UNIVERSIDAD PARA LA COOPERACION INTERNACIONAL (UCI)

SETTING UP A PMO FOR THE MINISTRY OF AGRICULTURE AND LANDS IN GRENADA

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

St. George, Grenada

November 2019

APPROVAL PAGE

UNIVERSIDAD PARA LA COOPERACION INTERNACIONAL (UCI)

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DEDICATION

This work is dedicated to my family, friends and loved ones who in many ways supported me through the development of this work, and to Ministry of Agriculture and Lands, for serving as the model for this thesis.

ACKNOWLEDGMENTS

I would first like to thank my thesis tutor, Ms. Evelyn Hernandez of the Global School of Project Management (UCI), for guiding me through this research work, and steering me in the right direction whenever I went off tangent.

I also would like to acknowledge Mr. Carlos Colon Riollano and all the course facilitators of this program. Your insights and experience have been invaluable in getting me thus far.

My appreciation to the Global School of Project Management for awarding me a partial scholarship to pursue this master's degree in Project Management.

I would not have been able to complete this program without the continuous encouragement of my very dear friends Mr. Benedict Peters and Mr. Daniel Lewis. Your encouragement and unwavering support propelled me to the end of the race.

Finally, I must express my profound gratitude to my family for their unwavering support and continuous encouragement throughout these two years of study, research and writing. This accomplishment would not have been possible without them.

Thank you all so very much. I owe you a world of gratitude.

Kim K Julien

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ABBREVIATIONS AND ACRONYMS

CAHFSA	Caribbean Agriculture Health & Food Safety Authority
CAO	Chief Agricultural Officer
CARDI	Caribbean Agricultural Research and Development Institute
CDB	Caribbean Development Bank
СММІ	Capability Maturity Model Integration
ND	No Date
FAO	Food & Agriculture Organization
FGP	Final Graduation Project
GCA	Grenada Cocoa Association
GEF	Global Environment Facility
GFNC	Grenada Food and Nutrition Council
GNCA	Grenada co-operative Nutmeg Association
IFAD	International Fund for Agriculture Development
IICA	Inter-American Institute for Cooperation on Agriculture
MOA	Ministry of Agriculture
M & E	Monitoring & Evaluation
OECS	Organization of Eastern Caribbean States
OPM3	Organizational Project Management Maturity Model
P3M3	Portfolio, Program & Project Management Model
PMIS	Project Management Information Systems
PM	Project management
PMO	Project Management Office
PS	Permanent Secretary
ROI	Return on Investment
UNDP	United Nations Development Programme
USDA	United States Department of Agriculture
UWI	University of West Indies

EXECUTIVE SUMMARY (ABSTRACT)

The principal goal of this research is to revitalize the Agricultural Sector geared at restoring its contribution to the Socio-economic development of the country of Grenada. This will be done through the implementation of project management frameworks, using the benefits of having Project Management Office (PMO) as part of the organizational structure of the Ministry.

The first step involved the identification of the Ministry of Agriculture and Lands as the pilot Ministry in which this research was conducted. Then the research began with a maturity assessment as a pre-requisite criterion for setting up a PMO. The assessment was conducted through a questionnaire. This questionnaire comprised of fifteen (15) questions on the need for a PMO and the benefits it will bring to the Ministry. The participants were key M.O.A. stakeholders and employees. Also, an interview with the Chief Agricultural Officer attached to the Ministry of Agriculture and Lands helped with the assessment process.

The Ministry of Agriculture and Lands is a medium-sized institution that has over 380 employees. It has been in existence for over sixty-five years and its main purpose is to support the development of the agricultural sector through the provision of key services such as training, developing of regulations and providing concessions to stakeholders.

The Ministry's key responsibility is the management and oversight of the Agricultural Sector. To be specific, the Ministry offers several services to the public including extension services to farmers, pest management and control, sale of plants, and sale of minimal small ruminants, laboratory services as well as veterinary and livestock services.

The main problem which has been addressed in this study is the non-existence of a PMO that will act as the backbone of a successful project management approach to the Ministry. While the Ministry is doing a fairly good job in managing existing projects and attracting new ones through project proposals, there is room for improvement.

The establishment of a PMO is expected to provide the following benefits to the M.O.A.: guidance, helps to keep projects on track, assistance with communications and development of new project proposals, support for project monitoring activities and most importantly, to attract and acquire large sums of Grant Capital or External Funding.

The general objective for this project is to develop a Project Management Office implementation proposal for the Ministry of Agriculture and Lands (M.O.A.) to maximize and optimize the results of projects executed by this Ministry.

The specific objectives are:

1) To establish the roles and responsibilities to be assigned to the PMO as well as its location on the hierarchy on the M.O.A. organizational management, and to evaluate the PMO's efficiency; 2) To assess the maturity level of the M.O.A, in order to determine its project management strengths and capacity to respond to improved opportunities and expanding needs; 3) To analyze the different PMO types in order to establish the most suitable for the M.O.A.; 4) To facilitate project teams and help them do their jobs more effectively by streamlining process and bureaucracy, offering training, mentoring and quality assurance and; 5) To determine the PMO Implementation Plans for all projects but with specific emphasis on Grant Funded Projects, including the sequence of main steps required to achieve them, in order to measure and improve their performance.

The research methodologies used in performing the study include:

Primary and secondary sources of information that support the research methods used. The primary sources used were conducting of an interview with the Chief Agricultural Officer (CAO) and other key stakeholders, questionnaire and documenting personal experiences from site related activities.

The secondary sources used were the PMBOK, sixth edition, 2017, MOA records, the World Wide Web, journals, documentaries and presentations on project management and PMOs.

In addition to the foregoing, the perusal of literature reviews of similar researches using the analytical, deductive and observational methods also formed the methodology of the study. The analytical and deductive methods allowed for an indepth analysis of the Ministry's structure, while the observational method was used to evaluate and record the deliverables and their acceptance by stakeholders.

The tools employed to carry out the study were based on tools specified in the PMBOK Guide and were specified to each objective required. These included meetings, interviews, analytical tools, communication requirements analysis, stakeholder analysis and surveys including the general questionnaire on interview questions on the need for a PMO and the OPM3 maturity model.

Conclusion to the main objective of this is research was that, a PMO was necessary and indeed should be developed to maximize the benefits to be derived from potential Grant Funded projects under the MOA.

Pursuant to the results of this research, it was recommended that a maturity assessment should be conducted at least once per year in order to update the status of the MOA. Also, that a special management team be established and charged with the task of reviewing the process of the management of projects and the existing roles of the PMO.

Moreover, the Project Manager must ensure that project teams are formulated with members from the PMO and the projects' executives. Meanwhile, the Permanent Secretary and the Chief Agricultural Officer together shall ensure that the PMO formulate Implementation Plans for all projects but with specific emphasis on Grant Funded Projects.

INTRODUCTION

1.1 Background

The Ministry of Agriculture and lands (MOA) is a relatively medium-sized Government institution that has over 380 employees. It has been in existence for over sixty-five years. This Ministry is responsible for the management and oversight of the Agricultural sector. This noble institution is led by the Minister, Honourable Mrs. Yolande Bain-Horsford and it has a mandate to contribute to the economic growth and sustainable development of Grenada.

This mandate places the agricultural sector as one of the pillars of Grenada's economy as the country focuses on achieving a significant level of food security and economic growth from this pivotal economic sector.

It is noteworthy to point out that in 2004 and 2005, Grenada was adversely affected by two hurricanes which virtually decimated the agricultural sector. As a result, the Ministry has committed to the revitalization of the sector in order to restore its contribution to the socio-economic development of the country.

The renewal emphasis on agriculture focuses on a continuous replanting programme for nutmegs, much of which was destroyed following Hurricanes Ivan (2004) and Emily (2005), rehabilitation of the cocoa industry, and supporting value additions, expanding livestock development (especially small ruminants), increasing soursop (Grenada's new Green Gold) production and expanding fruit orchards. Efforts are also being made to get as much idle lands as possible under cultivation.

In order to achieve these objectives, the restructuring and re-organization of the Ministry is necessary to provide improved leadership and support services.

Thus, there is a great need for the establishment of a Project Management Office (PMO). Setting up a PMO is expected to enable the Ministry to attract more Grant Funded Projects which is crucial for the development of the sector as Government is not able to provide the financial support needed in the sector given its financial challenges. The technical and administration staff attached to this unit will be able to write more project proposals and secure extensive funding in a highly competitive regional and global market. This PMO will be one of the main engines of the Ministry and will support other departments, especially in project planning and implementation.

1.2 Statement of the problem

The imminent problem at hand is the non-existence of a PMO which will act as the backbone of a successful project management approach to this institution. The PMO is expected to provide the following: guidance, project monitoring, helps to keep projects on track, assistance with communications and new project proposals and most importantly, to attract and acquire large sums of Grant Capital or External Funding.

The MOA on average gets about three percentage of Grenada's total annual Budget. This allocation is grossly inadequate, and the MOA relies heavily on Grant Funds in order to effectively implement key programmes of the Ministry.

It is worth mentioning that the island of Grenada is under a "Home Grown Structural Adjustment Programme" which is supported by the IMF. This explains the reason for such low yearly allocations to the MOA. Thus, there is a need for the Ministry to be more innovative and resourceful in order to negotiate for additional funding from donor agencies including: Global Environmental Facility (GEF), United Nations Development Programme (UNDP), the World Bank, the Caribbean Development

Bank (CDB), the Green Climate Fund, the International Fund for Agriculture Development, Donor Countries and Multi-Lateral Environmental Agencies (Conventions).

The current situation of project management in the Ministry involves some senior staff members writing a few proposals in an ad hoc manner and as a result, some projects and funds are obtained. However, these projects take a long time to be implemented and are not always managed in the most efficient manner. The unfortunate results are unnecessary project delays, cost overruns, dis-satisfied stakeholders, more expenditure on the administrative rather than the technical component of these projects and even incomplete projects at times.

In addition, there is an Administrative Officer responsible for the approval of payments of project funds. The function of this officer is mainly of a financial nature and does not offer any technical support. The officer is not involved in the production of new project proposals. This officer is also not engaged in the actual implementation process apart from making the funds available on time.

1.3 Purpose

The Ministry of Agriculture and Lands (M.O.A.) does not have a PMO, just an Administrative Officer (responsible for Capital Projects) who is attached to the Finance Department. The Administrative Officer is responsible for approving payment of invoices, purchase orders and contracts for the different projects which are managed by this Ministry.

The purpose of this research is to analyse the current organisational structure of the Ministry and its project management maturity considering all the problems stated above. The intention is to develop a PMO proposal that is suitable for the MOA transition.

The overall intended benefits of this process, irrespective of the type of PMO that is developed, is to drive the development of projects, reduce project delays, accelerate the implementation process and ensure that all funds which are allocated for Grenada are utilised for its intended purposes and avoid the return of much unused funds. The lessons learnt can be shared with other Ministries and the creation of other project management offices throughout the Government's Public Service.

1.4 General objective

1. To develop a Project Management Office implementation proposal for the Mininistry of Agriculture and Lands (M.O.A.) geared at maximizing and optimizing the results of projects executed by this Ministry.

1.5 Specific objectives

- To establish the roles and responsibilities to be assigned to the PMO as well as its location in the hierarchy of the M.O.A Organisational management and to evaluate the PMO's efficiency;
- To assess the maturity level of the M.O.A., in order to determine its project management strengths and capacity to respond to improved opportunities and expanding needs;

- To analyse the different PMO types in order to establish the most suitable for the M.O.A;
- 4. To facilitate project teams and help them do their jobs more effectively by streamlining process and bureaucracy, offering training, mentoring and assuring quality;
- 5. To determine the PMO Implementation Plans for all projects but with specific emphasis on Grant Funded projects, including the sequence of main steps required to achieve it, in order to measure and improve its performance.

2. THEORETICAL FRAMEWORK

2.1 Company/Enterprise Framework

This research is conducted in Grenada using one of the Government's Ministries as a pilot case study. Figure 1 shows a map of Grenada and the Ministry of Agriculture and Lands is based in the Parish of Saint George, however there are sub-offices and stations located in the other parishes.



Figure 1 Map of the Island of Grenada (Source: Travel Quaz.com-Map of Grenada, 2019) MOA is a medium-sized institution established as an official arm of the state of Grenada to support the development of the agricultural sector.



Figure 2 Display of local produce and spices (Source: Grenada Display online -Picture and Information of Grenada online, 2019)

This service is provided through education, regulations, advisory and training services and granting of special concessions. The MOA also helps farmers to produce healthy fruits and vegetables in order to supply the population with these highly nutritious local foods as seen in figures 2 and 3.



Figure 3 Display of fresh fruits and vegetables (Source: Healthline-What's the difference between fruits and vegetables? -2017)

One of the driving mottoes of the Zero Hunger initiative under the Ministry is to "Eat Local and Buy Local". In its quest to ensure that every citizen in Grenada has unlimited access to sufficiently healthy quality foods, the Ministry of Agriculture over the last few years has been working collaboratively with the Food & Agriculture Organization (FAO) in implementing a Zero Hunger Initiative Programme.

The Programme involves supporting the most vulnerable in society by providing assistance in developing their capacity, in some cases, to produce some essential food staples, while in other cases, direct food supplies have been made available to these persons.

It is noteworthy that the Government of Grenada endorsed a Food & Nutrition Security Policy and Action Plan in 2013. The Zero Hunger Initiative is therefore a specific programme implemented in that overall policy objective. Figure 4 shows display from World Food Day 2018 which was held in Grenville under the theme "Our Actions are our Future: A Zero Hunger World by 2030 is still possible." The annual celebration was organised by the Ministry of Agriculture in collaboration with the Food and Agriculture Organisation (FAO), ICCA, and Caribbean Agricultural Research & Development Institute (CARDI).



Figure 4 World Food Day in Grenada, 2018) (Source: nowgrenada.com, 2018)

2.2 Company/Enterprise Background

The Public Service of Grenada has been in existence for many years and the date of significance is **June 1, 1952** when the then Governor, Brigadier Sir Robert Arundell of the Windward Islands established the Office of the Public Service Commission.

The Ministry of Agriculture has always been an important portfolio with Ministerial leadership. Over the many years of its existence, portfolios were added to this Ministry. At present, the portfolios of Lands and Surveys constitute part of the Ministry.

The portfolio and mandate of the Ministry is to put systems and structures in place to ensure that the agriculture sector in the State of Grenada becomes globally competitive, that food security is optimised and that livelihoods related to the sector become sustainable while conserving the natural environment of the island.

2.2.1. Mission and vision statements

Mission: A professional and highly trained staff providing efficient, effective, quality services to the agricultural community (farming, agro-processors and agri-business) to stimulate maximum production for local consumption, export and increased income through the sustainable use of natural resources.

Vision: An agricultural sector that is globally competitive, which ensures food security and sustainable livelihoods for the nation and the conservation of our natural environment.

2.2.2. Organizational structure

The Ministry of Agriculture and Lands is part of a network of 13 Ministries in the Public Service system of the Government of Grenada and receives strategic direction from the Minister, Hon. Yolande Bain-Horsford. There is one Permanent Secretary, who has the overall responsibility for the management of the Ministry.

The Management Team of The Ministry comprises the Minister, the Permanent Secretary, the Chief Agricultural Officer and the Heads of Divisions. The divisions are Administration, Extension, Land Use, Veterinary and Livestock, Agronomy, Lands & Surveys, Research Unit, Produce Chemist Laboratory and Pest Management Unit as seen in figure 5.

There are also government Estates, the Spice Research Unit, Propagation Stations and District Agriculture Offices where most of the Extension staff offices are based.

There are a number of entities which are closely linked to the M.O.A. such as the Grenada Food & Nutrition Council (GFNC), the Grenada Co-operative Nutmeg Association (GNCA), Grenada Cocoa Association (GCA) and the Minor Spices Corporation. These are statutory bodies which have Government appointed directors on the Board of Directors body.

The Ministry of Agriculture works very closely with a number of collaborating agencies such as the FAO, Inter-American Institute for Cooperation on Agriculture (IICA), the Caribbean Agricultural Research and Development Institute (CARDI), the Chinese Agriculture Technical Mission, the International Fund for Agriculture Development (IFAD), the World Bank, the Organization of Eastern Caribbean States (OECS), the University of the West Indies (UWI), the Caribbean Agriculture Health & Food Safety Authority (CAHFSA) and the United States Department of Agriculture (USDA) among others.

The M.O.A benefits significantly from these entities through funding for implementation of programmes and projects, training and technical support.

MINISTRY OF AGRICULTURE AND LANDS ORGANISATIONAL CHART

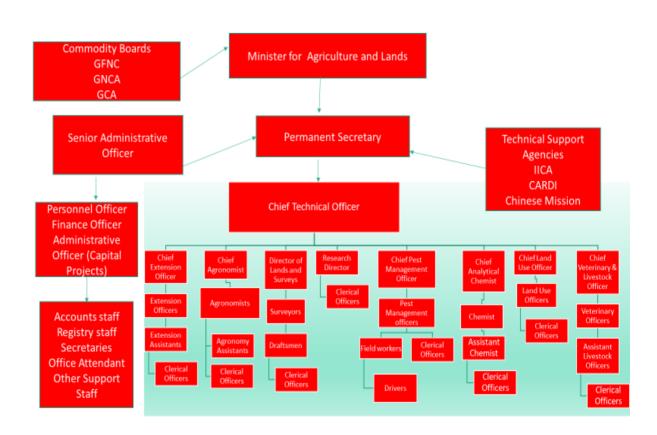


Figure 5 Organizational structure

(Source: MOA Corporate Plan 2015-2017)

2.2.3. Services Offered

The Ministry of Agriculture and Lands offers several services to farmers, agroprocessors and the public at large including extension services to farmers, pests and diseases management, general advisory services, concessions on critical inputs, training, sale of economic plants, and sale of minimal small ruminants, laboratory services as well as veterinary and livestock services.

The Ministry also facilitates the sale of crown lands and oversees land management. Also, through the Pest Management Unit & the Veterinary and Livestock Divisions, phyto-sanitary and animal certificates for the export and import of fresh plant produce, meat and meat products are issued to customers.

The MOA also provides policy guidance and regulations for the entire agricultural sector, support farmers and agro-processors in their business ventures; as well as educate all stakeholders about good farming practices and techniques. Advice on the right tools and farm machinery that should be used on farms are also provided through its extension services.

In recent times the Ministry of Agriculture has focused on some key important areas geared at providing some strategic interventions in the development of the sector. These areas include:

- Supporting investment in root crops, fruit tree crops, nutmeg, cocoa and other high demand crops/commodities;
- Supporting climate smart agriculture initiatives;
- Improving food and nutrition security;
- Strengthening animal health and extension service delivery; and
- Regularizing informal settlers and improving revenue collection from land allotments.

2.3 Project Management Concepts

Project management is the practice of utilizing people, tools, skills and techniques in a coordinated manner to achieve a deliverable end, be it a product, service or change in a predicted output. There are myriad of processes that make up project management. The detailed knowledge of these processes constitutes the basic skill set to becoming a project manager.

Relevant concepts as may be applicable to this research are outlined below:

2.3.1. Project

A project is a temporary endeavor undertaken to create a unique product, service or result. It must have a start and end date. Projects are undertaken at all organizational levels. A project can involve a single individual or a group. It can involve a single organizational unit or multiple organizational units from multiple organizations. *(PMBOK Guide -* Sixth Edition, 2017, p.4). For the purposes of this research, a project shall be a proposal of a Project Management Office (PMO) for MOA.

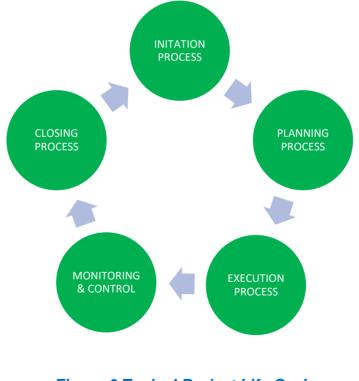
2.3.2. Project Management

Project management is the application of knowledge, skills, tools, and techniques to project activities to meet the project requirements. Project management is accomplished through the appropriate application and integration of the project management processes identified for the project (PMBOK Guide, Sixth Edition, 2017 p.10).

2.3.3. Project life cycle

A project life cycle is the series of phases that a project passes through from its start to its completion. It provides the basic framework for managing the project. (PMBOK Guide, Sixth Edition, 2017, p.19). The generic life cycle of most projects includes the following:

- Starting the project,
- Organizing and preparing
- · Carrying out the project work
- Monitoring & Control
- Closing the project.



TYPICAL PROJECT LIFE CYCLE

Figure 6 Typical Project Life Cycle (Source: The Author, 2019) The MOA does not have a defined project cycle. One of the intents of this research is to enable, via the proposed PMO, procedures such as structured project cycles that would assist the MOA in managing its projects from staffing to start the project, managing and executing right down to closing the project.

2.3.4 Project Management Processes

Project management constitutes the core process that links the various parts of a project's activities and processes. There are 47 processes that are divided into ten (10) knowledge areas. These knowledge areas interact with the five (5) main process groups called the Project Management Process Groups. These are Initiation, Planning, Execution, Monitoring & Control, and Closing. Every project must go through different stages of these process groups. These processes are applicable to all projects and are highly interactive.

Each knowledge area is characterized by its inputs, the tools and techniques that can be applied and their resulting outputs. (PMBOK Guide, Sixth Edition, 2017, p.23). For this research project, except for Project Procurement Management, this final graduation project (FGP) followed the same knowledge areas from the formulation of the Project Charter to the actual project which in this case was to propose a Project Management Office (PMO).





2.3.5. Project Management Knowledge Areas

A knowledge area is a complete set of concepts, terms and activities that make up a professional field or area of specialization. The attempt to propose a PMO will require the application of some of the project management knowledge areas to assist in the evaluation the maturity of MOA.

The knowledge areas as established in PMBOK guide, sixth edition, and applicable to the setting up of this research work are:

Project Integration Management: This knowledge area characterizes the initial steps of a project development. It embodies the integration of all project management processes and their interdependencies. Project integration

management allows for the development of the Project Charter, Project Management Plan, Project Work Development, and Project Monitoring and Control Plan which manages how to perform change control and close the project. All these constitute the series of first applications of the knowledge areas to project management.

Project Scope Management: This is the knowledge area responsible for defining the processes required to ensure that the project includes all the work required to successfully complete the project. In this case, it was the development of the FGP.

Project Time Management: This includes all the processes which ensure that a project is completed in a timely manner. This was defined by UCI, with the assumption that the FGP should be completed by November 2019.

Project Cost Management: This includes the processes for all cost-related aspects of a project. It normally allows for the development of processes such as Plan Cost management, cost estimation, determining project budget and project cost control.

Project Quality Management: This is the knowledge area which includes processes and activities that determine the quality objectives and responsibilities of the project. The intent is to guarantee the satisfactory delivery of product or products for which it produces. It uses processes like Quality Management Plan, and quality assurance and control quality to ascertain its deliverables. Tutors and readers of this research constitute the custodian to the quality management component of the FGP.

Project Human Resource Management: This includes processes that organize and manage the project team. It allows for the development of a human resource plan for the project.

Project Communication Management: This includes the processes that ensure the timely collection, control, planning, retrieval, distribution, storage and management of the project information.

Project Risk Management: This allows for conducting Plan Risk Management, Risk Identification Plan, Qualitative and Quantitative Risk Analysis as well as the Risk Response Plan with a view to increasing the likelihood of a positive impact and decrease the likelihood of a negative impact or occurrence on a project.

Project Procurement Management: This includes the processes necessary for ensuring the purchase or acquisition of required products. This is the only exception that this FGP had not fully instituted.

Project Stakeholder Management: This includes the processes necessary to identify the person or persons, groups, and organizations that may impact or may be impacted by the outcome of a project. It also focuses on keeping the flow of communication to and from the stakeholders with a view of understanding their needs and expectations. Management is done through processes such as stakeholder identification, plan stakeholder management and control stakeholder management. In the case of this research, key stakeholders are the client, management and staff of MOA, and other stakeholders such as employees and suppliers.



Figure 8 Shows the ten major knowledge areas (Source: Project Management Knowledge Areas-pmwares.com, 2017)

2.4 Project Management Office (PMO), Project Management Maturity (PMM)

PMO (Project Management Office)

A project Management Office (PMO) is a management structure that standardizes the project-related governance processes and facilitates the sharing of resources, methodologies, tools, and techniques. The responsibility of a PMO can range from providing project management support functions to the direct management of one or more projects (PMBOK Guide, Sixth Edition, 2017, p.48).

The three (3) main types of PMO structures as seen in chart 1 are, Supportive, Controlling and Directive:

Supportive PMO:

This PMO is primarily one that provides on-demand expertise to the organization using its templates, access to information, best practices, and sharing of data collected from other projects. This type of PMO is suitable for organizations or companies where projects are done successfully, yet not with firm control systems, and there is the need for additional control. The degree of control with this type of PMO is low. (Reiling, J. 2014).

Controlling PMO

This type of PMO provides support and compliance through various means. It also requires that the support be used by adopting specific project management frameworks, methodologies; templates, forms, tools, and PMO controlled set of rules. It ensures conformity to governance among other benefits. The degree of control resulting from this type of PMO is moderate. (Reiling, J. 2014).

Directive PMO

This is perhaps the PMO type with the highest control of all three (3) PMO's. This PMO essentially "takes over" the project by providing project management experiences and resources to manage the projects. As the organizations undertake projects, the PMO assigns a professional Project Manager for each of the projects, creating a consistency of reporting from each project manager back to the directive PMO. By this means, a higher level of professionalism is implemented with each project. This type of PMO is more effective for large organizations that run various projects concurrently (Reiling, J. 2014).

Chart 1 Types of PMO



(Source: Discover ideas about Best Practice. List of 3 types of PMO and key features of each. Pinterest.com, 2019)

2.5 Project Management Maturity

Project management maturity is explained as a progressive and holistic model that develops an organization's approach, methodology, strategy, and decision-making process as defined by the three core areas of project management: people, process, and tools. Maturity model can help your organization identify gaps, and take important operational steps, toward improving its entire culture around project management. Mature organizational systems and processes assist the achievement of consistent project management excellence. The understanding of maturity, however, is often a subjective concept (Pretorius et al., 2012).

There are numerous maturity models around particularly within the information technology (IT) and business management sectors. It should be noted though that, maturity models, just like the discipline of project management apply, generically to any industry sector.

Some of the main maturity models identified during the literature review for this FGP and are briefly mentioned and explained are:

- Capability Maturity Model Integration (CMMI)
- Portfolio, Program & Project Management Model (P3M3)
- Organizational Project Management Maturity Model (OPM3)

2.5.1 Capability Maturity Model Integration (CMMI)

The CMMI was developed to combine multiple business maturity models into one framework. It was born from the Software CMM model developed between 1987 and 1997. CMMI Version 1.1 was released in 2002, followed by Version 1.2 in 2006 and Version 1.3 in 2010; V1.3 is currently being replaced by V2.0, which will be released in phases starting March 2018 (White, 2018). It was spearheaded by the CMMI Institute.

The CMMI Institute operates through a network of CMMI partners, which comprise trained and certified organizations and individuals providing official training programs, appraisals and other consulting services. It provides a set of practices or improving processes, resulting in a continuous improvement system that paves the way for better operations and performance.

CMMI was used heavily by organizations that undertook software development, systems engineering and product development. It uses a single tool to assess maturity or capability; "but the CMMI is more than a process model; it's also a behavioral model. Businesses can use the CMMI to tackle the logistics of improving performance by developing measurable benchmarks, but it can also create a structure for encouraging productive, efficient behavior throughout the organization" (White, 2018).

There are five (5) maturity levels used in the assessment of CMMI:

- 1. Initial: Processes are unpredictable, poorly controlled and reactive.
- 2. Managed: Processes are characterized for projects and are often reactive.
- 3. **Defined:** Processes are characterized for the organization and are proactive.
- 4. Quantitatively managed: Processes are measured and controlled.

5. **Optimizing:** There is a focus on process improvement.

Some analysts have stated that there is a problem with the adoption of CMMI by organizations. However, the newer model promises to be more user friendly and thus businesses can expect to adopt the model quite easily with fewer challenges.

2.5.2 Portfolio, Program & Project Management Maturity Model (P3M3)

P3M3 is a model developed to assess government maturity standards. According to (Sowden et al., 2008), P3M3 also acts as a roadmap for ongoing improvement and progression towards realistic and achievable goals that are suitable for business needs and aspirations. P3M3 focuses on helping to expand emerging processes of project complexity that contribute to overall success.

The levels of maturity assessment in P3M3 are effectively identical to those for CMMI. P3M3 has a strong support base in the United Kingdom. It is developed based on seven project process-related perspectives. These are:

- 1. Organizational governance
- 2. Management control
- 3. Benefits management
- 4. Risk management
- 5. Stakeholder management
- 6. Finance management
- 7. Resource management

(Young et al., 2014) argue that one deficiency of the P3M3 model is that it uses a single number to represent maturity at the project, program and portfolio levels. The concern is that the single number reported is therefore misleading and will generally

report a lower level of maturity than what is present in an organization. It also may paint a poorer picture than what might exist and disregard the relative closeness of the next higher level.

Another shortcoming they mention is that the 'generic attributes' evaluated in all three P3M3 domains are claimed as essential to achieving improvement in project management maturity. It is doubtful, however, whether these generic attributes are appropriate for program and portfolio management domains, which are typically more complex than stand-alone project management (Young et al., 2014)

2.5.3 Organizational Project Management Maturity Model (OPM3)

OPM3 is a maturity model developed between 1998 and 2013 by a team of volunteers from the PMI. The model is believed to be suitable for organizations of any size, location or practice environment. (Langston and Ghanbaripour, 2016)

OPM3 provides a way to deliver strategy through clearly linked portfolios, programs, and projects. Opm3 enhances effective use of human capital by developing portfolio, program and project competencies (stakeholder engagement, estimating, scheduling, management, etc. OPM3 transforms the portfolio, program, and project domain processes into high- quality delivery processes that are well understood, stable, repeatable and predictable. OPM3 highlights opportunities for more flexible, adaptable, and improved management systems (OMP3, 2013).

OPM3 maturity is classified into four levels. (Pinto and Williams, 2013): These levels are:

- 1. Standardize: Structured processes are adopted
- 2. Measure: Data is used to evaluate process performance
- 3. Control: Control plan developed for measures
- 4. Continuously improve: Processes are optimized

OPM3 is by far the most sophisticated of the identified maturity models in the discipline of project management. It is also the most resource intensive (Backlund et al., 2014). OPM3 is also flexible, scalable and supports organizations of different types, sizes, complexity and geographic location regardless of age or maturity. OPM3 benefits organizations, management, governance bodies, portfolio programs or project management offices (PMOs), OPM consultants, process improvement experts, change agents, department managers and those engaged in project management activities (OPM3, 2013).

These benefits may include, but are not limited to:

- Greater market share
- Improved competitive advantage
- Improved customer satisfaction and retention
- Improved time to market
- Increased employee productivity
- Operational effectiveness
- Predictable delivery performance
- Reduced cost and rework, and
- Stronger linkage between strategy and execution

2.6 Maturity Assessment Model for this FGP

This research proposes to use the Organizational Project Management Maturity Model (OPM3). The key to making this model work is to align portfolio, program and project management with organizational strategies. OPM also advances organizational capability by linking portfolio, program and project management principles and practices with organizational enablers (e.g. structural, cultural, technological and human resource practices) to support strategic goals.

An organization such as the MOA measures its capabilities, then plans and implements improvements towards the systematic achievement of best practices. In fact, any organization that implements OPM can improve its processes by adopting recognized best practices to achieve consistent portfolio, program, and project success in support of strategic goals.

The OPM3 cycle, uses a step -by-step process to utilize this strategy execution framework and the steps that the Project Manager will have to follow at the MOA are the following:

- Acquire knowledge
- Perform assessment
- Manage improvements
- Repeat the process

In terms of Acquire knowledge it is expected that the Project Manager understands OPM (information needed on the people, processes and technology), understands the organization (gather information on the vision, mission, services offered, degree of automation and project management information systems) and assesses change readiness through training, culture and equipment.

Perform Assessment – here the Project Manager will plan, execute and manage the assessment, also compiles and analyzes data and documents and will present the results.

Manage Improvement- here the Project Manager will use the following processes:

- Measure results
- Create recommendations
- Select initiatives
- Implement improvement initiatives
- Manage change

The Project Manager will conduct questionnaires, training sessions, data analyses and use Project Management Information Systems (PMIS) in order to perform the assessment and research for the MOA.

METHODOLOGICAL FRAMEWORK

3.1 Information sources

For the purposes of this research, information sources can be defined as a location, institution, portal or site, from where somebody is able to gather knowledge or information for his or her use or consumption.

The information source for this project stretches from literature reviews (including the PMBOK Guide), to documentaries, academic journals, the World Wide Web, personal experiences and MOA records.

3.1.1. Primary sources

Primary source of information for this research will be defined as a firsthand and or direct source from where the original information is obtained.

Interviews with the Chief Agricultural Officer and other key stakeholders and documenting personal experiences from site related activities.

3.1.2. Secondary sources

Secondary source of information is the source that is not the primary source. For example, the PMBOK Guide, Sixth Edition, 2017, MOA records, the world wide web, journals, documentaries, presentations on project management and PMO's and literature reviews of similar researches using the analytical, deductive and observational methods which all constitute secondary sources of information.

Chart 2 Information sources

Objectives	Information sources			
	Primary	Secondary		
To establish the roles	The Project	Journals, and project management		
and responsibilties to	Manager.	websites, PM books, PMBOK Guide,		
be assigned to the PMO		articles and presentations from		
as well as its location on		project management offices.		
the hierarchy on the				
M.O.A Organisational				
management, and to				
evaluate the PMO's				
efficiency.				
To assess the maturity	MOA	Project management tools and		
level of the M.O.A., in	organizational	techniques from PMO experienced		
order to determine its	structure and	practitioners and experts. Online		
project management	operational	literature and academic journals		
strengths and capacity	processes and	review.		
to respond to improved	procedures.			
opportunities and				
expanding needs.				
To analyse the different	Interview with the	Website research on PMO's, project		
PMO types in order to	Chief Agricultural	management sources, templates and		
establish the most	Officer of MOA,	documentaries.		
suitable for the M.O.A.	key stakeholders			
	& Project Team.			

To facilitate project	The Project	PMBOK Guide, PM books, articles
teams and help them do	Manager.	and presentations from project
their jobs more		management offices, journals and
effectively by		project management websites.
streamlining process		
and bureaucracy,		
offering training,		
mentoring and quality		
assurance.		
To determine the PMO	Interview with the	PM books, PMBOK Guide, articles
Implementation Plans	Chief Agricultural	and presentations from project
for all projects but with	Officer of MOA,	management offices, journals and
specific emphasis on	key stakeholders	project management websites.
Grant Funded Projects,	& Project Team.	
including the sequence		
of main steps required		
to achieve them, in		
order to measure and		
improve their		
performance.		

(Source: The Author, 2019)

3.2 Research methods

According to the Cambridge dictionary, research method is defined as "a particular way of studying something in order to discover new information about it or understand it better". On this project, the research methods used were primarily Literature reviews, Analytical, Deductive- Inductive and Observation Research Methods.

3.2.1. Analytical- synthetic method

This method consists of using critical thinking skills and the evaluation of facts and information relative to the research being conducted. Within analytical research articles, data and other important facts that pertain to a project is compiled. After the information is collected and evaluated, the sources are used to prove a hypothesis or support an idea. (What is Analytical Research? (n. d).

3.2.2. Deductive-Inductive method

This is a common method of research in which the deductive or "top-down approach to research methodology begins with hypotheses based on existing knowledge or literature. In other words, it seeks to test an established theory. In comparison, the Inductive, or 'bottom -up" research, collects data and observations in order to discern a pattern with them, or to formulate a new theory. (What is Deductive Research? (n. d).

3.2.3. Observational Method

This form of research is defined as the method of viewing and recording the actions and behaviours of participants. There is no experiment conducted and no variables are manipulated. The observations are made without disturbing, influencing or altering the environment or the participants in any way. Researchers simply use all their senses to observe participants in either a natural setting or a naturally occurring situation. (Observational Method (n. d).

Chart 3 Research methods

Objectives	Research methods				
	Analytical Method	Deductive- Inductive Method	Observational Method		
To establish the roles and	This method	This method			
responsibilties to be	made for the	was used to			
assigned to the PMO as	critical thinking	gain an			
well as its location on the	of the roles and	understanding			
hierarchy on the M.O.A	responsibilities	of the roles and			
Organisational	to be assigned	responsibilities			
management, and to	to the PMO for	of the various			
evaluate the PMO's	the first time in	PMO's, and			
efficiency.	the history of the	then			
	company.	systematically			
		categorize			
		these			
		responsibilities			
		as may be			
		applicable to the			
		MOA's PMO at			
		this time.			
To assess the maturity	This method	This method is			
level of the M.O.A., in	was used to	applied by			
order to determine its	assess the	testing the tools			
project management	current maturity	and techniques			
strengths and capacity to	status of MOA.	used to assess			
respond to improved	OPM3 methods	the maturity			
opportunities and	were used as	status of the			
expanding needs.	references.	organization.			

To analyse the different	The analytical	This method	
PMO types in order to	method in this	was used to	
establish the most	instance was	compare the	
suitable for the MOA.	used to study	-	
	-	of the different	
		PMO's., to then	
	roles and	determine	
	responsibilities	correctly the	
		suitable one for	
	organization; in		
	particular the		
	MOA.		
To facilitate project teams	The analytical	This method	
and help them do their		was used to	
jobs more effectively by	instance was	compare the	
streamlining process and	used to		
bureaucracy, offering	determine and		
training, mentoring and	understand the	project teams,	
assuring quality.	project teams,	and to	
assumg quanty.		determine their	
	a PMO within	level of	
	the MOA.	productivity	
	ine mort.	after receiving	
		training and	
		development.	
To determine the PMO	This method	This method	This method
Implementation Plans for			
	served as the	brought in the	helped record the
all projects but with	critical thinking	component of	
specific emphasis on	and analytical	facts gathering	questionnaire

Grant Funded Projects,	guide to	and the effective	response			
including the sequence of	developing the	use of the data	patterns of			
main steps required to	implementation	that was	stakeholders. It			
achieve them, in order to	plan for the	collected from	also helped			
measure and improve	PMO.	the research.	summarize to			
their performance.		The data was	which PMO			
		then used to	stakeholders			
		create a new	were more			
		income.	aligned with.			
			Furthermore, it			
			helped with			
			gathering			
			consensus on			
			how			
			improvement			
			on new projects			
			should be			
		measured.				
(Source: The Author, 2019)						

(Source: The Author, 2019)

3.3 Tools

Research tools are defined as any instrument, resources or information medium that can be used to facilitate and enhance the accomplishment of a task or operation. The tools used in this final graduation project are meetings, expert judgment, scheduling tools, alternative analysis, analytical techniques and OPM3 method. Figure 9 shows a group of top Ministry executives brain storming about a need for a PMO.



Figure 9 Brainstorming meeting (example of tool used) (Source: Group meeting clipart-clipartmag.com, 2019)

2019)
Tools
Meetings, expert judgment,
stakeholders, consultation, online PMO
templates.
Organizational Project Management
Maturity Model.
Meetings, expert judgment
Meetings, expert judgment, key
stakeholders consultation
Stakeholders input and online PMO
research templates and experts' advice.

3.4 Assumptions and Constraints

An Assumption according to PMBOK Guide (PMBOK Guide, Sixth Edition, 2017, pg. 699). "is a factor in the planning process that is considered to be true, real or certain, without proof or demonstration" and Constraint as "A limiting factor that affects the execution of a project or process".

The assumptions of this graduation project are:

- Good Governance will be one of the leading responsibilities to be assigned to this PMO.
- The maturity level of PMO will be assessed within the next three months.
- A PMO on the hierarchy of the MOA organizational structure will help it to be more effective with its projects.
- Project teams will do their jobs properly and the necessary funding, and skills will be provided for them.
- Developing a methodology to plan MOA work schedule would lead to better return on investment (ROI).

The Constraints of this project are:

- Bureaucracy and political interference could stand in the way of good governance and this could cause problems for the PMO; especially in the execution of its duties.
- Finding the right Maturity assessment model for this FGP given the short space of time for this project.
- Management insensitivity or lack thereof for the value for a PMO on the MOA organizational structure could hinder establishment.

- Delays in Government processes may impede project processes and it may be difficult to source adequate funding. Lack of other resources and finding the necessary skilled persons could also hinder the project.
- The short schedule of 3 months is a limiting factor in developing a comprehensive framework and Implementation Plan.

Objectives	Assumptions	Constraints
To establish the roles and responsibilities to be assigned to the PMO as well as its location on the hierarchy on the M.O.A organisational management, and evaluate the PMO's efficiency.	Good Governance will be one of the leading responsibilities to be assigned to this PMO.	Bureaucracy and political interference will stand in the way of good governance and this can cause problems for the PMO; especially in the execution of its duties.
To assess the maturity level of the M.O.A., in order to determine its project management strengths and capacity to respond to improved opportunities and expanding needs.	The maturity level of PMO will be assessed within the following 3 months.	Finding the right Maturity Assessment Model for this FGP given the short space of time for this project will be a challenge.

Chart 5 Assumptions and Constraints

Objectives	Assumptions	Constraints
	A PMO on the	Management's
	hierarchy of	usual insensitivity
To analyse the different PMO types in order to	the MOA	for the value of a
establish the most suitable for the M.O.A.	organizational	PMO on the MOA
	structure will	organizational
	help it be more	structure will
	effective with	hinder
	its projects.	establishment.
		Delays in
		Government
	Project teams	processes may
To facilitate project teams and help them do their jobs	will do their	impede project
	jobs properly	processes and it
more effectively by streamlining process and bureaucracy, offering training, mentoring and assuring	and the	will be difficult to
quality.	necessary	source adequate
quanty.	funding and	funding. Lack of
	skills will be	other resources
	provided for	and finding the
	them.	necessary skilled
		persons could also
		hinder the project.

Objectives	Assumptions	Constraints	
	Developing a	The short	
	methodology	schedule of 3	
To determine the PMO Implementation Plans for all	to plan the	months will be a	
projects but with specific emphasis on Grant Funded	MOA work	limiting factor in	
projects, including the sequence of main steps	schedule that	developing a	
required to achieve them, in order to measure and	would lead to	comprehensive	
improve their performance.	better return	framework and	
	on investment	Implementation	
	(ROI).	Plan.	

(Source: The Author, 2019)

3.5 Deliverable(s)

A deliverable is defined in the small business. chron. webpage as "tangible or intangible product or service produced as a result of a project, that is intended to be delivered to a customer (either internal or external) in order to finish a Project."

The deliverables of this project are:

- A report of the location of the PMO on MOA's organizational management structure.
- A report of the level of maturity of the MOA.
- Report detailing the roles and responsibilities assigned to the suitable PMO for the MOA.
- Report on the number and types of project teams established.
- A report of the appropriate methodology, tools and templates.

Objectives	Deliverables		
To establish the roles and responsibilities to be assigned to the PMO as well as its location on the hierarchy on the M.O.A Organisational management, and evaluate the PMO's efficiency.	A report on the location of the PMO on MOA's organizational management structure.		
To assess the maturity level of the M.O.A. in order to determine its project management strengths and capacity to respond to improved opportunities and expanding needs.	A report of the level of maturity of the MOA.		
To analyse the different PMO types in order to establish the most suitable for the M.O.A.	Report detailing the roles and responsibilities assigned to the suitable PMO for the MOA.		
To facilitate project teams and help them do their jobs more effectively by streamlining process and bureaucracy, offering training, mentoring and assuring quality.	Report on the number and types of project teams established.		
To determine the PMO Implementation Plans for all projects but with specific emphasis on Grant Funded Projects, including the sequence of main steps required to achieve them, in order to measure and improve their performance.	Report of the appropriate methodology, tools and templates.		

Chart 6 Deliverables (Source: The Author, 2019)

4 RESULTS

For the purpose of this research, a general questionnaire (**see appendix 4**) was conducted in order to determine the need for a Project Management Office or Project Management Unit at the Ministry of Agriculture and Lands (MOA). The bottom line was to get a holistic view from the staff in terms of their support for the recommendation to set up a PMO at the Ministry of Agriculture and Lands.

A total of fifteen questions were posed to the random selection of twenty staff members from across the Ministry: including senior managers, technical staff and other clerical staff. The respondents were asked to select one of five answers ranging from, strongly agree to strongly disagree. In all the questions, the respondents were more in agreement or gave a favourable response overall of "Agree" for all the questions (see chart 7 & 8).

In addition, based on the responses received from the questionnaire and the review and analysis, as well as the responses from the interview with the Chief Agricultural Officer (**see appendix 5**), the following maturity assessment results were obtained:

It was determined that there was a great need to have a PMO established at the Ministry of Agriculture and Lands. In terms of the roles and responsibilities to be assigned to the PMO, the results strongly established that the PMO should be engaging in major coordination, monitoring, writing new project proposals, mobilizing much needed Grant Funds for Capital Projects, and ensuring that projects are implemented on time and at minimal cost.

The findings indicate that the best location on the hierarchy of the MOA's Organisational Chart is at the third level with the PMO personnel reporting directly to the Permanent Secretary or PS (**see chart 9**). The reason for this location is to

ensure maximum efficiency and reduced bureaucracy. Decisions and actions will be made a lot sooner and this will facilitate projects being delivered ahead of schedule.

Another determination from the research was to analyze the different types of PMO in order to establish the most suitable for the MOA. The findings showed that moderate to High Control was the best fit as there was a need for a hands-on approach and extensive involvement in the implementation, monitoring and execution of projects. It was felt that the stakes were high and that nothing should be taken for granted. It was necessary to do as much as possible in order to avoid or reduce project risks.

Again, the research findings indicate that the PMO will play a pivotal role in facilitating project teams and help them to perform their jobs more effectively by reducing bureaucracy, offering training, and providing guidance on the processes to be followed. Additionally, the PMO will ensure quality assurance by setting the standards for the various projects to adhere to, and those standards will be in line with the policies of the Ministry.

It was determined that the PMO will be involved in the implementation stage of all projects under the direct control of the Ministry. The processes to follow will be engaging in bi-weekly meetings with the key stakeholders involved in those projects and site visits of relevant projects. Monthly progress reports will also be required from the different projects, and the PMO will be responsible for the dissemination of information, corrective measures, and recommendations to the various projects.

Finally, the research was able to assess the maturity level of the MOA in order to determine its project management strengths and ability to respond to improved opportunities and expanding needs. It was established that with the absence of a PMO, best practices were not always followed. There was no standardized way for

implementing and executing projects. At times projects could not be completed on time and within budget. Also, in some cases monies were returned to donor agencies because of failure to implement those projects in the expected time frame allocated. In other cases, projects were partially completed, and unutilised funds were also returned.

The data from chart 7 below show the results of the questionnaire. The results illustrate that for each question, the highest points went to the option "Agree". Therefore, respondents gave positive or favourable responses for the establishment of a PMO at the Ministry of Agriculture and Lands.

Chart 7

Question Number	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Total Responses
1	2	2	0	12	4	20
2	1	5	2	8	4	20
3	1	2	1	13	3	20
4	0	0	4	13	3	20
5	0	2	0	12	6	20
6	0	3	4	10	3	20
7	1	2	3	9	5	20
8	0	1	5	8	6	20
9	1	0	3	10	6	20
10	1	0	5	11	3	20
11	1	1	2	11	5	20
12	2	0	5	13	0	20
13	0	2	3	11	4	20
14	1	4	2	10	3	20
15	0	5	5	10	0	20

Table showing responses for each question given in the PMO questionnaire

(Source: The Author, 2019)

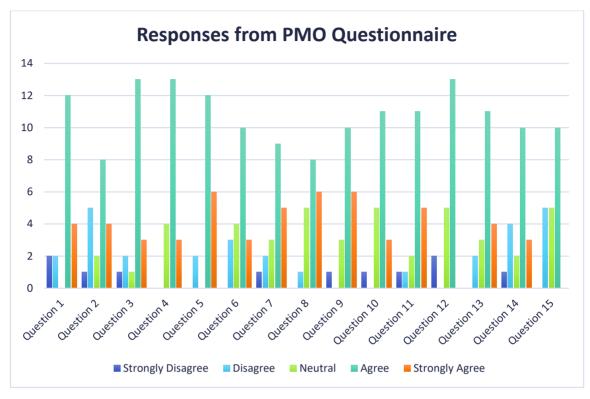


Chart 8: Graph of Responses from PMO Questionnaire

From chart 8 above it can be seen that for each question the most favorable response was agree. It can also be seen that only a few respondents disagree or strongly disagree with the idea of a PMO.

⁽Source: The Author, 2019)

4.1. To establish the roles and responsibilities to be assigned to the PMO

Following the maturity assessment and the recommended PMO type, these series of roles and responsibilities are proposed for the hybrid PMO for the MOA. These roles and responsibilities are from the needs assessment and improvement potentials envisaged for the MOA. It is critical at this juncture that over zealousness must be avoided regarding the assignment of the roles and responsibilities to a new PMO. Often, the simpler and more realistic these roles and responsibilities are, the easier and better, they are carried out **(see chart 9).** The basic responsibilities according to research into PMOs are as follows:

4.1.1 Establishing Project Methodologies

Establishing the methodology to execute a project successfully is a key role of a PMO. This is the foundation of the processes and procedures upon which the organization is to rely with constant reviews and updates of its processes to attain the desired goal.

The review of the MOA's status reveals that it would be best to start with a noncomplex methodology for its operation. This bears in mind that the organization has had limited structured methodology in terms of project implementation, execution and completion. Project management methodologies can be complex, demanding sophisticated set up, and are often very costly. Hence, the recommended methodology comprises a non-complex, basic project management process of developing or creating the following:

Project Charter: This will outline very clearly the overall vision of the project in question, as well as articulate the objectives and goals of the project to all its stakeholders.

Work Plan: This will set out detailed schedules of activities, resources, time frames and the deliverables of the project to the project team.

WBS: This will define the specific deliverables due from each team member at each stage of the project.

Governance Plan: This outlines the roles and responsibilities to be assigned to each member of the project team.

Risk Analysis Identification: This will allow the team to list the potential problems or deviances that have a probability of occurrence, create impact, and identify their possible solution or mitigation.

Communication Plan: Establishes the protocol, procedure, and methods to communicate project information and issues to members of the team.

Forms and Templates: This will establish the list of simplified tools, (forms and templates) that the project team would use to effectively communicate, report and do record keeping according to industry best practices. Templates such as project scheduling (Gantt timeline), project budget, simple project tracking template, daily task manager, assumptions, and risk managements templates.

4.2.1 Project Tracking

The responsibility of project tracking in a PMO is paramount. This is one of the roles of the Project manager. The lack of any progress or delays and their possible impact on the deliverables of a project, can be traced to its tracking. This is very critical to every project. Based on researched cases, a PMO of the size anticipated for the MOA, normally should track its project in three (3) steps:

1.Collecting project status information: This usually entails the routine gathering from all project team leaders, updated work plans, issues, change orders and any other relevant project data.

2.Consolidation and analysis of the data collected: This mechanism would allow all data collected to be analyzed and the results compared to a benchmark set using the OPM3 guidelines, and then communicated to the management team for review and possible action.

3.Corrective Action: This process allows for an official endorsement of the corrective actions to be taken by the management team through a process of change management.

The PMO has the responsibility of gathering and archiving project experience and reusable data for future projects. This would form part of its methodology to close the project. The Project manager is charged with this responsibility.

4.3.1 Project Support

One of the responsibilities of a PMO is to serve as project support. This is huge and widely encompassing responsibility that often requires a multiplicity of inputs and efforts from both internal and external resources. Hence it is coordinated by the PMO project executive or body.

Research into the current status of the MOA clearly indicates that the MOA needs to be provided with a support mechanism to maximize its full potential with regards to delivery of projects. When a PMO serves as a project support, it embodies the following responsibilities:

The PMO provides a centralized location for planning, analyzing, negotiating, reorienting project direction and concerns in line with the project baseline to the customer and stakeholders.

One important support system a PMO provides is the training to team members of relevant project management tools and techniques applied to the project in question. The PMO in its support role would formulate some in-house consultancy services geared at specific project issues that would be administered to the project team from time to time.

The PMO also supports the organisation by developing a group of competent project managers through its continuous training sessions. These project managers would then ensure that the implementation of a project is done effectively following the established methodologies set out by the PMO through consultation with its stakeholders.

Chart 9: PMO Roles & Responsibilities Chart

No	Responsibility	Role/SME	Owner	Creator	Approver	Timeline
1	Establishing project methodologies Create Project charter	Project Manager, Chief Agricultural Officer & Permanent Secretary	РМО	Chief Agricultural Officer	Project Sponsor	One week First week in Sept. of 2020
	 Create work plan 	Project Manager	PMO	Project Manager	Permanent Secretary	Ongoing throughout The life of the project Starts Second week in Sept. of 2020
	✤ Work Break down structure	Project Manager	PMO	Project Manager	Permanent Secretary	One week Second week in Sept. of 2020
	 Governance plans 	Project Manager	PMO	Project Manager	Permanent Secretary	Ongoing throughout The life the project. Commences from The third week of Sept. 2020
	 Prepare Risk Analysis Plan 	Project Manager	PMO	Project Manager	Permanent Secretary	One week Third week of Sept. 2020
	 Create Communication Plan 	Project Manger	РМО	Project Manager	Chief Agricultural Officer	One week Second week of Sept. 2020
	✤ Create forms and Templates	Project Manager	PMO	Project Manager	Chief Agricultural Officer	Two weeks Start from the second Week of Sept. 2020
2	 Project tracking Collecting project status information Consolidating & analyzing data collected Implementing corrective action, if required 	Project Manager	РМО	Project Manager	Permanent Secretary	Two months Starts from the first Week of October 2020
3	Project Support Provide a centralized location for all project data, for sharing and analysing project development Develop competent project managers through training & mentoring		РМО		Permanent Secretary	Ongoing throughout The life of the project. Starts from the Second week of October 2020

(Source: Author, 2019)

4.4.1 The location of the proposed PMO within the existing management structure of the MOA.

Based on all the maturity assessment results as well as the analysis and selection of a suitable PMO, The MOA could begin solving its maturity problems by locating the PMO in a strategic position on its management structure. This will allow for speedy implementation of processes and procedures and the PMO can harness considerable momentum to tackle the most urgent project-related matters.

Furthermore, based on what has been determined thus far with this research, the MOA stakeholders' input into the location of its PMO is apparent. While the questionnaire did not directly deal with the location of PMO on its current organizational structure, it was given consideration during the interviews.

The awareness generated as a result of a low-rated maturity level also serves to strategically look at the merits of placing the MOA's PMO very high on its management structure. For best results, it was decided that a PMO placement directly under the mandate of the Permanent Secretary, would give it the control characteristics it deserves to be functional and appropriate for its intended purpose (see Chart 10).

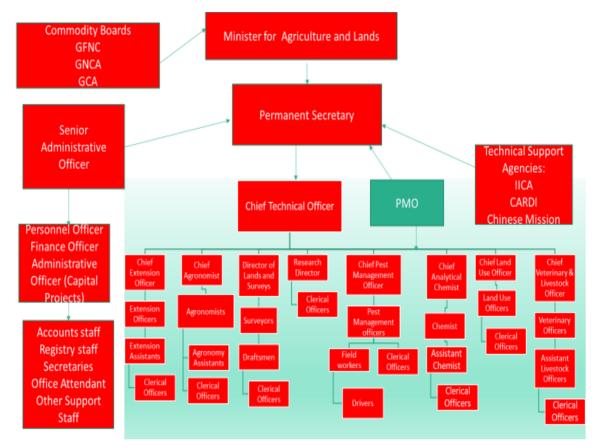


Chart 10: Organisational chart showing the New PMO

(Source: The Author, 2019)

4.2. To assess the maturity level of the M.O.A.

Describe the activities and results associated with the fulfillment of this specific objective (might include graphs, charts, flow diagrams, methodologies, phases, templates and plans).

It is common knowledge that one only solves a problem if he could identify the problem. Pointing back to the assumption that the MOA needs a PMO, it would be required that management of the MOA begins with an assessment of the status of the Ministry. This would be in keeping with the management alignment and the willingness to embrace change.

Interviews with the key stakeholders indicated their willingness and urgency to perform a maturity assessment as a prerequisite to any targeted improvement efforts. A maturity assessment would require a step-by-step analysis of its processes and organisational structure. The findings would enable leadership to determine the strengths and weaknesses of the Ministry as well as its potential for future development.

4.3. To analyze the different types of PMOs.

Information reviewed both from the PMBOK and other project management offices all concur that there are three (3) basic types of PMO's based on their degree of influence and control over the projects within the organization: Supportive PMO, Controlling PMO, and Directive PMO.

A supportive PMO structure performs primarily a consultative role to projects by supplying templates, best practices and training, and serves as a repository of information from lessons learnt from previous projects. A Controlling PMO structure provides support to projects by requiring compliance through project management framework or methodologies, and using specific templates, tools and forms or conformance to governance to achieve its mandate. A directive PMO structure is one that takes full control and directly manages the project or projects. This PMO structure has the highest control of all the three (3) PMO structures.

In the analysis of all three PMO's, it was realized that, each type of PMO has its function and impact based on the type of organisation, its structure, its culture and

most importantly, its objectives for the overall success of that Ministry or Organisation.

In this case study, the MOA's structure and culture undeniably require a PMO. This is based on the results from the respondents as highlighted in the results chapter. The PMO that was chosen based on the results and the analysis of different PMO types based on the current status and culture of MOA, is that of a **hybrid** of two PMO's (Controlling & Directing PMOs).

The general inclination from the staff and other stakeholders was that they were more comfortable with a medium whereby the MOA enjoyed the full characteristics of a moderate Controlling PMO with a strong compliance governance characteristic of a Directive PMO.

It is important to note that choosing a type of PMO, was directly linked to the results of the assessment conducted. The weaknesses identified from the maturity assessment via the use of questionnaire further supported the argument regarding which PMO to choose at this time. It was felt that a hybrid of two PMOs will best meet the needs of the Ministry.

Chart 11: Characteristics of the PMO

Type of PMO	Characteristics
Supportive	 Consultant to projects providing best practices, lessons learned, templates and training. Very low control/influence over projects Works when projects can succeed in loosely controlled manner
Controlling	 Requires compliance to their frameworks/methodologies Might require regular reviews Works if compliance will bring improvements and if PMO has enough executive support
Directive	 Directly manages projects; high degree of control/influence Injects professionalism in project Effective in larger hierarchical organizations

(Source: Author, adapted from pinterest.com, 2019)

4.4. To facilitate project teams

The maturity assessment results indicated that there was some form of project teams, especially with regards to the persons employed to work with a particular project. For example, the Agriculture Competitiveness Project (AGRICOM) which is funded by the World Bank and is now implemented as a major initiative of the Ministry, has employed four key persons to implement this project.

The staff comprises a project Coordinator, a Monitoring & Evaluation Specialist (M&E Specialist), an Administration & Communications Officer and a National Planning Business Consultant. Together they carry out their functions as a team or

one unit. The staff has separate responsibilities but operate as a team in order to effectively implement and execute this project.

However, having a PMO will help the staff to receive much needed support and help them to do their jobs more effectively. This can be done by streamlining process and reducing bureaucracy.

In addition, through training and mentoring needs, the PMO can also provide the benefit of better-quality assurance. The project had some problems in implementation and started a year late. The project document was signed in July, 2017 and should have commenced immediately, but it was launched on the 26 July, 2018. Therefore, having a PMO could have ensured that the project commenced on time.

4.5. To determine the PMO Implementation Plans

According to Scheid, 2019, the PMO implementation plan and its size should be determined by the structure of the organization, number of projects completed and planned, team sizes, education of staff and certification levels of project managers. It is necessary for the Project Manager to identify areas of concern, risk or ones that are problematic. Additionally, other notable attributes include the setting of clear standards on how the PMO will be run and why it is needed.

The next step is to get project managers' and team members' input on what they would like to see in the project management office such as training tools, direction and leadership, reporting systems, communication plans, reviews and performance meetings. Every PMO structure should be taken with care and deliberate content from everyone who will utilize the PMO. If a project management office is set up with

only upper management input, it could backfire making the PMO a place no one trusts, especially project teams (Scheid, 2019).

The maturity assessment results allowed for the determination of the most fitting PMO for the MOA. However, now that the role, scope and outcomes of the MOA's PMO have been identified, it would be timely to implement the new organizational structure.

The implementation plan is directly linked to the results of the assessment in that the lack of consensus from the various projects, and the result of having some employees' involvement in decision-making amongst other analyses, help determine the structure of this implementation plan.

The first requirement is to consult with all stakeholders about the introduction of the PMO into the organizational structure. This process can be carried out through training and consultation with all team members as well as top management.

Secondly, a review of the skills levels available to carry forward the new structure has to be ascertained. The history of the organization's performance is analyzed so as to establish what the new PMO is to prioritize and target for the immediate, or long-term improvement. All these are to be measured with the organization's strategic plans and baselines.

Once the skills have been successfully identified and the needs assessment approved, the processes and procedures that are required to implement the methodologies set out for this PMO can be established. These processes and procedures are carried out using the processes templates developed specifically for the organization. Communication templates as well as reporting templates are very important tools that all team leaders should be trained to understand and use.

Finally, a check and balance system through a constant review of the performance, and adherence to methodologies set out for the effective operations of this PMO is to be implemented. This would allow for growth and inherent changes to the PMO to be reviewed by the executives of the organization as required, so as to make the PMO current and relevant to the organization.

CONCLUSIONS

A maturity assessment was conducted using the process of interviews and a questionnaire designed with the aim of getting responses based on the objectives of this project. The aim of the maturity assessment was to determine the strengths, weaknesses and opportunities as well as needs of the MOA. The results of the assessment are intended to guide the selection of the most suitable PMO for the MOA and to establish the roles and responsibilities to be assigned to that particular PMO. Based on the results obtained from the maturity assessment, it was concluded that:

1. In relation to the first objective of establishing the roles and responsibilities to be assigned to the PMO, as well as its location on the hierarchy of the MOA'S organizational chart, it is proposed that it should start with the three basic and widely accepted project management responsibilities of: establishing project methodologies, project tracking and project supporting. For example, writing new project proposals, monitoring, coordinating departments and projects, mobilizing new funds and ensuring project implementation, execution and completion are key activities which must be realized.

It was determined and accepted that this new PMO will be located at the third level of the MOA's Organogram. It was concluded that there should be direct reporting to the Permanent Secretary in an effort to reduce bureaucracy and to improve on the efficiency in relation to the implementation and eventual completion of projects in a timely manner or before the schedule date of completion.

2. The second objective was to assess the maturity level of the MOA, in order to determine its project management strengths and its ability to respond to

improved opportunities and expanding needs. The assessment was done using the structured questionnaire, interview sessions and observation of the daily operations of the Ministry.

It was concluded that some of the strengths of the Ministry include the ability to attract important projects which can be very beneficial to the Agricultural sector, and a compliment of highly skilled and qualified staff especially in the technical areas of Agronomy, Pest Management, Research, Veterinary Medicine, Extension among others.

However, there are weaknesses, including high levels of bureaucracy, poor organizational skills, lack of an established PMO and efficient project teams, absence of adequate financial resources to implement key programmes, micromanagement in some areas and minimal training in the areas of project management. However, the analysis shows that employees and other stakeholders are open to the idea of adapting to change. The establishment of a PMO at the MOA in order to expand the needs of the Ministry is overwhelmingly welcomed and supported.

3. The third objective, which is to analyze the different types of PMOs in order to establish the most relevant type for the MOA. After analyzing the three main types, supportive, controlling and directive, it was concluded that the best PMO will be that of a hybrid which essentially is a mixture of the controlling and directive given the dynamism of the Ministry, the large number of projects and accountability to donor agencies.

This hybrid PMO should benefit all stakeholders and fit into the current structure of the Ministry. This is a true recognition of the culture, size and the dynamism of this organization. The Ministry should be able to recruit the new staff needed for establishment of this PMO. Some of the staff may come from

within the Ministry and from other Ministries. If it becomes necessary, the Ministry will recruit from the private sector in order to bring a more businesslike and fresh approach to Project Management.

4. In terms of the fourth objective, it was concluded that the projects implemented under the MOA usually try to operate as a team or unit, but those teams are not usually properly structured. A PMO will help to set up project teams within the different projects. The number of teams established, and functioning will determine the success of the PMO. A project management team is a group of people interrelated by mutual managerial responsibilities, a system of formal seniority and have duties to perform within the shared project they are engaged in.

Project management team goals are to reach project results via effective collaboration. Project management team size can vary massively from small teams comprising several people, to "teams of teams" where thousands of people are engaged into work via a multilevel system of units, departments, functional teams and cross-departmental teams.

5. The final objective, which is to determine the PMO implementation plans for all projects but with specific emphasis on Grant Funded Projects. In terms of this objective, it can be concluded that the appropriate methodologies, tools and templates will be used in order to properly assess the implementation plans for those projects which are approved.

Stakeholders will be consulted before implementation plans are initiated. Training sessions will be carried out with the new project teams. The skills levels of those persons who make up the project teams will be assessed. The

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next step will be to implement the plans following the standardized methodologies, tools and templates which were selected. All future objectives will follow the same procedures as set out by the PMO.

RECOMMENDATIONS

Based on the research and assessment conducted on the current status of the MOA maturity level and the potential for growth and development as a model public sector institution, the following are recommended:

- It is recommended that a special management team be established by September 2020 in order to prepare for the establishment of the PMO in the following year. It is proposed that commencement of the PMO should be in February 2021. This team will be charged with the task of reviewing the process of the management of projects and the existing roles of the PMO and determine its adequacy or lack thereof.
- A maturity assessment should be conducted at least once per year in order to update the status of the MOA and to further determine the project management strengths and needs. The Project Manager and the Chief Agricultural Officer shall be responsible for this assessment.
- 3. An analysis should be done by the Project Manager and his or her team, at least once per year. The aim of the analysis is to look at the relevance of the PMO's existence to advice the Ministry's management, and stakeholders if and when the MOA would be better served with another PMO type based on the projects it embarks on.
- 4. The Project Manager must ensure that project teams are formulated with members from the PMO and the project(s) executives. This task is expected to take place within the first two weeks of the launch of the project. Project teams should submit monthly and /or quarterly reports and the Project Manager should also ensure that those teams get the necessary training and mentoring that are needed in order for them to function more efficiently.

5. The Permanent Secretary and the Chief Agricultural Officer together shall ensure that the PMO formulate Implementation Plans for all projects with specific emphasis on Grant Funded projects. They must also ensure that those Implementation Plans are executed in sequence in order for the PMO to be able to measure and improve performance. This task is expected to take place within the first two weeks of each approved project.

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APPENDICES

Appendix 1: FGP Charter

	PROJECT CHARTER
Date	Project Name:
May 13, 2019	Setting up a PMO for the Ministry of Agriculture and Lands in Grenada
Knowledge Areas / Processes	Applicacion Area (Sector / Activity)
Knowledge areas:	Public Service / Public Sector
Project Integration Management, Scope Management, Time Management , Cost Management, Quality Management, Human Resource Management, Communication Management, Risk Management, Procurement Management & Stakeholder Management	
Process groups: Initiation, Planning, Execution, Monitoring & Control & Closing	
Start date	Finish date
May 13, 2019	November 8, 2019
Project Objectives (general and spec	l sific)
General objective: • To develop a Project Managem	nent Office implementation proposal for the Mininistry of Agriculture

and Lands (M.O.A.) to maximize and optimize the results of projects executed by this Ministry.

Specific objectives:

- 1 To establish the roles and responsibilities to be assigned to the PMO as well as its location on the hierarchy on the M.O.A organisational management, and to evaluate the PMO's efficiency.
- 2 To assess the maturity level of the Ministry of Agriculture and Lands, in order to determine its project management strengths and capacity to respond to improved opportunities and expanding needs.
- 3 To analyse the different PMO types in order to establish the most suitable for the M.O.A.
- 4 To facilitate project teams and help them do their jobs more effectively by streamlining process and bureaucracy, offering training, mentoring and assuring quality.
- 5 To determine the PMO Implementation Plans for all projects with specific emphasis on Grant Funded Projects, including the sequence of main steps required to achieve it, in order to measure and improve its performance.

Project purpose or justification (merit and expected results)

In Grenada, at the Ministry of Agriculture and Lands (M.O.A.) there is no PMO, only an Administrative Officer (Capital Projects) who is attached to the Finance Department. The Administrative Officer is responsible for approving payment of invoices, purchase orders and contracts for the different projects which are managed by this Ministry. In fact, the M.O.A. has a mandate to contribute to the economic growth and sustainable development of Grenada. This mandate places agriculture as one of the pillars of Grenada's economy as the country focuses on achieving a significant level of food security and economic growth from this sector.

The renewed emphasis on agriculture focuses on a replanting programme for nutmegs, much of which was destroyed during Hurricanes Ivan (2004) and Emily (2005), rehabilitation of the cocoa industry and supporting value additions, expanding livestock development (especially small ruminants) and fruit orchards. Efforts are being made to get as much idle lands as possible under cultivation. In order to achieve these goals, the restructuring and re-organisation of the Ministry is necessary to provide improved leadership and support services.

The Ministry manages several locally funded and Grant funded projects. The Grant funded ones are usually supported by Global Environmental Facility (GEF), United Nations Development Programme (UNDP), Caribbean Develop Bank (CDB) and the World Bank. It usually takes a lot of effort and due diligence to manage just one project, and the Ministry does not have the technical and administrative capacity to implement and execute those projects. The results are unnecessary project delays and reduced funding (donor agencies release funds in tranches). Thus, it is very necessary to set up a PMO at the Ministry in order to drive projects, reduce project delays, accelerate the implementation process and unsure that all funds which are allocated for Grenada are utilised for its intended purpose and avoid the return of much needed funds. This sector usually gets a small allocation (about 3%) of the total annual budget and depends mostly on Grant funds for the growth of the sector.

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

- PMO Application documents for managing Locally Funded and Grant Funded projects.
- Enhanced templates and suites of measurable indicators to evaluate project outcomes.
- Number of Implementation plans developed.

Assumptions

It is assumed that this project would be developed using experiences, data and information gathered from the Ministry of Agriculture and Lands and from other revelant sources.

Constraints

Due to time constraints, the scope of this project would be reduced to meet this academic endeavour. The research and implementation of the PMO (start of operations) shall continue beyond this paper. Two other major contraints are change of governement or administration and overall bureaucracy.

Preliminary risks

If permission and access to the required information is hindered in any way during the research period, that might impact the delivery time and subsequent quality of the project.

Budget

The cost of this project has not yet been dertemined.

Milestones and dates

	Milestone	Start date	End date
٠	Project Charter	May 13, 2019	May 19, 2019
•	Introduction Chapter	May 20, 2019	May 26, 2019
•	Theoretical Framework	May , 27 2019	June 2, 2019
•	Methodological Framework	June 3, 2019	June 9, 2019
•	Annexes, Executive Summary & Bibliography	June 10, 2019	June 14, 2019
٠	Tutoring Process	June 17,2019	Sept. 13, 2019
•	Reading by reviewers	Sept. 16,2019	Oct. 4, 2019
•	Adjustments	Oct. 7, 2019	Nov. 1, 2019
•	Presentation to Board of Directors	Nov. 4, 2019	Nov. 8, 2019

Relevant historical information

The Ministry of Agriculture and Lands, led by Hon. Yolande Bain Horsford, Minister, has being in existence since June 1952 and was reformed in 1974 when Grenada became an independent nation. In recent times the Ministry had been grouped with other sectors like fisheries, forestry and the environment. Its Mission Statement is "A professional and highly motivated staff, providing efficient, effective, quality services to the

agricultural community (farming, fishing, forestry) to stimulate maximum production for local consumption, export and increased incomes through the sustainable use of natural resources." It has as its mandate to contribute to the economic growth and sustainable development of Grenada.

This mandate places agriculture as one of the pillars of Grenada's economy as the country focuses on achieving a significant level of food security and economic growth from this sector. While various sectors in Grenada have recovered well from two hurricanes in 2004 and 2005, the agricultural sector was an exception. Nevertheless, the Ministry continues to be committed to the revitalization of the sector to restore its contribution to the socio-economic development of the country.

The Ministry also provides guidance and supervision to the following Statutory Bodies:

- Grenada Cocoa Association (GCA)
- Grenada Cooperative Nutmeg Association
- The Grenada Food and Nutrition Council (GFNC)
- Minor Spices Association

The ministry has never embarked on such a major project to set up a PMO. This office will be responsible for the oversight and implementation of all projects under the management of the Minstry of Agriculture and Lands. This project will be revolutionary and can be seen as a pilot project for other Ministries to follow and implement.

Stakeholders

Direct stakeholders:

The Government of Grenada The Minister for Agriculture and Lands The Permanent Secretary

Indirect stakeholders:

Chief Agricultural Officer						
Senior Administrative Officer	Proje	Project Manager				
Administrative Officer- Capital Projects	Admi	ninistrative Officer(Recurrent)				
Office Staff	Clien	ts/ Customers				
Project Manager:		Signature:				
Authorized by:		Signature:				
Autorized by:						

The Ministry also provide guidance and supervision to the following Statutory Bodies:

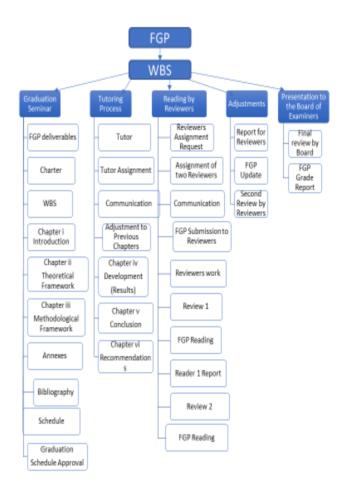
- Grenada Cocoa Association (GCA)
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The ministry has never embarked on such a major project to set up a PMO which will be responsible for oversite and implementation of all projects under the management of the Minstry of Agriculture and Lands. This project will be revolutionary and can be seen as a pilot project for other Ministries to follow and implement.

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Stakeholders	
Direct stakeholders:	
The Government of Grenada The Minister for Agriculture and Lands	
The Permanent Secretary	
Indirect stakeholders:	
Chief Agricultural Officer	
Senior Administrative Officer	Project Manager
Administrative Officer- Capital Projects	Administrative Officer(Recurrent)
Office Staff	Clients/ Customers
Project Manager: Kim Sulien	Signature:
Authorized by:	Signature:

Appendix 2: FGP WBS



Appendix 3: FGP Schedule

ID	Task Name	Duration	Start	Finish	43 20	Jun '1 27 03	9		Jul '19	- 	- m	Aug '19) 10 1		Sep'	19	c	Od	'19 07		~ .	Nov'	19	40	
1	Final Graduation Project	130 days	Mon 13/05/19	Fri 08/11/19	13 20	27 03	10	1/ 24	<u> 0 1</u>	JAS 15		29 05	12 1	9 2	6 112	09 1	6 Z3	30	07	14 .	21 2	8 04	<u> 11</u>	18	
2	FGP	0 days	Mon 13/05/19	Mon 13/05/19	13/05																				
3	Graduation Seminar	25 days	Mon 13/05/19	Fri 14/06/19																					
4	Project Charter	5 days	Mon 13/05/19	Fri 17/05/19	1																				
5	Introduction Chapter	5 days	Mon 20/05/19	Fri 24/05/19	ľ																				
6	Theoretical Framework	5 days	Mon 27/05/19	Fri 31/05/19																					
7	Methodological Framework	5 days	Mon 03/06/19	Fri 07/06/19																					
8		5 days	Mon 10/06/19	Fri 14/06/19																					
9	Tutoring Process	65 days	Mon 17/06/19	Fri 13/09/19			ľ									1									
10	Reading by reviewers	15 days	Mon 16/09/19	Fri 04/10/19												ľ		-1							
11	Adjustm ents	20 days	Mon 07/10/19	Fri 01/11/19														Ĩ				h			
12	Presentation to Board of examiners	5 days	Mon 04/11/19	Fri 08/11/19																			1		
13	FGP End	0 days	Fri 08/11/19	Fri 08/11/19																		4	05/1	1	

Appendix 4 : Project Management Questionnaire

PROJECT MANAGEMENT OFFICE QUESTIONNAIRE

This survey seeks to find out your thoughts on the need for a Project Management Office (PMO) or Project Management Unit (PMU) within the Ministry of Agriculture and Lands (MOA)."A PMO is a group –internal or external to a company- that sets, maintains and ensures standards for project management across that organization. They are the keepers of best practices, project status and direction- all in one spot."

Privacy Statement

Please complete this questionnaire which is for research purposes only. Please do not write any identifying marks on the survey as participants are meant to be anonymous. All information will be kept confidential. Thank you for your time and cooperation.

Answer the following questions by **circling** the most appropriate answer

1. Do you agree that there is a need to have a Project Management Office (PMO) or Project Management Unit (PMU) at the Ministry of Agriculture and Lands (MOA)?

Strongly Disagree Disagree Neutral Agree Strongly Agree

2. Do you agree that this Ministry is mainly driven or Supported by Capital Funded Projects?

Strongly Disagree Disagree Neutral Agree Strongly Agree

3. Should this ministry endeavour to include in its Corporate Strategic Plan the need to create a PMO or Unit by 2021?

Strongly Disagree Disagree Neutral Agree Strongly Agree

4. Do you believe having a PMO or PMU will help to increase the level of productivity of Capital Funded Projects under this Ministry?

Strongly Disagree Disagree Neutral Agree Strongly Agree

5. Will you favour the PMO or PMU within the Ministry if one of the prime benefits is an increase in cost savings?

Strongly Disagree Disagree Neutral Agree Strongly Agree

6. Will you support the creation of a PMO or PMU if one of the benefits is to deliver projects under budget?

Strongly Disagree Disagree Neutral Agree Strongly Agree

7. PMO or PMU usually help businesses to deliver projects ahead of schedule. Do you see this as an important reason for setting up a PMO or PMU at this Ministry?

Strongly Disagree Disagree Neutral Agree Strongly Agree

8. Do you think a successful PMO or PMU should be aligned with corporate strategy and the culture of the Ministry?

Strongly Disagree Disagree Neutral Agree Strongly Agree

9. Do you think a PMO or PMU should be transparent and available to provide relevant and accurate information in order to support decision- making?

Strongly Disagree Disagree Neutral Agree Strongly Agree

10. Do you believe that a PMO or PMU unit should be the central point for lessons learned, templates and best practices in order to avoid or stop project teams from repeating processes?

Strongly Disagree Disagree Neutral Agree Strongly Agree

11. The PMO or PMU makes it easy for project teams to do their jobs by reducing bureaucracy, providing training, coaching, mentoring and quality assurance. Do you think this Ministry will benefit tremendously from those advantages?

Strongly Disagree Disagree Neutral Agree Strongly Agree

12. Will you give your support to the creation of a PMO or PMU if it provides the function for managing documentation, project history and organisational knowledge?

13. Do you believe that the creation of the PMO or PMU will help to foster capacity building and allow this Ministry to achieve measurable and sustainable results from its development goals or plans?

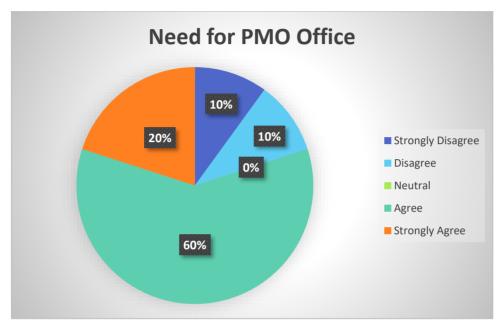
Strongly Disagree Disagree Neutral Agree Strongly Agree

14. Do you believe that the PMO or PMU should be expected to work with all stakeholders in order to maximize the benefits from projects, not only for the Ministry but for the nation of Grenada?

Strongly Disagree Disagree Neutral Agree Strongly Agree

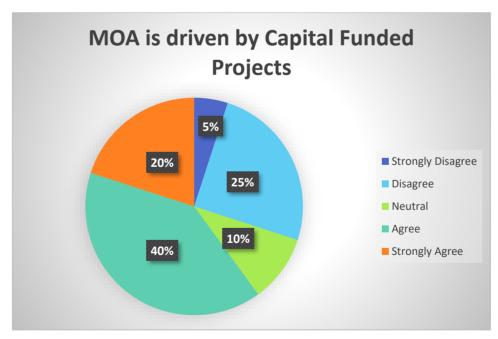
15. Do you believe the PMO or PMU should comprise a minimum of at least four persons including the Chief Project Officer and one Senior Project Officer?

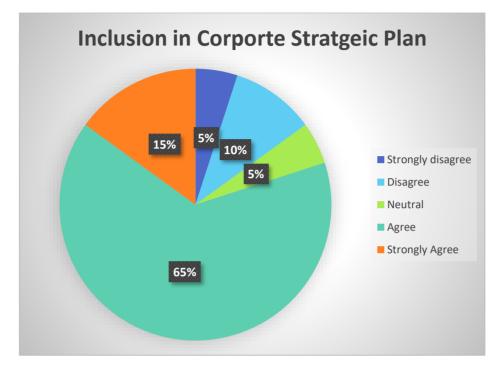
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
			J	



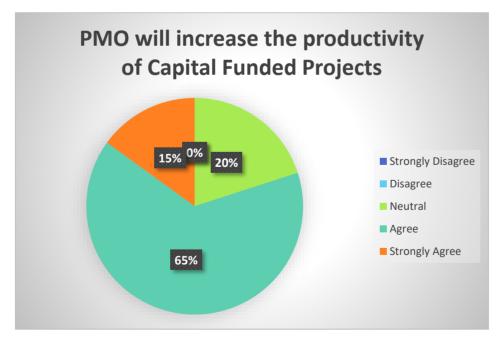
Appendix 5: Graphs showing responses of Questionnaire

Question 1

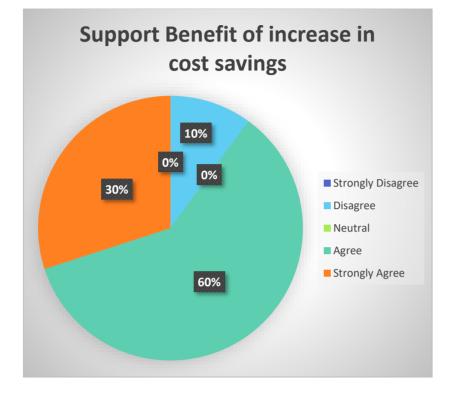


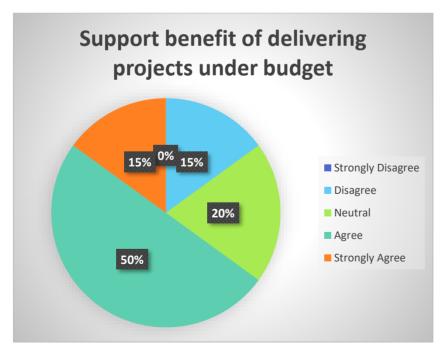


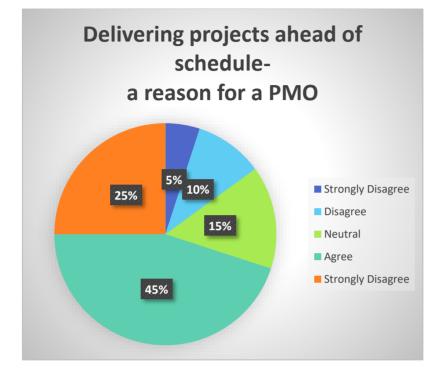
Question 4

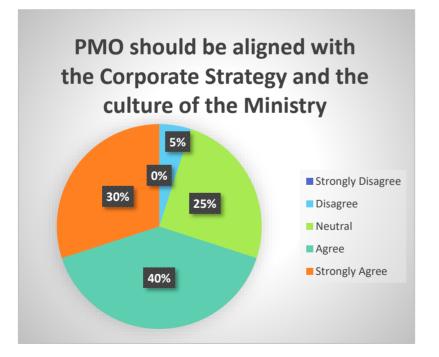


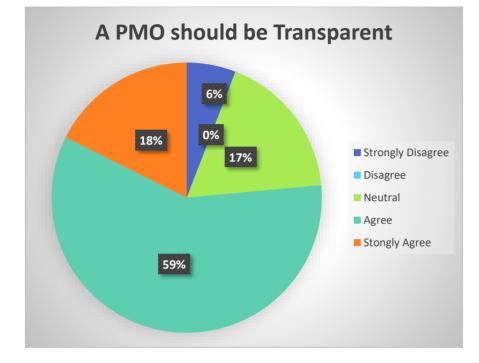
81

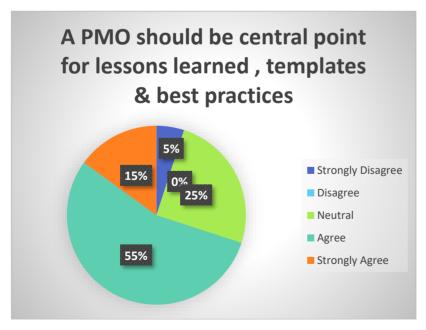


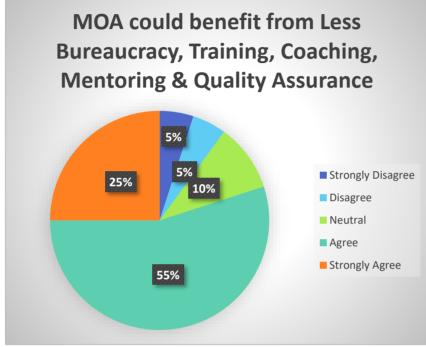




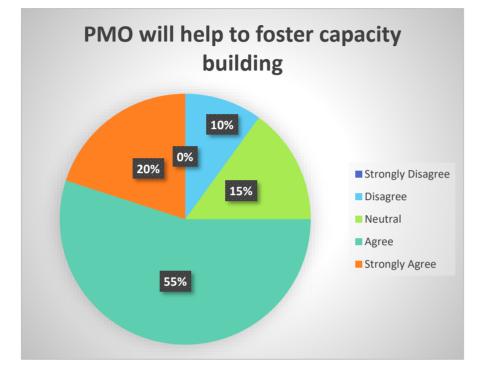






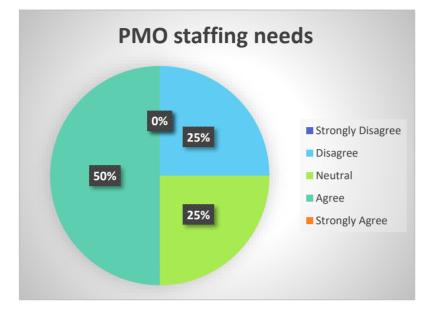














Appendix 6: Interview with the Chief Agricultural Officer

Interview questions

- 1. Do you agree that there is a need to have a Project Management Office at the Ministry of Agriculture and Lands?
- 2. Do you agree that this Ministry is mainly driven or supported by Grant Funded Capital Projects?
- 3. Some of the benefits of a Project Management Office are cost savings, delivering projects under budget, increasing productivity and delivering projects ahead of schedule. Do you see those benefits as important reasons for setting up a PMO?
- 4. The PMO should be expected to work with all stakeholders in order to maximise the benefits from projects, not only for the Ministry but for the nation of Grenada?

- 5. Do you agree that a successful PMO should be aligned with the corporate strategy and the culture of the Ministry?
- 6. There are three (3) types of PMO, supportive, controlling and Directive. Which one will you say will best suit this Ministry?
- 7. This Ministry should endeavour to include in its Corporate Strategic Plan the need to create a PMO by 2021. Do you agree or disagree?
- 8. Where do you think the PMO should be placed on the hierarchy of the Ministry of Agriculture and Lands?
- 9. What roles and functions should this PMO have within this Ministry?
- 10. Is this Ministry in its current framework able to determine project management strengths efficiently?
- 11. Does the Ministry usually have project teams? If yes, what types of teams are being used by this Ministry?
- 12. Can you share information on how projects under this Ministry are being managed and monitored without having a PMO?

Appendix 7: Project Management Office (image of how the unit will be set up)



APPENDIX 8: EXAMPLE OF A PMO CHECKLIST1

	PMO Setup Checklist	
	Why is the organization creating a PMO?	1
Mission and	What will the PMO aim to achieve?	1
Vision	Is there a strong justification for the PMO?	<
VISION	Does the organization have the resources (people, budget, readiness) to implement a PMO?	✓
Function	What areas/departments will be covered in the PMO implementation?	✓
	What will the PMO deliver and not deliver?	4
and Scope	What functions and services will be provided by the PMO?	✓
	Where will the PMO fit in the organization?	
Success	Who will the PMO report to?	
Criteria	How will the PMO be configured?	
	How will the PMO know if it has been successful in its implementation?	
	What is the timeframe for the implementation?	
	What are the key achievements in the roadmap?	
Roadmap	What does the PMO want to achieve in the short, medium, and long-term?	
	When and how will the methodology and new working practices be piloted?	
	When and how will the methodology and new working practices be rolled-out?	
	Who is going to be impacted by and/or can impact the PMO implementation?	
Stakeholders	Who are the PMO's customers? What are their expectations? What do they want from the PMO?	
	Who will form the PMO team? Does the PMO have the right competencies in house?	
	Is there a strong PMO sponsor and a strong PMO Manager?	

(Source: The internet images)

P. O. Box 670

St.George

Grenada

November21, 2019

Academic Advisor

Master's Degree in Project Management (MPM) Universidad para la Cooperation Internacional (UCI)

Dear Academic Advisor:

Re: Philological Review of Final Graduation Project submitted by Miss Kim Julien in partial fulfillment of the requirements for the Masters Degree in Project Management

I have reviewed the document and edited for grammar, usage, diction and style. I am persuaded that any changes and improvements suggested by me have been made by Miss Julien. In my opinion, the document now meets the literary and linguistic standard of a student reading for a degree at the Master's level.

Sincerely,

Esther M. D'Mees

Esther M. O'Neale, B.A. Sir George Williams University (Montreal)

M.A. Manhattan College (New York)

Greetings in Our Lord Jesus Christ

Manhattan College

by authority of the Board of Trustees and on recommendation of the Faculty hereby confers on

Esther Madonna O'Peale

the degree of

Master of Arts (Reading)

with all the honors, rights and privileges thereto appertaining.



Given under the seal of the College this first day of September in the Bear of Our Lord One Thousand nine hundred and seventy-eight.

Brother Patrick S. Mr. Dangesc Butter

Brother Stephen Sullivan For