UNIVERSIDAD PARA LA COOPERACION INTERNACIONAL
(UCI)

PROJECT MANAGEMENT PLAN TO OPERATIONALIZE MONARCH FARMS STRATEGIC OBJECTIVES

SANISHA CASSY MAXIMIN

FINAL GRADUATION PROJECT SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE
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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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María Fernanda Ibarra

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Karolina Jiménez

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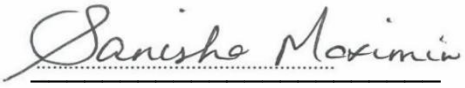
Mónica Cecilia González



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Sanisha Cassy Maximin
STUDENT

DEDICATION

To my loving angel Kerisa Maximin! Continue to fly high butterfly and let your colors forever paint our skies!

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First and foremost, I would like to thank the Almighty God for giving me the lucidity of mind to be able complete this project. My most profound gratitude and appreciation goes out to my tutor Maria Fernanda Ibarra for excellent tutorship and my readers: Mónica Cecilia González and Karolina Jiminèz which were expressed through constructive and prompt feedback throughout the development of the project.

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ABSTRACT

The aim of this document is to formulate a Project Management Plan for Monarch Farms, an agricultural business in St. Lucia, to help with the execution of its strategic objectives. This integrative project management plan which consists of constituent plans for scope, schedule, cost, quality, resource, communication, risks, procurement, and stakeholder engagement, will provide guidance for managing a successful project implementation in accordance with the standards and framework enunciated by the Project Management Institute. As a newly established business, Monarch Farms does not have an implementation plan which details how its key strategic objectives will be executed, monitored, and controlled.

The management of Monarch Farms has successfully developed a coherent regenerative and sustainable business strategy which are closely linked to Goal 2 of the Sustainable Development Goals particularly, working in partnership with other parties throughout the agricultural value chain, empowering small farmers, using practical solutions for sustainable food, increasing agricultural productivity, improving farmers' livelihoods, and an invested approach in educating persons about sustainable agriculture agricultural practices to create a more wholesome and fulfilling life.

As is generally accepted, organizations which demonstrate higher levels of project management capability can also demonstrate increases in business performance through the effective use of project management methods. This project plan will enable Monarch Farms to create long-term value for its stakeholders, and the society at large by employing proven practices, knowledge, skills, tools, and techniques that have demonstrable successes and usefulness.

The business model of Monarch Farms aims to contribute to the revitalization of the agricultural industry in St. Lucia by employing measures to change and create a new mindset of the youth about the agricultural sector, to educate farmers on the importance of diversification, create logistics and support for farmers and introduce sustainable, conservation and regenerative agriculture as the solution for environmental and ecological revitalization.

There is a plethora of research which shows that poor strategy execution has been highlighted by many organizations as one of the reasons why projects and by extension businesses fail. Executing a business strategy successfully requires careful planning and precision in order to reach the desired outcomes, fulfill stakeholder expectations and maximize benefits from projects. In this context, the Project Management Plan to operationalize Monarch Farms' Strategic Objectives will give a major impetus to the organisation to design and deliver effective, scalable and practical steps to ensure all-round sustainability in its projects, processes and products.

Key words: sustainability, business value, agriculture, strategy, project management plan

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ABBREVIATIONS AND ACRONYMS

AC	Actual Cost
APM	Association for Project Management
CA	Conservative Agriculture
CPI	Cost Performance Index
CV	Cost Variance
EV	Earned Value
EVM	Earned Value Management
FAO	Food and Agriculture Organization of the United Nations
FGP	Final Graduation Project
GPM	Green Project Management
ISO	International Organization for Standardization
NRDC	Natural Resources Defence Council
OECD	Organization for Economic Cooperation and Development
PMAJ	Project Management Association for Japan
PMI	Project Management Institute
PV	Planned Value
RACI	Responsible, Accountable, Consulted, Informed
RAM	Responsibility Assignment Matrix
SDGs	Sustainable Development Goals
SPI	Schedule Performance Index
SV	Schedule Variance
TBL	Triple Bottom Line
UNSW	University of New South Wales
WBS	Work Breakdown Structure

EXECUTIVE SUMMARY

Monarch Farms was officially established in St. Lucia on 28th May 2020 and recognized as a registered agricultural business. The organization aims to revamp the agricultural industry in St. Lucia by educating farmers on the importance of diversification; creating logistics and support for farmers; procuring equipment and materials needed for farming; creating an environment that is conducive for the development of young farmers; increasing the awareness of agribusiness and associated roles to the populace; and introducing sustainable, conservation and regenerative agriculture as the solution for environmental and ecological revitalization.

Although Monarch Farms had a well-defined roadmap that articulated its organization's mission, vision, and goals, it did not have an implementation plan on how it would execute its strategy. As a result, this Final Graduation Project sought to develop a Project Management Plan to enable Monarch Farms to effectively manage the execution of its strategic objectives. The development of an integrated management plan will serve as a blueprint to key stakeholders which will chart the path forward for achieving ultimate success by reducing the potential risks that could derail its progression.

The general objective of the Final Graduation Project was to formulate a Project Management Plan to assist Monarch Farms in executing its business strategy. The specific objectives were: to develop a Project Charter commissioning the existence of the project and conferring authority to the Project Manager to utilize organizational resources to project activities; to develop a Scope Management Plan providing detailed outline of how all project elements will be defined, validated, and controlled to minimize scope creep and manage stakeholders' expectations; to generate a Schedule Management Plan with guidelines for creating, managing, executing, monitoring, and controlling planned project activities to deliver project on time; to produce a Cost Management Plan explaining how the costs of resources needed to complete project activities will be managed throughout the project lifecycle; to develop a Quality Management Plan which identifies quality requirements for the project and its outputs and outlines how the project will deliver results that conform to defined requirements and meet customer satisfaction; to generate a Resource Management Plan that guides project team on how required resources will be classified, distributed, administered, and released to bring project into successful fruition; to create a Communication Management Plan which details the framework on how communication will be managed and controlled to enable transparency and collaboration that produce meaningful value to the project; to map out a framework for risk management to help take informed decisions about the risks that affect project objectives; to create a Procurement Management Plan documenting the approaches for acquiring, managing, and controlling externally sourced products, services, and results; to create a Stakeholder Engagement Plan devising a systemic approach to identify stakeholders, needs, power and influence on the projects and to formulate strategies for interacting, communicating, and managing these stakeholders' expectations.

To facilitate the development of the Final Graduation Project Applied Research was the methodology used with the utilization of qualitative research methods. This methodology was vital for analyzing and answering the research question “How beneficial is a Project Management Plan for the successful implementation of Monarch Farms business strategy?

Utilizing a Project Management Plan to support the execution of the organization’s business strategy will empower Monarch Farms to deliver real business value for itself and its stakeholders. The Project Plan also encourages the conduct of a comprehensive and detailed P5 Impact Analysis will help Monarch Farms to analyze how its project’s products and processes impacts across social, environmental, and economic domains. In addition, it helps Monarch Farms to demonstrate a commitment to sustainability, by having a solid sustainability plan which aligns its strategies, policies, operations, processes, and products to that plan and will help implement changes leading to the implementation of future projects or operations in a sustainable manner, while considering the environmental and social impacts.

Based on the work carried out, it can be inferred that Monarch Farms has a solid business strategy which can create value for its organisation and stakeholders and has the potential to deliver benefits even after the culmination of the project. It has a built-in value management framework which is tied to its business strategy that will support the organisation in achieving its desired strategic objectives. The Project addresses key challenges within the agricultural sector in St. Lucia such as the disinterest of youth in the agricultural sector; lack of dedicated programs to encourage and support youth involvement in agriculture; lack of mentorship, sensitization, and education of the critical importance of agriculture in Small Island Developing States.

To address the findings of the research it was proposed for consideration by the management of Monarch Farms that a detailed list of skillset and experience should be provided to the recruiting personnel or agency responsible for enlisting team members for the project. It was also noted that technology will play a critical role in moving the business strategy forward and should be a strategic priority for management of Monarch Farms. The Managing Director of Monarch Farms should leverage information technology to enhance capacity to monitor and stabilize agricultural production and marketing and to develop a central Management Information System which incorporates all aspects of its operations.

For the continued realization of benefits, it was recommended that the Management of Monarch Farms develop a Benefits Sustainment Plan to optimize business value beyond the implementation of the project in order to remain competitive and have a distinctive advantage in the agribusiness industry. There is a need for the Government of St. Lucia to inject greater finances in the agricultural sector with an aim of increasing youth interest and involvement in agribusiness, with greater emphasis on the multi-functional value of agriculture, starting at the school level. Thus, the Ministry of Agriculture in conjunction with the Ministry of Education needs to play a critical role in sensitizing youth about the importance of the agricultural sector for the sustained growth and development of the nation.

1. INTRODUCTION

1.1. Background

The agricultural sector has for many years been marginalized in St. Lucia and is seen nationally as the work of the poor and destitute. In St. Lucia, Agriculture is rarely considered a profession by young people and as a result our youth, both young men and women, see no merit or value in taking up jobs in the agricultural sector. Although Agriculture is taught at all levels of the education system in St. Lucia it was not given the prominence it deserved. From primary to secondary school, the focus of agriculture was mainly on planting of crops and animal husbandry, which were both characterized by excessive and demanding responsibilities. In addition, the jobs associated with agriculture were typified as being of low socioeconomic status. This demotivated young persons into venturing or enhancing their education on the field of Agriculture. Young people everywhere aspire to something other than working the land for little money and little social status (Dent, 2021, p. iv). This is a field that is so often forgotten, yet it is important for securing and maintaining national food security and achieving zero hunger, goal 2 of the 2030 Agenda for Sustainable Development – “End hunger, achieve food security, and improved nutrition and promote sustainable agriculture” (United Nations, 2015) and a mechanism for eradicating poverty.

Recognizing the challenges that St. Lucian Farmers and by extension the agricultural sector is faced with, such as limited markets for sale of produce, high production costs, market saturation because of high volumes of the same ‘seasonal’ produce, lack of interest by young persons and high importation bill of agricultural produce, foods which can be cultivated in St. Lucia; Monarch Farms decided to create strategic partnerships with other farmers, pooling their resources to enable a coordinated approach to farming and better manage the agricultural food supply chain in St. Lucia.

Monarch Farms has formulated a business strategy which it anticipates will create avenues for increased profitability, greater economies of scale, greater

sustainability, increased awareness of food diversification, increased markets for sale of produce locally, regionally, and internationally, year-round cultivation and production, timely acquisition of material and equipment and knowledge sharing.

As the organization is moving into the implementation phase, it requires an implementation plan which would allow it to elaborate and translate its business strategy into action and to do so successfully. As a result, this Final Graduation Project will develop a useful Project Plan to enhance the Monarch Farms' chances of realizing success during its implementation phase. It articulates how the project will be executed, monitored, and controlled. The project plan will serve as a guide for how all project work will be performed, detailing all activities in manageable components to allow for work to be done efficiently.

Because it integrates all knowledge management areas into a cohesive whole, it gives visibility to project stakeholders, clearly communicating what the project will achieve. As work progresses, performance can be measured against the project plan to determine if the project is on target. Ultimately, the project plan will enable Monarch Farms to create and deliver business value from its investments by employing proven, reliable, and well-established processes to meet its project objectives and wider strategic objectives.

1.2. Statement of the Problem

In furtherance of the strategic objectives of Monarch Farms, it requires a solid plan of action to effectively manage the execution of the project. Currently, Monarch Farms does not have an implementation plan which details how it will execute its business strategy. The development of an integrated management plan will serve as a blueprint to key stakeholders which will chart the path forward for achieving ultimate success by reducing the potential of risks that could derail its progression.

The development of the comprehensive project plan will help Monarch Farms not only achieve its project objectives but also its strategic objectives which are:

[1] educating farmers on the importance of diversification; [2] creating logistics and support for farmers; [3] procuring equipment and material needed for farming efficiently; [4] creating an environment that is conducive for the development of young farmers; [5] increasing the awareness of agribusiness and associated roles to the populace; and [6] introducing sustainable, conservation and regenerative agriculture as the solution for environmental and ecological revitalization.

1.3. Research Question

The research question which is addressed in this Final Graduation Project is "***how beneficial is a Project Management Plan for the successful implementation of Monarch Farms business strategy***?"

1.4. Research Hypothesis

Based on the research question and the basis for the Final Graduation Project, the primary hypothesis was: - "***it is hypothesized that a Project Management Plan is essential for the successful implementation of an organization's business strategy, contributing significantly to the achievement of its strategic goals, delivery of high business value and achieving long-term success."***

1.5. Purpose

The purpose of this Final Graduation Project is to develop a Project Management Plan for Monarch Farms to help it translate and elaborate its business strategy into action. Fundamentally, the development of the Integrated Project Management Plan is in response to the absence of a plan to facilitate the effective execution of activities to help revive agriculture in St. Lucia. The integrative project management plan offers a plethora of benefits to Monarch Farms including creating a roadmap for stakeholders to have an in-depth understanding of the purpose for the project implementation. This will allow for obtaining the buy-in or support of stakeholders, as well as obtaining the necessary financial support required to fully operationalize the project.

The Project Management Plan would also serve as a communication tool to communicate scope, resource and quality requirements, potential risks, tasks involved to complete project and the deadlines to be met to stay on track. The framework proposed also allows for synergy and strategic alignment of all aspects of project management to wit: - scope, schedule, cost, quality, resource, communication, risk, procurement, and stakeholder engagement, to be strategically and systematically arranged in such a way to best support the fulfillment of project objectives and long-term impacts and benefits of the project.

Ultimately, the project plan will enable Monarch Farms to create and deliver business value from its investments by employing proven, reliable, and well-established processes to meet its project objectives and wider strategic objectives.

1.6. General Objective

To formulate a Project Management Plan to Operationalize Monarch Farms Strategic Objectives.

1.7. Specific Objectives

1. To develop a Project Charter commissioning the existence of the project and conferring authority to the Project Manager to utilize organizational resources to project activities.

2. To develop a Scope Management Plan providing detailed outline of how all project elements will be defined, validated, and controlled to minimize scope creep and manage stakeholders' expectations.

3. To generate a Schedule Management Plan with guidelines for creating, managing, executing, monitoring, and controlling planned project activities to deliver project on time.

4. To produce a Cost Management Plan explaining how the costs of resources needed to complete project activities will be managed throughout the project lifecycle.

5. To develop a Quality Management Plan which identifies quality requirements for the project and its outputs and outlines how the project will deliver results that conform to defined requirements and meet customer satisfaction.

6. To generate a Resource Management Plan that guides project team on how required resources will be classified, distributed, administered, and released to bring project into successful fruition.

7. To create a Communication Management Plan which details the framework on how communication will be managed and controlled to enable transparency and collaboration that produce meaningful value to the project.

8. To map out a framework for Risk Management to help take informed decisions about the risks that affect project objectives.

9. To create a Procurement Management Plan documenting the approaches for acquiring, managing, and controlling externally sourced products, services, and results.

10. To create a Stakeholder Engagement Plan devising a systemic approach to identify stakeholders, needs, power and influence on the projects and to formulate strategies for interacting, communicating and managing these stakeholders' expectations.

2. THEORETICAL FRAMEWORK

2.1 Company/Enterprise Framework

2.1.1 Company/Enterprise Background

Monarch Farms was officially established and recognized as a registered business in St. Lucia on 28th May 2020 as an agricultural business. Five years prior to its incorporation, the Managing Director, Mr. Uriah Andree Jn Baptiste, resided in the British Virgin Islands where he noticed a lot of the agricultural produce consumed by the populace originated from neighboring islands such as St. Vincent and the Grenadines and Dominica. As a result, he conducted market research to gain a better understanding of their market and to assess the possibilities of tapping into that market by differentiating his products, services, and experience.

He later returned to his home country St. Lucia where he noticed that there was a chronic lack of support, both technical and financial, for farmers and that the agricultural business in St. Lucia was a dying commodity. Another compelling factor which gave rise to his movement, was the awareness of the number of agricultural products which were imported on a weekly basis in St. Lucia; many of which are grown or can be grown locally. Having a love and genuine passion for the field of agriculture, he embarked upon establishing Monarch Farms by taking a systematic holistic approach to farming, not only to maximize profits but to strategically open opportunities that would benefit the socioeconomic wellbeing of the St. Lucian society.

To increase profitability and generate greater efficiencies of scale, the Managing Director of Monarch Farms decided to form strategic partnerships with one hundred and forty-four (144) farmers island wide. This framework will enable greater coordination of a diverse production of crop types, which in turn would impact the sustainability in supply chain and realize growth in both farm-to-table and farm-to-market produce.

Monarch Farms aims to revamp the agricultural industry in St. Lucia by: [1] educating farmers on the importance of diversification; [2] creating logistics and support for farmers; [3] procuring equipment and material needed for farming efficiently; [4] creating an environment that is conducive for the development of young farmers; [5] increasing the awareness of agribusiness and associated roles to the populace; and [6] introducing sustainable, conservation and regenerative agriculture as the solution for environmental and ecological revitalization including the use of more effective, efficient and sustainable technology for planting and harvesting.

The Management of Monarch Farms is of the view that if we transform the mindsets of the younger generation and provide technical and financial support to smallholder farmers, improve the conditions of agricultural productivity in a resilient and sustainable way could be an effective way of contributing to poverty reduction and improved food security; two concepts which are intricately linked. Simultaneously, as mechanisms are in place to increase productivity and incomes of farmers, there are greater economic impacts to be realized by the State of St. Lucia.

Data collection is at the epicenter of everything that Monarch Farm does and is critical to the success of its business strategy. The concept of tagging farms is an innovative ideology which would allow the Management of Monarch Farms to [1] know what types of crops each farm produces; [2] know the dates of planting and harvesting of each farm and crop types; [3] project and quanitfy the amounts of produce for sale; [4] determine when to rotate and which crops to rotate with, to improve soil health and; [5] identify availability and accessibility of produce.

In addition, as a means of resolving the challenge that St. Lucia is faced with, that is with the market being saturated with high volumes of the same ‘seasonal’ produce, the data collection capacity will enable farmers to strategically cultivate crops at varying times of the year to enable a sustained and balanced flow of these produce year round. As a result of this, citizens would not have to incur exorbitant cost of imported produce due to the lack of local supply.

This could serve as a precursor to or a pilot project which farmers in St. Lucia can benefit from holistically. The dearth of data has been a major challenge for the agricultural sector in St. Lucia, similar to many of the other sectors within the Public Service of St. Lucia. Therefore, having an integrated and cohesive information platform with crucial information for all stakeholders including farmers or sellers and buyers could spur major development in the Agricultural industry. The adoption of this technology would help to enhance evidence based decisions, improve monitoring and evaluation of crop production and enable a proactive response approach in dealing with risks.

Monarch Farms is currently in its planning stage and has not benefited from the development of an integrated management plan. This management plan will therefore provide a roadmap for the successful implementation of its project, ensuring that each subsidiary plan is fully aligned with the strategic goals and objectives of the business to deliver real business value for itself and its stakeholders. It would also benefit from having a bird's eye view of the potential factors that could possibly endanger the progress of the project execution and to implement the necessary and appropriate corrective or preventive actions to lessen the impact or severity of any negative risks.

2.1.2 Mission and Vision Statements

The Mission and Vision Statements provided by the Managing Director of Monarch Farms are as follows:

Mission Statement

We are committed to revolutionizing and revitalizing the agricultural industry in St. Lucia by changing the youth's perception of the sector. Serving local, regional and international markets, we aspire to provide all our customers with the freshest produce and meats, employing ethical, environmentally friendly processes,

advanced climate-smart resilient agricultural technologies and practices for improved health and nutrition, food security and productivity; creating an avenue for empowerment and development for our employees, farmers, and communities to improve their livelihood by promoting sustainable and regenerative agriculture for a better, stronger, and more resilient St. Lucia.

Vision Statement

To become the leading entity in agricultural production in St. Lucia, by using the best livestock, agronomical and regenerative practices to produce high quantity and quality food to significantly reduce the food import bill and promote community empowerment.

2.1.3 Organizational Structure

To fulfill its mandate and effectively carry out its mission, Monarch Farms is organized in a hierarchical structure with a Managing Director at the helm. The Managing Director is responsible for guiding the strategic direction of the business. He is responsible for providing strategic leadership, oversight and management of the operations and performance of the organization.

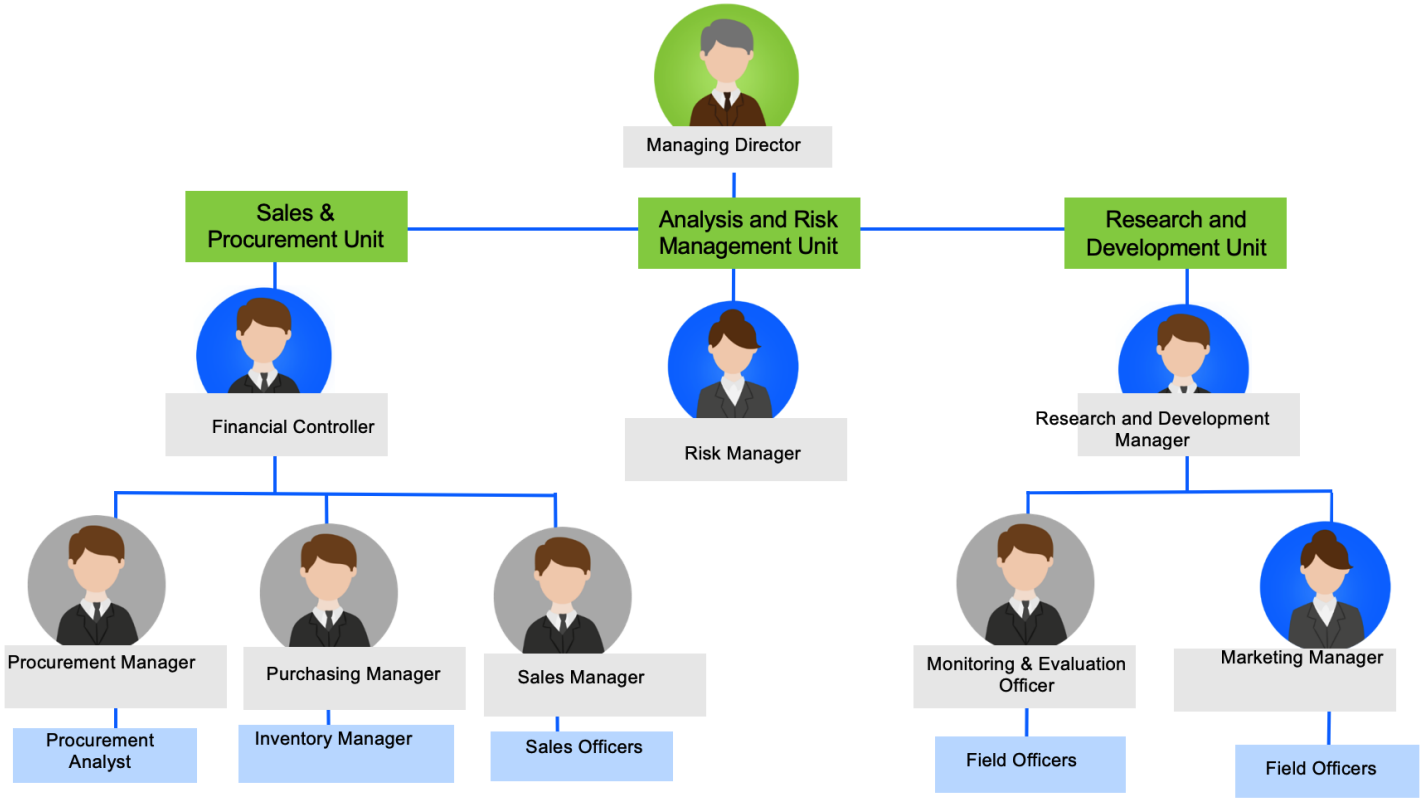
The farm is divided into three units to wit: - (1) Sales and Procurement; (2) Analysis and (3) Risk Management and Research and Development. These units are spearheaded by a Financial Controller, Risk Manager and Research and Development Manager respectively. Using this structured approach to manage the affairs of Monarch Farms is intended to create, maintain, and drive organizational value.

The integrative functions of the Sales and Procurement Unit include Supply Chain Management with responsibility for purchasing, operations, logistics, resource management, information flow, procurement, and securing strong supply base. The Analysis and Risk Management Unit is responsible for implementing, analyzing, and

maintaining sound risk management and internal control for effective business continuity; not just surviving but thriving. The Research and Development Unit has the general responsibility for promoting sustainable and regenerative practices in agriculture, agricultural productivity, keeping the business competitive by providing insights into new markets, cultivation, and production.

Figure 1 below is a diagrammatic representation of the organizational structure of Monarch Farms.

Figure 1 Organizational Structure – Monarch Farms (Source: Managing Director, Monarch Farms, 2022)



2.1.4 Products Offered

Monarch Farms offers a wide range of fresh produce and meat in keeping with international standards. Monarch Farms is committed to providing technical

assistance to farmers to enable growth and development in the field of agriculture and to offer programs dedicated to changing the mindset of youth about agriculture. They aim to provide logistics and support services to farmers, effective procurement management and direct access to markets, locally, regionally, and internationally.

2.2 Project Management Concepts

Principles of Project Management

The Project Management Institute offers twelve principles of Project Management in its latest edition of A Guide to the Project Management Body of Knowledge, (PMBOK® Guide), 2021.

Figure 2 Principles of Project Management (Source: PMBOK® Guide, 2021)

Principles of Project Management			
Be a diligent, respectful, and caring steward	Create a collaborative team	Effectively engage with stakeholders	Focus on value
Recognize, evaluate, and respond to system interaction	Demonstrate leadership behaviors	Tailor based on context	Build quality into processes and deliverables
Navigate complexity	Optimize risk responses	Embrace adaptability and resiliency	Enable change to achieve the envisioned future state

Note. From PMI. A Guide to the Project Management Book of Knowledge, Seventh Edition, by Project Management Institute (PMI), pg. 100. Copyright by PMI 2021.Permission not sought.

- **Principle 1**. Be a diligent, respectful and caring steward recommends that the Project Manager should approach his work with integrity, carefulness and persistence of effort in an earnest and honest manner.

- **Principle 2.** Create a collaborative team environment recommends that work should be done in a team setting where participation, involvement and engagement of team members are encouraged. Team members would feel a sense of appreciation and belongingness when they form part of the decision-making process.

- **Principle 3.** Effectively engage with stakeholders proposes that Project Managers should make a concerted effort to communicate with stakeholders on a regular basis. Stakeholders should be consulted from the early stages of the project not only to inform them of the project but also to gain support, advice and requirements. Effective engagement of stakeholders can make a notable difference in the progression and success of a project.

- **Principle 4.** Focus on value. This principle encourages the Project Manager and team to have value at the epicenter of their work, creating value for the business and delivering value to the customer. Project Managers must ensure that projects are aligned to the strategic objectives of the organization. They are to also determine whether it is fit for purpose and that its beneficiaries are satisfied for the outcome and obtain value for money.

- **Principle 5.** Recognize, evaluate, and respond to systems interaction means that Project Managers have to be cognizant of the fact that managing project should be done in a systematic approach. The processes are all interrelated and should work together to achieve the objectives of the project.

- **Principle 6.** Demonstrate leadership behavior. The Project Manager should possess the capability of influencing, motivating and inspiring team to achieve continued high performance.

- **Principle 7.** Tailor based on context. No two projects are the same therefore it is critical to adapt processes to suit the realities of the project at hand.

- **Principle 8.** Build quality into processes and deliverable. This suggests that there are quality controls embedded in processes; this would ensure that deliverables meet quality standards, they perform satisfactorily, conform to the requirements of stakeholders, and are fit for use.

- **Principle 9.** Navigate complexity means efforts such as setting up the appropriate organizational structure, diligently researching the program or project prior to approval, cultivating talents, fostering leadership, practicing effective communications, nurturing flexibility, being resilient, and applying critical thinking to implement appropriate, thoughtful action plans are necessary (PMI, 2014).

- **Principle 10.** Optimize Risk Reponses. Selecting appropriate risk responses to proactively deal with imminent risks.

- **Principle 11.** Embrace adaptability and resiliency. Understand that change is constant. Team members have to be able to be flexible enough to deal with changing conditions and when setbacks are experienced, they have the drive, determination and motivation to get back up.

- **Principle 12**. Enable change to achieve envisioned future state. Projects should not be managed so rigidly that it leaves no allowance or flexibility to incorporate changes. Notwithstanding, there should be a level of control to change requests.

Project Performance Domains

According to the PMI (2021) a project performance domain is a group of related activities that are critical for the effective delivery of project outcomes. Project performance domains are interactive, interrelated, and interdependent areas of focus that work in unison to achieve desired project outcomes. There are eight project performance domains to wit: Stakeholders, Team, Development Approach and Life Cycle, Planning, Project Work, Delivery, Measurement, and Uncertainty. PMI submits that together the performance domains form a unified whole to enable successful delivery of the project and its intended outcomes (PMI, 2021, p. 102). Figure 3 below shows a diagrammatic representation of the project performance domains.

Figure 3 Project Performance Domains (Source: PMBOK® Guide, 2021)

Note. Adapted from PMI. A Guide to the Project Management Book of Knowledge, Seventh Edition, by Project Management Institute (PMI), pg. 100. Copyright by PMI 2021.Permission not sought.

Stakeholder Performance Domain

The Stakeholder Performance Domain addresses activities and functions associated with stakeholders. Effective stakeholder interaction contributes to successful project outcomes. Stakeholder engagement includes implementing strategies and actions to promote productive involvement of stakeholders in project decision making and implementation.

Team Performance Domain

The Team Performance Domain addresses activities and functions associated with the people who are responsible for producing project deliverables that realize business outcomes. The project team is a set of individuals performing the work of

the project to achieve its objectives. An environment can be established to support the team in evolving into a high-performance team. This includes fostering team development, encouraging leadership behaviors from all project team members and sharing ownership for the outcomes.

Development Approach & Life Cycle Performance Domain

The Development Approach & Life Cycle Performance Domain addresses activities and functions associated with the development approach, cadence and life cycle phases of the project. The project deliverables determine the most appropriate development approach such as a predictive, adaptive, or hybrid approach. The deliverables and the development approach influence the number and cadence for project deliveries. The development approach and delivery cadence influence the project life cycle and its phases.

Planning Performance Domain

The Planning Performance Domain addresses activities and functions associated with the initial, ongoing, and evolving organization and coordination necessary for delivering project deliverables and outcomes. Planning organizes, elaborates, and coordinates work throughout the project. Planning takes place up front and throughout the project. The amount, timing, and frequency varies depending on the product, development approach, environment, and stakeholders.

Project Work Performance Domain

The Project Work Performance Domain addresses activities and functions associated with establishing project processes, managing physical resources, and fostering a learning environment. Project work is associated with establishing the processes and performing the work to enable the project team to deliver the expected value and outcomes. Project work includes communication, engagement, managing physical resources, procurements, and other work to keep project operations running smoothly.

Delivery Performance Domain

The Delivery Performance Domain addresses activities and functions associated with delivering the scope and quality that the project was undertaken to achieve. Projects support strategy execution and advancing business objectives. Project delivery focuses on meeting requirements, scope, and quality expectations to deliver the expected outputs that will drive intended outcomes. Projects provide business value by developing new products or services, solving problems, or fixing things that were defective or sub-optimal. Projects may use a delivery approach that supports releasing deliverables throughout the project life cycle, at specific points, or at the end of the project. Business value often continues to be captured long after the project has ended.

Measurement Performance Domain

The Measurement Performance Domain addresses activities and functions associated with assessing project performance and taking appropriate actions to maintain acceptable performance. Measurement involves assessing project performance and implementing appropriate responses to maintain optimal performance. The Measurement Performance Domain evaluates the degree to which the project deliveries and performance are meeting the intended outcomes. Having timely and accurate information about delivery and performance allows the team to learn and determine the appropriate action to take to address current or expected variances from the desired performance.

Uncertainty Performance Domain

The Uncertainty Performance Domain addresses activities and functions associated with risk and uncertainty. Projects exist in environments with varying degrees of uncertainty, and uncertainty presents threats and opportunities that project teams explore and assess and then decide how to handle. Uncertainty, in the broadest sense, is a state of not knowing or unpredictability. There are many nuances to uncertainty, such as: risk associated with not knowing future events, ambiguity associated with not being aware of current or future conditions, complexity associated with dynamic systems with unpredictable outcomes, and many others.

Project

Kernez (2017) avers that a project can be considered to be any series of activities and tasks that: have a specific objective, with a focus on the creation of business value, to be completed within certain specifications; have defined start and end dates; have funding limits (if applicable); consume human and nonhuman resources (i.e., money, people, equipment) and are multifunctional (i.e., cut across several functional lines). According to the Project Management Institute [PMI], a project is defined as a temporary endeavor undertaken to create a unique product, service, or result (Project Management Institute, 2017, p. 35). As defined by the Project Management Association of Japan [PMAJ], a project is as a value creation undertaking based on a project mission which is completed in a given or agreed timeframe and under constraints, including resources and external circumstances (PMAJ, 2017 p. 132).

Based on the definitions proffered above, the inherent primary attributes which constitute a project are: [1] uniqueness of deliverable - no two projects are identical, [2] temporary nature - definite start and end times, [3] vehicle for change – opportunity for value creation, and [4] uncertainty – dynamic environment.

The project for this Final Graduation Project [FGP] is a Project Management Plan which has an agreed timeframe of twelve weeks, commencing 19 September 2022. The Project Management Plan for Monarch Farms is a temporary undertaking earmarked for the production of a comprehensive integrated plan to enable the management of Monarch Farms to incorporate conservative agricultural practices in its day-to-day operations. This initiative will enable Monarch Farms to create and deliver strategic business value for itself and its stakeholders and to ensure the achievement of intended strategic objectives and benefits, both tangible and intangible.

Project Management

The International Organization for Standardization [ISO] 21502:2020 suggests that Project management integrates the practices included in this document to direct, initiate, plan, monitor, control and close the project, manage the resources assigned to the project and motivate those individuals involved in the project to achieve the project's objectives (ISO 21502:2020, p. 6). PMI (2017) offers another definition for Project Management which states "project management is the application of knowledge, skills, tools, and techniques to project activities to meet the project requirements. It is accomplished through the appropriate application and integration of the project management processes identified for the project" (PMI, 2017, p.40). Axelos Global Best Practice (2017): Managing Successful Projects with PRINCE2 ® submits that Project Management is the planning, delegating, monitoring and control of all aspects of the project, and the motivation of those involved, to achieve the project objectives within the expected performance targets for time, cost, quality, scope, benefits and risk.

The Japanese authority on Project Management puts forward their own definition of Project Management, to wit: - Project management is the professional capability to deliver with due diligence, a project product that fulfills a given mission, by organizing a dedicated project term, effectively combining the most appropriate technical and managerial method and techniques and devising the most efficient and effective work breakdown and implementation routes (PMAJ, 2017 p. 133).

For the purposes of this Final Graduation Project, the author utilizes the guidelines and processes advanced by the Project Management Institute, Sixth Edition of A Guide to the Project Management Body of Knowledge, [PMBOK® Guide].

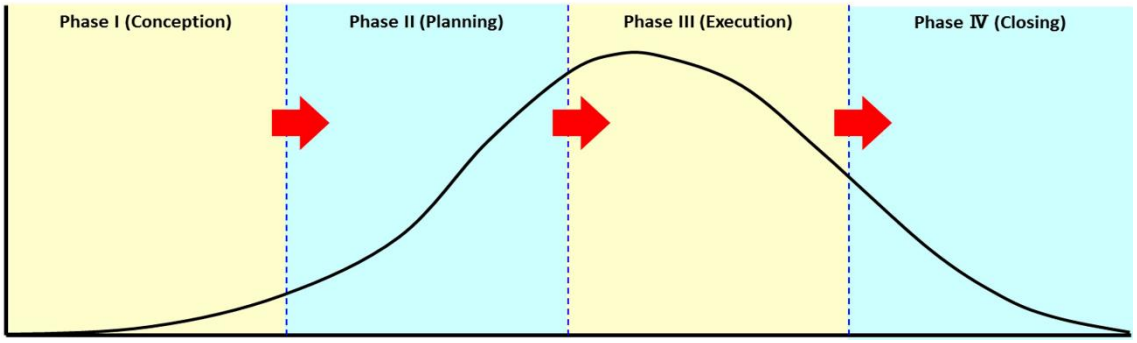
Project Life Cycle

A life cycle according to the Association for Project Management [APM] is a framework comprising a series of distinct high-level stages required to transform an idea or concept into reality in an orderly and efficient manner. It offers a systematic

and organized way to undertake project-based work and can be viewed as the structure underpinning deployment (APM, 2019).

PMI (2017) describes a project life cycle as the series of phases that a project passes through from its start to its completion. It provides the basic framework for managing the project (PMI, 2017, p. 49). In general terms, a project life cycle is a model of the progression of a project of its entire lifespan from conception to completion. Figure 4 illustrates a generic progression of a life cycle of any project.

Figure 4 Generic Progression of the Life Cycle of a Project (Source: PMAJ, 2017)



Note. From P2M. A Guide of Program and Project Management for Enterprise Innovation, International Edition, by Project Management Association of Japan (PMAJ), pg. 143. Copyright by the authors 2017.Permission not sought.

This basic framework applies regardless of the specific project work or methodology applied. The Project Management life cycle has five phases: initiation, planning, executing, monitoring and controlling and closing. Some authorities highlight four phases by incorporating monitoring and controlling with execution. Each phase has its associated activities or processes to produce a value driven deliverable or outcome.

Within a project life cycle, there are generally one or more phases that are associated with the development of the product, service, or result. These are called a development life cycle. Development life cycles can be predictive (plan-driven), adaptive (agile), iterative, incremental, or a hybrid (PMI, 2017, p. 654). Predictive

project life cycles are characterized by an emphasis on specification of requirements and detailed planning during the beginning phases of a project. Detailed plans based on known requirements and constraints may reduce risk and cost. Milestones for key stakeholder involvement are also planned. As execution of the detailed plan progresses, the monitoring and controlling processes focus on constraining changes that might impact the scope, schedule, or budget. Based on the definition of a predictive development life cycle, it can be concluded that the Final Graduation Project will follow a predictive life cycle.

Unlike a predictive methodology, a highly adaptive or agile life cycles for projects is characterized by progressive elaboration of requirements based on short iterative planning and executing cycles. Risk and cost are reduced by progressive evolution of initial plans. Key stakeholders are continuously involved and provide frequent feedback which enables responding to changes more quickly and also leads to better quality (PMI, 2017, p. 654).

Project Management Processes

Managing projects successfully from initiation to closure requires the application of a set of project management activities or processes which are inextricably linked to produce a desired output. Each phase or stage of the project's life cycle has a series of interrelated processes which work together to achieve a specific project objective. Processes may contain overlapping activities that occur throughout the project (PMI, 2017, p. 52). The Project Management Institute highlights five Project Management Process Groups which is a logical grouping of processes applied as a project transition from one phase to the next in the project life cycle to wit: Initiating Process Group, Planning Process Group, Executing Process Group, Monitoring and Controlling Process Group and Closing Process Group.

During this FGP only two of the five process groups will be applied in order to achieve the specific objectives of the project, namely: Initiating Process Group, and Planning Process Group. According to the PMI (2017), the Initiating Process Group are those processes performed to define a new project or a new phase of an existing project

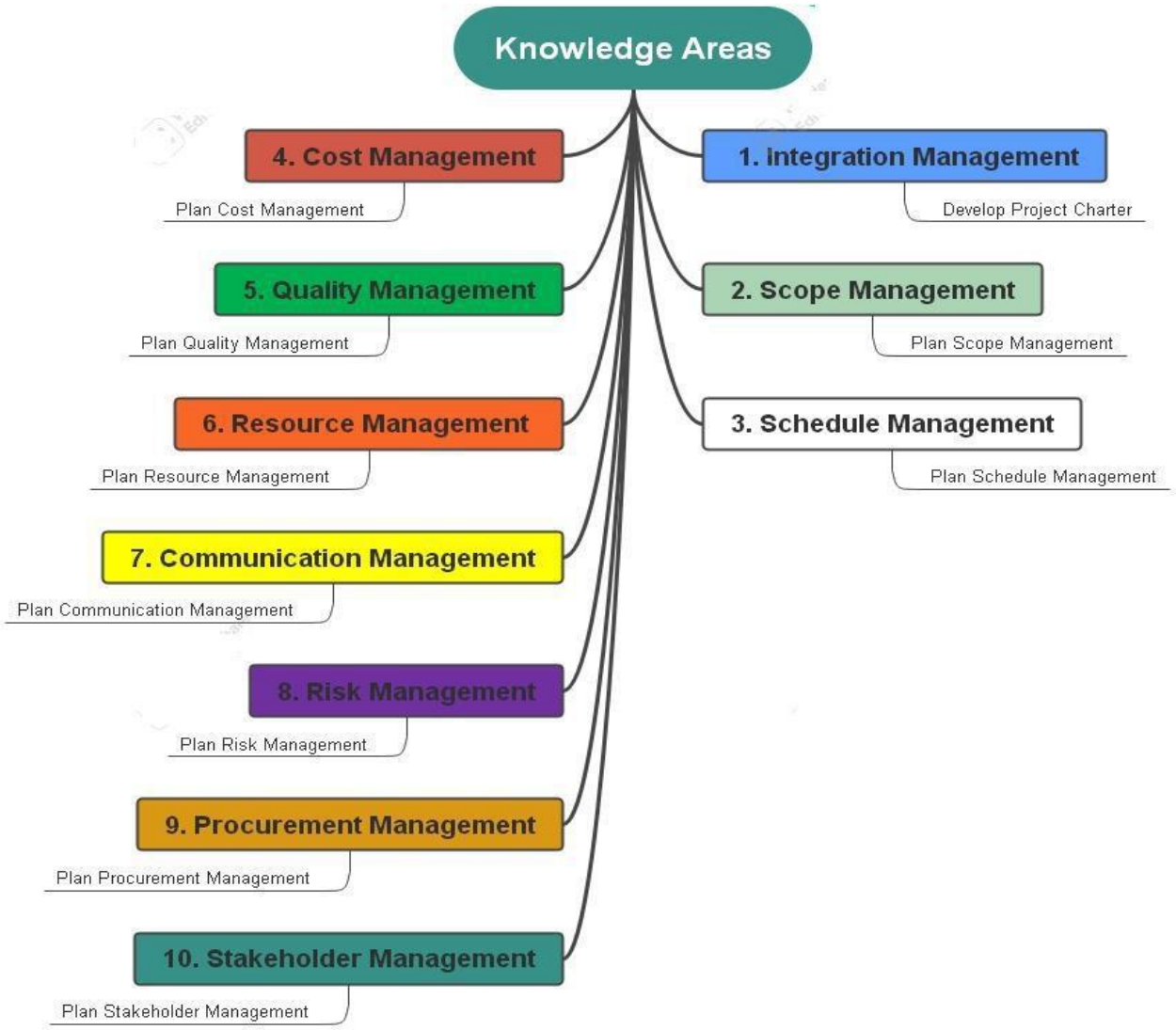
by obtaining authorization to start the project or phase. Developing a Project Charter for the FGP falls squarely under this process group. The other specific objectives of the FGP which speaks to creating subsidiary plans for each knowledge area are activities under the Planning Process Group. The Planning Process Group are those processes required to establish the scope of the project, refine the objectives, and define the course of action required to attain the objectives that the project was undertaken to achieve (PMI, 2017, p. 53).

Project Management Knowledge Areas

Knowledge domains or areas are the core areas of knowledge that underpin a professional discipline which must be understood in order to perform competently with demonstrable skill, knowledge and acumen in the field of work. The Project Management Institute describes a knowledge area as an identified area of project management defined by its knowledge requirements and described in terms of its component processes, practices, inputs, outputs, tools, and techniques (PMI, 2017). PMI identifies ten knowledge management areas that a Project Manager need to be proficient in, to successfully manage a project viz: - [1.] Project Integration Management; [2] Project Scope Management; [3] Project Schedule Management; [4] Project Cost Management; [5] Project Quality Management; [6] Project Resource Management; [7] Project Communication Management; [8] Project Risk Management; [9] Project Procurement Management; and [10] Project Stakeholder Management. The ten knowledge areas, though interrelated, have distinct functions, applicable processes tools and techniques.

Completing the Integrated Project Management Plan for Monarch Farms in fulfillment of this FGP requires the creation of a project document for each of the abovementioned knowledge areas. Whereas a Project Charter will be developed under the Integrated Project Management Knowledge Area a project plan coinciding with the names of the remaining respective knowledge areas will be developed. Figure 5 below shows the process to be completed under each knowledge area to achieve the specific objectives abovementioned.

Figure 5 Project Management Knowledge Areas (Source: Sanisha Maximin, 2022)



Note. Adapted From A Guide to Project Management Book of Knowledge, Sixth Edition, by Project Management Institute (PMI), 2017

2.3 Other Applicable Concepts Related to the Project Topic and Context

2.3.1 Strategy

Lafley and Martin (2013) describe strategy as an integrated set of choices that uniquely positions the firm in its industry so as to create sustainable advantage and

superior value relative to the competition. These experts on Strategy suggests that strategy is about making specific choices to win in the marketplace. This phenomenon is supported by Kim and Mauborgne (2005) in their book Blue Ocean Strategy. According to the duo, Blue Ocean Strategy is a concept in strategic management directed at finding new business and value propositions. While venturing beyond existing industry space, businesses have to understand how to succeed in this novel space, by systematically maximizing opportunities and simultaneously minimizing risks (Kim and Mauborgne, 2005). Survival in any industry requires staking out and venturing into new market spaces and creating products and or services that can grow profitably and offer high value at lower costs for both customers and companies. Businesses have to change their thinking patterns or mindsets to set themselves apart from competition and chart a new path for their businesses instead of being at loggerheads with companies and customers in the same industries.

2.3.2 Conservation Agriculture

The Food and Agriculture Organization of the United Nations [FAO] defines Conservation Agriculture [CA] as a farming system that can prevent losses of arable land while regenerating degraded lands. This authority on Agriculture submits that Conservative Agriculture promotes maintenance of a permanent soil cover, minimum soil disturbance, and diversification of plant species. It enhances biodiversity and natural biological processes above and below the ground surface, which contribute to increased water and nutrient use efficiency and to improved and sustained crop production. In its 2017 Fact Sheet on Conservative Agriculture, FAO highlights three main principles of CA namely:

[1] Minimum mechanical soil disturbance (i.e., no tillage) through direct seed and/or fertilizer placement. This reduces soil erosion and preserves soil organic matter.

[2] Permanent soil organic cover (at least 30 percent) with crop residues and/or cover crops. Maintaining a protective layer of vegetation on the soil surface

suppresses weeds, protects the soil from the impact of extreme weather patterns, helps to preserve soil moisture, and avoids compaction of the soil.

[3] Species diversification through varied crop sequences and associations involving at least three different crops. A well-designed crop rotation promotes good soil structure, fosters a diverse range of soil flora and fauna that contributes to nutrient cycling and improved plant nutrition, and helps to prevent pests and diseases.

Due to increased environmental concerns, there is renewed interest in the formulation of alternative strategies for enhancing development activities, including agriculture, that take cognizance of the needs of smallholder farmers and of long-term investment in environmental sustainability that is also affordable and accessible to smallholders (Kassam, A., Mkomwa, S., & Friedrich, T., 2017, p.3). In recent times, Conservative Agriculture has demonstrated its potential in addressing climate-change challenges and it has also been shown to contribute to climate-change adaptation and mitigation, biodiversity conservation and delivery of ecosystem and societal services such as clean water, carbon sequestration and control of soil erosion and degradation (Kassam, A., Mkomwa, S., & Friedrich, T., 2017, p. 3).

2.3.3 Sustainable Development

For more than twenty (20) years, sustainable development has been the topic of discussion of world leaders. This core and central theme elaborated on the Millennium Development Goals which ended in 2015 and gave rise to the adoption of the Sustainable Development Goals [SDGs]. The Sustainable Development Goals are the blueprint to achieve a better and more sustainable future for all. They address the global challenges we face, including poverty, inequality, climate change, environmental degradation, peace, and justice (United Nations, 2022).

Sustainable Development as described by the European Commission, means meeting the needs of the present whilst ensuring future generations can meet their own needs. It has three pillars: economic, environmental and social. To achieve sustainable development, policies in these three areas have to work together and support each other.

The 2030 Agenda for Sustainable Development, which includes 17 Goals and 169 targets, sets out an ambitious vision for sustainable development and integrates its economic, social and environmental dimensions. This new Agenda enshrines the expectations, aspirations and priorities of the international community for the next 15 years (Bárcena, A, Cimoli, M., García-Buchaca, R., Yáñez, L.F., & Pérez, R. 2018).

The main objective of Monarch Farms is closely related to Goal 2 of the Sustainable Development Goals which speaks to ending hunger, achieving food security, improving nutrition and promoting sustainable agriculture. According to the authors Bárcena, A, Cimoli, M., García-Buchaca, R., Yáñez, L.F., & Pérez, R. in their publication: 2030 Agenda for Sustainable Development, An Opportunity for Latin America and the Caribbean, the food and agriculture sector offers key solutions for development and is central for hunger and poverty eradication.

2.3.4 Regenerative Agriculture

Regenerative agriculture is both an attitude and a suite of practices that restores and maintains soil health and fertility, supports biodiversity, protects watersheds, and improves ecological and economic resilience. It focuses on creating the conditions for life above and below ground and takes its cues from nature, which has a very long track record of successfully growing things (White, 2020). The literal meaning of “regeneration” when applied to agriculture means reconditioning a land to a higher state after it has been utilized for crop production using a variety of technical management practices (McLennon, E., Dari, B., Sihi, G. and Kankarla, V. 2021).

The notion of success for farmers who focus on regenerative agriculture goes beyond yield and farm size. Success includes things like joy and happiness, the number of families they feed, watching how the land regenerates and flourishes, the

money saved from not purchasing chemical inputs, the debt avoided by repurposing old equipment, and the relationships built with community members (NRDC, 2021).

The National Resources Defence Council [NRDC] (2021) asserts the following factors form the principles for success in regenerative agriculture: (1) nurturing the relationship with and across ecosystems - between people, lands, waterbodies, livestock, wildlife, and even microbial life in soil.; (2) prioritizing soil health - limit mechanical soil disturbance, instead feed and preserve the biological structures that bacteria, fungi, and other soil microbes build underground—which provide above-ground benefits in return; (3) reducing reliance on synthetic inputs such as herbicides, pesticides, and chemical fertilizers and; (4) nurturing communities and reimagine economies -growing healthy food for their families and communities.

The practice of regenerative agriculture is especially beneficial for the small farming system since it lacks the necessary financial resources for more intensive agricultural production systems. Whereas environment, climate, and financial resources have had diverse effects on agriculture infrastructure in developing countries they still have the same supports and infrastructure for regenerative agriculture (McLennon, E., Dari, B., Sihi, G. and Kankarla, V. 2021). The significance of regenerative agriculture is that it adopts goals such as sustainability through water and nutrient recycling and preservation (McLennon, E., Dari, B., Sihi, G. and Kankarla, V. 2021. Its multiple co-benefits, including the production of healthy, nutritious food, means it will be a critical component of our response to rising climate instability (White, 2020).

3. METHODOLOGICAL FRAMEWORK

To facilitate the development of the Final Graduation Project, this section sets out the Methodological Framework to show alignment among the research question, logic of inquiry, methods and procedure of data collection and analysis. McMeekin, N., Wu, O., Germeni, E. & Briggs, A. (2020) provides a working definition of Methodological Framework suggesting that it is a tool to guide the developer through a sequence of steps to complete a procedure. Thus, the methodological framework for this Final Graduation Project includes information sources, research methods, and an analysis of the tools, assumptions, constraints, and deliverables used in the FGP.

On account of this being an Applied Research Final Graduation Project, implies that applied research is imperative to the development of this study. Applied research as defined by the Organization for Economic Cooperation and Development [OCED] is the original investigation undertaken, in order to acquire new knowledge which is directed primarily towards a specific, practical aim or objective (OECD 2015 p. 51). It is undertaken either to determine possible uses for the findings of basic research or to determine new methods or ways of achieving specific and predetermined objectives. It involves considering the available knowledge and its extension in order to solve actual problems (OECD. 2015 p. 51). To enhance the analytical capacity and study credibility, the appropriate methodological support is utilized to meet study objectives.

To test the research question and hypothesis necessitated the conduct and application of extensive, detailed research on areas of study. Research in common parlance refers to a search for knowledge (Patel, M. & Patel, N., 2019). It is a search for knowledge to get new information about a topic of interest. Kumar (2019) contends that research is not only a set of skills but a way of thinking in an attempt to further explore, understand and explain one's observations, draw conclusions and inferences to enhance practice skill and knowledge base. It provides the information and knowledge needed to solve problems and make informed decisions.

3.1 Information Sources

Development of the Final Graduation Project requires the synthesis of research and credible information. Accordingly, the sources of information used in the project must be reliable and credible to give the overall project objectivity, authority, accuracy, and reliability.

IGI Global (2022) posits that **Sources of Information** include documents, key people, books, and so forth that can provide useful information about the matter being studied; and an **Information Source** is a person, thing, or place from which information comes, arises, or is obtained. Information sources can be classified under two headings: primary and secondary sources.

3.1.1 Primary Sources

Seton Hall University Library (2022) describes Primary Source as a first-hand or contemporary account of an event or topic. They are the most direct evidence of a time or event because they were created by people or things that were there at the time or event. These sources have not been modified by interpretation and offer original thought or new information. Primary sources are original materials, regardless of format. The University of New South Wales [UNSW] Sydney offers a similar interpretation of a Primary Source.

According to UNSW (2022) a Primary source provide a first-hand account of an event or time period and are considered to be authoritative. They represent original thinking, reports on discoveries or events, or they can share new information. Often these sources are created at the time the events occurred, but they can also include sources that are created later. They are usually the first formal appearance of original research (UNSW Library, 2022).

Examples of primary sources include but not limited to: patents, diaries, newspaper articles, artefacts, photographs, transcripts of conversations or interviews, speeches, music, art, legislation, policy, memoirs, autobiographies, manuscript

material, journals, letters, speeches, scrapbooks, published books, newspapers, government publications, oral histories, records of organizations.

Chart 1 highlights the different primary sources which will be utilized during the development of the Final Graduation Project.

3.1.2 Secondary Sources

Secondary sources were created by someone who did not experience first-hand or participate in the events or conditions you're researching (Harvard University Library 2022). A secondary source interprets and analyses primary sources. Some types of secondary source include Textbooks; journal articles; histories; criticisms; commentaries; encyclopaedias, dictionaries, biographies, dissertations, newspaper editorial/opinion pieces. Secondary sources according to UNSW (2022) offer an analysis, interpretation or a restatement of primary sources and are considered to be persuasive. They often involve generalization, synthesis, interpretation, commentary or evaluation in an attempt to convince the reader of the creator's argument. They often attempt to describe or explain primary sources.

The summary of information sources shown below in Chart 1 provides details of the secondary sources of information which will be used in the Final Graduation Project.

Chart 1 Information Sources (Source: Sanisha Maximin, 2022)

Objectives	Information sources	
	Primary	Secondary
1. To develop a Project Charter commissioning the existence of the project and conferring authority to the Project Manager to utilize organizational resources to project activities	Interviews, meetings, legislations, policy documents, grant proposal, email exchange	Textbooks, journal articles, encyclopaedias, dictionaries, knowledge area guides

Objectives	Information sources	
	Primary	**Secondary**
2. To develop a Scope Management Plan providing detailed outline of how all project elements will be defined, validated, and controlled to minimize scope creep and manage stakeholders' expectations.	Project Charter, email conversations, interviews, meetings, legislation, policies, records of Organization such as Grant Proposal, Company Profile, newspaper articles, conference papers, technical papers, regulatory documents such as laws, statutes	Textbooks, journal articles, commentaries, encyclopaedias, opinion pieces, government publications, websites, knowledge area guides
3. To generate a Schedule Management Plan with guidelines for creating, managing, executing, monitoring, and controlling planned project activities to deliver project on time.	Project Charter, email conversations, interviews, meetings, legislation, policies, records of Organization such as Grant Proposal, Company Profile, newspaper articles, conference papers, technical papers, regulatory documents such as laws, statutes.	Textbooks, journal articles, commentaries, encyclopaedias, opinion pieces, government publications, websites, knowledge area guides

Objectives	Information sources	
	Primary	**Secondary**
4. To produce a Cost Management Plan explaining how the costs of resources needed to complete project activities will be managed throughout the project lifecycle.	Project Charter, email conversations, interviews, meetings, legislation, policies, records of Organization such as Grant Proposal, Company Profile, newspaper articles	Textbooks, journal articles, commentaries, encyclopaedias, opinion pieces, government publications, websites, knowledge area guides
5. To develop a Quality Management Plan which identifies quality requirements for the project and its outputs and outlines how the project will deliver results that conform to defined requirements and meet customer satisfaction.	Project Charter, email conversations, interviews, meetings, legislation, policies, records of Organization such as Grant Proposal, Company Profile, newspaper articles	Textbooks, journal articles, commentaries, encyclopaedias, opinion pieces, government publications, websites, knowledge area guides
6. To generate a Resource Management Plan that guides project team on how required resources will be classified, distributed, administered, and released to bring project into successful fruition.	Project Charter, email conversations, interviews, meetings, legislation, policies, records of Organization such as Grant Proposal, Company Profile, newspaper articles	Textbooks, journal articles, commentaries, encyclopaedias, opinion pieces, government publications, websites, knowledge area guides

Objectives	Information sources	
	Primary	**Secondary**
7. To create a Communication Management Plan which details the framework on how communication will be managed and controlled to enable transparency and collaboration that produce meaningful value to the project.	Project Charter, email conversations, interviews, meetings, legislation, policies, records of Organization such as Grant Proposal, Company Profile, newspaper articles	Textbooks, journal articles, commentaries, encyclopaedias, opinion pieces, government publications, websites, knowledge area guides
8. To map out a framework for risk management to help take informed decisions about the risks that affect project objectives.	Project Charter, email conversations, interviews, meetings, legislation, policies, records of Organization such as Grant Proposal, Company Profile, newspaper articles	Textbooks, journal articles, commentaries, encyclopaedias, opinion pieces, government publications, websites, knowledge area guides
9. To create a Procurement Management Plan documenting the approaches for acquiring, managing, and controlling externally sourced products, services, and results.	Project Charter, email conversations, interviews, meetings, legislation, policies, records of Organization such as Grant Proposal, Company Profile, newspaper articles	Textbooks, journal articles, commentaries, encyclopaedias, opinion pieces, government publications, websites, knowledge area guides

Objectives	Information sources	
	Primary	Secondary
10. To create a Stakeholder Engagement Plan devising a systemic approach to identify stakeholders, needs, power and influence on the projects and to formulate strategies for interacting. communicating and managing these stakeholders' expectations.	Project Charter, email conversations, interviews, meetings, legislation, policies, records of Organization such as Grant Proposal, Company Profile, newspaper articles	Textbooks, journal articles, commentaries, encyclopaedias, opinion pieces, government publications, websites, knowledge area guides

3.2 Research Methods

Before delving into what Research Methods are it is important to understand the meaning of Research Methodology. The Department of Library Services of the University of Pretoria (2022) posits that a Research Methodology can be understood as a way to systemically solve or answer the research problem. Thus essentially, it can be understood as the process of studying how research is done in a scientific manner. Through the methodology, we study the various steps that are generally adopted by a researcher in studying his/her research problem and the underlying logic behind them.

The selection of the research method is crucial for what conclusions one can make about a phenomenon. It affects what one can say about the cause and factors influencing the phenomenon (University of Pretoria, 2022).

Fundamentally, Research Methods refers to the ways of collecting data. Methods according to the University of Western Australia, are the specific approach to collecting your data. This could include: ▶• Interviews ▶• Surveys ▶• Focus groups ▶• Experiments ▶• Case studies ▶• Observational studies ▶• Online data collection.

Research Methods refers to the tools that one uses to do research. These are the tools that will enable you to collect the data to answer a research question (Hammond, 2022). These can either be qualitative or quantitative or mixed (University of Pretoria, 2022).

3.2.1 Qualitative Research Methods

Qualitative methods deal with data that are not presented in countable form, for example documents, interview transcripts, and pictures, and these data need techniques such as coding and content analysis in order to be organized and analyzed. Qualitative methods feature strongly in methodologies such as life history, narrative enquiry, case study, and ethnography which tend to help describe and explain local rather than general conditions (Hammond, 2022).

3.2.2 Quantitative Research Methods

The University of Pretoria (2022) submits quantitative methods examines numerical data and often requires the use of statistical tools to analyze data collected. This allows for the measurement of variables and relationships between them can then be established. This type of data can be represented using graphs and tables (University of Pretoria, 2022). Hammond (2022) opines that quantitative methods are generally seen as dealing with the collecting and measuring of data in countable form, for example, test scores, Likert scales, frequency of events or incidents and so on. Quantitative methods give the general picture, by, for example, showing the spread of opinion or behavior within a group, and they are often associated with surveys, experimental methods, and hypothesis testing.

3.2.3 Mixed Research Methods

In some forms of research, both quantitative and qualitative data are collected, analyzed, and interpreted. Instrument data may be augmented with open-ended observations, or census data may be followed by in-depth exploratory interviews. In this case of mixing methods, the researcher makes inferences across both the quantitative and qualitative databases (Creswell & Creswell, 2018).

3.2.4 Relationship Between Research Methods and Research Question

In analyzing or answering the research question "How beneficial is a Project Management Plan for the successful implementation of Monarch Farms business strategy" it is important to utilize both quantitative and qualitative research methods.

Chart 2 gives an indication of the utility of the research methods in relation to the specific objectives of the project.

Chart 2 Research Methods (Source: Sanisha Maximin, 2022)

Objectives	Research Methods	
	Quantitative Research Method	Qualitative Research Method
1. To develop a Project Charter commissioning the existence of the project and conferring authority to the Project Manager to utilize organizational resources to project activities.		The Project Charter was developed using documentary data from the management of Monarch Farms. Data was collected and analyzed through the conduct of one-on-one interviews with the MD of Monarch Farms. It also included using reference materials such as books, journals and other credible sources of information on the fields of study and associated related concepts.

Objectives	Research Methods	
	Quantitative Research Method	**Qualitative Research Method**
2. To develop a Scope Management Plan providing detailed outline of how all project elements will be defined, validated, and controlled to minimize scope creep and manage stakeholders' expectations.		The Scope Management Plan was developed using documentary data from the management of Monarch Farms. Data was collected and analyzed through the conduct of one-on-one interviews with the Managing Director of Monarch Farms. It also included using reference materials such as books, journals and other credible sources of information on the fields of study and associated related concepts.
3. To generate a Schedule Management Plan with guidelines for creating, managing, executing, monitoring, and controlling planned project activities to deliver project on time.		The Schedule Management Plan was developed using documentary data from the management of Monarch Farms. Data was collected and analyzed through the conduct of one-on-one interviews with the Managing Director of Monarch Farms. It also included using reference materials such as books, journals and other credible sources of information on the fields of study and associated related concepts.

Objectives	Research Methods	
	Quantitative Research Method	**Qualitative Research Method**
4. To produce a Cost Management Plan explaining how the costs of resources needed to complete project activities will be managed throughout the project lifecycle.		The Cost Management was developed using documentary data from the management of Monarch Farms. Data was collected and analyzed through the conduct of one-on-one interviews with the Managing Director of Monarch Farms. It also included using reference materials such as books, journals and other credible sources of information on the fields of study and associated related concepts.
5. To develop a Quality Management Plan which identifies quality requirements for the project and its outputs and outlines how the project will deliver results that conform to defined requirements and meet customer satisfaction.	Quantitative Research Methods were used to quantify the opinions, attitudes, behaviors, perceptions of intended beneficiaries, target market and customers. Questionnaires and surveys were administered to gain a deeper insight into the how the public thinks, and to determine the type of audience / target market Monarch Farms will be catering to.	The Quality Management Plan was developed using documentary data from the management of Monarch Farms. Data was collected and analyzed through the conduct of one-on-one interviews with the Managing Director of Monarch Farms. It also included using reference materials such as books, journals and other credible sources of information on the fields of study and associated related concepts.

Objectives	Research Methods	
	Quantitative Research Method	**Qualitative Research Method**
6. To generate a Resource Management Plan that guides project team on how required resources will be classified, distributed, administered, and released to bring project into successful fruition.		The Resource Management Plan was developed using documentary data from the management of Monarch Farms. Data was collected and analyzed through the conduct of one-on-one interviews with the Managing Director of Monarch Farms. It also included using reference materials such as books, journals and other credible sources of information on the fields of study and associated related concepts.
7. To create a Communication Management Plan which details the framework on how communication will be managed and controlled to enable transparency and collaboration that produce meaningful value to the project.	These were used to quantify the opinions, attitudes, behaviors, perceptions of intended beneficiaries, target market and customers. Questionnaires and surveys were administered to gain a deeper insight into the how the public thinks, and to determine the type of audience / target market Monarch Farms will be catering to.	The Communication Management Plan was developed using documentary data from the management of Monarch Farms. Data was collected and analyzed through the conduct of one-on-one interviews with the Managing Director of Monarch Farms. It also included using reference materials such as books, journals and other credible sources of information on the fields of study and associated related concepts.

Objectives	Research Methods	
	Quantitative Research Method	**Qualitative Research Method**
8. To map out a framework for risk management to help take informed decisions about the risks that affect project objectives.	Quantitative Research Methods were used to quantify the opinions, attitudes, behaviors, perceptions of intended beneficiaries, target market and customers . Questionnaires and surveys were administered to gain a deeper insight into the how the public thinks, and to determine the type of audience / target market Monarch Farms will be catering to.	The Risk Management Plan was developed using documentary data from the management of Monarch Farms. Data was collected and analyzed through the conduct of one-on-one interviews with the Managing Director of Monarch Farms. It also included using reference materials such as books, journals and other credible sources of information on the fields of study and associated related concepts.
9. To create a Procurement Management Plan documenting the approaches for acquiring, managing, and controlling externally sourced products, services, and results.		This plan was developed using documentary data from the management of Monarch Farms. Data was collected and analyzed through the conduct of one-on-one interviews with the Managing Director of Monarch Farms. It also included using reference materials such as books, journals and other credible sources of information on the fields of study and associated related concepts.

Objectives	Research Methods	
	Quantitative Research Method	**Qualitative Research Method**
10. To create a Stakeholder Engagement Plan devising a systemic approach to identify stakeholders, needs, power and influence on the projects and to formulate strategies for interacting. communicating and managing these stakeholders' expectations.	Quantitative Research Methods were used to quantify the opinions, attitudes, behaviors, perceptions of intended beneficiaries, target market and customers. Questionnaires and surveys were administered to gain a deeper insight into the how the public thinks, and to determine the type of audience / target market Monarch Farms will be catering to.	The Stakeholder Engagement Plan was developed using documentary data from the management of Monarch Farms. Data was collected and analyzed through the conduct of one-on-one interviews with the Managing Director of Monarch Farms. It also included using reference materials such as books, journals and other credible sources of information on the fields of study and associated related concepts.

3.3 Tools

The Project Management Institute (2017) posits that a project tool is something tangible, such as a template or software program, used in performing an activity to produce a product or result (PMI, 2017, p. 710). Tools are used to help project teams plan, track, monitor, control, and manage projects to achieve project objectives, create and maintain business value that meet and exceed stakeholders' expectations.

Chart 3 provides a summary of the project planning tools which was utilized in development of this Final Graduation Project.

Chart 3 Tools (Source: Sanisha Maximin, 2022)

Objectives	Tools
1. To develop a Project Charter commissioning the existence of the project and conferring authority to the Project Manager to utilize organizational resources to project activities.	▪ Assumptions and constraint analysis – to help analyze and identify the assumptions and constraints that occur in the project for the purpose of identifying risks. ▪ Expert knowledge – personnel with the technical knowledge of the industry and focus area of the project ▪ Data gathering tools such as interviews, meetings to gather high level requirements and other information necessary for development of Project Charter ▪ Project Charter Template
2. To develop a Scope Management Plan providing detailed outline of how all project elements will be defined, validated, and controlled to minimize scope creep and manage stakeholders' expectations.	▪ Expert knowledge – personnel with the technical knowledge of the industry and focus area of the project ▪ Data gathering tools such as interviews, meetings to gather high level requirements and other information necessary for development of the Scope Management Plan ▪ Scope Management Template ▪ Questionnaires and or surveys to determine what the various stakeholders deem beneficial and could create value. ▪ Work breakdown Structure to decompose project into smaller components.

Objectives	Tools
3. To generate a Schedule Management Plan with guidelines for creating, managing, executing, monitoring, and controlling planned project activities to deliver project on time.	▪ Scheduling network analysis – to show logical interrelationships between elements of work — in chronological order, from initial planning through to project closure. ▪ Expert knowledge – personnel with the technical knowledge of the industry and focus area of the project ▪ Data gathering tools such as interviews, meetings to gather information necessary for development of this plan. ▪ Gantt Chart – to show the various tasks of the project when each must take place and how long each will take. ▪ Schedule Management Template
4. To produce a Cost Management Plan explaining how the costs of resources needed to complete project activities will be managed throughout the project lifecycle.	▪ Expert knowledge – personnel with the technical knowledge of the industry and focus area of the project ▪ Data gathering tools such as interviews, meetings to gather information necessary for development of the Cost Management Plan ▪ Cost Management Template
5. To develop a Quality Management Plan which identifies quality requirements for the project and its outputs and outlines how the project will deliver results that conform to defined requirements and meet customer satisfaction.	▪ Requirements documentation to capture the requirements that the project and product should attain to meet stakeholder expectations. ▪ Stakeholders' register – to help identify stakeholders who have a particular interest in or impact on quality, with the emphasis on the customer and project sponsor needs and expectations.

Objectives	Tools
	▪ Check Sheet, check List, Quality Management Template ▪ Expert knowledge – personnel with the technical knowledge of the industry and focus area of the project ▪ Data gathering tools such as interviews, meetings to gather information necessary for development of the Quality Management Plan
6. To generate a Resource Management Plan that guides project team on how required resources will be classified, distributed, administered, and released to bring project into successful fruition.	▪ Organizational chart – to show organizational structure. ▪ Organizational breakdown structure – to show the organization's existing units with project activities under each. ▪ Assignment Matrix – to show work to be done and assigned resources. [RACI – to describe roles and responsibilities of units or staff in the project activities. ▪ Resource Management Software – to show visibility of what resources are available and allocated. ▪ Meetings – to plan resource management
7. To create a Communication Management Plan which details the framework on how communication will be managed and controlled to enable transparency and collaboration that produce meaningful value to the project.	▪ Stakeholders Register – to determine what their level of influence and impact is in order to establish methods and frequency of communication. ▪ Communication Requirements ▪ Meetings – to discuss and determine the most appropriate way to communicate, ▪ Communication Management Template

Objectives	Tools
8. To map out a framework for risk management to help take informed decisions about the risks that affect project objectives.	▪ Risk Breakdown Structure – to help consider the full range of sources from which individual project risks may arise. ▪ Meetings with key stakeholders to brainstorm potential risks. ▪ Risk Management Template ▪ SWOT Analysis – to draw out the possible threats and opportunities facing the project. Could give greater insight and understanding into competitors and market position.
9. To create a Procurement Management Plan documenting the approaches for acquiring, managing, and controlling externally sourced products, services, and results.	▪ Meetings - to determine the strategy for managing and monitoring the procurement. ▪ List of procurement activities, Procurement Management Template
10. To create a Stakeholder Engagement Plan devising a systemic approach to identify stakeholders, needs, power and influence on the projects and to formulate strategies for interacting. communicating and managing these stakeholders' expectations.	▪ Stakeholder Management Template, Stakeholder Register ▪ Stakeholder Matrix - to map out stakeholders in terms of importance and potential impact on project activities. ▪ Expert knowledge – personnel with the technical knowledge of the industry and focus area of the project ▪ Data gathering tools such as interviews, meetings, surveys to gather information. ▪ Stakeholder Management Software

3.4 Assumptions and Constraints

An assumption is defined by the Project Management Institute as a factor in the planning process that is considered to be true, real, or certain, without proof or demonstration (PMI, 2017, p. 682). These assumptions are external factors that have the potential to influence (or even determine) the success of a project but lie outside the direct control of project managers (European Commission, 2004). In identifying the assumptions for the Final Graduation Project, it is important to answer the question: “What external factors may impact the attainment of the specific project objectives that are outside the author’s control?”

A constraint on the other hand is a limiting factor that affects the execution of a project, program, portfolio, or process (PMI, 2017, p. 685). Constraints are things that we know to be true, and which must be accounted for in the plan so that we can work around them. Project constraints are the factors that limit your development process.as time, expertise, budget, skills, technical capabilities etc. In identifying constraints for the Final Graduation Project, the author must ask “what are the limiting factors that can impact value, delivery quality, and overall project success?”

Chart 4 Assumptions and Constraints (Source: Sanisha Maximin, 2022)

Objectives	Assumptions	Constraints
1. To develop a Project Charter commissioning the existence of the project and conferring authority to the Project Manager to utilize organizational resources to project activities.	Access to organizational information will be readily and easily accessible.	The maximum time frame to finalize the FGP is 12 weeks; approximately one week is allotted for completion of the Project Charter.

Objectives	Assumptions	Constraints
2. To develop a Scope Management Plan providing detailed outline of how all project elements will be defined, validated, and controlled to minimize scope creep and manage stakeholders' expectations.	Key stakeholders from Monarch Farms will be available to provide all information needed to complete the Scope Management Plan including requirements. Project objectives are clear.	Limited budget with no contingency reserve for development of the FGP. This could impact travel to and from the various farms and other potential authoritative areas. The maximum time frame to finalize the FGP is 12 weeks; approximately one week is allotted for completion of this plan. The author / student/ project manager has the sole responsibility of developing plans which includes research, data collection and analysis.
3. To generate a Schedule Management Plan with guidelines for creating, managing, executing, monitoring, and controlling planned project activities to deliver project on time.	Resource material is easily accessible and available. The amount of time allotted for development of the Schedule Management Plan is sufficient.	Limited budget with no contingency reserve for development of the FGP. This could impact travel to and from the various farms and other potential authoritative areas. The maximum time frame to finalize the FGP is 12 weeks; approximately one week is allotted for completion of this plan. The author / student/ project manager has the sole responsibility of developing plans which includes research, data collection and analysis.

Objectives	Assumptions	Constraints
4. To produce a Cost Management Plan explaining how the costs of resources needed to complete project activities will be managed throughout the project lifecycle.	The author has a good understanding of Cost Management to competently establish the format and standards by which the project costs are to be measured, reported, and controlled	Limited budget with no contingency reserve for development of the FGP. This could impact travel to and from the various farms and other potential authoritative areas. The maximum time frame to finalize the FGP is 12 weeks; approximately one week is allotted for completion of the Cost Management Plan. The author / student/ project manager has the sole responsibility of developing plans which includes research, data collection and analysis.
5. To develop a Quality Management Plan which identifies quality requirements for the project and its outputs and outlines how the project will deliver results that conform to defined requirements and meet customer satisfaction.	All quality requirements, metrics, standards will be captured to ensure quality conformance, performance and fitness for use / purpose.	Limited budget with no contingency reserve for development of the FGP. This could impact travel to and from the various farms and other potential authoritative areas. The maximum time frame to finalize the FGP is 12 weeks; approximately one week is allotted for completion of this plan. The author / student/ project manager has the sole responsibility of developing plans which includes research, data collection and analysis.

Objectives	Assumptions	Constraints
6. To generate a Resource Management Plan that guides project team on how required resources will be classified, distributed, administered, and released to bring project into successful fruition.	The requisite information necessary for development of the Resource Management Plan is available in order to provide guidance on how project resources should be categorized, allocated, managed, and released.	Limited budget with no contingency reserve for development of the FGP. This could impact travel to and from the various farms and other potential authoritative areas. The maximum time frame to finalize the FGP is 12 weeks; approximately one week is allotted for completion of this plan. The author / student/ project manager has the sole responsibility of developing plans which includes research, data collection and analysis.
7. To create a Communication Management Plan which details the framework on how communication will be managed and controlled to enable transparency and collaboration that produce meaningful value to the project.	The amount of time allotted for development of the Communication Management Plan is sufficient.	Limited budget with no contingency reserve for development of the FGP. This could impact travel to and from the various farms and other potential authoritative areas. The maximum time frame to finalize the FGP is 12 weeks; approximately one week is allotted for completion of this plan. The author / student/ project manager has the sole responsibility of developing plans which includes research, data collection and analysis.

Objectives	Assumptions	Constraints
8. To map out a framework for risk management to help take informed decisions about the risks that affect project objectives	With the collaborative efforts of the PM / author and Managing Director of Monarch Farms, an effective risk management framework will be developed.	Limited budget with no contingency reserve for development of the FGP. This could impact travel to and from the various farms and other potential authoritative areas. The maximum time frame to finalize the FGP is 12 weeks; approximately one week is allotted for completion of this Plan. The author the sole responsibility of developing plans which includes research, data collection and analysis.
9. To create a Procurement Management Plan documenting the approaches for acquiring, managing, and controlling externally sourced products, services, and results.	All resource material necessary for development of this plan n will be easily accessible. The Management of Monarch Farms will have a general idea of the goods and services they wish to acquire from outside of the organization.	Limited budget with no contingency reserve for development of the FGP. This could impact travel to and from the various farms and other potential authoritative areas. The maximum time frame to finalize the FGP is 12 weeks; approximately one week is allotted for completion of this plan. The author / student/ project manager has the sole responsibility of developing plans which includes research, data collection and analysis.

Objectives	Assumptions	Constraints
10. To create a Stakeholder Engagement Plan devising a systemic approach to identify stakeholders, needs, power and influence on the projects and to formulate strategies for interacting. communicating and managing these stakeholders' expectations.	The project will have the full buy-in and support of key stakeholders. All relevant stakeholders will be identified, classified, prioritized, and assessed to determine which stakeholders have the abilities to affect the projects, both favorably and unfavorably	Limited budget with no contingency reserve for development of the FGP. This could impact travel to and from the various farms and other potential authoritative areas. The maximum time frame to finalize the FGP is 12 weeks; approximately one week is allotted for completion of the Stakeholder Engagement Plan. The author has the sole responsibility of developing plans which includes research, data collection and analysis.

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; deliverables may be tangible or intangible (PMI, 2017 p. 36). The main deliverable for this Final Graduation Project is a Project Management Plan for Incorporating Sustainability into Monarch Farms St. Lucia. PMI (2017) purports that the Project Management Plan is the document that describes how the project will be executed, monitored, controlled and closed. It integrates and consolidates all of the subsidiary management plans and baselines, and other information necessary to manage the project. The Integrated Project Management Plan for Monarch Farms is

a compilation of constituent plans for Scope Management, Schedule Management, Cost Management, Quality Management, Resource Management, Communication Management, Risk Management, Procurement Management, and Project Stakeholder Management in addition to a Project Charter which gives formal authorization to the Project Manager to utilize project resources.

Chart 5 Deliverables (Source: Sanisha Maximin, 2022)

Objectives	Deliverables
1. To develop a Project Charter commissioning the existence of the project and conferring authority to the Project Manager to utilize organizational resources to project activities.	Project Charter
2. To develop a Scope Management Plan providing detailed outline of how all project elements will be defined, validated, and controlled to minimize scope creep and manage stakeholders' expectations.	Scope Management Plan Scope baseline
3. To generate a Schedule Management Plan with guidelines for creating, managing, executing, monitoring, and controlling planned project activities to deliver project on time.	Schedule Management Plan Schedule baseline
4. To produce a Cost Management Plan explaining how the costs of resources needed to complete project activities will be managed throughout the project lifecycle.	Cost Management Plan Cost baseline
5. To develop a Quality Management Plan which identifies quality requirements for the project and its outputs and outlines how the project will deliver results that conform to defined requirements and meet customer satisfaction.	Quality Management Plan

Objectives	Deliverables
6. To generate a Resource Management Plan that guides project team on how required resources will be classified, distributed, administered, and released to bring project into successful fruition.	Resource Management Plan
7. To create a Communication Management Plan which details the framework on how communication will be managed and controlled to enable transparency and collaboration that produce meaningful value to the project.	Communication Management Plan
8. To map out a framework for risk management to help take informed decisions about the risks that affect project objectives.	Risk Management Plan
9. To create a Procurement Management Plan documenting the approaches for acquiring, managing, and controlling externally sourced products, services, and results.	Procurement Management Plan
10. To create a Stakeholder Engagement Plan devising a systemic approach to identify stakeholders, needs, power and influence on the projects and to formulate strategies for interacting. communicating and managing these stakeholders' expectations.	Stakeholder Engagement Plan

4. RESULTS

4.1. Project Charter

This project charter provides a detailed insight into all areas associated with this project.

Chart 6 Project Charter (Source: Sanisha Maximin, 2022)

PROJECT CHARTER
Project Title
Operationalising Monarch Farms Strategic Objectives
Project Description
Monarch Farms was established in May 2020 with an aim to revamp the agricultural industry in St. Lucia. Changing the mindset of the youth about the agricultural sector so that they would see agriculture as a business or profession and not as a low-income job of last resort is of importance to the organization. The organization also seeks to enhance the industry by educating farmers on the importance of diversification; creating logistics and support for farmers; procuring equipment and materials needed for farming; increasing the awareness of agribusiness; and introducing sustainable, conservation and regenerative agriculture as the solution for environmental and ecological revitalization. To increase profitability and generate greater efficiencies of scale, the Managing Director of Monarch Farms decided to form strategic partnerships with one hundred and forty-four (144) farmers island wide. This framework will enable greater coordination of a diverse production of crop types, which in turn would impact the long-term sustainability in supply chain and realize growth in both farm-to-table and farm-to-market produce.

As the organization is moving into its implementation phase, it requires an implementation plan which would allow it to elaborate and translate its robust business strategy into action.

The project aims to provide a guideline for Monarch Farms to enable it to execute its business strategy. The plan will articulate how the project will be executed, monitored, and controlled. It will also serve as a guide for how all project work will be performed, breaking down all activities in manageable components to allow for work to be done efficiently.

Budget

The project costs will amount to an investment of EC $100,000 which is equivalent to US $36, 806.65.

Start Date	End Date
6 March 2023	29 September 2023

Project Objectives

General Objectives

To contribute to the revitalization of the agricultural industry in St. Lucia.

Specific Objectives

1. To develop a supply chain strategy that will create synergies from farm to export to enable opportunities for increased markets and sales, reduced operational costs and optimization of agricultural products by 14th April 2023.

2. To register farmers who are committed to joining the strategic partnership in order to be able to gather information relating to farms and crop production by 25th May 2023.

3. To carry out a crop diversification training to educate strategic partners on the importance of crop diversification and alternate crop production as a means of incorporate sustainable agricultural practices on their farms by 6th June 2023.

4. To implement a Young Farmers Development Program geared towards changing the mindset of the youth about the agricultural industry and to view agribusiness as a viable profession by 1st September 2023.

Project Inclusions

The Project includes the follwoing major deliverables:

1. **Supply Chain Strategy**
   - 1.1 Licenses
     - 1.1.1 Application
   - 1.2 Strategy Development
     - 1.2.1 Concept Design
     - 1.2.2 Planning
     - 1.2.3 Execution

2. **Farmer Registration**
   - 2.1 Inception Meeting
   - 2.2 Signed Commitment from Farmers
   - 2.3 Register and Tag Farms
   - 2.4 Collect Farm Data
     - 2.4.1 Populate Database
   - 2.5 Crop Calendar Production

3. **Crop Diversification Training**
   - 3.1 Curriculum Development
   - 3.2 Implementation of Training Program
   - 3.3 Evaluation

4. **Young Farmers Development Program**
   - 4.1 Consultancy
     - 4.1.1 Schools Site Visitation
     - 4.1.2 Town Hall Meetings
     - 4.1.3 Monarch Farms Guided Tours

4.2 Young Farmers Summer Program

4.2.1 Program Development

4.2.2 Invitation

4.2.3 Registration

4.2.4 Work Program Implementation

4.2.5 Work Program Evaluation

4.2.6 Awards Ceremony

Project Exclusions

This project only focuses on the elements highlighted under the section Project Inclusions. It does not include research and anlalysis of sustainable, conservation and regenerative practices.

Project Milestones

Milestones	Estimated End Date
Import and Export Licences	24 March 2023
Signed Commitment from Farms	07 April 2023
Crop Production Calendar	25 May 2023
Crop Diversification Training	6 June 2023
Young Farmers Consultancy	07 July 2023
Summer Program	1 September 2023

Expected Benefits

This project is expected to realize the following benefits:

1. Create avenues for increased profitability, greater economies of scale and long-term sustainability.
2. Increase awareness of food diversification.
3. Increased markets for sale of produce locally, regionally, and internationally.
4. Improve year-round cultivation and production.
5. Reduce cultivation and production cost including cost of materials and equipment.
6. Enhance knowledge sharing.

7. Cultivate and foster youth enthusiasm and mindset about the agricultural industry.
8. Promote a coordinated approach to farming and managing agricultural food supply chain in St. Lucia.

Key Stakeholders

- Ministry of Agriculture
- Ministry of Commerce
- Customs and Excise Department
- Farmers
- Youth
- Secondary School and College Students
- Supermarkets
- Financial Institutions
- Project Team
- Project Sponsor
- Consultants / Trainers

Development Impact

Data collection is at the epicenter of everything that Monarch Farm does and is critical to the success of its business strategy.The concept of tagging farms is an innovative ideology which would allow the Management of Monarch Farms to [1] know what types of crops each farm produces; [2] know the dates of planting and harvesting of each farm and crop types; [3] project and quanitfy the amounts of produce for sale; [4] determine when to rotate and which crops to rotate with, to improve soil health and; [5] identify availability and accessibility of produce.

The data collection capacity will enable farmers to strategically cultivate crops at varying times of the year to enable a sustained and balance flow of of these produce year round. This would assist in resolving the challenge that St. Lucia is faced with as the market is being saturated with high volumes of the same ‘seasonal’ produce. Hence, citizens would no longer incur exorbitant cost of imported produce because of lack or limited local supply.

This could serve as a precursor to or a pilot project which farmers in St. Lucia can benefit from holistically. The dearth of data has been a major challenge for the agricultural sector in St. Lucia, similar to many of the other sectors within the Public Service of St. Lucia. Therefore, having an integrated and cohesive information platform with crucial information for all stakeholders including farmers or sellers and buyers could spur major development in the Agricultural industry.

The adoption of this technology would help to enhance evidence based decisions, improve monitoring and evaluation of crop production and enable a proactive response approach in dealing with risks.

Assumptions

1. Schools will respond favourably to request for site visits and summer program
2. Registered farmers will remain interested in the program
3. New farmers will come onboard
4. Young people will demonstrate concrete effort and enthusiasm to learn and change mindset about the agricultural sector
5. Project will receive the required financial backing
6. Technical team will be readily available to provide consultancy and training to farmers and prospective farmers

Constraints

The major constraints that the project is faced with are:

1. Budget - sharp rise in costs can create unforeseen or unexpected rise in the provision of resources.

2. Risk – changes in Government policies for the acquisition of import and export licences.

High Level Project Risks

1. Inflationary environments could lead to increased prices for goods and services and may distort budgetary costs for planned activities.

2. Unmanaged conflicts for both team members and participants could lead to high intensity environments resulting in reduced productivity and demotivated performance.

3. Failure to keep strategic partners (farmers) well informed of the process and progress of strategy implementation could result in farmers wanting to receive earning immediately upon signing of agreements.

4. Injurious acts of harm against young people such as physical, sexual and emotional abuse.

5. Praedial larceny

Signatures

The signatures of the people below document approval of the formal Project Charter. The Project Manager is empowered by this charter to proceed with the project as outlined in the charter.

Customer	Project Sponsor	Project Manager
Name	Name	Name
Signature	Signature	Signature
Date	Date	Date

4.2. Scope Management Plan

4.2.1 Purpose of Document

This Scope Management Plan is a subsidiary plan of the overall Project Management Plan which is to be utilized for the effective execution of the project: - Operationalizing Monarch Farms' Strategic Objectives. It describes how the project

scope will be defined, monitored, controlled, and validated. This document will guide the Project Development Team on what needs to be done to meet the full expectations and requirements of stakeholders and project objectives.

4.2.2 Scope Definition

The scope for Operationalizing Monarch Farms' Strategic Objectives was defined through a requirements collection process by interviewing the Managing Director of Monarch Farms who provided comprehensive details of the business strategy and expectations. This was done in conjunction with a thorough review of the project proposal and project charter. The information below provides details of the project description, objectives, and main deliverables.

4.2.3 Project Description

Monarch Farms was established in May 2020 with an aim of revamping the agricultural industry in St. Lucia. The Management of Monarch Farms realized that survival in the agricultural industry required staking out and venturing into new market spaces, creating products and or services that can grow profitably and offer high value at lower costs for its customers and its business. To set its' business apart from other agricultural businesses, it charted a new path involving tagging and registering of farms wherein the data collected would allow for the Management of Monarch Farms to [1] determine what types of crops each farm produces; [2] ascertain dates of planting and harvesting of each farm and crop types; [3] project and determine the amounts of produce for sale; [4] determine when to rotate and which crops to rotate with, to improve soil health and; [5] identify availability and accessibility of produce.

In addition, as a means of resolving the challenge that St. Lucia is faced with, that is with the market being saturated with high volumes of the same 'seasonal' produce, the data collection capacity will enable farmers to strategically cultivate crops at varying times of the year to enable a sustained and balanced flow of these produce year round. As a result of this, citizens would not have to incur exorbitant cost of imported produce due to the lack of local supply. To increase profitability and

generate greater efficiencies of scale, the Managing Director of Monarch Farms decided to form strategic partnerships with one hundred and forty-four (144) farmers island wide. This framework will enable greater coordination of a diverse production of crop types, which in turn would impact the long-term sustainability in supply chain and realize growth in both farm-to-table and farm-to-market produce.

Of importance to the organization is changing the mindset of the youth about the agricultural sector with a hope that they would see agriculture as a business or profession and not as a low-income job of last resort. The organization also seeks to enhance the industry by educating farmers on the importance of diversification; creating logistics and support for farmers; procuring equipment and materials needed for farming; increasing the awareness of agribusiness; and introducing sustainable, conservation and regenerative agriculture as the solution for environmental and ecological revitalization.

Monarch Farms has created a novel business strategy by entering into uncontested market space which has allowed it to diversity, and open avenues to become profitable, grow and create value for its customers. As the organization is moving into its implementation phase, it requires an implementation plan which would allow it to elaborate and translate its robust business strategy into action.

The project Operationalising Monarch Farms Strategic Objectives seeks to provide a guideline for Monarch Farms to enable it to execute its business strategy. The plan will articulate how the project will be executed, monitored, and controlled. It will also serve as a guide for how all project work will be performed, decomposing all activities in manageable components to allow for work to be done efficiently.

4.2.4 Project Goal

To contribute to the revitalization of the agricultural industry in St. Lucia.

4.2.5 General Objective

To implement Monarch Farms Strategic Objectives.

4.2.6 Specific Objectives

1. To develop a supply chain strategy that will create synergies from farm to export to enable opportunities for increased markets and sales, reduced operational costs and optimization of agricultural products by 14th April 2023.

2. To register farmers who are committed to joining the strategic partnership in order to be able to gather information relating to farms and crop production by 25th May 2023.

3. To carry out a crop diversification training to educate strategic partners on the importance of crop diversification and alternate crop production as a means of incorporate sustainable agricultural practices on their farms by 6th June 2023.

4. To implement a Young Farmers Development Program geared towards changing the mindset of the youth about the agricultural industry and to view agribusiness as a viable profession by 1st September 2023.

4.2.7 Product Scope

The Project will accomplish the following deliverables:

0. Business Strategy Execution Project

1. Supply Chain Strategy

1.1 Licenses

1.1.1 Application

1.2 Supply Chain Management Strategy

1.2.1 Concept Design

1.2.2 Planning

1.2.3 Execution

2. Farmer Registration

2.1 Inception Meeting

2.2 Signed Commitment from Farmers

2.3 Register and Tag Farms

2.4 Collect Farm Data

2.4.1 Populate Database

2.5 Crop Calendar Production

3. Crop Diversification Training

3.1 Curriculum Development

3.2 Implementation of Training Program

3.3 Evaluation

4. Young Farmers Development Program

4.1 Consultancy

4.1.1 Schools Site Visitation

4.1.2 Town Hall Meetings

4.1.3 Monarch Farms Guided Tours

4.2 Young Farmers Summer Program

4.2.1 Program Development

4.2.2 Invitation

4.2.3 Registration

4.2.4 Work Program Implementation

4.2.5 Work Program Evaluation

4.2.6 Awards Ceremony

Chart 7 In and Out of Scope Descriptive (Source: Sanisha Maximin, 2022)

"IN" Scope	*"OUT" of Scope*
The following items that WILL be included as part of the work performed	The items that WILL NOT be included as part of the work performed by this

"IN" Scope	*"OUT" of Scope*
• The project is not to exceed the six (6) months duration or the cost of EC$100,000.00. • It includes the design, and development of curriculum for work program, crop calendar, and site visits	• It does not include the design and development of the database. • The project does not include the process of seeking grants to incentivise participants.

4.2.8 Creation of Work Breakdown Structure

Below is a high-level Work Breakdown Structure (WBS) and its associated WBS Dictionary. The WBS provides the foundation for defining the works to accomplish the project objectives. It also establishes a framework for managing the work through to completion.

The Project Development Team along with key stakeholders will be responsible for the further decomposition of WBS into smaller and more manageable work components. This will allow for more comprehensive and detailed description of all the tasks to be completed, on time and within budget for scheduled deliverables.
A top-down method will be used to further elaborate and decompose the WBS to ensure that the project is logically structured and considers all of the work packages to complete the full scope of works.

The Team Lead for level 1 elements of the work breakdown structure will be responsible for identifying risks associated with respective components, resources needed to achieve the deliverables, cost estimation, and escalating any issues or challenges faced with his or her component of the project scope.

Figure 6 Work Breakdown Structure (Source: Sanisha Maximin, 2022)

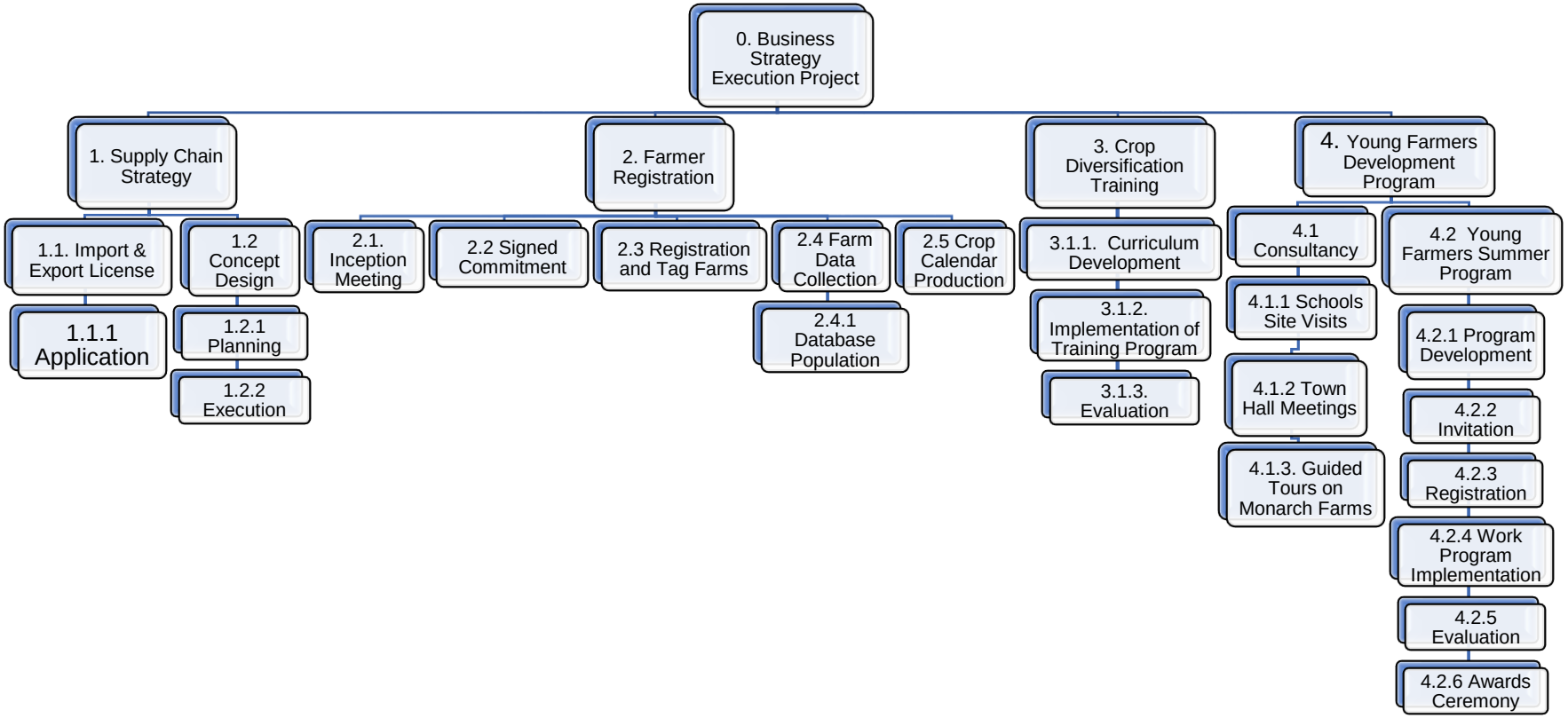


Chart 8 Work Breakdown Structure Dictionary (Source: Sanisha Maximin, 2022)

ID	WBS CODE	DESCRIPTION OF WORKS	RESOURCES REQUIRED	COST ESTIMATE (E.C.)	ACCEPTANCE CRITERIA
MF011	**1.1**	Acquisition of Import and Export Licences.	Business Registration Documents	$1000.00	Physical licenses should be on hand by 24 March 2023. Certificate of receipt should be signed off on by Project Development Team Lead along with PM to confirm receipt.
MF012	**1.2**	Design, Development and implementation of a Supply Chain Management Strategy.	Expert knowledge Business plan	$6000.00	Takes into consideration integration and departmental communication, purchasing, distribution, logistics, automated component with simple userface
MF021	**2.1**	Inception Meeting to inform farmers about strategic partnership and to obtain commitment from farmers who have given oral indication of willingness to participate	Laptop Projector and Screen Large Conference Room Brochures with information on partnership. Refreshments - Eats and drinks	$2000.00	Video and audio recording of meeting Detailed report one week after scheduled meeting.

ID	WBS CODE	DESCRIPTION OF WORKS	RESOURCES REQUIRED	COST ESTIMATE (E.C.)	ACCEPTANCE CRITERIA
MF022	**2.2**	Signed Commitment from Farmers	Scanner Printer Mobile Phone Internet Access Vehicle access	$5000.00	Commitment Agreements should be witnessed by a Justice of the Peace or Notary Royal affixed with signature, date, and seal. Digital copies of all agreements are entered into the database.
MF023	**2.3**	Register and Tag Farms. All farmers who commit to the strategic partnership are to complete Farmer Registration Forms. Farms associated with the respective farmers are to be tagged and barcoded.	Barcode scanner Barcode generator and printer Printer Electronic signature software Computer Internet Mobile Phone Laptop	$15,000.00	Forms are completed with signature of the Farmer and Field Officer who recorded the information. Note: Farmer Registration is an ongoing process

ID	WBS CODE	DESCRIPTION OF WORKS	RESOURCES REQUIRED	COST ESTIMATE (E.C.)	ACCEPTANCE CRITERIA
MF0241	**2.4.1**	Populate Database	Laptop Internet	$5000.00	Populated with information of each farm, crop varieties, information on planting, sowing, and harvesting periods. Upon completion, Project Manager to review entries, ensure all reports and data can be generated followed by a review by the Project Sponsor.
MF025	**2.5**	Crop Calendar Production	Laptop Internet Adobe software	$6000.00	Populated with relevant information, user friendly interface and experience. Upon completion, Project Manager along with three Farmer Representatives to review and grant approval Electronic signatures of all approvers will be affixed on approval screen.

ID	WBS CODE	DESCRIPTION OF WORKS	RESOURCES REQUIRED	COST ESTIMATE (E.C.)	ACCEPTANCE CRITERIA
MF03	**3**	Crop Diversification. Educating farmers who are part of the strategic partnership on the importance of crop diversification and alternate crop production. Consultancy also involves educating farmers on the importance and how to incorporate sustainable, conservation and regenerative agricultural practices on farms.	Vehicle access Telephone Internet Experts in the field of conservation and regenerative agricultural practices, as well as crop diversification	$10,000.00	Announcements should be made on local television and radio stations. In addtion to the television and radio announcements, social media can also be used as a medium for notifying farmers of consultancy. All communication to be in both English and Creole Small group sessions with 10 – 15 farmers All sessions must be recorded.
MF04	**4**	Development of Young Farmers. Developing of a schedule of activities to help change the mindset of the young people about	Artist Internet Laptop Email Media support	$50,000.00	Use of animation or caricature videos and other activites that would keep young people engaged.

ID	WBS CODE	DESCRIPTION OF WORKS	RESOURCES REQUIRED	COST ESTIMATE (E.C.)	ACCEPTANCE CRITERIA
		agricultural industry. This includes having school visits at secondary schools and college, as well as having town hall meetings to meet young people. Program also involves a summer program where interested students and other youth can have a practical session on one of Monarch Farms learning about different topics such as Sustainable, Conservation and Regenerative Agricultural Practices, Agri-Business, use of Technology in Agriculture.			All Project Development Team and field officers are to receive training in conflict resolution and dealing with vulnerable and difficult young people prior to the commencement of the implementation of deliverable. All sessions are to be interactive All sessions must be recorded Only person who receive the training will be assisting with imparting knowledge on the youth. Particpants who have an attendance rate of 90% or more will be elgible for grant incentive.

4.2.9 Scope Validation

Scope verification is an ongoing process that is performed during the project implementation. As a means of verifying and certifying that project deliverables are completed satisfactorily and are in keeping with the project requirements, there will be weekly reviews of the deliverables by the Managing Director of Monarch Farms. Upon completion of each deliverable, the Project Manager will present the deliverable to the Managing Director and Project Sponsor, who will sign off on a Certificate of Acceptance to formally accept project deliverable. By signing the Certificate of Acceptance, the Managing Director and Project Sponsor acknowledge and attest that the deliverable was completed in accordance with quality requirements.

The Project Manager, along with the Project Team Leads will have weekly end of week review meetings to monitor the progress of the project.

4.2.10 Scope Control

Control Scope is the process of monitoring the status of the project and product scope and managing changes to the scope baseline. It assures that this project will utilise an appropriate change control approach to ensure that we maintain the agreed scope of the project.

Any changes to the scope must be done through a formal change control process. Stakeholders requesting a suggested change to the scope must submit the stipulated Change Request Form to the Project Manager via email and entered onto the Change Request Register Log. The Project Manager will assess the merit, severity and impact of the request. If the impact of the request is low and will not influence the objectives of the project if not address, the Project Manager using her discretion may reject or approve the request. If the impact is medium, the Project Manager in consultation with the Project Development Team Lead and Managing Director should discuss request and enter an agreement of acceptance or rejection. If the suggested change to the scope is deemed to have a high impact if not addressed, the Project Manager will convene a Change Control Board meeting including the Project Sponsor, Managing Director and each Project Development Team Lead. If the change is approved by the Board, the Project Sponsor together with the Managing Director will formally accept

the change by signing the project change control document. Subsequently, all project documents will be updated to reflect the change. The change to the scope will be communicated to all stakeholders.

4.3. Schedule Management Plan

Scheduling provides a detailed plan that represents how and when the project will deliver the products, services, and results defined in the project scope and may serve as a tool for communication, managing stakeholder expectations, and as a basis for performance reporting (PMI, 2011).

It is the premise of this Schedule Management Plan to establish the processes for developing, monitoring, and controlling the schedule for the duration of this project. This plan will follow the processes involved in Schedule Management as defined by the Project Management Institute, to wit: define activities, sequence activities, estimate activities, develop schedule, and control schedule.

4.3.1 Defining Activities

During this process, Project Team Leads together with subordinate Project Development Team members will identify and document the specific actions to be performed to produce the project deliverables. This process will be achieved by decomposing or subdividing work packages into smaller, more manageable components called schedule activities. Schedule activities describe the work that needs to be accomplished. The work presented by the activities in each work package must add up to one hundred percent (100%) of the work necessary to complete the work package.

As a basic principle highlighted in PMI's Practice Standard for Scheduling (2011), each activity must start with a verb and should contain a unique, specific object. At the end of this process each Project Team Lead should have developed an activities list for each of the work packages that he or she is responsible for its execution under the approved version of the WBS.

4.3.2 Sequence Activities

This process is principally concerned with determining when the activities will take place depending on defined duration and preceding activities. The sequence logic specifies when an activity should start or finish on the basis of duration of, predecessor(s).

For the purposes of this project, the Project Team will use the Finish to Start sequencing logic relationship in which the team determines which activity has to finish before the other can start. This will help to map out or generate a schedule network diagram.

4.3.3 Estimate Durations

Based on the activities list, the Project Team Lead and Project Development Team will estimate, with a reasonable degree of confidence, the length of time it will take to accomplish the work for the respective activity. In addition, the team will also estimate, as reasonably possible, the resources, both type and quantities, required to perform the activity. This information will be populated in the Activities List.

4.3.4 Develop Schedule

With the use of Kanata's Gantt Chart, the team will generate a schedule model for project execution and monitoring and controlling. The Schedule Model will be populated with planned start and finish dates for project activities and milestones. Using this software, team members will be able to determine the critical path for the project, that is, the sequence of activities that represents the longest path through a project, which determines the shortest possible project duration. The Gantt Chart below at Figure 7 shows a visual display of the planned work to be completed for the entire project with assigned timelines and deadlines for the various tasks.

This is an iterative process which can require review and revision as the progresses to sustain a realistic schedule throughout the duration of the project. However, any changes required to the schedule model has to go through the formal change control procedure.

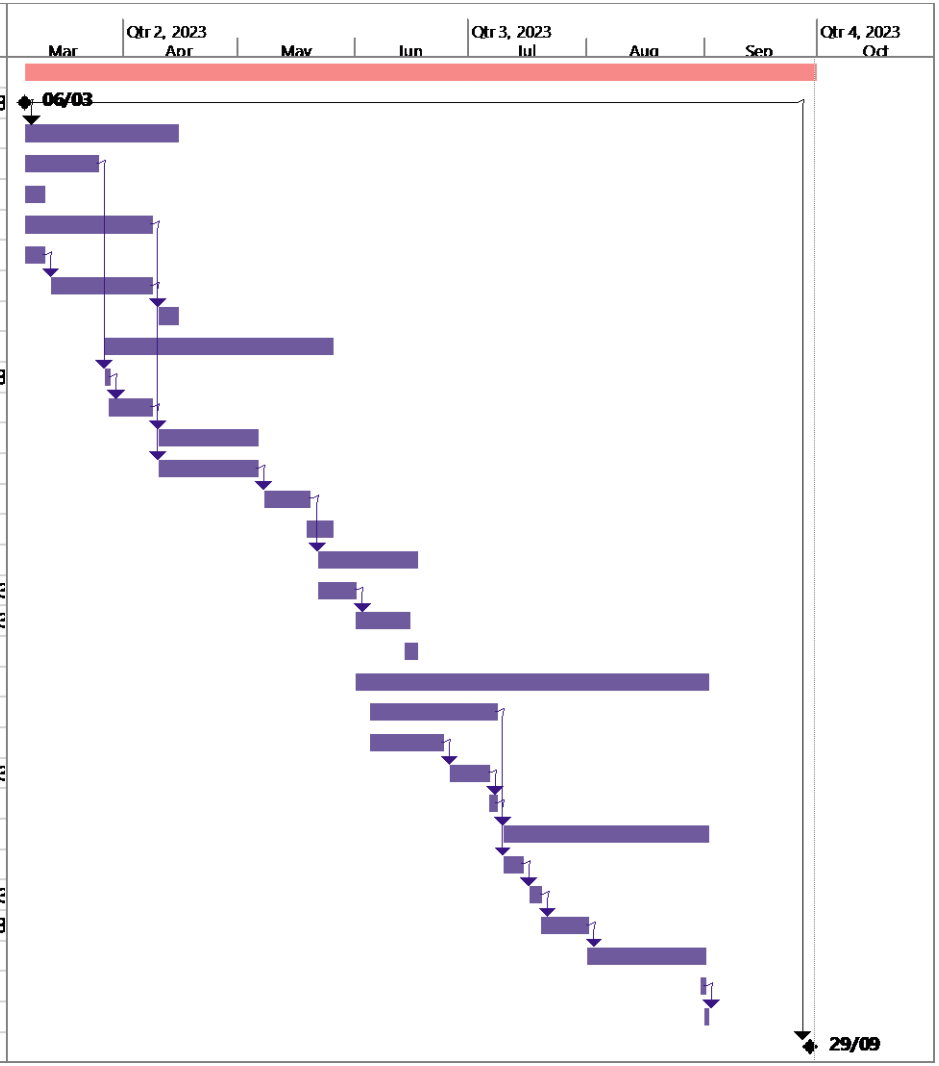
Chart 9 Preliminary Schedule Model (Source: Sanisha Maximin, 2022)

WBS ID	Task Name	Duration	Start	Finish	Predecessors
0	**Business Strategy Execution Project**	150 days	Mon 06/03/23	Fri 29/09/23	
	Project Start Date	0 days	Mon 06/03/23	Mon 06/03/23	
1	**Supply Chain Strategy**	30 days	Mon 06/03/23	Fri 14/04/23	2
1.1	Import and Export Licenses	15 days	Mon 06/03/23	Fri 24/03/23	
1.1.1	Application	5 days	Mon 06/03/23	Fri 10/03/23	
1.2	Strategy Development	25 days	Mon 06/03/23	Fri 07/04/23	
1.2.1	Concept Design	5 days	Mon 06/03/23	Fri 10/03/23	
1.2.2	Planning	20 days	Mon 13/03/23	Fri 07/04/23	7
1.2.3	Execution	5 days	Mon 10/04/23	Fri 14/04/23	8
2	**Farmer Registration**	44 days	Mon 27/03/23	Thu 25/05/23	
2.1	Inception Meeting	1 day	Mon 27/03/23	Mon 27/03/23	4
2.2	Signed Commitment form Farmers	9 days	Tue 28/03/23	Fri 07/04/23	11
2.3	Register and Tag Farms	20 days	Mon 10/04/23	Fri 05/05/23	12
2.4	Collect Farm Data	20 days	Mon 10/04/23	Fri 05/05/23	6
2.4.1	Populate Database	10 days	Mon 08/05/23	Fri 19/05/23	14
2.5	Crop Calendar Production	5 days	Fri 19/05/23	Thu 25/05/23	
3	**Crop Diversification Training**	20 days	Mon 22/05/23	Fri 16/06/23	15

WBS ID	Task Name	Duration	Start	Finish	Predecessors
3.1	Curriculum Development	8 days	Mon 22/05/23	Wed 31/05/23	
3.2	Implementation of Training Programme	10 days	Thu 01/06/23	Wed 14/06/23	18
3.3	Evaluation	3 days	Wed 14/06/23	Fri 16/06/23	
4	**Young Farmers Development Programme**	67 days	Thu 01/06/23	Fri 01/09/23	
4.1	Consultancy	25 days	Mon 05/06/23	Fri 07/07/23	
4.1.1	Schools Site Visitation	15 days	Mon 05/06/23	Fri 23/06/23	
4.1.2	Town Hall Meetings	8 days	Mon 26/06/23	Wed 05/07/23	23
4.1.3	Monarch Farms Guided Tour	2 days	Thu 06/07/23	Fri 07/07/23	24
4.2	Young Farmers Summer Program	40 days	Mon 10/07/23	Fri 01/09/23	25
4.2.1	Programme Development	5 days	Mon 10/07/23	Fri 14/07/23	22
4.2.2	Invitation	3 days	Mon 17/07/23	Wed 19/07/23	27
4.2.3	Registration	8 days	Thu 20/07/23	Mon 31/07/23	28
4.2.4	Work Program Implementation	23 days	Tue 01/08/23	Thu 31/08/23	29
4.2.5	Work Program Evaluation	1 day	Thu 31/08/23	Thu 31/08/23	
4.2.6	Awards Ceremony	1 day	Fri 01/09/23	Fri 01/09/23	31
	Project End	0 days	Fri 29/09/23	Fri 29/09/23	2, 21

Figure 7 Gantt Chart (Source: Sanisha Maximin, 2022)

ID	Task Mode	Task Name	Duration	Start	Finish
1		**Business Strategy Execution Project**	150 days	Mon 06/03/23	Fri 29/09/23
2		Project Start Date	0 days	Mon 06/03/23	Mon 06/03/23
3		**1 Supply Chain Strategy**	30 days	Mon 06/03/23	Fri 14/04/23
4		1.1 Import and Export Licences	15 days	Mon 06/03/23	Fri 24/03/23
5		1.1.1 Application	5 days	Mon 06/03/23	Fri 10/03/23
6		1.2 Strategy Development	25 days	Mon 06/03/23	Fri 07/04/23
7		1.2.1 Concept Design	5 days	Mon 06/03/23	Fri 10/03/23
8		1.2.2 Planning	20 days	Mon 13/03/23	Fri 07/04/23
9		1.2.3 Execution	5 days	Mon 10/04/23	Fri 14/04/23
10		**2 Farmer Registration**	44 days	Mon 27/03/23	Thu 25/05/23
11		2.1 Inception Meeting	1 day	Mon 27/03/23	Mon 27/03/23
12		2.2 Signed Commitment form Farmers	9 days	Tue 28/03/23	Fri 07/04/23
13		2.3 Register and Tag Farms	20 days	Mon 10/04/23	Fri 05/05/23
14		2.4 Collect Farm Data	20 days	Mon 10/04/23	Fri 05/05/23
15		2.4.1 Populate Database	10 days	Mon 08/05/23	Fri 19/05/23
16		2.5 Crop Calendar Production	5 days	Fri 19/05/23	Thu 25/05/23
17		**3 Crop Diversification Training**	20 days	Mon 22/05/23	Fri 16/06/23
18		3.1 Curriculum Development	8 days	Mon 22/05/23	Wed 31/05/23
19		3.2 Implementation of Training Programme	10 days	Thu 01/06/23	Wed 14/06/23
20		3.3 Evaluation	3 days	Wed 14/06/23	Fri 16/06/23
21		**4 Young Farmers Development Programme**	67 days	Thu 01/06/23	Fri 01/09/23
22		4.1 Consultancy	25 days	Mon 05/06/23	Fri 07/07/23
23		4.1.1 Schools Site Visitation	15 days	Mon 05/06/23	Fri 23/06/23
24		4.1.2 Town Hall Meetings	8 days	Mon 26/06/23	Wed 05/07/23
25		4.1.3 Monarch Farms Guided Tour	2 days	Thu 06/07/23	Fri 07/07/23
26		4.2 Young Farmers Summer Program	40 days	Mon 10/07/23	Fri 01/09/23
27		4.2.1 Programme Development	5 days	Mon 10/07/23	Fri 14/07/23
28		4.2.2 Invitation	3 days	Mon 17/07/23	Wed 19/07/23
29		4.2.3 Registration	8 days	Thu 20/07/23	Mon 31/07/23
30		4.2.4 Work Program Implementation	23 days	Tue 01/08/23	Thu 31/08/23
31		4.2.5 Work Program Evaluation	1 day	Thu 31/08/23	Thu 31/08/23
32		4.2.6 Awards Ceremony	1 day	Fri 01/09/23	Fri 01/09/23
33		Project End	0 days	Fri 29/09/23	Fri 29/09/23



4.3.5 Monitoring and Controlling Schedule

Project Team Leads will be responsible for documenting weekly activity progress using the project schedule software tool. There will be regular performance review meetings to measure and analyze actual schedule performance against the schedule baseline. Project Team Lead will be responsible for updating the Project Manager on any variation from approved version of detailed schedule.

During the review sessions, the Project Team Lead together with the Project Manager will try to determine what the cause of the variance is, to determine whether the schedule variation requires corrective or preventive action. Should there be a request for changes to the approved schedule baseline, a formal change request must be channeled through the Project Manager to the established Change Request Board. Change requests must be sufficiently justified before they can be approved.

The Project Manager will utilize Schedule Performance Measurements such as Schedule Variance and Schedule Performance Index to assess the magnitude of the variation against the approved schedule. Using Schedule Variance [SV] the Project Manager will be able to determine whether the project is ahead or behind the planned date. If the Schedule Variance is positive (+), this means we are ahead of schedule. If the Schedule Variance is negative (-), this means we are behind schedule. The Schedule Performance Index [SPI] will measure how efficiently the project team is accomplishing the scheduled work. An SPI value less than (<) 1.0 indicates that less work was completed than was planned. An SPI value greater than (>) 1.0 indicates that more work was completed than planned. An SPI value equal (=) to 1.0 means that the work completed is equal to the planned work. As the project progresses, the Project Manager will provide a project status using the following Spotlight Status Chart for SV and SPI:

Chart 10 Spotlight Status Chart (Source: Sanisha Maximin, 2022)

Criteria	Green	Yellow	Red
Schedule Variance (SV)	SV = 0	SV Positive (+)	SV Negative (-)

Criteria	Green	Yellow	Red
	The schedule indicates major milestones are on schedule	The schedule indicates that one or more of the major milestones will be completed before time allotted	The schedule indicates that one or more of the major milestones have been missed or will be missed
Schedule Performance Index (SPI)	SPI = 1.0 means project is on schedule	SPI = >1 means project is ahead of schedule	SPI = <1 suggests that the project is behind schedule

Any activity in the red zone must be escalated to the Managing Director and Project Sponsor for urgent discussion and decision on the way forward. The corrective or prevention action(s) decided by the authorities will be communicated to Project Stakeholders and will be updated on the Project Schedule.

Team members should note that the Project Schedule performance and control should not be done in isolation. Viewed in isolation, the schedule offers limited value. To obtain more visibility of the overall project status, schedule performance should be monitored and controlled in consonance with cost performance.

4.4. Cost Management Plan

This section of the Project Management Plan provides guidance on how the project costs will be planned, structured, and controlled for the duration of the project to ensure the successful completion of the project within the allotted budget. Essentially, this referential plan will set out a framework for estimating, budgeting, and controlling the project's budget.

Control accounts will be created and managed at the third level of the WBS; that is, at the work packages level, however the tasks list for each activity under each work package must be accounted for.

4.4.1 Cost Estimation

Project Team Lead together with subordinate development team must establish the estimated budget for work packages. In determining the estimated budget for the work packages, team members must establish an itemized costing for the resources needed for individual activities.

Cost estimates shall be expressed in Eastern Caribbean Dollars (XCD or ECD). Costs should be rounded up to the nearest dollar and work hours rounded to the nearest whole hour. Project Team Leads are encouraged to specify whether these costs are fixed costs or variable costs.

When preparing cost estimates, a bottom-up approach will be used. This is a method of estimating the cost of individual work packages or activities estimated to the greatest level of specified detail. Therefore, costs estimates will be prepared using the best information available at the time of estimation. The basis for the estimate must be fully documented. The project will aim to have a realistic and well-accounted for understanding of costs to be able to draw up, as reasonably as practical, an accurate budget.

4.4.2 Determining the Budget

Once the team has estimated the costs for the individual activities or work packages, it is now time to consolidate the estimated costs of each work package to determine the cost baseline for the project. All Project Team Leads will provide the Project Manager with the projected costs for the various work packages who in turn will sum total all of the aggregated estimates to determine the project budget.

The cost baseline will be submitted to the Chief Financial Comptroller for review. After revision by the Chief Financial Comptroller, a contingency reserve of ten percent (10%) of the cost baseline will be added to help insure the project against debilitating time and monetary costs. The final cost baseline, along with the cost for the contingency reserve will be forwarded for approval by the Project Sponsor and Managing Director.

The approved cost baseline is the budget against which the project progresses, and performance measured. Any changes to the cost baseline must follow the established Change Control process in effect.

Chart 11 Approved Cost Baseline (Source: Sanisha Maximin, 2022)

WBS ID	COMPONENT / SUBCOMPONENT	ESTIMATE (EC $)
1	**Supply Chain Strategy**	**$7000.00**
1.1	Import and Export Licenses	$1000.00
1.2	Strategy Development	$6000.00
2	**Farmer Registration**	**$33,000.00**
2.1	Inception Meeting	$2000.00
2.2	Signed Commitment form Farmers	$5000.00
2.3	Farm Registration and Tagging	$15,000.00
2.4.1	Populate Database	$5000.00
2.5	Crop Calendar Production	$6000.00
3	**Crop Diversification Training**	**$10,000.00**
3.1	Curriculum Development	$3000.00
3.2	Implementation of Training Programme	$6000.00
3.3	Evaluation	$1000.00
4	**4 Young Farmers Development Programme**	**$50,000.00**
4.1	4.1 Consultancy	$15,000.00
4.2	Young Farmers Summer Program	$35,000.00
	Contingency Reserve (10%)	**$10,000.00**
	TOTAL COST	**$110,000.00**

4.4.3 Cost Monitoring and Control

Throughout the duration of the project, project cost will be monitored closely. This will be done in tandem with project schedule and scope. The Project Manager will be responsible for monitoring and managing the costs associated with the project. However, the Chief Financial Comptroller has the overall responsibility of managing the organization's budget.

To ensure that the project is progressing on budget, weekly updates on project costs will be given by Project Team Leads. Monthly audits will also be performed by the Chief Financial Comptroller.

Project Team Leads must ensure that all actual costs spent are recorded in the expenditure register with receipts and details of expenditure attached. This will enable the Project Manager to effectively gauge predicted costs against actual costs spent on work packages. Further, it will ensure that complete and accurate cost information is collected in a timely manner for the effective calculation of earned value.

Inputting correct information will help the Project Manager determine how well the project is performing against the cost baseline plan and what actions are required.

4.4.4 Cost Performance / Status

Cost performance of the project will be measured using Earned Value Management [EVM] with a focus on two Earned Value metrics: Cost Variance [CV] and; Cost Performance Index [CPI]. The Project Management Institute offers the following as definitions for these key terms:

- Cost Variance (CV) is the amount of budget deficit or surplus at a given point in time, expressed as the difference between earned value and the actual cost. It is a measure of cost performance on a project. It is equal to the earned value (EV) minus the actual cost (AC) (PMI, p.271, 2017).

- Cost Performance Index (CPI) is a measure of the cost efficiency of budgeted resources, expressed as a ratio of earned value to actual cost. A CPI value of less than 1.0 indicates a cost overrun for work completed. A CPI value greater than 1.0 indicates a cost underrun of performance to date. The CPI is equal to the ratio of the EV to the AC (PMI, p.271, 2017).

To calculate Earned Value [EV], the project will be using the achievement of work packages. Each work package is assigned a portion of the budget; when the work package is achieved, that portion of the budget has been achieved.

Each Project Team Lead will input the details of the cost used on the ascribed spreadsheet for his or her Level 1 component of the Work Breakdown Structure. The spreadsheet will contain information of all work packages for the control accounts and the allotted budget for each work package. As the project progresses, Project Team Leads will be responsible for entering the details of the costs spent on the various tasks and or activities. The spreadsheet will automatically compute the percentage of the work completed by dividing the actual cost spent by the budgeted amount multiplied by 100. The Earned value will then be calculated by multiplying the percent complete by the budget. That is: Earned Value = Percent complete (actual) x Budgeted Cost.

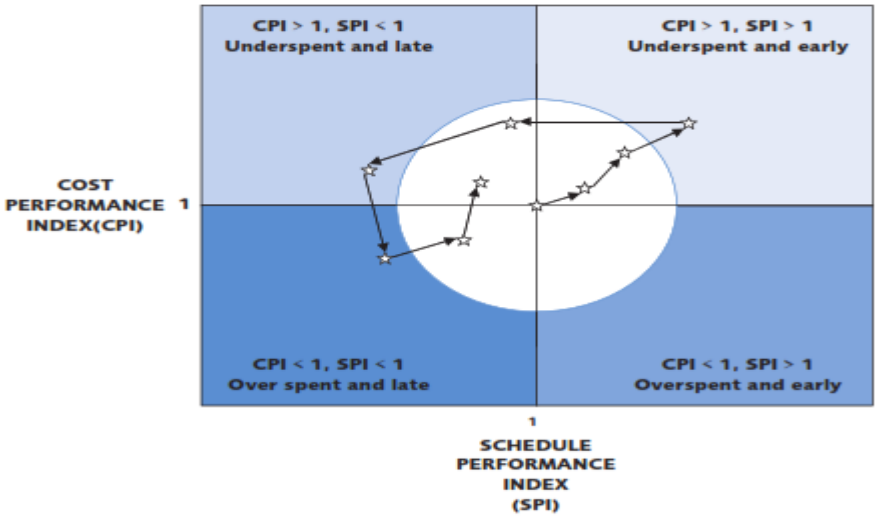
We can now use the Earned Value to compute [1] **Cost Variance** which is the cost comparison of what has been earned to what has been spent. The following equation is used to compute the Cost Variance: CV = cumulative EV – cumulative AC. The cost variance at the end of a project will be the difference between the budget at completion (BAC) and the actual amount spent. If the Cost Variance is positive (+), this means we are under budget. If the Cost Variance is negative (-), this means we over budget and; [2] **Cost Performance Index** which is the index of earned value to actual cost. It is computed using the equation: CPI = EV /AC. To further analyze the data, the Project Team should note that a CPI value of less than 1.0 (<1.0) indicates a cost overrun for work completed. A CPI value greater than 1.0 (>1.0) indicates a cost underrun of performance to date. A CPI value equal (=) to 1.0 means we are on planned cost. Therefore, a CPI below 1.0 is unfavorable and above 1.0 is favorable.

4.4.5 Overall Project Health / Status

The status of the project's overall functionality and progress towards a successful completion has to consider both the Schedule and Cost performance as part of the Earned Value Management System. The Association for Project Management (2008) defines Earned Value Management as a project control process based on a structured approach to planning, cost collection and performance management. It facilitates the integration of project scope, cost and time objectives and the establishment of a baseline plan for performance management. According to the PMI (2011) Earned Value Management (EVM) is a management methodology for integrating scope,

schedule and resources for objectively measuring project performance and progress and for forecasting project outcome. PMI (2011) contends that a fundamental principle of EVM is that patterns and trends of performance, when captured against a soundly developed baseline, can be excellent predictors of the future project performance.

Figure 8 Bullseye Chart Showing Cost and Schedule Performance Indices (Source: APM, 2008)



Note. Adapted From APM. Association for Project Management. Earned Value Management, APM Guidelines. Copyright @ Association for Project 2008. Permission not sought.

The earned value metrics for the schedule performance will be discussed in the Schedule Management Plan however, a bullseye chart with the two indices and interpretation is shown above.

4.5. Quality Management Plan

Quality is an essential aspect of any project or organization, whether big or small, being able to meet or exceed stakeholders' expectations is critical. According to the UK's Chartered Quality Institute [CQI], the only true measure of acceptable quality is customer satisfaction, which takes into account both objective and subjective interpretations of the needs and expectations of customers. What qualifies as an acceptable level of quality for an organization is ultimately a question for stakeholders, that is, anyone who has an interest in the success of what the organization does (CQI, 2022).

Delivering an acceptable level of quality in the organization means knowing who the stakeholders are, understanding what their needs are and meeting those needs or even better, exceeding expectations. Failure to meet quality requirements can have serious negative consequences for any or all project stakeholders.

Rose (2005) defines quality as the ability of a set of inherent characteristics of a product, system, or process to fulfil requirements of customers and other interested parties. Quality is therefore vital to the success, survival and thriving of Monarch Farms, and as a result it must be managed effectively to enhance the organization's brand and reputation, increase its market share, boost its profits, increase its efficiency, protect it against risks, reduce costs and sustain greater customer satisfaction.

This Quality Management Plan is an essential component of the Integrated Project Management Plan which provides guidance on how quality will be planned, managed, and controlled throughout the project.

4.5.1 Monarch Farms' Quality Policy Statement

Monarch Farms embodies a holistic framework where quality is at the epicenter of everything we do. We value conformance, prevention, inspection and correction over rejection. We adhere to the notion that "none of us is as smart as all of us." For that reason, we value the contribution of every stakeholder, whether you are a team member, external customer, or bystander. In support of our vision and mission, we strive to foster a positive and cooperative working environment which promotes continuous improvements and growth of our peoples, processes, and products. We believe in a whole systems thinking approach realizing that every constituent part of the ecological system is connected to each other, and that they are interrelated and must work together in order to have a well-balanced and harmonious system. Our philosophy is to responsibly balance the needs of our customers, employees, shareholders, communities, and environment in a safe and just space.

4.5.2 Quality Planning

Quality is the responsibility of every project team member. All team members have an obligation to ensure that their role in achieving quality is done at the stipulated timeframes. By carefully performing quality management throughout the lifecycle of the project, as early as practically possible, we will be able to detect limitations to implement remedial measures and minimize negative effects on the environment, project costs and schedules.

As Project Team Members it is our responsibility to prevent non-conformance to requirements and work towards achieving customer satisfaction. This will be done by understanding the requirements of our stakeholders, agreeing upon quality objectives, setting quality standards, and measuring the work done against what was established to determine compliance and managing and verifying conformance through quality assurance processes.

Project Team Lead must also carefully consider the impact of the works to be done on the environment and to ensure that the work performed does not degrade our natural environment. Below are the quality requirements gathered so far from some of the main stakeholders in relation to the elements of the Work Breakdown Structure. Please note that the list is not exhaustive and would require completion during discussions held between Project Team Members and the requisite stakeholders for each deliverable.

Chart 12 Quality Requirements (Source: Sanisha Maximin, 2022)

WBS CODE	DESCRIPTION OF WORKS	QUALITY REQUIREMENTS	ACCEPTANCE CRITERIA
1. **1.1**	**Supply Chain Strategy** Acquisition of Import and Export Licenses.	▪ Authentic ▪ Regulatory compliant	Physical licenses should be on hand by 24 March 2023. Certificate of receipt should be signed off on by Project Development Team Lead along with Project Manager to confirm receipt.
1.2	Design, development and implementation of a Supply Chain Management Strategy.	▪ Customer focused. ▪ Strategy is reliable and suitable for use. ▪ Provides visibility across departments for better decision making. ▪ Easy to use and understand. ▪ Proactive rather than reactive.	Takes into consideration integration and departmental communication, purchasing, distribution, logistics, automated component with simple userface .
2.	**Farmer Registration**	▪ Seamless process. ▪ Simple and easy to complete. ▪ Delivered in both English and Creole. ▪ Accessible from web-portal. ▪ Downloadable forms. ▪ Speed ▪ Friendly interface and experience	All forms completed must be verified by a different person other than the one who inputted the data. All registered farmers must show proof of identity using National Identification Cards or Passports

WBS CODE	DESCRIPTION OF WORKS	QUALITY REQUIREMENTS	ACCEPTANCE CRITERIA
3.	**Crop Diversification Training**	▪ In keeping with international standards ▪ Engaging ▪ Support growth and development of local farmers.	All communication to be in both English and Creole. Small group sessions with 10 – 15 farmers. All sessions must be recorded.
4.	**Young Farmers Development Program**	▪ Engaging and motivating. ▪ Thought-provoking. ▪ Invokes high-impact fun learning. ▪ Fosters collaboration and creativity. ▪ Animated ▪ Environmentally friendly	Use of animation or caricature videos and other activites that would keep young people engaged. All Project Development Team and field officers are to receive training in conflict resolution and dealing with vulnerable and difficult young people prior to the commencement of the implementation of deliverable. All sessions are to be interactive and must be recorded. Only person who receive the training will be assisting with imparting knowledge on the youth. Particpants who have an attendance rate of 90% or more will be elgible for grant incentive.

4.5.3 Quality Objectives and Standards

The Project Team Lead for level 1 elements of the Work Breakdown Structure, together with subordinate Project Development Team members, will be responsible for determining what the quality standards and objectives are for their deliverables and or component of the project. The identified standards will be discussed with the Project Manager for approval. Project Team Leads must ensure that stakeholders' requirements and acceptance criteria are considered and met.

4.5.4 Managing Quality

4.5.4.1 Quality Assurance and Audit

The following processes will be employed to determine if project performance is meeting the requirements of quality and other standards:

1. Every morning at 7:45 a.m. Project Team Lead will meet with subordinate team members to brief on the planned activities for the day.

2. Project Development Team will be given their respective tasks to complete to meet the sub-team's target.

3. All tasks will be lodged in the Task Management System on the project's intranet. This would entail details of what activity is to be completed, by whom, and its status.

4. Project Team Lead and team members will review the requirements for the deliverable they are targeting, and ensure that they understand the requirements, standards, and acceptance criteria to be met.

5. Upon completion of a task, the Project Team Lead will verify that the task completed was in keeping with agreed targets and requirements. The project Team Lead will mark task as complete on the Task Management System.

6. Any issues experienced by the Project Development Team member that need to be addressed formally should be registered on the Issues Log and a report forwarded to the Project Manager through the Project Team Lead. The issue report will capture the issue or problem description, impact analysis, its severity and recommendation for issue resolution. The Project Manager will subsequently action issue report accordingly.

7. All completed deliverables will be escalated to the Project Manager for revision in conjunction with the Project Team Lead for approval.

8. If the deliverable does not conform to specification, the Project Manager will reject deliverable, then meet with the person whom the task was assigned to, together with all subordinate team members or solely the Project Team Lead, to devise corrective measures to bring the deliverables up to standards.

9. As a means of verifying and certifying that project deliverables are completed satisfactorily and are in keeping with the project requirements, there will be weekly reviews of the deliverables by the Managing Director of Monarch Farms.

10. Upon completion of each deliverable, the Project Manager will present the deliverable to the Managing Director and Project Sponsor, who will sign off on a Certificate of Acceptance to formally accept project deliverable. By signing the Certificate of Acceptance, the Managing Director and Project Sponsor acknowledge and attest that the deliverable was completed in accordance with quality requirements and fit for use.

4.5.6 Quality Control and Improvements

To ensure that there is congruence with applicable standards, regulations, requirements, product specifications and to eliminate sources of quality non-conformities, the Project Manager will be responsible for reviewing the project performance against the plan. The Project Manager along with all Project Team

Leads will have weekly end of week review meetings to monitor the progress of the project. During these sessions, the team wil be verifying, validating and monitoring work products to ensure the requirements for quality and scope of work are being fulfilled. The Project Manager will also address the issues logged by the various team members and provide Project Team Leads with updates on the decisions taken. Lessons learnt will be documented in the project's repository for future reference. Team Leads will also be required to provide feedback on their work processes and to provide suggestions for improvement of processes. Prior to the delivery or release of any work product, the Project Manager will exercise due diligence by meeting with the Managing Director, along with the Project Sponsor to thoroughly inspect deliverables, perform necessary tests, checks to ascertain that the deliverables meet their expectations and conforms with their quality requirements. When all parties are satisfied with the deliverable, the Managing Director with the Project Sponsor will formally accept the deliverable by signing the Certiifcate of Acceptance.

4.6. Resource Management Plan

This Management Plan applies to the estimation, acquisition, management and use of team and physical resources during the implementation of the project. It captures the following sub-topics:

- Identification and Estimation of Resources
- Acquiring Resources
- Team Building, Development and Management
- Resource Control

It sets expectations for what needs to be done within its scope, in order to achieve project outcomes. This Plan will help to promote project success by ensuring the appropriate resources are acquired and are readily available. For the purposes of this Project physical resources include equipment, materials, facilities, and infrastructure. Team resources or personnel refer to the human resources.

Below is a RACI Chart which is a type of a Responsibility Assignment Matrix [RAM] that advises of the level of involvement of Project Team members and is denoted with the letters, R, A, C. I. In Project Management, the term RACI stands for Responsible, Accountable, Consulted, and Informed.

Chart 13 RACI Chart (Source: Sanisha Maximin, 2022)

Activity	Project Manager	Project Team Lead	Project Development Team	Chief Financial Comptroller	Change Control Board
Collect Requirements	**A**	**R**	**R**		
Identify and Estimate Resources	**A C**	**R**		**I**	
Acquire Resources	**A R**	**I**	**I**	**R C**	
Building, Developing and Managing Team	**A R**	**I**	**I**		
Maintain Quality	**R**	**R**	**R**	**R**	**R**
Monitor and Control Resources	**R**				
Approve Change Requests	**C**	**I**			**R**
R = Responsible **A** = Accountable **C** = Consult **I** = Inform					

According to Forbes Advisors Miranda and Watts (2022), the designation for each of the categories are as follows:

- **Responsible**

Responsible designates the task as assigned directly to this person (or group of people). The responsible person is the one who does the work to complete the task or create the deliverable. Every task should have at least one responsible person and could have several. Responsible parties are typically on the project team and are usually developers or other creators.

- **Accountable**

The accountable person in the RACI equation delegates and reviews the work involved in a project. Their job is to make sure the responsible person or team knows the expectations of the project and completes work on time. Every task should have only one accountable person and no more. Accountable parties are typically on the project team, usually in a leadership or management role.

- **Consulted**

Consulted people provide input and feedback on the work being done in a project. They have a stake in the outcomes of a project because it could affect their current or future work. Project managers and teams should consult these stakeholders ahead of starting a task to get input on their needs, and again throughout the work and at the completion of a task to get feedback on the outcome.

- **Informed**

Informed folks need to be looped into the progress of a project but not consulted or overwhelmed with the details of every task. They need to know what's going on because it could affect their work, but they're not decision makers in the process. Informed parties are usually outside of the project team and often in different departments. They might include heads or directors of affected teams and senior leadership in a company.

4.6.1 Identification and Estimation of Resources

Below is a preliminary list of the resources required for Level 1 elements of the

Chart 14 Preliminary List of Resources (Source: Managing Director, Monarch Farms, 2022)

WBS CODE	DESCRIPTION OF WORKS	RESOURCES		
		MATERIALS	PEOPLE	COST
1.	Supply Chain Strategy	Business Registration, documents, business plan	Personnel with Expert knowledge on Supply Chain Management, Software Engineer	$7000
2.	Farmer Registration	Barcode scanner, barcode generator and printer, printer, electronic signature software, computer, internet, mobile phone, laptop, adobe software	Field Officers, Computer Technician, Database Programmer, Statistical Analyst	$33,000
3.	Crop Diversification Training	Vehicle, telephone, internet	Experts in the field of conservation and regenerative agricultural practices, as well as crop diversification	$10,000

WBS CODE	DESCRIPTION OF WORKS	RESOURCES		
		MATERIALS	PEOPLE	COST
4.	Young Farmers Development Program	Internet, laptop, bus or coach, food items	Media Artist / animator/ cartoonist, media support	$50,000

The list of resources listed above is not exhaustive. Project Team Leads for level one elements of the Work Breakdown Structure, together with subordinate development team, will utilize expert judgment and or bottom-up estimation to pragmatically assess the physical and human resources required for completion of the various activities and tasks associated with each work package. The list should contain the numbers necessary for resources, as well as any specialty requirement needed such as skill level or specifications for physical resources. Resource requirement list should also clarify by when resources should be ready for use.

Against each activity, the list of resources required must be forwarded to the Project Manager who is responsible for working closely with the Chief Financial Comptroller for determining the most suitable way for obtaining resources within budgeted parameters. Prior to the Project Manager's submission to the Chief Financial Comptroller, the Project Manager will meet with individual Project Team Leads to clarify the necessity of resources listed for activities and to prioritize them by classification as shown below:

[1] Essential: This is required to complete a project.
[2] Necessary: This will help efficient project implementation.
[3] Desirable: This will help project implementation but is not a necessity.

The necessity of items classified as [2] and [3] above will be discussed with the Chief Financial Comptroller from the standpoint of cost availability and performance. Thereafter, a Resource Calendar and a Resource Breakdown Structure [RBS] will

be created for each component to allow for more effective planning, managing, and controlling project work. Assessment of resources needed to complete project work will be done periodically as the project progresses.

In determining the resource needs for the various work packages, the Project Team should:

- Actively search for local suppliers.
- Give preference to local suppliers whenever possible.
- Use energy-efficient supplies and materials whenever possible.
- Prioritize the use of renewable energy.
- Actively seek ways to optimize the use of available resources.

The project will be using Kantata, an integrated and automated software, to manage project resources. This program will enable the Project Team to optimize resources and maximize project visibility across the entire project enabling effective monitoring of resource performance, identification of resource availability, resource deployment, as well as being able to forecast resource needs.

4.6.2 Acquisition of Resources

The resources needed for completion of the project can be sourced either internally or externally: locally, regionally, or internationally. Local procurement is preferred for the acquisition of both physical and human resources. Where the necessary resource is largely unavailable locally, the Project Manager in conjunction with the Chief Financial Comptroller will explore options outside of the jurisdiction.
Acquisition of resources will be conducted according to the procedures set forth in the Procurement Management Plan.

4.6.3 Team Building, Development and Management

To cultivate and maintain a culture of a high-performance team, this project team will undergo various activities to: (1) build trust and good rapport, (2) work well together to deliver consistent and superior high productivity, (3) keep each other motivated

and, (4) be in alignment with and committed to the shared vision and goal of this project.

Team Building and Development activities will include but not limited to the following:

1. Kickoff / meet and greet: - this activity will take place during the second day after the commencement of the project. All team members irrespective of team assignment will meet to introduce oneself, providing a short background of skills, strengths, and pet peeves.

2. In-house conflict resolution and emotional intelligence training program: - this session is pre-recorded and will run for the first two months of the project for one-hour a week. It is self-paced but monitored to ensure that all team members take the time out to learn the techniques offered by the consultant. These sessions will also form part of the weekly briefing sessions where team members will discuss what was aired and will also serve as a platform to clarify any ambiguities.

3. During the third Friday of the third month of the project all work will cease from 12:30 p.m. to allow project staff to attend and participate in a retreat out-of-office. The exact location will be communicated to team members closer to the date of the session.

4. At the end of each week, there will be post week in review sessions which will be an informal session for all team members to debrief, relax and unwind.

The Project Manager shall put in place the necessary work to achieve project objectives while delivering high quality team experiences effectively and efficiently.

Under these circumstances, the Project Manager will:

1. Have an open-door policy where every team member is welcomed to air grievances, speak of challenges, suggest ways for improvement.

Communication will be open and two-way for receiving and accepting constructive criticism and feedback.

2. Foster a participatory approach in governance. Every team member's voice is important and has a say in the decision-making process.
3. Be transparent and give visibility to project team as project progresses.
4. Continually seek ways, through consultation with team members to keep focused, motivated and performing.
5. Continually monitor team functionality and performance to determine if any actions are needed to correct or prevent team problems.
6. Assess, coach, mentor, give or outsource training where a skill gap exist that is both beneficial for project success and business continuity of Monarch Farms.
7. Reward and give recognition to team members for exceptional performances.

4.6.4 Resource Control

The Project Manager will closely monitor project resources with the use of Kantata to allow for real-time responsiveness with resource demand and supply and to proactively assess planned resource usage against actual resource performance for better decision making.
To allow for the resources needed for the project to be assigned and released at the right time, right place, and right amount for the project to continue without delay, the Project Manager will periodically confer with Project Team Leads to ensure that all resource requirements were realistically and practically captured.

Should there be any changes to the schedule and cost baselines, approval must be sought through the Change Control process which was outlined in the Scope Management Plan.

4.7. Communication Management Plan

Successful communication is critical in virtually every aspect of this project. The guide has been designed to provide a simple framework that can be used by the project team in effectively managing project communication appropriately and in a timely manner. Because of the diversity of the stakeholder group, this framework encourages an approach to best meet the needs of all stakeholders and the project. This Communication Plan describes how the project communications will be planned, structured, implemented and monitored effectively and efficiently.

4.7.1 Project Stakeholder

The preliminary stakeholders list provided includes:

- Ministry of Agriculture
- Ministry of Commerce
- Customs and Excise Department
- Farmers (registered and unregistered)
- Youth
- Secondary School and College Students
- Financial Institutions
- Project Team
- Project Sponsor
- Consultants / Trainers
- Media
- Staff of Monarch Farms

Please note that this list will be modified to entail a more comprehensive Stakeholders list during the stakeholder identification and analysis by the various Team leads and subordinates.

4.7.2 Stakeholders Communication Requirements

To ensure that the communication needs of Project Stakeholders are communicated and being met, Project Team Leads and subordinate team will be responsible for

obtaining the communication requirements of stakeholders for their component of the project.

By utilizing the Project Communications Requirement Matrix below, Project Team Leads are responsible for determining:

- Who needs to know what information?
- How often must that information be communicated/shared?
- By what means will information be communicated/shared?

Chart 15 Project Communications Requirement Matrix (Source: Sanisha Maximin, 2022)

What is being communicated	Why	To Whom	Communicaton Channel/ Mode	Frequency

This should be done by having one-on-one sessions with stakeholders to determine information needs. This step is a precursor to building trust in the relationship with stakeholders and by extension gaining the support and buy-in of the target group. Because of the diverse target audience, the Communication Channel or Mode selected is very important. Project Team Leads are to consider each stakeholder group separately to determine which model is most suitable for the stakeholder group. These entail the following methods:

Interactive Communication which is communication between two or more parties performing a multidirectional exchange of information in real time. It employs communications artifacts such as meetings, phone calls, instant messaging, some forms of social media, and videoconferencing.

Push Communication. This is communication which is sent or distributed directly to specific recipients who need to receive the information. This ensures that the information is distributed but does not ensure that it actually reached or was

understood by the intended audience. Push communications artifacts include letters, memos, reports, emails, faxes, voice mails, blogs, and press releases.

Pull Communication. This is used for large complex information sets, or for large audiences, and requires the recipients to access content at their own discretion subject to security procedures. These methods include web portals, intranet sites, e-learning, lessons learned databases, or knowledge repositories.

The more methods used to communicate about the project, the more likely we are to engage stakeholders and keep them engaged.

Chart 16 Project Communication Methods and Artifact (Source: Sanisha Maximin, 2022)

Modes of Communication	Artifacts
Interactive Communication	Face-to-Face Meetings, consultations, telephone calls, WhatsApp Messaging, video conferencing, Facebook, team briefings, focus group, subject matter expert technical working groups
Push Communication	Letters, memos, reports, emails, press releases (radio and television announcements)
Pull Communication	Web Portal, intranet sites, knowledge repository

4.7.3 Managing and Monitoring Communications

In an effort to validate that the information requirements as well as project requirements and expectations of the stakeholders are met, all communications with key stakeholder groups should be two-way.

Stakeholders should be given the opportunity to respond to communication disseminated and to provide candid and constructive feedback. Various methods should be employed to obtain feedback.

The project will use three methods to extract feedback from target audience receiving communications to measure and evaluate the effectiveness of the communications:

1. Email correspondence sent will have a read receipt feature. After emails have been read by recipients, a request for feedback prompt will be sent two days after. This prompt will continue to pop up on the screens of recipients until an answer is provided.

2. Evaluation forms will be provided to participants of consultations, work program, site visits immediately after sessions have been held.

3. Stakeholders will be encouraged to visit project website which contains a feedback form for persons to register feedback anonymously.

As the project progresses, it is expected that the stakeholders list will change and concomitantly, the project communications. As you identify new stakeholders with whom you must communicate, they may require communication in a way differently from your current stakeholders. This may include adjustments to stakeholders' information distribution, content or format, and distribution method.

Similarly, based on feedback from stakeholders, there may be a need to update the records to keep current needs and requirements. When changes are made, the Project Manager should be apprised of those changes.

Remember, the goal is to reach all our stakeholders to keep them engaged and committed to the project and doing so with a level of trust, within reasonable timeframes, efficiently and effectively. The more effectively we communicate, the more engaged and committed stakeholders will be to the project enabling for increased project success.

4.8. Risk Management Plan

Risk Management is a critical component in managing this project as it is instructive in the decisions taken for both project and operational objectives. Thus, attaining success in this project is heavily reliant on how risks are managed. If unmanaged, risks have the potential to cause the project to deviate from the plan and fail to achieve project objectives. Based on this backdrop, the purpose of this section is to outline a framework for risk management that addresses how risks facing the project are identified, assessed, responses planned and implemented, monitored, and controlled with the goal of improving the prospect that the project's objectives will be accomplished as planned.

4.8.1 Definition of Risk

According to the Project Management Institute (2017) a risk is defined as an uncertain event or condition that, if it occurs, has a positive or negative effect on one or more project objectives.

4.8.2 Risk Management Strategy

A five-step approach will be adopted by the Project Team in keeping with the framework proffered by the Project Management Institute to wit: Identify Risks, Perform Qualitative Risk Analysis, Plan Risk Responses, Implement Risk Responses and, Monitor Risks.

Step 1 - ***Identify Risks*** – this step involves the process of identifying individual project risks as well as sources of overall project risk and documenting their characteristics.

Step 2 - ***Perform Qualitative Risk Analysis*** – is the process of prioritizing individual project risks for further analysis or action by assessing their probability of occurrence and impact as well as other characteristics.

Step 3 - ***Plan Risk Responses*** – pertains to the process of developing options, selecting strategies, and agreeing on actions to address overall project risk exposure, as well as to treat individual project risks.

Step 4 - ***Implement Risk Responses*** – is the process of implementing agreed-upon risk response plans.

Step 5 - ***Monitor Risks*** - refers to the process of monitoring the implementation of agreed-upon risk response plans, tracking identified risks, identifying, and analyzing new risks, and evaluating risk process effectiveness throughout the project.

As with all other aspects of the Project, communication of risks will be open, transparent, and honest. All stakeholders will have a voice in decision-making, either directly or through legitimate intermediate institutions that represent their interests. Risks will be communicated to relevant stakeholders using the following methods: dissemination of risk reports, and project status reports as well as at project status meetings.

4.8.3 Risk Identification

In risk identification, the Project Team will try to look for risks and opportunities that can arise during the project. Risk identification is concerned with identifying events that can impact on the strategic objectives – '**what could happen?**'. This is a team effort which requires the participation of all persons involved in the project. We need to look at both the positive and the negative effect and so as a team we should also ask ourselves '**what could happen if we don't**?'.

The main goal for risk identification is to create a list of all the possible risks and opportunities that can affect the project. To enable the compilation of a thorough list of possible risks and opportunities, the methods used for risk identification will include: - brainstorming of project team and interviewing of domain experts, strategic partners and management of Monarch Farms. In addition, the P5 Impact Analysis

will also be used to analyze the project's product and process impacts across social, environmental, and economic domains.

The main risks which were identified by the Project Owner are as follows:

1. Inflationary environments could lead to increased prices for goods and services and may distort budgetary costs for planned activities.
2. Unmanaged conflicts for both team members and participants could lead to high intensity environments resulting in reduced productivity and demotivated performance.
3. Failure to keep strategic partners (farmers) well informed of the process and progress of strategy implementation could result in farmers wanting to receive earning immediately upon signing of agreements.
4. The volatility of commodity prices; unanticipated changes in demand or supply can create huge changes in prices.
5. Extreme weather events such as droughts, hurricanes and tropical storms can cause significant damage to farms.
6. Corruption.
7. The agreed sources of finance are cut off.
8. Praedial Larceny.

There is also great concern for child security, safety, and protection. As a result, it is incumbent upon the project team to identify any potential risk which can endanger the youth and for measures to be implemented to help the organization minimize the likelihood of negligence, reduce liability risks, and ensure a high degree of care and protection of young people while they participate in activities.

4.8.3.1 Risk Categories

Identified risks may fall under broad categories such as Project Management Risks, Systems Risks, Environmental Risks. Collectively, the Project Team together with the Project Manager, during the Risk Management sessions will determine the main

categories of risks which could impact the implementation of the project. This will enable the configuration of a Risk Register and Risk Breakdown Structure which must be monitored regularly to curtail the impact on the project's cost, quality, schedule, and performance.

All identified risks will be entered in the Risk Register which will be placed on the project's intranet for visibility by all key stakeholders. The risks (threats and opportunities) will be listed under the categories to which they relate.
Please note that Risk Identification is an iterative process. Project stakeholders should always be on the alert as new risk presents itself every day and requires constant identification, analysis, and planning.

4.8.4 Perform Qualitative Risk Analysis

Following the identification of risks (threats and opportunities), the identified risks will be assessed and prioritized by the Project Team together at its designated risk review sessions or at a time slot allocated for the review of severe emergent risks.
During the perform qualitative risk analysis step, the project team will be able to determine which risks priority should be given to, as well as, assessing those risks in terms of the likelihood that they will occur and the impact they will have if they do. Risks will be rated on qualitative scales using probability and impact as scales of measurement.

4.8.4.1 Probability and Impact Scales

4.8.4.1.1 Risk Probability

The first factor that determines the risk of a project is the probability. The Risk Probability is the determination of the likelihood of a risk occurring. For the purposes of this project, a five-point rating scale from one [1] to five [5] will be used by the team to evaluate the likeliness of the risk occurring.

The Risk Measurement Scale below provides a description of the scores that should be ascribed to the risk depending on the team's perception of it happening:

Chart 17 Risk Measurement Scale: Probability (Source: APM, 2008)

Rate	Descriptor	Probability
1	Remote	The event may only occur in exceptional circumstances
2	Unlikely	The event could occur at some point in time
3	Possible	There is an even chance of the event occurring or not
4	Probable	The event is very likely to happen to most circumstances
5	Certainly	The event is certain to happen

4.8.4.1.2 Risk Impact

The Impact Assessment expresses the damage if it is a threat or a benefit if it is an opportunity that the risk will have on the project objectives if it were to occur.

Similar to the probability assessment, the team will use a five-point rating scale from one [1] to five [5] to assess the risk impact. Risk Impact will be qualified using the monetary value indicator expressed below:

Chart 18 Risk Measurement Scale: Impact (Source: APM, 2008)

Impact	
1	Anything <1% of the budget i.e., < $1000.00
2	Between 1% and <4% of the budget i.e., $1000.00 and <$4000.00
3	Between 4% and <7% of the budget i.e., $4000.00 and <$7000.00
4	Between 7% and <10% of the budget i.e., $7000.00 and <$10,000.00
5	Anything > 10% of the budget i.e., >$10,000.00

4.8.4.1.3 Qualifying Risk Assessment

After the risk probability and impact have been assessed for each individual risks, the scores ascribed for the two determinants must be multiplied to determine the risk

score, that is the score for the Probability (P) must be multiplied by the score given for the Impact (I). The risk score (P x I) obtained for each risk will be the deciding factor for what happens next with the identified risks.

Below gives a description of the risk scores and suggested course of action to enable proper management of the risks:

Chart 19 Risk Score Matrix: Impact (Source: APM, 2008)

Risk Scores	Risk Classification	Decision
From 1 – 3	Low or Insignificant Risk.	Take no action. Keep in Risk Register. Risks are unlikely to require response actions, but status should be reviewed monthly to ensure that conditions have not changed.
From 4 – 8	Moderate Risk	Risk to be assigned a Risk Owner. Risk to be reviewed at least every two weeks to reduce probability of impact or increase chances of benefits. May require some risk action. Internal controls to be instituted. Controls and planned action to monitored effectively.
From 9 -15	Major Risk	Risk to be assigned a Risk Owner but should be closely managed by the Project Manager to ensure conditions remain within acceptable threshold. Contingency Plan to be put in place.
>15	Severe Risk	Risk to be escalated to Chief Financial Comptroller for active management alongside Project Manager. Risk has high impact and high likelihood; it needs to be actively managed to maintain exposure at an acceptable level.

Chart 20 Probability and Impact Matrix (Source: Sanisha Maximin, 2022)

			IMPACT				
			Remote	Unlikely	Possible	Probable	Certainly
			LOW →				HIGH
		Scores	5	4	3	2	1
HIGH ↕ LOW	PROBABILITY	5	5	10	15	20	25
		4	4	8	12	16	20
		3	3	6	9	12	15
		2	2	4	6	8	10
		1	1	2	3	4	5

At this stage, the Risk Register should be updated to include the risk score (P x I) of each risk, the decision taken for the risks and the Risk Owners for those risks which could have an impact on the project.

4.8.5 Roles and Responsibilities

The Table below summarizes the roles and responsibilities relevant to risk management from the perspective of key stakeholders.

Chart 21 Risk Management Roles and Responsibilities (Source: Sanisha Maximin, 2022)

Role	Responsibility
Project Manager	▪ To oversee the Project's approach to risk management. ▪ To identify, assess and capture improved performance and value for money through risk and opportunity management.

Role	Responsibility
	▪ To ensure that a robust framework is in place to identify, monitor and manage the project's threats and opportunities. ▪ To overview and review the risk register. ▪ To receive regular reporting on risks and identify necessary actions. ▪ To create a forum for discussion and a focal point for risk management. ▪ To raise the awareness of risk management issues and promote a risk management culture across project teams. ▪ Ensures that risk registers, a risk review process and an escalation process are in place.
Chief Financial Comptroller	▪ Reviews risk management practices to ensure they are performed in line with corporate Risk Management procedures. ▪ Considers risk management implications when making decisions. ▪ To undertake reviews of risk management activities where required. ▪ To consider the effectiveness of the implementation of the risk management strategy. ▪ Monitors and acts on escalated risks.
Project Team Lead	▪ To identify and assess new risks and opportunities. ▪ To ensure that the most appropriate and cost-effective measures are adopted to avoid, minimize, and control those risks in accordance with 'Best Value' principles. ▪ To develop good risk management practices within teams.

Role	Responsibility
	▪ To identify initiatives that could increase the likelihood of an opportunity being realized. ▪ To ensure that risk register entries and controls are accurate and up to date. ▪ To have responsibility for the management of risk within their area, including the implementation of action plans.
Project Development Team	▪ Participate in the identification, assessment, and control of risks. ▪ Escalate risks as necessary as defined by the risk management policy.
Managing Director	▪ Responsible for understanding risk and signing off on all risk mitigation plans. ▪ Responsible for overall oversight of risk management strategy ▪ Approves funding for risk management.
Strategic Partners	▪ Participate in the identification, assessment, and control of risks
Project Sponsor	▪ Approves the Risk Management Strategy and subsequent revisions.

The next process in the Risk Management process is to plan risk responses which seeks to establish appropriate response strategies to reduce or remove the threat or to maximize opportunities.

4.8.6 Plan Risk Responses

As a team effort, response plans must be developed to deal with risks that are deemed urgent and important. During scheduled or emergent Risk Management sessions, it will be necessary to have answers to the following questions as it relates to the risk at bar:

1. Can we reduce the likelihood of occurrence?

2. Can we reduce the impact?
3. Can we change the consequences of the risk?

Once a response has been agreed to collectively, one of the following generic approaches can be considered:

Threats

Mitigate — do something to reduce the probability, the impact, or both. Contingency plans and cost and schedule reserves are common mitigation approaches.

Accept — this is the response of choice for low probability, low impact risks. Acceptance means that the team will do nothing unless and until the risk becomes a problem.

Transfer — shift responsibility to an organization better placed to manage the risk.

Avoid — a change in strategy or approach may allow the team to avoid the risk completely. Avoidance means that the risk cannot affect the project in any way: either the probability or impact is reduced to zero.

Escalate — pass the risk up the management chain if the team lacks the ability to respond.

Opportunities

Exploit — do something to ensure that the opportunity can be realized.

Enhance — do something to increase the probability or the impact that the opportunity can be realized.

Share — shift the responsibility for trying to enhance the opportunity to another party. Where transference usually involves an outside party, sharing is normally done within the organization.

Ignore — do nothing in advance to take advantage of the opportunity.

Collectively, the team will decide whether to make a go or no-go decision based on the results of the response planning. After which, the Risk Register should be updated when appropriate risk responses are chosen and agreed upon.

4.8.7 Implement Risk Responses

The goal of Implement Risk Response is to ensure that the agreed-upon planned risk management actions are executed in the optimal way to reduce chances of threats and maximize opportunities that could be beneficial to both the project and the organization.

4.8.8 Risk Monitoring and Control

At this stage, risk responses will be monitored closely so as to ascertain their effectiveness. Depending on the urgency, proximity and relevance of the risk, the Project Manager will determine the frequency at which the risk and risk responses will be reviewed. During risk monitoring, the team will be able to determine whether the probability of or impact of the risk still exists or has changed.

Should the implemented responses or measures do not match expectations, corrective actions will be taken either solely by the Project Manager or in consultation with the Chief Financial Comptroller and or subordinate team.

An example of the Risk Register with preliminary risks is shown below:

Chart 22 Risk Register (Source: Sanisha Maximin, 2022)

ID	Risk Title	Risk Description	Probability	Impact	P X I	Owner	Strategy
1.	**External Risk**						
1.1	Regulatory Risk	Government can change laws and regulations for acquiring import and export licenses	3	5	15	Project Manager	Monitor closely. Follow up weekly with the necessary authorities to ensure regulations remain unchanged.
1.2	Inflationary Risk	Inflationary environments could lead to increased prices for goods and services and may distort budgetary	5	5	25	Chief Financial Comptroller	Contingency Reserve should be put in place to allow for purchase of needed items which have

ID	Risk Title	Risk Description	Probability	Impact	P X I	Owner	Strategy
		costs for planned activities					surpassed budgetary allocations
1.3	Weather Risk	Poor weather conditions can disrupt schedule for Guided Tours and Summer Work Program	3	4	12	Project Team Lead for Young Farmers Development Program	Pay close attention to weather forecast. Put mechanisms in place to alternate days for indoor activity to replace outdoor activities
2	**Commercial Risks**						
2.1	Partnership Risks	Farmers who are part of the strategic alliance may want to earn	5	5	25	Project Manager Managing Director	Strategic Partners should have a voice in all

ID	Risk Title	Risk Description	Probability	Impact	P X I	Owner	Strategy
		returns as early as possible					decision making. Managing Director to keep partners fully informed of the processes involved
2.2	Client Stability Risks	Youths and young adolescents are prone to engage in risky behaviors such as alcohol and drug use, sex, violence against each other	5	5	25	Project Manager	Engage Police Officers and Social Workers to have them form part of teams involved in summer program, as

ID	Risk Title	Risk Description	Probability	Impact	P X I	Owner	Strategy
							well as town hall meetings. During Summer Program, one of the weekly curriculum activities for the youth is to engage in some form of mentorship program which focuses on positive self-concept, ability to control emotions,

ID	Risk Title	Risk Description	Probability	Impact	P X I	Owner	Strategy
							conflict resolution, problem solving skills, developing positive self-images
3	**Technical Risks**						
3.1	Resource Risk	Utilization of the same human resources across competing initiatives or projects. If subject matter experts are assigned to other projects and initiatives then there might be	3	5	15	Project Manager	Commitment letters are to be drawn up for Subject Matter Experts to secure attendance. A stipend for timeframe in which expertise is required

ID	Risk Title	Risk Description	Probability	Impact	P X I	Owner	Strategy
		delays in implementing key project activities such as training workshops, receiving feedback					should also be considered
3.2	Absenteeism risk	Some participants may be unable to attend all training sessions because of lack of money for transportation to training location	3	2	6	Project Team Lead	Transportation will be organized at various communities to transport registrants to training site

4.9. Procurement Management Plan

The Procurement Management Plan provides guidelines and or policies for procuring resources to be obtained outside of Monarch Farms:

i. The approved financing for the Project will be managed by the Chief Financial Comptroller.

ii. Approval of all purchases for the project must be signed off on by Monarch Farms' Purchasing Manager and the Chief Financial Comptroller.

iii. The Project Team will work closely with the Chief Financial Comptroller to make certain that all procurement needs are met in accordance with the organization's policies, procedures, and legal statutes.

iv. The Project Team Leads together with subordinate team members will identify the resources required to fulfill their component of the project.

v. A fully itemized list of resources stipulating amounts of resources required, periods when they are required, and resource requirements should be forwarded to the Chief Financial Comptroller at least two months prior to its requirement.

vi. The Chief Financial Comptroller along with the Purchasing Officer will be responsible for supplier selection, preparation of contract documentation.

vii. It is the duty of the Project Manager to monitor contract performance and manage procurement relationships of agreed contracts. The Project Manager will ensure that all resources acquired for the project meets the requirements specified in the contractual agreement.

viii. The Chief Financial Comptroller shall consider sustainability in all procurement decisions, carefully analyzing overall project risk against make or buy decisions, outsourcing and appropriate contract types.

ix. Any changes to contract agreements, suppliers, resource specifications, vendors must be channeled through the Project Manager. Depending on the type and severity of change requested, the Project Manager may action it in conjunction with the Chief Financial Officer. If it is a very serious change which has implications for the project, the request should be escalated to the Managing Director and Project Sponsor for review and decision.

x. All approved changes will be carefully monitored by the Project Manager to make certain that the changes do not affect schedules, costs and project quality.

4.10. Stakeholder Engagement Plan

This Stakeholder Engagement Plan is a subordinate management plan within the Project Management Plan that identifies the strategies and actions required to facilitate effective stakeholder involvement, collaboration and participation in the project decision making and execution.

Empowered participation is imbued in the organizational culture of Monarch Farms. For that reason, the Project will use a participatory approach, that is, involving everyone who has a stake in the project. Everyone's opinions and participation should be welcomed and respected. The stakeholder group will include staff of Monarch Farms, target population, schools, Government Officials and any other institution or agency which has an interest in or can influence and impact the project positively or negatively.

Below are the processes for identifying, monitoring, and managing the key stakeholders for the project.

4.10.1 Stakeholder Identification

An initial assessment of the key stakeholders was conducted by the Managing Director and Project Sponsor. The following list was submitted as the main stakeholders group including beneficiaries and Project Development Team members:

- Ministry of Agriculture
- Ministry of Commerce
- Customs and Excise Department
- Farmers (registered and unregistered)
- Youth
- Secondary School and College Students
- Financial Institutions
- Project Development Team
- Project Sponsor
- Consultants / Trainers
- Media
- Staff of Monarch Farms

Stakeholder identification and analysis is an essential component of effective and meaningful stakeholder engagement activities. To determine a comprehensive list of stakeholders, the Team Lead for level 1 elements of the Work Breakdown Structure will be responsible for identifying the stakeholders for their component of the project with an aim of identifying stakeholders' interests, expectations, influence, and impacts, as well as eliciting their requirements. The intent here is to identify all the stakeholders to ensure all requirements are met. By not identifying all potential stakeholders, we run the risk of not identifying all potential requirements which could lead to changes that may confound implementation of the project.

Team Leads along with Project Development Team should consider obtaining assistance from individuals who have expert knowledge in the various industries

such as teachers, principals, farmers, officials from Ministry of Agriculture, Youth Development, Commerce etc. to generate a comprehensive list of stakeholders.
The data collected should be presented in the Stakeholder's Register, which can be located on the Project's intranet. The Stakeholder's Register will capture information on stakeholders such as: name, organizational position, location, contact details, role on the project, major requirements, expectations, potential for influencing project outcomes, interest, and power.

After the stakeholders have been identified, Team Leads are responsible for prioritizing the stakeholder groups using an L-Shape Matrix. The purpose is to gain an understanding of the relative importance of the stakeholder group. This prioritization will be assessed at a Project Meeting with all team members.

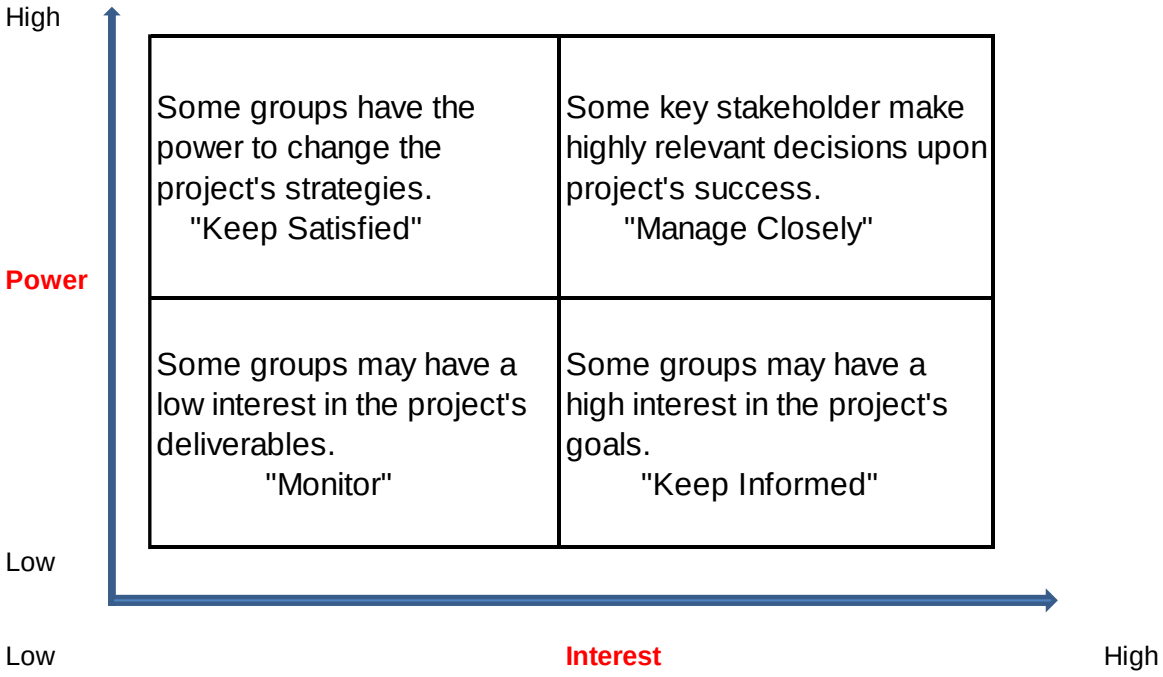
Team members will utilize the following key to prioritize stakeholders:

Chart 23 Stakeholder Prioritization Key (Source: Sanisha Maximin, 2022)

KEY	
10	Much more important
5	More Important
1	Equally Important
1/5 or 0.2	Less Important
1/10 or 0.1	Much Less Important

Once the list of stakeholders is complete with prioritization, Project Development Team Lead together with Project Development Team members should place stakeholders on a Power-Interest grid using the following template.

Figure 9 Power-Interest Stakeholder Classification Analysis Matrix Grid (Source: UCI, 2021)



Note: From SSM-MPM-17 - Stakeholder and Scope Management Lecture, Universidad Para La cooperación Internacional (UCI). Permission not sought.

Team Leads should ask the following questions when brainstorming the levels of power and interest of stakeholders:

- What level of power does the stakeholder have over the project?
- How strong could their impact be on the progress of the project?
- How can the stakeholder block or prevent the project from progressing?
- How could the stakeholder contribute to the project?
- What is the level of interest of the stakeholder for the project?
- How involved with the project are they likely to be?

Thereafter, the Project Development Team Leads in consultation with the Project Manager will classify the engagement level of the main stakeholder groups by using the PMI's Stakeholder Assessment Matrix which follows the structure below:

Chart 24 Stakeholder Assessment Matrix (PMI, 2017)

Stakeholder	Unaware	Resistant	Neutral	Supportive	Leading
Stakeholder 1					
Stakeholder 2					

Stakeholders will be classified using the following analysis:

- **Unaware**. Unaware of the project and potential impacts.
- **Resistant**. Aware of the project and potential impacts but resistant to any changes that may occur as a result of the work or outcomes of the project. These stakeholders will be unsupportive of the work or outcomes of the project.
- **Neutral**. Aware of the project, but neither supportive nor unsupportive.
- **Supportive**. Aware of the project and potential impacts and supportive of the work and its outcomes.
- **Leading**. Aware of the project and potential impacts and actively engaged in ensuring that the project is a success.

The letters C and or D will be placed under the respective category for each stakeholder. According to the PMI C represents the current engagement level of each stakeholder and D indicates the level that the Project Development Team has assessed as essential to ensure project success (desired). The gap between current and desired for each stakeholder will direct the level of communications necessary to effectively engage the stakeholder.

4.10.2 Managing Stakeholder Engagement

The Stakeholder group is very diverse with respect to level of education, demography, interest. To be able to devise an effective engagement strategy that would allow Project Development Team to connect with stakeholders in a meaningful and maximize participation, the approach taken must be targeted to each stakeholder group.

Chart 25 Stakeholder Engagement Strategy (Source: Sanisha Maximin, 2022)

Target Audience / Stakeholder	Approach
Farmers	Currently, most of the farmers are older people whose primary language is creole/patois. Communication to this stakeholder group should always be in creole as well as English for those who understand and can speak English. Notices of meetings, consultations, engagement activity should be announced via announcements on radio and telephone during the peak hours where delivery have a patois segment. The farmers are vital to the future success of Monarch Farms and should be invited in the decision-making process at the various stages of the project. Modes of engagement include: - **Interactive Communication**
Students, youth	Young people are very technologically savvy. Social media plays a monumental role in the youth culture of today. Engaging the youth should include communication via Facebook, Instagram, Tik Toc and any other platform which the youth utilize. Advertisements or announcements can also be communicated via local radio and television by incorporating animations / caricature which the youth are more likely to listen to or watch. Modes of engagement: - **Interactive Communication; Push Communication**
Media, Government Officials, Principals/Teachers, Consultants, Trainers	Communication with this stakeholder group should be formalized and could be dispensed via letters, emails, telephone calls. Mode of engagement: - **Interactive Communication; Push Communication and Pull Communication**

Target Audience / Stakeholder	Approach
Project Sponsor, Project Development Team, Managing Director, Project Manager	This stakeholder group must always be in the know about the project progress. This will enable the principles of transparency and accountability in the project. Mode of engagement: - **Interactive Communication; Push Communication and Pull Communication**

Depending on the level of influence, power and or interest of a stakeholder group the decision must be taken as to whether the stakeholder will be invited to partner with the project, participate in project, consulted to manage their expectations and keep them supportive of the project or kept informed on the progress of the project.

4.10.3 Monitor Stakeholder Engagement

Constructive feedback is important to the success of this project and the continued operations of Monarch Farms. Obtaining feedback will be an ongoing process through the implementation of the project. At every consultation Project Development Team Leads will obtain feedback from participants. This will facilitate the identification of areas which could be improved and strengthened.

Following the review of feedback received should an adjustment be required to improve the approach to the stakeholder engagement, the Project Development Team should follow the same approach which was elucidated in the Scope Management Plan for approval of change requests.

Copious notes are to be recorded of all interactions and should be submitted to the Project Manager at most, three (3) days after engagement. Any approved changes must to be reflected on corresponding documents such as Stakeholders list, Communication Management Plan, Engagement Plan.

5. CONCLUSIONS

1. The Project Charter for this project serves as a high-quality business case which the management of Monarch Farms can use to secure viable and sustainable investment opportunities.

2. The project objectives enunciated in the Scope Management Plan were clearly defined, providing a totality of the outputs, activities and work required to accomplish the overall project goal. Adherence to the Scope Management Plan is crucial. As reasonably as possible, the Project Manager should ensure that the project sticks to the schedule and that elements outside of the scope of the project should not be entertained. In addition, the Project Manager has to ensure changes to the scope are thoroughly ventilated and are of a necessity before approval is granted.

3. The one hundred and fifty (150) days duration allocated for the project is sufficient to successfully complete the project should the project progress as planned. Given that the lifecycle of the project is six months, the Project Manager has to monitor the schedule regularly to ensure that the project does not fall behind schedule. Delays in the schedule can lead to schedule variances, implications for resources, and spikes in costs which were not catered for.

4. The Cost Management Plan provides guidelines on how the expenditures for the project will be managed throughout its life cycle. Due to the current financial climate in St. Lucia where the costs of products are progressively increasing, the Project Manager, as well as subordinate team need to keep a close watch on the resources needed to execute the project and to put in place strategies which will help to level out resources or incorporate cost trade-offs where applicable to minimize setbacks.

5. Monarch Farms has a solid, well written quality policy which shows that the organisation is committed to achieving quality in its processes, procedures and products. Based on the organization's business strategy, the Quality Management Plan provides a strengthened aggressive strategy to enable it to venture into markets, locally, regionally, and internationally with high quality as a competitive linchpin.

6. Full consideration was given to the resources required for executing the project. It is concluded that successful implementation of this project, in the given timeframe and budget, requires the appointment of a high-performance team particularly persons who are knowledgeable in key areas of the project as there would be insufficient time for training personnel to be at the standard that is required to progress efficiently and effectively. Also, it was concluded that technology plays a critical role in moving the business strategy forward and should be a strategic priority for management of Monarch Farms, not only in its project objectives but also in the operations of the business, from farming to office procedures.

7. The stakeholder group for this project is very diverse. As a result, the project must utilize an effective communication strategy to benefit from meaningful and impactful participation from all of its stakeholder groups. Two of the main groups requiring targeted engagement are (1) the farmers and (2) the youth. In communicating with the farmers, the project must ensure that communication is done in both English and Creole. As a stakeholder group, majority of the farmers who form part of the strategic partnership are older and may have difficulty communicating in English. To address the youth, one of the fastest and easiest ways to get them involved or interested in agriculture is through their engagement using the social media platform and animated videos. These interactive and engaging forms of communication will keep them captivated and engaged in discussions.

8. Risk management is fully embedded in the organization's operating procedures and has the principle of sustainability as a key cornerstone of its corporate responsibility activities. One of the major risks the project faces, is rise in prices of goods and services due to volatility of our financial environment. In addition, there are high risks that could negatively impact the progress of the project to wit: -natural disasters such as hurricanes, droughts, tropical storm, as well as some commercial risks which could be mitigated if the correct strategies are employed early. Risk Management is a critical component in managing this project as it is instructive in the decisions taken for both project and operational objectives.

9. Procurement planning is undertaken as part of Monarch Farms' business planning process. The structured approach to procurement seeks to employ cost-saving measures without jeopardizing quality and ensuring that the organization receives value for money. In addition, sustainability is ingrained in the fabric of Monarch Farm's procurement practices.

10. Stakeholder engagement is critical for the success of the project. Communication needs to be involved from the start particularly with the strategic partners (farmers). The project needs to be on the "front foot" with the farmers to ensure that their needs are taken into consideration; understanding with each step of the process and to chart a proper course moving forward. This will engender trust, confidence, buy-in and commitment to the strategic objectives of the organization. This is vital throughout the project lifecycle to enable successful project delivery. Monarch Farms has a solid business strategy which can create value for its organization and stakeholders and has the potential to deliver benefits even after the culmination of the project. It has a built-in value management framework which is tied to its business strategy that will support the organization in achieving its desired strategic objectives.

6. RECOMMENDATIONS

The following recommendations are proposed for consideration by the management of Monarch Farms:

1. The management of Monarch Farms should develop a Benefits Sustainment Plan to optimize business value beyond the implementation of the project. This will enable Monarch Farms to advance its strategies and enable it to develop distinctive competencies or advantage and remain competitive.

2. The Management of Monarch Farms should collaborate with agencies such as the Inter-American Institute for Cooperation on Agriculture (IICA) and the Taiwanese Embassy in St. Lucia, to continue the drive of changing the mindset of the youth on the importance of Agriculture. This will enable the Young Farmers Program to remain active, ensuring that the commitment for change is embedded in the minds of the youth. Additionally, it will enable the management of Monarch Farms to monitor and measure the impact of their engagement with their beneficiaries which will result in the delivery of sustainable change and realization of business benefits.

3. The Management of Monarch Farms should put the necessary mechanisms in place to continuously monitor the external environment for development of new risks or opportunities.

4. The Managing Director of Monarch Farms should have on staff a key technology personnel such as a Systems Administrator for monitoring and managing data.

5. The Managing Director of Monarch Farms should leverage information technology to enhance capacity to monitor and stabilize agricultural production and marketing.

6. The Management of Monarch Farms should establish processes for allowing key stakeholder groups, particularly farmers who are part of the strategic partnership, to view records and submit critical feedback or information for the continued growth of the organization.

7. Monarch Farms needs to have a central Management Information System which incorporates all aspects of its operations.

8. The Managing Director of Monarch Farms should ensure that all project documents are kept in an online repository to provide guidance and serve as lessons learned for future projects or change initiatives of similar nature.

9. The Ministry of Agriculture in conjunction with the Ministry of Education needs to play a critical role in sensitizing youth about the importance of the agricultural sector for the sustained growth and development of the nation.

10. The Government of St. Lucia needs to inject greater finances in the agricultural sector with an aim of increasing youth interest and involvement in agribusiness, with greater emphasis on the multi-functional value of agriculture.

11. The Project Manager together with the Managing Director of Monarch Farms should provide a detailed list of skillsets and experience should be provided to the recruiting personnel or agency responsible for enlisting team members for the project. Potential team members should possess the right skills to enable the project to progress efficiently, build capability and support the project implementation plan.

7. VALIDATION OF THE FGP IN THE FIELD OF REGENERATIVE AND SUSTAINABLE DEVELOPMENT

Sustainable Development and Regenerative Development are at the epicenter of Monarch Farm's business model. This is enshrined in the company's mission and vision statements. The management of Monarch Farms holds the view that in order to achieve business success, creating and maintaining value must take into account the effects and relationships between the social, environmental and economic spheres of its business. This is therefore tied closely to the three pillars of Sustainable Development namely: economic, environmental and social and the triple bottom line theory coined by John Elkington who avers that the triple bottom line is a sustainability framework that examines a company's social, environment, and economic impact (Elkington, 2018). The triple bottom line suggests that business performance cannot only be measured by its profits but should incorporate the impacts on the environment and social dimensions thus giving rise to the 3Ps or triple bottom line [TBL] of profit, planet and people.

In the context of Project Management, integrating sustainable practices in the discipline is at the heart of Green Project Management [GPM]. In addtion to the three domains of the TBL, GPM offers an additonal two perspectives which should be considered when identifying potential impacts that projects could have on sustainability; these include product and processes.

In analyzing the relationship and impact of the execution of the FGP and the operation of the final product with regenerative and sustainable development, we will first take a closer look at the Sustainable Development Goal which the project impacts. Secondly, we will amalgamate GPM's P5 with principles of regenerative development to assess and identify potential impacts on sustainability by carrying out a complete and detailed Sustainability Impact Analysis of the project under the perspectives of process and product. The P5 Standard as a tool will determine the impact on the sustainable development of the project's process and the project

product (GPM, 2019). It will help Monarch Farms to demonstrate a commitment to sustainability, by having a solid sustainability plan which aligns its strategies, policies, operations, processes, and products to that plan and will help implement changes leading to the implementation of future projects or operations in a sustainable manner, while considering the environmental and social impacts.

The 2030 Agenda for Sustainable Development, which includes 17 Goals and 169 targets, sets out a vision for sustainable development, integrating its economic, social and environmental dimensions.

Out of the 17 goals, Goal 2 is closely related to the strategic objective of Monarch Farms. Goal 2 of the Sustainable Development Goals refers to ending hunger, achieving food security, improving nutrition, and promoting sustainable agriculture. Operationalising Monarch Farms will include a myriad of sustainable agricultural practices which will be further enhanced by the concepts of conservative and regenrative agriculture. These include: composting and other residue management, mulching, crop roation, crop diversification, and reduced tilage. Such practices will help largely to regenerate the land used by farmers and will promote sustainable increases in agricultural production and productiviity which are necessary for food security (availability and accessibility to nutritious, safe and healthy food) and improved livehoods.

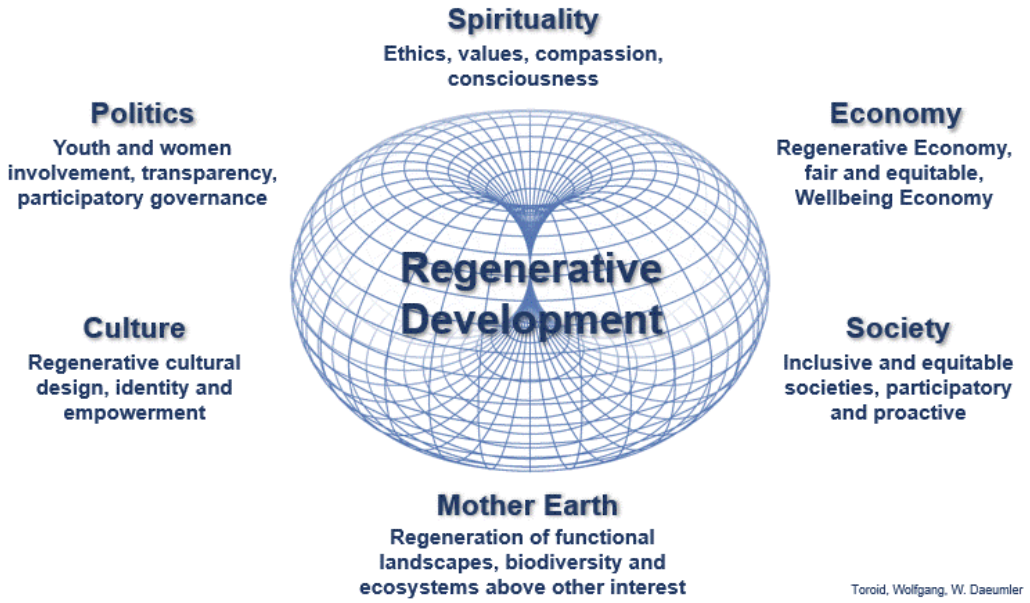
Research shows that every organization has an environmental, social, and economic impact. In Project Management, Project Managers and team have a very vital role to play in helping to restore our ecosystem. This can be done by employing regenerative strategies in policies, decision making, and practices.

The term ‘regenerative’ describes processes that restore, renew or revitalise their own sources of energy and materials, ensuring the capacity to sustain and nurture all life. Regenerative approaches use whole-systems thinking to build equitable resilience that responds to the needs of society while respecting the integrity of

nature. Regenerative development aims for an integrated, whole-systems approach to the design and construction of human settlements and practices. The field of regenerative development, which draws inspiration from the self-healing and self-organising capacities of natural living systems, is increasingly seen as a source for achieving this end. Cabal (2021) asserts that a regenerative development approach works with whole living systems frameworks to improve physical, ecological, social, cultural, economic and spiritual health and well-being together, not in isolation; regeneration is to be made whole to be brought back to life.

Under the regenerative development framework, Dr. Eduard Müller in his publication: "Regenerative development, the way forward to saving our civilization" cites six layers or principles which must be integrated to achieve a wholesome and holistic approach to reverse the damage done to Mother Earth. These principles include:- ▶• Environmental – regeneration of functional landscapes, where we produce and conserve, maximizing ecosystem function; ▶• Social - social strengthening by community organization and development, to cope with adaptation to climate change and reduce sumptuous consumption patterns; ▶• Economic - a new paradigm for economic development where people matter more than markets and money, measured according to the well-being of humans and all life forms; ▶• Cultural - conservation and valuation of living culture which is the necessary bond for community life, where local knowledge, values and traditions are shared within family, friends and the community as a whole, giving meaning to these terms; ▶• Political - rethinking and redesigning current political structures so they reflect true participatory democracy without the influence of money and power and especially fostering long term vision and actions that seek increased livelihoods and happiness and not only gross income; and most importantly ▶• Spiritual - fostering deep spiritual and value structures based on ethics, transparency and global well-being to allow humanity to live in peace with itself and Mother Earth. Figure 9 shows a diagrammatic representation of the six principles.

Figure 10 Six Principles of Regenerative Development (Source: UCI, 2022)



Note. From UCI. Universidad Para La Cooperacion Internacional webpage for Certificate in Regenerative Entrepreneurship.. Copyright @ Universidad Para La Cooperacion Internacional 2022. Permission not sought.

An assessment of the intended practices of Monarch Farms alongside the regenerative development principles follows:

Chart 26 Assessment of Regenerative Development Principles with Monarch Farms (Source: Sanisha Maximin, 2022)

Principles	Analysis
Environmental Regeneration of functional landscapes, biodiversity and ecosystems above other interests	Monarch Farms will be engaged in Conservation Agriculture which is a farming system that can prevent losses of arable land while regenerating degraded lands, therefore promoting maintenance of a permanent soil cover, minimum soil disturbance, and diversification of plant species. The business will also engage in Regenerative Agriculture by prioritizing soil health and having a strong focus on growing healthy food that

Principles	Analysis
	is readily available and easily accessible for families and the wider communities.
Social Inclusive and equitable societies, participatory, proactive	Monarch Farms approach to agricultural development and busines takes a system wide view and understanding that all parts work together for the good and that the whole is greater than the sum of its parts. This is indicated in its structure which seeks to enable collaborative planning and decision making for the enablement of more fulfilling, active, responsible and democratic agricultural community in St. Lucia. Stakeholders play a central role in all aspects of the business from development of new innovative ideas for products and services, development of solutions, strategies and, improvements to practices. Stakeholders are closely connected, working together to achieve seamlessness, transparency and for all actors to be capable of meeting the needs and requirements of the change.
Economic Regenerative economy, fair and equitable economy, wellbeing economy, common good circular.	From an economic standpoint, the management of Monarch Farms embraces the concept of regenerative economy because they are of the view that many benefits can be realized if it is incorporated into its broader business framework. Such benefits include: - increased resilience and cost savings, decreased organizational risk, a decrease in unforeseen costs, and overall success for all stakeholders involved. The organization recognizes the need to address the issues which causes degradation to our ecological system hence the implementation of agricultural farms that incorporate the practices of conservative, sustainable and regenerative practices.

Principles	Analysis
	Monarch Farms consider the social foundation of its community and as a result it takes into consideration the basic needs of St. Lucia, issues of international importance such as human rights, gender equality, renewable energy, decent work schemes, and is enforcing democratic and participatory governance, giving every stakeholder a medium to voice concerns, challenges and areas for improvements. It focuses on healthy people (health, housing, water, food); connecting farms, farmers and the entire supply chain; enabling people (jobs, income, education, energy); empowering people to be socially adaptable, having an attitude of change and welcoming limitations are areas for growth. Monarch Farms takes a systems thinking approach realizing that every constituent part of the ecological system is connected to each other, that they are interrelated and must work together to have a well-balanced and harmonious system. By that token through education, sensitization and mobilization, it will help to nurture the citizenry conditioning them to recognize that there is no need to be self-serving and competitive but to recognize that we are interdependent and working harmoniously could create a greater chance of thriving in a safe and just space. Additionally, it takes into perspective seeing the big picture and realizing that the economy does not operate in a vacuum but is embedded in a larger system, the earth and that these are interconnected and dependent on each other.

Principles	Analysis
Political Participatory governance, transparency, ethics, youth involvement	The Caricom leaders in the region have realized that for the region to reduce on the regional food importation bill, there is a dire need to invest in agriculture, remove trade barriers and improve intra-regional transportation (Caricom, 2022). They have also realized that there ought to be both regional and political will, shared vision, and commitment to impact the change that is being sought and to deal with any emergent issues that could hinder achievement of their goals. Having inclusive, participatory, and democratic politics will allow for the involvement and engagement of all constituents including, youth, men, and women; everyone will have a voice in the decisions which affect them. Organizationally, the concept of youth involvement, participatory governance, inclusivity will be the motto and practice of Monarch Farms.
Cultural Regenerative cultural design, towards a new consciousness	Training and development is an area of priority for Monarch Farms. Training is not only directed to the registered farmers but also for persons who have an interest in agriculture. Training and development will also help to cultivate the minds of young people from a very early age where they are taught about the positives of agricultural development and changing the mindsets of those individuals whose minds ar sullied about the agricultural profession and transformining and elevating their thinking and conciousness into a new paradigm of benefits that can be realized if they embrasce progressive and regenerative agricultural practices.

Principles	Analysis
	A new paradigm shift could result in a cultural change, not only within the immediate community of Monarch Farms but also the wider society of St. Lucia.
Spiritual Values, ethics, carrying society Earth Charter	Generally, St. Lucians believe in a higher power, the existence of a supernatural being which creates and makes all things possible. Paying true reverence to this being suggests that they forego self in homage of a higher and greater presence. This caters for an enabling environment and culture which believes that all living things are connected and should be cared for and respected; that we should live peaceful and inclusive lives; that there should be equitable distribution of social and economic justice and respect and love for the natural systems. This is the value system which most, if not all St. Lucians live by and will be incorporated in the business culture of Monarch Farms.

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9. APPENDICES

Appendix 1: FGP Charter

CHARTER OF THE PROPOSED FINAL GRADUATION PROJECT (FGP)

1. Student name

Sanisha Cassy Maximin

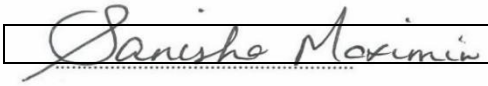
2. FGP name

Project Management Plan for Operationalizing Monarch Farms Strategic Objectives

3. Application Area (Sector or activity)

Project Management and Business Strategy

4. Student signature



5. Name of the Graduation Seminar facilitator

Roger Valverde

6. Signature of the facilitator

7. Date of charter approval

September 04, 2022

8. Project start and finish date

September 19, 2022	February 02, 2023

9. Research question

How beneficial is a Project Management Plan for the successful implementation of Monarch Farms business strategy?

10. Research hypothesis

It is hypothesized that a Project Management Plan is essential for the successful implementation of an organization's business strategy to consistently meet its strategic goals, deliver high business value and achieve long-term success.

11. General objective

To formulate a Project Management Plan for Operationalizing Monarch Farms Strategic Objectives.

12. Specific objectives

1. To develop a Project Charter commissioning the existence of the project and conferring authority to the Project Manager to utilize organizational resources to project activities.
2. To develop a Scope Management Plan providing detailed outline of how all project elements will be defined, validated, and controlled to minimize scope creep and manage stakeholders' expectations.
3. To generate a Schedule Management Plan with guidelines for creating, managing, executing, monitoring, and controlling planned project activities to deliver project on time.
4. To produce a Cost Management Plan explaining how the costs of resources needed to complete project activities will be managed throughout the project lifecycle.
5. To develop a Quality Management Plan which identifies quality requirements for the project and its outputs and outlines how the project will deliver results that conform to defined requirements and meet customer satisfaction.
6. To generate a Resource Management Plan that guides project team on how required resources will be classified, distributed, administered, and released to bring project into successful fruition.
7. To create a Communication Management Plan which details the framework on how communication will be managed and controlled to enable transparency and collaboration that produce meaningful value to the project.

8. To map out a framework for risk management to help take informed decisions about the risks that affect project objectives.
9. To create a Procurement Management Plan documenting the approaches for acquiring, managing, and controlling externally sourced products, services, and results.
10. To create a Stakeholder Engagement Plan devising a systemic approach to identify stakeholders, needs, power and influence on the projects and to formulate strategies for interacting. communicating and managing these stakeholders' expectations.
11. To analyze whether Monarch Farms will be successful

13. FGP purpose or justification

The purpose of this Final Graduation Project is to develop a Project Management Plan for Monarch Farms to help it translate and elaborate its business strategy into action. Fundamentally, the development of the Integrated Project Management Plan is in response to the absence of a plan to facilitate the effective execution of activities to help revive agriculture in St. Lucia. The integrative project management plan offers a plethora of benefits to Monarch Farms including creating a roadmap for stakeholders to have an in-depth understanding of the purpose for the project implementation. This will allow for obtaining the buy-in or support of stakeholders, as well as obtaining the necessary financial support required to fully operationalize the project.

The Project Management Plan would also serve as a communication tool to communicate scope, resource and quality requirements, potential risks, tasks involved to complete project and the deadlines to be met to stay on track. The framework proposed also allows for synergy and strategic alignment of all aspects of project management to wit: - scope, schedule, cost, quality, resource, communication, risk, procurement, and stakeholder engagement, to be strategically and systematically arranged in such a way to best support the fulfillment of project objectives and long-term impacts and benefits of the project.

Ultimately, the project plan will enable Monarch Farms to create and deliver business value from its investments by employing proven, reliable, and well-established processes to meet its project objectives and wider strategic objectives.

14. Work Breakdown Structure (WBS). In table form, describing the main deliverable as well as secondary, products or services to be created by the FGP.

0. Final Graduation Project

1. Graduation Seminar

1.1 FGP Deliverables

1.1.1 Charter

1.1.2 Work Breakdown Structure

1.1.3 Chapter I: Introduction

1.1.4 Chapter II: Theoretical Framework

1.1.5 Chapter III: Methodical Framework

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 IV: Development (Results)

2.3.1 Authorised Project Charter

2.3.2 Scope Management Plan

2.3.3 Schedule Management Plan

2.3.4 Cost Management Plan

2.3.5 Quality Management Plan

2.3.6 Resource Management Plan

2.3.7 Communication Management Plan

2.3.8 Risk Management Plan

2.3.9 Procurement Management Plan

2.3.10 Stakeholders Engagement Plan

2.4 Chapter V: Conclusions

2.5 Chapter VI: Recommendations

3. Reading by Reviewers

1.1 Reviewers Assignment Request

1.1.1 Assignment of Two Reviewers

1.1.2 Communication

1.1.3 FGP Submission to Reviewers

1.2 Reviewers Work

1.2.1 Reviewer 1

1.2.1.1 FGP Reading

1.2.1.2 Reader 1 Report

1.2.2 Reviewer 2

1.2.2.1 RGP Reading

1.2.2.2 Reader 2 Report

4. Adjustments

4.1 Report for 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

15. FGP budget

The estimated budget for developing the FGP is US $3000.00. This amount is inclusive of costs for: software licenses acquisition, printing, and shipping FGP to Costa Rica, site visits (transportation, lodging and food), information gathering and processing (interviews, surveys, telephone, internet).

16. FGP planning and development assumptions

1. The amount of time allotted by the University for completion of the FGP is sufficient.
2. Resource material is easily accessible and available.
3. The tutor will be available around the clock to answer queries or concerns of the author.
4. The writer/student does not have to take time away from work to complete the various components of the FGP; she is able to balance full-time work and study including research and writing.

17. FGP constraints

1. The maximum time frame to finalize the FGP is 12 weeks; the author holds a full-time eight to five job.
2. Financial capability of the student may limit ability to acquire necessary resources for the development of FGP.
3. Project Management software licenses can have a high price tag attached.
4. Quality of FGP will very likely decline if allocated time is insufficient or feedback from Tutors are late resulting in student rushing delivery.

18. FGP development risks

1. The author/writer of the FGP could fall ill, which might delay the progress/continued elaboration of FGP development deliverables.
2. If Tutors are tardy with critical evaluative feedback, the author's work performance and quality of the FGP development deliverables might diminish.
3. If key stakeholders from Monarch Farms are unavailability this might lead to the absence of pertinent information required for development of subsidiary project plans.

19. FGP main milestones

Milestones are related to deliverables on the second level (deliverables) and third level (control accounts) of the WBS of section 14 of this Charter. At the same time the deliverables are related to the specific objectives (in the case of the FGP please include the times for the tutorship reviews as well as for the readership).

Deliverable	Finish estimated date
1.1.1 Charter	September 04, 2022
1.1.2 Work Breakdown Structure	July 31, 2022
1.1.3 Chapter I: Introduction	August 28, 2022
1.1.4 Chapter II: Theoretical Framework	August 14, 2022
1.1.5 Chapter III: Methodological Framework	August 21, 2022
1.1.6.1 Bibliographical Research	September 04, 2022
1.1.6.2 Schedule	August 28, 2022
2.3.1 Authorized Charter	September 25, 2022
2.3.2 Scope Management Plan	October 02, 2022
2.3.3 Schedule Management Plan	October 09, 2022
2.3.4 Cost Management Plan	October 16, 2022
2.3.5 Quality Management Plan	October 23, 2022
2.3.6 Resource Management Plan	October 30, 2022
2.3.7 Communication Management Plan	November 06, 2022
2.3.8 Risk Management Plan	November 13, 2022
2.3.9 Procurement Management Plan	November 20, 2022
2.3.10 Stakeholders Engagement Plan	November 27, 2022
2.4 Chapter V Conclusions	December 04, 2022
2.5 Chapter VI Recommendations	December 04, 2022
3.2.1 First Review – Reviewer 1	December 11, 2022
3.2.2 First Review – Reviewer 2	December 18,2022
4.0 Adjustments	December 24, 2022
4.3.1 Second Review – Reviewer 1	December 28, 2022

4.3.2 Second Review – Reviewer 2	December 31, 2022
5.1 Board of Examiners Evaluation	January 14, 2023
5.2 FGP Grade Report	January 21, 2023

20. Theoretical framework

20.1 Estate of the "matter"

Monarch Farms was officially established and recognized as a registered business in St. Lucia on 28th May 2020 as an agricultural business. Five years prior to its incorporation, the Managing Director, Mr. Uriah Andree Jn Baptiste, resided in the British Virgin Islands where he noticed a lot of the agricultural produce consumed by the populace originated from neighboring islands such as St. Vincent and the Grenadines and Dominica. As a result, he conducted market research to gain a better understanding of their market and to assess the possibilities of tapping into that market by differentiating his products, services, and experience.

He later returned to his home country St. Lucia where he noticed that there was a chronic lack of support, both technical and financial, for farmers and that the agricultural business in St. Lucia was a dying commodity. Another compelling factor which gave rise to his movement, was the awareness of the number of produce which were imported on a weekly basis in St. Lucia; many of which are grown or can be grown locally.

To increase profitability and generate greater efficiencies of scale, the Managing Director of Monarch Farms decided to form strategic partnerships with one hundred and forty-four farmers island wide. This framework will enable greater coordination of a diverse production of crop types, which in turn would impact the long-term sustainability in supply chain and realize growth in both farm-to-table and farm-to-market produce.
Monarch Farms aims to revamp the agricultural industry in St. Lucia by [1] educating farmers on the importance of diversification; [2] creating logistics and support for farmers; [3] efficiently procure equipment and material needed for farming; [4] creating an environment that is conducive for the development of young farmers; [5] increase the awareness of agribusiness and associated roles to the populace; and [6] introduce sustainable, conservation and regenerative agriculture as the solution for environmental and ecological revitalization.

The Management of Monarch Farms is of the view that if we transform the mindsets of the younger generation and provide technical and financial support to smallholder farmers, improve the conditions of agricultural productivity in a resilient and sustainable way could be an effective way of contributing to poverty reduction and improved food security; two concepts

which are intricately linked. Simultaneously, as mechanisms are in place to increase productivity and incomes of farmers, there are greater economic impacts to be realized by the State of St. Lucia.

Monarch Farms is currently in its planning stage and has not benefited from the development of an integrated management plan. This management plan will therefore provide a roadmap for the successful implementation of its project, ensuring that each subsidiary plan is fully aligned with the strategic goals and objectives of the business to deliver real business value for itself and its stakeholders. It would also benefit from having a bird's eye view of the potential factors that could possibly endanger the progress of the project execution and to implement the necessary the appropriate corrective or preventive actions to lessen the impact or severity of any negative risks.

20.2Basic conceptual framework

Project Management, Business Strategy, Agriculture, Business Value

21. Methodological framework

Objective	Name of deliverable	Information sources	Research method	Tools	Restrictions
1. . To develop a Project Charter commissioning the existence of the project and conferring authority to the Project Manager to utilize organizational resources to project activities.	Project Charter	▶• **Primary Sources** • Interviews • Meetings • Legislations • Policy documents • Grant Proposal • Email exchange ▶• **Secondary Sources** • Textbooks • Journal articles • Encyclopaedias • Dictionaries • Knowledge area guides	▶• **Qualitative Method** The Project Charter was developed using documentary data from the management of Monarch Farms. Data was collected and analyzed through the conduct of one-on-one interviews with the Managing Director of Monarch Farms. It also included using reference materials such as books, journals and other credible sources of information on the fields of study and associated related concepts.	• Assumptions and constraint analysis • Expert knowledge • Data gathering tools such as interviews, meetings • Project Charter Template	▪ The maximum time frame to finalize the FGP is 12 weeks; approximately one week is allotted for completion of the Project Charter.
2. To develop a Scope Management Plan providing detailed outline of how all project elements will be defined,	Scope Management Plan	▶• **Primary Sources** • Project Charter • Email conversations • Interviews • Meetings • Legislation	▶• **Qualitative Method** The Scope Management Plan was developed using documentary data from the management of Monarch Farms. Data was collected and	• Expert knowledge • Data gathering tools such as interviews, meetings	▪ Limited budget with no contingency reserve for development of the FGP. This could impact travel to and

Objective	Name of deliverable	Information sources	Research method	Tools	Restrictions
validated, and controlled to minimize scope creep and manage stakeholders' expectations.		• Policies • Records of Organization such as Grant Proposal, Company Profile, • Newspaper articles • Regulatory documents such as Laws and Statutes • Conference Papers • Technical Papers ▶• **Secondary Sources** • Textbooks • Journal Articles • Commentaries • Encyclopaedias • Opinion pieces • Government publications • Websites • Knowledge area guides	analyzed through the conduct of one-on-one interviews with the Managing Director of Monarch Farms. It also included using reference materials such as books, journals and other credible sources of information on the fields of study and associated related concepts.	• Scope Management Template • Questionnaires and or surveys • Work breakdown Structure	from the various farms and other potential authoritative areas. ▪ ▪ The maximum time frame to finalize the FGP is 12 weeks; approximately one week is allotted for completion of the Scope Management Plan. ▪ ▪ The author / student/ project manager has the sole responsibility of developing plans which includes research, data collection and analysis.

Objective	Name of deliverable	Information sources	Research method	Tools	Restrictions
3. To generate a Schedule Management Plan with guidelines for creating, managing, executing, monitoring, and controlling planned project activities to deliver project on time.	Schedule Management Plan	▶• **Primary Sources** • Project Charter • Email conversations • Interviews • Meetings • Legislation • Policies • Records of Organization such as Grant Proposal, Company Profile, • Newspaper articles • Regulatory documents such as Laws and Statutes • Conference Papers • Technical Papers ▶• **Secondary Sources** • Textbooks • Journal Articles • Commentaries • Encyclopaedias	The Schedule Management Plan was developed using documentary data from the management of Monarch Farms. Data was collected and analyzed through the conduct of one-on-one interviews with the Managing Director of Monarch Farms. It also included using reference materials such as books, journals and other credible sources of information on the fields of study and associated related concepts.	• Scheduling network analysis • Expert knowledge • Data gathering tools such as interviews, meetings. • Gantt Chart • Schedule Management Template	▪ Limited budget with no contingency reserve for development of the FGP. This could impact travel to and from the various farms and other potential authoritative areas. ▪ ▪ The maximum time frame to finalize the FGP is 12 weeks; approximately one week is allotted for completion of the Schedule Management Plan. ▪ ▪ The author / student/ project manager has the sole responsibility of developing plans

Objective	Name of deliverable	Information sources	Research method	Tools	Restrictions
		• Opinion pieces • Government publications • Websites • Knowledge area guides			which includes research, data collection and analysis
4. To produce a Cost Management Plan explaining how the costs of resources needed to complete project activities will be managed throughout the project lifecycle.	Cost Management Plan	▶• **Primary Sources** • Project Charter • Email conversations • Interviews • Meetings • Legislation • Policies • Records of Organization such as Grant Proposal, Company Profile, • Newspaper articles • Regulatory documents such as Laws and Statutes • Conference Papers	▶• **Qualitative Method** The Cost Management was developed using documentary data from the management of Monarch Farms. Data was collected and analyzed through the conduct of one-on-one interviews with the Managing Director of Monarch Farms. It also included using reference materials such as books, journals and other credible sources of information on the fields of study and associated related concepts.	• Expert knowledge • Data gathering tools such as interviews, meetings. • Cost Management Template	▪ Limited budget with no contingency reserve for development of the FGP. This could impact travel to and from the various farms and other potential authoritative areas. ▪ ▪ The maximum time frame to finalize the FGP is 12 weeks; approximately one week is allotted for

Objective	Name of deliverable	Information sources	Research method	Tools	Restrictions
		• Technical Papers ▶• **Secondary Sources** • Textbooks • Journal Articles • Commentaries • Encyclopaedias • Opinion pieces • Government publications • Websites • Knowledge area guides			completion of the Cost Management Plan. ▪ ▪ The author / student/ project manager has the sole responsibility of developing plans which includes research, data collection and analysis.
5. To develop a Quality Management Plan which identifies quality requirements for the project and its outputs and outlines how the	Quality Management Plan	▶• **Primary Sources** • Project Charter • Email conversations • Interviews • Meetings • Legislation • Policies	▶• **Qualitative Method** The Quality Management Plan was developed using documentary data from the management of Monarch Farms. Data was collected and analyzed through the conduct	• Requirements documentation (using Microsoft Excel)	▪ Limited budget with no contingency reserve for development of the FGP. This could impact travel to and from the various

Objective	Name of deliverable	Information sources	Research method	Tools	Restrictions
project will deliver results that conform to defined requirements and meet customer satisfaction.		• Records of Organization such as Grant Proposal, Company Profile, • Newspaper articles • Regulatory documents such as Laws and Statutes • Conference Papers • Technical Papers **▶• Secondary Sources** • Textbooks • Journal Articles • Commentaries • Encyclopaedias • Opinion pieces • Government publications • Websites • Knowledge area guides	of one-on-one interviews with the Managing Director of Monarch Farms. It also included using reference materials such as books, journals and other credible sources of information on the fields of study and associated related concepts. **▶• Quantitative Method** Quantitative Research Methods were used to quantify the opinions, attitudes, behaviors, perceptions of intended beneficiaries, target market and customers. Questionnaires and surveys were administered to gain a deeper insight into the how the public thinks, and to determine the type of audience / target market Monarch Farms will be catering to.	• Stakeholders' register • Check Sheet • Check List • Quality Management Template • Expert knowledge • Data gathering tools such as interviews, meetings.	farms and other potential authoritative areas. ▪ ▪ The maximum time frame to finalize the FGP is 12 weeks; approximately one week is allotted for completion of the Quality Management Plan. ▪ ▪ The author / student/ project manager has the sole responsibility of developing plans which includes research, data collection and analysis. ▪

Objective	Name of deliverable	Information sources	Research method	Tools	Restrictions
6. To generate a Resource Management Plan that guides project team on how required resources will be classified, distributed, administered, and released to bring project into successful fruition.	Resource Management Plan	**▶• Primary Sources** • Project Charter • Email conversations • Interviews • Meetings • Legislation • Policies • Records of Organization such as Grant Proposal, Company Profile, • Newspaper articles • Regulatory documents such as Laws and Statutes • Conference Papers • Technical Papers **▶• Secondary Sources** • Textbooks • Journal Articles • Commentaries • Encyclopaedias	**▶• Qualitative Method** The Resource Management Plan was developed using documentary data from the management of Monarch Farms. Data was collected and analyzed through the conduct of one-on-one interviews with the Managing Director of Monarch Farms. It also included using reference materials such as books, journals and other credible sources of information on the fields of study and associated related concepts.	• Organizational chart • Organizational breakdown structure • Assignment Matrix. [RACI] • Resource Management Software • Meetings	▪ Limited budget with no contingency reserve for development of the FGP. This could impact travel to and from the various farms and other potential authoritative areas. ▪ ▪ The maximum time frame to finalize the FGP is 12 weeks; approximately one week is allotted for completion of the Resource Management Plan. ▪ ▪ The author / student/ project manager has the sole responsibility of developing plans

Objective	Name of deliverable	Information sources	Research method	Tools	Restrictions
		• Opinion pieces • Government publications • Websites • Knowledge area guides			which includes research, data collection and analysis.
7. To create a Communication Management Plan which details the framework on how communication will be managed and controlled to enable transparency and collaboration that produce meaningful value to the project.	Communication Management Plan	▶• **Primary Sources** • Project Charter • Email conversations • Interviews • Meetings • Legislation • Policies • Records of Organization such as Grant Proposal, Company Profile, • Newspaper articles • Regulatory documents such as Laws and Statutes • Conference Papers	▶• **Qualitative Method** The Communication Management Plan was developed using documentary data from the management of Monarch Farms. Data was collected and analyzed through the conduct of one-on-one interviews with the Managing Director of Monarch Farms. It also included using reference materials such as books, journals and other credible sources of information on the fields of study and associated related concepts.	• Stakeholders Register • Communication Requirements • Meetings • Communication Management Template	▪ Limited budget with no contingency reserve for development of the FGP. This could impact travel to and from the various farms and other potential authoritative areas. ▪ ▪ The maximum time frame to finalize the FGP is 12 weeks; approximately one week is allotted for

Objective	Name of deliverable	Information sources	Research method	Tools	Restrictions
		• Technical Papers **▶• Secondary Sources** • Textbooks • Journal Articles • Commentaries • Encyclopaedias • Opinion pieces • Government publications • Websites • Knowledge area guides	**▶• Quantitative Method** Quantitative Research Methods were used to quantify the opinions, attitudes, behaviors, perceptions of intended beneficiaries, target market and customers. Questionnaires and surveys were administered to gain a deeper insight into the how the public thinks, and to determine the type of audience / target market Monarch Farms will be catering to.		completion of the Communication Management Plan. ▪ ▪ The author / student/ project manager has the sole responsibility of developing plans which includes research, data collection and analysis
8. To map out a framework for risk management to help take informed decisions about the risks that affect project objectives.	Risk Management Plan	**▶• Primary Sources** • Project Charter • Email conversations • Interviews • Meetings • Legislation • Policies	**▶• Qualitative Method** The Risk Management Plan was developed using documentary data from the management of Monarch Farms. Data was collected and analyzed through the conduct	• Risk Breakdown Structure • Meetings	▪ Limited budget with no contingency reserve for development of the FGP. This could impact travel to and from the various

Objective	Name of deliverable	Information sources	Research method	Tools	Restrictions
		• Records of Organization such as Grant Proposal, Company Profile, • Newspaper articles • Regulatory documents such as Laws and Statutes • Conference Papers • Technical Papers **▶• Secondary Sources** • Textbooks • Journal Articles • Commentaries • Encyclopaedias • Opinion pieces • Government publications • Websites • Knowledge area guides	of one-on-one interviews with the Managing Director of Monarch Farms. It also included using reference materials such as books, journals and other credible sources of information on the fields of study and associated related concepts. **▶• Quantitative Method** Quantitative Research Methods were used to quantify the opinions, attitudes, behaviors, perceptions of intended beneficiaries, target market and customers. Questionnaires and surveys were administered to gain a deeper insight into the how the public thinks, and to determine the type of audience	• Risk Management Template • SWOT Analysis	farms and other potential authoritative areas. ▪ ▪ The maximum time frame to finalize the FGP is 12 weeks; approximately one week is allotted for completion of the Risk Management Plan. ▪ ▪ The author / student/ project manager has the sole responsibility of developing plans which includes research, data collection and analysis

Objective	Name of deliverable	Information sources	Research method	Tools	Restrictions
			/ target market Monarch Farms will be catering to.		
9. To create a Procurement Management Plan documenting the approaches for acquiring, managing, and controlling externally sourced products, services, and results.	Procurement Management Plan	▶• **Primary Sources** • Project Charter • Email conversations • Interviews • Meetings • Legislation • Policies • Records of Organization such as Grant Proposal, Company Profile, • Newspaper articles • Regulatory documents such as Laws and Statutes • Conference Papers • Technical Papers ▶• **Secondary Sources** • Textbooks • Journal Articles	▶• **Qualitative Method** The Procurement Management Plan was developed using documentary data from the management of Monarch Farms. Data was collected and analyzed through the conduct of one-on-one interviews with the Managing Director of Monarch Farms. It also included using reference materials such as books, journals and other credible sources of information on the fields of study and associated related concepts.	• Meetings • List of procurement activities • Procurement Management Template	▪ Limited budget with no contingency reserve for development of the FGP. This could impact travel to and from the various farms and other potential authoritative areas. ▪ ▪ The maximum time frame to finalize the FGP is 12 weeks; approximately one week is allotted for completion of the Procurement Management Plan. ▪ The author / student/ project manager has

Objective	Name of deliverable	Information sources	Research method	Tools	Restrictions
		• Commentaries • Encyclopaedias • Opinion pieces • Government publications • Websites • Knowledge area guides			the sole responsibility of developing plans which includes research, data collection and analysis.
10. To create a Stakeholder Engagement Plan devising a systemic approach to identify stakeholders, needs, power and influence on the projects and to formulate strategies for interacting. communicating and managing these stakeholders' expectations.	Stakeholder Engagement Plan	▶• **Primary Sources** • Project Charter • Email conversations • Interviews • Meetings • Legislation • Policies • Records of Organization such as Grant Proposal, Company Profile, • Newspaper articles • Regulatory documents such as Laws and Statutes	▶• **Qualitative Method** The Stakeholder Engagement Plan was developed using documentary data from the management of Monarch Farms. Data was collected and analyzed through the conduct of one-on-one interviews with the Managing Director of Monarch Farms. It also included using reference materials such as books, journals and other credible sources of information on the	• Stakeholder Management Template • Stakeholder Register • Stakeholder Matrix • Expert knowledge • Data gathering	▪ Limited budget with no contingency reserve for development of the FGP. This could impact travel to and from the various farms and other potential authoritative areas. ▪ The maximum time frame to finalize the FGP is 12 weeks; approximately one week is allotted for

Objective	Name of deliverable	Information sources	Research method	Tools	Restrictions
		• Conference Papers • Technical Papers **▶• Secondary Sources** • Textbooks • Journal Articles • Commentaries • Encyclopaedias • Opinion pieces • Government publications • Websites • Knowledge area guides	fields of study and associated related concepts. **▶• Quantitative Method** Quantitative Research Methods were used to quantify the opinions, attitudes, behaviors, perceptions of intended beneficiaries, target market and customers. Questionnaires and surveys were administered to gain a deeper insight into the how the public thinks, and to determine the type of audience / target market Monarch Farms will be catering to.	tools such as interviews, meetings, surveys. • Stakeholder Management Software	completion of the Stakeholder Engagement Plan. ▪ The author / student/ project manager has the sole responsibility of developing plans which includes research, data collection and analysis.

22. Validation of the work in the field of the regenerative and sustainable development.

Sustainable Development and Regenerative Development are at the epicenter of Monarch Farm's business model. This is enshrined in the company's mission and vision statements. The management of Monarch Farms holds the view that in order to achieve business success, creating and maintaining value must take into account the effects and relationships between the social, environmental and economic spheres of its business. This is therefore tied closely to the three pillars of Sustainable Development namely: economic, environmental and social and the triple bottom line theory coined by John Elkington who avers that the triple bottom line is a sustainability framework that examines a company's social, environment, and economic impact (Elkington, 2018). The triple bottom line suggests that business performance cannot only be measured by its profits but should incorporate the impacts on the environment and social dimensions thus giving rise to the 3Ps or triple bottom line [TBL] of profit, planet and people.

In the context of Project Management, integrating sustainable practices in the discipline is at the heart of Green Project Management [GPM]. In addtion to the three domains of the TBL, GPM offers an additonal two categories which should be considered when identifying potential impacts that projects could have on sustainability; these include product and processes.

Operationalising Monarch Farms will include a myriad of sustainable agricultural practices which will be further enhanced by the concepts of conservative and regenrative agriculture. These include: composting and other residue management, mulching, crop roation, crop diversification, and reduced tilage. Such practices will help largely to regenerate the land used by farmers and will promote sustainable increases in agricultural production and productiviity which are necessary for food security (availability and accessibility to nutritious, safe and healthy food) and improved livehoods.

Research shows that every organization has environmental, social, and economic impact. Equally, Project Management has a very vital role to play in helping to restore our ecosystem, by employing regenerative strategies in our policies, decision making, and resource management they can become an engine of environmental, social, and economic value creation.

An assessment of the intended practices of Monarch Farms alongside the regenerative development principles follows:

Environmental - Monarch Farms will be engaged in Conservation Agriculture which is aa farming system that can prevent losses of arable land while regenerating degraded lands, therefore promoting maintenance

of a permanent soil cover, minimum soil disturbance, and diversification of plant species. The business will also engage in Regenerative Agriculture by prioritizing soil health - limit mechanical soil disturbance, instead feed and preserve the biological structures that bacteria, fungi, and other soil microbes build underground—which provide above-ground benefits in return; and reducing reliance on synthetic inputs such as herbicides, pesticides, and chemical fertilizers and a strong focus on growing healthy food that is readily available and easily accessible for families and the wider communities.

Social - Monarch Farms approach to agricultural development and business takes a system wide view and understanding that all parts work together for the good and that the whole is greater than the sum of its parts. This is indicated in its structure which seeks to enable collaborative planning and decision making for the enablement of more fulfilling, active, responsible and democratic agricultural community in St. Lucia. Stakeholders play a central role in all aspects of the business from development of new innovative ideas for products and services, development of solutions, strategies, improvements to practices. Stakeholders are closely connected, working together to achieve seamlessness, transparency and for all actors to be capable of meeting the needs and requirements of the change.

Economic - From an economic standpoint, the management of Monarch Farms embraces the concept of regenerative economy because they are of the view that many benefits can be realized if it is incorporated into its broader business framework. Such benefits include: - increased resilience and cost savings, decreased organizational risk, a decrease in unforeseen costs, and overall success for all stakeholders involved. The organisation recognizes the need to address the issues which causes degradation to our ecological system hence the implementation of agricultural farms that incorporate the practices of conservative, sustainable and regenerative practices.

Monarch Farms consider the social foundation of its community and as a result it takes into consideration the basic needs of St. Lucia, issues of international importance such as human rights, gender equality, renewable energy, decent work schemes, and is enforcing democratic and participatory governance, giving every stakeholder a medium to voice concerns, challenges and areas for improvements.
It focuses on healthy people (health, housing, water, food); connecting farms, farmers and the entire supply chain; enabling people (jobs, income, education, energy); empowering people to be socially adaptable, having an attitude of change and welcoming limitations are areas for growth.

Monarch Farms takes a systems thinking approach realizing that every constituent part of the ecological system is connected to each other, that they are interrelated and must work together to have a well-balanced and harmonious system. By that token through education, sensitization and mobilization, it will help to nurture the citizenry conditioning them to recognize that there is no need to be self-serving and competitive but to recognize that we are interdependent and working harmoniously could create a greater chance of thriving in a safe and just space.

Additionally, it takes into perspective seeing the big picture and realizing that the economy does not operate in a vacuum but is embedded in a larger system, the earth and that these are interconnected and dependent on each other.

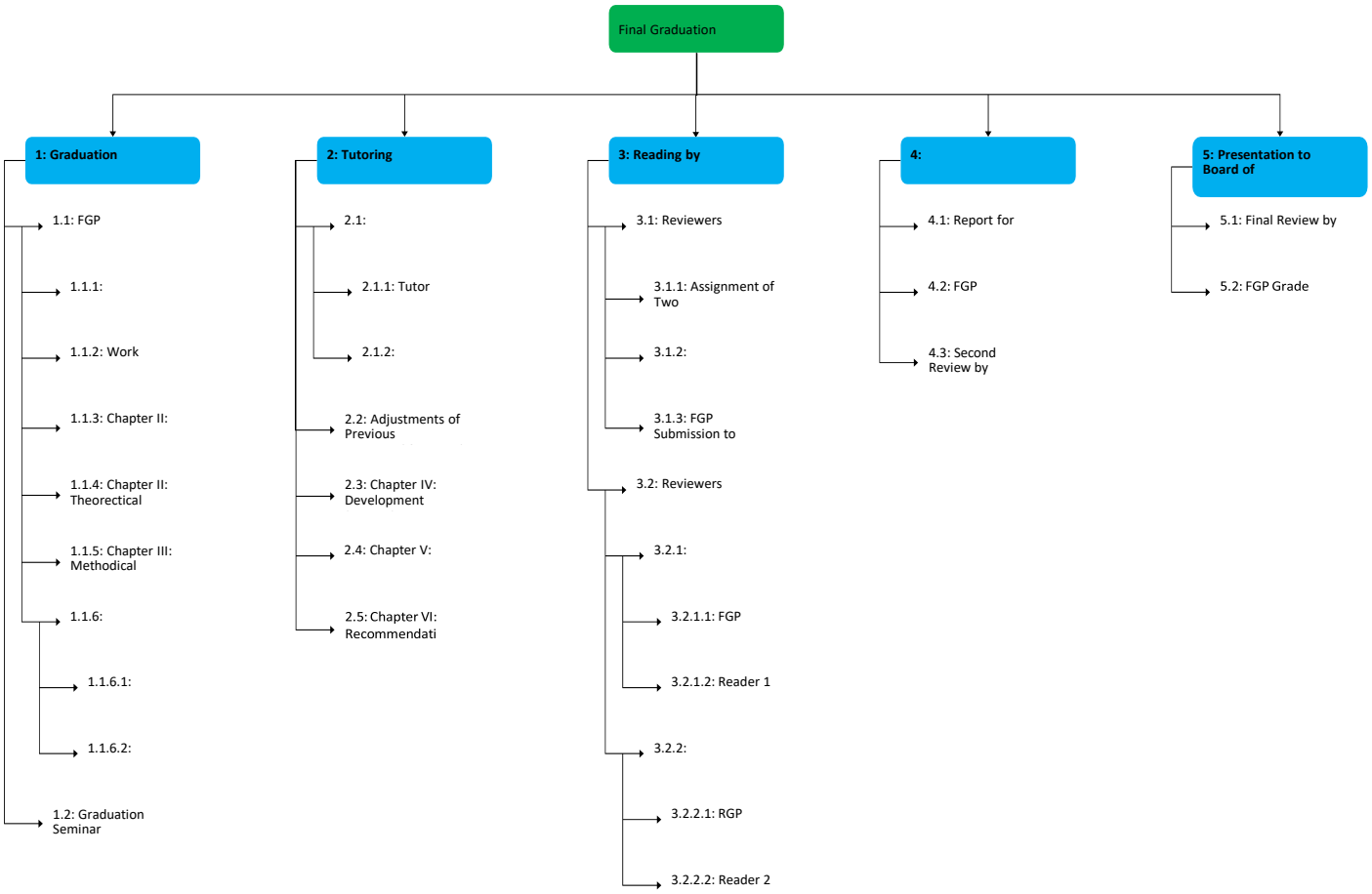
Political - Having inclusive, participatory, and democratic politics will allow for the involvement and engagement of all constituents including, youth, men, and women; everyone will have a voice in the decisions which affect them. Organizationally, the concept of youth involvement, participatory governance, inclusivity will be the motto and practice of Monarch Farms.

Cultural - Training and development is an area of priority for Monarch Farms. Training is not only directed to the registered farmers but also for persons who have an interest in agriculture. Training and dvelopment will also help to cultivate the minds of young people from a very early age where they are taught about the positives of agricultural development and changing the mindsets of those individuals whose minds ar sullied about the agricultural profession and transformining and elevating their thinking and conciousness into a new paradigm of benefits that can be realized if they embrasce progressive and regenerative agricultural practices. With the newly found knowledge of the young and old about these agricultural could result in a cultural change, not only within the immediate community of Monarch Farms but the wider society of St. Lucia.

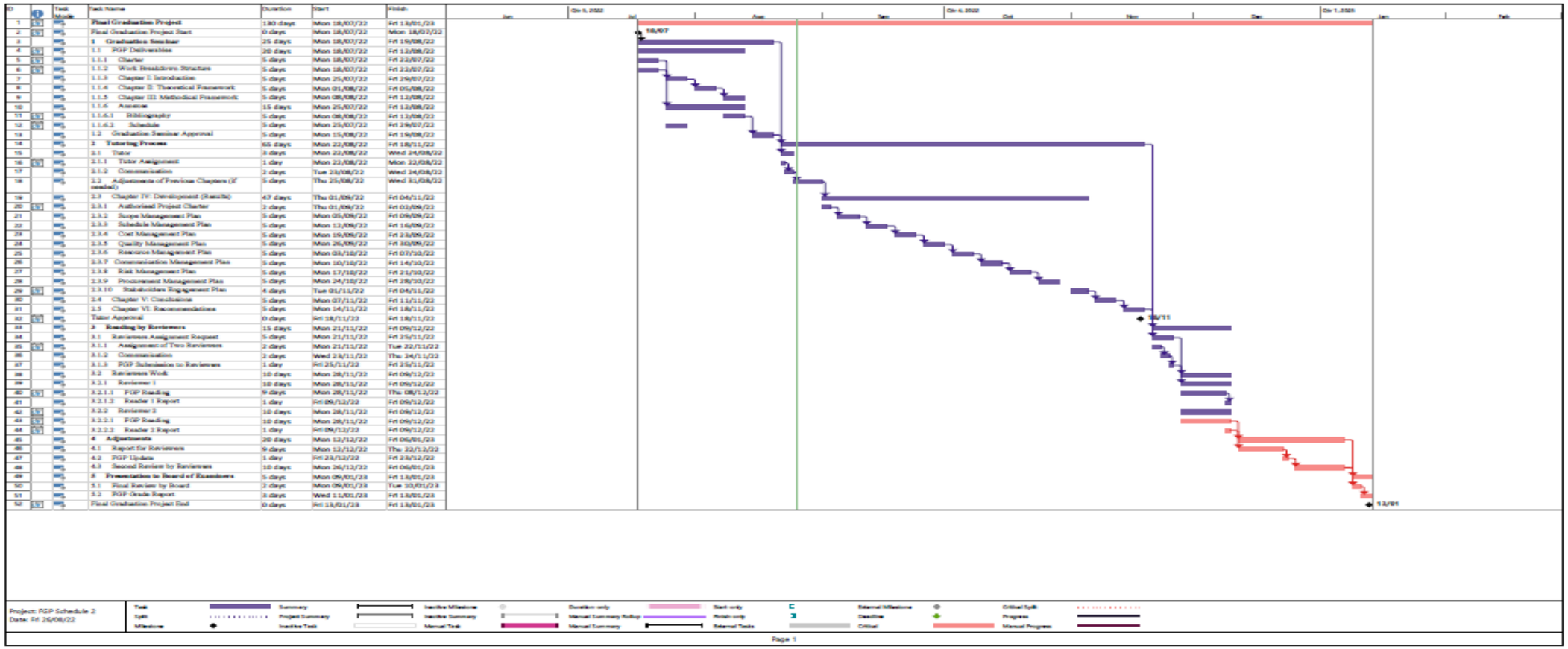
Spiritual - Generally, St. Lucians believe in a higher power, the existence of a supernatural being which creates and make all things possible. Paying true reverence to this being suggests that they forego self in homage of a higher and greater presence. This caters for an enabling environment and culture which believes that all living things are connected and should be cared for and respected; that we should live peaceful and inclusive lives; that there should be equitable distribution of social and economic justice and respect and love for the natural systems.

This is the value system which most, if not all St. Lucians live by and will be incorporated in the business culture of Monarch Farms.

Appendix 2: FGP WBS



Appendix 3: FGP Schedule



Appendix 4: Preliminary bibliographical research

Bilali, H., Callenius, C., Strasser, C., & Probst, L. (2018). Food and Nutrition Security and Sustainability Transitions in Food Systems. Food and Energy Security. 2019;8: e00154. https://doi.org/10.1002/fes3.154

In this article, the authors highlight the linkages between sustainability transitions and food and nutrition security using the perspective of sustainable food systems. We explore the diversity of food security narratives and food sustainability paradigms in the agro-food arena, analyze relations between food security and food systems sustainability, and suggest options to foster a transition toward sustainable food systems. For food systems to deliver food and nutrition security for present and future generations, all their components need to be sustainable, resilient, and efficient.

Dent, D. (2021). Regenerative Agriculture: What is Missing? What do we Still Need to Know. Spring Nature.

In this book, the author gives a comprehensive description of the historical view of agricultural practices in the past, as well as providing coverage on key areas of land usage for food purposes. The book is a compendium of articles by different authors on various topics which affect agriculture such as politics and economics, current agricultural practices and discusses what more is needed to create truly regenerative agriculture that rebuilds soils, rural economies and Society. It also allows for in-depth discourse on what other practices should be engaged in to enable farmers to meet the needs of the present without compromising the ability of future generations to meet their own needs'. The author is of the view that Regenerative Agriculture does not refer to any particular alternative farming system. It simply means farming that is both productive and sustainable; farming that does no harm but, more than that, farming that rebuilds soils, landscapes and communities.

FAO, IFAD, UNICEF, WFP and WHO. (2021). The State of Food Security and Nutrition in the World; Transforming Food Systems for Food Security, Improved Nutrition and Affordable Healthy Diets for All. FAO. https://www.fao.org/3/cb447en/cb447en.pdf

In this publication, the authors try to highlight the need for deeper reflection on how to better address the major drivers that are resulting in global food insecurity and malnutrition. The article draws on evidence garnered over the years through various editions on changes in food security and nutrition with a view of understanding why the global environment is at this critical point. This

edition, provides insights on what needs to be done to transform food systems for food security, improved nutrition and affordable healthy diets.

Ferranti, P., Berry, E., & Jock, A. (2019). Encyclopedia of Food Security and Sustainability. Elsevier.

In this book, the authors cover the hottest topics in science and food sustainability, providing a synopsis of the path society is on to secure food for a growing population. The authors investigate the focal issue of sustainable food production in relation to the effects of global change on food resources, biodiversity and global food security.

Food and Agriculture Organization (FAO) of the United Nations. (2017). St. Lucia and FAO, Building Sustainable Agricultural Systems and Food and Nutrition Security. FAO. https://www.fao.org/3/AX425E/ax425e.pdf

This article addresses FAO's interventions in St. Lucia to help to help build sustainable agricultural systems and food and nutrition.

Food and Agriculture Organization (FAO) of the United Nations. (2018). Transitioning Towards Sustainable Food and Agriculture. FAO. https://www.fao.org/3/I9007EN/i9007en.pdf

This document provides an overview of FAO's engagement in agroecology and summarizes the main gaps and opportunities for upscaling. It contends that Agroecology can support the achievement of multiple objectives including economic, environmental, social, nutritional, health and cultural – holistically. It is an approach that contributes directly to the achievement of thirteen of the Sustainable Development Goals, while significantly increasing the resilience of both people and the environment, mitigating climate change, and sustainably using and conserving natural resources and biodiversity.

Gibbons, L. (2020). Regenerative – The New Sustainable? Sustainability 2020, 12(13), 5483. https://doi.org/10.3390/su12135483

The author, Leah Gibbons believes that regenerative sustainability, the next wave of sustainability, includes and transcends these goals, aiming for thriving living systems in which whole-system health and wellbeing increase continually. The author suggests that we should aim for regenerative sustainability because it offers holistic approaches based on how thriving living systems function, addresses the root causes of (un)sustainability, and is inherently more inspiring and motivational. Advancing regenerative sustainability will require fundamental shifts supported by more awareness and

education, theoretical and practical development, leadership, empowering communities, and integrating spirituality.

Mc.Lennon, E., Bari, B., Jha, G., Sihi, D., & Karnala, V. (2021). Regenerative Agriculture and Integrative Permaculture for Sustainable and Technology Driven Global Food Production and Security. Agronomy Journal, https://doi.org/10.1002/agj2.20814

In this article, the authors describe how adverse impacts of natural resources poses huge challenges for sustainability of food production. The situation is direr for developing countries or rural regions of the world due to the limited resources available to farming communities in these regions. The authors examine the extent to which regenerative agriculture, permaculture and smart technology have evolved in response to sustainable agricultural production, agricultural decision support system, and overall global food security. They contend that collectively, regenerative agriculture and permaculture are semi-closed holistic systems approach designed to reduce or eliminate dependence on external inputs (e.g., chemicals) which restores and maintains natural systems (e.g., soil quality, biodiversity, and ecosystem services). They suggest that fully embracing modern regenerative agriculture as well as integrated permaculture will improve soil health, ecosystem biodiversity, land and resource conservation, agricultural sustainability, and food security.

Project Management Institute. (2021). A Guide to the Project Management Body of Knowledge, (PMBOK® Guide) - Seventh Edition, Project Management Institute, Inc.

This book is a fundamental resource for the project management discipline. It details critical drivers for success in the business arena focusing on the advancements made in the discipline and its associated challenges and guiding practitioners on how to meet these challenges, better align to how people work today and help you be more proactive, innovative and nimble, achieving successful delivery of project outcomes and delivering value to stakeholders.

Project Management Institute. (2017). A Guide to the Project Management Body of Knowledge, (PMBOK® Guide) - Sixth Edition, Project Management Institute, Inc.

This book provides guidelines and associated inputs, tools, techniques, and outputs for the processes involved in project management from project initiation to closure. It also describes the Agile Methodology, an iterative approach to delivering a project throughout its lifecycle.

Roös, P. (2021). Regenerative-Adaptive Design for Sustainable Development: A Pattern Language Approach. Springer

In this book, the author tests a regenerative-adaptive pattern language theory towards investigating the possibilities of a holistic, integrated design and planning method for sustainable development that incorporates the principles of regenerative design, as well as an adaptive pattern language that re-establishes our wholeness with nature, and considers the vulnerabilities of a changing landscape. The book examines an integral approach to contemporary theories of planning and design that explores the human-nature relationship patterns in social and spatial interconnections, between people and their natural environments. The interconnectedness of human and natural systems is used to scaffold possible solutions to address key environmental and sustainability issues that specifically address the need for patterns of behavior that acknowledge the duality of 'man and nature. The book presents a holistic, regenerative-adaptive pattern language that encapsulates how communities can better appreciate landscape change under future climate effects, and acknowledges the importance to adapt to patterns of change of place and the environment and therefore inform the communities' responses for sustainable development.

White, C. (2020). Why Regenerative Agriculture? The American Journal of Economics and Sociology. 79(3). https://doi.org/10.1111/ajes.12334

White contends that Regenerative agriculture is both an attitude and a suite of practices that restores and maintains soil health and fertility, supports biodiversity, protects watersheds, and improves ecological and economic resilience. It focuses on creating the conditions for life above and below ground and takes its cues from nature, which has a very long track record of successfully growing things. The author suggests a possible solution to climate change and offers many co-benefits.

Appendix 5: Revision Dictum

Dean
Global School of Project Management
Universidad Para La Cooperacion Internacional (UCI)
San Jose
COSTA RICA

REVISION DICTUM

I Nathalie Elliott nee Feverier, attest that I have thoroughly reviewed the Final Graduation Project submitted by Sanisha Maximin in partial fulfillment of the requirements for attainment of a Master in Project Management (MPM) Degree.
I advise that the English grammar is correct.

Yours faithfully

……..
Nathalie Elliott