

Environment and Social Analysis for the Modernisation of the Agriculture Sector Project





Table of Contents

Li	st of Ak	breviations	3
1	Intr	oduction	4
	1.1	Purpose	
	1.2	Project Overview	
2		eholder Identification and Analysis	
	2.1.		
3	Con	sultation Planning	
4		ew of the Stakeholder Consultation - October 29, 2019	
	4.1	Session 1: Welcome and Introductory Remarks	10
	4.2	Session 2: Introduction to the Modernization of the Agriculture Sector Program (MASP)	10
	4.3	Session 3: Presentation of the Findings and Recommendations from the Environment and	
	Social	Assessment (ESA)	11
	4.4	Session 4: Question and Answer Segment	13
5	Арр	endix I – List of Invitees	19
6	Арр	endix II– Register of Attendees at the Stakeholder Consultation	31
7	Арр	endix III – Invitation to Stakeholder Consultation	32

List of Abbreviations

ESA Environment and Social Assessment

ESL Environmental Solutions Limited

GoJ Government of Jamaica

MASP Modernization of the Agriculture Sector Project

MICAF Ministry of Industry, Commerce, Agriculture and Fisheries

1 Introduction

1.1 Purpose

This document presents the proceedings of the stakeholder consultation held for the Environmental and Social Assessment conducted for the Modernization of the Agriculture Programme (MASP). The stakeholder consultation was held at the Hotel Four Seasons in Kingston, Jamaica on October 29, 2019. This meeting was organized to sensitize stakeholders about the developing MASP, present the findings and recommendations of the environmental and social assessment carried out, as well as to gain feedback from key stakeholders involved.

1.2 Project Overview

The agricultural sector is an important contributor to Jamaica's economic development and is recognized as a priority in the government mid-term economic and social development plans. The Ministry of Industry, Commerce, Agriculture and Fisheries (MICAF) has had challenges over the years in the development of this small-scale agricultural sector. This sector is considered to be underexploited with several challenges preventing farmers from being competitive on the local and international markets.

To improve small-scale farmer competitiveness in larger local and international markets, production practices and outputs need to meet market requirements, quality and cost. MICAF has recognized the need to create synergies among small-holders, provide development support and connect agricultural producers to a wider market of consumers. The Modernization of the Agricultural Sector Program (MASP) is being prepared by the Government of Jamaica (GoJ), to continue the development of small-scale agriculture in Jamaica, with greater focus on increasing agricultural competitiveness and the modernization of the sector.

The MASP is intended to provide support for various growth-enhancing reforms and development programmes designed to increase agricultural productivity and market linkages by offering improved services in the following areas:

- (i) Animal and plant health services;
- (ii) Food safety services;
- (iii) Agricultural extension; and
- (iv) The promotion of public-private partnerships (PPP) in the agricultural sector.

To achieve the above objectives the following components have been identified:

- Component 1: Agricultural health and food safety
- Component 2: Public agricultural infrastructure and public-private partnerships

During the preparation of this program an environmental and social assessment was conducted to identify potential impacts of the program and provide recommendations on addressing any potentially negative impact as the program is implemented.

2 Stakeholder Identification and Analysis

All stakeholders are participants in the planned implementation of the project in one capacity or the other. However, some have more direct and important roles than others.

This implied order of functional involvement has been summarised in this section.

Medium Interest Stakeholders

Their roles may be based on a specific administrative mandate and capability/capacity which is a standard engagement for them (for example, National Environment and Planning Agency [NEPA]).

Stakeholders with Important Interests

These stakeholders have important information or specific action-based deliverables on which project implementation must rely. The Stakeholder Consultation process will not qualify as robust if these entities are not consulted.

Critical Stakeholders

These stakeholders are critical engines of project development both in relation to conceptual planning and actual resource deployment. This also includes affected parties who will be impacted by this programme. These persons must be consulted.

Table 2.1: Stakeholder Identification

Stakeholders that have a Participatory Role in the Project's planned Implementation	Participatory Role	Current Interest Focus	Current Interest Rating
Ministry of Science, Energy and Technology (MSET)	Facilitating	Technology Input – Linkages with SRC for training	MEDIUM INTEREST STAKEHOLDERS
The Ministry of Health	Facilitating and Procurement	Public Health Inspection of Facilities	
National Environment and Planning Agency	Regulatory	Environmental permits/ licences	
National Land Agency	Facilitating	Land ownership and titling	
Independent lawyer(s)	Procurement and Facilitating	Support Land ownership changes	
Jamaica National Heritage Trust	Regulatory	Guidance on changes to sites with key heritage features	
Mines and Geology Division	Regulatory	Facilitating the extraction of material from rivers or quarries	
JPSCo	Facilitating and Procurement	Electricity supply (AMC Complex only)	
Subcontractors	Facilitating and Procurement	The details of the involvement of these subcontractors are yet to be worked out. They will	

Stakeholders that have a Participatory Role in the Project's planned Implementation	Participatory Role	Current Interest Focus	Current Interest Rating
		perform contracted functions whether on the renovation of the AMC complex or farm management, or as to be determined.	
Contract workers	Facilitating	These will likely comprise the workforce of the subcontractors.	
Equipment suppliers	Procurement	As likely determined by subcontractors	
Contract service providers Facilitators of Project	Procurement and Facilitating	As likely determined by subcontractors and Client	
National Irrigation Commission	Facilitating	Irrigation Water Supply	STAKEHOLDERS WITH AN
National Land Agency	Facilitating	Land acquisition and titling	IMPORTANT
National Water	Facilitating and	Water supply (AMC Complex	INTEREST
Commission	Procurement	plus interfaces with existing networks in Agro Parks)	
Water Resources Authority	Regulatory	Licence for Well Drilling, Pumping, and Monitoring	
Dept. of Cooperatives and Friendly Societies	Facilitating	Supporting the registration and maintenance of Farmers' Groups	
Implementers - Stakehold	ers influencing Project		
Ministry of Industry, Commerce, Agriculture and Fisheries	Implementing Agency	Overarching	CRITICAL STAKEHOLDERS
Agro Investment Corporation	Operations	Manage operations of Agro Parks and AMC Complex	
Municipal Corporations	Facilitation and Planning	Local Government Inputs – Possible interactions with the Inter-Agency Committee, Parish Disaster Committee, Parish Development Committee	
National Works Agency	Procurement	Structural works	
Social Development Commission	Facilitating	Social environment	
National Solid Waste Management Authority	Procurement and Facilitating	Waste management	

Stakeholders that have a Participatory Role in the Project's planned Implementation	Participatory Role	Current Interest Focus	Current Interest Rating
Planning Institute of Jamaica	Facilitating	Project planning and funding	
Affected Stakeholders		1	
All Agro Parks and Packaging facilities	Affected communities	Impacts negative or positive	
Communities surrounding all Agro Parks	Affected communities	Impacts negative or positive	
AMC Complex – Spanish Town Road	Surrounding community	Impacts negative or positive	
Plant Quarantine produce Inspection – Norman Manley International Airport	Surrounding community	Impacts negative or positive	
Plant Quarantine produce Inspection – Donald Sangster International Airport	Surrounding community	Impacts negative or positive	
Stakeholders Able to Affec	t the Project		
Jamaica Social	Procurement and	Liaise with existing projects	
Investment Fund	Facilitating	funded in the project area	
Government of Jamaica/Adaptation Fund Programme (GOJ/AFP)	Procurement and Facilitating	Liaise with existing projects funded in the project area	
Inter-American Institute for Cooperation on Agriculture (Jamaica)	Procurement and Facilitating	Liaise with existing projects funded in the project area	
RIU Group of Hotels	Market	Market for agricultural produce	
Grace Kennedy	Market	Market for agricultural produce	
Progressive	Market	Market for agricultural produce	
Lee's Food Fair	Market	Market for agricultural produce	
Spur Tree Spices	Market	Market for agricultural produce	
Chefs and Accountants	Market	Market for agricultural produce	
Everything Fresh	Market	Market for agricultural produce	
Jamaica's Finest	Market	Market for agricultural produce	
Hi-Pro New Port Fersan	Procurement Procurement and Facilitating	Provision of seeds Training	
		Provision of pesticides and fertilizers	
American Airlines	Procurement and Facilitating	Facilitating export within short time frame	

Stakeholders that have a Participatory Role in the Project's planned Implementation	Participatory Role	Current Interest Focus	Current Interest Rating
Fly Jamaica	Procurement and Facilitating	Facilitating internal movement of goods Montego Bay— Kingston	
Caribbean Airlines	Procurement and Facilitating	Facilitating export within short time frame	
Idel Brown	Procurement	Exporter - Market for agricultural produce	
Patsy Duncan	Procurement	Exporter - Market for agricultural produce	
Seaboard Shipping and Freight,	Procurement	Secure Fast transport of produce to UK	
Corrpak	Procurement	Packaging Material	
Jamaica Customs	Facilitating	Granting Export of Goods	
DHL	Procurement	Export Services	

2.1.1 Stakeholder Analysis

The following table presents the mapped stakeholders and the level of engagement needed.

Table 2.2: Mapping of Stakeholders

Stakeholders	Level of Engagement	Participation / Needs
Stakeholders Agro Park Workers and residents as well as surrounding communities	Consult, Involve, Collaborate	Awareness – messages to inform stakeholders on activities
Stakeholders that are involved in the Project's development and planned implementation, irrespective of current interest rating	Consult, Involve, Collaborate	Two-way consultation to guide project understanding, and likely out-turns of the ESA and associated plans, also mitigation responses to negative impacts or on beneficial activities Participation ranges across: Regulatory bodies that provide guidelines to be followed, the requisite permits, and monitoring Collaboration to ensure relevant agencies and authorities are engaged

Stakeholders	Level of Engagement	Participation / Needs
Stakeholders who can influence Project Implementation	Consult, Involve, Collaborate	Project understanding, and likely out-turns of the ESA and associated plans, also mitigation responses to negative impacts or on beneficial activities
Internal Stakeholders		
Contractor	Transact, Consult, Involve	Training and sensitisation on lender requirements for completing
Servicing company/ companies	Transact, Consult	contracted work
Renovation Contractors	Transact, Consult, Involve	Collaboration to ensure two-way
Services and facilities suppliers	Transact, Consult	communication regarding any issues, mitigation measures, or positive impacts
Security agencies	Transact, Consult	Collaboration regarding security issues or breaches
Media Houses	Monitor Inform	To inform message for awareness

3 Consultation Planning

The following table presents the report on the stakeholder plan to facilitate disclosure of information on the project and its execution. The engagement helped to build and maintain over time a constructive relationship with all stakeholders.

Table 3.1: Consultation Plan During the ESA for MASP

	STAKEHOLDER CONSULTATION									
COMPONENTS	DETAILS	EXPECTED OUTCOMES								
VENUE	Hotel Four Seasons, 18 Ruthven Road, Kingston	Central location utilised that is easily accessible by all stakeholders.								
DATE	Tuesday October 29, 2019	Stakeholders engaged where they were provided notice ahead of time.								
TIME	10:00am to 1:00pm	Stakeholder engaged at a time when they are available.								
INVITEES	See Appendix I	All critical stakeholders are invited.								
MEANS OF INVITING	Emails and direct phone call									
PURPOSE OF MEETING	 To sensitize stakeholders about the developing MASP 	Stakeholders sensitized								

STAKEHOLDER CONSULTATION								
COMPONENTS	DETAILS	EXPECTED OUTCOMES						
	 Present the findings and recommendations of the environmental and social 	Presentation if findings and recommendations made						
	assessment carried out	 Feed back gained and elaborated in Section 4.4 						
	 Gain feedback from key stakeholders involved 							

4 Review of the Stakeholder Consultation - October 29, 2019

Section 2.1 to 2.4 below recaps the proceedings of the consultation.

4.1 Session 1: Welcome and Introductory Remarks

The stakeholder consultation began at 10:30am on October 29, 2019. The meeting was chaired by Mr. Clifford Spencer, Chief Planning Analyst (Acting) at MICAF who gave the welcome and introductory remarks. He began by emphasizing that the modernization and development of the agricultural sector is a priority program of the Government of Jamaica and, by extension, MICAF, as it will play a very important part in increasing economic growth. In the last fiscal term, the sector contributed 6.7% to the country's GDP, 27% to exports, and employed 18% of the labour force. The fact remains that most of the agricultural land in Jamaica is occupied by small holders (own or utilize <1 hectare of land) who are highly vulnerable to external shocks. To improve the position of agriculture, farmers need to become more competitive as this will help them build resistance to these shocks. The government has begun the preparation of the MASP which will seek to foster the development of small-scale agriculture through modernization, thereby improving service delivery and therefore enhancing competitiveness.

4.2 Session 2: Introduction to the Modernization of the Agriculture Sector Program (MASP)

The second session provided an introduction to MASP, which was presented by Ms. Petronia Colley, Director of ACP Bridging Project, MICAF. She began the session by acknowledging that Jamaica has identified the movement towards an internationally recognized agricultural sector as a major contributor to securing economic prosperity and achieving some of its Vision 2030 goals. She further highlighted that the main factors impacting increased agricultural competitiveness and productivity in the agriculture sector includes weak agricultural health and food safety systems as well as lack of dedicated linkages to markets for small and medium farmers. To improve the agriculture sector's long-term viability, eight medium term priority policies were conceptualized with an emphasis on strengthening the agriculture health and food safety system. The objective of MASP is to increase agricultural productivity and income for all stakeholders. Specifically, the project will look at:

Animal and plant health services and improve these within the next 5 years,

- Food market service systems, and
- The implementation of public-private partnerships within the framework of the sector.

These objectives aim to increase the export capacity of the sector. The project is currently valued at US\$ 20 million (in negotiations with IDB for an additional US\$5 million) and has two components:

- 1. Agriculture Health and Food Safety:
 - intent is to strengthen the plant-pest surveillance system,
 - conduct training,
 - refurbish critical facilities within the Plant Quarantine and Produce Inspection Division (including procurement and maintenance of equipment and supplies for the development of a surveillance database with support from RADA),
 - train staff for the Research and Development Division.
- 2. Renewed approach to the development of Agro Parks and Agro Economic Zones:
 - infrastructure financing (packing houses, trucks, roads, irrigation networks, drainage etc.)
 - establishment of a matching grant scheme (program finances 70-80% of an accepted proposal and beneficiary will find the matching 20-30%).

4.3 Session 3: Presentation of the Findings and Recommendations from the Environment and Social Assessment (ESA)

Session 3 involved a detailed presentation of the ESA conducted under MASP shared by Project Manager, Mrs. Annmarie Goulbourne from Environmental Solutions Limited (ESL). ESL was contracted by the IDB to conduct the assessment which involved reviewing the existing environment and social setting, as well as determining the potential environmental and social impacts of the MASP. They also identified the positives and negatives of the program to Agro Parks and Produce Inspection Facilities, and the recommendations and mitigation measures for the negatives were presented along with positive benefits of the programme which can be enhanced.

The presentation shared the findings obtained from existing data and site visits of four sample Agro Parks (Yallahs, Spring Plain, Ebony Park, and New Forest/Duff House), the agricultural marketing complex on Spanish Town Road, the Plant Quarantine/Produce Inspection Facility at the Norman Manley International Airport (NMIA) in Kingston and the inspection facility at the Donald Sangster International Airport (DSIA) in Montego Bay.

Insight was given into the physical, ecological and social setting of the Agro Parks and various issues identified at the inspection facilities at the NMIA and DSIA were highlighted. Some of the main concerns which could be addressed under the MASP include:

- A fumigation chamber which is insulated, or temperature controlled,
- A produce inspection area which is temperature controlled (heat impacts integrity of produce),
- The need for the facility's expansion to accommodate more airline handlers especially in anticipating increases in the volume for exports
- Expanding and utilizing unused agro lands,
- Having equipment available for rent to persons within the agro park, (e.g. tractors and other equipment for land preparation) to reduce dependency on AIC.

The presentation also included a risk, impacts and mitigation section where recommendations to issues identified on the agro parks and inspection facilities. Some of the suggestions given included:

- Soil degradation and siltation of channels and water ways which was noted in two Agro Parks
 requires assessment and mitigative strategies employed in the upper watershed area to reduce
 impact of persons on the flat.
- Flooding due to inadequate drainage requires maintenance of riparian vegetation along the river channel.
- Agricultural runoff contaminating groundwater and rivers requires a change in how farmers operate on farms.
- Improperly treated wastewater which can potentially contaminate groundwater requires adequate treatment facilities.
- Overexploitation of groundwater from wells requires deeper assessment into hydrology of water sources (by NIC) and continued monitoring by WRA.
- Ensuring persons have the right protective gear for operation of heavy machinery, and that there is adequate storage of hazardous chemicals to minimize spills and contamination.
- Maintain ecological balance and functioning by preserving steep slopes and non-arable land.
- Loss due to extreme weather (temperature, rainfall, humidity) requires farm, disaster and pest management plans and water shortages due to heightened evapotranspiration and reduced rainfall require farmers to be educated and trained in mitigative and adaptive strategies (e.g. the use of drip irrigation, and planting crops which are more tolerant to the environment).
- GIS mapping for all Agro Parks which shows the boundary and networks of the parks.
- Incorporating strategic marketing approaches.
- Hot water treatment area to address fruit fly issue.
- Increase number of inspectors.
- Considerations for installing an incinerator.
- Local produce testing for pesticide residue before sending abroad.

During the presentation it was noted that the previous ACP project had funded:

• training for Global Gap certification of farmers from each Agro Park (although not all have been certified),

- installation of irrigation networks to allow farmers to access irrigation water for farms (all were equipped with metres),
- construction of Global Gap certified packaging facilities (all of which have a similar design which include wastewater treatment system, septic tank, reed bed and soak away pit).

4.4 Session 4: Question and Answer Segment

Session 4 was geared towards receiving questions, suggestions, clarification based on the presentation which was given. Panellists for this session were:

- Mrs. Annmarie Goulbourne Project Manager and Environmental and Social Specialist from ESL
- 2. Mrs. Rashida Khan-Haqq Environmental Chemist and Manger, Analytical Services Division at ESL
- 3. Mr. Mario Christie Food Safety and Chemical Analyst at ESL

The following elaborates the interactive question and answer segment.

Question 1

Question by Ms. Petronia Colley:

- 1. With respect to water quality issues identified across the parks in the previously conducted Global Gap project, have there been any changes in water quality then and now?
- 2. What were the health and safety protocol issues identified (air, noise, water etc)?

Clarification was sought on:

- GIS mapping of all three Agro Parks was done by the Agro-Investment Corporation during a previous project (Global Gap) and may be obtained by ESL.
- Implication within the airport space which are under consideration for financing.

Response by Rashidah Khan-Haqq: In regard to health and safety, there is a problem with ventilation at NMIA which currently takes the form of air exchange (stale air is replaced with better quality air to prevent lethargy, infections etc.).

The placement of the generator is also of concern as flume gas exhaust is expelled into the building. Fumigation is done in an area accessible to all persons on the facility, putting them at risk. If the chamber is not completely sealed, then persons can be exposed to this toxic gas released during the process and in the current situation, gases are vented back to a walkway which leads to the main building. In comparison, at the MBJ Donald Sangster building, the fumigation area is separate from the main building so access can be restricted and therefore less risk, but there are still issues with ventilation.

There are also significant structural issues and poor maintenance of the building.

With respect to the goods, temperature is a factor which impacts the preservation life of products being exported. It was noted that after inspection, goods are not kept in a temperature-controlled space and at NMIA while it is waiting to be taken onto the aircraft, they are left in the direct sun. at MBJ the waiting area is covered but is still a very hot space.

The space should be retrofitted for its use with particular focus on temperature and ventilation control. This may include increasing the level of the stack for the generator at NMIA to minimize the impact of the

building and putting in place an off-sight fumigation facility like that of MBJ to reduce exposure to the gases released in the process.

Response by Annmarie Goulbourne: The associated report from the Modernization of Agriculture project has a health and safety management plan which lists detailed impacts and mitigation protocols for the complexes.

Response by Mario Christie: No primary water quality data was collected under this consultancy and therefore the water quality data presented was that which was collected under the ACP project in 2018 so no comparisons were made. A full year of water quality monitoring is recommended, as opposed to the three-month period done in the previous project, so as to account for the impact of monthly changes in weather patterns and stages of crop production on water quality.

Response by Owen Scarlett (AIC): passed on GIS shapefiles for some Agro Parks, all that was available; made mention of recent (last week) water quality work and aims to have consistent monitoring; matching grants for prospective investors; complex on Spanish Town Road is an ideal location to expand export in agriculture and looks forward to everyone having the same food/animal health and safety certifications.

Question 2

Tony Grant (Ebony Park Agro Park): Made the following observations on the Ebony Park component of the presentation:

- Presentation mentioned no drains being at Ebony Park but he pointed out that drainage exists
 but is inadequate as there are no drains specifically on the farms at Ebony Park. Increased siltation
 during the rainy period from the farms affecting nearby drains in the surrounding area and lack
 of maintenance of those existing drains have consequential effects.
- Noted that contamination from faecal coliform in the Rhymesberry gully may also be from the Ebony Park HEART Academy which has a chicken farm; focus should not only be on the Agro Park.
- Only noted mention of Milk River as a community but that is not near Ebony Park.
- Hydrological study is not needed in the area as most of the wells have already been studied and mapped by NIC who also recently resuscitated the facilities. Data can be obtained as it already exists.
- Interested in replacing some of the natural vegetation with lumber and fruit trees.
- Should allow existing farmers to expand farms on unused land within the park rather than searching for new farmers.
- Need tangible benefits, like markets, for GlobalGAP and other certified farmers to attract new farmers to the program.
- Hotels should be only allowed to use certified farmers; as he has personally experienced being replaced by cheaper uncertified farmers.

Response from Rashidah Khan-Haqq: The Rhymesberry gully is heavily impacted by surface runoff and multiple facilities surrounding the park all contributing to the contamination of the gully, but the exact sources were not pinpointed as further in-depth study is required.

GlobalGAP certification is key because many clients require quality assurance. The industry needs to increase confidence in the goods being received and there is less risk.

Response from Annmarie Goulbourne: The SDC data used for the Milk River Development Area is inclusive of 15 districts which includes not only the Milk River community, but also communities directly adjacent to the park.

Regarding the ecology of the natural vegetation, it is best not to disturb the existing biodiversity by introducing another monoculture crop so that the current vegetation can carry out its natural function along the hillsides.

Response from Clifford Spencer (MICAF): Regarding the tangible benefits of the GlobalGAP certification, MICAF is looking towards partnerships with entities like JAMPRO to identify additional export markets.

Question 3

Marina Young (Principal Director, RADA): Made the following observation and suggestions:

- Based on experience and investigations at RADA, a number of disease outbreaks on Agro parks
 were often related to the surface water as it is a medium in which bacteria thrives and measures
 must be taken to reduce this water on the farms; i.e. drainage issues must be addressed.
- Suggested that the report should also look at the Agro-forestry components as a strategic approach and highlight its various uses, for example, using fruit tree crops as a perimeter around each block of farm.
- Need to ensure that existing GlobalGAP farmers and those to be certified engage in the collection and proper disposal of pesticide containers.
- Assessment needs to look at the logistics and opportunities for composting as it is a key component at the Agro Parks.
- Emphasized Tony Grant's point on the need for proper layout of in-field drainage based on slope
 of land and other factors (by engineers at NIC), to ensure water escapes quickly out of the fields.
 The long extensive blocks of land as it stands depends only on seepage of water underground
 through the soil which takes a long time and increases the risk of diseases.

Response Points have been duly noted by the Team.

Question 4

Questions by Sanniel Wilson (Chief Inspector, Plant Quarantine Produce Division MICAF):

1. What is the percentage estimate you believe the issues and challenges identified under the project would potentially have on the agricultural output and by extension the modernization program?

- 2. How can the saltwater and higher than normal temperatures challenges on the facilities at the NMIA be dealt with?
- **3.** Other than methyl bromide fumigation and hot water treatments, what are alternative fumigation or alternative treatments which can be conducted to reduce pests on agricultural produce?

The following clarifications were made:

- At the export complex, agricultural produce which does not meet the country's requirement are
 not given back to farmers, but are instead, incinerated. The incinerator is located at the Veterinary
 Services Complex. Built into the procurement, was the training of individuals who would be
 responsible for maintaining the incinerator.
- [Based on comments made by Rashidah Khan-Haqq as it relates to the impact of fumigation on health and safety]. MBJ and NMIA uses two different types of fumigation methods and there is exposure to staff and whoever uses the facility. By moving the facility to another location there would need to be further considerations of airport regulations, cost and the impacts of seawater and high temperatures. This makes finding another ideal location difficult.
- The complex does not test for pesticide levels on the produce. If pests are identified they are banned from export but if found on local commodities they are not sent back to farmers. Pesticide residue testing is seldomly conducted through the FSPID. Trying to work with persons from the FSPID to have testing done before getting to the complex or local manufacturer for all produce (both those for export and those being sold locally).

Response by Rashidah Khan-Haqq: Based on discussions with the managers at NMIA and MBJ, produce is only incinerated when there is a pest related issue. A drawback noted in the assessment, was that overall quality testing of goods are not done unless a pest problem arises. Heavy metal and pesticide testing needs to be carried out at all times.

Regarding seawater and temperature challenges, the type of material used when installing machinery must match/be suitable for its location and the potential external factors that can impact it. There also needs to be regular maintenance for cleaning and repair especially when there is higher risk to damage (like that associated with seawater and high temperatures).

Regarding alternative uses to methyl bromide, the existing best practices must be reviewed to determine a suitable replacement.

Moving the fumigation facility is the best option but care must be taken not to position it where winds will still take the fumes back to the main building. Must be located downwind, away from any receptors.

Question 5

Pamelita Dann (Yallahs Agro Park): Made the following suggestions:

• Each park should have its own processing facility for value added products as some farmers have a challenge selling the crops harvested. Having this facility would mean farmers belonging to the

- Agro Park will have a place to take their produce for processing and would minimize the chance of spoilage.
- Agricultural farmlands should be exclusively reserved and sold to farmers who will use the land
 for farming. Using these lands for residential purposes should be prohibited as it reduces the
 opportunities of those farmers who wish to expand their farmland.
- Consideration for agro-tourism where tourists would engage in farm tours/visits.

Response Points have been duly noted by the Team.

Question 6

Questions and Comments made by Milton Henry (NIC):

- 1. What was the impact or contribution of the parks to employment?
- **2.** Were there any productivity improvements with the implementation of the parks? And if there were, which groups benefited most (skilled labourers etc.)?
- 3. How has land use change to housing and other developments in Yallahs impacted the Agro Park?
- 4. Are farmers reporting or indicating that they are better off being a part of the Agro Park?
- **5.** Funding is needed for the engineering of drainage and irrigation systems to benefit farmers in the parks and should be a part of creating and dissecting of farm plots to ensure an efficient layout pattern of irrigation pipes prior to commencing operation.

Response by Annmarie Goulbourne There were some data challenges but what is available will be reviewed to determine employment contributions etc.

Question 7

Questions and comments made by Anthony Trout (AIC):

- 1. Does the research accurately inform how the project money will be allocated, in terms of expenditure?
- 2. Which labs are able to carry out MRM analyses or have similar certification to test produce?
- **3.** GlobalGAP farmers need a guaranteed market to positively impact the farmers and encourage others to become certified as well. If other famers do not see the need or benefit of certification, they will not do it.

Response by Mario Christie: particularly for export markets traceability is required and that comes with the protocols which certified farmers have to follow. This reduces the amount of loss in income and produce incurred if a pest etc. is detected. Adequate lab certification can come in the form of MRM as mentioned as well as HACCP food health certification. Ministry needs to begin to institutionalize the food health and safety regulations on a national level so that the demand for the certification will increase. In essence, persons who are involved in farming would need to have the certification to be able to operate and have a market and persons purchasing would only be allowed to legally buy from those who can show that they are certified.

Also, it is not just about certification, it is more important to have the management system implemented.

Question 8

Questions by Ms. L. McKenzie (Yallahs Agro Park): Questions directed to the NIC

- 1. What can be done about the turn-around time in obtaining water when there is loss electricity for multiple days or when pipes burst?
- **2.** Can the parks be upgraded to solar power?

Response by Milton Henry (NIC): The operations department will take a look at the issue a try to shorten repair time.

5 Appendix I – List of Invitees

N o.	Position	First Name	Last Name	S e x	Agency	Address 1	Addre ss 2	Fax/Email Address	Telephone #
	GOVERNMENT	AGENCIES							
1	Director - ACP Bridging Project	Petroni a	Colley	F	MICAF	Hope Gardens, Kingston 6	Kingst on 6	colleypetronia1@gmail.com	876-428- 8922 876- 927- 1731/1750 ext 2400
2	Planning Unit	Clifford	Spencer	М	MICAF	Hope Gardens	Kingst on 6	Clifford C. Spencer <ccspencer@micaf.gov.jm></ccspencer@micaf.gov.jm>	876-890- S2170
3	Engineer	Peter	Reid	М	АСРВР			preid@agroinvest.gov.jm	876-839- 9582
4	Value Chain Manager	Saleem	Clarke	М	АСРВР			stormyclarke@yahoo.com	876-519- 2984
5	Agro Park Manger	Anthon y	Trought	М	Spring Plain			atrought@agroinvest.gov.jm	876-277- 0977
6	Minister of MICAF-	Audley	Shaw	М	MICAF	Hope Gardens	Kingst on 6	minister@MICAF.GOV.JM	876-927- 1731
7	Minister without Portfolio MICAF	1C	Hutchins on	М	MICAF	Hope Gardens	Kingst on 6	hm_office@MICAF.GOV.JM	876-927- 1732
8	Permanent Secretary (PS)	Dermon	Spence	М	MICAF	Hope Gardens	Kingst on 6	psecoffice@micaf.gov.jm	876-927- 1731
9	Coordinator Special Projects	Yolando	Gibson	F	MICAF	Hope Gardens	Kingst on 6	yagibson@MICAF.GOV.JM	876-927- 1731
1	Chief Technical	Courtne y	Cole	М	MICAF	Hope Gardens	Kingst on 6	cbcole@MICAF.GOV.JM	876-927- 1731

N	Position	First	Last	S e		Address 1	Addre	Fax/Email Address	Telephone
o.		Name	Name	х	Agency		ss 2	•	#
	Director								
	(CTD)								
	Chief								
	Technical				MICAF	Hope	Kingst	rhmcneil@MICAF.GOV.JM	876-927-
1	Director					Gardens	on 6	<u></u>	1731
1	(CTD) (Acting)	Roy	Mcneil	M					
	Principal								
	Director					Норе	Kingst		876-927-
	Planning and				MICAF	Gardens	on 6		1731
1	Policy	Michell	Parkins	F					
2	(Acting)	е	Parkins	F				mnparkins@MICAF.GOV.JM	
	Senior Director,								
	Strategic								
	Planning and					Норе	Kingst		876-927-
	Performance				MICAF	Gardens	on 6	dlcoley@MICAF.GOV.JM	1731
	Monitoring					Garaciis	011 0		1731
1	and								
3	Evaluation	Delroy	Coley	М					
	Chief Plant	/							
	Quarantine								
	Produce				MICAF	Hope	Kingst	sswilson@micaf.gov.jm	876-927-
1	Inspection					Gardens	on 6		1731
4	Officer	Saniel	Wilson	F					
	Principal								
	Director,				MICAF	Норе	Kingst	Irmyors@micaf gov im	876-927-
1	Research and		Myers-		IVIICAF	Gardens	on 6	<u>lrmyers@micaf.gov.jm</u>	1731
5	Devlopment	Lisa	Morgan	F					
	principal					Норе	Kingst		
1	Director				RADA	Gardens	on 6		876-818-
6	Technical	Marina	Young	F		34.40113	00	youngm@rada.gov.jm	6019

N o.	Position	First Name	Last Name	S e x	Agency	Address 1	Addre ss 2	Fax/Email Address	Telephone #
	Services , RADA								
1 7	Principal Director Field Services/ Opertions RADA	Winston	Simpson	М	RADA	Hope Gardens	Kingst on 6	simpsonw@rada.gov.jm	876-818- 5855
1 8	Fruit Tree Crop Specialist	Locksley	Waites	М	RADA	Hope Gardens	Kingst on 6	waitesl@rada.gov.jm	876-927- 1731
1	Design		6		NIC				
2 0	Engineer NIC Pincipal Financial Officer (Acting)	Renford Annmar ie	Smith Tomlinso	M F	MICAF	Hope Gardens	Kingst on 6	adtomlinson@MICAF.GOV.J M	876-552- 0138
2 1	Head, Economic Development Projects, (Acting) MoFP	Andrea	Allen	F	MoFP			-	
2 2	Director, Project Managemnet and Coordination	Leitha	Geddes	М	MICAF	Hope Gardens	Kingst on 6	legeddes@micaf.gov.jm	
2	Chief Planning Analyst	Karl	Hyatt	М	MICAF	Hope Gardens	Kingst on 6	kahyatt@micaf.gov.jm	

		First	Last	S			Addre		Telephone
N	Position	Name	Name	е		Address 1	ss 2	Fax/Email Address	#
о.		Ivaille	IVAIIIE	х	Agency		33 2		#
2	Senior Project				MICAF	Норе	Kingst	gabrissett@micaf.gov.jm	
4	Accountant	Garfield	Brissett	M	WICAI	Gardens	on 6	gabrissett@mear.gov.jiii	
2	Project							pareid@micaf.gov.jm	
5	Engineer	Peter	Reid	М				<u>parenag misangovijin</u>	
2	Procurement								
6	Manager	Paul	East	M				-	
	Advisor to								
	Hon. Minister				MICAF	Норе	Kingst	rmiller@MICAF.GOV.JM	
2	William J.C				10110741	Gardens	on 6	111111CT (@1V11C) 11 . C C V .51V1	
7	Hutchinson	Robert	Miller	М					
	Advisor to								
	Hon. Minister				MICAF	Норе	Kingst		
2	William J.C				10110741	Gardens	on 6	-	
8	Hutchinson	Omer	Thomas	M					
	CEO Rural								
	Agricultural								
	Development				RADA			-	
2	Authority		Thomps						
9	(RADA)	Peter	on	M					
	Technical					Норе	Kingst		876-276-
3	Services	Nashim			MICAF	Gardens	on 6	nmdavis@MICAF.GOV.JM	5725
0	Coordinator	а	Davis	F					
1	CEO National								
1	Irrigation				NIC			ceo@nicjamaica.com	
3	Commission				-				
1	(NIC)	Joseph	Gyles	М					
	Techinical								
_	Assistant to				MICAF				<u>18763826</u>
3	Minister								<u>785</u>
2	Shaw	Keisha	Lewis	F					

		First	Last	S			Addre		Talanhana	
N	Position	Name	Name	е		Address 1	ss 2	Fax/Email Address	Telephone #	
0.		Hame	Hame	X	Agency		33 2		.,	
	Advisor to									
3	Hon. Minister	5	6 11					dasouth@MICAF.GOV.JM		
3	Shaw	Dimitri	South	М						
	CEO , Agro-									
3	Invest Corporation	Alexand			AIC			_		
4	(AIC)	er	Powell	М						
_	Hon. Minister	Ci	rowen	IVI						
	Floyd Green-					4 St. Lucia	Kingst			
3	Minister of				MICAF	Avenue	on 5	-	876-968-	
5	State-	Floyd	Green	М					7116	
		,				AMC				
						Complex,	Kingst		876-579-	
	Manager	Owen	Scarlett	М	AIC	188	on	oscarlett@agroinvest.gov.jm	6070	
3						Spanish	011		0070	
6						Town Road				
	Investment					188	Kingst	jtate-	876-470-	
3	Officer		Tate-	_	AMC Complex	Spanish	on	clarke@agroinvest.gov.jm	7688	
7		Jodian	Clarke	F		Town Road	Vin ant		076 474	
3	Manager	Sylveste	Christie	М	Plant Quarantine	NMIA	Kingst on	schristie@MICAF.GOV.JM	876-474- 8020	
3		r	Cilistie	IVI			Monte		876-284-	
9	Manager	Dalton	Hastings	М	Plant Quarantine	SIA	go Bay	dwhastings@MICAF.GOV.JM	7112	
4	Project	Daiton	riastings	141	National Irrigation	191 Old	Kingst		876-977-	
0	Director	Milton	Henry	М	Commission	Hope Road	on 6	MiltonH@nicjamaica.com	4022	
	Manager for		,							
	Mid-		Robert		NUC NAId Claused as	Oakassass	May	Dahama Quisianaisa as s	987-	
	Clarendon		(Courtne		NIC - Mid Clarendon	Osbourne	Pen	Robertm@nicjamaica.com/	3140/3259	
4	Irrigation		y Wilmot		Irrigation District	Store	P.O.	courtneyw@nicjamaica.com	/ 469-1909	
1	District	Miller	acting)	М					, 103 1303	

N o.	Position	First Name	Last Name	S e x	Agency	Address 1	Addre ss 2	Fax/Email Address	Telephone #
4 2	Manager for Yallahs Irrigation District	Young	Glenmor e	М	NIC - Yallahs Irrigation District	Yallahs	St. Thoma s	glenmorey@nicjamaica.com	706- 3159/489- 8912
4 3	Manager for New Forest Irrigation District	Miller	Robert (Courtne y Wilmot acting)	М	NIC - New Forest Irrigation District	New Forest P.A.	Manch ester	Robertm@nicjamaica.com/ courtneyw@nicjamaica.com	876-371- 0794
4	Executive Director	Dwayne	Vernon	М	Social Development Commission	22 South Camp Road	Kingst on 4		876 928 8304
4 5	Social Development Manager	Mona	Sue-Ho		Jamaica Social Investment Fund	11 Oxford Road	Kingst on 5	mona.sueho@jsif.org	876-968- 4545
4 6	CEO	Peter	Knight	М	National Environment and Planning Agency	10/11 Caledonia Ave.	Kingst on 5	ceo@nepa.gov.jm	876-754- 7540
4 7	Principal Director	UnaMay	Gordon	F	Climate Change Division	16A Half- Way-Tree Road	Kingst on 5	unamay.gordon@megjc.gov.j m	876 633 7354
4 8	National Coordinator - Japan Caribbean Climate Change Partnership	Ayesha	Constabl e	F	Climate Change Division	16A Half- Way-Tree Road	Kingst on 5	ayesha.constable@megic.gov .im	876 633 7354
4 9	Parish Development Officer	Erick	Green	F	Clarendon 4-H Clubs	Denbigh	May Pen P.O.	clarendon@jamaica4hclubs.c om	902-4049/ 986- 7767/859- 1941

N o.	Position	First Name	Last Name	S e x	Agency	Address 1	Addre ss 2	Fax/Email Address	Telephone #
5 0	Centre Manager	Weise	Roxan	F	Denbigh 4-H Training Centre	Denbigh	May Pen P.O.	denbigh.training@jamaica4hc lubs.com	876-584- 4927
5	CEO	Donna- Marie	Rowe	F	Jamaica Information Service	58a Half Way Tree Road, Kingston 10	Kingst on 10	drowe@jis.govv.jm/ceo@jis.g ov.jm	876 926- 3590-4/ 876 926- 3740-6
5 2	Director of Regional Implementati on and Special Projects	Varden	Downer	М	National Works Agency	140 Maxfield Ave.	Kingst on 10	vardendowner@nwa.gov.jm	876-926- 3210-9
5	Parish Manager	Terrenc e	Vernon	М	The Adult & Special Education Division/HEART Trust NTA	9 Tropical Avenue/47 Mancheste r Avenue	May Pen P.O.	vernonterrence@yahoo.com/ tvernon@heart-nta.org	902-5640/ 876-313- 4684
5 4	Parish Manager Clarendon	Marvin	Lawrenc e	М	RADA	Georges Street	May Pen P.O.	clarendon@rada.gov.jm/	878-1426/ 986-2222
5	Parish Manager St. Thomas	Bevene	Martin	F	RADA	Belfast, Morant Bay	St. Thoma s	stthomas@rada.gov.jm	876-982- 2234/ 982- 2205/ 982- 2496
5	Parish Manager St. Elizabeth	Nathan	Samuels	М	RADA	63 Cooke Drive	Santa Cruz	stelizabeth@rada.gov.jm/sa muelsn@rada.gov.jm	(876)966- 2285/ 966- 2232/ 966- 2872

N o.	Position	First Name	Last Name	S e x	Agency	Address 1	Addre ss 2	Fax/Email Address	Telephone #
5 7	Manager, On- Farm Irrigation/Wa ter Management Unit	Everton	Robinso n	М	RADA	Hope Gardens	Kingst on 6	robinsone@rada.gov.jm	977-1158- 62
5 8	Senior Director Estate Management Division	Donova n	Hayden	М	National Land Agency	8 Ardenne Road	Kingst on 10	donovan.hayden@nla.gov.jm	750-5263
5 9	Director of Operations	Aretha	McFarla ne	F	National Solid Waste Management Authority	61 Half Way Tree Road	Kingst on 10	nswma@nswma.gov.jm	876-960- 4511 / 876-926- 3988
6	CEO	Christop her	Emanuel	М	Jamaica Agricultural Society	67 Church Street	Kingst on	cpaulemanuel@gmail.com	876 922- 0610-2
6	CEO	Miss Marilyn	Headley	F	Forestry Department	173 Constant Spring Rd.	Kingst on 8	mheadley@forestry.gov.jm	876-924- 2626/ 924- 2667-8
6 2	Parish Field Officer	Patricia	McKenzi e	F	Heart Trust NTA/ Youth Service Division	Trenton Road, Sandy Bay	Claren don	patricia mckenzie@heart- nta.org	986- 6264/383- 5807/ 452- 5381
6 3	Principal	Collie	Clarke	М	Heart Trust NTA Ebony Park Academy	Toll Gate	Claren don	collie_clarke@heart-nta.org	987-1330/ 876-987- 1334-6 / 876-987- 1790

N o.	Position	First Name	Last Name	S e x	Agency	Address 1	Addre ss 2	Fax/Email Address	Telephone #
6 4	Youth Empowerme nt Officer	Miss Chevell e	Campbel I	F	Youth Information Centre	1 Trenton Road	Claren don	ccampbell@myc.gov.jm	902-5608/ 483-3033
6 5	Chief Technical Director, Labour Division	Debora h	Patrick Gardene r	F	Ministry of Labour & Social Security	1F North Street	Kingst on	deborah.gardner@mlss.gov.j m	922-0349
6 6		Tamara	Morrison	F	Pesticide Control Authority			pca@caribpesticide.net/morr ison@caribpesticide.net	876-461- 2808
	FUNDING AGEN	NCY/ IDB	T			T			
6 7	Rural Development Specialist	Paolo, Carmine	De Salvo	М	IDB Haiti		-	desalvo@iadb.org	
6 8		Yuri	Chakall		IDB Jamaica		-	yuric@iadb.org	
6	Operations Lead Specialist	Adriana	La Valley	F	IDB Jamaica		-	AdrianaLV@iadb.org	876-764- 0831
7 0	Consultant	Jovan	Johnson	М	IDB Jamaica		-	JOVANJ@iadb.org	876-764- 1066
	NGOs								
7	Biologist/Orn ithologist	Donova n Brando n	Нау	М	Caribbean Coastal Area Management Foundation (CCAM)	Salt River	Claren don	brandonhay@cwjamaica.com	289-8253
7 2	Executive Director	Ingrid	Parchme nt	F	Caribbean Coastal Area Management Foundation (CCAM)	Salt River	Claren don	iparchment@yahoo.com	289-8253

N o.	Position	First Name	Last Name	S e x	Agency	Address 1	Addre ss 2	Fax/Email Address	Telephone #
7 3	Chairman	Mrs. Lorine	Cousins	F	Clarendon Parish Dev. Committee Benevolent Society	23 Paisley Avenue	May Pen P.O.	clarendonpdcbs@yahoo.com	876-986- 9061/ 456- 8158
	FARMERS GRO	UPS/WATE	R USERS AS	SOC	IATION		•		
7		Govinda	Fisher	М	Spring Plain Farmers' Association		Claren don		876–533– 6330
7 5		Anthon y	Grant	М	Ebony Park Agricultural Cooperative (EPAC)		Claren don		876–354– 5111
7		Gregory	Thomas	М	Yallahs Water Users Association		St. Thoma s		
7	Secretary	Pamelit a	Dann	F	Yallahs Water Users Association		St. Thoma s	gip krow pam@yahoo.com	876–303– 1525
7	Public Relations Officer	Eric	Williams	М	Yallahs Water Users Association		St. Thoma	yesrealnaturalist@yahoo.com	876–409– 6500
7		Clinton	Oscar	М	New Forest/Duff House Water Users Group		St. Elizabe th		876–403– 6840
	PRIVATE SECTO	OR					_		
8	_					Lot 2A/2B Wherry Wharf Complex,	Kingst		
C	Chemicals	Nichael	Dadzie	M	New Port Fersan	Newport E,	on	ndadzie@newportfersan.com	967-5815

N	Position	First Name	Last Name	S e		Address 1	Addre	Fax/Email Address	Telephone #
0.		Hame	rume	X	Agency		33 2		"
8	F	Data	D	F					
1	Exporter	Patsy	Duncan	F					
	CONSULTANTS					T	l		
	Team Leader/ Environment								
	al Risk								
8	Management				Environmental	7 Hillview	Kingst		876-978-
2	Specialist	Eleanor	Jones	F	Solutions Limited	Ave	on 10	b.eleanor@gmail.com	9519/6297
	Project								,
	Manager and								
	Environment								
	al and Social								
8	Management	Annmar	Goulbou		Environmental	7 Hillview	Kingst		876-978-
3	Specialist	ie	rne	F	Solutions Limited	Ave	on 10	<u>abarnett@eslcaribbean.com</u>	9519/6297
	Environment								
	al Chemist								
	and Manager,								
0	Analytical	Rashida	Khan-		Environmental	7 Hillview	l/:mask		076 070
8	Services Division	h	Knan- Haqq	F	Solutions Limited	Ave	Kingst on 10	rkhan@eslcaribbean.com	876-978- 9519/6297
4	Food Safety	11	Пачч	-	Solutions Limited	Ave	011 10	TKHan@esicaribbean.com	9319/0297
8	and Chemical				Environmental	7 Hillview	Kingst		876-978-
5	Analyst	Mario	Christie	М	Solutions Limited	Ave	on 10	mchristie@eslcaribbean.com	9519/6297
8	Microbiologis	Mandes			Environmental	7 Hillview	Kingst		876-978-
6	t	a	Jackson	F	Solutions Limited	Ave	on 10	mjackson@eslcaribbean.com	9519/6297
			Fraser-						,
8	Adminitrative	Moniqu	Anderso		Environmental	7 Hillview	Kingst		876-978-
7	Assistant	e	n	F	Solutions Limited	Ave	on 10	admin@eslcaribbean.com	9519/6297
8	Research	Kimberl			Environmental	7 Hillview	Kingst		876-438-
9	Assistant	ey	Coore	F	Solutions Limited	Ave	on 10	k.coore94@gmail.com	7829

N o.	Position	First Name	Last Name	S e x	Agency	Address 1	Addre ss 2	Fax/Email Address	Telephone #
	Deptuty				<u> </u>		St.		
9	Director				Rⅅ, Bodles Research	Old	Cather		876-865-
0	(Acting)	Carla	Douglas	F	Station	Harbour	ine	cpdouglas@micaf.gov.jm	0483
9		Seymou			Housing Agency of				876-383-
1		r	Harvey	Μ	Jamaica			sharvey@jamaicahaj.com	8957
9	Commercial								876-293-
2	Director	Wayne	Barrette	М	NIC			wayned@nicjamaica.com	5469
							St.		
9							Thoma		876-821-
3		Cleon	Fagan	М		Yallahs	S		9381
9	Executive					Норе	Kingst		876-927-
4	Secretary	Marcia	Harris	F	MICAF	Gardens	on 6	mharris@micaf.gov.jm	1731
9	Agricultural	Marsha-				Норе	Kingst		876-927-
5	Economist	Gaye	Beckford	F	MICAF	Gardens	on 6	mbeckford@micaf.gov.jm	1732
9			McKenzi			Норе	Kingst		876-927-
6		Shari	е	F	MICAF	Gardens	on 6	smckenzie@micaf.gov.jm	1733
9			McKenzi			191 Old	Kingst		876-528-
7		Lelieth	е	F	NIC	Hope Road	on 6	-	8089

6 Appendix II— Register of Attendees at the Stakeholder Consultation

No.	Position	Eiret Nama	Last Namo	Sex	Agency	Address 1	Address 3	Fax/Email Address	Telephone #
NO.	Position GOVERNMENT AGENCIES	First Name	Last Name	Jex	Agency	Address 1	Address 2	i ax/ ciliali Address	тетернопе #
1	Director - ACP Bridging Project	Petronia	Colley	F	MICAF	Hope Gardens, Kingston 6	Kingston 6	colleypetronia1@gmail.c om	876-428-8922 876-927- 1731/1750 ext 2400
2	Planning Unit	Clifford	Spencer	М	MICAF	Hope Gardens	Kingston 6	Clifford C. Spencer <ccspencer@micaf.go v.jm=""></ccspencer@micaf.go>	876-890-S2170
3	Engineer	Peter	Reid	М	АСРВР			preid@agroinvest.gov.j m	876-839-9582
4	Value Chain Manager	Saleem	Clarke	М	АСРВР			stormyclarke@yahoo.co m	876-519-2984
5	Agro Park Manger	Anthony	Trought	М	AIC			atrought@agroinvest.go v.jm	876-277-0977
6	Chief Technical Director (CTD)	Courtney	Cole	М	MICAF	Hope Gardens	Kingston 6	cbcole@MICAF.GOV.JM	876-927-1731
7	Principal Director, Research and Devlopment	Lisa	Myers-Morgan	F	MICAF	Hope Gardens	Kingston 6	Irmyers@micaf.gov.jm	876-927-1731
8	principal Director Technical Services , RADA	Marina	Young	F	RADA	Hope Gardens	Kingston 6	youngm@rada.gov.jm	876-818-6019
9	Director, Project Managemnet and Coordination	Leitha	Geddes	М	MICAF	Hope Gardens	Kingston 6	legeddes@micaf.gov.jm	
10	Senior Project Accountant	Garfield	Brissett	М	MICAF	Hope Gardens	Kingston 6	gabrissett@micaf.gov.jm	
11	Manager	Owen	Scarlett	М	AIC	AMC Complex, 188 Spanish Town Road	Kingston	oscarlett@agroinvest.go v.jm	876-579-6070
12	Investment Officer	Jodian	Tate-Clarke	F	AMC Complex	188 Spanish Town Road	Kingston	<u>itate-</u> <u>clarke@agroinvest.gov.j</u> <u>m</u>	876-470-7688
13	Project Director	Milton	Henry	М	National Irrigation Commission	191 Old Hope Road	Kingston 6	MiltonH@nicjamaica.co m	876-977-4022
	FARMERS GROUPS/WATER USE	RS ASSOCIATI	ON	1			1	T	T
14	President	Anthony	Grant	М	Ebony Park Agri	cultural Cooper	Clarendon		876–354–5111
15	Secretary	Pamelita	Dann	F	Yallahs Water Users Association		St. Thomas	gip_krow_pam@yahoo.co	876–303–1525
16	Public Relations Officer	Eric	Williams	М	Yallahs Water Users Association		St. Thomas	yesrealnaturalist@yahoo.	876–409–6500
	CONSULTANTS	l .	T			1	T	I	l .
17	Project Manager and Environmental and Social Management Specialist	Annmarie	Goulbourne	F	Environmental Solutions Limited	7 Hillview Ave	Kingston 10	abarnett@eslcaribbean.co	876-978-9519/62
18	Environmental Chemist and Manager, Analytical Services Division	Rashidah	Khan-Haqq	F	Environmental Solutions Limited	7 Hillview Ave	Kingston 10	rkhan@eslcaribbean.com	876-978-9519/62
19	Food Safety and Chemical Analyst	Mario	Christie	М	Environmental Solutions Limited	7 Hillview Ave	Kingston 10	mchristie@eslcaribbean.c	876-978-9519/62
20	Adminitrative Assistant	Monique	Fraser-Andersor	F	Environmental Solutions Limited	7 Hillview Ave	Kingston 10	admin@eslcaribbean.com	876-978-9519/62
21	Research Assistant	Kimberley	Coore	F	Environmental Solutions Limited	7 Hillview Ave	Kingston 10	k.coore94@gmail.com	876-438-7829
22	Deptuty Director (Acting)	Carla	Douglas	F	Rⅅ, Bodles Research Station	Old Harbour	St. Catherine	cpdouglas@micaf.gov.jm	876-865-0483
23		Seymour		М	Housing Agency of Jamaica			sharvey@jamaicahaj.com	
24	Commercial Director	Wayne	Barrette	M	NIC			wayned@nicjamaica.com	
25		Cleon	Fagan	M		Yallahs	St. Thomas	1	876-821-9381
26 27	Executive Secretary Agricultural Economist	Marcia Marsha-Gaye	Harris Beckford	F	MICAF	Hope Gardens Hope Gardens		mharris@micaf.gov.jm mbeckford@micaf.gov.jm	876-927-1731 876-927-1732
28		Shari	McKenzie	F	MICAF	Hope Gardens		smckenzie@micaf.gov.jm	
29		Lelieth	McKenzie	F	NIC	191 Old Hope Road	Kingston 6		876-528-8089

7 Appendix III – Invitation to Stakeholder Consultation

