UNIVERSIDAD PARA LA COOPERACION INTERNACIONAL
(UCI)

PROJECT MANAGEMENT PLAN FOR THE CONDUCT OF TRAINING IN STANDARDS FOR CERTIFICATION OF ORGANIC FARMING PROJECT

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FINAL GRADUATION PROJECT SUBMITTED IN PARTIAL FULFILLMENT OF
THE REQUIREMENTS FOR THE
MASTERS IN PROJECT MANAGEMENT (MPM) DEGREE

Castries, Saint Lucia
December 2017

UNIVERSIDAD PARA LA COOPERACION INTERNACIONAL
(UCI)

This Final Graduation Project was approved by the University as partial fulfillment of the requirements to opt for the Master in Project Management (MPM) Degree

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DEDICATION

I dedicate this research project to my son Jayxan, who is the main catalyst in my pursuit of excellence, so that he too, through my example, can aspire to be the best he can. To my mother Patricia, who has given her time so unselfishly, and provided support countless times, when I had to direct my attention away from my son over the last two years of study and research for this masters in project management, I say thank you. You have been my backbone and your contribution has been priceless.

ACKNOWLEDGMENTS

I give praise and thanks to God for giving me strength and helping me throughout this course to find the balance needed, and for having provided to me the necessary support structures at home and from UCI for a successful completion. To Him be the Glory, great things He hath done.

I acknowledge with sincere gratitude the support of my thesis tutor Ms Sophia Crawford, who was quite diligent, responsive and prompt in the review of my work, making the experience and interaction a good one. I would also like to thank the administrative team and course facilitators at UCI, for their support and the strong practical component of this Master's Degree Program. This has equipped me with the ability to apply, with confidence, the knowledge and concepts gleaned. It has also created the potential for me to be a good Project Manager. My immense gratitude also goes out to the Organization of American States (OAS) for the award of a partial scholarship to pursue this Master's degree in Project Management.

My deepest gratitude goes out to my son, mother, my family and friends who provided their support and words of encouragement to see it through to the end. I must single out the continuous encouragement, assistance and guidance of Desmond and fellow MPM classmates along this journey. It made a big difference in keeping me focused. I am indeed indebted to you all.

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ABBREVIATIONS AND ACRONYMS

- AC - Actual Cost
- APM - Assistant Project Manager
- CARPHA - Caribbean Public Health Agency
- CPI - Cost Performance Index
- EU - European Union
- EV - Earned Value
- EVM - Earned Value Management
- FGP - Final Graduation Project
- GIZ-CATS - German Development Cooperation - Caribbean Aqua Terrestrial Solutions Program
- ISO - International Organization for Standardization
- MAFPPNRC - Ministry of Agriculture, Fisheries, Physical Planning, Natural Resources and Co-operatives
- NAO - National Authorizing Office
- NCA - National Consumers Association
- NMI - National Metrology Institute
- OAS - Organization of American States
- PM - Project Manager
- PMBOK - Project Management Body of Knowledge
- PMI - Project Management Institute
- PV - Planned Value
- RFP - Request for Proposal
- SLBS - Saint Lucia Bureau of Standards
- SPI - Schedule Performance Index
- SV - Schedule Variance
- SWOT - Strength, weaknesses, opportunities, threats
- WBS - Work Breakdown Structure
- XDC - Eastern Caribbean Dollars

EXECUTIVE SUMMARY (ABSTRACT)

The Ministry of Agriculture, Fisheries, Physical Planning, Natural Resources and Co-operatives (MAFPPNRC), has been promoting environmentally sustainable management practices to increase food production, as declared in their mission statement. Organic Agriculture involves management practices that restore, maintain and enhance ecological harmony, as well as boost healthy and sustainable patterns of production and consumption. A project to implement an Organic Farming Certification Program was conceptualized by the MAFPPNRC, one that would allow agricultural producers to be aware of the principles and good practices necessary for the production of certified organic foods and the tangible benefits to the environment, local economies and public health.

The Saint Lucia Bureau of Standards (SLBS), which has a Certification Department, was given the responsibility as the implementing agency for this project, which sought to select and adopt an appropriate code of practice standard, train the inspectorate to develop competency in farm inspections, train organic farmers in the requirements of the Code of Practice and to design and implement an Organic Farming Certification Program to offer certification services. This project commenced in March 2016, but has gone way beyond the expected date of completion and has not been able to offer the intended certification services. There was no Project Management Plan developed to define how the project would have been executed, monitored, controlled and closed, to allow for its successful completion.

The general objective of this final graduation project was to develop a Project Management Plan in accordance with PMI good practices, to be used for better management and completion of the Project "Conduct of Training in Standards for Certification of Organic Farming." The specific objectives were: to develop an approach for project integration management to manage the interdependencies among the project processes and their coordination, so that the project can be managed as a whole; to develop the scope management plan to describe how the scope will be defined, documented, verified, managed and controlled; to develop the schedule management plan to establish the criteria and the activities for developing, monitoring and controling the schedule; to develop the cost management plan to describe how the project costs will be planned, structured and controlled; to develop the quality management plan to describe the quality assurance and continuous process improvement approaches for the project; to develop the human resource management plan to provide guidance on how the project human resources will defined, acquired, managed and eventually released and to determine project roles and responsibilities; to develop the communications management plan to describe how comunications will be planned, structured, monitored and controlled; to develop the risk management plan to describe how risk management activities inclusive of risk identification, analysis, and risk responses will be structured and performed; to develop the procurement management plan to document the project procurement decisions and to specify the approach for identification of potentiel sellers; and to develop the stakeholder

management plan to identify the management strategies required to effectively engage stakeholders.

The methodology for this research was analytical, through the use of information and literature from identified sources, including the documents from the project, such as reports and other records of project activities.

The Project Management Plan constituted a baseline document with subsidiary plans from the Project Management knowledge areas of Scope,Time, Cost, Quality, Human Resources, Communications, Risk, Procurement and Stakeholder Management, and Integration Management using the tools and techniques for information gathering and analysis and use of templates to be used as organizational process assets for use in future projects. The plan was created for the project with a scope of designing and implementing an Organic Farming Certification Program within a six month period and within a limited budget with funding from the Sponsor.

The development of this Project Management Plan has allowed for the identifcation of the shortfalls related to past project planning and has provided the information required and the creation of the opportunity for the effective completion of this project, with the reralization of all the objectives of the project.

It is recommended that the SLBS conduct a study and review of this plan, and actively engage all stakeholders involved, to develop an agreed upon action plan for the way forward to bring the project to completion. The SLBS should also enhance its approach to projectized work with the use of the project management tools , techniques and standardized templates, which have been created in this Project Management Plan, which will serve as a reference document.

1. INTRODUCTION

1.1 Background

Over the years consumers are becoming increasingly concerned about the quality and safety of agricultural produce for human consumption. This is because conventional farming practices are often tied to potential health hazards not only for consumers but also for the farm worker, and results in environmental degradation.

The growth and spread of organic agriculture, is starting to be seen as a way to boost healthy and sustainable patterns of production and consumption and to contribute to management practices that restore, maintain and enhance ecological harmony. Being a sustainable form of agriculture, it uses methods to promote soil health, minimize water use, lower pollution levels and promote farm worker health.

A project to "Conduct training in standards for Certification of Organic Farmers" was conceptualized by the Ministry of Agriculture, Fisheries, Physical Planning, Natural Resources and Co-operatives with activities resulting in;

- ✓ The selection and adoption of an appropriate code of practice,
- ✓ Training of organic farmers in the requirements of the Code of Practice,
- ✓ Developing a cadre of competent inspectors, and
- ✓ Designing a certification program to finally offer certification services.

This project was rather timely as there are other initiatives on island by non governmental agencies to implement organic farming practices. These activities support the mission of the Agricultural Division of the MAFPPNRC which states, "*To develop the agricultural sector to ensure increased production of quality food and other commodities through environmentally sustainable management practices for the benefit of the entire population*."

The overall objective of the project was to provide a means to improve the revenue generating potential of the rural sector. The project also aimed to improve the rural sector's contribution to the productivity of the agricultural sector and the economy, through efforts that will cultivate knowledge and human capacity in organic and sustainable agriculture for farmers. The specific objective was to make agricultural producers aware of the principles and good practices that are necessary for production of certified organic foods and the tangible benefits to the environment, local economies and public health.

The National Authorizing Office (NAO) which is the entity responsible for the processes of planning, implementing, coordinating and disbursing of European Union (EU) Funds, and ensuring its efficient and optimal utilization, contracted the Saint Lucia Bureau of Standards (SLBS), on behalf of the MAFPPNRC, as the Implementing Agency for this project.

The project commenced in March 2016 and has not been completed, with the implementation of the Certifcation Program still pending, hence the non accomplishment of the final deliverable which is the offering of certification services. This is because the necessary farmer support services to create the demand for certification has not been fully established, and there is a lack of the necessary coordinating mechanisms of all the stakeholders involved.

The development of a project management plan, with the application of the PMI best practices at this point, is very important to be able to successfully complete this project.

1.2 Statement of the problem

The project was not completed on time and with no project management plan to follow the execution, monitoring and control of the project. The offering of certification services has therefore not commenced. According to the schedule of

activities, the project commenced on March 9, 2016 with a six month implemention period following which, farm inspections would have been conducted by the trained inspectorate against the requirements of the developed Code of Practice for Organic Farming, to determine if the requirements for certification were met.

Opportunities to be seized

The development of a project management plan for this project will be beneficial for the SLBS. It will allow for the identifcation of the shortfalls related to project planning and will provide the opportunity to create a road map to allow for the effective completion of this project. In other words, the achievement of all the objectives of the project will be realised moving forward.

The Project Management Plan will also serve as a reference document by The SLBS in the management of future projects, as there is a lack of a standardized approach and templates to manage projects.

1.3 Purpose

Various types of projects have been implemented by The Saint Lucia Bureau of Standards over the years. These range from organizational projects which upon completion, later become operationalize as new programs within the different departments, to external projects completed on behalf of other organizations.

The project "Conduct of Training in Standards for Certification of Organic Farming" is seen as having the potential to have a positive impact on the environment, local economy and public health. This Project Management Plan will explain the management of stakeholders which is a critical component, and other areas to be managed, to increase the potential of achieving all objectives and finishing successfully. It will allow for an assessment to be done by the SLBS to ascertain the shortfalls in managing this project and note ‘lessons learned’ for future projects.

In the past, the desired outcome of some projects which have been undertaken has not been fully achieved. Developing the Project Management Plan utilizing the PMI guidelines will contribute to organizational process assets to be used as inputs into future project planning processes.

1.4 General Objective

To develop a Project Management Plan in accordance with Project Management Institute (PMI) good practices, to be used for better management and completion of the Project "Conduct of Training in Standards for Certification of Organic Farming."

1.5 Specific objectives

1. To develop an approach for project integration management to manage the interdependencies among the project processes and their coordination, so that the project can be managed as a whole.
2. To develop the scope management plan to describe how the scope will be defined, documented, verified, managed and controlled.
3. To develop the schedule management plan to establish the criteria and the activities for developing, monitoring and controlling the schedule.
4. To develop the cost management plan to describe how the project costs will be planned, structured and controlled.
5. To develop the quality management plan to describe the quality assurance and continuous process improvement approaches for the project.
6. To develop the human resource management plan to provide guidance on how the project human resources will be defined, acquired, managed and eventually released and to determine project roles and responsibilities.
7. To develop the communications management plan to describe how comunications will be planned, structured, monitored and controlled.

8. To develop the risk management plan to describe how risk management activities inclusive of risk identification, analysis, and risk responses will be structured and performed.
9. To develop the procurement management plan to document the project procurement decisions and to specify the approach for identification of potential sellers.
10. To develop the stakeholder management plan to identify the management strategies required to effectively engage stakeholders.

2. THEORETICAL FRAMEWORK

2.1 Company Enterprise framework

2.1.1 Company Enterprise background

The Saint Lucia Bureau of Standards (SLBS) is a statutory body, established by the Standards Act No. 14 of 1990, which gives the SLBS the responsibility to develop and promote standards and codes of practice for products and services for the protection of the health and safety of consumers and the environment; as well as for industrial development in order to promote the enhancement of the economy of Saint Lucia. A second Act, the Metrology Act, gives the SLBS the responsibility for legal metrology (weights and measures) and establishes SLBS as the National Metrology Institute (NMI).

One of the ways in which the SLBS executes its mandate, is through the programs of its various departments. The Standards Development Department is responsible for the development of standards in accordance with the International Organization for Standardization (ISO) standards and best practices and was responsible for the development of the organic farming standard. The Certification Department operates in accordance with ISO standards for Certification Bodies certifying processes, products and services. The SLBS' certification services are therefore recognized locally and in the Caribbean region, and it was for this reason that the organization was contracted to design and implement an Organic Farming Certification Program against the requirements of the standard. The department currently operates five certification programs.

2.1.2 Mission and Vision Statements

Mission

To strengthen the national quality infrastructure in Saint Lucia in order to contribute to the advancement of the national economy, support sustainable development, promote health and safety of consumers, protect the environment, and facilitate trade. (Quality Task Team, 2016)

Vision

To be a model of excellence, in the provision of products and services in the areas of quality, standardization and metrology. (Quality Task Team, 2016)

2.1.3 Organizational structure

The Ministry of Commerce, International Trade, Investment, Enterprise Development and Consumer Affairs is the parent ministry of the SLBS. The affairs of SLBS are directed by a broad based fifteen (15) member Standards Council, which sets the policy direction of the institution. This Council is accountable to the Minister of Commerce. The Director of SLBS is the Chief Executive Officer who is responsible for directing and managing the financial and administrative affairs of the SLBS.

There are four technical departments namely; Certification, Metrology, Compliance and Standards Development. Also, there are three departments offering support services namely; Information Services, Finance & Administration, and Human Resource & Training Department, in addition to the Executive Office. The organization is currently staffed with thirty-two (32) employees, four within the Standards Development Department and three within the Certification Department who have been primarily involved with the project. Figure 1 below represents the current organizational structure.

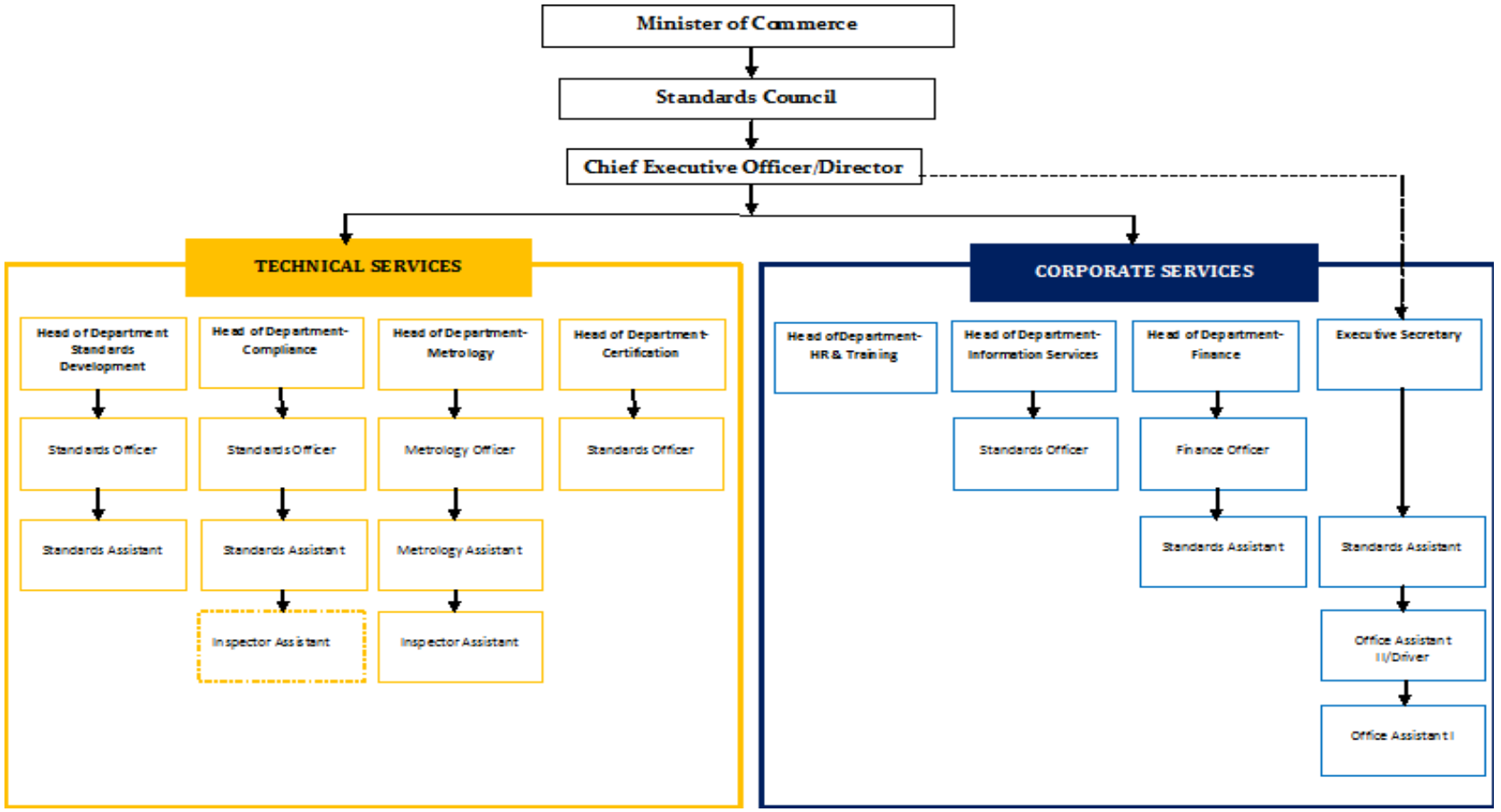


Figure 1. Organizational Structure (Source: SLBS Employees Handbook Revision 5.0)

2.1.4 Products offered

The SLBS offers a range of products and services as follows:

- Voluntary label assessment against National Labeling Standards
- Development of Standards
- Sale of National, Regional and International Standards
- Certification of products, processes and services.
- Verification of measurement devices
- Calibration of weighing instruments and weights and test measures.
- Training in the requirements of Standards
- Import monitoring (tire inspection, warehouse inspection, electrical safety appliance testing, and labels),
- Market Surveillance (packaged water surveillance, general retail surveillance)
- Packaged water plant inspections

2.2 Project Management concepts

2.2.1 Project

A project can be defined as “a temporary endeavour undertaken to create a unique product, service, or result " (PMI, 2013, p.3). Therefore, a project has a beginning and an end. This Final Graduation Project (FGP) explores the development of a Project Management Plan, to be used for better management and completion of the Project "Conduct of Training in Standards for Certification of Organic Farming." The Certification Programs which have been implemented within the organization are all unique, however, the approach to managing projects within the SLBS, falls short of the guidelines established by the PMI, hence, creating this plan will assist in a standardized process towards project management.

2.2.2 Project management

Project Management is defined in the Project Management Body of Knowledge (PMBOK) guide as “the application of knowledge, skills, tools, and techniques to

project activities to meet the project requirements” (PMI, 2013, Pg 5). PMI goes on to explain that project management is accomplished through the appropriate application and integration of forty-seven (47) logically grouped project management processes.

2.2.3 Project life cycle

A project life cycle is the "series of phases that a project passes through from its initiation to its closure" (PMI, 2013 p.38). PMI further explains that the project life cycle can be determined or shaped by the unique aspects of the organization, industry or technology employed. However, all projects can be mapped to the following generic life cycle structures:

- Starting the project
- Organizing and preparing
- Carrying out the project work and
- Closing the project

According to Mulcahy et al, 2013, the project life cycle is sometimes referred to as the performing organization's or department’s methodology for projects. The types of projects implemented at the SLBS are quite varied due to the different products and services provided within four different technical areas, each with its own peculiarity.

2.2.4 Project management processes

Project management processes are described in the PMBOK Guide 5th Edition as processes that “ensure the effective flow of the project throughout its life cycle” (PMI, 2013, Pg 47). This book characterizes the forty-seven (47) project management processes, by the inputs, the tools and techniques that can be applied, and the resulting outputs. All of the processes are grouped into five process groups namely; initiation, planning, execution, monitoring and controlling and closing, applied across the ten (10) project management knowledge areas.

To develop this Project Management Plan for the Certification Program, only the processes involved in initiating and planning will be used, with the corresponding subsidiary plans created in accordance with the ten knowledge areas. See Chart 1 for initiating and planning process groups and knowledge areas.

Chart 1. Project Management Process Groups and Knowledge Area Mapping (Source: PMBOK, 2013)

Knowledge Areas	Project Management Process Groups				
	Initiating Process Group	**Planning Process Group**	**Executing Process Group**	**Monitoring and Controlling Process Group**	**Closing Process Group**
4. Project Integration Management	4.1 Develop Project Charter	4.2 Develop Project Management Plan	4.3 Direct and Manage Project Work	4.4 Monitor and Control Project Work 4.5 Perform Integrated Change Control	4.6 Close Project or Phase
5. Project Scope Management		5.1 Plan Scope Management 5.2 Collect Requirements 5.3 Define Scope 5.4 Create WBS		5.5 Validate Scope 5.6 Control Scope	
6. Project Time Management		6.1 Plan Schedule Management 6.2 Define Activities 6.3 Sequence Activities 6.4 Estimate		6.7 Control Schedule	

Knowledge Areas	Project Management Process Groups				
	Initiating Process Group	**Planning Process Group**	**Executing Process Group**	**Monitoring and Controlling Process Group**	**Closing Process Group**
		Activity Resources 6.5 Estimate Activity Durations 6.6 Develop Schedule			
7. Project Cost Management		7.1 Plan Cost Management 7.2 Estimate Costs 7.3 Determine Budget		7.4 Control Costs	
8. Project Quality Management		8.1 Plan Quality Management	8.2 Perform Quality Assurance	8.3 Control Quality	
9. Project Human Resource Management		9.1 Plan Human Resource Management	9.2 Acquire Project Team 9.3 Develop Project Team 9.4 Manage Project Team		
10. Project Communications		10.1 Plan Communications	10.2 Manage Communications	10.3 Control Communications	

Knowledge Areas	Project Management Process Groups				
	Initiating Process Group	**Planning Process Group**	**Executing Process Group**	**Monitoring and Controlling Process Group**	**Closing Process Group**
Management		Management			
11. Project Risk Management		11.1 Plan Risk Management 11.2 Identify Risk 11.3 Perform Qualitative Risk Analysis 11.4 Perform Quantitative Risk Analysis 11.5 Plan Risk Responses		11.6 Control Risks	
12. Project Procurement Management		12.1 Plan Procurement Management	12.2 Conduct Procurement	12.3 Control Procurements	12.4 Close Procurements
13. Project Stakeholder Management	13.1 Identify Stakeholders	13.2 Plan Stakeholder Management	13.3 Manage Stakeholder Engagement	13.4 Control Stakeholder Engagement	

2.2.5 Project Management knowledge area

There are ten project management knowledge areas (PMI, 2013). All of which will be used during the lifecycle of the FGP. These are reflected in Chart 1 above and are as follows:

1. Integration management
2. Scope management
3. Time management
4. Cost management
5. Quality management
6. Human resource management
7. Communication management
8. Risk management
9. Procurement management
10. Stakeholder management

2.2.5.1 Project Integration Management

"Project Integration Management includes the processes and activities to identify, define, combine, unify, and coordinate the various processes and project management activities within the Project Management Process Groups" (PMI, 2013, p. 63).

The processes involved in Project Integration Management are already outlined in Chart 1 above. For this FGP only the processes in the initiation (4.1 Develop Project Charter) and planning (4.2 Develop Project Management Plan) process group will be used.

2.2.5.2 Project Scope Management

PMI (2013, p.105) describes Project Scope Management as "the knowledge area which includes the processes required to ensure that the project includes all the work required, and only the work required, to complete the project successfully." The project manager needs to guard against unplanned changes to the scope to avoid project failure.

For this FGP only the processes in the planning process group will be used. These are 5.1 Plan Scope Management, 5.2 Collect Requirements, 5.3 Define Scope and 5.4 Create Work Breakdown Structure (WBS).

2.2.5.3 Project Time Management

"Project Time Management includes the processes required to manage the timely completion of the project" (PMI, 2013, p. 141).

For this FGP, only the processes in the planning process group will be used. These are 6.1 Plan Schedule Management, 6.2 Define Activities, 6.3 Sequence Activities, 6.4 Estimate Activity Resources, 6.5 Estimate Activity Durations,
6.6 Develop Schedule.

2.2.5.4 Project Cost Management

"Project Cost Management includes the processes involved in planning, estimating, budgeting, financing, funding, managing, and controlling costs so that the project can be completed within the approved budget" (PMI, 2013, p. 193).

For this FGP only the processes in the planning process group will be used. These are 7.1 Plan Cost Management, 7.2 Estimate Costs, and 7.3 Determine Budget.

2.2.5.5 Project Quality Management

"Project Quality Management includes the processes and activities of the performing organization that determine quality policies, objectives, and

responsibilities so that the project will satisfy the needs for which it was undertaken" (PMI, 2013, p. 227).

For this FGP only the processes in the planning process group will be used. These are 8.1 Plan Quality Management, where a quality management plan will be developed for the project.

2.2.5.6 Project Human Resource Management

"Project Human Resource Management includes the processes that organize, manage, and lead the project team" (PMI, 2013, p. 255).

For this FGP only the processes in the planning process group will be used. These are 9.1 Plan Human Resource Management. It allows for the development of a Human Resource Management Plan for the project.

2.2.5.7 Project Communications Management

"Project Communications Management includes the processes that are required to ensure a timely and appropriate planning, collection, creation, distribution, storage, retrieval, management, control, monitoring, and the ultimate disposition of project information" (PMI, 2013, p. 287).

For this FGP only the processes in the planning process group will be used. These are 10.1 Plan Communications Management, with the output of a Communications Management Plan.

2.2.5.8 Project Risk Management

"Project Risk Management includes the processes of conducting risk management planning, identification, analysis, response planning, and controlling risk on a project" (PMI, 2013, p. 309). PMBOK further explains that a project risk is an uncertain event or condition, which if it occurs, has a positive or negative effect on

one or more project objectives such as scope, schedule, cost and quality. Therefore, there are both positive and negative risks.

For this FGP only the processes in the planning process group will be used. These are 11.1 Plan Risk Management, 11.2 Identify Risk, 11.3 Perform Qualitative Risk Analysis, 11.4 Perform Quantitative Risk Analysis, and 11.5 Plan Risk Responses.

2.2.5.9 Project Procurement Management

“Project Procurement Management includes the processes necessary to purchase or acquire products, services, or results needed from outside the project team” (PMI, 2013, p. 355).

For this FGP only the processes in the planning process group will be used. These are 12.1 Plan Procurement Management.

2.2.5.10 Project Stakeholder Management

"Project Stakeholder Management includes the processes required to identify the people, groups, or organizations that could impact or be impacted by the project, to analyze stakeholder expectations and their impact on the project, and to develop appropriate management strategies for effectively engaging stakeholders in project decisions and executions" (PMI, 2013, p. 391).

For this FGP only the processes in the initiation (13.1 Identify Stakeholders) and planning (13.2 Plan Stakeholder Management Plan) process group will be used. This project will seek to identify ways in which the stakeholder can be communicated with, in a continuous manner, so that any issues are addressed and conflicts managed.

Stewart (2015) reported bad stakeholder management as one of the top ten reasons that projects fail. Project managers need to identify and know how to manage and communicate with stakeholders in a timely fashion. This ties the communications management plan to the stakeholder management plan.

3. METHODOLOGICAL FRAMEWORK

3.1 Information sources

In the power point presentation by Ajuwon (n.d.) an information source is described as " the means by which a person is informed about something or knowledge is availed to someone, a group of people or an organization." It goes on to explain that information sources can be observations, people, speeches, documents, pictures and organizations. Information sources can be in print, non-print and electronic media or format. The three types of information sources are primary, secondary and tertiary. Only primary and secondary information sources will be used to develop the FGP.

3.1.1 Primary sources

The Virginia Tech University Libraries (n.d.) state "a primary source is an original document containing firsthand information about a topic." Different fields of study may use different types of primary sources. Examples of these are interviews, speeches, newspaper and magazine articles, published photographs, recordings of television and radio broadcasts, letters, e-mails, diaries, sheet music and music recorded for mass distribution, advertisements, books and magazines.

The primary sources which are going to be used to develop this FGP are personal interviews with staff of SLBS and other stakeholders such as staff of the Ministry of Agriculture, minutes of meetings held, project reports and other organizational process assets (OPA).

3.1.2 Secondary sources

In the power point presentation by Ajuwon (n.d) a secondary source of information is "one that was created by someone who *did not* have firsthand experience or did not participate in the events or conditions being researched." Secondary sources describe, analyze, interpret, evaluate, comment on and discuss the evidence provided by primary sources. Secondary sources, which have been published most recently, are often the best secondary sources.

The main secondary sources include; databases, statistical yearbooks published by different entities. Others include; commentaries, criticisms, dictionaries and histories, dissertations and biographies.

The secondary sources which are going to be used to develop this FGP are PMBOK guide, PMI database, internet/ websites. Refer to Chart 2 for information sources to accomplish each objective of the FGP.

Chart 2 . Information sources (Source: Author of Study)

Objectives	Information sources	
	Primary	Secondary
To develop an approach for project integration management to manage the interdependencies among the project processes and their coordination, so that the project can be managed as a whole.	PMBOK guide Project reports and other OPA	PMBOK guide
To develop the scope management plan to describe how the scope will be defined, documented, verified, managed and controlled.	Interviews, communications via email, meeting minutes, project reports and other OPA	PMBOK guide MPM course notes PMI database Internet/websites
To develop the schedule management plan to establish the criteria and the activities for developing, monitoring and controlling	PMBOK guide, MPM course notes, interviews, communications via email,	PMBOK guide MPM course notes PMI database Internet/websites

Objectives	Information sources	
	Primary	Secondary
the schedule.	meeting minutes, project reports and other OPA	
To develop the cost management plan to describe how the project costs will be planned, structured and controlled.	PMBOK guide, MPM course notes, interviews, communications via email, meeting minutes, project reports and other OPA	PMBOK guide MPM course notes PMI database Internet/websites
To develop the quality management plan to describe the quality assurance and continuous process improvement approaches for the project.	PMBOK guide, MPM course notes, interviews, communications via email, meeting minutes, project reports and other OPA	PMBOK guide, MPM course notes PMI database Internet/websites
To develop the human resource management plan to provide guidance on how the project human resources will be defined, acquired, managed and eventually released and to determine project roles and responsibilities.	PMBOK guide, MPM course notes, interviews, communications via email, meeting minutes, project reports and other OPA	PMBOK guide, MPM course notes PMI database Internet/websites

Objectives	Information sources	
	Primary	Secondary
To develop the communications management plan to describe how comunications will be planned, structured, monitored and controlled.	PMBOK guide, MPM course notes, interviews, communications via email, meeting minutes, project reports and other OPA	PMBOK guide, MPM course notes PMI database Internet/websites
To develop the Risk Management plan to describe how risk management activities inclusive of risk identification, analysis, and risk responses will be structured and performed.	PMBOK guide, MPM course notes, interviews, communications via email, meeting minutes, project reports and other OPA	PMBOK guide, MPM course notes PMI database Internet/websites
To develop the procurement management plan to document the project procurement decisions and to specify the approach for identification of potential sellers.	PMBOK guide, MPM course notes, interviews, communications via email, meeting minutes, project reports and other OPA	PMBOK guide, MPM course notes PMI database Internet/websites
To develop the stakeholder management plan to identify the management strategies required to effectively engage stakeholders.	PMBOK guide, MPM course notes, interviews, communications via email,	PMBOK guide, MPM course notes PMI database Internet/websites

Objectives	Information sources	
	Primary	Secondary
	meeting minutes, project reports and other OPA	

3.2 Research Methods

The Cambridge English Business Dictionary explains a research method as "a particular way of studying something in order to discover new information about it or to understand it better." There are different types of research, but the Analytical research method will be used for this FGP.

3.2.1 Analytical Research Method

The Reference online dictionary states that the "analytical research method uses the already available facts or information and analyzes them to make a critical evaluation of the subject." It further explains that Analytical research explores a topic in-depth, and is an attempt to establish why something is a certain way or how it came to be that way. An analytical research paper is composed entirely of fact-based evidence, it allows for interpretation that is backed up by primary and secondary sources that ultimately support the conclusion.

Chart 3 below represents the research method used for each objective.

Chart 3. Research methods (Source: Author of Study)

Objectives	Research method
	Analytical research method
To develop an approach for project integration management to manage the interdependencies among the project processes and	In developing the approach to integration management, this method will analyze the information and literature from sources identified in Chart 2. Objective 1 above, to

Objectives	Research method
	Analytical research method
their coordination, so that the project can be managed as a whole.	guide the process and in decision making.
To develop the scope management plan to describe how the scope will be defined, documented, verified, managed and controlled.	In creating the scope management plan, this method will analyze the information and literature from sources identified in Chart 2. Objective 2 above, to guide the process and in decision making.
To develop the schedule management plan to establish the criteria and the activities for developing, monitoring and controlling the schedule.	In creating the schedule management plan, this method will analyze the information and literature from sources identified in Chart 2. Objective 3 above, to guide the process and in decision making.
To develop the cost management plan to describe how the project costs will be planned, structured and controlled.	In creating the cost management plan, this method will analyze the information and literature from sources identified in Chart 2. Objective 4 above, to guide the process and in decision making.
To develop the quality management plan to describe the quality assurance and continuous process improvement approaches for the project.	In creating the quality management plan, this method will analyze the information and literature from sources identified in Chart 2. Objective 5 above, to guide the process and in decision making.
To develop the human resource management plan to provide guidance on how the project	In creating the human resource management plan, this method will analyze the information and literature

Objectives	Research method
	Analytical research method
human resources will defined, acquired, managed and eventually released and to determine project roles and responsibilities.	from sources identified in Chart 2. Objective 6 above, to guide the process and in decision making.
To develop the communications management plan to describe how comunications will be planned, structured, monitored ;2and controlled.	In creating the communications management plan, this method will analyze the information and literature from sources identified in Chart 2. Objective 7 above, to guide the process and in decision making.
To develop the Risk Management plan to describe how risk management activities inclusive of risk identification, analysis, and risk responses will be structured and performed.	In creating the risk management plan, this method will analyze the information and literature from sources identified in Chart 2. Objective 8 above, to guide the process and in decision making.
To develop the procurement management plan to document the project procurement decisions and to specify the approach for identification of potentiel sellers.	In creating the procurement management plan, this method will analyze the information and literature from sources identified in Chart 2. Objective 9 above, to guide the process and in decision making.
To develop the stakeholder management plan to identify the management strategies required to effectively engage stakeholders.	In creating the stakeholder management plan, this method will analyze the information and literature from sources identified in Chart 2. Objective 10 above, to guide the process and in decision

Objectives	Research method
	Analytical research method
	making.

3.3 Tools

A tool is “something tangible, such as a template or software program, used in performing an activity to produce a product or result.” (PMI, 2013, p. 565) The application of various tools is used in conducting project activities throughout the ten knowledge areas described in the PMBOK guide. Chart 4 below identifies the tools which will be used to meet the project requirements.

Chart 4. Tools (Source: Author of Study)

Objectives	Tools
To develop an approach for project integration management to manage the interdependencies among the project processes and their coordination, so that the project can be managed as a whole.	Develop Project Management Plan Expert Judgment Facilitation techniques Direct and Manage Project Work Expert Judgment Meetings Project management information system Monitor and Control Project Work Expert Judgment Meetings Project management information system Analytical techniques Perform Integrated change control Expert Judgment

Objectives	Tools
	Meetings Change control tools Close Project Expert Judgment Meetings Analytical techniques
To develop the scope management plan to describe how the scope will be defined, documented, verified, managed and controlled.	Plan Scope Management Expert Judgment Meetings Collect Requirements Interviews Focus Groups Bench Marking Define Scope Expert Judgment Facilitated Workshops Create WBS Decomposition Expert Judgment Validate Scope Inspection Group Decision-making Techniques Control Scope Variance Analysis
To develop the schedule management plan to establish the criteria and the activities for developing, monitoring and controlling the schedule.	Plan Schedule Management Expert Judgment Meetings Define Activities Decomposition Rolling Wave Planning

Objectives	Tools
	Expert Judgment Sequence Activities Dependency Determination Leads and lags Estimate Activity Resources Expert Judgment Project Management software Estimate Activity Durations Expert Judgment Analogous estimating Develop Schedule Resource Optimization techniques Scheduling tools-Microsoft project 2016 Control Schedule Resource Optimization techniques Performance reviews
To develop the cost management plan to describe how the project costs will be planned, structured and controlled.	Plan Cost Management Expert Judgment Meetings Estimate Costs Expert Judgment Analogous estimating Bottom up estimating Project management software Determine Budgets Cost Aggregation Reserve Analysis Expert Judgment Control Costs Performance reviews

Objectives	Tools
	Reserve Analysis
To develop the quality management plan to describe the quality assurance and continuous process improvement approaches for the project.	Plan Quality Management Benchmarking Meetings Perform Quality Assurance Quality Audits Control Quality Approve change requests review
To develop the human resource management plan to provide guidance on how the project human resources will be defined, acquired, managed and eventually released and to determine project roles and responsibilities.	Plan Human Resource Management Organization Chart & position descriptions Meetings Expert Judgment Acquire Project Team Pre-assignment Multi-criteria decision making Develop Project Team Ground rules Training Manage Project Team Conflict management Interpersonal skills
To develop the communications management plan to describe how communications will be planned, structured, monitored and controlled.	Plan Communications Communication Requirements Analysis Communication Methods Manage Communications Communication Methods Information Management system Control Communications

Objectives	Tools
	Expert Judgment Information Management system
To develop the risk management plan to describe how risk management activities inclusive of risk identification, analysis, and risk responses will be structured and performed.	Plan Risk Management Analytical techniques Meetings Identify Risks Information gathering techniques Assumption Analysis Perform Qualitative Risk Analysis Risk probability and impact assessment Probability and impact matrix Risk Categorization Plan Risk Response Strategies for positive and negative risk Control Risk Risk assessment Risk audit
To develop the procurement management plan to document the project procurement decisions and to specify the approach for identification of potential sellers.	Plan Procurement Management Make or buy analysis Market research Conduct Procurement Procurement negotiations Control Procurement Contract change control system Audits Performance reporting Payments system Records Management system Close Procurement

Objectives	Tools
	Procurement audits Records Management system
To develop the stakeholder management plan to identify the management strategies required to effectively engage stakeholders.	Identify Stakeholders Stakeholder Analysis Expert Judgment Meetings Plan Stakeholder Management Expert Judgment Meetings Analytical Techniques Manage Stakeholder Engagement Communication Method Interpersonal Skills Management Skills Control Stakeholder Engagement Expert Judgment Meetings

3.4 Assumptions and Constraints

An assumption is defined as “a factor in the planning process that is considered to be true, real, or certain, without proof or demonstration.” (PMI, 2013, p. 529).

A constraint is “a limiting factor that affects the execution of a project, program, portfolio, or process” (PMI, 2013, p. 533).

For this FGP the assumptions and constraints for each specific objective are stated in Chart 5 below.

Chart 5. Assumptions and Constraints (Source: Author of Study)

Objectives	Assumptions	Constraints
To develop an approach for project integration management to manage the interdependencies among the project processes and their coordination, so that the project can be managed as a whole.	The project will be managed as a whole, with proper coordination among project processes based of their interdependencies.	The limited time frame and budget and the dependence on the sponsor to play its role to help realize the project objectives.
To develop the scope management plan to describe how the scope will be defined, documented, verified, managed and controlled.	The service contract issued by the contracting entity clearly identifies the work required to be done. The scope management plan will contain all the work required.	The scope of works will be accomplished within the limited time frame given by the contracting entity.
To develop the schedule management plan to establish the criteria and the activities for developing, monitoring and controling the schedule.	The time management plan will be realistic to accomplish all the work of the project.	Limited time frame given by the contracting entity to realize the project.
To develop the cost management plan to describe how the project costs will be planned, structured and controlled.	The funds provided by the sponsor will be sufficient. The budget is detailed and realistic for project success.	The implementing agency must work with the funds given, ensuring that the budget based on the activity cost estimates do not

Objectives	Assumptions	Constraints
		surpass the given funds.
To develop the quality management plan to describe the quality assurance and continuous process improvement approaches for the project.	The quality management plan will identify all the elements required to determine quality and acceptance of deliverables	The inability to currently offer internationally recognized certification services. The short time to implement the project, coupled with limited funds may not allow for adequate training of inspectors.
To develop the human resource management plan to provide guidance on how the project human resources will defined, acquired, managed and eventually released and to determine project roles and responsibilities.	The organization has sufficient staff to manage the project effectively.	The expertise to realize some of the project activities do not all lie within the organization. Management of project team.
To develop the communications management plan to describe how comunications will be planned, structured, monitored and controlled.	The organization has the required technology to allow for effective communication between all stakeholders.	Unreliability of Methods of communications available to specific stakeholders as it relates to their location in parts of

Objectives	Assumptions	Constraints
		the island with interrupted telephone services.
To develop the Risk Management plan to describe how risk management activities inclusive of risk identification, analysis, and risk responses will be structured and performed.	Through risk management planning all risk which can significantly impact project success will be identified and risk responses adequate.	This type of project is being realized with known risks from the start which can impact project success
To develop the procurement management plan to document the project procurement decisions and to specify the approach for identification of potentiel sellers.	The necessary resources required to implement the project will be available.	Expertise in training of inspectors for inspection of organic farms for certification is not available locally. Coordination of time for availability of expert to conduct training.
To develop the stakeholder management plan to identify the management strategies required to effectively engage stakeholders.	The stakeholder plan will identify all stakeholders and how they will be engaged and managed.	Cost associated with implementing the organic farming code of practice can reduce the major stakeholders' interest and commitment to the project.

3.5 Deliverables

A deliverable is defined as “any unique and verifiable product, result, or capability to perform a service that is required to be produced to complete a process, phase, or project” (Project Management Institute, 2013, p. 537). Chart 6 below represents the deliverables for each project objective.

Chart 6. Deliverables (Source: Author of Study)

Objectives	Deliverables
To develop an approach for project integration management to manage the interdependencies among the project processes and their coordination, so that the project can be managed as a whole.	Approach to Project Integration Management
To develop the scope management plan to describe how the scope will be defined, documented, verified, managed and controlled.	Scope Management Plan
To develop the schedule management plan to establish the criteria and the activities for developing, monitoring and controling the schedule.	Schedule Management Plan
To develop the cost management plan to describe how the project costs will be planned, structured and controlled.	Cost Management Plan
To develop the quality management plan to describe the quality assurance and continuous process improvement approaches for the project.	Quality Management Plan
To develop the human resource	Human Resource Management Plan

Objectives	Deliverables
management plan to provide guidance on how the project human resources will be defined, acquired, managed and eventually released and to determine project roles and responsibilities.	
To develop the communications management plan to describe how communications will be planned, structured, monitored and controlled.	Communication Management Plan
To develop the Risk Management plan to describe how risk management activities inclusive of risk identification, analysis, and risk responses will be structured and performed.	Risk Management Plan
To develop the procurement management plan to document the project procurement decisions and to specify the approach for identification of potential sellers.	Procurement Management Plan
To develop the stakeholder management plan to identify the management strategies required to effectively engage stakeholders.	Stakeholder Management Plan

4. RESULTS

4.1 PROJECT INTEGRATION MANAGEMENT

INTRODUCTION
DEVELOP PROJECT CHARTER
DEVELOP PROJECT MANAGEMENT PLAN
DIRECT AND MANAGE PROJECT WORK
MONITOR AND CONTROL PROJECT WORK
PERFORM INTEGRATED CHANGE CONTROL
CLOSE PROJECT OR PHASE

4.1.1 Introduction

The project integration management will involve managing the interdependencies among the project processes and their coordination, so that the project can be managed as a whole. This is the role of the Project Manager with the objective of getting the project done faster and more efficiently in the utilization of resources to meet the project objectives. The following project integration management process will apply; develop project charter, develop project management plan, direct and manage project work, monitor and control project work, perform integrated change control and close project or phase.

4.1.2 Develop Project Charter

This is the first part of integration management and it belongs to the initiating process group with the defining of scope and commitment of financial resources for the project. The project Charter was issued by the project Sponsor requesting the realization of this project, and consisted of a service agreement with terms of reference and the signing of a formal contract between the SLBS and the Sponsor. Appendix 4 contains the Charter as submitted by the Sponsor.

4.1.3 Develop Project Management Plan

The objectives and high level requirements from the Charter were used to develop the subsidiary plans for the ten knowledge management areas and integrated into

the Project Management Plan, constituting the control document defining the basis for all project work, herein, contained in this research project.

4.1.4 Direct and Manage Project Work

The Project Manager will use the Project Management Plan to lead and perform the work of the project, and implement approved changes.

4.1.5 Monitor and Control Project Work

The Project Manger and his team must track, review and report on the progress of the project to meet the objectives defined in the Plan. The information gathered during monitoring is used to make improvements and is communicated to stakeholders so that they are aware and updated on the status of the project.

4.1.6 Perform Integrated Change Control

All changes to the Project Management Plan must be made through a Change Control Integrated Process and not in a haphazard manner. The Project Manager is responsible for this process to ensure that all changes are considered in an integrated manner to reduce project risks such as scope creep, schedule delays which can affect the overall objectives of the project.

All request for changes which can come from the Project Team or any stakeholders are reviewed by the Project Manager and must be approved by the Sponsor of Project Manager depending on the nature of the change request. Changes can be requested to be made to project documents, deliverables, baselines and the Project Management Plan. The Project Manager can hold change control meetings to review requests for changes. Expert judgment from stakeholders can be requested to assess requests for changes.

4.1.7 Close Project or Phase

The Project Manager must realize the formal closure of the project by finalizing all activities across the project management process groups. All work performance

information will be reviewed to ensure that work is completed and that all project objectives have been met. The Project Manger will prepare a final project report which will include lessons learned to be used or applied to future projects. As the project progresses, whatever lessons are learned, they can be used to better the activity or phase of the project.

4.2 PROJECT SCOPE MANAGEMENT PLAN

INTRODUCTION
SCOPE STATEMENT DEVELOPMENT
WORK BREAKDOWN STRUCTURE
WORK BREAKDOWN STRUCTURE DICTIONARY
SCOPEBASELINE MAINTAINANCE & SCOPE CHANGE
DELIVERABLE ACCEPTANCE
SCOPE AND REQUIREMENTS INTEGRATION
SCOPE VALIDATION
SCOPE CONTROL

4.2.1 Scope Management Plan Introduction

This project entails the design and implementation of a Certification Program for Organic Farming and will therefore, include all work required for this to happen. The Scope Management Plan will therefore describe and document how the scope will be defined, developed, monitored, validated and controlled, and the supporting tools and techniques which will be used. The management of the project scope is important in ensuring that only the work required will be conducted, and there is no uncontrolled expansion.

A detailed analysis of the information in the Project Charter / Terms of Reference will form part of the process to initialize the Scope Management Plan. This plan was created using the template from the PMI website. A meeting was conducted with the Project Manager and Assistant Project Manager and representatives from the Ministry of Agriculture including the BAM Special Projects Coordinator and the Program Assistant of the NAO, to help finalize the project scope. The input from other meetings of the Project Management Team who possess technical expertise in standards development and certification assisted in the creation of the Scope Management Plan.

Roles and Responsibilities

The roles and responsibilities of the Project Manager, the Project Team and the Sponsor and other stakeholders in managing the scope of this project are defined

in the table below, Chart 7, to ensure that they are all aware of and understand their roles and responsibilities, and that only the work required is performed.

Chart 7. Scope Management Roles and Responsibilities
(Source: Author of the Study)

Name	Role	Responsibilities
National Authorizing Office	Project Sponsor	• Provides financial resources for the project. • Provides the project statement of work and information on initial scope of project. • Reviews the WBS. • Clarifies scope questions. • Provides formal acceptance of key project deliverables. • Approves or rejects scope change requests. • Resolves conflicts that extend beyond the Project Manager's control. • Works with the Project Manager to monitor progress.. • Ensures sustainability of project
X. Dubuison	Project Manager (PM)	• Lead responsibility and accountability for project success (meeting project objectives) or failure. • Leads the Project Team and develops the Project Management Plan. • Authorizes and approves all project expenditures • Approves all work activities and ensures that they meet established acceptability criteria and fall within acceptable variances. • Works with team members to resolve variances from the project management plan. • Defines the project change management plan. • Determines the need for scope change request.

Name	Role	Responsibilities
		• Communicates the outcomes of scope change requests to the team and necessary stakeholders. • Keeps the team focused on risk management and possible responses to the risks. • Receives information from and reports to Project Sponsor. • Escalates issues which cannot be solved, to the sponsor.
T. Haynes	Assistant Project Manager	• Assists the Project Manager with his responsibilities during the Standard development phase of the project.
Project Team	Team Members	• Take directives from the Project Manager • Help create and execute the project management plan to accomplish the work defined in the project scope statement. • Conduct process improvement. • Recommend and evaluate the need for scope changes and communicate to the Project Manager.
Stakeholders		• Participate in defining the project scope statement and deliverables. • Beneficiaries of the outcome of the project. • Can propose changes to the scope.

4.2.2 Scope Statement Development

The Project Manager will have responsibility for managing the Project Scope. The scope statement includes the project and product scope description, major deliverables, assumptions, constraints and exclusions.

Project Scope Statement

Product Scope Description

- Selection and adoption of appropriate code of practice for organic farming
- Designing an Organic Farming Certification Program
- Training to develop competency of the inspectorate
- Training of organic farmers in the requirements of the code of practice
- Offering certification services
- Public relations activities utilizing print and other media

Project Deliverables

- Draft Code of Practice for Organic Farming - Production and Processing for consideration as a National Standard
- Organic Farming Certification Manual
- Assessment checklists for farm inspections
- Training modules to train inspectorate
- Training modules to train farmers in the requirements of the Code of Practice for Organic farming
- 15-30 trained farmers in the developed Code of Practice for Organic farming
- 5-10 trained inspectors to conduct inspections of farms to determine readiness for certification
- Project Reports
  Inception
  First progress
  Second progress
  Third progress
  Fourth progress
  Draft final
  Final

Project Exclusions

The Code of Good Agricultural Practice - Organic Agriculture - Production and processing will cover requirements for plant production, animal husbandry, beekeeping, collection of wild products and aquaculture, and also the processing and labeling of products derived from these activities. However, the Certification Program will primarily focus on crop production for this project. The Certification Program designed, will not include certification of livestock, bee keeping, aquaculture and production. This will be developed in the future.

Project Constraints

1. Time: The contracting authority has given six months within which to implement the project.
2. Quality: The quality, reliability, availability and retrievability of the required additional information from the stakeholders within the fixed time period

Project Assumptions

i. Required funding from the Sponsor - National Authorizing Office is made available;
ii. Cooperation and commitment from stakeholders in the industry is forth coming;
iii. The Saint Lucia Bureau of Standards is able to establish a team with the appropriate competencies and skills to undertake the mandate.
iv. The Saint Lucia Bureau of Standards will be actively involved in the designing, and implementation of the certification system.

4.2.3 Work Breakdown Structure (WBS)

The project deliverables and project work was divided into more manageable components through a technique called decomposition to create the WBS. The work at the lowest level of the WBS are called work packages. Expert judgment was also employed based on experience with similar projects to develop standards and implement certification programs. The Project Manager conducted meetings with the project team members to facilitate the decomposition of the project work,

to fulfill the objectives of the project. The WBS will be used as a communication tool and to control scope creep and any scope related change requests, to determine if the request is within the planned scope of the project. (See WBS in Chart 8 below).

Chart 8. Work Breakdown Structure
(Source: Author of the Study)

Level 1	Level 2	Level 3	Level 4	Level 5
Organic Farming Certification Program	1.1 Standards Development/ Identification	1.1.1 Preparatory Stage	1.1.1.1 Document defining scope of draft code of practice for organic farming	
			1.1.1.2 Working Draft Code of Practice	
			1.1.1.3 Ad Hoc Task force committee for standards development	
		1.1.2 Committee Draft Stage	1.1.2.1 Technical Workshop 1 for ad hoc committee for consensus building	
			1.1.2.2 Committee draft Code of Practice	
		1.1.3 Production	1.1.3.1 Approved final Draft Code of Practice	
			1.1.3.2 Printed/Published finalized draft documents	
	1.2 Certification Scheme/Program	1.2.1 Scheme Design Phase	1.2.1.1 Document defining scope of certification program	
			1.2.1.2 Certification Manual	
			1.2.1.3 Documents (procedures/forms/checklist) to guide certification processes	
			1.2.1.4 Review Committee	

Level 1	Level 2	Level 3	Level 4	Level 5
			1.2.1.5 Technical Assistance Unit	
		1.2.2 Developing Competence Phase	1.2.2.1 Farmers	1.2.2.1.1 Modules
				1.2.2.1.2 Agenda
				2.2.1.3 List of Farmers
				1.2.2.1.4 Venue & Catering
				1.2.2.1.5 Invitations
				1.2.2.1.6 Workshop in North
				1.2.2.1.7 Workshop South
			1.2.2.2 Inspectorate	1.2.2.2.1 Modules
				1.2.2.2.2 Agenda
				1.2.2.2.3 List of Inspectors
				1.2.2.2.4 Venue &Catering
				1.2.2.2.5 Invitations
				1.2.2.2.6 Workshop & transportation
		1.2.3 Deliver/Offer Certification Services	1.2.3.1 Certification Department	
			1.2.3.2 Fee Structure	
			1.2.3.3 Finalized Procedures	
			1.2.3.4 Finalized Manual	

Level 1	Level 2	Level 3	Level 4	Level 5
			1.2.3.5 Launch of Organic farming Certification Program	1.2.3.5.1 Preparation for Launch
				1.2.3.5.2 Launch
	1.3 Project Management	1.3.1 Planning		
		1.3.2 Scheduling		
		1.3.3 Budgeting		
		1.3.4 Meetings		
		1.3.5 Monitoring and Control		
		1.3.6 Reporting		

4.2.4 WBS Dictionary

The Project Manager will ensure that during the planning phase of the project the work packages are defined using the WBS dictionary to prevent too much variation from what the deliverable is intended to be. This dictionary will describe the schedule milestones, a detailed description of the work to be done to each element of the WBS, deliverables and a unique number or WBS code of account (See WBS dictionary below in Chart 9).

Chart 9. Work Breakdown Structure Dictionary
(Source: Author of the Study)

Level	WBS Code	Element Name	Description of work	Deliverables
2	1.1	**Standards Development/Identification**	**Develop Standard**	
3	1.1.1	Preparatory Stage	- Identify the base documents to be used and conduct research on requirements for organic farming, to be used in developing the Saint Lucia Code of Practice	List of researched Standards
4	1.1.1.1	Document defining scope of draft code of practice for organic farming	- Determine which areas/sectors of agriculture the code of practice will cover	Scope of Code of Practice
4	1.1.1.2	Working Draft Code of Practice	- Using the base documents for preparing a working draft Code of Practice to be reviewed by the committee. - Print copies of working draft	Working draft Code of Good Agricultural Practices - Organic farming
4	1.1.1.3	Ad Hoc task force/Committee for standards development	- Determine date, time and venue of technical workshop for Ad hoc Committee. - Select and invite caterer, and confirm catering. - Select and Invite experts, technical government personnel to serve on Ad Hoc task force/Committee for standards development, and to attend workshop. - Confirm acceptance of invited members to serve. - Circulate working draft and supporting reference documents to Ad hoc committee members.	Confirmed List of Members of Ad hoc Committee Ad hoc Committee technical workshop date/time/venue Press Release
3	1.1.2	Committee Draft Stage		
4	1.1.2.1	Technical Workshop for ad hoc committee for consensus building	- Prepare venue and conduct workshop. - Press coverage of workshop	Signed register Press release

Level	WBS Code	Element Name	Description of work	Deliverables
4	1.1.2.2	Committee draft Code of Practice	- Consensus building with review of working draft. - Insert committee comments into draft. - Committee approves draft.	Committee Draft Code of Code of Good Agricultural Practices - Organic farming
3	1.1.3	Production	- Preparation of the Final Draft Code of Good Agricultural Practice for use for certification	
4	1.1.3.1	Final Draft Code of Practice by project team	- Conduct quality check on approved committee draft. - Acceptance of final draft by project team.	Approved Final Draft Code of Good Agricultural Practices - Organic Farming
4	1.1.3.2	Print/Publish finalized draft documents		Printed final drafts
2	1.2	**Certification Scheme/Program**	**Design and Develop and Implement Certification Program**	
3	1.2.1	Scheme Design Phase		
4	1.2.1.1	Document defining scope of Certification Program	- Determine areas/sectors of agriculture for which certification will be provided	Scope of the Certification Program

Level	WBS Code	Element Name	Description of work	Deliverables
4	1.2.1.2	Certification Manual	- Determine roles and responsibilities of the various entities involved in the certification process; a) Role of the SLBS- Certification Body b)Role of the Organic Farming Review Committee c) Role of the Technical Assistance Unit - Ministry of Agriculture d) Role of the farmer - Develop description of certification processes. - Requirements for eligibility. - Duration of agricultural certification and re-certification. -Organic product labeling requirements. - Inspection and testing of agricultural product to be sold or labeled “Organic.” - Training requirements for operators and inspectorate. - Stages of certification	Draft Certification Manual

Level	WBS Code	Element Name	Description of work	Deliverables
4	1.2.1.3	Documents(procedures/forms/checklists)	- Outline and develop the procedures to guide the certification processes. a) Procedure for application b) Procedure for granting certification c) Procedure to establish conditions for withdrawals, suspensions and cancellations of certification d) Procedure for establishing the process for complaints, claims and appeals. - Develop other documentation - forms/checklists; a) Application forms/ Organic System Plan template b) Inspector checklists c) Inspection report template d) Certificate template e) Farmer record keeping forms	Draft Procedures/forms/Checklists
4	1.2.1.4	Review Committee	- Determine composition of review committee. - Select , invite and confirm acceptance of invitees to sit on committee	List of Members of Review committee
4	1.2.1.5	Technical Assistance Unit	- Hold meeting with Ministry of Agriculture to discuss and determine composition of the review committee within the Ministry	Structure of Technical Assistance Unit
3	1.2.2	Developing Competence Phase		
4	1.2.2.1	**Farmers**	- Determine the number of training sessions required, and number of training days per workshop.	15-30 Farmers trained in the developed Code of Practice

Level	WBS Code	Element Name	Description of work	Deliverables
5	1.2.2.1.1	Training Modules	- Development of training modules. - Printing of Modules	Farmer Training Modules
5	1.2.2.1.2	Agenda	-Preparation of Agenda	Agenda for Farmer Training
5	1.2.2.1.3	List of participants	-Acquire list of organic farmers & extension officers from Ministry of Agriculture.	List of Farmers & extension officers to be trained
5	1.2.2.1.4	Venue & Catering	- Identify and select venue in North and South for training. - Select and invite caterer, and confirm catering.	Confirmed Venue Confirmed Caterer
	1.2.2.1.5	Invitations	Prepare and send out invitations	Confirmation of attendance
5	1.2.2.1.6	Workshop in North	- Prepare venue and conduct training - Record feedback and comments during training. - Evaluation of training by trainees. - Press coverage of Workshop.	Farmer training attendance register. Completed workshop evaluation forms Press release and coverage
5	1.2.2.1.7	Workshop in South	Conduct training. - Transportation for farmers on west coast. - Record feedback and comments during training. - Evaluation of training by trainees. - Press coverage of workshop.	Farmer training attendance register. Completed Workshop Evaluation forms Press release and coverage
4	1.2.2.2	**Inspectorate**		5-10 Trained & competent Inspectors
5	1.2.2.2.1	Training Modules	- Development of training modules. - Printing of modules	Printed Inspectorate Training Modules

Level	WBS Code	Element Name	Description of work	Deliverables
5	1.2.2.2.2	Agenda	- Preparation of agenda	Agenda for Inspectorate Training
5	1.2.2.2.3	List of Inspectors	- Acquire list of selected extension officers from Ministry of Agriculture for Inspectorate training. - Inform Officers of their selection. - Identify and invite potential Inspectors from private sector to serve on Inspectorate. - Confirm acceptance	List of Inspectors to attend training
5	1.2.2.2.4	Venue & Catering	- Identify and select venue for training. - Select and invite caterer, and confirm catering.	Confirmed Venue Confirmed Caterer
5	1.2.2.2.5	Invitation to Workshop	- Inform inspectors of training date, venue and time.	Confirm attendance
5	1.2.2.2.6	Workshop	- Prepare venue and conduct training. - Arrange transportation for field trips - Record feedback and comments during training. - Evaluation of training by trainees.	Inspectorate Training Attendance register Completed workshop Evaluation forms.
3	1.2.3	**Deliver/Offer certification services**		Certification Program implemented
4	1.2.3.1	Certification Department	-Preparation of Certification Department to receive applicants. - Develop brochures for organic farming certification.	Brochures
4	1.2.3.2	Fee Structure	- Meeting with Ministry of Agriculture to discuss fees. - Develop fees for certification services based on scope and size of farms.	Organic certification Fee structure

Level	WBS Code	Element Name	Description of work	Deliverables
4	1.2.3.3	Finalized Procedures	- Meeting with project team to finalize procedures	Approved procedures
4	1.2.3.4	Finalized Manual	- Meeting with Sponsor and Ministry of Agriculture to review and finalize Manual.	Approved certification manual
4	1.2.3.5	Launch of Organic farming Certification Program		Program launched Press release and coverage
5	1.2.3.5.1	Preparation for Launch	- Determine date and venue - Select and confirm caterer. - Print brochures - Select and invite stakeholders including the press to attend launch.	List of invitees Confirmed date, time, venue Agenda
5	1.2.3.5.2	Launch	- Realize launch	Program Launched
2	1.3	**Project Management**	- The management of the processes of planning, executive, monitoring and controlling, and closing the project	Project Management Plan
3	1.3.1	Planning	- Planning of all the activities required to attain the objectives of the project.	Project Management Plan
3	1.3.2	Scheduling	- Analyzing the sequence of activities, and resources required to determine duration and set timelines for timely completion of the project.	Project Schedule
3	1.3.3	Budgeting	- Estimating and aggregating the costs of individual activities or work packages	Cost Baseline
3	1.3.4	Meetings	- Planned meetings and meeting called when the need arises to manage the project.	Progress Meetings

Level	WBS Code	Element Name	Description of work	Deliverables
3	1.3.5	Monitoring and Controlling	- Monitoring the ongoing project activities against the project management plan, controlling changes and recommending corrective actions when variances are identified or preventive action to address potential problems.	Updates to the Project Management Plan, Project documents and organizational process assets. Work performance information. Change requests.
3	1.3.6	Reporting	Providing progress reports on work done at various intervals during the life cycle of the project, as required by the Sponsor.	Progress Reports ✓ Inception Report ✓ First Progress Report ✓ Second Progress Report ✓ Third Progress Report ✓ Fourth Progress Report ✓ Final

4.2.5 Scope Baseline Maintenance & Scope Change

The approved scope statement, work breakdown structure and the WBS dictionary is known as the scope baseline. All request for changes and recommendations for corrective and preventive action must be processed through the Change Control Process.

The Project Manager, Sponsor, any project team member or stakeholder may initiate proposed changes to the project scope. Requests for changes are submitted to the Project Manager who will make an evaluation of the request which can be rejected or accepted. Upon acceptance, scope change requests are then submitted to the Sponsor, stakeholder, and/or contracted consultants. Scope changes that are technical in nature are approved by the Project Manager, while changes that affect time and cost are approved by the Sponsor, who is responsible for final approval of project deliverables and project scope.

4.2.6 Deliverable Acceptance

The Contracting Authority will monitor the progress of the work of the project through the revision of reports submitted by the Project Manager at various intervals throughout the project lifecycle.

- Inception report four weeks after start of the project
- Four progress reports at four week intervals
- Final report four weeks before project completion date

Formal acceptance of each report and approval of the deliverables thus completed will be tied in with payment by the NAO for work accomplished.

4.2.7 Scope and Requirements Integration

It is important to track requirements throughout the life cycle of the project. The Project Manager and project team will determine how the requirements for the project will be analyzed, documented and managed by creating the Requirements Management Plan to reflect the following: collection, analysis, categories,

documentation, prioritization, metrics, traceability structure, tracking, reporting, validation and configuration management.

After meeting with the different groups of stakeholders, all the requirements collected will be documented in the Requirements Documentation Form (see Appendix 5). Included are the business requirements, stakeholder requirements, solution requirements (functional and nonfunctional, technological and standard compliance, support and training and quality requirements) and project requirements including acceptance criteria.

The Project Manager and project team will also manage changes to the product scope, through the creation of the requirements traceability matrix, which will link requirements from where they originated, to the deliverables which will satisfy them. Appendix 6 reflects the form to be used to develop this matrix.

4.2.8 Scope Validation

This is the process of monitoring and controlling which will be conducted at various points as the project progresses. The Project Manager will use the scope statement, the WBS and the WBS dictionary to verify that the work has been conducted as planned.

Techniques such as inspection, which includes activities such as; examining whether deliverables meet the product acceptance criteria and group decision making techniques will form part of the process of scope validation. Scope validation will be conducted in two formats. Upon the completion of each deliverable the Project Manager will meet with the BAM Project Coordinator to discuss the completion of each deliverable to verbally agree that it is completed satisfactorily. Formal acceptance will be given after submission of the progress reports, as per the terms of the contract signed between the SLBS and the Contracting Authority, who will grant the acceptance in writing upon review of the reports, which will provide details of the deliverables.

4.2.9 Scope Control

This is the second monitoring and controlling process which will also be conducted at various intervals as the project progresses, to monitor the status of the project, product scope and to manage any changes to the scope baseline. A technique called variance analysis will be used to determine the degree of difference between the baseline and the actual performance, to determine if corrective or preventive action is required.

As discussed in the section on scope change, a change control process/mechanism will be established for the project, for the processing of all requested changes, recommended corrective and preventive action.

4.3 PROJECT SCHEDULE MANAGEMENT PLAN

INTRODUCTION
SCHEDULE METHODOLOGY
PROCESS MANAGEMENT
- Activity Identification
- Activity Sequencing
- Estimating Resources and Activity Duration
- Develop Schedule

SCHEDULE MONITORING AND CONTROL
SCHEDULE CHANGES AND THRESHOLDS

4.3.1 Schedule Management Plan Introduction

This schedule management plan documents all the time management processes, and their associated tools and techniques that will be used to manage the timely completion of the project. A schedule management plan template was taken from the PMI website and modified. The project scope baseline as defined in the scope management plan was used as inputs into the time management process, to define and sequence the project activities, estimate activity resources, duration and in developing and managing the schedule.

Information from the Project Charter was used to develop the milestones for the project schedule which are as follows:

- Project Start
- Draft Code of Practice approved by Committee
- Approved final Daft Code of practice by project team
- Draft Manual
- Trained farmers
- Trained inspectorate
- Approved Manual
- Certification Services Commenced /End of Project

The roles and responsibilities of the Project Manager, Project Team members and stakeholders for developing the schedule are as follows: The Project Manager has

the overall responsibility for creating the project schedule using MS Project and to ensure that all monitoring activities are conducted to determine the project status as the project progresses. He will obtain approval from the sponsor for any changes within an established threshold and create the status reports as per the frequency required by the Sponsor. The Project Team will participate in defining activities, sequencing activities, estimating activity resources and duration and in executing the work of the project in keeping with the schedule baseline. The stakeholders will participate in reviews and validation of the schedule during its development.

4.3.2 Schedule Methodology

Microsoft Office Project 2016 was the tool used to develop the schedule for the project, containing the planned dates for starting and completing project activities and milestones. However, as work progresses the schedule module will be revised and maintained to ensure that the schedule remains realistic. The Project Management Team will employ the seven time management processes as defined in the PMBOK and as explained in the following section on process management.

4.3.3 Process Management

This section of the schedule management plan includes the four time management processes of define activities, sequence activities, estimate activity resources, estimate activity duration and develop schedule.

4.3.3.1 Activity Identification

To define the activities the Project Management team considered the project WBS, deliverables, constraints and assumptions made in the scope baseline. Through decomposition which was done during the creation of the WBS and WBS dictionary, the list of activities was developed. The involvement of the entire project team is critical to improve accuracy thereby leading to a reduction in the failure rate of quality and the need for rework. The expert judgment of project team members with expertise in developing standards and certification programs was also a

technique used during this process. As an output to this process, the activity list reflected in Chart 10 below, according to the PMBOK, is a comprehensive list with all the scheduled activities required by the project. This includes the activity identifier and scope of work description of each activity, in sufficient detail to ensure that the work required is understood (PMI, 2013, p. 152).

Chart 10. Activity Durations and Resource Assignment
(Source: Author of Study)

Level	WBS Code (Activity ID Number)	Element / Activity Name	Description of work	Duration (days)	Start	Finish	Resource Names
1	1.0	**Organic Farming Certification Program**		**130 days**	**Fri 3/9/18**	**Thu 9/6/18**	
		Project Start		0 days	Fri 3/9/18	Fri 3/9/18	Project Manager, Assistant Project Manager, Sponsor, Director
2	1.1	**Standards Development/ Identification**		**57 days**	**Fri 3/9/18**	**Mon 5/28/18**	
3	1.1.1	Preparatory Stage	• Identify the base documents to be used and conduct research on requirements for organic farming, to be used in developing the Saint Lucia Code of Practice	**31 days**	**Fri 3/9/18**	**Fri 4/20/18**	Assistant Project Manager, Standards Development Project Management Team
4	1.1.1.1	Document defining scope of draft code of practice for	• Determine which areas/sectors of agriculture the code of	1 day	Fri 3/9/18	Fri 3/9/18	Assistant Project Manager

Level	WBS Code (Activity ID Number)	Element / Activity Name	Description of work	Duration (days)	Start	Finish	Resource Names
		organic farming	practice will cover				
4	1.1.1.2	Working draft Code of Practice	• Use the base documents to prepare a working draft Code of Practice to be reviewed by the committee. • Print copies of working draft	24 days	Mon 3/12/18	Thu 4/12/18	Standards Development Project Management Team
4	1.1.1.3	Ad Hoc task force/Committee for Standards development	• Determine date, time and venue of technical workshop for Ad hoc Committee. • Select and invite caterer, and confirm catering. • Select and Invite experts, technical government personnel to serve on Ad Hoc task force/Committee for Standards development, and to attend workshop. • Confirm acceptance of invited members to	6 days	Fri 4/13/18	Fri 4/20/18	Assistant Project Manager

Level	WBS Code (Activity ID Number)	Element / Activity Name	Description of work	Duration (days)	Start	Finish	Resource Names
			serve. • Circulate working draft and supporting reference documents to Ad hoc committee members.				
3	1.1.2	Committee Draft Stage		**12 days**	**Thu 5/3/18**	**Fri 5/18/18**	
4	1.1.2.1	Technical Workshop for ad hoc committee for consensus building	• Prepare venue and conduct workshop. • Press coverage of workshop	2 days	Thu 5/3/18	Fri 5/4/18	Assistant Project Manager, Standards Development Project Team
4	1.1.2.2	Committee draft Code of Practice	• Consensus building with review of working draft. • Insert Committee comments into draft. • Committee approves draft.	10 days	Mon 5/7/18	Fri 5/18/18	Assistant Project Manager, Standards Development Project Team
		Draft approved by Committee		0 days	Fri 5/18/18	Fri 5/18/18	Assistant Project Manager
3	1.1.3	Production	• Preparation of the	**6 days**	**Mon**	**Mon**	Assistant

Level	WBS Code (Activity ID Number)	Element / Activity Name	Description of work	Duration (days)	Start	Finish	Resource Names
			Final Draft Code of Good Agricultural Practice for use for certification		**5/21/18**	**5/28/18**	Project Manager
4	1.1.3.1	Final Draft Code of Practice by project team	• Conduct quality check on approved committee draft. • Acceptance of final draft by project team	3 days	Mon 5/21/18	Wed 5/23/18	Project Manager, Assistant Project Manager
		Approved final Daft by project team		0 days	Wed 5/23/18	Wed 5/23/18	Project Manager, Assistant Project Manager, Director
4	1.1.3.2	Print/Publish finalized draft documents		3 days	Thu 5/24/18	Mon 5/28/18	Assistant Project Manager
2	**1.2**	**Certification Scheme/Program**		**129 days**	**Mon 3/12/18**	**Thu 9/6/18**	Project Manager
3	1.2.1	Scheme Design Phase		**41 days**	**Mon 3/12/18**	**Mon 5/7/18**	
4	1.2.1.1	Document defining scope of Certification	• Determine areas/sectors of agriculture for which	1 day	Mon 3/12/18	Mon 3/12/18	Project Manager,

Level	WBS Code (Activity ID Number)	Element / Activity Name	Description of work	Duration (days)	Start	Finish	Resource Names
		Program	certification will be provided.				
4	1.2.1.2	Certification Manual	• Determine roles and responsibilities of the various entities involved in the certification process. a) Role of the SLBS-Certification Body b)Role of the Organic Farming Review Committee c) Role of the Technical Assistance Unit - Ministry of Agriculture d) Role of the Farmer • Develop description of certification processes. • Requirements for eligibility. • Duration of agricultural certification and recertification. • Organic Product Labeling	20 days	Tue 3/13/18	Mon 4/9/18	Certification Department Project Team

Level	WBS Code (Activity ID Number)	Element / Activity Name	Description of work	Duration (days)	Start	Finish	Resource Names
			Requirements. • Inspection and testing of agricultural product to be sold or labeled- “Organic.” • Training requirements for operators and inspectorate. • Training requirements for operators and inspectorate. • Stages of certification				
		Draft Manual		0 days	Mon 4/9/18	Mon 4/9/18	Project Manager

Level	WBS Code (Activity ID Number)	Element / Activity Name	Description of work	Duration (days)	Start	Finish	Resource Names
4	1.2.1.3	Documents(procedures/forms/checklists)	• Outline and develop the procedures to guide the certification processes. a) Procedure for application b) Procedure for granting certification c) Procedure to establish conditions for withdrawals, suspensions and cancellations of certification d) Procedure for establishing the process for complaints, claims and appeals. • Develop other documentation - forms/checklists. a) Application forms/ Organic System plan template b) Inspector checklists c) Inspection report template d) Certificate template e) Farmer record keeping forms	20 days	Tue 4/10/18	Mon 5/7/18	Project Manager, Certification Department Project Team

Level	WBS Code (Activity ID Number)	Element / Activity Name	Description of work	Duration (days)	Start	Finish	Resource Names
4	1.2.1.4	Review Committee	• Determine composition of Review Committee. • Select , invite and confirm acceptance of invitees to sit on committee	4 days	Wed 3/21/18	Mon 3/26/18	Project Manager, Certification Department Project Team
4	1.2.1.5	Technical Assistance Unit	• Hold meeting with Ministry of Agriculture to discuss and determine composition of the review committee within the Ministry of Agriculture.	4 days	Wed 3/21/18	Mon 3/26/18	Project Manager, Assistant Project Manager, Director of SLBS
3	1.2.2	Developing Competence Phase		**61 days**	**Tue 5/8/18**	**Tue 7/31/18**	
4	1.2.2.1	**Farmers**	• **Determine the number of training sessions required, and number of training days per workshop.**	**54 days**	**Tue 5/8/18**	**Fri 7/20/18**	Project Manager, Director
5	1.2.2.1.1	Training Modules	• Development of training modules. • Printing of modules	10 days	Tue 5/8/18	Mon 5/21/18	Consultant

Level	WBS Code (Activity ID Number)	Element / Activity Name	Description of work	Duration (days)	Start	Finish	Resource Names
5	1.2.2.1.2	Agenda	• Preparation of Agenda	1 day	Tue 5/22/18	Tue 5/22/18	Consultant, Project Manager
5	1.2.2.1.3	List of participants	• Acquire list of organic farmers & extension officers from Ministry of Agriculture.	10 days	Wed 5/23/18	Tue 6/5/18	Project Manager, Certification Department Project Team
5	1.2.2.1.4	Venue & Catering	• Identify and select venue in North and South for training. • Select and invite caterer, and confirm catering.	5 days	Wed 6/6/18	Tue 6/12/18	Head of Finance Department, Project Manager
5	1.2.2.1.5	Invitations	• Prepare and send out invitations	15 days	Wed 6/13/18	Tue 7/3/18	Project Manager, Certification Department Project Team
5	1.2.2.1.6	Workshop in North	• Prepare venue and conduct training. • Record feedback and comments during	2 days	Tue 7/17/18	Wed 7/18/18	Project Manager, Consultant, Head of

Level	WBS Code (Activity ID Number)	Element / Activity Name	Description of work	Duration (days)	Start	Finish	Resource Names
			training. • Evaluation of training by trainees. • Press coverage of workshop.				Information Services Department
5	1.2.2.1.7	Workshop in South	• Conduct training. • Record feedback and comments during training. • Evaluation of training by trainees. • Press coverage of workshop.	2 days	Thu 7/19/18	Fri 7/20/18	Project Manager, Consultant, Head of Information Services
		Trained farmers		0 days	Fri 7/20/18	Fri 7/20/18	Project Manager
4	1.2.2.2	**Inspectorate**		**51 days**	**Tue 5/22/18**	**Tue 7/31/18**	
5	1.2.2.2.1	Training Modules	• Development of training modules. • Printing of modules	15 days	Tue 5/22/18	Mon 6/11/18	Consultant
5	1.2.2.2.2	Agenda	• Preparation of agenda	1 day	Tue 6/12/18	Tue 6/12/18	Consultant, Project Manager
5	1.2.2.2.3	List of Inspectors	• Acquire list of selected extension	10 days	Wed 6/13/18	Tue 6/26/18	Project Manager,

Level	WBS Code (Activity ID Number)	Element / Activity Name	Description of work	Duration (days)	Start	Finish	Resource Names
			officers from Ministry of Agriculture for inspectorate training. • Inform officers of their selection • Identify and invite potential inspectors from private sector to serve on inspectorate. • Confirm acceptance				Certification Department Project Team
5	1.2.2.2.4	Venue & Catering	• Identify and select venue for training • Select and invite caterer, and confirm catering.	3 days	Wed 6/27/18	Fri 6/29/18	Head of Finance Department, Project Manager
5	1.2.2.2.5	Invitation to workshop	• Inform inspectors of training date, venue and time. • Confirm attendance	5 days	Mon 7/2/18	Fri 7/6/18	Project Manager, Certification Department Project Team
5	1.2.2.2.5	Workshop	• Prepare venue and conduct training. • Record feedback and comments during	7 days	Mon 7/23/18	Tue 7/31/18	Project Manager, Consultant, Head of

Level	WBS Code (Activity ID Number)	Element / Activity Name	Description of work	Duration (days)	Start	Finish	Resource Names
			training. • Evaluation of training by trainees.				Information Services Department
		Trained Inspectorate		0 days	Tue 7/31/18	Tue 7/31/18	Project Manager
3	1.2.3	**Deliver/Offer certification services**		**27 days**	**Wed 8/1/18**	**Thu 9/6/18**	
4	1.2.3.1	Certification Department	• Preparation of Certification Department to receive applicants. • Develop brochures for organic farming certification	5 days	Wed 8/1/18	Tue 8/7/18	Project Manager, Certification Department Project Team
4	1.2.3.2	Fee Structure	• Meeting with Ministry of Agriculture to discuss fees. • Develop fees for certification services based on scope and size of farms	2 days	Wed 8/8/18	Thu 8/9/18	Project Manager, Head of Finance Department
4	1.2.3.3	Finalized Procedures	• Meeting with project team to finalize procedures	5 days	Fri 8/10/18	Thu 8/16/18	Project Manager
4	1.2.3.4	Finalized Manual	• Meeting with sponsor	2 days	Fri	Mon	Project

Level	WBS Code (Activity ID Number)	Element / Activity Name	Description of work	Duration (days)	Start	Finish	Resource Names
			and Ministry of Agriculture to review and finalize manual		8/17/18	8/20/18	Manager
		Approved Manual		0 days	Mon 8/20/18	Mon 8/20/18	Project Manager, Director, Sponsor
4	1.2.3.5	**Launch of Organic farming Certification Program**		**13 days**	**Tue 8/21/18**	**Thu 9/6/18**	
5	1.2.3.5.1	Preparation for Launch	• Determine date and venue • Select and confirm caterer • Select and invite stakeholders including the press to attend launch.	12 days	Tue 8/21/18	Wed 9/5/18	Project Manager, Head of Finance Department, Head of Information Services Department
5	1.2.3.5.2	Launch	• Realize launch	1 day	Thu 9/6/18	Thu 9/6/18	Project Manager
		Certification Services Commenced /End of Project		0 days	Thu 9/6/18	Thu 9/6/18	

Level	WBS Code (Activity ID Number)	Element / Activity Name	Description of work	Duration (days)	Start	Finish	Resource Names
2	1.3	**Project Management**	• The management of the processes of planning, executive, monitoring and controlling, and closing the project				
3	1.3.1	Planning	• Planning of all the activities required to attain the objectives of the project				
3	1.3.2	Scheduling	• Analyzing the sequence of activities, and resources required to determine duration and set timelines for timely completion of the project				
3	1.3.3	Budgeting	• Estimating and aggregating the costs of individual activities or work packages				
3	1.3.4	Meetings	• Planned meetings and meeting called when				

Level	WBS Code (Activity ID Number)	Element / Activity Name	Description of work	Duration (days)	Start	Finish	Resource Names
			the need arises to manage the project				
3	1.3.5	Monitoring and Controlling	• Monitoring the ongoing project activities against the project management plan, controlling changes and recommending corrective actions when variances are identified or preventive action to address potential problems				
3	1.3.6	Reporting	• Providing progress reports on work done at various intervals during the life cycle of the project, as required by the sponsor.				

4.3.3.2 Activity Sequencing

The activity list and milestone list was then used to identify and document relationships and dependencies among the project activities, to determine the logical sequence of work to create the project schedule. The precedence diagramming method, was the technique used allowing for the project management team to determine which one of the four logical relations exist between activities, namely; finish -to-start, finish-to-finish, start-to-finish or start-to-start. The nature of the project allows for many activities to occur simultaneously. The four attributes of dependency determination namely mandatory or discretionary and internal or external, in addition to the use of leads and lags were also techniques used during sequencing. The resulting schedule network diagram is reflected below in Figure 2.

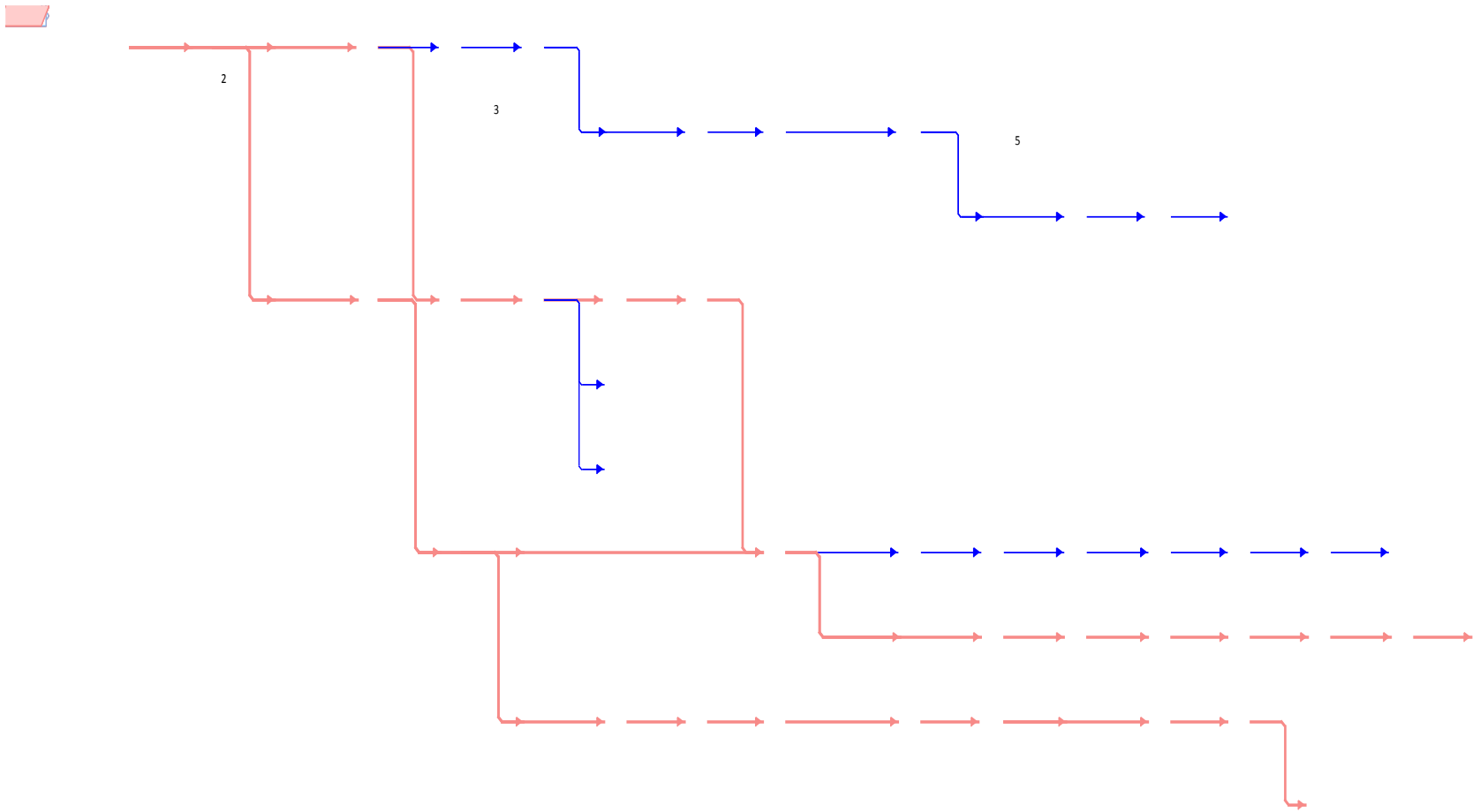


Figure 2. Project Schedule Network Diagram (Source: Author of the Study)

Chart 11. Key for Network Diagram (Source: Author of the Study)

ID		ID	Task Name	ID	Task Name
1	**1 Organic Farming Certification Program**	18	1.2.1.1 Document defining scope of Certification Scheme	34	**1.2.2.2 Inspectorate**
2	Project Start	19	1.2.1.2 Certification Manual	35	1.2.2.2.1 Training Modules
3	**1.1 Standards Development/Identification**	20	Draft Manual	36	1.2.2.2.2 Agenda
4	**1.1.1 Preparatory Stage**	21	1.2.1.3 Documents (procedures/forms/ checklists)	37	1.2.2.2.3 List of Inspectors
5	1.1.1.1 Determine scope of draft code of practice for organic farming	22	1.2.1.4 Review Committee	38	1.2.2.2.4 Venue and catering
6	1.1.1.2 Working draft Code of Practice	23	1.2.1.5 Technical Assistance Unit	39	1.2.2.2.5 Invitations
7	1.1.1.3 Ad Hoc task force/Committee for Standards development	**24**	**1.2.2 Developing Competence Phase**	40	1.2.2.2.6 Workshop
8	**1.1.2 Committee Draft Stage**	**25**	**1.2.2.1 Farmers**	41	Trained Inspectorate
9	1.1.2.1 Technical Workshop for ad hoc committee for consensus building	26	1.2.2.1.1 Training Modules	**42**	**1.2.3 Deliver/Offer certification services**
10	1.1.2.2 Committee draft Code of Practice	27	1.2.2.1.2 Agenda	43	1.2.3.1 Certification Department
11	Draft approved by Committee	28	1.2.2.1.3 List of participants	44	1.2.3.2 Fee Structure
12	**1.1.3 Production**	29	1.2.2.1.4 Venue & catering	45	1.2.3.3 Finalized Procedures
13	1.1.3.1 Final Draft Code of Practice by project team	30	1.2.2.1.5 Invitations	46	1.2.3.4 Finalized Manual
14	Approved final Daft by project team	31	1.2.2.1.6 Workshop in North	47	Approved Manual
15	1.1.3.2 Print/Publish finalized draft documents	32	1.2.2.1.7 Workshop in South	**48**	**1.2.3.5 Launch of certification program**
16	**1.2 Certification Scheme/Program**	33	Trained farmers	49	1.2.3.5.1 Preparation for Launch
17	**1.2.1 Scheme Design Phase**			50	1.2.3.5.2 Launch
				51	Certification Services Commenced /End of Project

4.3.3.3 Estimating Resources and Activity Duration

Estimating activity resources is the process of estimating the type and quantities of material, human resources, equipment and supplies required to perform each activity (PMI, 2013, p. 160), and allows for more accurate duration and cost estimates. This process is integrated with the estimate cost process done during cost management and with the process of determining the human resources required for the project during human resource management. Expert judgment was used to estimate resources. To estimate activity duration the project management team used expert judgement and analogous estimating (historical data from similar activity). Chart 10 above reflects the activity durations and resource assignment for each activity.

4.3.3.4 Develop Schedule

Microsoft Project 2016 is the scheduling tool used to develop the project schedule model, containing planned dates for the commencement and the completion of project activities and which serves as the baseline to track the project progress. As work continues on the project the schedule is revised to sustain a realistic project schedule. The resulting schedule is reflected in the Project Gantt Chart below in Figure 3.

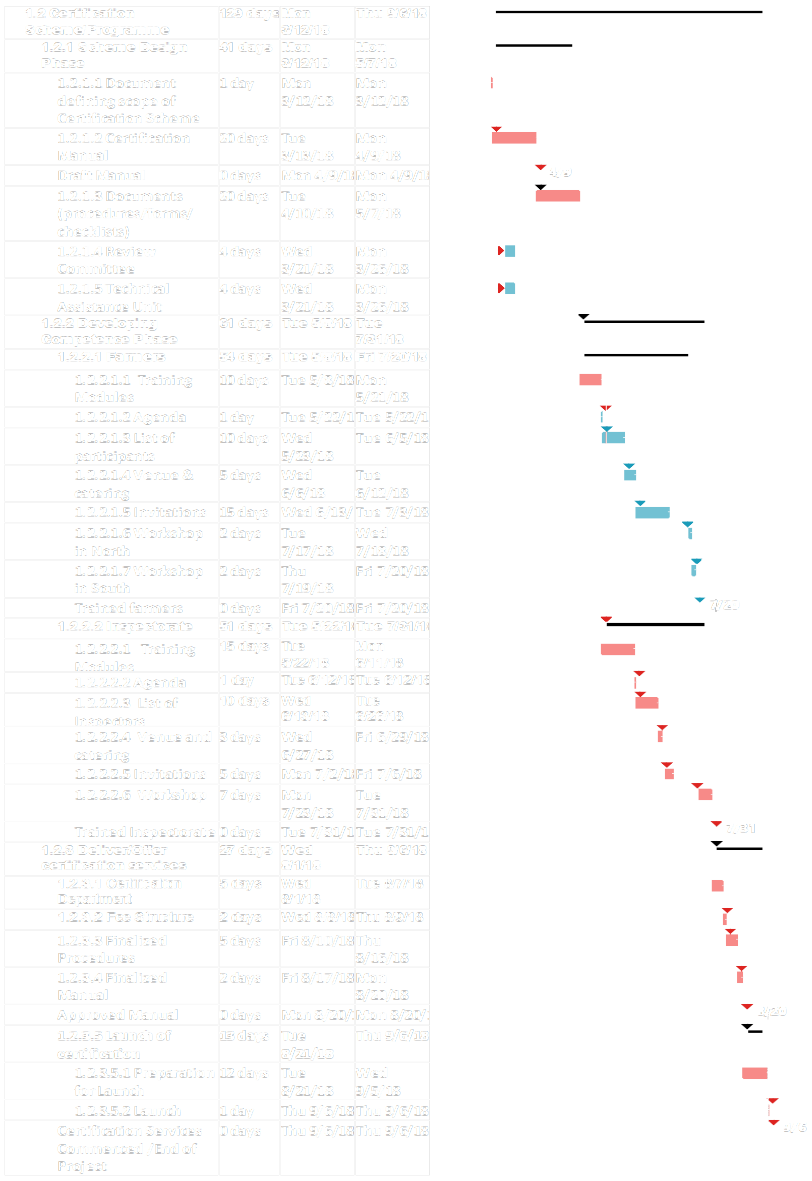


Figure 3: Organic Farming Certification Project Schedule (Source: Author of the Study)

4.3.4 Schedule Monitoring and Control

The Project Management Team will monitor the status of the project activities to update the progress of the project. It is the project manager's responsibility, to ensure that meetings are held to conduct performance reviews. This would include reviewing the start and finish dates and percentage completion of activities, to determine any deviations from the schedule baseline and the appropriate corrective or preventive actions which will be taken. The Project Management Team will compare the progress of the project along the critical path and the earned value management, utilizing the schedule variance (SV) and schedule performance index (SPI) to assess the magnitude of variation to the original schedule baseline.

Any negative schedule variances or SPI < 1 signifies the project is behind schedule or less work is being completed than planned and must result in corrective action to bring the SV and SPI to a zero or positive and > 1 value respectively.

As the project progresses, work performance information will be communicated to the Sponsor and other stakeholders.

Schedule Changes and Thresholds

The request for changes can be made by any member of the Project Team or the stakeholders. The request is then reviewed by the Project Team and Project Manager who will determine the impact on the various project activities and the schedule baseline. The team must establish the threshold, increase or decrease in duration of a particular work package or the overall schedule baseline, which will require a change request. The Project Manager will need approval from the Project Sponsor for any change requests, following which, the schedule will be adjusted and changes communicated to the various stakeholders.

4.4 PROJECT COST MANAGEMENT PLAN

INTRODUCTION
RULES FOR PERFORMANCE MEASUREMENT
PROCESS MANAGEMENT
    ESTIMATING COSTS & DEVELOPING THE BUDGET
    UPDATING, MONITORING AND CONTROLLING
COST REPORTING AND FORMAT

4.4.1 Cost Management Plan Introduction

This cost management plan identifies the policies, procedures and documentation for planning, managing, expending and controlling project cost (PMI 2013: Pg 193). The Project Manager is responsible for ensuring that the project is completed within the approved budget and will report to Sponsor on the project cost in the progress reports which are requested by the Sponsor at various stages of the lifecycle of the project. Hence, he will submit a written inception, first, second, third, fourth progress reports and final report, as well as discuss the cost performance of the project during the project status meeting as stated in the communications management plan. To measure cost performance he will use the earned value management methodology, to assess the project performance and progress.

The schedule and scope baselines are valuable inputs into the cost management process. The project charter provided by the Sponsor will also be used to develop the detailed project cost as it contains the summary budget. The funds will come from the Sponsor who contracted the SLBS to undertake this project. Tools and techniques to be used during project planning are expert judgment based on information from similar projects. The disbursement of funds and payments will be done in accordance with the SLBS' policies and procedures.

All costs will be quoted in Eastern Caribbean Dollar currency (XCD) and expressed using two decimal places.

4.4.2 Rules for Performance Management

Earned value management (EVM) will be used to monitor the performance and progress of the project. The three dimensions namely Planned Value (PV), Actual Cost (AC) and Earned Value (EV) will be utilized from which the variances from the approved cost baseline will be monitored, that is, the Cost Variance(CV). The Cost Performance Index (CPI) will be the EVM metrics used to determine the cost efficiency for the work completed or of the budgeted resources.

Any negative cost variances or CPI < 1 signifies the project is over the planned budget or signifies inefficiency in the use of funds, which must result in corrective action to bring the CV and CPI to a zero or positive and > 1 value respectively.

4.4.3 Process Management

The project management processes which include plan cost management, estimate costs, determine budget and control cost interact with each other and the other knowledge areas such as scope, schedule and human resource management.

4.4.3.1 Estimating Cost and Developing Budget

For the purposes of this project, which is a small project of short duration cost, estimating and cost budgeting will be performed as a single process over a short period of time by the Project Manager and team. Expert judgment and analogous estimating which costs less and consumes less time will be used for this process, due to the fact that the project team has the expertise and similar projects have been realized. For some activities such as catering and consultation fees, parametric estimating will be the preferred technique. The budget is reflected below in Chart 12.

Chart 12. Project Budget (Source: Author of Study)

WBS Activity ID	WBS Activity	Item/Service	Quantity	Unit Cost	Total Cost	Justification
1.3.4	Meetings	Catering	Break for 45 persons	Break @ $15.00 per person	$675.00	1/2 day Stakeholder Consultation Meeting at beginning of project
1.1.1.3	Ad Hoc task force/Committee for Standards development	Catering	For 20 persons for 2 days	Break @ $15.00 per person for two days Lunch @ $25.00 per person for two days	$600.00 $1000.00	Ad hoc Committee technical workshop
1.1.2.1	Technical Workshop for ad hoc committee for consensus building	Press release and coverage for ad hoc committee technical workshop	Coverage on major television stations	n/a	$0.00	To create pubic sensitization on project and provide information on development of a Code of Practice for Organic Farming.
1.2.2.1.6	Workshop in North	Catering and Venue	For 30 persons	Break @ $15.00 per person for two days Lunch @ $25.00 per person for two days	$900.00 $1500.00	Workshop in North for farmers
1.2.2.1.7	Workshop in South	Catering and Venue	For 30 persons	Break @ $15.00 per person for two days Lunch @ $25.00 per person for two days	$900.00 $1500.00	Workshop in the South for farmers

WBS Activity ID	WBS Activity	Item/Service	Quantity	Unit Cost	Total Cost	Justification
1.2.2.1.6 1.2.2.1.7	Workshop in North &South	Press release and coverage for farmer training	Coverage on major television stations	n/a	n/a	To create pubic sensitization on project and provide information on farmer training sessions.
1.2.2.2.4	Venue & Catering	Catering	For 20 persons for 7 days	Break @ $15.00 per person for 7 days Lunch @ $25.00 per person for 7days	$2100.00 $3500.00	Inspectorate training
1.2.2.2.6	Workshop	Transportation	2 field trips from north to south of island	$800.00 round trip per day	$1600.00	Field trip to organic farms to conduct practice audit for inspectorate training
1.2.2.1.7	Workshop in South	Transportation	Bus to transport farmers from west coast to south of island and back on both days	$400 round trip for 2 days	$800.00	Transportation of farmers without vehicles who live on west coast to farmer training in south to assure attendance

WBS Activity ID	WBS Activity	Item/Service	Quantity	Unit Cost	Total Cost	Justification
1.2.3.5.1	Preparation for Launch	Catering	For 25 persons	Break @ $15.00 per person	$375.00	Launch of Organic farming Certification Program
1.3.1	Planning	Organic farming consultant	Technical fees for consultant for 25 days (11 training days + 10 days module preparation+2 reporting days+ 2 days consulting on design of program)	$500 per day	$12500.00	For preparing Inspectorate and farmer training modules and facilitating, and assistance with design of certification program

WBS Activity ID	WBS Activity	Item/Service	Quantity	Unit Cost	Total Cost	Justification
1.3.1	Planning	Hotel accommodation for consultant	16 night stay at hotel	$275.00 per night	$4400.00	No consultant on island hence the SLBS will have to source the technical expertise out of island.
1.3.1	Planning	Per diem to consultant	17 days (2 travel days + 4 weekend days + 11 training days on island)	$165 per day	$2805.00	SLBS to pay per diem based on SLBS rate, to cover cost of lunch and dinner
1.3.1	Planning	Air fare for consultant	From USA to St. Lucia and back	$2500.00 round trip	$2500.00	No consultant on island hence the SLBS will have to source the technical expertise out of island consultant preferably based in USA

WBS Activity ID	WBS Activity	Item/Service	Quantity	Unit Cost	Total Cost	Justification
1.2.1.2	Certification Manual	Design of Certification program, procedures, forms, checklists	n/a		$5500.00	Cost of preparation time by SLBS project team
1.1.3.2	Print/Publish finalized draft documents	Printing of Code of Practice	80 copies (60 farmers + 20 inspectors)	$50.00 per copy	$4000.00	Cost of SLBS' printing of standards
1.2.2.1.1 & 1.2.2.2.1	Training Modules	Printing of farmer and inspectorate training modules	80 copies of modules (60 farmers + 20 inspectors)	$50.00 per copy	$4000.00	Cost of SLBS' printing of modules
1.2.3.5.1	Preparation for Launch	Printing of brochures	500 brochures	$5.00 per brochure	$2500.00	Cost of SLBS' printing of brochures
1.2.3	Deliver/Offer certification services	Payment of Certification fees for first 20	For 20 farmers	$425.00 per farmer	$8500.00	Application $70.00 Inspection fee $150.00 Surveillance Inspection

WBS Activity ID	WBS Activity	Item/Service	Quantity	Unit Cost	Total Cost	Justification
		farmers to enroll in Program upon implementation				fee $100.00 Certificate fee $100.00
		Contingency 10%			$6215.50	**Total $68370.50**

4.4.3.2 Updating, Monitoring and Controlling Cost

Costs for the project will be managed at the fourth and fifth levels of the WBS, while creating control accounts to monitor and track costs. The budget will be approved by the sponsor and will be the baseline against which actual results will be compared. To control costs the Project Manager will monitor the project status, managing any changes to this baseline, and updating costs. Any variance from the plan that is planned versus actual results must be identified and communicated to the Sponsor with a proposed corrective action plan, so that corrective action can be taken to minimize risk, ensuring that the cost expenditures do not exceed the authorized funding for the project. Any cost overruns must be brought back within acceptable limits.

4.4.4 Cost Reporting and Format

The established and agreed upon reports will explain and report on the cost performance of the project using the EVM metrics.

4.5 PROJECT QUALITY MANAGEMENT PLAN

INTRODUCTION
QUALITY PLANNING APPROACH
QUALITY ASSURANCE APPROACH
QUALITY CONTROL & QUALITY IMPROVEMENT APPROACH

4.5.1 Quality Management Plan Introduction

Project Quality Management aims to ensure that the project will satisfy the needs for which it was undertaken, from the customers' perspectives, by managing the project and its deliverables. With a focus on quality, time is spent to prevent rather than to deal with problems. There is a cost associated with conforming to the requirements of the project, and a cost of non conformance which can impact negatively on the project by increasing project spending, as a lack of attention to quality, means more rework or defects.

The Quality Management Plan will document how the project team plans to meet the requirements for quality to ensure project success. It will include the processes to identifying quality requirements, quality assurance and quality control activities. This plan was created using a template adapted from the PMI book of forms.

Roles and Responsibilities

The roles and responsibilities for quality for the Project Manager and his team are reflected in Chart 13 below.

Chart 13. Quality Management Roles and Responsibilities (Source: Author of Study)

Position	Responsibility
Project Manager	Prioritization of stakeholders listed in the register and identifying those with particular interest in quality or those who will impact quality, with the project team. Conduct meetings with the project team to discuss results of research and benchmarking exercises to determine which best practices will be adopted. Determine and document the quality metrics which will provide the attributes and how it will be measured. Approval of quality checklists. Lead problem solving activities to ensure identification of problems and root cause analysis. Determine the required frequency and conduct quality audits to ensure conformance of deliverables to quality metrics. To ensure change requests are approved and to verify implementation as approved.
Project Team	The identification of the quality requirements and or acceptable standards for the project and mapping out what will be done to meet these requirements. Design of the certification program in keeping with the requirements of the standard used by certification bodies. Research of other recognized organic farming certification programs to be used for benchmarking.

Position	Responsibility
	Creation of flowcharts to reflect the certification processes Prepare the Quality Checklist to be used to verify that the steps that are required to be performed are done.

4.5.2 Quality Planning Approach

It is important that when conducting a project, quality is planned into it as a measure to determine if the deliverables have been met and what can be done if they are not.

One of the first steps of successful quality planning is the identification of all stakeholders and their engagement with the collection of the requirements, making the Stakeholder Register, as generated during stakeholder management, one of the major inputs into the quality planning process. The Project Manager and his team will seek to prioritize stakeholders listed in the register, identifying those with particular interest in quality or those who will impact quality.

As defined in the Project Scope Statement the project deliverables are as follows:

- Draft Code of Practice for Organic Farming - Production and Processing for consideration as a national standard
- Organic Farming Certification Manual
- Assessment checklists for farm inspections
- Training modules to train inspectorate
- Training modules to train farmers in the requirements of the Code of Practice for Organic farming
- 15-30 trained farmers in the developed Code of Practice for Organic Farming
- 5-10 trained inspectors to conduct inspections of farms to determine readiness for certification

- Project Reports
    - Inception
    - First Progress
    - Second Progress
    - Third Progress
    - Fourth Progress
    - Draft Final
    - Final

The planning process entails the identification of the quality requirements and or acceptable standards for the project and its deliverables by the Project Management Team. Additionally it entails mapping out what will be done to meet these requirements, the human resources required as stated in the Human Resource Management Plan, the tools to be used and budget needed, how the project will demonstrate compliance with the Quality Requirements and how often monitoring will be conducted.

The main product of this project is an Organic Farming Certification Program to be designed in keeping with the requirements of the organization's Quality Management System and the current international standard ISO/IEC 17065 which spells out the requirements for bodies certifying products, processes and services. Hence, the Project Team must document and ensure that the design of the certification program is in keeping with the requirements of this standard namely the general, structural, resource and process requirements for certification.

During the planning process meetings will be conducted as well as benchmarking techniques where actual or planned project practices will be compared to other Certification Programs of the SLBS and Organic Farming Certification Programs of the United States Department of Agriculture, and the United Kingdom Soil Association. Flow charts will be used as well to depict the flow of the steps in the processes which form part of realizing the project.

The Project Manager will therefore, work with the project team to determine and document the quality metrics, which will provide the attributes and how it will be measured, to know how the project is going and if changes requested are required. They will also be required to prepare the quality checklist to be used to verify that the steps that are required to be performed are done. When problems have been identified the Project Team will use cause and effect diagram to identify, explore, and graphically display all possible causes related to a problem, including root causes.

4.5.3 Quality Assurance Approach

ISO 9000 defines quality assurance as " the part of quality management focused on providing confidence that quality requirements will be fulfilled." Quality audits will be led by the Project Manager to determine if the project quality requirements are being met. Quality assurance facilitates continuous improvement and thus constitutes an iterative means for improving the quality of all processes. The Project Manager and his team will determine the required frequency of the audits to assure that project activities are correctly implemented and executed. The key Quality Assurance metrics for the project are reflected in Chart 14 below.

Chart 14. Quality Metrics (Source: Author of Study)

	Item	Metric	Measurement Method
Product Metrics			
	Satisfaction of trainees with delivery of training by consultant	Score of 8/10 or higher with no individual score below 7	Post training Questionnaire
	Inspectorate training	Content covers 100% of the major requirements of ISO 19011-Guidelines for quality and/or environmental	Topics/content of modules

	Item	Metric	Measurement Method
		management systems audit namely principles of auditing, managing and audit program, audit activities, competence of auditors	
	Farmer training	Content covers 100% of the requirements of the standards for organic crop production	Topics/Contents of training modules
	Trained farmers	At least 15-30	Total number of farmers trained
	Trained inspectorate	At least 5-10	Total number of Inspectors trained
	Certification Program design	Design covers 90% of the requirements of ISO 17065 - requirements for bodies certifying products, processes and services.	Components of the program (general, structural, resource, process and management system requirements)
Project Metrics			
	CV - cost variance	CV of 0 or positive value	Difference between a tasks estimated cost and its actual cost (budget deficit or surplus)
	SV -schedule variance	CV of 0 or positive value	Amount by which the project is ahead or behind the planned delivery date

4.5.4 Quality Control and Quality Improvement Approach

"Quality control is the process of monitoring and recording results of executing the activities to assess performance and recommend necessary changes" (PMI 2013, Pg 227). The quality manager must ensure that designed certification program has all the components required in keeping with international standards, in other words to determine the correctness of the deliverable. During this process he must ensure that all change requests which have been approved, are reviewed to verify that they were implemented as approved.

The quality control process must also be ongoing to ensure that remedial action is taken when required and satisfactory results are produced, to immediately detect recurrences or new instances of trouble.

4.6 PROJECT HUMAN RESOURCE MANAGEMENT PLAN

INTRODUCTION
ROLES AND RESPONSIBILITIES
- Position Description
- RACI Chart

STAFFING MANAGEMENT PLAN
- Staff Acquisition
- Resource Calendars
- Developing Project Team
  - Recognition and Rewards
  - Training
- Managing the Project Team
  - Conflict Resolution
  - Performance Review

4.6.1 Human Resource Management Plan Introduction

This Human Resource Management Plan identifies the processes which will be employed to organize, manage and lead the Project Team, and to ensure that the human resources acquired for this project have the necessary qualifications, knowledge, training, skills and experience to successfully execute the work of the project.

The Management of Human Resources consists of four processes namely (i) Plan Human Resource Management, (ii) Acquire Project Team, (iii) Develop Project Team and (iv) Manage Project Team. (PMI 2013 Pg 255). The Human Resource Management Plan includes:

- Roles and responsibilities of team members throughout the project
- Project organization charts
- Staffing management plan to include:
  1. How resources will be acquired
  2. Timeline for resources/skill sets
  3. Training required to develop skills
  4. How performance reviews will be conducted
  5. Recognition and rewards system

4.6.2 Roles and Responsibilities

All team members must have a clear understanding of their roles and responsibilities which is important for project success. The Scope Management plan describes the product scope for the Organic Farming Certification Project as follows:

- Selection and adoption of appropriate code of practice for organic farming.
- Designing an Organic Farming Certification Program.
- Training to develop competency of the inspectorate,
- Training of organic farmers in the requirements of the code of practice.
- Offering certification services.
- Public relations activities utilizing print and media.

In assigning roles and responsibilities the work packages previously identified in the Scope Management Plan to realize the product scope must be reviewed to ensure that each work package has an owner.

Roles and responsibilities for this project have been established using job / position descriptions followed by the responsibility assignment matrix the RACI (Responsibility, Accountability, Consult, Inform) Chart.

4.6.2.1 Position Description

Project Manager (PM), (1 position): The project manager has the lead responsibility for the accomplishment of the organic farming project objectives and thus, the overall success of the project. The main responsibilities of the PM are described below:

- Authorize and approve all project expenditures.

- Approving all work activities and ensure that they meet established acceptability criteria and fall within acceptable variances.
- Evaluating the performance of all project team members.
- Acquiring human resources for the project.
- Establishing the review committee for assessment of inspection reports and ensuring that the Technical Assistance Unit is established within the Ministry of Agriculture and prepared.
- Designing Certification Program.
- Report project status to the stakeholders and specifically provision of inception report, first, second, third, fourth progress report, and final project report to the National Authorizing Office through the BAM Special Projects Coordinator.
- Ensuring that public relations activities are organized and conducted for the project activities as the project progresses.
- Stakeholder awareness of the activities of the project.
- Meeting and Communicating with the team and key stakeholders on project status and progress.
- Coordinating with the Information Services Department the public relations activities of the project.
- Coordinating with the Finance Department for selection of venue and catering for workshops and meetings.
- Launching of Certification Program.

Competencies required:

- Experience in Project Management
- Proficiency in Microsoft Project
- Experience and knowledge with certification requirements and developing certification programs.
- Must possess the following skills: leadership/management, analytical skills, budgeting, scheduling, excellent oral and report writing skills and effective communication, all of which will enable him to effectively manage the

project.

- Familiarity with local language - Kweyol.
- Experience in agricultural research, farming or assistance to the farming community.

Assistant Project Manager (APM) (1 position)

The Assistant Project Manager will be primarily responsible for the standards development component of the project with the selection and adoption of appropriate Code of Practice for Organic Farming. Responsibilities include:

- Development of the Standard through consensus building in keeping with international best practices.
- To produce a Draft Code of Practice for Organic Farming - Production and Processing for consideration as a national standard

Competencies required:

Skills as it relates to

- Ability to handle tasks within strict timelines/deadlines.
- Strong written, oral, computer, and problem solving skills are important.
- Ability to work well as part of a team, and with a diverse population is essential.
- Experience in project management.
- Proficiency in Microsoft Project.
- Experience and knowledge of the standards development process.

Consultant (1 position)

The Consultant will be responsible for:

- Designing and developing training modules and training of the inspectorate to develop competency in inspection of organic farms.
- Designing and developing training modules and training of organic farmers in the requirements of the code of practice.

- Prepare documents required for farm inspections to include inspection checklists and report templates.
- Prepare training agendas.
- Communicating with the PM and preparation and submission of inception report on activities conducted.

Qualifications, Experience and Competencies

The Consultant will need to possess the following qualifications and skills set of:

- A university degree in general agriculture or agronomy.
- Experience and knowledge with organic farming procedures, especially certification requirements.
- Two years of work experience as an agricultural or organic farming consultant.
- Good analytical and drafting skills are required.
- Experience in agricultural research, farming or assistance to the farming community.
- Experience in managing organic farming projects.
- Fluency in English.
- The ability to be a productive team player and to interact well with peers, industry government agencies and the general public.
- Good knowledge of current affairs and developments in organic farming.
- Excellent organizational and time management skills

working knowledge and experience in food sector

Other technical competencies include:

- Experience in the delivery of training.
- Excellent oral and written English skills.
- Familiarity with local language, Kweyol.

- Having conducted previous training of a similar nature.

Standards Officer Certification (SO-C) (2 position)

The SO-C will be responsible for:

- Drafting of the certification manual and development of procedures to guide the certification processes for approval by the PM.
- Acquiring list of organic farmers and extension officers.
- Preparation of invitations and dissemination to participants attending farmer and inspectorate training sessions, as well as confirmation of attendance.
- Reporting to the PM on the progress of activities assigned changes and updates made to the project for approval.
- Preparation of the department to receive applicants.
- Preparation of certification brochures.

Competencies required:

The SA-C will need to possess the following skills set:

- Excellent communication, interpersonal and writing skills;
- Excellent organizational and time management skills with the ability to multitask;
- The ability to work under pressure;
- Good teamwork, analytical and problem-solving skills;
- Strong attention to detail.

Standards Officer - Standards Development (SO-SD) (2 position)

The role of the SO-SD entails:

- Assisting the APM with research of standards to identify the base documents to be used.
- Preparation of working draft for review by the APM.
- Assisting the APM with composition of members of Ad hoc committee, to prepare and disseminate invitations and convene technical workshop

Competencies required:

The SA-DD will need to possess the following skills set:

- Excellent communication, interpersonal and writing skills;
- Excellent organizational and time management skills with the ability to multitask;
- The ability to work under pressure and good team work;
- Good teamwork, analytical and problem-solving skills;
- Strong attention to detail.

BAM Special Projects Coordinator (SPC) (1 position)

The BAM SPC is part of the Project Management Unit of the NAO - the contracting entity, and is responsible for approving the project status reports submitted by the PM. The PC monitors the status of the project and grants approval for any requested changes to the time, scope and cost baseline.

4.6.2.2 RACI Chart

The following RACI Chart 15 shows the relationship between project tasks and team members. The Project Manager will review and approve any proposed changes to project responsibilities. Changes will be proposed in accordance with the project's change control process. As changes are made all project documents will be updated and redistributed accordingly.

Chart 15. RACI Chart (Source: Author of Study)

	PM	APM	Consultant	SO-C	SO-SD	BAM PC
Define scope of draft Code of practice for Organic Farming	I	A			R	I
Develop Working Draft Code of practice	I	A			R	

	PM	APM	Consultant	SO-C	SO-SD	BAMPC
Develop Final Draft	1	A	I		R	I
Print Final Draft	I	A			R	
Define Scope of Certification Program	A		I	R		I
Certification Scheme Design	A	I	C	R		I
Preparation of Certification Manual	A	I	C	R		I
Training of farmers	A	I	R			C
Training of Inspectorate	A	I	R			C
Establishment of Review Committee and Technical Assistance Unit	A	I	C	R		R
Offering Certification Services	A	I		R		C
Launching of New Organic Farming Certification Program	A	I		R		C
Public Relations	A	I				I

Key:
R – Responsible for completing the work
A – Accountable for ensuring task completion/sign off
C – Consulted before any decisions are made
I – Informed of when an action/decision has been made

4.6.3 Staffing Management Plan

This Staffing Management Plan describes when and how project team members will be acquired and released, what training is required, how performance reviews will be carried out and the approach and criteria for rewards and recognitions. This Staffing Management Plan reflects elements of all the four human resource management processes which will encompass the following:

Acquisition Strategy – describes when, how, and from what sources staffing will be acquired.

Resource Histogram - which shows the number of human resources used per time period.

Staff Training - gaps and specific training requirements.

Performance Reviews - includes formal and informal assessments to evaluate and enhance the effectiveness of the team, and evaluation of individual team member's performance. Expectations of the work to be performed are described to all team members at the onset of the project.

Recognition and Rewards - describes how the efforts of employees will be rewarded to encourage morale.

4.6.3.1 Staff Acquisition

The National Authorizing Office contracted the Saint Lucia Bureau of Standards on behalf of the Ministry of Agriculture, as the implementing agency for this Organic Farming Certification Project. The SLBS is a national standards body with expertise in standards development, and designing and implementation of Certification Programs. As a result the project team members will be acquired internally from the Certification and Standards Development Department consisting of the heads of the departments and their standards officers. It must be emphasized that the standards development process also utilizes human resources external to the organization through the establishment of technical/ad hoc committees for the development of the standard.

However, due to the nature of this project the organization does not possess competencies specific to organic farming as described in the job description for a consultant to conduct the training required and advise on the design of the Certification Program. Human resource for training will be acquired externally. The Project Manager will be required to negotiate with and identify a consultant who will, before commencement of work, sign an agreement/contract with the SLBS for scope of works required.

The project team members from the SLBS will be acquired from the beginning of the project and throughout the duration of the project. The ad hoc committee will be acquired for the twelve day Committee Draft Stage of the project according to the Schedule Management Plan. The consultant will be engaged from the commencement of the Design of the Certification Program and will be required to be physically present to administer the farmer training and inspectorate training sessions, following which he will be released after submission and acceptance of his report.

4.6.3.2 Resource Calendars

It is expected that resources will be available before the project starts. The project team consists of eight members, six of which are full time staff members from the SLBS and the BAM SPC who are required to dedicate part of their workweek to the project. The consultant, an outsourced position, will be required to commence work when the certification component resumes, and will be required to dedicate a full 7.5 hr work day for the training sessions.

The resource histogram presented below in Figure 4 shows the percentage of time dedicated to the project by the team members based on a 20 day work month / 5 day work week.

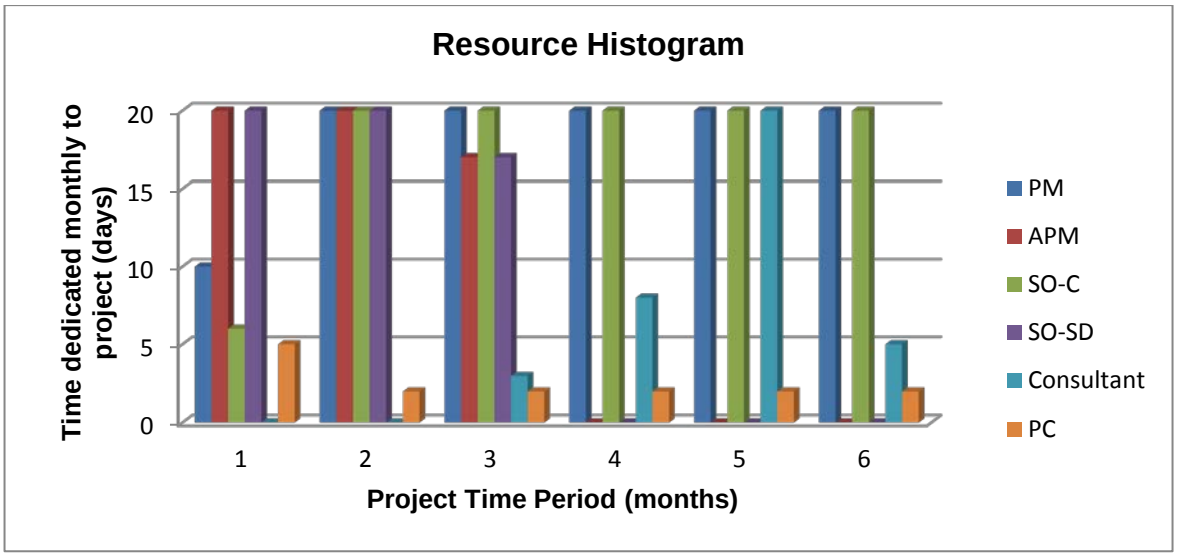


Figure 4. Resource Histogram (Source: Author of Study)

4.6.3.3 Developing Project Team

The Project Manager is responsible for good team management, utilizing effectively the skills and competencies of the team members, to enhance team performance. This team, with the exception of the consultant, has the experience of working with each other within the organization for over five years, hence, it is expected that there will be a smooth transition from forming to performing. However, after the team has been formed, the Project Manager will be responsible for meeting with the team to effectively communicate details of the project, its objectives, their roles and responsibilities. Ground rules in areas such as code of conduct, communication and working together and meeting etiquette will be established, as the early commitment to clear guidelines decreases misunderstandings and increases productivity. Recognition and rewards for the project must be made clear at this forming stage.

Recognition and Rewards

This project is expected to be completed over a period of six months. The limited budget does not allow for monetary rewards. The team members from the SLBS will conduct the activities of the project as part of their work responsibilities, but will

however, during the performance appraisal period of the organization be assessed. The consultant will be paid for the provision of his services as per the terms of contract.

Training

The SLBS generally possesses the required competence to carry out the activities of the project, with an expert in organic farming and certification being acquired. As a result, the need for training of team members to develop competencies will not be required.

If the need arises the Project Manager will conduct training on the development of soft skills for the effective functioning of the team and to enhance project success.

4.6.3.4 Managing the Project Team

Managing the project team involves tracking team member performance, providing timely feedback and resolving issues. The application of several tools and techniques including; performance appraisals, conflict management and the development/enhancement of interpersonal skills will be used for the effective management of the project team.

Conflict Resolution

In any project, there is some amount of conflict that will arise. One advantage in this particular project is that the team members from SLBS have all worked together, and the BAM special projects coordinator representing the NAO has worked with the SLBS in the past, hence, minimal conflict is anticipated. Methods for conflict resolution will still be taken into consideration, since there is an outsourced position which is that of a consultant. Should conflict arise, the collaborate/problem solve technique will be encouraged to resolve it. This involves incorporating multiple viewpoints and insights from differing perspectives, and a cooperative attitude and open dialogue which will lead to consensus and

commitment. Any team member with an issue is allowed to request a meeting to discuss the issue.

Performance Reviews

The project team consists of individuals who are expected to complete their tasks on time. The main tool/technique which will be used to manage the project team is project performance reviews, which will be communicated to team members from the commencement of the project. The PM and APM will inform them of the expectations of the work to be performed. The project is for a duration of six months, therefore to control the risk of project being behind schedule, the PM and APM will evaluate the performance of team members throughout the project at various intervals and upon completion of tasks. The performance review process will, however, be formalized by in-cooperating it into the performance appraisal process of the organization which is conducted every six months, where the team members performance will be factored into their individual appraisal by their head of department.

4.7 PROJECT COMMUNICATIONS MANAGEMENT PLAN

INTRODUCTION
COMMUNICATION OBJECTIVES
COMMUNICATION METHODOLOGY AND TECHNOLOGIES
COMMUNICATION MATRIX
MANAGE COMMUNICATIONS
CONTROL COMMUNICATIONS

4.7.1 Communications Management Plan Introduction

Organic farming practices promote environmental conservation and reduced reliance on synthetic pesticides and fertilizers. Agricultural producers are to be made aware of the principles and good practices that are necessary for production of certified organic foods and the tangible benefits to the environment, local economies and public health. Consumers are to be made aware of the health benefits of organic produce versus the traditional produce cultivated using chemicals which are very harmful.

This Communications Management Plan provides the framework to manage, coordinate and control the communications for the Organic farming Certification Project. It will assist with providing relevant, accurate and consistent project information to project stakeholders and other appropriate audiences, at the right time. The communication plan covers who will receive the communications, how the communications will be delivered, what information will be communicated, who communicates with whom, and the frequency of the communications, be it internal, outgoing and incoming communication.

To develop this plan the Project Manger and his team will use the stakeholder management plan which provides information on the stakeholders, to be engaged throughout the life cycle of this project, those which can impact positively or negatively on project success.

This plan will reference the tools and techniques, namely; the technology and methods used for effective communication, meaning that the communication is clear, complete and correctly understood.

4.7.2 Communication Objectives

It is important that all stakeholders are aware of the project to be implemented - an organic farming certification program, to obtain support and buy in, which will lead to the sustainability of the project once implemented. Therefore, key communication objectives for the project are to:

- Give accurate and timely information about the project.
- Create public awareness on the undertaking of the project,
- Persuade and obtain support/buy-in for the project from farmers, consumers and retailers.
- To promote a uniform national approach to the implementation of organic farming practices and certification.
- Ensure that accurate and consistent messages are disseminated.
- Encourage use of project management best practices.

4.7.3 Communication Methodology and Technologies

Through the use of interactive communication methods namely; meetings, phone calls, one-on-one conversations, the Project Manager and team members will ensure that there is a common understanding of what is being communicated. Minutes of meeting will be recorded utilizing Chart 16 below which is a modified version of the SLBS' Management Review Meeting minutes template.

Chart 16. Project Meeting Minutes Template
(Source: SLBS Management Review Meeting Template)

SAINT LUCIA BUREAU OF STANDARDS **Project Meeting Minutes** **Meeting Title:**			
Meeting Objective/s:			
In attendance			
Name	**Designation/Department**	**E-mail**	**Phone**
Agenda			
Results			
Description/ Item	**Discussion/ Decision**	**Follow Up Action**	**Responsibility & Timeline**
Prepared by: **Submitted by:** **Approved by:**			

Push communication techniques such as the use of letters, reports, e-mails and press releases will be employed. This project does not require the handling of any sensitive or confidential information.

4.7.4 Communication Matrix

The matrix outlines the targeted audiences, the key communication messages to be delivered, the method for delivering the information, the communicator and the frequency of the delivery. Chart 17 below represents the communications requirements for this project.

Chart 17. Communication Matrix (Source: Author of Study)

Communication Type	Objective of Communication	Method	Frequency	Audience	Owner	Deliverables
Inception meeting	Project sponsor to communicate the high level details of the project. • Review project objectives. • Review scope of the project. • Establish the way forward and approach to the project.	Face to face	Once	Project Sponsor - NAO, BAM Special PC, Chief Extension Officer - MOA, Marketing Specialist -MOA	Project Manager/Assistant Project Manager	Inception Report Approach to Implementation/ Plan of Action
Stakeholder Consultation Meeting	• Introduce the stakeholders to the project and its objectives, and approach to the project/project plan. • Communicate stakeholders roles in the project	Face to Face	Once	GIZ-CATS, RISE St Lucia, Belle Vue Farmers' Cooperative, Seed Foundation, CARPHA, Organic producers, National Consumers Association, Vendors of agricultural	Project Manager/Assistant Project Manager	Agenda Meeting Minutes

Communication Type	Objective of Communication	Method	Frequency	Audience	Owner	Deliverables
	• Stakeholders to express major requirements, expectations, interests, concerns			implements, organic fertilizers/chemicals, Manufacturers of Organic fertilizers/chemicals, Retailers of organic produce, Agro processors,		
Project Team Meetings	• Initial kick off meeting To discuss the Project Team's approach to the project/project plan & schedule • Review status of the project with the team. • Review Reports before submission to Sponsor	Face to Face	kick off meting Weekly When required	Project Team	Project Manager	Agenda Meeting Minutes Project Schedule

Communication Type	Objective of Communication	Method	Frequency	Audience	Owner	Deliverables
Training Workshops Preparatory meetings	• Plan logistics of training • Discuss training modules and agenda, and available dates • Discuss selection to participate	Face to Face Telephone calls, E-mail Telephone calls, E-mail	Needs basis	Project Team members, Finance department, Consultant, Workshop Participants	Project Manager/Assistant Project Manager	Confirmation of venue & Date, Invitations to workshops, List of Invitees
Project Briefing & Status Meetings	• Report on the status of their activities to project manager	Face to Face	Weekly	Project Manager	Project Team members	Project Updates
Project Status Meetings	• Report on the status of the project to sponsor. Overall	Face to Face	After each status report	Sponsor	Project Manager/Assistant Project Manager	Project Status Reports (First, second, third, fourth, final project

Communication Type	Objective of Communication	Method	Frequency	Audience	Owner	Deliverables
	performance of the project including activities, progress, costs and issues.					report)
Public Relations	• Disseminate information on undertaking of Project, objectives and benefits	Print media(newspapers) Electronic media (television, radio, social media) Email		FLOW customers	PRO	Press releases on Television and Newspapers Public service announcements Stakeholder Project Updates on Social Media Initial Press Conference
Press Launch of Certification Program	• Introduce the new certification program and requirements to stakeholders	Face to face	Once	Project Sponsor Project Team Stakeholders	Project Manager	Brochure Fee Structure

4.7.5 Manage Communications

"Manage communications is the creating, collecting, distributing, storing, retrieving and the ultimate disposition of project information in accordance with the communications plan" (PMI, 2013, p. 297), for an effective and efficient flow of communication between stakeholders. To accomplish this, the Project Management Team will use, as part of its Information Management System, a variety of tools. These will include; a system of hard copy document management and electronic communications managements. This will ensure that data is effectively captured, securely stored and easily retrieved and distributed in accordance with guidelines established, as part of the organization's quality management system. This Project Manager is responsible for ensuring that the reporting system comprises timely and comprehensive reporting formats, with data which can be used as organizational process assets.

4.7.6 Control Communications

Throughout the life cycle of the project, the Project Manager is responsible for ensuring that the communication needs of the project stakeholders are met, and as a result, must monitor and control the flow of communications.

Any communication issues and/or problems experienced by team members should be reported to the Project Manager. The Project Manager must also ensure that the stakeholder engagements sessions allows for the recording of any problems with communications and corresponding corrective actions.

Any request for changes to the communications plan will go through the change control process.

4.8 PROJECT RISK MANAGEMENT PLAN

INTRODUCTION
RISK IDENTIFICATION
RISK ANALYSIS AND EVALUATION
RISK RESPONSE PLANNING
RISK MONITORING AND CONTROL

4.8.1 Project Risk Management Introduction

"Project risk is an uncertain event or condition that if it occurs, has a positive or negative effect on one or more project objectives such a scope, schedule, cost and quality" (PMI, 2013; Pg 310). This Risk Management Plan provides a management framework to ensure that all levels of risk and uncertainty are properly managed for the duration of the project. The planning process will highlight methods for how risks are identified and recorded, analyzed, evaluated, prioritized and the appropriate risk response strategies and their approval, for managing and controlling project risks to increase the probability of project success. Project risks may arise from many sources, and in an effort to simplify risk response planning, risks are grouped into major categories in the form of a risk breakdown structure. Some examples of categories include technical, environmental, financial, people, organizational and external.

4.8.2 Risk Identification

Known risk which cannot be managed proactively will be assigned a contingency reserve. A management reserve will be assigned for unknown risk.

This process commenced during the development of the project charter submitted by the MAFPPNRC which identified some of the risks associated with this Organic Farming Certification Project. During the creation of this subsidiary risk management plan, the Project Manager, using expert judgment, identified as many risks as possible significant to the project and documented these in the Risk Register in Chart 22. At this point, it is important to note that not all risks may have been identified, hence, the project manager will use information gathering techniques such as brain storming sessions with the management team and

stakeholders, interviewing experienced project participants, stakeholders and experts, as well as a SWOT (strength, weaknesses, opportunities and threat) analysis.

The Project Manager also created a Risk Breakdown Structure (RBS) Chart to determine and record the categories of risks. The RBS will be later improved during the brainstorming sessions, and will in itself help to find new risks, thus, improving the effectiveness and quality of the identify risk process. The RBS in Chart 18 below initially highlights four risk categories for this project; organizational, technical, external and project management activities.

Chart 18. Risk Breakdown Structure (RBS) (Source: Author of Study)

Level 0	Level 1	Level 2	Level 3
Project Risks	1. Organizational	1.1 Human Resource	1.1.1 Deficiency in required skills and expertise
			1.1.2 Project management controls
		1.2 Prioritization of Tasks	1.2.1 Project team responsibilities ill defined and non prioritization of tasks
	2. Project Management	2.1 Planning & Estimating	2.1.1 inaccurate project duration estimates from inexperienced estimators
			2.1.2 inaccurate project costs estimates from inexperienced estimators

Level 0	Level 1	Level 2	Level 3
		2.2 Communication	2.2.1 Poor team communication
			2.2.2 Poor communication of project objectives to stakeholders
		2.3 Procurement	2.3.1 Untimely procurement
		2.4 Controlling	2.4.1 Inadequate project management controls
	3. Technical	3.1 Quality	3.1.1 Inappropriate certificate program design
			3.1.2 Poorly designed and ineffective training
			3.1.3 Inability to develop competency of inspectorate
			3.1.4 Unattainable organic farming practices prescribed in standard
	4. External	4.1 Stakeholders/Customers	4.1.1 Unreasonable expectations/lack of support and cooperation
		4.2 Subcontractors	4.2.1 Lack of clarity in Contract /poor scope definition

Level 0	Level 1	Level 2	Level 3
			4.2.2 Non-compliance with terms of contract
			4.2.3 Disputes

4.8.3 Risk Analysis and Evaluation

Following the risk identification process, a qualitative risk analysis will be performed utilizing a technique referred to as risk probability and impact assessment. This is where the probability or likelihood that each specific risk will occur and the potential effect on project objectives will be determined. Based on its probability and impact, each identified risk is given a ranking or rating. The probability scales (Chart 19) and impact scales (Chart 20) which follow, define the different levels/rankings of risk probability, impact and their interpretation.

Following the determination of probability and impact and based on the specific combinations of probability and impact, ratings will be assigned to the risk. The probability and impact matrix (Chart 21) constitutes the tool for the scoring and prioritization of risks. Risks in the red zone will be classified/ rated as *high risk*, risks in the yellow zone are classified *moderate risk* and risks in the green zone are considered *low risk*. From this list, priorities for the plan risk response process will be established. This means, a determination will be made for risks which warrant mitigation versus those which will be put on the watch list. Risks in the red zone will require priority action and aggressive risk response strategies. Those in the yellow zone will be mitigated. Those found in the low risk zone may not require proactive management action beyond being placed in the risk register as part of the watch list or adding a contingency reserve.

Chart 19. Probability Scale (Source: Author of Study)

Rating	Interpretation	Description
5	very high	81-100% chance of occurring
4	high	61-80% chance of occurring
3	moderate	41-60% chance of occurring
2	low	21-40% chance of occurring
1	very low	0-20% chance of occurring

Chart 20. Impact Scale and Effect on Project Objectives (Source: Author of Study)

Defined conditions for Impact Scales of a Risk on Major Project Activities					
Project Objectives	Relative/ numerical scales are shown				
	Very low / 1	Low / 2	Moderate / 3	High / 4	Very High / 5
Cost	insignificant cost increase	< 10% cost increase	10-20% cost increase	20-40% cost increase	> 40% cost increase
Time	insignificant time increase	project time increases by two weeks	project time increases by four weeks	project time increases by six weeks	project time increases by over two months
Quality	quality degradation barely noticeable	quality degradation noticeable	quality reduction requires sponsor approval	quality reduction unacceptable to sponsor	project results effectively useless

Chart 21. Probability and Impact Matrix (Source: Author of Study)

Probability and Impact Matrix	
PI	Threats
15-25	red
10-14	yellow
1-9	green

4.8.4 Risk Response Planning

Following the qualitative risk analysis, there is no need for further quantitative analysis before the commencement of planning for risk responses. This is because the effort /benefit ratio is not ideal for this project with a tight schedule baseline - six month duration.

To determine the appropriate risk response strategies, the project manager will meet with Project Team members, the Project Sponsor and other relevant stakeholders, including risk owners, where the appropriate risk response strategies will be determined for each risk and agreed upon. It is important for the Project Sponsor to approve the response strategy for risks in the red zone. The risk response strategies are reflected in the risk register.

4.8.5 Risk Monitoring and Control

The status of risks will be monitored weekly by the Project Manager and the Project Management Team and the risk register updated as required throughout the life cycle of the project. This involves utilization of tools and techniques such as risk assessments and audits to monitor the effectiveness of the implemented risk response strategies, and identifying any new risks. Updates will be communicated to the various stakeholders during the project status meetings.

Chart 22. Organic Farming Project Risk Register (Source: Author of Study)

Id/RBS Code	Description of Risk	Triggers	Cause	Consequences	Probability	Impact	P*I	Risk Response Strategy	(OWNER) Individual/ Group responsible for mitigation action(s)
2.1.1	The project cannot be completed within six month period set by the sponsor causing an extension of project time and possibility of project going over budget.	Underestimation of time needed to complete project activities during planning Lack of prioritization of tasks by team members working simultaneously on other work program activities. Delay in provision of required information from the various	Inadequate expert judgment made so that the project can be realized in six months.	Extension of project time Skip one or more stages or shorten the duration of some activities affecting the quality of the output.	5	5	25 red	<u>Mitigation</u> Ensuring that the most skilled and experienced team members using the required tools and techniques are included during the estimate activity duration process. Prioritization of the work of the project over other work program activities of the organization, during the life cycle of the project.	Project Manager

Id/RBS Code	Description of Risk	Triggers	Cause	Consequences	Probability	Impact	P*I	Risk Response Strategy	(OWNER) Individual/ Group responsible for mitigation action(s)
		agencies including MOA Weather event with extended work downtime							
2.1.2	Inadequate funding to complete the project resulting in non realization of project objectives.	Inaccurate cost estimates	Lack of skill and experience and appropriate tools by project team in the estimate cost process	More funding will have to be sought for project completion Extension of project time	2	4	8 green	Mitigation- Ensure that persons with the required knowledge and skills are used during the estimate cost process. Contingency reserve will be allocated.	Project Manager
1.1.1 & 2.3	The organization does not have the required full range of expertise at the time	Unavailability of organic farming consultant at time required as	Organization does not possess the required	Quality of project deliverables	3	5	15 red	Mitigation Proper planning and effective recruitment.	Project Manager

Id/RBS Code	Description of Risk	Triggers	Cause	Consequences	Probability	Impact	P*I	Risk Response Strategy	(OWNER) Individual/ Group responsible for mitigation action(s)
	needed for the execution of the project impacting on the quality of the project deliverables and extending the time needed to complete the project.	per the HR calendar Inability to recruit qualified consultant	expertise in organic farming in-house	Less skilled personnel may require more time to execute activities. Extension of project time				Contractual agreements with consultant	
4.1.1 & 2.2.2	Lack of cooperation and support from other entities/agencies/beneficiaries with the non acceptance of the project and the utilization of the new certification services.	Poorly communicated and understood project objectives Unrealistic expectations from stakeholders Stakeholders' concerns are not considered	Stakeholders identification process fails to identify and engage key stakeholders Public awareness/ sensitization efforts	Scope reduction Extension of project time to allow for acceptance and buy-in	3	5	15 red	<u>Mitigation</u> Ensure the stakeholder identification process is effective. Ensure stakeholder engagement meetings are conducted to	Project Manager

Id/RBS Code	Description of Risk	Triggers	Cause	Consequences	Probability	Impact	P*I	Risk Response Strategy	(OWNER) Individual/ Group responsible for mitigation action(s)
			insufficient					properly communicate project objectives for acceptance and buy-in	
3.1.1	Certification Program Designed is not recognized and accepted locally, regionally and internationally resulting in stakeholders not utilizing the services.	Failure to design using international best practices	Lack of expertise of Project Management Team	Quality of the project deliverables	1	4	4 green	Watch List The Organization follows internally best practices in accordance with internal and recognized standards for its certification programs and standards development activities.	Project Manager

Id/RBS Code	Description of Risk	Triggers	Cause	Consequences	Probability	Impact	P*I	Risk Response Strategy	(OWNER) Individual/ Group responsible for mitigation action(s)
4.2.2	Consultant who does not comply with the terms of contract or breaches contract by not performing the scope of work in the contract causing the project to fail.	Work performance information shows that the deliverables don't meet the required acceptance criteria	Contractor does not possess the required competence or underestimated the level of effort and time required to perform good work	Quality of project deliverables specifically training component	3	5	15 red	Mitigation Ensuring that the terms of contract provides a detailed descriptions of the work to be done, qualification, skills and experience required and subcontracting of a consultant with the required competence	Project Manager
3.1.3 & 3.1.2	Competencies not developed to offer Certification services impacting the quality of the services to be offered.	Poor delivery of training	Developed Training program ineffective. Poor selection of Inspectors	Quality of Certification Services offered	3	4	12 yellow	Mitigation Ensuring review and approval of training modules by project team prior to delivery training.	

Id/RBS Code	Description of Risk	Triggers	Cause	Consequences	Probability	Impact	P*I	Risk Response Strategy	(OWNER) Individual/ Group responsible for mitigation action(s)
								Ensuring that the consultant possess the required competence to deliver training. Ensuring that the inspectorate selected, possess minimum established requirements/qualifications.	

4.9 PROJECT PROCUREMENT MANAGEMENT PLAN

INTRODUCTION
PROCUREMENT ROLES AND RESPONSIBILITIES
PROCUREMENT RISKS AND CONSTRAINTS
PROCUREMENT DEFINITION
PROCUREMENT METHOD AND APPROVALS
SELECTION CRITERIA
PROCUREMENT METRICS FOR PROCUREMENT ACTIVITIES

4.9.1 Procurement Management Plan Introduction

This Procurement Management Plan describes the processes necessary to acquire products and services or results needed from outside the project team. It will specify the procurement decisions, identifying what needs to be acquired , how it will be acquired, how much is needed and when to acquire it, as well as, the tools and techniques used to conduct, control and close procurements.

4.9.2 Procurement Roles and Responsibilities

The Project Manager with assistance from the Assistant Project Manager will have responsibility for ensuring that all products and services needed for the realization of the project are procured, in a timely manner for project success. The PM will liaise with the Office of the Director and Finance Department of the SLBS which is the department responsible for procurements decisions, to communicate the procurement needs of the project and timeline for procurement. Files of all contracts and records of all procurement activities will be maintained by the Finance Department.

The PM will prepare the Terms of Reference (TOR) for the contracting of the consultant, containing a description of the scope/statement of work required, the qualifications and expertise required, the cost estimation of services, the terms of payment, as well as, the desired delivery time and place. The Head of Finance Department is responsible for preparing the contract. This is a binding legal agreement to be voluntarily entered into by the consultant and the SLBS for preparation and payment of cheques. The criteria for the selection and award of

the contract will be determined by the Project Management Team, Director and Head of Finance Department.

The Project Manager will co-ordinate with Head of Information Services Department for the preparation of the press releases and dissemination to the media houses for coverage of project activities.

4.9.3 Procurement Risks and Constraints

There are risks associated with procurement activities which must be identified, analyzed, managed and controlled to ensure project success. One of the major risks which has been identified in the 'Risk Register', is the potential that the consultant does not comply with the terms of contract or breaches the contract by not performing the scope of works, hence, measures must be put in place to mitigate this risk.

The constraints are primarily schedule and cost related, as the activities must be completed within the limited six month duration of the project, with the provision of limited funds by the Project Sponsor.

4.9.4 Procurement Definition

Chart 23 below provides a list of the services required for the organic farming project to be completed successfully.

Chart 23. List of Procurement Services
(Source: Author of Study)

Item/Service	Quantity	Justification	When required
Catering	For 45 persons	Stakeholder Consultation Meeting at beginning of project	Week of March 12, 2018
Catering	For 20 persons for 2 days	Ad hoc Committee technical workshop	May 3-4, 2018
Press release and coverage for ad hoc committee technical workshop	Coverage on major television stations	To create pubic sensitization on project and provide information on development of a Code of Practice for organic farming	May 3-4, 2018
Catering and Venue	For 30 persons	Workshop in North for farmers	July 17-18, 2018
Catering and Venue	For 30 persons	Workshop in the South for farmers	July 19-20, 2018
Press release and coverage for farmer training	Coverage on major television stations	To create public sensitization on project and provide information on farmer training sessions.	July 17-20, 2018
Catering	For 20 persons for 7 days	Inspectorate training	July 23-31, 2018
Transportation	2 field trips from north to south of island	Field trip to Organic farms to conduct practice audit for inspectorate training	July 30-31, 2018
Transportation	14 seater bus to transport farmers from west coast to south of island and back on both days	Transportation of farmers without vehicles who live on west coast to farmer training in south to assure attendance	July 19-20, 2018
Catering	For 25 persons	Launch of Organic farming Certification Program	September 6, 2018

Item/Service	Quantity	Justification	When required
Organic farming consultant	One consultant	For preparing inspectorate and farmer training modules and facilitating, and assisting with design of the certification program	From April 9, 2018
Hotel accommodation for consultant	16 night stay at hotel	No consultant on island hence the SLBS will have to source the technical expertise out of island.	July 16 -31
Air fare for consultant	Travel to St. Lucia July 16 from USA, and back to USA departing St. Lucia August 1	No consultant on island hence the SLBS will have to source the technical expertise out of island.	Consultant based in USA

4.9.5 Procurement Method and Approvals

Procurements will be conducted in accordance with the procurement policy for the Organization, and the use of the organizations' procurement forms. A list of acceptable, quality suppliers is maintained by the Finance Department within the accounting system.

For any materials and services within the range of XCD (Eastern Caribbean Dollars) $101 – XCD$1,725.00, one quotation will be required, whereas, for materials and services within the range of XCD$1,725.00 - XCD$10,000.00 – three quotations will be required. Both of these must be authorized by the Head of Finance Department and the Director. For procurements which cost more than XCD$10,000.00 three quotations will be required with authorization by the Head of Finance Department, the Director and approval from the Board of Directors.

The main procurements for the project will be an organic farming consultant, catering services, transportation, and press releases and coverage of the activities as they are being realized. There will be no costs incurred for press releases and coverage.

Given the limited time and budget constraints to realize the project, the Project Management Team, for the procurement of the organic farming consultant, will identify suitable individuals or companies, who will be sent a Request for Proposal (RFP). The response to the RFP must include a description of how the requirements will be met and the cost breakdown of services to be provided and can be submitted to the SLBS by facsimile, letter, e-mail or other electronic means. Once received, proposals will be reviewed and evaluated by the Project Team, Director and Head of Finance to determine which ones meet the established criteria. The terms of the accepted offer will be in cooperated into a fixed-price contract to be signed by the Director and subcontracted consultant. This contract will contain a termination clause to manage any early terminations of the contracted work, if the consultant is not meeting contractual obligations. Therefore, the Project Manager must monitor the performance of the contractor as the project progresses. Any changes to the contract must be done through the integrated change control system.

Procurement of the caterers and venue for the various activities will only require the selection of one caterer and one venue for each activity, as the amounts, through past experiences and expert judgment, will not exceed EC$1,725.00.

4.9.6 Selection Criteria

The criteria for selection of the consultant will be based on the following:

- ✓ Professional capacity
- ✓ Technical capability to provide training and advice on design of certification program.

- ✓ Technical approach
- ✓ Availability when required
- ✓ Cost
- ✓ References

Caterers and venue will be chosen from the approved suppliers list, based on their availability for the dates as per the project schedule, cost and past performances as per the results of past evaluations conducted by the SLBS.

4.9.7 Procurement Metrics for Procurement Activities

Upon completion of work, sources selected for procurement of material and services will be evaluated in accordance with the SLBS process for evaluation of suppliers, with input from Project Team members.

As per the SLBS Supplier /Product Evaluation Form, the following metrics, with a rating on a 1-5 scale have been established for: overall customer service, accurate delivery, timely delivery, reliability, effectiveness, compliance with specifications, quality and recommendation for future use.

Scale:

1. Unacceptable
2. Fair
3. Good
4. Very Good
5. Exceptional

4.10 PROJECT STAKEHOLDER MANAGEMENT PLAN

INTRODUCTION
IDENTIFY STAKEHOLDERS
PLAN STAKEHOLDER MANAGEMENT
MANAGE STAKEHOLDER ENGAGEMENT
CONTROL STAKEHOLDER ENGAGEMENT

4.10.1 Stakeholder Management Plan Introduction

"Project Stakeholder Management includes the processes required to identify the people, groups or organizations that could impact or be impacted by the project. It also analyzes stakeholder expectations and their impact on the project, to develop appropriate management strategies for effectively engaging stakeholders in the project decisions and execution" (PMI 2013, pg. 391). It is important that there is effective communication with stakeholders, to understand their needs and expectations and to manage issues and conflicts as they arise.

The stakeholder management plan identifies the management strategy required to effectively engage stakeholders and will therefore, focus on how stakeholders are identified, managed and controlled throughout the project's lifecycle.

4.10.2 Identify Stakeholders

The Project Management Team consisting of staff of the Standards Development Department , Certification Department and the Director of the SLBS, will conduct a stakeholder analysis as one of the techniques used to help identify who the stakeholders are, to enhance the chances of the project being successful. The relevant information regarding their roles, major requirements, expectations, interest (level of concern), power (level of authority), influence (active involvement), potential impact (ability to effect changes) on project success and their engagement level, will be documented in the Stakeholder Analysis Register in Chart 24.

Chart 24. Stakeholder Analysis Register (Source: Author of Study)

ID No	Name	Role	Major Requirements	Main Expectations	Stakeholder classification (Internal vs External vs Supporter vs Resistor vs Neutral vs Leading vs Unaware)	Influence	Impact	Power	Interest	Plans for Engagement
1	Saint Lucia Bureau of Standards (SLBS) Project Team	Implementing Agency/Contractor/Project Management	The Ministry of Agriculture provides the required support.	Once implemented the certification program will be used.	Internal Leading	H	H	H	H	Manage Closely
2	Ministry of Agriculture	Mobilization of Organic farmers to participate in the project. Technical assistance to farmers in meeting the requirements	Certification program designed utilizing international standards and can be recognised within the region and internationally in the long term.	The SLBS will work efficiently to realize the project objectives.	External Supportive	H	H	H	H	Manage Closely

ID No	Name	Role	Major Requirements	Main Expectations	Stakeholder classification (Internal vs External vs Supporter vs Resistor vs Neutral vs Leading vs Unaware)	Influence	Impact	Power	Interest	Plans for Engagement
		of the code of practice for organic farming. Technical expertise in the development of the standard. Extension officers to serve as theinspectorate for the farm								

ID No	Name	Role	Major Requirements	Main Expectations	Stakeholder classification (Internal vs External vs Supporter vs Resistor vs Neutral vs Leading vs Unaware)	Influence	Impact	Power	Interest	Plans for Engagement
		inspections.								
3	National Authorizing Officer (NAO)	Contracting Authority/ Sponsor	Project to be completed within scope, time and budget. The project receives all the necessary resources to be implemented successfully. Guidelines for utilization and disbursement of	Project will be a success and is sustainable. The proposed beneficiaries are satisfied.	External Supportive	H	H	H	H	Manage Closely

ID No	Name	Role	Major Requirements	Main Expectations	Stakeholder classification (Internal vs External vs Supporter vs Resistor vs Neutral vs Leading vs Unaware)	Influence	Impact	Power	Interest	Plans for Engagement
			funds are adhered to.							
4	BAM Special Projects Coordinator	Monitor the progress of the project	Project to be completed within scope, time and cost constraints Progress Reports are submitted as per the schedule of submission	All the deliverables of the projects will be realized and project will be a success.	External Supportive	H	H	H	H	Manage Closely
5	National Consumers Association	Advocacy for Consumers to use organic produce	Certified Organic produce/products	Organic produce available to consumers who want to make informed choices.	External Unaware but would be supportive	H	H	L	H	Keep Informed

ID No	Name	Role	Major Requirements	Main Expectations	Stakeholder classification (Internal vs External vs Supporter vs Resistor vs Neutral vs Leading vs Unaware)	Influence	Impact	Power	Interest	Plans for Engagement
6	German Development Cooperation - Caribbean Aqua Terrestrial Solutions Program (GIZ-CATS)	Support farmer associations/cooperatives to adopt sustainable organic farming practices	The project provides information on progress made.	Project will be a success.	External Unaware but would be supportive	L	L	L	H	Keep Informed
7	Organic Farmers	Implementing the requirements of the Organic Farming Standard.	Receive training in the requirements of the standard. Assistance in implementing the standard	The requirements to become certified is attainable and not expensive.	External Unaware but would be supportive	H	H	L	H	Keep Informed

ID No	Name	Role	Major Requirements	Main Expectations	Stakeholder classification (Internal vs External vs Supporter vs Resistor vs Neutral vs Leading vs Unaware)	Influence	Impact	Power	Interest	Plans for Engagement
			organic fertilizers are available. Being certified will provide product differentiation and is profitable.							
8	Farmers Groups (Associations, Cooperatives)	Assist members in implementing the requirements of the standard	The Standard be made available and requirements are explained and understood.	Technical assistance is available to their members to implement the standards.	External Unaware but would be Supportive	H	H	L	H	Keep Informed
9	Non-Governmental Organizations -	To promote organic agriculture	The Standard be made available and requirements	The certification program is implemented and	External Unaware but would be supportive	L	L	L	H	Keep Informed

ID No	Name	Role	Major Requirements	Main Expectations	Stakeholder classification (Internal vs External vs Supporter vs Resistor vs Neutral vs Leading vs Unaware)	Influence	Impact	Power	Interest	Plans for Engagement
	RISE (St. Lucia) Inc.	within the organization.	are explained and understood.	can be used by members seeking certification.						
10	Vendors of agricultural implements, organic fertilizers/chemicals				External Unaware but would be supportive	L	L	L	H	Keep Informed
11	Consumers of organic produce	End users of organic produce	Farmers to implement organic farming practices	Certified organic produce is available on the market at an affordable cost.	External Unaware but would be supportive	L	L	L	H	Keep Informed
12	Agro processors	End users of Organic produce for	The Standard be made available and requirements	There is a demand for local organic products.	External Unaware but would be supportive	L	L	L	L	Monitor

ID No	Name	Role	Major Requirements	Main Expectations	Stakeholder classification (Internal vs External vs Supporter vs Resistor vs Neutral vs Leading vs Unaware)	Influence	Impact	Power	Interest	Plans for Engagement
		the manufacture of organic produce.	for manufacturing of organic products are understood.							
13	Manufacturers of Organic fertilizers/chemicals	Make organic chemical available to organic farmers.	The chemicals manufactured can be approved by the SLBS and Ministry of Agriculture for Organic production.	There is a demand for the chemicals.	External Unaware but would be supportive	L	L	L	H	Keep Informed
14	Caribbean Public Health Agency (CARPHA)	Testing of organic produce.	Proper sample protocols are adhered to when testing is required.	Utilization of the laboratory services.	External Unaware but would be supportive	L	L	L	L	Monitor

ID No	Name	Role	Major Requirements	Main Expectations	Stakeholder classification (Internal vs External vs Supporter vs Resistor vs Neutral vs Leading vs Unaware)	Influence	Impact	Power	Interest	Plans for Engagement
15	Retailers of organic produce	Make organic products available to the consumer.	Procurement of certified products to be offered for sale.	Consumer demand increases for organic products.	External Unaware but would be supportive	L	L	L	H	Keep Informed

This register will be consulted and updated on a regular basis through the lifecycle of the project as stakeholders may change or new ones may be identified.

Chart 25 below further classifies the level of power/interest of stakeholders on a scale of 1-5.

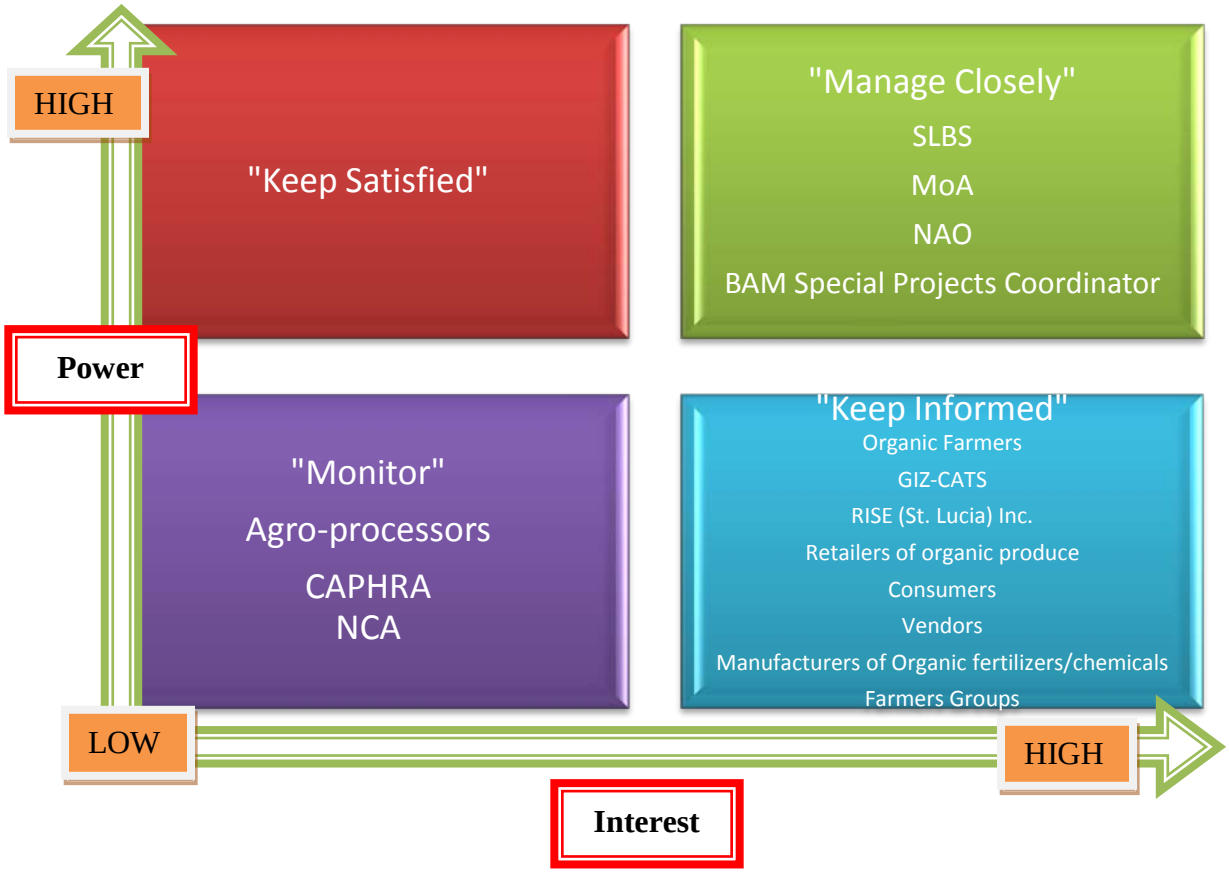
Chart 25. Power/Interest Rating (Source: Author of Study)

ID No	Stakeholder Name	SCALE		Rating & Interpretation
		Power	Interest	
1	Saint Lucia Bureau of Standards (SLBS) Project Team	5	5	5 - very high 4 - high 3- moderate 2- low 1- very low
2	Ministry of Agriculture	5	5	
3	National Authorizing Officer (NAO)	5	5	
4	BAM Special Projects Coordinator	5	5	
5	National Consumers Association (NCA)	2	3	
6	German Development Cooperation - Caribbean Aqua Terrestrial Solutions Program (GIZ-CATS)	1	4	
7	Organic Farmers	3	4	
8	Farmers Groups (Associations, Cooperatives)	2	4	
9	Non Governmental Organizations - RISE (St. Lucia) Inc	2	4	
10	Vendors of agricultural implements, organic fertilizers/chemicals	1	4	
11	Consumers of organic produce	2	4	
12	Agro processors	1	2	
13	Manufacturers of organic fertilizers/chemicals	1	5	
14	Caribbean Public Health Agency (CARPHA)	1	1	
15	Retailers of organic produce	2	4	

A visual representation of the classification of stakeholder groups based on their power and interest, will be made using the Power /Interest grid, as seen in Chart 26. Stakeholders are assigned to one (1) of four (4) groupings / quadrants, namely high interest / high power, high interest / low power, high power / low interest, and low interest / low power. This will allow for the appropriate attention to be given to each group according to the level of engagement needed.

The groups of stakeholders with high interest and high power, which make highly relevant decisions upon the project's success, will be managed closely. Those with high interest in the project's goals but low power will be kept informed. Stakeholder groups with high power to change the project's strategies but low interest will be kept satisfied, while those with low interest in the project's deliverables and low power will be monitored.

Chart 26. Power/Interest Grid (Source: Author of Study)



The Project Manager will organize a series of meetings with the different stakeholder groups to ensure that their expectations, concerns and issues are known and captured adequately. Meetings and interviews will be conducted between the Project Management Team and identified experts in organic agriculture as necessary. This will be to determine and define the required engagement levels of all stakeholders, to guide the plan stakeholder management process.

4.10.3 Plan Stakeholder Management

The information in the stakeholder register provides the information needed, to plan appropriate ways to effectively engage the project stakeholders at each stage of the project, throughout its lifecycle, based on the analysis of their needs, interest and potential impact on project success. As the project progresses the level of engagement may vary for different groups of stakeholders, with some groups such as end users becoming more important towards the end. The current engagement levels of each group of stakeholders is compared to the planned or the desired level required for project success, and recorded in the Stakeholder Engagement Assessment Matrix below in Chart 27. Actions and communications required to close the gaps will be identified by the Project Team utilizing expert judgment.

The engagement level of all stakeholders is classified using the PMBOK's classification as follows:

- Unaware - unaware of the project and potential impacts
- Resistant - aware of project and potential impacts and resistant to change
- Neutral - aware of the project yet neither supportive nor resistant
- Supportive - aware of project and potential impacts and supportive to change
- Leading - aware of project and potential impacts and actively engaged in ensuring the project a success.

Chart 27. Stakeholder Engagement Assessment Matrix
(Source: Author of the study)

Stakeholder	Unaware	Resistant	Neutral	Supportive	Leading
SLBS					C[1] D[2]
Ministry of Agriculture				C	D
National Authorizing Officer				C D	
BAM Special Projects Coordinator				C D	
National Consumers Association	C			D	
GIZ-CATS	C			D	
Organic Farmers	C			D	
RISE (St. Lucia) Inc	C			D	
Manufacturers of Organic fertilizers/chemicals	C			D	
Farmers groups	C			D	
Non Governmental Organizations	C			D	
Retailers of organic produce	C			D	
Vendors of agricultural implements, organic chemicals	C			D	
Agro processors	C			D	
CARPHA	C			D	

[1] "C": current level of engagement
[2] "D" desired level of engagement

4.10.4 Manage Stakeholder Engagement

This is the process during project execution of communicating and working with the stakeholders to meet their needs /expectations, to address issues as they occur and foster appropriate stakeholder engagement in project activities throughout the lifecycle of the project. The Project Manager and Project Team works to increase support and minimize resistance from stakeholders. The Communications Plan will be used to communicate the required information such as project goals, objectives, benefits, risks, project progress and any changes, to the relevant stakeholders, in a timely and efficient manner. This would ensure that there is a clear understanding of the project. An issue log will be maintained to collect, document and address concerns raised by stakeholders and to respond to and identify solutions.

4.10 Control Stakeholder Engagement

The Project Team will monitor stakeholder relationships. . They will monitor strategies and plans for engaging stakeholders which will be adjusted appropriately to help increase the efficiency and effectiveness of stakeholder engagement activities, as the project evolves and its environment changes. The control process will involve a comprehensive identification and listing of stakeholders and reassessment of current ones, using expert judgment through consultations.

Any request for changes during interaction with stakeholders, will be addressed through the change control process. Through a properly established Information Management System, the Project Manager will capture, store and distribute information to stakeholders about the project.

5. CONCLUSIONS

The development of this Project Management Plan, in meeting the general objectives of this Final Graduation Project, consisted of the development of nine subsidiary plans, as per the nine specific objectives, for an Organic Farming Certification Project in accordance with the PMBOK Guide. Analytical research methods, with the review of readily available project information, from the implementing organization, and templates from the PMI book of forms from the PMI website was used.

- The Scope Management Plan was created utilizing information from the Project Charter, project documents and meetings with the key project stakeholders. The scope statement was developed, the WBS and the WBS dictionary which in the description of work, identified the various work activities to accomplish the scope of works of the project. This plan has allowed for the identification of all the work that is required for the successful design of the certification program and its effective implementation.

- The Schedule Management Plan established the timelines to be adhered to, for timely execution of the project activities. The Activity List, Project Gantt Chart and Project Schedule Network Diagram were created during this process, providing the Organization with a methodology for schedule development to arrive at a realistic schedule for the completion of this project and future projects.

- The Cost Management Plan was created with the estimation of cost and development of the project budget, to be compared with the funding provided by the sponsor, and the cost performance measures needed to monitor the ultilisation of funds. This plan has helped the organization to itemize and estimate the cost of the project activities and how the performance of the project can be monitored to implement the necessary corrective actions when inefficiencies are found.

- The Quality Management Plan established the approaches toward quality assurance and quality control to build quality into the project. It focused on the engagement of stakeholders and their requirements as inputs to allow for succesful quality planning. The Quality metrics and their measurement methods were defined, showing the Organization how these metrics can be used as guidance during quality audits to assess the quality of the project outputs thus far before proceeding to complete the project.

- The Human Resource Management Plan was created identifying the human resources required for the project, their roles and responsibilities and how they will be acquired and managed during the project. The RACI chart shows the responsibilities between tasks and team members, identifies all the members of the project team who need to be informed and consulted when certain decisions are made, and will assist in moving forward to complete the project.

- The Communications Management Plan was created utilizing the stakeholder register with the development of a Communication Matrix, detailing what needed to be communicated, how often, when and how, so that the project can respond in a timely manner to the communication needs of stakeholders. This plan will assist the Organization to clearly communicate with the stakeholders who in turn will benefit by having a better understanding of the project and how it will benefit them once implemented.

- The Risk Management Plan was created to identify and document risk in a Risk Register and a qualitative risk assessment was conducted so that risks can be effectivey managed and controlled for project success. Through the development of this plan certain risk were identified with appropriate risk planning responses which should have be taken, and can however still be taken to improve the chances of the project being brought to completion.

- The Procurement Management Plan was created to identify the approach for procurements of services, with a list of all the services to be procured, as well as the methods and approvals needed and procurement metrics for procurement activities. This plan clearly indicates when the products and services are procured during project realization.

- The Stakeholder Management Plan was created to identify the strategies required to manage the project stakeholders. It consisted of a Stakeholder Analysis Register with the classification of stakeholders and the engagement levels required to effectively manage the stakeholders. Moving forward it will provide guidance on the group of stakholders who must be targeted and engaged to allow for implementation of the certifcation program by the Organization, and the active participation of all stakeholders.

It can be generally concluded that these plans constitute baseline documents for the organization for review and study, the components of which, when enabled, will lead to a successful approach to completion of the Organic Farming Certification Project. It will utilize good project management practices and will also constitute good organization process assets for use in future projects.

6. RECOMMENDATIONS

Having completed this course in Project Management, the student is thoroughly able to apply the requisite knowledge, skills, expertise, capabilities, tools and techniques to create this Project Management Plan. As a result, the following recommendations are made to the Director of the Saint Lucia Bureau of Standards for the use of this plan, not only to attempt to successfully complete the organic farming project, but to enhance the future approach to projectized work within the organization.

- The SLBS should review and study this Project Management Plan, to identify the shortfalls in managing the Organic Farming Project, which led to its non-implementation and how it can employ good project management practices, in this plan, for the successful completion of the project.

- Following this, the SLBS should use the findings to create an action plan and present the information to stakeholders, through stakeholder group meetings. This is with the objective of reaching a consensus on the way forward and getting the required commitment to realize the activities. An element, which according to best project management practices, was omitted.

- The Management Team of the SLBS should adopt a methodology to be used by the organization for future projects. This should be consistent with the Project Management Institute best practices, the use of the planning processes and templates created during the development of this Project Management Plan.

- The SLBS should ensure that relevant staff receive training in the use of the project management tools, techniques and standardized templates which have been created in this Project Management Plan.

- The SLBS should consistently ensure that Porject Team members follow the established standardized approach in managing all projects, with the creation of the subsidiary plans, for each knowledge area and the utilization of templates to increase the chances of project success.

- The SLBS should ensure that the relevant support services exist and that the necessary coordinating mechanisms of all stakeholders involved are in place.This is in keeping with the stakeholder and communications management process, which will enhance the success rates of projects requiring implementation, that are dependant on the full participation and involvement of the key stakeholders.

- Based on the result of analysis of this Project Management Plan, the SLBS should determine the needs and opportunities, for continuous improvement, of its processes for managing projects and implement them to improve the overall effectiveness of its operations and its quality management system.

- The organization should document lessons learned from managing the organic farming project, and apply them to future projects.

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8. APPENDICES

Appendix 1: FGP Charter

PROJECT CHARTER **Formalizes the project start and confers the project manager with the authority to assign company resources to the project activities. Benefits: it provides a clear start and well defined project boundaries.**	
Date	**Project Name:**
June 26, 2017	Project Management Plan for the Conduct of Training in Standards for Certification of Organic Farming Project
Knowledge Areas / Processes	**Application Area (Sector / Activity)**
Knowledge areas: Integration,Scope,Time ,Cost, Quality,Human Resources,Communications, Risk, Procurement, Stakeholders **Process groups:** Initiating, Planning	Agriculture
Start date	**Finish date**
June 26, 2017	January 5, 2018
Project Objectives (general and specific)	

General objective:
To develop a Project Management Plan in accordance with Project Management Institute (PMI) good practices, to be used for better management and completion of the Project "Conduct of Training in Standards for Certification of Organic Farming."

Specific objectives:

1. To develop an approach for project integration management to manage the interdependencies among the project processes and their coordination, so that the project can be managed as a whole.
2. To develop the scope management plan to describe how the scope will be defined, documented, verified, managed and controlled.
3. To develop the schedule management plan to establish the criteria and the activities for developing, monitoring and controlling the schedule.
4. To develop the cost management plan to describe how the project costs will be planned, structured and controlled.
5. To develop the quality management plan to describe the quality assurance and continuous process improvement approaches for the project.
6. To develop the human resource management plan to provide guidance on how the project human resources will be defined, acquired, managed and eventually

released and to determine project roles and responsibilities.
7. To develop the communications management plan to describe how communications will be planned, structured, monitored and controlled.
8. To develop the Risk Management Plan to describe how risk management activities inclusive of risk identification, analysis, and risk responses will be structured and performed.
9. To develop the procurement management plan to document the project procurement decisions and to specify the approach for identification of potentiel sellers.
10. To develop the stakeholder management plan to identify the management strategies required to effectively engage stakeholders.

Project purpose or justification (merit and expected results)

The Saint Lucia Bureau of Standards (SLBS) is an organization which occasionally implements projects. Having completed the courses in the project management program, for this masters, has resulted in the Project Manager acquiring the requisite knowledge, skills, expertise, capabilities, tools and techniques to be able to apply them to better manage projects within the organization.

One such project is the "Conduct of Training in Standards for Certification of Organic Farming," which is still in progress. My organization was contracted to implement this project which was seen as having the potential to positively impact the environment, local economy and public health. The key deliverables of this project were to develop a Code of Practice for organic farming, to train farmers in the requirements of this code, to train inspectors in the requirements of the standard and inspection techniques, to develop a cadre of competent inspectors to design and implement a certification program to certify farms which adhere to the requirements of the standard.

The project has not been completed due to problems experienced with the impementation of the certification program. There is no standard Project Management Plan which can serve as a guide to achieve the effective completion of this project, which is behind schedule. As a resul,t this final graduation project which is the creation of a Project Management Plan will assist the SLBS to try to bring this project to a successful completion. It will allow for a "postmortem" to be done, to be able to identify the shortfalls and the changes which can be made, in keeping with good project management practices, with the expectation of fully achieving the objectives of the project.

Description of Product or Service to be generated by the Project – Project final deliverables

1. Project Management Plan which will constitute the document outlining the approach to integration of all the processes.

2. The susidiary plans to include:

- 1. The scope management plan
- 2. The schedule management plan
- 3. The cost management plan
- 4. The quality management plan
- 5. The human resource management plan
- 6. The communications management plan
- 7. The risk management plan
- 8. The procurement management plan
- 9. The stakeholder management plan

Assumptions

1. It is assumed that the project management plan will be the guiding document which will faciliate the successful completion of the project
2. It is assumed that the stakeholders involved in the project will buy into the project management plan and will be convinced that it will provide a favourable outcome, bringing the project to a close.
3. It is assumed that the SLBS will provide the support needed to conduct research and will provide all the required information.
4. It is assumed that the project manager will efficiently manage time, to complete all the activities as per the work breakdowm structure within the time given.

Constraints

1. Time: The limited timeframe within which to implement the project .
2. Quality: The quality, reliability, availability and retrievability of the required additional information from the stakeholders within the fixed time period.

Preliminary risks

1. If proper time management skills are not employed, this will affect the timely completion of the deliverables according to the workbreakdown structure, thereby impacting the completion date of the Project Management Plan.
2. If the information needed from the stakeholders, is not submitted in a timely manner, and is not accurate, this will affect the timely creation of the necessary subsidiary plansand the quality of the project mananegment plan.

Budget

There are no costs associated with developing this Project Management Plan.

Milestones and dates

Milestone	Start date	End date
Signed/Approved FGP Charter	July 24, 2017	July 28, 2017
Tutor Approval of FGP	November 10, 2017	November 10, 2017

Submission of FGP to Reviewers	November 17, 2017	November 17, 2017
Reviewers work & report	November 20, 2017	December 1, 2017
Adjustments completed	December 4 2017	December 29, 2018
FGP grade report	January 5, 2018	January 5, 2018

Relevant historical information

The growth and spread of organic agriculture, is starting to be seen as a way to boost healthy and sustainable patterns of production and consumption. It also contributes to management practices that restore, maintain and enhance ecological harmony. There is also increasing scrutiny by the public of the quality, appearance and most of all the safety of food for human consumption.

This project was conceptualized by the Ministry of Agriculture. The aim was to provide a means to improve the revenue generating potential of the rural sector and its contribution to the productivity of the agricultural sector and the economy. This would be achieved through efforts that would cultivate knowledge and human capacity in organic and sustainable agriculture for farmers. As a result, agricultural producers needed to be aware of the principles and good practices that are necessary for production of certified organic foods and the tangible benefits to the environment, local economies, and public health.

The National Authorizing Office (NAO) within the Ministry of Agriculture contracted the Saint Lucia Bureau of Standards as the Implementing Agency for this project. "The Conduct of Training in Standards for Certification of Organic Farming" sought to achieve the following: selection and adoption of appropriate code of practice standard, training to develop auditing competency, training of organic farmers in the requirements of the code of practice, designing a certification program and offering certification services. This project commenced in March 2016 and has not been completed, with the implementaton of the certifcation program still pending, resulting in the project being behind schedule.

The development of a Project Management Plan with the application of the PMI standards at this point, is very important to be able to successfully complete this project. It will be a blueprint to be able to analyse the practices which were employed and how the project could have been better managed. The Project Management Plan will also serve as a document which can be used by the SLBS for adoption in the management of future projects.

Stakeholders

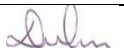
Direct stakeholders:

- Bureau of Standards (Implementing Agency)
- Ministry of Agriculture, Fisheries, Cooperatives, Food Production and Rural Development (MoA)
- The National Authorizing Office (Contracting Authority/Sponsor)

- BAM Special Projects Coordinator
- Organic Farmers
- Providers of agricultural implements/products
- Farmers groups/associations

Indirect stakeholders:

- Consumers of organic produce
- Retailers of organic produce
- National Consumers Association (NCA)
- German Development Cooperation - Caribbean Aqua Terrestrial Solutions Program (GIZ-CATS)
- Non-Governmental Organizations - RISE (St. Lucia) Inc
- Vendors of agricultural implements, organic fertilizers/chemicals
- Manufacturers of agricultural implements, organic fertilizers/chemicals
- Agro processors
- Caribbean Public Health Agency (CARPHA)

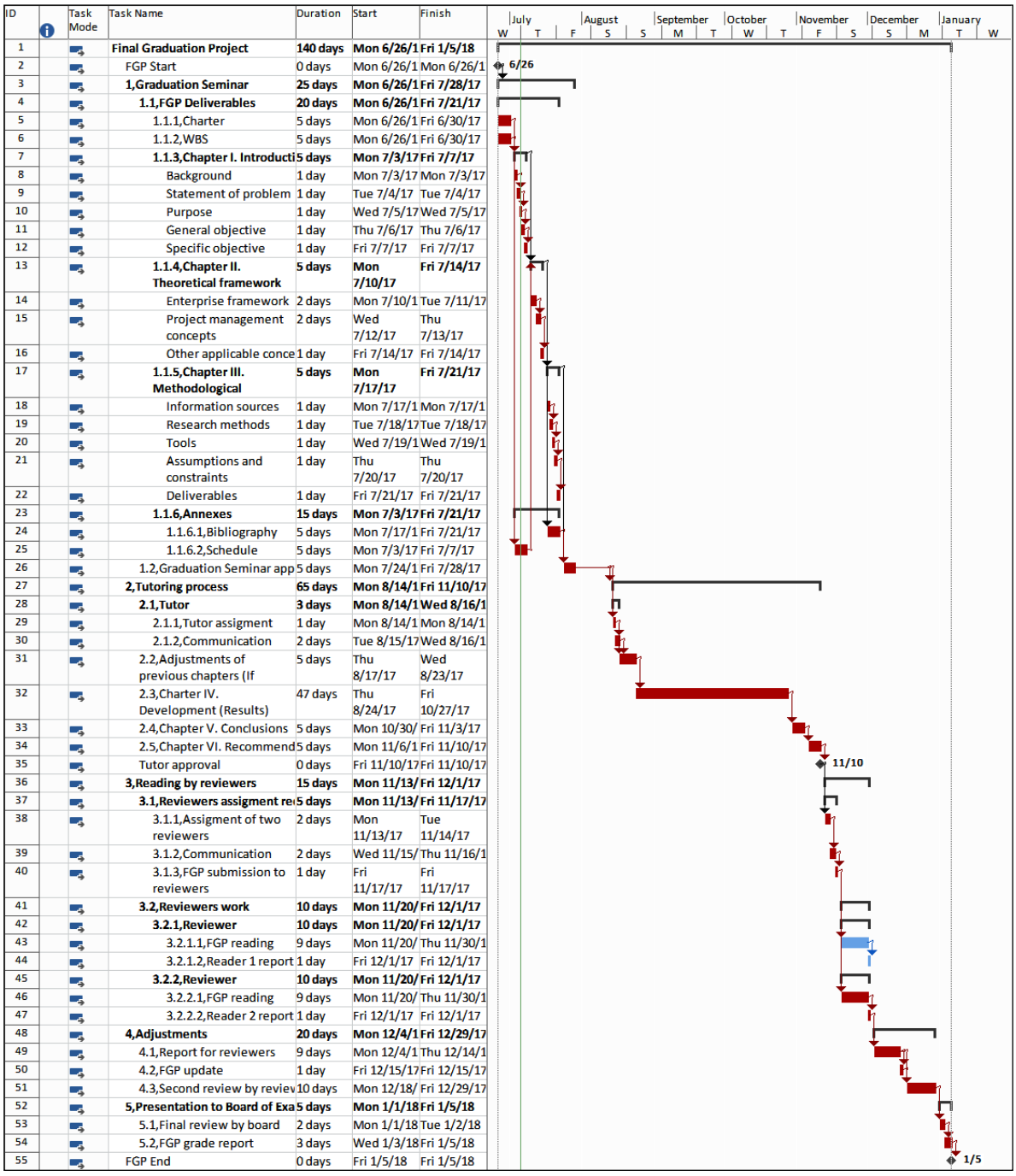
Project Manager: Dr. Xanthe Dubuison	**Signature:** 
Authorized by: Sophia Crawford	**Signature:** 

Appendix 2: FGP WBS

Level 0	Level 1	Level 2	Level 3	Level 4
Final Graduation Project	1 Graduation Seminar	1.1 FGP Deliverables	1.1.1.1 Charter	
			1.1.2 WBS	
			1.1.3 Chapter 1. Introduction	1.1.3.1 Background
				1.1.3.2 Statement of problem
				1.1.3.3 Purpose
				1.1.3.4 General Objective
				1.1.3.5 Specific Objective
			1.1.4 Chapter 2. Theoretical Framework	1.1.4.1 Enterprise Framework
				1.1.4.2 Project Management Concepts
				1.1.4.3 Other applicable Theory/Concepts
			1.1.5 Chapter 3. Methodological Framework	1.1.5.1 Information sources
				1.1.5.2 Research Methods
				1.1.1.5.3 Tools
				1.1.1.5.4 Assumptions & Constraints
				1.1.5.5 Deliverables
			1.1.6 Annexes	1.1.6.1 Bibliography 1.1.6.2 Schedule
		1.2 Graduation Seminar Approval		
	2 Tutoring process	2.1 Tutor	2.1.1 Tutor assignment	
			2.1.2 Communication	
		2.2 Adjustments of previous Chapters (if needed)		
		2.3 Chapter 4. Development (Results)	2.3.1 Scope Management Plan	
			2.3.2 Schedule Management Plan	

			2.3.3 Cost Management Plan	
			2.3.4 Quality Management Plan	
			2.3.5 Human Resource Management Plan	
			2.3.6 Communications Management Plan	
			2.3.7 Risk Management Plan	
			2.3.8 Procurement Management Plan	
			2.3.9 Stakeholder Management Plan	
		2.4 Chapter 5. Conclusions		
		2.5 Chapter 6. Recommendations		
	3 Reading by Reviewers	3.1 Reviewers assignment request	3.1.1 Assignment of two reviewers	
			3.1.2 Communication	
			3.1.3 FGP submission to reviewers	
		3.2 Reviewers work	3.2.1 Reviewer 1	3.2.1.1 FGP reading
				3.2.1.2 Reader 1 report
			3.2.2 Reviewer 2	3.2.2.1 FGP reading
				3.2.2.2 Reader 1 report
	4 Adjustments	4.1 Report by reviewers 4.2 FGP Update 4.3 Second review by reviewers		
	5 Presentation to Board of examiners	5.1 Final review by Board 5.2 FGP grade report		

Appendix 3: FGP Schedule



ID	Task Mode	Task Name	Duration	Start	Finish
1		**Final Graduation Project**	**140 days**	**Mon 6/26/1**	**Fri 1/5/18**
2		FGP Start	0 days	Mon 6/26/1	Mon 6/26/1
3		**1,Graduation Seminar**	**25 days**	**Mon 6/26/1**	**Fri 7/28/17**
4		**1.1,FGP Deliverables**	**20 days**	**Mon 6/26/1**	**Fri 7/21/17**
5		1.1.1,Charter	5 days	Mon 6/26/1	Fri 6/30/17
6		1.1.2,WBS	5 days	Mon 6/26/1	Fri 6/30/17
7		**1.1.3,Chapter I. Introducti**	**5 days**	**Mon 7/3/17**	**Fri 7/7/17**
8		Background	1 day	Mon 7/3/17	Mon 7/3/17
9		Statement of problem	1 day	Tue 7/4/17	Tue 7/4/17
10		Purpose	1 day	Wed 7/5/17	Wed 7/5/17
11		General objective	1 day	Thu 7/6/17	Thu 7/6/17
12		Specific objective	1 day	Fri 7/7/17	Fri 7/7/17
13		**1.1.4,Chapter II. Theoretical framework**	**5 days**	**Mon 7/10/17**	**Fri 7/14/17**
14		Enterprise framework	2 days	Mon 7/10/1	Tue 7/11/17
15		Project management concepts	2 days	Wed 7/12/17	Thu 7/13/17
16		Other applicable conce	1 day	Fri 7/14/17	Fri 7/14/17
17		**1.1.5,Chapter III. Methodological**	**5 days**	**Mon 7/17/17**	**Fri 7/21/17**
18		Information sources	1 day	Mon 7/17/1	Mon 7/17/1
19		Research methods	1 day	Tue 7/18/17	Tue 7/18/17
20		Tools	1 day	Wed 7/19/1	Wed 7/19/1
21		Assumptions and constraints	1 day	Thu 7/20/17	Thu 7/20/17
22		Deliverables	1 day	Fri 7/21/17	Fri 7/21/17
23		**1.1.6,Annexes**	**15 days**	**Mon 7/3/17**	**Fri 7/21/17**
24		1.1.6.1,Bibliography	5 days	Mon 7/17/1	Fri 7/21/17
25		1.1.6.2,Schedule	5 days	Mon 7/3/17	Fri 7/7/17
26		1.2,Graduation Seminar app	5 days	Mon 7/24/1	Fri 7/28/17
27		**2,Tutoring process**	**65 days**	**Mon 8/14/1**	**Fri 11/10/17**
28		**2.1,Tutor**	**3 days**	**Mon 8/14/1**	**Wed 8/16/1**
29		2.1.1,Tutor assigment	1 day	Mon 8/14/1	Mon 8/14/1
30		2.1.2,Communication	2 days	Tue 8/15/17	Wed 8/16/1
31		2.2,Adjustments of previous chapters (If	5 days	Thu 8/17/17	Wed 8/23/17
32		2.3,Charter IV. Development (Results)	47 days	Thu 8/24/17	Fri 10/27/17
33		2.4,Chapter V. Conclusions	5 days	Mon 10/30/	Fri 11/3/17
34		2.5,Chapter VI. Recommend	5 days	Mon 11/6/1	Fri 11/10/17
35		Tutor approval	0 days	Fri 11/10/17	Fri 11/10/17
36		**3,Reading by reviewers**	**15 days**	**Mon 11/13/**	**Fri 12/1/17**
37		**3.1,Reviewers assigment re**	**5 days**	**Mon 11/13/**	**Fri 11/17/17**
38		3.1.1,Assigment of two reviewers	2 days	Mon 11/13/17	Tue 11/14/17
39		3.1.2,Communication	2 days	Wed 11/15/	Thu 11/16/1
40		3.1.3,FGP submission to reviewers	1 day	Fri 11/17/17	Fri 11/17/17
41		**3.2,Reviewers work**	**10 days**	**Mon 11/20/**	**Fri 12/1/17**
42		**3.2.1,Reviewer**	**10 days**	**Mon 11/20/**	**Fri 12/1/17**
43		3.2.1.1,FGP reading	9 days	Mon 11/20/	Thu 11/30/1
44		3.2.1.2,Reader 1 report	1 day	Fri 12/1/17	Fri 12/1/17
45		**3.2.2,Reviewer**	**10 days**	**Mon 11/20/**	**Fri 12/1/17**
46		3.2.2.1,FGP reading	9 days	Mon 11/20/	Thu 11/30/1
47		3.2.2.2,Reader 2 report	1 day	Fri 12/1/17	Fri 12/1/17
48		**4,Adjustments**	**20 days**	**Mon 12/4/1**	**Fri 12/29/17**
49		4.1,Report for reviewers	9 days	Mon 12/4/1	Thu 12/14/1
50		4.2,FGP update	1 day	Fri 12/15/17	Fri 12/15/17
51		4.3,Second review by reviev	10 days	Mon 12/18/	Fri 12/29/17
52		**5,Presentation to Board of Exa**	**5 days**	**Mon 1/1/18**	**Fri 1/5/18**
53		5.1,Final review by board	2 days	Mon 1/1/18	Tue 1/2/18
54		5.2,FGP grade report	3 days	Wed 1/3/18	Fri 1/5/18
55		FGP End	0 days	Fri 1/5/18	Fri 1/5/18

Appendix 4: Organic Farming Certification Project Charter/Terms of Reference

THE CONDUCT OF TRAINING IN STANDARDS FOR CERTIFICATION OF ORGANIC FARMING

1. BACKGROUND INFORMATION
1.1. Beneficiary country
1.2. Contracting Authority
1.3. Country background
1.4. Current situation in the sector
1.5. Related programs and other donor activities
2. OBJECTIVE, PURPOSE & EXPECTED RESULTS
2.1. Overall objective
2.2. Purpose
2.3. Results to be achieved by the Contractor
3. ASSUMPTIONS & RISKS
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6. REQUIREMENTS
6.1. Staff
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6.3. Facilities to be provided by the Contractor
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6.7. Expenditure verification
7. REPORTS
7.1. Reporting requirements
7.2. Submission & approval of reports
8. MONITORING AND EVALUATION
8.1. Definition of indicators
8.2. Special requirements

1 BACKGROUND INFORMATION

1.1 Beneficiary country - Saint Lucia

1.2 Contracting Authority

The National Authorizing Officer
Ministry of Finance, Economic Affairs Planning and Social Security
Department of Planning and National Development
5th Floor Conway Business Centre
Jn. Baptiste Street, Castries
St. Lucia

1.3 Country background

In an environment in which there is more international trade of agricultural commodities from globalization of economies and markets and there is increasing scrutiny by the public of the quality, appearance and most of all safety of food for human consumption, the growth and spread of organic agriculture, though a recent phenomenon in Saint Lucia, is starting to be seen as a way to boost healthy and sustainable patterns of consumption and production and to contribute to management practices that restore, maintain and enhance ecological harmony.

Some local producers still have the misconception that organic farming generates lower yields that agricultural commodities would be of poor quality, and/or a higher cost of production. Others who have been exposed to some training have been apparently quite surprised to find that this view may not be completely true and that it impedes a better method of a non-chemical and heather farming option. It eliminates the use of synthetic inputs, such as synthetic fertilizers and pesticides, veterinary drugs, genetically modified seeds and breeds, preservatives, additives and irradiation and uses site-specific and environmentally friendly management practices that can increase the levels of output from the agricultural sector.

Internationally, the pendulum is gradually swinging the other way. Interest in organics, raw foods, whole grains, natural sugars and the like is growing and now has begun to soar, with specific groups, such as yoga practitioners and heath activists. Parents with children suffering from food and chemical allergies have also started trying to source healthier options. Tourism is also playing a major role locally. In Saint Lucia, visitors to more exclusive and upper-end hotels and resorts have started requesting that their meals contain whole grains, organic ingredients, and free-range meat and dairy, which in turn has encouraged some hotels to support local organic farming.

This is one trend that will be here to stay and grow. Therefore, farmer training in the diversified organic production of vegetables, livestock, flowers, fruits and herbs for local, regional and extra regional markets with emphasis on hands-on small farm management and decision-making as well as development of basic farming and business skills and knowledge is essential for the continued growth and development of the said subsector.

1.4 Current situation in the sector

The overall objective of the Agricultural Transformation Program (ATP) funded by the BAM instrument is to improve the revenue generating potential of the rural sector and its contribution to economic growth. Specific objectives refer to increased productivity of the agricultural sector through entrepreneurship, innovative and technology oriented approaches, agri-enterprise development, quality standards and certification and reduced risk of natural disasters and disease control in the agricultural sector through an improved disaster preparedness and prevention (DPP) framework.

Agriculture remains a sector with much potential for growth although its contribution to GDP has been declining over the last 15 years, largely due to a decline in banana production from a peak of 134,000 tonnes. The sector contributed approximately 3.5% to GDP in 2013. This outturn reflected mixed performances of the various subsectors but was led by an improvement in production of non-banana crops such as coconut, cocoa, vegetables and herbs, other fruit and tree crops and cut flowers. Banana production remains central to the sector as the main export crop with production estimated to have increased marginally over 2012, partly attributed to the continued efforts at combating the Black Sigatoka leaf spot disease. In 2013, banana exports to the United Kingdom recorded a marginal increase of 0.6 percent to 12,202 tonnes with relatively unchanged export revenue of $21.1 million.

Although the livestock sector is small and dominated by the poultry and pork sub-sectors, it continues to experience reasonable stability. Chicken production exceeded the levels recorded in 2012 by 13.4 percent to 1,642.9 tonnes with a commensurate increase in revenue. In contrast, pork production fell by 16.8 percent to 151.2 tonnes in 2013, due to a significant rise in the cost of feed. Saint Lucia remains self-sufficient in eggs with production continuing to fluctuate around the 2013 production figure of 1.15 million dozen eggs which converts to approximately EC$7.1 million.

Despite the above, the country however is still a net-food importer, with a growing trade deficit in its food bill over the last decade. This remains a major challenge to the Government who is creatively trying to respond by: transforming risk averse, resource-deficient farmers into efficient and competitive entrepreneurs to allow agriculture to operate as the true engines of economic growth and social stability; attracting young and appropriately skilled technical and professional labour in the production and marketing of goods and services from this sector.

Additionally, training has to be a key factor to meet the demands of the national development policy for agriculture which emphasizes the need to increase the efficiency and competitiveness of agriculture; promote the adoption of improved/appropriate technological packages; expand and diversify agricultural, forestry, and fisheries base and increase value-added by promoting agro-industrial development.

The anticipated impact of training particularly in standards for certification of organic farming, is growth in the financial and economic viability of agricultural production, with positive impacts also on food security, new employment and income generating opportunities especially in rural areas.

1.5 Related programs and other donor activities

The proposed program builds upon previous STABEX and Special Framework of Assistance (SFA) interventions. The program will complement other donor supported activities such as those supported by the Caribbean Development Bank (CDB), the European Investment Bank (EIB) (soft loans to private sector development initiatives), regional cooperation with Martinique (EU INTERREG Program), the Inter-American Institute for Cooperation on Agriculture (IICA) through the St. Lucia Network of Rural Women Producers (SLNRWP), and current EU activities with agencies such as the Chamber of Commerce, National Skills Development Centre, the Saint Lucia Social Development Fund and the Ministry of Agriculture through the Banana Industry Trust (BIT) and other government agencies.

All BAM interventions will build on various regional, thematic and All-ACP programs already benefitting Saint Lucia. Special coordination mechanisms will be established to ensure complementarity with upcoming European Union funded regional support programs, i.e. the Agricultural Health and Food Safety (AHFS) policy component of the "Economic Integration and Trade of the OECS Region", the SPS regulatory compliance frameworks within the "Support to the Implementation of the Economic Partnership Agreement (EPA)" program with CARIFORUM, actions implemented by IICA, the Technical Barriers to Trade (TBT) and Export Promotion components of the Economic Partnership Agreement (EPA) program.

Finally, synergies shall be explored with the 10th EDF Agriculture Policy Program, with a focus on the Caribbean and the Pacific with actions to strengthen the capacity of Regional Institutions, including, but not limited to the CARICOM secretariat, to support national agriculture policy and strategy processes to more effectively integrate Micro, Small and Medium Enterprises, producers and commodity associations.

2. OBJECTIVE, PURPOSE & EXPECTED RESULTS

2.1 Overall objective

The overall objective of this consultancy is to improve the revenue generating potential of the rural sector and its contribution to the productivity of the agricultural sector and the economy through efforts that will cultivate knowledge and human capacity in organic and sustainable agriculture for farmers.

Specifically, the objective of this consultancy is to make agricultural producers aware of the principals and good practices that are necessary for production of certified organic foods and the tangible benefits to the environment, local economies, and public health.

2.2 Purpose

Organic Agriculture is a very knowledge intensive production system and capacity building must play a central role in this regard. There are many efforts all around the world regarding the development of training material and the organization of training courses related to Organic Agriculture. However, existing knowledge is still

scattered and not easily accessible. In Developing Countries like Saint Lucia, this situation remains an important constraint for the growth of the organic subsector.
Therefore, the main purpose of this consultancy is to provide training and develop a Certification program for the certification of Organic Farms/ Organic Products. As a result producers will become more aware of the following:
Organic agriculture can contribute to meaningful socio-economic and ecologically sustainable development due to the application of organic principles, which means efficient management of local resources and therefore cost-effectiveness.
Certified organic products must comply with stringent International standards which must be met and the certification covers all aspects of the production chain to ensure that the organic integrity is maintained. This includes crop seed, farming techniques, harvesting and storage, transporting and processing through to the finished product.
The market for organic products at the local and international level has tremendous growth prospects and offers creative producers and exporter's excellent opportunities to improve their income and living conditions.

2.3 Results to be achieved by the Contractor

Results to be achieved:
The capacity of Saint Lucia's agricultural sector to compete more effectively in identified varied markets for select commodities is improved through the following:
The development of Codes of Practice for Organic Farming – (for use as the benchmark against which certification can be done).
A better understanding of the production skills as well as the knowledge, management, and business planning skills necessary to operate a diversified organic farm.
Development of a Certification program for the certification of Organic Farms/ Organic Products
The awareness of certification processes for organically grown foods and agricultural products and the necessity for regulating the sale of organic products to consumers.
The development and consolidation of linkages and effective logistics between agriculture/agribusiness and relevant sectors.

3. ASSUMPTIONS & RISKS

3.1 Assumptions underlying the project

Required funding from the European Union is made available;
Cooperation and commitment from stakeholders in the industry is forth coming;
The consultant is able to establish a team with the appropriate competencies and skills to undertake the mandate.
The Saint Lucia Bureau of standards will be actively involved in the designing, and implementation of the certification system.

3.2 Risks

1. Inability to recruit qualified personnel or to select a suitable entity to conduct the consultancy.
2. Lack of cooperation from the anticipated agencies and beneficiaries.

4. SCOPE OF THE WORK

4.1 Description of assignment

This initiative will serve to provide a holistic picture of different agriculture methodologies and technologies used in organic farming with emphasis on the organic certification process to include but not limited the following:
Selection and adoption of appropriate code of practice standard
Designing a Certification Program
Training to develop auditing competency
Training of Organic Farmers in the requirements of the code of practice
Offering Certification Services
Public Relations Activities
Print and media

- Geographical area to be covered - The island of Saint Lucia

Target groups;
The target groups include, inter alia:

Farmers producing or expected to produce the identified commodities
Ministry of Agriculture, Food Production, Fisheries and Rural Development

4.2 Specific work

The consultant must:
Review all documentation that may be relevant to this assignment.
Carefully review the Terms of Reference and comment where deemed necessary.
Obtain Codes of Practice for Organic Farming
Provide reading material for participants to be trained.
Submit a detailed methodology and work-plan including a time schedule, the name, professional status and biographic data of the professional key experts to be employed in this assignment.
Conduct training of auditors for farms and farmers to provide the feedback that is necessary for regulatory compliance and retail acceptance.
Conduct a capacity building sessions on the use of the training material for selected producers and appropriate staff of the MAFFRD.

4.3 Project management

Responsible body
The Contracting Authority represented by the National Authorizing Officer (NAO) for the European Development Fund (EDF)
Management structure
The contract will be between the Consultant and the National Authorizing Officer. However, the Management will comprise a Program Steering Committee (PSC) and a Project Management Unit (PMU). The Consultant shall be supervised by the Project Management Unit (PMU) set up for the implementation of the ATP Program.
Changes to the TOR may be made only in accordance to the needs subject to written agreement between the Consultant and the NAO and be made by an addendum.

Facilities to be provided by the Contracting Authority and/or other parties
The consultant is to provide all office facilities for the execution of the contract.

5. LOGISTICS AND TIMING

5.1 Location

The operational base for the project will be Saint Lucia.

5.2 Start date & period of implementation

The intended start date will be the day of the signatory of the contract and the period of implementation will be six (6) months from this date. Please refer to Articles 19.1 and 19.2 of the Special Conditions for the actual commencement date and period of execution.
Total estimated time for development and implementation of the certification program is 3 months. Additionally a period of 3 months of record keeping by organic farmers will be required post implementation of the requirements of the standards, before farms can be audited, to determine whether they meet the requirements for certification.

6. REQUIREMENTS

6.1 Staff

Note that civil servants and other staff of the public administration of the partner country, or of international/regional organisations based in the country, shall only be approved to work as experts if well justified. The justification should be submitted with the tender and shall include information on the added value the expert will bring as well as proof that the expert is seconded or on personal leave.

Key experts

<u>Key Expert 1 – Team Leader</u>

The ideal candidate should possess the following qualifications and experience:

Qualifications, Experience and Competencies

University degree in general agriculture or agronomy.
Experience and knowledge with organic farming procedures, especially certification requirements.
Two years of work experience as an agricultural or organic farming consultant.
Good analytical and drafting skills are required.
Experience in agricultural research, farming or assistance to the farming community.
Experience in managing organic farming projects.
Fluent in English.

Other technical competencies include:
Proficiency in report writing
Working knowledge and experience in food sector

Experience in the delivery of training
Excellent oral and written English skills.
Familiarity with local language, Kweyol
Fluent in English.
Has conducted previous consultancy of a similar nature

Key Expert 2: Trainer
Qualifications, Experience and Competencies
Minimum qualifications include a Diploma in Agriculture, Agricultural Communication, Agricultural Education or a related field
Two years as a high school teacher of Agriculture.
The ability to be a productive team player and to interact well with peers, industry government agencies and the general public.

Other technical competencies include:
Experience in the delivery of training
Excellent oral and written English skills.
Familiarity with local language, Kweyol
Has conducted previous training of a similar nature

Non key experts
The CVs for experts other than the key experts should not be submitted with the tender. The Contractor shall select and hire other experts as required according to the needs. The selection procedures used by the Consultant to select these other experts shall be transparent and shall be based on pre-defined criteria, including professional qualifications, language skills and work experience. Consideration should be given to selecting experts who are very knowledgeable of the local and cultural environment and who can speak Kweyol.

Support staff & backstopping
The cost for backstopping and support staff, as needed, are considered to be included in the tenderer's financial offer.

6.2 Office accommodation

Office accommodation of a reasonable standard and in approximately 10 square meters for each expert working on the contract is to be provided by the Contractor.
The costs of the office accommodation are to be covered by the fee rates.

6.3 Facilities to be provided by the Contractor

The Contractor shall ensure that experts are adequately supported and equipped. In particular, it must ensure that there is sufficient administrative, secretarial and interpreting provision to enable experts to concentrate on their primary responsibilities. It must also transfer funds as necessary to support their work under the contract and to ensure that its employees are paid regularly and in a timely fashion.
The costs for local transportation and any other support facilities requested for the execution of the contract shall be the responsibility of the contractor.

6.4 Equipment

No equipment is to be purchased on behalf of the Contracting Authority / partner country as part of this service contract or transferred to the Contracting Authority / partner country at the end of this contract. Any equipment related to this contract which is to be acquired by the partner country must be purchased by means of a separate supply tender procedure.

6.5 Incidental expenditure

The provision for incidental expenditure covers ancillary and exceptional eligible expenditure incurred under this contract. It cannot be used for costs that should be covered by the Contractor as part of its fee rates, as defined above. Its use is governed by the provisions in the General Conditions and the notes in Annex V to the Contract. It covers:

Travel costs and subsistence allowances for missions, outside the normal place of posting (i.e. outside of Saint Lucia) undertaken as part of this contract. If applicable, indicate whether the provision includes costs for environmental measures, for example C02 offsetting.

The Provision for incidental expenditure for this contract is EUR 3,000.

Daily subsistence costs may be reimbursed for missions foreseen in these terms of reference or approved by the Contracting Authority, and carried out by the contractor’s authorised experts, entailing overnight stays outside the expert’s normal place of posting. Any subsistence allowances to be paid for missions undertaken as part of this contract must not exceed the per diem rates published on the website:

- http://ec.europa.eu/europeaid/work/procedures/index_en.htm at the start of each such mission.

The per diem is a flat-rate sum covering daily subsistence costs. These include accommodation, meals, tips and local travel, including travel to and from the airport. Taxi fares are therefore covered by the per diem. Per diem are payable on the basis of the number of nights spent on site by the contractor's authorised experts for missions carried out outside the expert's normal place of posting.

6.6 Lump sums

No lump sums are foreseen in this contract.

6.7 Expenditure verification

The provision for expenditure verification covers the fees of the auditor charged with verifying the expenditure of this contract in order to proceed with the payment of any pre-financing installments and/or interim payments.

The provision for expenditure verification for this contract is EUR 4,000. This amount must be included unchanged in the Budget breakdown.

This provision cannot be decreased but can be increased during execution of the contract.

7 REPORTS

7.1 Reporting requirements

The Contractor will submit the following reports in English in one (1) original and three (3) copies in addition to documents required under specific activities and one electronic version.

Name of report	Content	Time of submission
Inception Report	Maximum 12 pages. In the report the Contractor shall describe e.g. initial findings, progress in collecting data any difficulties encountered or expected in addition to the work program and staff travel. The Contractor should proceed with his/her work unless the Contracting Authority sends comments on the Inception Report.	To be produced after two (2) weeks, from the start of implementation.
First Progress Report	Providing the updated status and highlighting any issues. This detailed report should also include a step by step procedure for designing the certification program.	Four (4) weeks after inception report.
Second Progress Report	Following the development and implementation of the certification program, and the training to develop auditing competency.	Four (4) weeks after the first progress report.
Third Progress Report	Following the training of organic farmers in the requirement of the code of practice.	Four (4) weeks after the second progress report
Draft Final Report	After all arrangements and agreements for the certification system has been finalized with the Saint Lucia Bureau of Standards.	Four (4) weeks before contract completion date
Final Report	To be submitted with a short description of achievements, problems encountered recommendations. This report should be accompanied by a final invoice.	Two (2) weeks before contract completion date

7.2 Submission & approval of reports

The reports referred to above must be submitted to the Project Manager identified in the contract. The Project Manager is responsible for approving the reports. Four hard copies and an electronic version of the report must be submitted; all documentation must be in the English language.

The Project Management Unit (PMU) is responsible for approving the reports. Feedback on approval and on issues raised from reports shall be given to the Consultant within ten (10) days of submission.

8. MONITORING AND EVALUATION

8.1 Definition of indicators

The main indicators which will be used to measure progress in achieving the outputs of the consultancy are the timely presentation of the reports in Section 7, above.

8.2 Special requirements N/A

Appendix 5: Requirements Documentation

Project Title:_____ Date Prepared:_____

ID	Requirement	Stakeholder	Category	Priority	Acceptance Criteria	Validation Method

Appendix 6: Requirements Traceability Matrix

Project Title:_____ Date Prepared:_____

Requirement Information					Relationship Traceability			
ID	Requirement	Priority	Category	Source	Objective	WBS Deliverable	Metric	Validation

Appendix 7: Change Request Form

CHANGE REQUEST

Project Title:_____ **Date Prepared:**_____

Person Requesting Change:_____ **Change Number:**_____

Category of Change:

☐ Scope ☐ Quality ☐ Requirements

☐ Cost ☐ Schedule ☐ Documents

Detailed Description of Proposed Change

Justification for Proposed Change

Impacts of Change

Scope	☐ Increase	☐ Decrease	☐ Modify
Description:			
Grade	☐ Increase	☐ Decrease	☐ Modify
Description:			

CHANGE REQUEST

Requirements	☐ Increase	☐ Decrease	☐ Modify
Description:			
Cost	☐ Increase	☐ Decrease	☐ Modify
Description:			
Schedule	☐ Increase	☐ Decrease	☐ Modify
Description:			
Stakeholder Impact	☐ High risk	☐ Low risk	☐ Medium risk
Description: **Project Documents**			

Comments

CHANGE REQUEST

Disposition ☐ Approve ☐ Defer ☐ Reject

Justification

Change Control Board Signatures

Name	**Role**	**Signature**	

Date: _____

Appendix 8: Revision Dictum

Inglewoods
Grand Riviere
Gros- Islet
CASTRIES

12th December, 2017

University for International Cooperation (UCI)
Costa Rica

Dear Sir/ Madame,

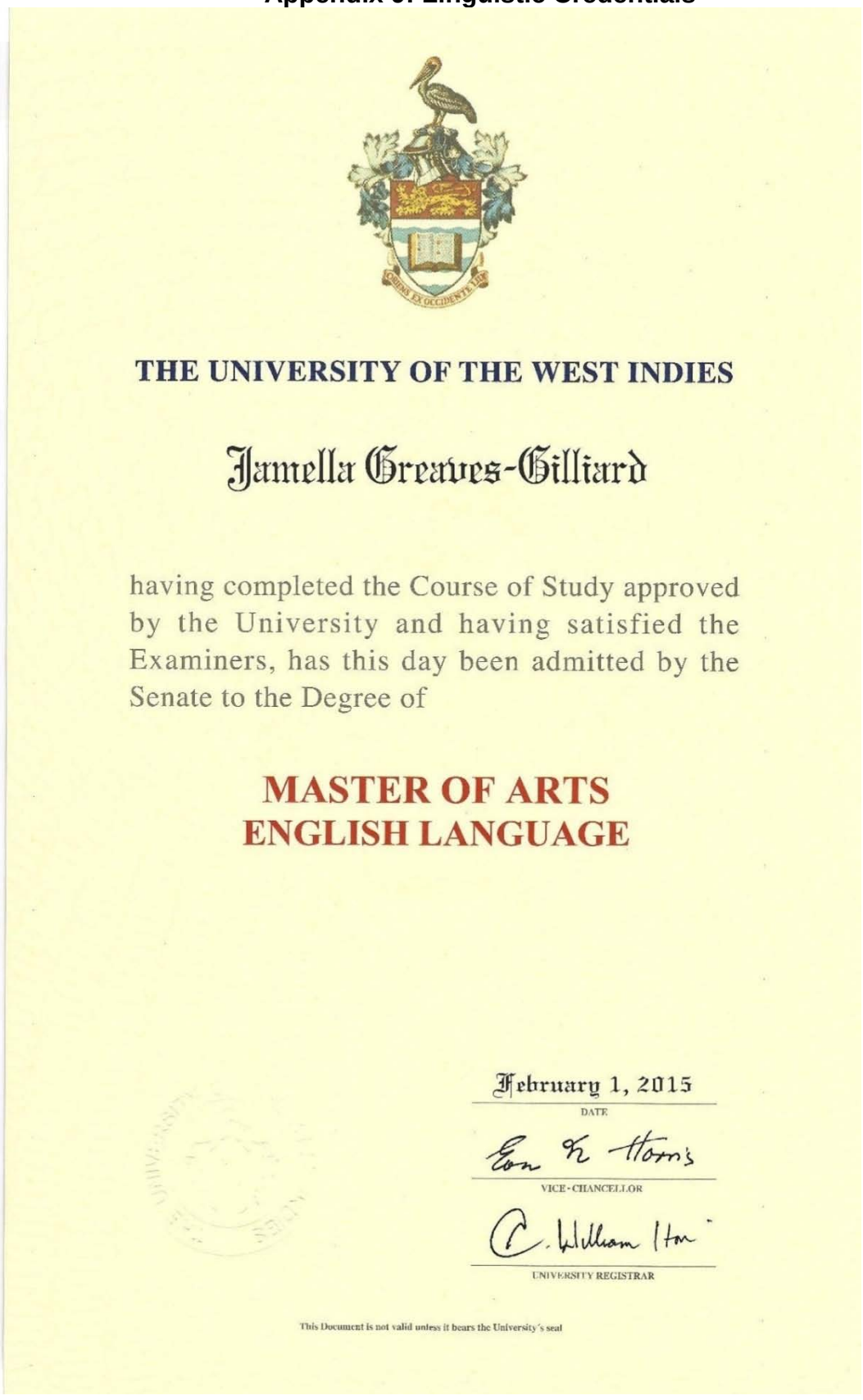
My name is Jamella Greaves- Gilliard. I have been a teacher for the last fourteen to fifteen (15) years and I hold a bachelor's degree in Literacy Studies and a Master of Arts Degree in Language Arts. I teach all subjects at the primary school level which include areas such as Numeracy, Literacy, Social- Studies, Health and Family Life Education and Science and Information Technology. I have taught most of the grades- from kindergarten to grade six (6).

I have revised this thesis, strictly considering mechanics such as spelling, grammar, punctuation, sentence structure etc. No changes were made to the content area of this thesis. I have recommended corrections and the writer is expected to note these and apply them, in order to produce and present a more suitable piece.

Sincerely,

Mrs. Jamella Greaves- Gilliard

Appendix 9: Linguistic Credentials



THE UNIVERSITY OF THE WEST INDIES

Jamella Greaves-Gilliard

having completed the Course of Study approved by the University and having satisfied the Examiners, has this day been admitted by the Senate to the Degree of

MASTER OF ARTS
ENGLISH LANGUAGE

February 1, 2015
DATE

VICE-CHANCELLOR

UNIVERSITY REGISTRAR

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THE UNIVERSITY OF THE WEST INDIES

Jamella Greaves-Gilliard

having completed the Course of Study approved by the University and having satisfied the Examiners, has this day been admitted by the Senate to the Degree of

BACHELOR OF EDUCATION
LANGUAGE EDUCATION
(LITERACY STUDIES)

with

Second Class Honours (Upper Division)

July 1, 2011

DATE

VICE-CHANCELLOR

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