

PERFORMANCE AUDIT

OF

THE ROADS & BRIDGES PROJECT:

GOVERNANCE AND PROJECT MANAGEMENT

2015 - 2018



Office of the Auditor General
Brades
Montserrat
August 2019

THE ROADS & BRIDGES PROJECT: GOVERNANCE AND PROJECT MANAGEMENT

This is a Report of a Performance Audit conducted by the Office of the Auditor General pursuant to Section 103 of the Montserrat Constitution Order 2010

Marsha V E Meade Auditor-General (Ag) Office of the Auditor General August 2019

PREAMBLE

Vision Statement

The Office of the Auditor General plays a crucial role in ensuring that public monies are spent wisely. Our vision is therefore "to be a proactive Supreme Audit Institution that helps the nation to make good use of its resources".

Mission Statement

"The OAG is the national authority on public-sector auditing issues and is focused on assessing performance and promoting accountability, transparency and improved stewardship in managing public resources by conducting independent and objective reviews of the accounts and operations of central government and statutory agencies; providing advice; and submitting timely Reports to Accounting Officers and the Legislative Assembly".

The Goal

Our goal is "to promote staff development, enhance productivity, and maintain a high standard of auditing and accounting in the public sector, thereby contributing to the general efficiency and effectiveness of public finance management".

AUDITOR GENERAL'S OVERVIEW

This audit examined the governance framework for the Roads & Bridges Project (over the years 2015 to 2018), as well as aspects of efficiency and effectiveness in the management of the project. Overall, the evidence that we gathered shows that there is an adequate framework of oversight and accountability, and that the project's implementation has been satisfactory within its budgeted time and cost.

Significant limitations of infrastructure, especially at the Little Bay harbour, continue to delay the arrival of goods and assets needed for projects. With high reliance on imported items, projects face several risks and vulnerabilities, including disruptions to supplies, shortages of items, and fluctuating prices. Thus, there are opportunities for the island to revive local production of some items, as well as to explore better supply chain management to get better quality and lower costs. Implementing a specialised project management unit within the MCWEL to manage projects across the public sector will provide a better vehicle to support existing and future projects.

We have also provided a number of recommendations that we feel would benefit the Government and the citizens of Montserrat once they are implemented.

I wish to thank the staff of the Ministry of Communications, Works, Energy & Labour and all other persons who provided information, clarifications or extended any courtesy to my staff during this assignment.

Marsha V E Meade

Auditor-General (Ag)
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Brades

30 August 2019

ABBREVIATIONS

CARICOM Caribbean Community

CAROSAI Caribbean Organisation of Supreme Audit Institutions

DFID Department for International Development, UK Government
DITES Department of Information Technology & E-Government Services

EME Early Market Engagement

EMP Environmental Management Plan

E.U. Energy Unit, MCWEL European Union

GDP Gross Domestic Product GU Geothermal Unit, MCWEL GOM Government of Montserrat

ICT Information and Communication Technologies

INTOSAI International Organisation of Supreme Audit Institutions
ISSAI International Standards for Supreme Audit Institutions

MCWEL Ministry of Communications, Works, Energy & Labour, Montserrat

MOFEM Ministry of Finance & Economic Management, Montserrat

MPS Montserrat Public Service

OAG Office of the Auditor General, Montserrat OECS Organisation of Eastern Caribbean States

OOP Office of the Premier, Montserrat

PS Permanent Secretary

SDP Sustainable Development Plan: 2008 to 2020, Government of Montserrat

TC Technical Co-operation (refers to GOM posts funded by the DFID)

TOR Terms of Reference

Table of Contents

PREAMBLE	iii
Vision Statement	iii
Mission Statement	iii
The Goal	iii
AUDITOR GENERAL'S OVERVIEW	iv
ABBREVIATIONS	V
EXECUTIVE SUMMARY	viii
Overview	viii
Main Findings	viii
Key Recommendations	ix
Audit Conclusion	ix
Subsequent Events	x
CHAPTER 1: INTRODUCTION	1
Background	1
Objectives of the Audit	1
Scope of Performance Audit	1
Scale of Performance Audit	2
What We Excluded from this Audit	2
Why We Performed This Audit	2
How We Performed This Audit	3
CHAPTER 2: GOVERNANCE	4
Overview	4
Findings of the Audit	4
Recommendations	5
CHAPTER 3: DATA & COMMUNICATION	6
Overview	6
Findings of the Audit	6
Recommendations	7

CHAPTER 4:	9
MANAGEMENT OF HUMAN RESOURCES	9
Overview	9
Findings of the Audit	10
Recommendations	10
CHAPTER 5: PROJECT MANAGEMENT	12
Findings of the Audit	12
Recommendations	
CHAPTER 6: MANAGEMENT RESPONSE	15
CHAPTER 7: OVERALL CONCLUSION	16
APPENDIX 1: OFFICE OF THE AUDITOR GENERAL	17
APPENDIX 2: KEY REFERENCES	19
APPENDIX 3: TERMINOLOGY	21
APPENDIX 4: AUDIT FIELDWORK	22

EXECUTIVE SUMMARY

Overview

1. The Roads & Bridges Project began in 2015 with projected completion by 2018. The overall budget was EC\$4.20 million, including (1) purchase of an asphalt-paver, (2) repairs to a bridge and part of the road at Barzey's and (3) repairs to the bridge at Bunkum Bay. It is fully funded by the UK Government's Department for International Development (DFID). Under the GOM's oversight, through the MCWEL and the PWD, the projects to date were satisfactory and were mostly completed within their budgeted time and cost. A few delays and inefficiencies in other aspects of project management have incurred additional time and costs such as delays in import shipments, and shortages of cement. Inadequate funding continues to challenge the MCWEL in delivering the full scope of proposed projects, and also limits the number and extent of routine asset replacements, repairs, and maintenance of infrastructure each year.

Main Findings

- **2. Good governance overall.** An important finding of our research is that, despite some deficiencies within various bodies or committees, there was adequate oversight of this infrastructural project.
- **3. Rising number of accidents on roads.** The Police Traffic Department's records show that, between December 31st, 2014, and December 31st, 2016, the number of vehicular accidents increased nearly 40%. This trend highlights the risks of underfunding resulting in delays in maintenance of infrastructure and, eventually, deterioration of the assets beyond repair.
- 4. **Projects delivered despite limited funding**. The asphalt paver was bought and repairs have been done at the Bunkum Bay Bridge, and on the Barzey's road and bridge. As an example of inadequate financing, funding was cut from the original proposal of \$2.5 million to \$1.4 million, which was sufficient only for a much smaller section of the road at Barzey's.
- **5. High risks from reliance on imports.** Too few of the commonly used items (e.g., for construction of infrastructure and for its ensuing maintenance) are produced locally. Projects are often affected by shortages, by fluctuating prices, and by issues with foreign suppliers.

6. Inadequate port & facilities. Imports are often delayed because the Little Bay port is too small and has no breakwater. Many supply ships cannot come to Montserrat directly, resulting in longer transit and higher shipping & handling costs of inputs. Rough seas often prevent boats from docking, resulting in delays in getting inputs and, hence, delays in projects.

Key Recommendations

- 7. Increase the funding for infrastructure. Given the value of the assets at risk, and the range of other risk factors, MCWEL must get better support (e.g., from MOFEM, DFID, and CDB) for eliminating the backlog of repairs and maintenance across the public sector. This also requires adequate funding for investments in essential new projects e.g., ports, roads, bridges, and energy.
- **8. Produce more items locally**. For example, the hot mix factory, which has had long downtime, could be reactivated to produce construction materials at lower cost than imports. More consideration should also be given for the rehabilitation of the Trant's quarry to further reduce the importation of road construction material such as road base and aggregates.

Audit Conclusion

- 9. With heavy reliance on imported materials, fuels, and equipment, projects in Montserrat have experienced delayed shipments, shortages of materials, fluctuating prices, and supply chain risks. Altogether, these factors cause inefficiencies, increase unit costs, reduce outputs, and delay outcomes throughout the MPS. They are also hindering the development of the private sector, thereby delaying achievement of the Sustainable Development Plan 2008 to 2020. Repairs and maintenance of infrastructure have been under-funded and delayed over the past several years. Funding for investments in new infrastructure has also been inadequate.
- **10.** Over the past three years, despite such challenges, the PWD has satisfactorily implemented the Roads & Bridges project to address some of these overdue repairs and upgrades to necessary infrastructure. The newly acquired paver will reduce the cost of operating and maintaining equipment, while contributing to road maintenance across the island in the future. Likewise, (a) the upgrades to the bridge at Bunkum Bay and (b) the rebuilding of a bridge and a

section of the road at Barzey's will help to make the road network safer and more comfortable for all motorists and the travelling public.

Subsequent Events

- 11. Subsequent to our fieldwork, the GOM hosted a ceremony in May, 2019, to launch the Little Bay Port Development Project. This is expected to span the next 2 to 3 years with funding from the UK Caribbean Infrastructure Fund (implemented by the CDB), the E.U., and the GOM.
- **12.** We were also apprised of the GOM's Memorandum of Understanding signing with the DFID on April 29th, 2019, to revive the hot mix factory which will be among the items to be funded under the Capital Investment Programme for Resilient Economic Growth (CIPREG).

CHAPTER 1: INTRODUCTION

Background

1. This report represents our second audit within the theme of major capital projects conducted with support from the National Audit Office, UK, as part of the UK Overseas Territories' Project. This performance audit focused on (1) the internal organisation, governance, and processes of the Public Works Department (PWD) and related stakeholders, (2) the GOM's policy framework for major public capital projects, and (3) the supporting stakeholders (e.g., the MCWEL, the PWD, and the DFID). These connected dimensions have implications (a) for project related governance, (b) for departmental effectiveness and efficiency, and (c) for the quality of project outcomes and post implementation services to the public. In turn, the quality and the timely completion of public projects particularly (and, more generally, the activities of the GOM and throughout the MPS) affect the entire economy and society of Montserrat. This is amplified since the central GOM and the wider public sector still constitute about 75% of GDP and roughly 65% of full time employment in the national economy, and they have numerous multiplier effects.

Objectives of the Audit

2. The audit sought to examine the level of governance of large capital projects and the quality of project management in the public sector of Montserrat. We considered (a) the quality of internal records and reporting, (b) management of human and other resources, (c) issues, limitations, and challenges and their causes, and (d) their impact on the organisational efficiency and effectiveness of the project-management system for stakeholders. Finally, the study aimed to identify, to measure, and to assess the channels of communication with other agencies and stakeholders. In particular, we sought to identify the major challenges and deficiencies facing the relevant Departments, and, hence, opportunities and recommendations for improving the outcomes for all stakeholders.

Scope of Performance Audit

3. The scope of this performance audit was to examine the status and the past 2 years' trends within public projects and, especially, within the Roads & Bridges Project. We included several GOM departments, DFID, and private sector contractors in our review in order to assess the 360 degree perspective of stakeholders regarding their mandate, structure, efficiency, quality of outputs, communication, quality of service, and overall performance. Financial and other data-analyses focused on the current year and the prior 2 years (i.e., years 2016 to 2018).

Scale of Performance Audit

4. The scale of this performance audit included agencies and Departments within the GOM that interact with or through the PWD in relation to the public works system in Montserrat, with an emphasis on the roads and bridges.

What We Excluded from this Audit

5. We excluded capital project data preceding those of the year 2016, except for background knowledge and local context. We excluded comparative compensation analyses and other cross country reviews. We also largely excluded regional and international data sets, except for background information, thus emphasising Montserrat-specific current and very recent historical data-sets. Future performance audits and GOM's own strategic plans will need to address these areas in order (i) to reach optimal human resources management (e.g., effective recruitment, competitive compensation, and long-term retention of talent), including major areas such as energy management, environmental safety, and sustainable development, (ii) to embed a culture of effective financial management and public accountability, and (iii) to exceed comparative Caribbean standards and global best practices, as Montserrat competes with other countries for talent, for funding, and for investments.

Why We Performed This Audit

- **7. Economic Development**. In Montserrat, the public sector is much larger as a percentage of the workforce and as a percentage of Gross Domestic Product (GDP) than it is in most other countries in Caribbean and Latin America. Hence, Government of Montserrat's (GOM) policies and programmes, public sector spending, and public services play pivotal roles in either catalysing economic development or impeding national progress (National Tourism Policy, 2016, p. 22). Public utilities and infrastructure affect both the public sector and the private sector.
- **8. Quality of Public Services**. Since most of the island's employment is within the public sector, any deficiencies in public servants' performance affect the entire country, including the sustained development of businesses and job creation in the private sector. During the past 26 months, the public sector, as well as the rest of the society and the economy, has suffered, for example, (a) some interruptions of ferry service, (b) recurrent outages of power supply and internet services, and (c) resulting significant losses of productivity in its internal operations, including interruption of business and the early closure of offices in several instances. All citizens and residents interact with the public service directly and indirectly, and they depend on the efficient, reliable, and effective provision of roads and bridges, among many other public services.
- **9. Safety & Investment**. Investors require a satisfactory quality of regulations, of utilities, and of infrastructure in the country. Businesses and households alike expect [a] low cost essential

Roads & Bridges Project: Governance & Project Management

services and [b] on-demand availability of transportation, infrastructure, and energy. The orderly development both of the society and of the economy requires an efficient and effective network of roads to provide reliable transportation of goods and safe transit of people. The quality of the road network directly affects the delivery of other public services, including sanitation, ambulance, fire, social and police services.

How We Performed This Audit

- 10. Interviews. Initially, we engaged in interviews with senior public sector officials across various GOM departments that relate to public sector projects. With the guidance provided by these meetings, we proceeded to devise questionnaires and data gathering techniques suitable for the purpose of assessing (i) the governance of public works projects, (ii) the efficiency and the effectiveness of data gathering, reporting, human resources, and interdepartmental communication and co-operation related to public projects, and (iii) the trends, outcomes, and costs of project management in public works, with an emphasis on the roads and bridges project in each case.
- 11. Reviews of relevant law, regulations and literature. Before and during our fieldwork, we researched GOM laws and regulations in order to establish the legislative framework for our performance audit. The programme of research also included literature on such relevant subjects as (a) governance, (b) human resources management, (c) public sector efficiency and effectiveness, (d) project management, (e) public utilities, and (f) performance benchmarks and standards of service. These sources supplemented our reviews of various internal and external documents related to the GOM's policies, structures, and operations affecting the issues of major public projects.
- 12. Internal & External Evidence. Various information requests were made during August to November, 2018. Emphasis was placed on factors affecting the Roads & Bridges Project's governance, project management, efficiency, and performance. In particular, we sought to know (a) whether the staff was adequately trained, equipped, and managed during the past few years, (b) issues affecting the project's progress and outputs, (c) the quality of communication and co-operation among the stakeholders, and (d) recommendations or opportunities for improvements.
- 13. Standards used. This audit was conducted according to standards promulgated by the International Organisation of Supreme Audit Institutions (INTOSAI) for performance audits. Those standards require that we plan and perform our audit in order to obtain sufficient and reliable evidence to reach a reasonable conclusion about the performance of the project with regard to [a] its governance and [b] its management during the period under review. The international standards used to perform this audit-engagement and to assess the findings of this audit include ISSAI 1, ISSAI 100, ISSAI 3000, and ISSAI 3100.

CHAPTER 2: GOVERNANCE

Overview

14. The Roads & Bridges Project began in the fiscal year 2015-2016 with projected completion by the fiscal year 2018-2019. It is fully funded by the UK Government's Department for International Development (DFID). From the external funding perspective, this was one part of the DFID's project programme entitled Montserrat Priority Infrastructure Needs, which was projected to cover the period of April 2015, to March 2018. The overall budget for the Roads & Bridges project was EC\$4.20 million, including (1) purchase of an asphalt paver, (2) repairs to a bridge and part of the road at Barzey's and (3) repairs to the bridge at Bunkum Bay. The GOM, through the accounting responsibility of the MCWEL and the daily supervision by the PWD, is directly responsible for the project management. Under the GOM's oversight, a variety of committees and units provide review, monitoring, inputs, and accountability for the approval, implementation, and outcomes of projects.

Findings of the Audit

- **16. Good Cost Control per Budget.** To date, cumulative spending is within the total budgeted. For instance, for the fiscal year ended March 31st, 2018, the actual expenditure was \$889,235.20 against a budget of \$1,414,300.00. Actual spending during the first 2 years was \$2,933,121.51, which was within the 3 year budget of \$4.20 million.
- **17. GOM's Infrastructure Review Board is functioning.** As it does with all other projects funded by the DFID and by the E.U. in Montserrat, the Infrastructure Review Board (which resides under the MOFEM) provides oversight over the Roads & Bridges Project. However, some weaknesses were evident:
 - (a) Late start of some meetings;
 - (b) Absences (e.g., 11 persons were missing from the meeting of October 20th, 2017); and
 - (c) Infrequent meetings (e.g., records show only 5 meetings from May, 2016, to June, 2018; the TOR recommend monthly).

18. MOFEM's Procurement Unit & GOM's Public Procurement Board are functioning. Public works exceeding EC\$100,000 are subject to public tenders and are evaluated by a team appointed by the Public Procurement Board. This includes relevant expertise from the DFID, from the GOM, and from the MOFEM, supported by external technical advisors [DFID's Addendum to Business Case, Geothermal Project, 2014, paragraph 25(II), p. 6]. All public tenders or procurements are also subject to review by the MOFEM's Procurement Unit, which provides (a) independent oversight for procurement and (b) advisory services to the Procurement Board.

Recommendations

- 19. Review committees' Terms of Reference. We recommend that the MOFEM and the Cabinet (a) conduct a review of all public sector committees and Boards, and, where necessary, (b) update the TOR of all committees and Boards (e.g., Infrastructure Review Board; Public Procurement Board).
- **20. Review and assess Committees/Boards.** This includes factors such as (a) the frequency of meetings, (b) the outputs of meetings, (c) the number and quality of decisions or recommendations made; and (d) annually, we also recommend an objective review of the individual attendance and participation of all persons appointed to committees/Boards.
- **21.** Accreditation and development of Committees/Boards. Develop long-term competencies of members: e.g., through the Eastern Caribbean Securities Exchange's (ECSE) Accredited Directors programme, which targets the training and accreditation of persons before and during their service in committees and boards throughout the OECS.

CHAPTER 3: DATA & COMMUNICATION

Overview

22. This section of the performance review examined the project and related departments to assess (a) the extent of their use of electronic tools and channels for information and communication, (b) their data security and the handling of information assets, (c) their effectiveness in engaging stakeholders throughout projects, and (d) the quality of records and communication within and between committees and stakeholders.

Findings of the Audit

- 23. Internal communication: Errors, omissions & inconsistencies. Numerous times in the various reports and minutes, we noted errors, omissions, faulty sentences, and internal inconsistencies in statements of facts and figures. The number and the types of errors, taken together, as well as their persistence over time, undermine the integrity, the reliability, and the usefulness of records.
- **24. External communication: Late/missing documents.** An important part of governance is transparency. However, we found that several project related documents on DFID's development tracking website were not published until long afterwards: e.g., the Annual Review dated September 11, 2016, was not put on the website until June, 2018 (i.e., 2 years later).
- **25. Some internal reviews/controls are inadequate.** For example, in all of the documents that we reviewed, the Infrastructure Review Board's meeting notes indicated that there were no comments, questions, discussion, or corrections of the notes from the preceding meeting(s). This was contrary to the TOR, which require review of prior meeting notes at each meeting.
- 26. Adequate file management & storage. In its new headquarters, the MCWEL has fireproof and waterproof safes/cabinets for important documents. Some files, which are for reference or are not critical, are stored in either semi-water proof/fire proof cabinets or wooden cabinets. There is a fire alarm system in the main building and fire extinguishers are installed throughout the building, but there is no water sprinkler system. While there is no comprehensive electronic monitoring system for each of the Ministry's various buildings and premises, security Roads & Bridges Project: Governance & Project Management

personnel are in place after normal working hours 7 days per week. Many files are created and stored electronically; however, the continued use of paper and the accumulation of physical documents create a number of costs and risks: e.g.,

- (1) Fire hazards,
- (2) Health risks,
- (3) Risks of unauthorised access,
- (4) Risks of misappropriation and/or theft,
- (5) Progressive deterioration/damage of documents,
- (6) Rising cost of physical storage,
- (7) Ever increasing requirements of physical storage space, and
- (8) Loss of originals and/or the sole available copy/copies.

Recommendations

- **27. Integrate, digitise, and protect files.** Recommended strategies include the following:
- [1] MCWEL should work with the DITES to minimise the use of paper and physical files (apart from essential documents that must be retained in physical form for legal purposes).
- [2] Equip officers with digital devices to use in their work outside the office e.g., supervision of work sites, dealing with contractors, and performing estimates of works completed.
- [3] DITES should create a seamless electronic system for managing projects and to maintain a central repository for all project related files for easy access, storage, and sharing by and between all stakeholders. In line with the GOM's Policy Agenda: Items 4.1 and 4.2, this approach will (a) enhance governance, (b) improve communication, and (c) provide continuity between incoming and outgoing officers and members of boards/committees.
- 28. Keep websites and online information up to date. We encourage all stakeholders to keep its online information up to date in the public interest. To ensure good governance, including transparency and accountability, we further recommend that the MCWEL liaise with its project partners, such as the MOFEM and the DFID, to advocate for them to keep their websites and online information current and complete with respect to their projects in Montserrat.

- **29. Recommended improvements within the Infrastructure Board.** In line with the GOM's Policy Agenda: Items 4.1 and 4.2, for enhancing good governance, we recommend that the MOFEM, which is responsible for this Board, pursue the following improvements:
- (1) Implement a risk management approach that will: (a) identify the main project-relevant risks, (b) select a leader or team for action on managing each risk or risk cluster, and (c) specify how each risk will be mitigated, insured or prevented.
- (2) At each meeting, review and correct the minutes of the previous meeting; condense the minutes to key items (i.e., actions and decisions) and add a page with the highlighted key risks of the project.
- **(3)** Review the reporting format for the Committee and ensure clear linkages between meeting notes, the risk register, and the project plan.
- (4) In each meeting, present and discuss a clear statement of the project's expenses for the most recent period.
- **(5)** In each set of meeting notes, summarise the cumulative spending versus the budget: from the project's inception to the most recent reporting date.
- **(6)** Document, review and improve the attendance and participation of persons appointed to the Infrastructure Board and all other committees.

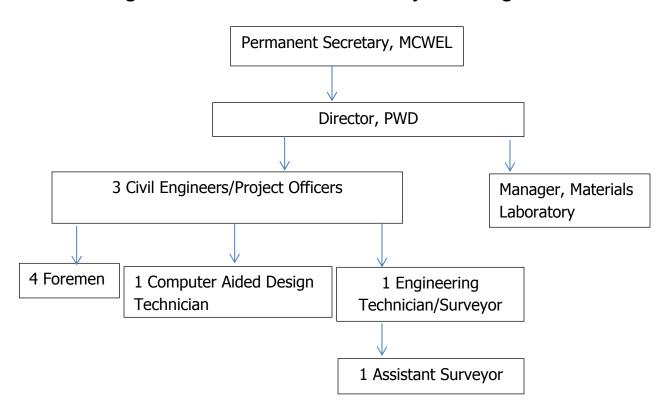
CHAPTER 4:

MANAGEMENT OF HUMAN RESOURCES

Overview

30. This section of the review focused on the PWD, which functions under the MCWEL. It has responsibility for projects across all Ministries and Department. However, it has a very small staff to execute this ambitious mandate. An outline of the project management unit is below:

Organisational Chart of PWD & Project Management



Findings of the Audit

- **PWD officers are over extended.** The small number of engineers in the department results in their being thinly stretched at times. Each engineer has to alternate time, effort, and focus (a) across a range of widely different activities within each assigned project and (b) also across various projects. Frequent overtime has adverse effects on officers' health, productivity, and families.
- 32. Little or no continuity planning/action for some key skills/posts. There remain continuing risks to projects, given the small number of engineers and project officers within the PWD. Short-term risk factors include the impact on the effective supervision of projects in the event that officers are absent for any reason. Long-term risk factors include (a) the number and duration of vacancies within the MCWEL and (b) the HRMU's inadequate implementation of the MCWEL's succession planning for all officers.

Recommendations

- **33. Review work loads of project officers.** Given the large number of projects and the small number of project officers, it is essential that the PS of the MCWEL and other Heads of Department review the allocation of projects per officer. Consider upgrading the tools, the software, the hardware, and the administrative support for project officers in order to assist them in continuing to find ways to boost their productivity, teamwork, and time management skills.
- 34. Implement a Specialised Project Management Unit within MCWEL. Acquire the necessary expertise to manage infrastructural projects across the public sector and dedicate resources to achieve enhanced planning, higher quality of business cases, more efficient procurement and logistics, and more effective cost management and implementation. This Unit would provide a better vehicle to support the existing projects and to enhance the effectiveness of project officers, contractors, and related activities. This Unit would also provide independent advice and review to Ministries and departments on the design and delivery of their projects.

would provide a better vehicle to support the existing projects and to enhance the effectiveness of project officers, contractors, and related activities. This Unit would also provide independent advice and review to Ministries and departments on the design and delivery of their projects. This Unit would complement the recently instituted Programme Management Office (within the MOFEM), which has a PEFA compliant mandate to oversee and to co-ordinate all types of projects within the broader context of the GOM's overarching programmes and strategic plans, and to manage their long-term impact, outputs, and outcomes.

- **35. Strengthen the Procurement Unit**. Given its central role in quality-assurance of public procurement, which is an essential part of all of GOM's projects, this Unit requires adequate staffing. It also requires a long-term plan for the embedding of local capacity within the public sector to provide high quality design, implementation, and review of procurement activities. The increasing range and complexity of projects, including human resources, ICT aspects, technical specifications, and specialised assets, require a high level of competencies.
- **36. Strengthen continuity & implement succession plans**. In the short term, this requires the MCWEL, working with the MOFEM and the HRMU, to provide for understudies, secondments, and temporary replacements when officers are taking any form of leave (e.g., sickness leave; vacation leave; overseas duties). In the long term, this requires a clear pathway for career planning for each officer as well as the proactive grooming of candidates to fill key project management and project supporting positions (e.g., procurement, disbursement, accounting, financial management, and aid/funding) in the event of incumbents' promotions, secondments, resignations, retirements, prolonged illness, or deaths. As the MCWEL has a documented plan for succession at all levels, it is important for the HRMU to implement succession plans effectively and efficiently.
- **37. Annual surveys of employees & stakeholders.** We highly recommend that the MCWEL, along with the HRMU, perform annual surveys [1] of employees and [2] of those that provide goods or services to the Ministry/Department.
- **38. Annual customer surveys.** The MCWEL must be empowered with the resources to achieve surveys of clients/users of each Department's services at least annually. Each year, document, demonstrate, measure, and report satisfactory action on resolving at least one significant customer-related recommendation, complaint or issue. Make this a part of the Ministry's performance indicators and, likewise, for each of its Departments, in line with the GOM's Policy Agenda: Items 4.1 and 4.2.

CHAPTER 5: PROJECT MANAGEMENT

Findings of the Audit

- **40. Effective project management under PWD.** The Public Works Department manages projects for the MCWEL, including roads and bridges. Each civil engineer is assigned a portfolio of projects. In turn, these responsible project officers visit work sites, supervise work in progress, and liaise with the private-sector contractors who do the work within each project.
- **41. Several delays within project.** Significant delays included 6 weeks for the Bunkum Bay bridge project: (a) the bridge plates arrived 4 weeks late; (b) a lack of cement delayed the construction of the retaining walls by 2 weeks.
- **42. Land purchases are often long delayed.** Significant project delays related to legal and procedural matters arising from the need to purchase parts of privately owned lands that were needed for the construction/expansion of roads and bridges, and for related infrastructure. Lands belonging to deceased persons pose additional time, costs, and risks to acquire satisfactorily, while their estates are being administered and resolved.
- 43. High impact of inadequate port facilities. The heavy reliance on imported equipment, materials, and vehicles exposes projects to delays in shipping. In some instances, hurricanes disrupted logistics during the last four months of year 2017. Routinely, however, the lack of a suitable harbour, including the absence of a breakwater, results in the non delivery of imported items. In several cases, the ships come towards Little Bay but cannot unload items, owing to rough seas in the port.
- 44. The hot mix factory is obsolete. Historically, the island had local production of a range of materials used for construction and for projects. However, these ageing facilities became inefficient, obsolete, and eventually abandoned, as needed parts are no longer manufactured and/or would require very expensive special orders. In turn, the GOM faces high and rising import costs and supply chain risks for a wide range of essential materials that are required for its own projects, as well as for the redevelopment of the economy across the private sector. Challenges of the status quo include these: (1) Materials as vital as cement, asphalt, and

wood are frequently unavailable; (2) Several imported items are of lower quality than the previously locally produced equivalents were; and (3) import shipments are sometimes delayed.

45. Rising number of road accidents. The Police Traffic Department's records show that, from December, 2014, to December, 2016, the number of vehicular accidents increased nearly 40%. This trend highlights the risks of underfunding resulting in [a] delays in repairs/maintenance of infrastructure and [b] eventually, deterioration of the assets beyond repair.

Recommendations

- 45. Accelerate essential port development. The MCWEL must continue to liaise with the MOFEM and with the DFID to advocate for adequate resources to be provided for necessary enhancements to the infrastructure on which all projects depend. Among other benefits, this will support the GOM's Policy Agenda: items 1.1, 1.3, 1.5, 1.7, and 1.9. Whilst the long-term development will span years, major gains will result even from some short-term measures, including using local resources to address the identified needs and risks in smaller phases.
 - (a) This includes the phased dredging of the ports (both at Little Bay and at Plymouth) to provide access for larger vessels to bring equipment, vehicles, and materials to the island for projects, and from the island after projects.
 - (b) It also requires, urgently, the phased construction of a series of breakwaters to reduce wave action that frequently prevents the arrival and the docking of ships at the island's ports. E.g., large boulders from projects and construction on the island can be used to accumulate a near shore base of materials to slow wave action.

Subsequent to our fieldwork, the GOM hosted a ceremony in May, 2019, to launch the Little Bay Port Development Project. This is expected to span the next 2 to 3 years with funding from the UK Caribbean Infrastructure Fund (implemented by the CDB), the E.U., and the GOM.

46. **Improve logistics management & inventory planning.** in line with GOM's Policy Agenda: Items 1.1, 1.4, 1.5, 3.3, and 4.1, the MCWEL should continue to liaise with the MOFEM, including the Procurement Unit, and with the GOM's funding partners (e.g., the DFID, the E.U., and the CDB), to advocate strongly for the actions and the resources that are needed urgently to address the identified deficiencies and risks in supply management for project related activities.

47. Revive the hot mix factory. The MCWEL should continue to liaise with the MOFEM and with the DFID to advocate strongly for adequate resources to be provided to reactivate the local production of construction materials. This will significantly reduce their cost per unit. In line with the objectives of the Sustainable Development Plan, this strategy will also greatly enhance the island's progress to self-sufficiency in selected resources, while minimising (a) the risks of high dependence on foreign supply chains and (b) the rising costs of imported materials. Thus, the GOM (i) will achieve major cost reductions during its projects and (ii) over time, will lower the cost of repairs and maintenance within its operations. Among other benefits, this will support the GOM's Policy Agenda: Items 1.1, 1.3, 1.5, 1.7, and 1.9.

Subsequent to our fieldwork, we were apprised of the GOM's Memorandum of Understanding signed with the DFID on April 29th, 2019, and that this will be among the items to be funded under the Capital Investment Programme for Resilient Economic Growth (CIPREG).

CHAPTER 6: MANAGEMENT RESPONSE

MCWL Management Response

On Performance Audit of The Roads & Bridges Project: Governance & Project Management 2015-2018

The Ministry of Communications, Works & Labour has reviewed the Performance Audit of The Roads & Bridges Project 2015-2018. We are in agreement with most of the Findings and Recommendations and wish to document our appreciation for the documentation of the facts, the context and challenges which the Ministry faced and the recommendations to the Government of Montserrat for some changes.

We also make the following comments:

- A. Sec 28. Keep websites and online information up to date. It is the full responsibility of project partners such as DFID and MoFEM to keep their websites and online information current and complete.
- B. Sec 30. Organization Chart
 PWD does not have responsibility for projects across all Ministries and Departments.
 MCWL/PWD provides assistance with project management whenever it has the capacity to do so, and where a ministry or department requests this support.
- C. Sec 33. Review Workloads of project officers
 Given the diverse and heavy mandate of MCWL, the amount of staffing resources allocated to it and the numerous projects it implements, MCWL cannot change the allocation of project per officer.
- D. Sec 36. Strengthen continuity & Implement Succession Plans
 It is important to state that MCWL as well as MOFEM and HRMU provide understudies, secondments and temporary replacements since MCWL cannot allocate resources to itself, but can only request.

CHAPTER 7: OVERALL CONCLUSION

- (a) Urgent need to improve infrastructure. The experience of the past three years revealed an urgent need to revisit the approach (1) to funding of repairs and maintenance to existing infrastructure, and (2) to planning and funding the new investments that are required to deliver the MCWEL's mandate and GOM's Sustainable Development Plan.
- **(b) Need for more flexible budgeting.** This is especially important with long-term projects. Over time, projected costs tend to rise and new costs and issues emerge, making original estimates of limited relevance. Risks and contingencies need better planning. In the past several years, a rigid approach to budgeting and to negotiations with contractors has caused long delays in projects. Overall effectiveness, relevance, and value for money are more important than simply getting the lowest price or input cost on contracts or on items to be procured.
- **(c) Long-term planning**. A number of units and departments, including the Procurement Unit and the PWD, have been under-staffed at various times. To be effective, all units involved in project management require adequate staffing, capacity, and skills to keep abreast both in traditional areas and in emerging topics. Strategic HR management is needed across all related Ministries/Departments to ensure business continuity and succession planning.
- **(d)** Improved logistics and supply management. MCWEL, along with other departments across the public sector, has an opportunity to increase the number of potential suppliers, contractors, and bidders on public procurement. This requires a more strategic approach to supply management, including consolidated planning and ordering of goods and services across the entire public service. It also includes seeking opportunities to harness the economies of scale from regional smart partnerships e.g., within the OECS, CARICOM, CDB, and UKOTs.

APPENDIX 1: OFFICE OF THE AUDITOR GENERAL

Functions

By force of *The Montserrat Constitution Order 2010*, the OAG is established and upheld in its independence and in its functions within the public sector of Montserrat. The relevant section states as follows below:

"Functions of Auditor-General

- 103.—(1) The Auditor General shall audit and report on the public accounts of Montserrat and of all public offices, including the courts, the central and local government administrations, universities and higher education institutions, and any public corporations or other bodies or organisations established by an Act of the Legislature, and may conduct financial and value for money audits in respect of any project involving public funds.
- (2) The Auditor General shall submit to the Legislative Assembly annually a report of the accounts audited by him or her under subsection (1) for the immediately preceding financial year.
- (3) For the purposes of subsection (1) the Auditor General and any person authorised by him or her shall have a right of access at all reasonable times to all such documents as appear to him or her to be necessary for the purposes of the audit, and shall be entitled to require from any person holding or accountable for any such documents such information and explanation as he or she thinks necessary for those purposes.
- (4) In the exercise of his or her functions, the Auditor-General shall not be subject to the direction or control of any other person or authority."

The independence of both (a) the functioning of the Auditor-General and (b) the budgetary allocations from the Government's national Consolidated Fund to finance the Office of the Auditor General are clearly stated and emphatically declared as follows below:

"National Audit Office

- 104.—(1) The Legislature shall by law make provision for the establishment of an independent National Audit Office headed by the Auditor General.
- (2) The budget for the National Audit Office shall be charged on and paid out of the Consolidated Fund, and must at all times be adequate to enable the full performance of the functions conferred on the Auditor General by this Constitution or any other law.
- (3) The accounts of the National Audit Office shall be audited and reported on by an auditor appointed by the Legislative Assembly." [Bold and underlined emphases added throughout.]

In line with international standards for public sector auditors and global best practices for Supreme Audit Authorities, the OAG of Montserrat espouses the following values and priorities:

Our Values

Respect. We seek to build productive professional associations and cordial personal working relationships with colleagues internally as well as with other public servants externally.

Honesty. We tell the truth even when it is unpleasant or embarrassing. Accurate self-assessment is vital for every person and for every unit of Government to acknowledge its strengths and its weaknesses, and to begin to address performance gaps and shortfalls from relevant policies, from applicable standards, and from currently binding laws and regulations.

Transparency. Our work is in the service of the Government and the people of Montserrat. Therefore, all of our final reports on engagements undertaken are made available to all stakeholders, to the public and to any other interested parties via publication on our website.

Confidentiality. In the course of our duties, we protect the identity of all persons who reveal secret information or private details. Our reports disclose general conclusions and focus on practicable solutions rather than highlighting any person or department directly.

Accountability. By definition, the work of the O.A.G. is to hold accountable all public sector Ministries, Departments, agencies, public private partnerships, and State-owned enterprises. In turn, we are accountable (a) to colleagues through quality control procedures and through peer review, (b) to local, regional and multinational professional accounting and auditing bodies, and (c) to global standards setting bodies. Finally, the O.A.G. itself is subject to annual audits by an independent external audit-firm of the highest repute.

Objectivity. Auditors must remain impartial, devoid of partisan bias, without membership of political parties, and otherwise focused on the truth and the facts, rather than personal opinions, emotions, or self-interest. All of our analyses, conclusions and recommendations are based on facts and verifiable and auditable evidence, supported by retained audit papers and work in progress files throughout each and every audit-engagement. Information is gathered solely for the purposes of the official audit and never to be used for personal advantage of either the auditors themselves or of any other person, party, entity, or enterprise.

Independence. Vitally important to the respectability of the O.A.G. is the independence of the Auditor-General and of his/her staff both in appearance and in fact, both in public discourse and in social intercourse. Auditors must avoid any potentially compromising personal relationships or business activities with any public-sector auditee. Where he/she has (i) any material private indirect interest and/or (ii) any direct financial or other interest in an auditee and/or (iii) in or with any of its employees, suppliers, investors, creditors, or other related parties, an auditor must either refrain from any part of an audit of such entity and/or disclose the nature and the extent of such actually or potentially compromising interest whatsoever it be.

APPENDIX 2: KEY REFERENCES

- S.D.P. (2010). *Montserrat Sustainable Development Plan 2008 to 2020: Journey to Sustainable Prosperity.* Ministry of Economic Development and Trade, Government of Montserrat. [hard copy]
- **General Orders for the Montserrat Public Service** (1986). Government of Montserrat.

 Amended in March, 2017 https://discovermni.com/2017/03/24/cabinet-approves-amendments-to-gom-general-orders/
- Montserrat Energy Policy 2016 2030: The Power to Change. Government of Montserrat. Retrieved from https://www.dropbox.com/s/6klinip1du98ok6/The%20Power%20to%20Change%20MEP% 20-VersionALL_IN_Jan19th.pdf?dl=0
- Discover Montserrat (2018, March 29). **SVG Finance Minister calls on region to start implementing 21st-century Government**. Retrieved from
 https://discovermni.com/2018/03/29/svg-finance-minister-calls-on-region-to-start-implementing-21st-century-govt/
- Discover Montserrat (2017, February 17). *RFI for Montserrat's Solar Power Project Published.*Retrieved from https://discovermni.com/2017/02/17/rfi-for-montserrats-solar-power-project-published/
- Discover Montserrat (2017, February 15). *Load Shedding Schedule Released by Power Company*. Retrieved from https://discovermni.com/2017/02/15/load-shedding-schedule-released-by-power-company/
- Discover Montserrat (2017, March 28). *GOM Moving on Solar Power Project.* Retrieved from https://discovermni.com/2017/03/28/gom-moving-on-solar-power-project/
- **Geothermal Project: Annual Review** (2014, January). Department for International Development, U.K.
- **Geothermal Project: Addendum to Business-Case** (2014, May). Department for International Development, U.K.
- **Geothermal Project: Annual Review** (2014, October). Department for International Development, U.K.
- Geothermal Project: Risk-Register (2015, April). Department for

- International Development, U.K.
- **Geothermal Project: Annual Review** (2015, October). Department for International Development, U.K.
- **Geothermal Project: Business-Case** (2015, October). Department for International Development, U.K.
- **Geothermal Project: Annual Review** (2016, October). Department for International Development, U.K.
- **Geothermal Project: Annual Review** (2017, October). Department for International Development, U.K.
- **Geothermal Project: Logical Framework** (2017, October). Department for International Development, U.K.
- **Development Tracker.** Project-reporting website, Department for International Development, U.K. Government. Retrieved from https://devtracker.dfid.gov.uk/projects/GB-1-202824/documents
- Government Information Service (2018, September 21). *Training for State-Owned Enterprise Board Members*. Retrieved from http://gisbarbados.gov.bb/blog/training-for-soe-board-members/

APPENDIX 3: TERMINOLOGY

Efficiency. Efficiency is measured as the ratio of inputs per given or desired unit of output. The performance-goal is to <u>minimise inputs and/or input-costs per unit of output</u>.

Productivity. Productivity is measured as the ratio of actual units of output per given unit of each input. The performance-goal is to **maximise output per unit of each input**.

Effectiveness. Effectiveness is measured as the ratio of actual units/costs of all outputs to the desired units/costs of output. The performance-goal is to <u>minimise gaps between desired</u> <u>output(s)</u> and <u>actual output(s)</u>, subject to the desired quality of that output.

Value for money. This is the *desired surplus and/or value of benefits* derived from actual output(s), deliverable(s), or outcome(s). It is measured as the consumer's utility or economic surplus: i. e., (1) the actual (and/or user-perceived) value of all benefits of each unit of output, minus (2) the actual costs per unit of each input required to produce and to enjoy the benefits of that unit of output. The performance-goal is to <u>maximise the total value of incremental benefits (minus marginal costs) derived from all units of output</u> (e. g., public services or public goods), subject to the desired quality of that output, and to any applicable standards, regulations, contractual obligations, client-service objectives, or legal requirements.

Performance. This concept defines observable behaviours in respect of a specified function or activity. In practical terms, performance is measured as the comparison of *ex post* actual outcomes with *a priori* desired or pre-agreed outcomes. This lends itself very well to objective definition, measurement, monitoring, reporting, feedback, and recommendations for improvement, wherever gaps are identified between (a) desired behaviours and outcomes and (b) actual behaviours and outcomes. **Learning, for instance, is measured by improved behaviours**.

Performance audits. Performance-audits are objective, external, and independent reviews of activities, processes, organisations, financial statements, and/or other objects of interest, having explicit regard to such parameters as (i) applicable laws, (ii) external regulations, (iii) internal policies, (iv) internal rules, (v) international treaties, (vi) bilateral or multilateral agreements, (vii) industrial benchmarks, (viii) contracts, (ix) codes of conduct, (xi) ethics, (xii) morals, and/or (xiii) professional standards. Performance-audits go well beyond (1) financial audits and (2) internal audits, for instance, to examine the actual, observable, and measurable behaviours, outputs, efficiency, effectiveness, and value for money of an entity, a programme, an agency, a statutory corporation, or an entire public sector, as the case might be. In this regard, performance-auditing is inherently more far-reaching, more strategic, and more consultative than other types of audit. When it is well executed by the auditor(s), and when, thereafter, its findings are wisely attended and its recommendations expeditiously implemented, a performance-audit in the public sector has the potential to offer the greatest value for money to the Government and, ultimately, to the people of Montserrat. In short, it pays for itself many times over.

APPENDIX 4: AUDIT FIELDWORK

Questionnaire for Interviewees

Senior Interviewees & Correspondents

- (1) Director, Strategic Management, Ministry of Communications, Works, Energy, & Labour
- (2) Assistant Civil Engineer, Public Works Department, MCWEL
- (3) Project Aid Officer, Ministry of Finance & Economic Management
- (4) Assistant Secretary, Energy (Acting), MCWEL
- (5) Director, PWD (Acting), MCWEL