximately 10% of the training attendants were women.

Sauces and Spices

As shown in Table 2 for the three Catiki founders, employees in the sauces and spices sector (and generally in the food-processing sector) are predominantly female:

Table 2: Employees of Catiki Foods Limited's founders

Laboratory	Pepper Products Ltd	Tijule Company Limited	Canco Limited
Total employees	62	76	180
Total # of women employees	35	51	150

Source: IFC; Jamaica Food SME Program - EPA Capacity Building II - Preliminary Final Report

Coffee

Only for coffee farmers trained on improved practices by technicians trained in the project, participants have been monitors by gender: Nearly 10% were female farmers, which at a first glance seems to be low, but it reflects ownership of smallholder coffee farms in Jamaica.

Laboratories

At the level of key professional staff being responsible for the planning and implementation of project activities in the laboratories, BSJ, JANAAC and NCBJ, an overall very balanced gender distribution can be observed (nine male and eight female). In addition, all laboratories employ a relatively high percentage of highly qualified female technicians, which has been confirmed by interviewees during the evaluation mission.

Environment

Neither the Financing Agreement, nor the Programme Estimates did foresee any explicitly environment-related targets of the Project's activities. However, the project has clearly positive environmental externalities through all measures implemented in all major components and result areas:

Sauces & spices

Export customers of sauces and spices are increasingly demanding concerning product safety. Consequently, processors are seriously testing their products concerning pesticide residues and these tests are now almost entirely done by local Jamaican laboratories, which have been supported – among others – by the EPA I and EPA II Programmes.

To meet these requirements, sauces and spices processors request their suppliers (local farmers) to apply pesticides accordingly and provide corresponding guidance.

Coffee

Coffee processors have confirmed that they increasingly test their products (especially green beans exported to Japan) concerning possible pesticide residues. This, together with further improves extension services for coffee farmers (provided by JARCA and processors) results in less and especially better i.e. more focused) application of pesticides in coffee farming.

Another positive environmental side effect is soil protecting / preservation effect resulting from the perennial nature of coffee, which avoids erosion in the extremely hilly coffee growing areas of Jamaica.

Laboratory Infrastructure

The Programme facilitates greater control in the use of pesticides in agricultural production, wider implementation of environment-friendly management schemes and relevant certifications. This is facilitated through upgrading of laboratories responsible for the control of pesticide residues and soil testing.

Public Health

The aforementioned stricter control of pesticides residues in food products and better control of pesticide application on farm level is not only a precondition for exports. It can also be expected that greater attention on international food safety standards will have a positive impact on the domestic standards, therefore allowing access to safer food to all the population. The same production / processing lines are used for locally marketed food, too.

Mitigation of Rural Depopulation

Approximately 7.000 smallholder coffee farmers and their families live in remote rural areas, without noteworthy other sources of income. Their livelihood is based on JBM coffee and the price premium which it achieves on the world market. Consequently, any activity which contributes to increasing more profitable coffee productivity is appropriate to mitigate migration of the rural farm population into urban areas.

4. CONCLUSIONS AND RECOMMENDATIONS

4.1. Conclusions

The Tables below (see Table 3, 4 and 5) give an overview of key conclusions for each of the three components:

- Sauces and Spices
- Coffee
- Quality Infrastructure

Table 3: Conclusions and main findings: Sauces and Spices

Sauces & Spices Component

The establishment of an "umbrella company" (Catiki) by three sauces & spices producers is widely recognized as a success, and replication in other sectors could be interesting.

Unfortunately, a corresponding best practice documentation / guideline has not been shared with BSOs and other interested parties, thus limiting future replication of this positive experience.

Incorporation of quality approach by firms (certification) has been successfully promoted and implemented, mainly due to hands-on in-company advice. Practical advice oriented at specific company's capacity and needs instead of state-of-the-art theory is crucial.

Due to time requirements being longer than anticipates for (a) selecting companies willing and able to establish a consortium and (b) for product development, no export has been generated through "umbrella company" CATIKI during the implementation period. Stricter time management might require limitation of participatory process.

Table 4: Conclusions and main findings: Coffee

Coffee Component

Unfortunately, the intended promotion the traditional Typica variety faced a low acceptance by coffee farmers. This has been caused by external factors (sharp decline in coffee prices) and internal factors (higher costs combined with lower yields and income as compared to other varieties).

Accelerated verifiable registration of coffee farmers is confirmed by all stakeholders to be as key precondition for efficient and effective future support to coffee farmers.

Investment and financial commitment of (some) processors in promotion of Typica variety has been one important element / precondition for success. Unfortunately, resulting from a consolidation process in the coffee industry during project implementation, processors less convinced in Typica's advantages have significantly strengthened their position.

Table 5: Conclusions and main findings: Quality Infrastructure

Quality Infrastructure Component

Upgrading of infrastructure and procedures at 8 laboratories has been successful and all supported laboratories except one (Bodles) have already renewed their accreditation beyond the project and with own resources.

Increased laboratory capacity / qualification in combination with increased awareness concerning food security and certification on company level have resulted in an increasing utilization of lab services by food processors & exporters.

Sustainability of laboratories requires a combination of an improved business-oriented management of laboratories. Additionally, laboratories in small economies are likely to rely on basic financing being provided by Government resources.

The database for registration of food contaminants is not operational, mainly due to unsolved institutional responsibility issues.

4.2. Recommendations

The Table below (see Table 6) gives some recommendations (together with the corresponding observations on which they are based), which should be taken into account for the design of future similar projects or follow-up activities.

Table 6: Observations and recommendations

Observation	Recommendation
Projects implemented through Contribution Agreements tend to be perceived by beneficiaries and other stakeholders as also being financed by the Implementing Agency.	A clear visibility strategy concerning project documentation, handouts etc, which clearly indicate the EU as financing institution, needs to be strictly adhered to.
SME's professional staff capacity is limited (management staff & technical staff). Decision taking is mostly concentrated on one person (CEO / General Manager / Owner).	As project activities have to be implemented additionally to the usual day-to-day business without having dedicated project teams, extra time has to be calculated in planning of project activities.
Unanimously, the short-term experts employed under the sauces & spices result area 1 have been qualified as very good and clearly better as compared to previous experiences.	 Try to replicate in future projects crucial success factors for highly appreciated experts: Hands-on support on the shop floor- including follow-up through "remote guidance" - Instead of "lecturing approach". Good understanding of institutional, financial and human resources capacity in small island economies. Looking for pragmatic solutions instead of teaching unrealistic and unsustainable high-end solutions.
At the end, the project ran out of time and resources to implement the (crucial) export marketing plan for sauces & spices. At the beginning, time was lost due to "too participative" approach in selecting the final companies who would be ready to join an joint umbrella company.	Follow a more rigorous selection criteria for "eligible" companies during the beginning: • First experience in export activities or proven readiness for export. • Ability and willingness to contribute own resources (even if small ones), already at early stage of the project, thus separating those who are really interested and committed from those who only participate as long as now investment is required. This would allow for even more focused utilization of project resources and implementation time. Rather go for a pilot type example with few but really interested and capable participants then getting "stranded" half way with too many participants on board.
The establishment of an "umbrella company" (Catiki) by three sauces & spices producers is widely recognized as a success, and replication in other sectors could be interesting. Unfortunately, a corresponding best practice documentation / guideline has not been shared with BSOs and other interested parties.	In order to further leverage the success of this positive experience, it would have been necessary to prepare a corresponding documentation and present / distribute it to BSOs (and not only to Catiki shareholders) for future multiplication. Otherwise, the wheel might have to be invented again, and resources would be wasted.
Participants in trainings and other capacity building measures increase	Assure that participants in (expensive) trainings and study tours have a "bonding agreement" with

Observation	Recommendation
their professional qualification and hence their "market value". Consequently, they are tempted to look for better-paid jobs, sometimes abroad.	their employer. This would increase the probability of them staying with their current employer.
Capacity building of laboratory staff has been successful. However, turnover of staff as well as continuous technical developments require this to be transformed into a continuous process rather than a single activity.	In addition, public institutions (like most laboratories) should contribute to training costs. Later on, they will have to continue these activities anyhow to keep their professional standards up to date.
Capacity building for laboratories was focused – similar as with many other projects / programmes - on technical aspects.	To justify investment in technical aspects (equipment & training), it is an indispensable necessity that laboratories increase management capacities to better utilize these investments. This requires structural adaptation and business minded approach: • Business planning • Accurate costing of services • Service mentality • Fast response to customer requests • Pro-active communication with (potential) customers
Laboratories have faced unplanned costs and down time due to equipment for laboratories having been purchased without corresponding service contracts and warranty agreements.	Make sure that appropriate service and warranty agreements (including spare parts) are part of the supply contracts. With limited resources, rather opt for more inclusive service component and sacrifice additional equipment.
With end of project, external support ends, although "guidance" would still be required to consolidate achievements	Long-term partnership with more advanced (but not too exaggerated) laboratories for exchange of experience would increase sustainability of project initiatives and achievements.
Knowledge of (potential) clients from the private sector concerning services offered by laboratories and potential benefits for them is still limited.	Laboratories need to establish a systematic marketing of their services. Probably most efficient as a joint activity, because of limited competition due to limited overlapping of services.
Home market for laboratories in Jamaica is small and limits possibilities to reduce costs per test through scale effects.	Broaden marketing activities towards the CARICOM region. Assure quick response / turnover time as key sales argument for private sector customers
Major efforts and investments have been made by the Programme to develop a database infrastructure and provide corresponding training for enhanced monitoring programmes for residues including pesticides, veterinary medicinal products and environmental contaminants. However, these have never been put in operation and applied, mainly due to unsolved and overlapping institutional responsibilities and major concerns concerning the confidentiality of data resulting from inspections on company level	Make sure that the institutional setup is in place for later implementation and utilization of newly developed systems before starting to develop new systems

4.3. Lessons learnt

The following Table (see Table 7) shows some lessons learnt (together with the corresponding observations on which they are based), which generalise findings and experience of EPA II Programme into relevant knowledge that should support decision making, improve performance and promote the achievement of better results for future projects.

Table 7: Observations and Lessons learnt

Observation	Lessons learnt
As also observed in numerous other projects, lengthy recruiting process for the Project Manager has caused delays at beginning.	Start recruiting and contracting Project Manager, with a suspension clause, already before FA is signed.
At the end, the project ran out of time and resources to implement the (crucial) export marketing plan for sauces & spices. At the beginning, time was lost due to "too participative" approach in selecting the final companies.	Follow a more rigorous selection criteria for "eligible" companies during the beginning.
At the end, the project ran out of time and resources to implement the (crucial) export-marketing plan for sauces & spices. At the beginning, time was lost due to "too participative" approach in selecting the final companies who would be ready to join an joint umbrella company	 Follow a more rigorous selection criteria for "eligible" companies during the beginning: First experience in export activities or proven readiness for export. Ability and willingness to contribute with own resources (even if small ones), already at early stage of the project, thus separating those who are really interested and committed from those who only participate as long as now investment is required. This would allow for even more focused utilization of project resources and implementation time. Rather go for a pilot type example with few but
	really interested and capable participants then getting "stranded" half way with too many participants on board.
The establishment of an "umbrella company" (Catiki) by three sauces & spices producers is widely recognized as a success, and replication in other sectors could be interesting.	In order to further leverage the success of this positive experience, it would have been necessary to prepare a corresponding documentation and disseminate it to BSOs for future multiplication.
External factors / variables (like in the case of result area 2 – coffee: Industry consolidation with changed priorities, drastic decline of prices, weather turbulences) might change the framework for project implementation.	When it became clear that promotion of the Typica variety lacked acceptance by coffee farmers, the focus of project activities has been adapted to the new conditions, which in this case has led to inclusion of new project activities (i.e. farm registration). Such flexibility of both, implementing agencies / contractors as well as EU, is a good example, demonstrating the need (a) to constantly monitor project progress and changes in the business environment, and (b) to readjust project activities accordingly, if necessary.
Limited acceptance of traditional coffee	Make sure that final beneficiaries' interests are in

Observation	Lessons learnt
variety (Typica) by farmers (higher cost and risk combined with lower yield and no price premium) made successful promotion of Typica unlikely, even without unforeseeable external factors having influences the development (see forgoing box).	accord with project activities and targets. Avoid top-down planning without prior checking their acceptance.
Knowledge of (potential) clients from the private sector concerning services offered by laboratories and potential benefits for them is still limited.	Laboratories need to establish a systematic marketing of their services. Probably most efficient as a joint activity, because of limited competition due to limited overlapping of services.
Home market for laboratories in Jamaica is small and limits possibilities to reduce costs per test through scale effects.	Broaden marketing activities towards the CARICOM region. Assure quick response / turnover time as key sales argument for private sector customers
Public labs are not yet managed in a way that assures long-term sustainability of their services.	This can only be accomplished through adopting a business approach to the way services are costed, laboratories maintained and the entities marketed. This does not imply that all labs need to operate self-sufficient. Corresponding activities have been started, but need to be further intensified, until such a management philosophy is internalized in the public labs.
"Generic" sensitization activities have already been frequently provided, they are not sufficient to trigger (potential) exporters of agro-based products to introduce appropriate measures.	Offer in-company sessions, too, to further convince and motivate entrepreneurs, who should contribute in a cost-sharing scheme to these services.
Sensitization measures are focused on "what has to be done" to "meet regulatory requirements".	For better "capturing" / convincing of the private sector, sensitization activities should, wherever possible, include cost and benefit elements.