



**PERFORMANCE MONITORING, EVALUATION AND REPORTING (PMER)
PLAN 2021-2026 FOR THE NATIONAL FOREST MANAGEMENT AND
CONSERVATION PLAN (NFMCP)**



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Performance Monitoring, Evaluation and Reporting (PMER) Plan 2021-2026 for the National Forest Management and Conservation Plan (NFMCP)

This document was prepared by Jan J. Voordouw, independent consultant, in close collaboration with the staff of the Forestry Department (FD) and the implementation partners of NFMCP. It does not necessarily reflect the views of the Government of Jamaica or FD.

Cover photos (both by Jan Voordouw):

Left: Bullhead Mountain, Clarendon. Right: Flamstead area (Mount Dispute), Blue Mountains, during Forest Trek June 2022, St. Andrew.

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Acronyms and Abbreviations

AAC	Allowable Annual Cut	IPCC	Intergovernmental Panel on Climate Change
BSJ	Bureau of Standards of Jamaica	JAMPRO	Jamaica Trade and Invest
CBO	Community-based Organisation	JCDT	Jamaica Conservation for Development Trust
CCD	MEGJC Climate Change Division	JFB	Jamaica Fire Brigade
CCMD	FD Corporate Communication and Marketing Division	JNHT	Jamaica National Heritage Trust
CF	Consolidated Fund (GOJ)	JSIF	Jamaica Social Investment Fund
CIF	Climate Investment Fund	KPI	Key Performance Indicator
COP	Conference of Parties	L&FESD	FD Legal and Forest Enforcement Services Division
CPC	Chief Parliamentary Council	LFMC	Local Forest Management Committee
CSD	FD Corporate Services Division	LICJ	Land Information Council of Jamaica
CSM	Carbon Stock Monitoring	LUCA	Land use cover assessment
CSO	Civil Society Organisation	MDA	Ministries, Departments and Agencies
DAC	OECD Development Assistance Committee	MEGJC	Ministry of Economic Growth and Job Creation
DBJ	Development Bank of Jamaica	MGD	Mines and Geology Division
DRM	Disaster Risk Management	MAF	Ministry of Agriculture and Fisheries
EFJ	Environmental Foundation of Jamaica	MLGCD	Ministry of Local Government and Community Development
EIA	Environmental Impact Assessment	MOEY	Ministry of Education and Youth
ERMD	MEGJC Environment and Risk Management Division	MOFPS	Ministry of Finance and Public Service
FAO	Food and Agricultural Organisation	MOJ	Ministry of Justice
FCF	Forest Conservation Fund	MOT	Ministry of Tourism
FD	Forestry Department	MRV	Measuring, Reporting and Verifying
FMA	Forest Management Area	MSET	Ministry of Science, Energy and Technology
FMP	Forest Management Plan	MSJ	Meteorological Service of Jamaica
FOD	FD Forest Operations Division	MTF	Medium-term Socio-Economic Policy Framework
FS&TSD	FD Forest Science & Technology Services Division	MTM	Ministry of Transport and Mining
GCF	Green Climate Fund	NBSAP	National Biodiversity Strategy and Action Plan
GDP	Gross Domestic Product	NCU	Northern Caribbean University
GEF	Global Environment Facility	NDC	Nationally Determined Contribution
GFF	Global Forest Fund	NEPA	National Environment and Planning Agency
GFFFN	Global Forest Financing Facilitation Network	NERGIS	National Emergency Response GIS Team
GHG	Greenhouse Gases		
GOJ	Government of Jamaica		
ICF	International Climate Fund		
ICTD	FD Information and Communication Technology Division		
IDB	Inter-American Development Bank		
IDP	International Development Partner		
IOJ	Institute of Jamaica		

NFI	National Forests Inventory	TPDCO	Tourism Product Development Company
NFMCP	National Forest Management and Conservation Plan	UDC	Urban Development Corporation
NGO	Non-Governmental Organisation	UNCBD	United Nations Convention on Biological Diversity
NLA	National Land Agency	UNCCD	United Nations Convention to Combat Desertification
NRV	Natural Resource Valuation	UNDP	United Nations Development Programme
NSDMD	MEGJC National Spatial Data Management Division	UNEP	United Nations Environment
NSWMA	National Solid Waste Management Authority	UNESCO	United Nations Educational, Scientific and Cultural Organisation
ODPEM	Office of Disaster Preparedness and Emergency Management	UNFCCC	United Nations Framework Convention on Climate Change
OECD	Organisation for Economic Cooperation and Development	UNFF	United Nations Forum on Forests
PASMP	Protected Areas System Master Plan	USAID	United States Agency for International Development
PC	Parish Council	USFS	United States Forest Service
PDC	Parish Development Committee	UTECH	University of Technology
PES	Payment for Ecosystem Services	UWI	University of the West Indies
PIOJ	Planning Institute of Jamaica	UWI/CSG	University of the West Indies Mona– Climate Studies Group
PMER	Performance Monitoring, Evaluation and Reporting	UWI/DLS	University of the West Indies Mona– Department of Life Sciences
PPCR	Pilot Programme for Climate Resilience	WRA	Water Resources Authority
PSOJ	Private Sector Organisation of Jamaica		
PSP	Permanent Sample Plots		
RADA	Rural Agricultural Development Authority		
REDD	Reducing Emissions from Deforestation and Forest Degradation		
REDD+	REDD and increasing the role of conservation, sustainable management of forests and enhancement of forest carbon stocks		
SCPB	FD Strategic and Corporate Planning Branch		
SDC	Social Development Commission		
SDG	Sustainable Development Goal		
SFM	Sustainable Forest Management		
SRC	Scientific Research Council		
TAC	NFMCP Technical Advisory Committee		
TCPA	Town and Country Planning Act		
TEF	Tourism Enhancement Fund		

1 INTRODUCTION TO THE PMER PLAN 2021-2026 FOR THE NFMCP

The NFMCP Performance Monitoring, Evaluation and Reporting (PMER) Plan aims at guiding the actual daily implementation of monitoring and reporting activities. It is designed to assess the extent of progress made towards the implementation of the NFMCP and importantly, the sustainable transformation of the forest sector towards climate resilience.

The PMER Plan 2021-2026 is accompanied by the PMER Strategic Framework updated for the same period and presented in another document. The Strategic Framework describes the Results Framework and other background to the entire performance monitoring, evaluation and reporting process.

The PMER Plan is structured around the Outcomes and Outputs of the five (5) Thematic Areas of NFMCP:

1. Forest Governance and Conservation – with 2 Outcomes and 10 Outputs for 2021-2026;
2. Forest Utilisation – with 3 Outcomes and 10 Outputs for 2021-2026;
3. Capacity for Sustainable Forest Management – with 3 Outcomes and 12 Outputs for 2021-2026;
4. Education, Training and Awareness – with 2 Outcomes and 4 Outputs for 2021-2026;
5. Monitoring and Information Management – with 3 Outcomes and 11 Outputs for 2021-2026.

The PMER Plan 2021-2026 is organised into **three main tables** which form the body of this document:

- **TABLE 1: The NFMCP 2021-2026 PMER Matrix.** This is the principal part of the PMER Plan, providing information on all needed monitoring and reporting activities through ten columns.
- **TABLE 2: Targets related to the outputs of NFMCP.** This table expands on the column on Targets in Table 1, providing the baseline 2020-2021 as well as annual targets for achieving the outputs during the period 2021-2026.
- **TABLE 3: Institutional involvement in NFMCP Outputs.** This table expands on the column on Owner/Responsibility in Table 1. It is a handy reference which lists the specific outputs and outcomes where an institution has a role to play. It lists both the primary as well as secondary implementing entities and relevant stakeholders.

The next sections of this document provide guidance on each of these three Tables. In earlier versions of the PMER Plan a fourth Table was added, regarding the roles of the main stakeholders in the Implementation of NFMCP and in its performance monitoring and reporting. This information is now contained in the Stakeholder Engagement Plan.

Additionally, this document includes information relevant to risk management (**Table 4**) and several tables relating to costing the implementation of the outputs of NFMCP during the period 2021-2026 (**Tables 5 to 10**).

2 PERFORMANCE MONITORING, EVALUATION AND REPORTING (PMER) PLAN

2.1 Guide to the PMER Matrix (Table 1)

The Performance Monitoring, Evaluation and Reporting (PMER) Matrix is the main tool to guide the monitoring and reporting of the NFMCP. The PMER Matrix sets out in detail how relevant data will systematically be collected over the lifetime of the NFMCP, and how these and other information can be collated for assessing, demonstrating and reporting on progress made towards the achievement of expected results.

The PMER Matrix contains the various levels of the Logic Model (see **Table 1** in the NFMCP strategic document): Impact; Outcomes; and Outputs. For each of these, it presents the key performance indicators, baselines, targets, estimated level of risk, data sources, methods of data collection, frequency of data collection, and responsibility for data production/collection/verification. The Results Framework, that is presented in the PMER Strategic Framework document, consisting of Results (Impact, Outcomes and Outputs), Indicators and Data Sources, is fully integrated into the PMER Matrix.¹

The PMER Matrix is contained in **Table 1**. The ten columns of the PMER Matrix are explained.

PMER Column	Explanation
Column 1 - Intended Result	This describes the result chain from output, through outcome to impact level (as articulated in the logic model). Only results are included in the PMER – never activities.
Column 2 – Key Performance Indicator (KPI)	KPIs are the principal indicators used to measure actual results. Specific results may at times have additional indicators articulated, as may be required for specific reporting purposes.
Column 3 - Baseline	Baseline data refer to the existing situation, or ‘starting point’ prior to intervention, for measuring the progress towards an expected result, project or programme area, through the use of indicators. For this update, most of the baseline information is dated 2020-2021. The collection of baseline data is a critical activity of any monitoring and evaluation system. Without baseline data, there would be no point from which to measure end results.
Column 4 - Target	A target represents the desired and measurable result expected for an indicator at a specified point in time. For this update of the NFMCP the targets represent the values in Year 10 (2026) or earlier if the output can be completed before. A table for Annual Targets 2021-2026 is provided in Table 2 . Targets have to be set based on

¹ This tool is known by varying names, a few of these are: indicator tracking table, indicator matrix, M&E plan, performance measurement framework, or scorecard. While the names and formats of a PMER Matrix may vary, the overall function remains the same: it is a critical tool for planning and managing data collection, analysis, and use.

PMER Column	Explanation
	realism, planned activities and available budgets. Setting targets is intended to enable stakeholders to envision the overall change the programme or plan is aiming to achieve and to enable managers to determine if they are “on track”.
Column 5 – Risk Level	For each of the outputs, potential risk factors are selected from a list of major risk statements and mitigation measures are articulated. Based on these and the experience of the executing parties, a level of risk is estimated. Levels may be Low (L), Medium (M) or High (H).
Column 6 - Data Sources	A data source refers to ‘where’ data can be found or ‘who’ should be contacted to access data to inform each indicator. Data sources can include individuals, organisations, or documentation from which data about the key performance indicators will be obtained.
Column 7 – M&E Methods	A method denotes the way in which data/information is collected. Examples include: document review, census, field observations, surveys, satellite pictures, etc.
Column 8 – Monitoring Timeline	This determines how often and regular the data will be collected throughout project/programme implementation. Progress being made towards the achievement of results can be reported at a variety of time periods (quarterly, semi-annually, annually or even less frequently) depending on contexts. Note that the higher up the results chain you go, the less frequent you tend to monitor.
Column 9 - Budget	This column provides the estimated total costing (to the Consolidated Fund and other sources of funding) of delivering an output during the period 2021 to its completion.
Column 10 – Responsibility	This column records which agency is responsible for collecting, analysing and reporting on the data collected, and which agencies play supportive roles. Responsible persons can change throughout the programme implementation and agencies may change too. Table 3 provides an overview of all the institutions engaged in the PMER for NFMCP during 2021-2026 and their responsibility for the PMER of outputs.

Modified from “Results-Based Management Tools at Global Affairs Canada: A How-to Guide²”.

²http://www.international.gc.ca/development-developpement/partners-partenaires/bt-oa/rbm_tools-gar_outils.aspx?lang=eng

2.2 Guide to the PMER Baselines and Targets (Table 2)

Table 2 presents a matrix for the annual targets for each of the Outputs as well as the established baseline. It expands on the summarised information contained in the PMER Matrix columns “Baseline 2020-2021” and “Target Y10”. The table indicates the year that an output should be delivered and the targets established for the years up to that point. This table is very useful in the annual reporting exercise, by providing these interim measuring points in easily accessible framework.

2.3 Guide to the institutional responsibilities in NFMCP and PMER (Table 3)

Table 3 provides a handy overview of all the institutions engaged in the PMER for NFMCP and their engagement relating to the specific outputs. Table 3 lists both the Primary Implementing Entities, as well as a host of other partner organisations which contribute to the achievement of specific results.

2.4 Guide to the PMER Database

All information from the three tables described above, as well as detailed budgets for each output, is contained in the PMER database (provided in Excel). Instructions to the Excel database are provided on the first tab: “Introduction.”

It is intended to integrate the information contained in the PMER database and in this document fully into the BMES system, currently used by the Forestry Department.

3 COSTING OF THE NFMCP 2021 - 2026

3.1 Resource needs and costing per output and per outcome

The costing per outcome, thematic area and expenditure category, are presented in **Table 5**. The NFMCP over the 5-year period 2021-2026 is expected to cost just over J\$6.5 billion, with J\$6.1 billion covered by the Consolidated Fund and just over J\$400 million funded by external sources or funds still to be raised.

Outcomes are not automatically achieved when the outputs which fall under it, are produced. In general, regarding the achievement of outcomes, outputs need to be taken up by additional NFMCP partners and stakeholders, which use these to strengthen their programmes, extend / scale-up the products and as such actively contribute to achieving the outcome. Outcomes also have separate indicators to measure their progress. The cost of achieving outcomes is therefore partly internal and partly external to the plan. Financially speaking, in most cases, the internal cost of an outcome can be absorbed under the costs of producing the outputs. Therefore, in this exercise, the costing of the NFMCP outcomes is based on the cumulative costs of the outputs which fall under it.

Table 5 provides an overview of the costing of the 13 outcomes under the 5 thematic areas of the NFMCP. Costing of the individual contributing outputs is presented in **Tables 6 – Table 10** grouped as follows:

Thematic Area 1, Forest Governance and Conservation, see **Table 6**. Thematic Area 2, Forest Utilisation, see **Table 7**. Thematic Area 3, Capacity for Sustainable Forest Management, see **Table 8**. Thematic Area

4, Education, Training and Awareness, see **Table 9**. Thematic Area 5, Monitoring and Information Management, see **Table 10**.

3.2 Inputs and in-kind contributions

The NFMCP costing include the engagement of the principal actors of the forest sector (the Primary Implementing Entities or PIEs), with all providing in-kind contributions to the Plan, in particular through staff-time, premises costs/utilities, use of equipment and local travel and subsistence. The budget notes contained in a separate document present how the in-kind support was monetised. **Table 5** shows that the cost of the NFMCP 2021-2026 to the consolidated fund is J\$6,126 million or 94% of the total cost.

3.3 Thematic analysis of the resource needs of the NFMCP

In addition to the financing by the Consolidated Fund, a few other contributions have been identified. These are upcoming funding from GEF-6 and possibly GREF-7 which will be run through the Consolidated Fund. The AP&FM PPCR will provide J\$15m to Output 3.1.4 and J\$15m to Output 3.1.7.

However, the plan will need additional resources to achieve all its outcomes and objectives. The needs per Thematic Areas (rounded to the nearest million) are:

Thematic Area 1	J\$77 million (or 6.6% of cost of TA)
Thematic Area 2	J\$10.5 million (or 1.4% of cost of TA)
Thematic Area 3	J\$204.5 million (or 10.6% of cost of TA)
Thematic Area 4	J\$0.1 million (or 1.9% of cost of TA)
Thematic Area 5	J\$83 million (or 3.9% of cost of TA)
Total	J\$375 million

3.4 Implementation guidelines and cash flow requirements

The cash flow requirements for financing the NFMCP over the period 2021 – 2026 is presented in the budget notes, a separate document.

Table 1: NFMCP Performance Monitoring, Evaluation and Reporting (PMER) Matrix

Intended Result	KPI	Baseline 2020-21 (Y5 status)	Target (Y10 / 2026 unless otherwise stated)	Risk Level	Data Sources	M&E Methods	Monitoring Timeline	Budget (J\$'000)	Owner/ Responsibility: Leading (L) & Supporting (S)
(Impact: Jamaica's forests are sustainably managed, protected, healthy, economically viable and socially beneficial to all.	Change in status of forest cover.	40% (2013)	No net loss in forests cover over 2013 baseline.		Land Use Cover Assessment (LUCA) Report.	Document review and verification of reports and records.	Every 10 years		L: Forestry Department S: NEPA, JCDT, IIED
	Change in status of Closed Broadleaf Forests.	84,636.6 (2013). (NB. 2013 baseline is a reduction from the 1998 land use which showed 88,000 ha).	To be determined based on findings from 3.2.3 (due FY 17/18)		Land Use Cover Assessment (LUCA) Report.	Document review and verification of reports and records.	Every 10 years		L: Forestry Department S: None
	Total amount (tons) of carbon stored in natural forests in Jamaica.	Pilot carbon stock assessments have been completed in 4 forest estates (in St. Ann, Clarendon and Hanover) with a total area of 1101.7 ha. Total measured: 170,295.14 MgC or average 154.6 MgC/ha.	NFI completed, which includes calculation of carbon storage level.		Maps, National Forest Inventory Programme Database. NFMS data.	Document review and verification of reports and records. Manual developed.	Every 5 years		L: Forestry Department S: MEGJC/CCD, UWI/DLS, MSET

Intended Result	KPI	Baseline 2020-21 (Y5 status)	Target (Y10 / 2026 unless otherwise stated)	Risk Level	Data Sources	M&E Methods	Monitoring Timeline	Budget (J\$'000)	Owner/ Responsibility: Leading (L) & Supporting (S)
Outcome 1.1: Strengthened governance, policy and legislative framework to ensure sustainable development of the forest sector.	Extent to which the framework is utilised to ensure integration of the interests and concerns of the forest sector into national decision making processes.	Technical Advisory Committee for the sector plan established as formal mechanism.	All relevant governmental agencies engaged in the framework and addressing the sustainable development of the forest sector.		Gazettes of the respective acts, House of Parliament website. Regulations. Relevant Agency reports, which speak to meeting any obligations and timelines for actions as indicated in any Policy document or National Plan.	Document review and verification of reports and records.	Ad hoc, depending on speed of the policy process	Total: 970,722 (CF 930,394; Other sources 40,328)	L: Ministry of Economic Growth and Job Creation/Planning Dept. S: FD, NEPA, Cabinet Office, OCPC.
	Rate of compliance with Forest Act and regulations.	60% (2015-16)	Over 80%.		Performance Reports FD.	Document review and verification of reports and records.	Annually.		L: Forestry Department/ L&FESD S: None
Output 1.1.1: <i>Cross sectoral mechanism established for integrating the Forest Sector into relevant national decision making processes.</i>	(Yes/No) National multi-stakeholder policy coordination mechanism in place, including regarding mangrove management, to ensure that the forest sector is integrated into	At least 5 agencies actively involved in Technical Advisory Committee (TAC), chaired by MEGJC and PIOJ.	Full integration of all the agencies and private sector engaged in the forest sector in national decision-making processes relevant to the forest sector and their implementation.	M	Minutes of meetings held. NFMCP Annual progress reports.	Document review and verification of reports and records.	Once, but with annual progress updates.	Total: 38,700 (CF 38,700; Other sources 0)	L: Ministry of Economic Growth and Job Creation, FD, PIOJ S: NLA, NEPA, MSJ, JNHT, UWI, IOJ, MOFPS, Private land owners

Intended Result	KPI	Baseline 2020-21 (Y5 status)	Target (Y10 / 2026 unless otherwise stated)	Risk Level	Data Sources	M&E Methods	Monitoring Timeline	Budget (J\$'000)	Owner/ Responsibility: Leading (L) & Supporting (S)
	decision making processes.								
Output 1.1.2: <i>Forest Act 1996 and Regulations 2001 amended and promulgated.</i>	(Yes/No) Amended Forest Act as well as revised Forest Regulations approved and promulgated by 2025.	Draft bill is under review by both OCPC and FD (re-scoping).	Legislation promulgated (Y9)	H	Gazetted Act, MOJ/Parliament website, Forestry Department Website.	Document review.	Ad hoc, depending on speed of the amendment process.	Total: 37,510 (CF 37,510; Other sources 0)	L: Ministry of Economic Growth and Job Creation/ERMB S: FD, NEPA, Cabinet Office, OCPC, MGD, JCA
Output 1.1.3: <i>Support for the preparation of Development Orders provided, to include forest estates and their management priorities.</i>	Number of Development Orders drafted and updated which include forest estates management priorities.	4 Development Orders prepared and including forest management maps. (Define forest resources priorities, how to assess, how new are DCs)	9 Development Orders prepared and updated regarding forest management priorities. Completed.	H	Progress reports of Parish Development Committee. Reports of the Town and Country Planning Authority (TCPA – now part of NEPA) and reports of the Parish Municipal Authorities.	Document review and verification of reports and records.	Annually	Total: 59,250 (CF 59,250; Other sources 0)	L: National Environment and Planning Agency S: FD, MC, PDC, LFMCs, Private Forest owners

Intended Result	KPI	Baseline 2020-21 (Y5 status)	Target (Y10 / 2026 unless otherwise stated)	Risk Level	Data Sources	M&E Methods	Monitoring Timeline	Budget (J\$'000)	Owner/ Responsibility: Leading (L) & Supporting (S)
Output 1.1.4: <i>Crown lands (mangroves, swamps and terrestrial) transferred by Commissioner of Lands to the Forestry Department for sustainable management under various programmes (e.g. mangrove management plan, REDD+ implementation).</i>	Area (Hectares) of mangrove/swamp forests, as well as terrestrial lands transferred by the Commissioner of Lands for Forestry Department's management.	Documents submitted to NLA. SCJ has 1000 ha of wetland available, Canoe Valley has over 2000 acres of wetlands. Properties where ownership cannot be identified (some are natural lands). 2,267 ha of mangroves managed as forest estates (2015)	Transfers of terrestrial lands (1000 ha) for REDD+ completed and of mangroves and swamp lands initiated. Updates NLA Property inventory done.	L	Land transfer records. NLA cadastral maps and NLA IMap, Land use / land cover dataset; current ortho-rectified imagery (5cm -10cm res.)	Document review. Drone mapping; Using GIS techniques and in-house GIS software to remotely identify mangrove areas; ground-truthing (field verification) and reconnaissance (field-observations).	Annually.	Total: 67,316 (CF 50,145; Other sources 17,171)	L: National Land Agency S: FD

Intended Result	KPI	Baseline 2020-21 (Y5 status)	Target (Y10 / 2026 unless otherwise stated)	Risk Level	Data Sources	M&E Methods	Monitoring Timeline	Budget (J\$'000)	Owner/ Responsibility: Leading (L) & Supporting (S)
Output 1.1.5: <i>Enforcement capacity of FD increased.</i>	Quality and applicability of approaches for detection of offences regarding encroachment and illegal activities.	Protection and enforcement approaches in place. Mechanisms to detect encroachment on forest estates include patrol plans and rangers reports. Surveillance solutions being introduced. Data system on incidents in protected areas (held by NEPA) and particular breaches are shared with FD. Co-management partners (NEPA, FD, MAF, JNHT, NLA) meet quarterly.	Package of approaches introduced and operational, documented and assessed on quality and applicability. Relationships for enforcement established with co-managers and stakeholders.	L	Reports from responsible entities: Strategic and operational plans. Site visit reports and patrol plans and schedules. Static reports for protected areas produced from database NEPA (+ data dashboard in real time).	Document review and verification of reports and records.	Annually.	Total: 180,111 (CF 163,111; Other sources 17,000)	L: Forestry Department/ L&FESD S: MEGJC/ERMB, NEPA, NLA, MAF, RADA, Security Agencies, JCF, JDF, JCDDT, UDC
Output 1.1.6: <i>Regulations developed for special recreational use permits, research permits, license permits,</i>	(Yes/No) Regulations for special recreational use permits, research permits, license programmes	Existing Forest Regulations 2001 and Forest Act 1996.	Completed. New permit and license programmes fully introduced (Y9).	H	Regulations and the actual Licences and Permits.	Document review and verification of reports and records.	Once.	Total: 34,970 (CF 34,970; Other sources 0)	L: Ministry of Economic Growth and Job Creation/ERMB S: FD, NEPA, Cabinet Office,

Intended Result	KPI	Baseline 2020-21 (Y5 status)	Target (Y10 / 2026 unless otherwise stated)	Risk Level	Data Sources	M&E Methods	Monitoring Timeline	Budget (J\$'000)	Owner/ Responsibility: Leading (L) & Supporting (S)
<i>licence programmes.</i>	developed and introduced.								OCPC, TDPCo, MOT
Output 1.1.7: <i>Boundary verification programme implemented.</i>	Km of parcel boundary traversed and verified (Proxy indicator).	6-8 parcels are verified per annum. CCPA marked. BJCM boundaries have received some visibility and marking.	Regular operation of the boundary verification programme, aligned to national standards (NLA). Specially protected areas have signage to mark boundaries.	M	Performance Reports FD, NLA survey diagrams; FD Forest estate master listing; satellite imagery.	Document Review. Using GIS techniques and in house GIS software to remotely identify and capture mangrove areas; ground-truthing (field verification) and reconnaissance (field-observations); survey techniques.	Annually	Total: 552,865 (CF 546,708; Other sources 6,157)	L: Forestry Department/ FS&TD S: NLA, NWC, UDC, Private land owners, JCDDT, C-CAM, Windsor Research
Outcome 1.2: Forest biodiversity protected.	Change in status of targeted species (Water Mahoe, Juniper Cedar, Bitterwood, Giant Swallowtail, Yellow-billed Parrot and Black-billed Parrot).	Biodiversity Indices exist for targeted species (2015-16).	No net loss of targeted species		NEPA reports, Biodiversity Index.	Biodiversity surveys, transects. Verification of reports and records.	Every 5 years.	Total: 201,210 (CF 164,310; Other sources 36,900)	L: National Environment and Planning Agency S: FD

Intended Result	KPI	Baseline 2020-21 (Y5 status)	Target (Y10 / 2026 unless otherwise stated)	Risk Level	Data Sources	M&E Methods	Monitoring Timeline	Budget (J\$'000)	Owner/ Responsibility: Leading (L) & Supporting (S)
<p>Output 1.2.1: List of invasive plant and animal species in forested areas developed, maintained.</p>	<p>(Yes/No) Up to date species list of invasive flora and fauna in forested areas in place.</p>	<p>Invasive species are catalogued. IOJ houses the Clearing House Mechanism (database) on invasive species. Some species with location data. List available of flora in Closed Broadleaf Forest and Disturbed Broadleaf Forests.</p>	<p>NFI completed.</p>	<p>M</p>	<p>Performance Reports from responsible entities, invasive alien species list.</p>	<p>Document review.</p>	<p>Annually</p>	<p>Total: 54,970 (CF 54,370; Other sources 600)</p>	<p>L: Forestry Department/ FS&TD S: NEPA, IOJ, UWI/DLS, JCDD</p>
<p>Output 1.2.2: Invasive species management within forest areas addressed through the implementation of the Strategy and Action Plan.</p>	<p>Number of invasive flora and fauna species managed through various methodologies.</p>	<p>Invasive species not managed within forest areas. However, invasive species removal combined with forest restoration activities in parts of BJCM PA. Also, IOJ manages Mason River Protected Area.</p>	<p>Management of invasive species in all forest classes ensured through the Invasive species strategy and action plan.</p>	<p>M</p>	<p>Invasive species working group reports. Performance Reports and technical reports from responsible entities.</p>	<p>Document review and verification of reports and records.</p>	<p>Ad hoc. As they are prioritized, a plan is developed.</p>	<p>Total: 76,840 (CF 49,840; Other sources 27,000)</p>	<p>L: NEPA S: FD/FS&TD, IOJ, UWI/DLS, JCDD, Local farmers</p>

Intended Result	KPI	Baseline 2020-21 (Y5 status)	Target (Y10 / 2026 unless otherwise stated)	Risk Level	Data Sources	M&E Methods	Monitoring Timeline	Budget (J\$'000)	Owner/ Responsibility: Leading (L) & Supporting (S)
Output 1.2.3: <i>Species (pilot) management or recovery plans developed.</i>	Number of species management or recovery plans developed.	Management/species recovery plans are included in NEPA's 10-year strategic plan: (a) Orchid Policy 2014-19 being revised; (b) Plant Conservation Strategy (being updated); (c) Jamaica Iguana Strategy and Implementation Plan; (d) Whistling Duck Management Plan; (e) Crocodile Action Plan; (f) Tree fern management plan 2020-2030.	Species management plan developed for Water Mahoe (Hernandia) (Y9).	H	Evidence of strategies and species management and recovery plans. Performance Reports and technical reports from responsible entities.	Document review and verification of reports and records.	Annually	Total: 69,400 (CF 60,100; Other sources 9,300)	L: National Environment and Planning Agency S: FD/FS&TD, IOJ, UWI/DLS
Outcome 2.1: Innovative mechanisms established for financing sustainable forest management and obtaining benefits from forest use.	Number of private forest owners accessing incentives.	Four private forested areas declared (2015-16).	Ten forest owners access incentives.		MOFPS Tax Reports / Returns.	Document review and verification of reports and records.	Annually	Total: 273,754 (CF 273,754; Other sources 0)	L: Forestry Department S: NEPA, MOFPS, MC, PDC

Intended Result	KPI	Baseline 2020-21 (Y5 status)	Target (Y10 / 2026 unless otherwise stated)	Risk Level	Data Sources	M&E Methods	Monitoring Timeline	Budget (J\$'000)	Owner/ Responsibility: Leading (L) & Supporting (S)
Output 2.1.2: <i>Exploration of additional incentives to promote sustainable forest management, their launch and promotion.</i>	Number of incentives (new or revised) available to private landowners.	Assessment report finalised as basis for follow up action. Three incentives: Technical Assistance; free seedlings under PFP; and Land Declaration Programme. (2015)	One (new / revised) incentive made available and promoted.	M	Performance Reports FD, Assessment report, Consultancy report.	Document review and verification of reports and records.	Annually	Total: 53,911 (CF 53,911; Other sources 0)	L: Forestry Department/ L&FESD S: MOFPS, MC, PDC, Private land owners
Output 2.1.3: <i>Programme developed for payment of ecosystem services within forested areas.</i>	(Yes/No) Programme for payment of ecosystem services in forested areas in place.	Experience of Yallas/Hope River scheme to be used. Position paper regarding PES prepared and sent to MEGJC, for subsequent submission to Cabinet Office.	PES within forested areas Pilot project conducted and completed.	H	Performance Reports FD.	Document review and verification of reports.	Once	Total: 53,911 (CF 53,911; Other sources 0)	L: Forestry Department/ FS&TD S: NEPA, WRA, NSWMA, Home owners

Intended Result	KPI	Baseline 2020-21 (Y5 status)	Target (Y10 / 2026 unless otherwise stated)	Risk Level	Data Sources	M&E Methods	Monitoring Timeline	Budget (J\$'000)	Owner/ Responsibility: Leading (L) & Supporting (S)
<p>Output 2.1.4: <i>Alternative livelihoods in forest communities promoted.</i></p>	<p>Number of alternative livelihood projects supported.</p>	<p>46 alternate livelihood projects selected and awarded to forest community groups and NGOs. Project themes included: Agroforestry, Apiculture, Bamboo Utilization, Craft Item Production, Eco-Tourism, Medicinal/Nutraceu tical Products, Rainwater Harvesting, Reforestation, Smart Agriculture - Water Catchment Areas, &Yam Stick Production. Lessons learned and results from livelihood activities (sustainable tourism, agroforestry) in BJCM PA.</p>	<p>Capacity built with the 16 LFMCs to continue and sustain the livelihood promotions. Social enterprises initiated and supported (bridge implementation gap of business planning).</p>	<p>L</p>	<p>Performance Reports from responsible entities: FD Annual reports & reports from Rural Sociologist, SDC, EFJ. Project proposals received; field visits to project sites; pictures.</p>	<p>Document review and verification of reports and records.</p>	<p>Annually</p>	<p>Total: 165,932 (CF 165,932; Other sources 0)</p>	<p>L: Forestry Department/FOD S: LFMCs, CBOs, JCDT, EFJ, SDC, HEART Trust/NTA, RADA, JAS, TPDCo, JBDC</p>

Intended Result	KPI	Baseline 2020-21 (Y5 status)	Target (Y10 / 2026 unless otherwise stated)	Risk Level	Data Sources	M&E Methods	Monitoring Timeline	Budget (J\$'000)	Owner/ Responsibility: Leading (L) & Supporting (S)
Outcome 2.2: Sustainable harvesting and use of timber products from forests.	Percentage change of revenue generated from sustainable harvesting activities within forest estates.	481 cubic metres (2016).	Volume available for sustainable harvesting determined.		Performance Reports FD, lumber yards, saw mills. STATIN and PIOJ monitoring.	Surveys and document review	Annually.	Total: 107,946 (CF 107,826; Other sources 120)	L: Forestry Department S: None
Output 2.2.1: <i>Identification of three to five wood product species, to be assessed for economic viability.</i>	Number of identified wood species assessed.	List available of economic wood species in Jamaica relevant to timber harvesting (over 100 species).	Assessment and recommendations on 3-5 wood species completed.	H	Performance Reports from responsible entities: STATIN. Saw-millers (testimonies). Database on FD plantation outputs.	Document review and verification of reports.	Annually	Total: 51,520 (CF 51,520; Other sources 0)	L: Forestry Department/ FS&TD S: UWI/DLS, JBDC, NCU, Wood workers and furniture makers, SRC, Utech, importers
Output 2.2.2: <i>Sustainable harvesting programme developed for commercial/ merchantable plantations within forest estates.</i>	(Yes/No) Categories of allowable annual cut (AAC) per plantation/ forest stand / block established.	Five sustainable harvesting plans completed (3 clusters) to inform AAC calculations and harvesting projections for FMPs.	Categories of allowable annual cut (AAC) per plantation/ forest stand / block established and included in FMPs.	M	Performance Reports FD.	Document review and verification of reports.	Annually.	Total: 56,426 (CF 56,306; Other sources 120)	L: Forestry Department/ FS&TD S: JCF, Private land owners, BSJ

Intended Result	KPI	Baseline 2020-21 (Y5 status)	Target (Y10 / 2026 unless otherwise stated)	Risk Level	Data Sources	M&E Methods	Monitoring Timeline	Budget (J\$'000)	Owner/ Responsibility: Leading (L) & Supporting (S)
Outcome 2.3: Sustainable use of non-timber products and services of forests.	Percentage change of revenue generated from non-timber forest products and services, available to the public.	Revenues from BJCMNP services, Forest Trek and several products for sale.	Revenues generated by an additional 2-3 products and services. Minimum 500 visitors to recreational sites on forest estates recorded (minimum 100 visitors annually).		Performance Reports FD. Non-GOJ entities (eg. JCDT reports).	Document review and verification of reports and records. Surveys of visitor satisfaction.	Annually.	Total: 353,676 (CF 343,231; Other sources 10,435)	L: Forestry Department S: JCDT
Output 2.3.1: <i>Research programme on non-timber forest resources developed and pertinent marketing efforts established to follow the programme's recommendations.</i>	(Yes/No) Research programme for non-timber forest resources established.	No formal research programme exists for non-timber forest resources.	Research programme and marketing actions evaluated, to support best approaches for future programming.	M	Performance Reports FD: Research Department, UWI, SRC.	Document review and verification of reports.	Once	Total: 54,020 (CF 54,020; Other sources 0)	L: Forestry Department/ FS&TD and CCMD S: IUCN, FAO

Intended Result	KPI	Baseline 2020-21 (Y5 status)	Target (Y10 / 2026 unless otherwise stated)	Risk Level	Data Sources	M&E Methods	Monitoring Timeline	Budget (J\$'000)	Owner/ Responsibility: Leading (L) & Supporting (S)
Output 2.3.2: <i>Potential identified of non-timber materials that can be extracted for processing or sale.</i>	(Yes/No) Guidance documentation generated on identified products.	Market Research Survey on Non-timber Forest Products (Aug 2021) executed under Business development consultancy-EUBSP. Draft market research report was received.	Guidance documentation generated on identified products and their potential (Y7).	M	Market Survey reports.	Document review and verification of reports.	Once	Total: 21,783 (CF 21,783; Other sources 0)	L: Forestry Department/ CCMD S: None
Output 2.3.3: <i>Economically viable non-timber market opportunities developed.</i>	Volume produced and sales of selected non-timber products (Christmas trees, pine cones, potted plants/trees and NFIs).	Two Investment profiles completed and promoted for Christmas trees and Bitterwood wood chips.	Non-timber market opportunities fully developed for sales (as indicated by increased sales).	M	Feasibility assessment Reports, Investment profiles, JAMPRO investment reports. JBDC re small business creation regarding this area.	Document review and verification of reports.	Annually	Total: 54,125 (CF 54,125; Other sources 0)	L: Forestry Department/ CCMD S: BSJ (incl. its Fito sanitary division), JAMPRO, PSOJ, Min Agriculture, JBDC

Intended Result	KPI	Baseline 2020-21 (Y5 status)	Target (Y10 / 2026 unless otherwise stated)	Risk Level	Data Sources	M&E Methods	Monitoring Timeline	Budget (J\$'000)	Owner/ Responsibility: Leading (L) & Supporting (S)
Output 2.3.4: <i>Recreational facilities established.</i>	Number of recreational facilities established on forest estates.	One business strategy developed, which includes recreation. JCDT manages Portland Gap and Holywell.	Minimum one (1) recreational facility launched - in Bogue 2, St Ann.	L	Progress Reports from responsible entities: FD, TPDCo, TEF, JSIF. NGO sources .	Document review and verification of reports.	Every 5 years	Total: 162,863 (CF 162,863; Other sources 0)	L: Forestry Department/ CSD S: JCDT, TPDCo, CBOs, LFMCs
Output 2.3.5: <i>Guidelines for the use of cultural and heritage sites on Forest Reserves and FMAs developed.</i>	Number of guidelines for use of cultural/ heritage sites developed.	Preservation scheme finalised for BJCM and submitted to OPC. JCDT draft ecotourism guidelines for Cockpit country available. Quarterly meetings JNHT and JCDT conducted.	One Guideline for use of cultural/ heritage trails and sites in the Cockpit Country completed (by Y9 - 2025).	M	Progress Reports from responsible entities: FD, TPDCo, TEF, JSIF, NEPA. JNHT and NGOs.	Document review and verification of reports.	Every 5 years	Total: 60,885 (CF 50,450; Other sources 10,435)	L: Jamaica National Heritage Trust S: FD, JCDT, NEPA, CBOs, LFMCs
Outcome 3.1: Improved participatory planning to manage, protect and conserve Jamaica's forests.	Area (ha) of forest under sustainable forest management plans.	As at March 31, 2021 a total of twelve (12) FMPs have been developed covering approximately ninety-four (94) or 41% of the island's 228 forest estates.	Minimum 60% of targeted forested areas (including forested wetlands) under SFM have sustainable management plans.		Biophysical Inventory (BPI) Assessment; silviculture plans, Forest health assessment.	Ground based forest inventories	Annually.	Total: 1,594,006 (CF 1,376,061; Other sources 217,945)	L: Forestry Department S: None

Intended Result	KPI	Baseline 2020-21 (Y5 status)	Target (Y10 / 2026 unless otherwise stated)	Risk Level	Data Sources	M&E Methods	Monitoring Timeline	Budget (J\$'000)	Owner/ Responsibility: Leading (L) & Supporting (S)
	(Yes/No) Evidence of introduction of forest-related planning instruments by stakeholders	NEPA, UDC, JCDT, FD, RADA have introduced forest-related planning instruments.	Additional stakeholders have introduced forest-related planning instruments.		Performance Reports FD. Annual reports of partner agencies.	Document review and verification of reports and records.	Annually.		L: Forestry Department S: NEPA, UDC, JCDT, RADA
Output 3.1.1: <i>Reforestation in targeted areas (mangroves, urban areas and forest estates).</i>	Area (hectares) reforested/rehabilitated.	Forest Estates: 600 ha (375,000 seedlings) for 2016-2021 planted. 526 ha maintained. Urban forestry: Guidelines drafted to support urban forestry programme. Urban planting: 180,641 trees. Mangroves: None.	Total 700,000 tree seedlings planted (approx. 1,120 ha reforested). Over 1,000ha of forest plantations maintained. 2,000 ha of mangroves rehabilitated/restored.	L	Performance Reports FD. FD verification report. Reports from JCDT (Blue and John Crow Mountains National Park) and NEPA (Portland Ridge – Portland Bight Prot. Area).	Document review and verification of reports and records.	Annually	Total: 747,133 (CF 574,388; Other sources 172,745)	L: Forestry Department/FOD S: NEPA, C-CAM, UWI/DLS (CMS), LFMCS, Forest owners, CBOs, Private sector entities

Intended Result	KPI	Baseline 2020-21 (Y5 status)	Target (Y10 / 2026 unless otherwise stated)	Risk Level	Data Sources	M&E Methods	Monitoring Timeline	Budget (J\$'000)	Owner/ Responsibility: Leading (L) & Supporting (S)
Output 3.1.2: <i>Forest Management Plans (FMP) for forest estates in Forest Management Units (FMU) developed.</i>	Number of FMPs developed for forest estates in FMUs.	As at March 31, 2021 a total of twelve (12) FMPs have been developed covering approximately ninety-four (94) estates or 41% of the island's 228 forest estates .	One FMP covering a FMU revised or developed per year.	L	Silviculture reports, socio-economic studies, divisional reports, Bio-physical reports, Forest Health Assessment, community consultations. SDC.	Verification of reports and maps. Performance Reports from Forest Operations.	Every 5 years	Total: 147,711 (CF 147,711; Other sources 0)	L: Forestry Department/ FS&TD S: LFMCS, NEPA, SDC, JFB, NLA, TPDPCo
Output 3.1.3: <i>Forest restoration activities included and implemented within Watershed Management Plans.</i>	Number of forest restoration activities implemented through Watershed Management Plans.	Plans available for: Rio Cobre, Rio Minho, Drivers River. Plan for Swift River in draft.	5 watershed management plans completed, which include forest restoration activities.	M	Performance Reports from responsible entities. Watershed management plans and monitoring reports.	Document review.	Every 5 years	Total: 77,500 (CF 62,300; Other sources 15,200)	L: National Environment and Planning Agency S: FD/FS&TD, MEGJC/ERMB, PIOJ, NGO, ODPEM, WRA

Intended Result	KPI	Baseline 2020-21 (Y5 status)	Target (Y10 / 2026 unless otherwise stated)	Risk Level	Data Sources	M&E Methods	Monitoring Timeline	Budget (J\$'000)	Owner/ Responsibility: Leading (L) & Supporting (S)
Output 3.1.4: <i>Nursery programme implemented and expanded.</i>	Number of seedlings produced and revenue generated.	205,000 seedlings produced in 2021. J\$5 million generated in nursery revenue.	Seedling production capacity increased to 500,000 seedlings produced annually. Cumulative: 2.8 million. - J\$20million in nursery revenue generated cumulatively.	M	Performance Reports FD: Forest Operations. Finance and accounts. FD verification report.	Document review and verification of reports and records.	Annually	Total: 312,178 (CF 297,178; Other sources 15,000 – AM&FM-PPCR)	L: Forestry Department/ FOD S: Private tree nurseries, LFMCs, NSWMA, Min Agriculture, FFP, Trees that Feed, CTPP
Output 3.1.5: <i>Mangrove forests management plan developed and implemented.</i>	Rate of implementation of mangrove forest management plan.	No mangrove management plan.	Plan implemented 50%.	L	Reports from RAMSAR Committee (monthly). NEPA Annual Reports to RAMSAR secretariat. UDC Monitoring and Management Plans for key areas.	Document review and verification of reports and records. Ground-truthing (field verification) and reconnaissance (field observations)	Annually	Total: 170,142 (CF 170,142; Other sources 0)	L: Forestry Department/ FS&TD and FOD S: IOJ, MEGJC/ERMB, NGOs, UWI/DLS (Marine labs), UDC, NEPA, C-CAM, PEPA, Oracabessa MPA, Alligator Head

Intended Result	KPI	Baseline 2020-21 (Y5 status)	Target (Y10 / 2026 unless otherwise stated)	Risk Level	Data Sources	M&E Methods	Monitoring Timeline	Budget (J\$'000)	Owner/ Responsibility: Leading (L) & Supporting (S)
Output 3.1.6: <i>Guidelines developed for establishing management practices for riparian forests within forest estates.</i>	(Yes/No) Best management practices developed for riparian forests within forest estates.	No guidelines for management practices for riparian forests exist.	Guidelines for best management practices published. 80% Implementation of research and collection best practices.	M	Performance Reports from responsible entities, best practices document / SOP/Guideline documents.	Document review and verification of reports and records.	Once.	Total: 51,499 (CF 51,499; Other sources 0)	L: Forestry Department/ FS&TD S: NEPA, WRA, NWC, NIC
Output 3.1.7: <i>Appropriate guidelines developed and implemented for the establishment and maintenance of trees in urban settings (There are other maintenance standards for forest estates).</i>	(Yes/No) Guidelines developed for the establishment and maintenance of trees in urban settings.	Draft guidelines for the establishment and maintenance of trees in urban settings developed for review.	Guidelines developed and utilised as evidenced by execution of urban tree planting activities.	L	Performance Reports from responsible entities. Municipal Corporations, NHT, HAJ.	Verification of document.	Once	Total: 66,984 (CF 51,984; Other sources 15,000 – AM&FM-PPCR)	L: Forestry Department/ FOD S: MLGCD, NSWMA, PSOJ, CBOs, Min Agr (Public Gardens Division), MEGJC (urban renewal)
Output 3.1.9: <i>Implementation of the Three Million Trees in Three Years Initiative (National Tree Planting Initiative - NTPI).</i>	Number of seedlings distributed and planted.	Initiative started in 2019. Design underway for GPS enabled tree tracking application-876 trees.	Three million seedlings planted and distributed (Y7).	M	FD Performance Reports. Updates from 876 Trees App stakeholders.	Document review and verification of reports.	Annually.	Total: 20,859 (CF 20,859; Other sources 0)	L: Forestry Department/ FOD S: Private tree nurseries, OPM, NEPA, JCDT, CTPP, LFMCs, NSWMA, Min Agriculture, FFP, Trees that Feed,

Intended Result	KPI	Baseline 2020-21 (Y5 status)	Target (Y10 / 2026 unless otherwise stated)	Risk Level	Data Sources	M&E Methods	Monitoring Timeline	Budget (J\$'000)	Owner/ Responsibility: Leading (L) & Supporting (S)
									Bauxite Comp., PLOs
Outcome 3.2: Strengthened institutional capacity for REDD+ readiness.	Number of phases of the REDD+ process completed.	Phase 1 is mostly completed.	Phase 2 completed.		Performance Reports FD. REDD+ programme reports.	Document review and verification of reports and records.	Annually.	Total: 169,636 (CF 163,111; Other sources 6,525)	L: Forestry Department
	Extent of research completed and tested on mechanisms for carbon sink enhancement.	To be determined.	5 scientific articles		Performance Reports FD.	Document review and verification of reports.	Annually.		S: None L: Forestry Department S: None
Output 3.2.2: REDD+ Readiness Strategy completed and implemented.	(YES/No) REDD+ strategy, integrating the 7 Cancun principles, developed and approved.	No REDD+ readiness Strategy. Analytical report on DFDD produced. (2019). Manual for NFI drafted. Forest monitoring being done by PSPs (carbon stock), MSJ (weather data). JCDT has a wide area network of forest sensors (air temperature and humidity).	REDD+ strategy detailing adherence to all 7 Cancun principles developed and approved. (Year 7?). Leveraging the REDD+ mechanism. Forest emission reference levels calculated.	H	REDD+ readiness project report, REDD+ readiness project stakeholders' reports, LUCA Report, Forest Policy and Act, NFMCP.	Document review. Consultations, interviews.	Once	Total: 169,636 (CF 163,111; Other sources 6,525)	L: Forestry Department/ FS&TD S: MEGJC/CCD, NEPA, UDC, C-CAM, JCDT, FAO, UNDP, UNEP
Outcome 3.3: Strengthened capacity of	Percentage change in area (ha) of	To be determined (Data to be	To be determined.		FD Forest Operations field reports.	Survey of burnt areas (on the	Annually.	Total: 172,701 (CF	L: Forestry Department, Meteorological

Intended Result	KPI	Baseline 2020-21 (Y5 status)	Target (Y10 / 2026 unless otherwise stated)	Risk Level	Data Sources	M&E Methods	Monitoring Timeline	Budget (J\$'000)	Owner/ Responsibility: Leading (L) & Supporting (S)
Local Forest Management Committees and other community groups.	forests affected by fire annually.	provided by FRIM and JFB).			Bush Fire Warning Index.	ground or aerial verification).		162,696; Other sources 10,005)	Service of Jamaica
	Extent of participation by local communities in forest-based activities.	None.	Extent to which local communities participate in forest-based activities annually (sale of standing timber, forest recreation etc).		Performance Reports FD.	Document review and verification of reports and records.	Annually.		S: JFB L: Forestry Department S: LFMCs, CBOs
Output 3.3.1: <i>Strengthened capacity in project development and management of LFMCs and other community groups.</i>	Number of community groups trained.	30 groups trained / 250 persons sensitised through EUBSP Indicator 4 activities. In 2019-2020 Proposal writing workshops held islandwide targeting community groups. More that 20 community groups successfully secured project funding under EUBSP.	Minimum of 20 additional groups trained / 375 persons sensitised.	M	Performance Reports from responsible entities. Rural Sociologist.	Document review and verification of reports and records.	Annually	Total: 60,524 (CF 54,593; Other sources 5,931)	L: Forestry Department/ FOD S: NGOs, SDC, EFJ

Intended Result	KPI	Baseline 2020-21 (Y5 status)	Target (Y10 / 2026 unless otherwise stated)	Risk Level	Data Sources	M&E Methods	Monitoring Timeline	Budget (J\$'000)	Owner/ Responsibility: Leading (L) & Supporting (S)
Output 3.3.2: <i>Governance and decision-making processes related to LFMCs strengthened.</i>	Number of recommendations from LFMC study implemented.	Training on governance and decision-making started.	Minimum three (3) recommendations from LFMC study executed (Support provided for National LFMC executive; LFMC roadmap developed and implemented; Governance Capacity building executed).	M	Performance Reports FD.	Document review.	Annually	Total: 54,969 (CF 54,969; Other sources 0)	L: Forestry Department/ FOD S: JFB
Output 3.3.3: <i>Fire suppression teams established and trained within community groups in high priority/high risk areas.</i>	Number of community groups trained in Forest Fire Management.	FD: Total of 25 community groups (over 500 persons) across forest fire hotspot areas trained in Forest Fires Management. JCDT: Fire management training conducted and equipment provided in BJCM NP.	40 groups trained. Bush Fire Warning Index utilised.	M	Project reports, Fire statistics (Jamaica Fire Brigade). FD performance report.	Document review and verification of reports and records.	Annually	Total: 57,208 (CF 53,134; Other sources 4,074)	L: Forestry Department/ FOD S: JFB, LFMCs, SDC, MSJ, Parish Councils (MLGCD), CBOs, JCDT, RADA

Intended Result	KPI	Baseline 2020-21 (Y5 status)	Target (Y10 / 2026 unless otherwise stated)	Risk Level	Data Sources	M&E Methods	Monitoring Timeline	Budget (J\$'000)	Owner/ Responsibility: Leading (L) & Supporting (S)
Outcome 4.1: Forest communities, the general public as well as targeted groups have increased capacity regarding sustainable forest practices.	Proportion of the population reporting increased understanding of the importance of the forest sector and its benefits.	5 year target achieved as increase of 56% - (representing an 8% increase over 2013 baseline of 48%) achieved in 2017 public perception survey.	Over 56% of population.		Public Perception Study Report.	Document review and verification of reports and records.	Every 5 years.	Total: 484,463 (CF 484,463; Other sources 0)	L: Forestry Department S: NEPA
	Change in Knowledge, Attitudes, Perceptions and Behaviour on sustainable forest practices among various target audiences in critical thematic areas and locations.	KAP study done by the IDB/GEF project as well as reports from NEPA in Watershed management unit.	One KAP study detailing change completed.		Socioeconomic survey from PIOJ produced every three years, STATIN Census/Reports. National KAP study for Forest Dependent Communities. Feedback forms from school visits and community meetings. FD socio-economic surveys. Bi-annual	Document review and verification of reports and records.	Annually.		L: Forestry Department S: None

Intended Result	KPI	Baseline 2020-21 (Y5 status)	Target (Y10 / 2026 unless otherwise stated)	Risk Level	Data Sources	M&E Methods	Monitoring Timeline	Budget (J\$'000)	Owner/ Responsibility: Leading (L) & Supporting (S)
					Assessment of groups in the forest dependent areas (LFMCs).				
<p>Output 4.1.1: Education programme developed to strengthen the public's understanding on the benefits of forests and its resources, the importance of sustainable forest management and conservation practices.</p>	<p>Number of public education/awareness sessions and school awareness sessions delivered (disaggregated by Parish, type of schools and age of children).</p>	<p>Cumulatively, 1,400 schools (in 14 parishes) visited and 675 public education/awareness sessions implemented. Forest Trek implemented.</p>	<p>Cumulatively, 2,850 school visits (in 14 parishes) and 875 public awareness events implemented.</p>	<p>L</p>	<p>FD Annual Performance Reports, PR&CC Branch Reports (Monthly & quarterly), Interagency reports on PR activities, Survey report NEPA Public Education Branch, JET Annual Report. SDC Community Priority Plans.</p>	<p>Document review and verification of reports and records.</p>	<p>Every 3 year (FD Survey), Annual; ad hoc.</p>	<p>Total: 380,066 (CF 380,066; Other sources 0)</p>	<p>L: Forestry Department/ CCMD S: MEGJC/CCD, MOEY, NEPA</p>

Intended Result	KPI	Baseline 2020-21 (Y5 status)	Target (Y10 / 2026 unless otherwise stated)	Risk Level	Data Sources	M&E Methods	Monitoring Timeline	Budget (J\$'000)	Owner/ Responsibility: Leading (L) & Supporting (S)
Output 4.1.2: <i>Forest fire-related public awareness and education programme designed, implemented.</i>	Number of fire awareness and education programmes conducted.	Between 2016-2021- A total of 360 forest fire awareness advertisements were aired. One new forest fire brochure designed and promoted.	20 localised public awareness campaigns launched.	L	Progress Reports from responsible entities: FD, JFB, NEPA, Mines & Geology, Jamaica Bauxite Institute. Preliminary Assessment in target areas. KAP study (Forest fire management)	Document review and verification of reports and records.	Annually	Total: 54,370 (CF 54,370; Other sources 0)	L: Forestry Department/ FOD S: RADA, MEGJC/ERMB, MSJ
Output 4.1.3: <i>Outreach programme for private forest owners developed and evaluated on an ongoing basis.</i>	Number of private forest land owners participating in outreach programme.	150 persons registered under the private forestry programme, participating in technical transfer meetings.	150 ++ planters benefiting from outreach programme. Materials produced.	M	Performance Reports FD, Report of private forest owners Programme, Satisfaction survey reports on programme provided by FD. PFP Coordinator's monthly reports / records.	Document review and verification of records.	Annually	Total: 50,027 (CF 50,027; Other sources 0)	L: Forestry Department/ FOD S: RADA, NEPA, 4-H Club network, environmental clubs (some are JET), JCF, JAS, JFB

Intended Result	KPI	Baseline 2020-21 (Y5 status)	Target (Y10 / 2026 unless otherwise stated)	Risk Level	Data Sources	M&E Methods	Monitoring Timeline	Budget (J\$'000)	Owner/ Responsibility: Leading (L) & Supporting (S)
Outcome 4.2: Strengthened capacity for natural resource valuations, carbon stock monitoring and silviculture.	Change in organizational capacity to conduct Natural Resource Valuations (NRVs), carbon stock monitoring and silvicultural practices.	Capacity developed in Carbon stock monitoring and execution of carbon stock assessments, through revision to forest inventory manual to include in five (5) pilot sites under EUBSP Indicator 5 activities. No capacity in NRV.	Capacity established. Silviculture Officer position added to Agency structure increasing capacity from one to two.		Capacity studies from FD, NEPA, Mines & Geology, Jamaica Bauxite Institute and other pertinent agencies.	Document review and verification of reports.	Annually.	Total: 59,347 (CF 59,244; Other sources 103)	L: Forestry Department S: None
Output 4.2.1: <i>Continuing training programmes on core areas of competence for Sustainable Forest Management developed and implemented.</i>	Number of individuals trained in areas of competence related to Sustainable Forest Management (within the Forestry Department and relevant agencies).	32 team members participated in 2 week NRV course (supporting SFM) in 2019.	Training course Silviculture for SFM for 6 FD staff implemented.	H	Performance Reports FD, Training reports, Reports from NEPA.	Document review and verification of records.	Annually	Total: 59,347 (CF 59,244; Other sources 103))	L: Forestry Department /CSD S: NEPA, PIOJ, Utech, UWI/DLS, CATIE, iitf, NCU, NSDMD (GIS-ELA)

Intended Result	KPI	Baseline 2020-21 (Y5 status)	Target (Y10 / 2026 unless otherwise stated)	Risk Level	Data Sources	M&E Methods	Monitoring Timeline	Budget (J\$'000)	Owner/ Responsibility: Leading (L) & Supporting (S)
Outcome 5.1: Improved availability of spatial data for sustainable forest management practices, promoting investment, and assessing vulnerabilities and risks in the forest sector.	Number of actions for climate change adaptation and mitigation implemented.	Nationally Determined Contribution (NDC) of Jamaica revised to include forest sector and greater climate change considerations.	Minimum of two (2) actions for climate change adaptation and mitigation, as detailed in revised NDCs, implemented.		PIOJ, STATIN, MEGJC/CCD data and reports.	Document review and verification of records.	Twice per year.	Total: 779,169 (CF 768,869; Other sources 10,300)	L: Ministry of Economic Growth and Job Creation/Climate Change Division S: FD /FS&TSD
Output 5.1.1: <i>Spatial representation of disturbance within broad leaf forests developed.</i>	Level of disturbance in spatial representation of disturbed broadleaf forests used to develop protection efforts.	Research implemented on spatial representation of disturbance. Updated map initiated for BJCM PA.	Use of Dis-aggregated spatial representation (defined levels of disturbance between 5% and 15%).	M	Satellite imagery (current). Aerial photographs.	Remote sensing, ground truthing. GIS spatial data analysis.	Once.	Total: 544,908 (CF 543,708; Other sources 1,200)	L: Forestry Department/ FS&TD S: NEPA, REDD Consultants (UK), NWC, UDC, Private land owners, MCs, Windsor Research Centre, JCDT, C-CAM

<p>Output 5.1.3: <i>Assessment of risks and vulnerabilities of forests and forest communities to a selected climate change hazard (e.g., fire, floods, landslides) as they impact on carbon stocks and emissions.</i></p>	<p>(Yes/No) Risks and vulnerability assessment completed, regarding impact on carbon stocks and emissions of climate change hazards in forests and forest communities.</p>	<p>Some vulnerability maps exist under the NAP. Under AP-FM project, vulnerability maps were done for Rio Minho Watershed. Between 2019 and 2021 several gap analyses and vulnerability assessments were completed for four (4) sectors (Transport, Energy, Agriculture, Forestry & Land use) as part of climate change adaptation & mitigation planning. For the forest sector, vulnerability assessments were completed to support the enhanced/ revised NDC for the country which was submitted in June 2020.</p>	<p>Risks and vulnerability assessment on carbon stocks and emissions in forests within the NDC completed (June 2025).</p>	<p>L</p>	<p>Project reports PPCR, AP-FM and subsequent technical reports. NDC papers.</p>	<p>Document review and verification of reports and records. Spatial data and reports.</p>	<p>Annually</p>	<p>Total: 71,150 (CF 62,050; Other sources 9,100)</p>	<p>L: Ministry of Economic Growth and Job Creation/CCD S: FD/FS&TD, ODPEM, SDC, NEPA</p>
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Intended Result	KPI	Baseline 2020-21 (Y5 status)	Target (Y10 / 2026 unless otherwise stated)	Risk Level	Data Sources	M&E Methods	Monitoring Timeline	Budget (J\$'000)	Owner/ Responsibility: Leading (L) & Supporting (S)
Output 5.1.4: <i>Lands verified and mapped in the private forestry programme (PFP) showing contribution to forest cover; database of private forest owners maintained (NFD).</i>	Area (Hectares) of PFP participants' lands verified and mapped to support contribution to forest cover/ reforestation efforts.	700 established sites - 164 sites surveyed and mapped representing 106 ha.	200 sites surveyed and monitored.	L	Verification mapping reports.	Document review and verification of reports and records. GIS techniques identify and capture private land parcels ; ground truthing (field verification) and reconnaissance (field-observations); survey techniques.	Annually	Total: 163,111 (CF 163,111; Other sources 0)	L: Forestry Department/ FOD, ICT and FS&TD S: Private land owners, NLA
Outcome 5.2: Strengthened capacity for impact and vulnerability assessments and for management of research and knowledge systems.	Number of joint research initiatives generating scientific data that contribute to sustainable forest management.	No joint research initiatives regarding SFM.	To be determined.		Performance Reports FD: Research department, NEPA, UWI-DLS, CCD-MEGJC, JCDT and other NGOs.	Document review and verification of reports and records.	Annually.	Total: 293,011 (CF 287,711; Other sources 5,300)	L: Forestry Department S: IOJ, UWI/DLS

Intended Result	KPI	Baseline 2020-21 (Y5 status)	Target (Y10 / 2026 unless otherwise stated)	Risk Level	Data Sources	M&E Methods	Monitoring Timeline	Budget (J\$'000)	Owner/ Responsibility: Leading (L) & Supporting (S)
Output 5.2.1: <i>Research outputs related to sustainable forest management and the impact of climate change on all forest types in Jamaica collected and circulated.</i>	Number of research outputs (by type) collected and made accessible through Clearing House Mechanism.	Few research outputs available. Clearing House Mechanism not established.	To be determined	M	Meeting reports/records working group. Research Department Report, Performance reports FD.	Document review and verification of reports and records.	Annually	Total: 62,300 (CF 62,300; Other sources 0)	L: Institute of Jamaica S: FD/FS&TD, NEPA, UWI/CSG, UWI/DLS
Output 5.2.2: <i>Forest fire assessments conducted.</i>	Number of forest fire assessments (by type) conducted.	Seven (7) forest fire assessment were conducted and reports submitted between April 2020 to February 2021 estimating a total of 8 ha lost.	Protocols for fire assessments developed and implemented.	M	Progress Reports from responsible entities.	Document review and verification of reports and records. Spatial data and maps.	Annually	Total: 168,111 (CF 163,111; Other sources 5,000)	L: Forestry Department/ FOD and FS&TD S: MEGJC/ERMB, MSJ, JFB, ODPEM, RADA, SDC
Output 5.2.3: <i>The engagement of the Forestry Department in consultations on impact assessments regarding mining and quarrying</i>	(Yes/No) Pertinent impact assessments reviewed by the Forestry Department.	FD is not engaged in consultations on impact assessments regarding mining and quarrying proposed activities in forest lands.	FD fully engaged in consultations on impact assessments in forested areas.	H	Impact assessment reports. Research and documentation on impacts of mining and quarrying on forests.	Document review and verification of reports.	Every 5 years	Total: 62,600 (CF 62,300; Other sources 300)	L: National Environment and Planning Agency S: FD, MTM, UNDP, MTM/MGD

Intended Result	KPI	Baseline 2020-21 (Y5 status)	Target (Y10 / 2026 unless otherwise stated)	Risk Level	Data Sources	M&E Methods	Monitoring Timeline	Budget (J\$'000)	Owner/ Responsibility: Leading (L) & Supporting (S)
<i>proposed activities in forest lands strengthened.</i>									
Outcome 5.3: : Improved collaborative monitoring of forest resources.	Evidence of increased institutional capacities for Measuring, Reporting and Verifying (MRV) deforestation and forest degradation.	MRV training done by FD team members.	To be determined.		REDD+ readiness project report, REDD+ readiness project stakeholders' reports. FD performance reports.	Document review. Surveys and interviews with stakeholders . Needs & Capacity Assessment.	Annually	Total: 1,072,470 (CF 1,004,681; Other sources 67,789)	L: Forestry Department S: MEGJC/CCD, NEPA, UNEP, UNDP, IOJ
	(Yes/No) Robust and transparent National Forest Monitoring System (NFMS) established.	NFMS established (2020).	NFMS operational.		Performance Reports FD.	Document review.	Annually		L: Forestry Department S: None
Output 5.3.1: <i>Improved availability of data for driving the growth and investment in the forest sector (both timber and non-timber).</i>	Number of Growth & Yield curves for primary commercial species developed.	Growth & Investment data for 2 species (Caribbean Pine & Blue Mahoe) exist (2015)	Growth & Investment data for 6 species (Cedar, Spanish Elm, Santa Maria Teak, British Honduras Mahogany and WI Mahogany completed.	H	Performance Reports FD.	Document review and verification of reports and records	Annually	Total: 401,747 (CF 380,547; Other sources 21,200)	L: Forestry Department/ FS&TD S: JBDC, NCU, Private land owners, LFMCS, CBOs, SRC, Utech, UWI/DLS

Intended Result	KPI	Baseline 2020-21 (Y5 status)	Target (Y10 / 2026 unless otherwise stated)	Risk Level	Data Sources	M&E Methods	Monitoring Timeline	Budget (J\$'000)	Owner/ Responsibility: Leading (L) & Supporting (S)
Output 5.3.3: <i>Weather stations placed in strategic locations within/ close to forested areas to garner additional data to support sustainable forest management practices.</i>	(Yes/No) Climate data/information obtained from AWSs strategically placed within/close to forested areas provided for SFM planning.	One station established in forested area (Bull Head Mountain).	Three-four AWS Data collection and analysis supporting sustainable forest management practices. Models are developed and linked to bush fire index, biodiversity (temperature and rainfall, etc.), storm damage.	H	Monitoring report MSJ. Performance reports FD.	Automatic and manual weather station data to be collected monthly.	Monthly	Total: 68,990 (CF 61,080; Other sources 7,910)	L: Meteorological Service of Jamaica S: FD/FS&TD, MEGJC/CCD
Output 5.3.4: <i>National Forest Monitoring System (NFMS) using Permanent Sampling Plots (PSPs) to investigate and determine climate change impacts.</i>	Number of Permanent Sample Plots established to measure emission from deforestation and forest degradation.	Some PSPs established in certain forest types (2015-16).	Additional 50, bringing the total to 200 PSPs established. Carbon stocks and other parameters calculated based on harmonised forest monitoring systems.	H	Programme Reports PSP.	Ground based forest inventories.	Every 5 years	Total: 181,111 (CF 163,111; Other sources 18,000)	L: Forestry Department/ FS&TD S: Academia, UWI/DLS, USFS, Private land owners

Intended Result	KPI	Baseline 2020-21 (Y5 status)	Target (Y10 / 2026 unless otherwise stated)	Risk Level	Data Sources	M&E Methods	Monitoring Timeline	Budget (J\$'000)	Owner/ Responsibility: Leading (L) & Supporting (S)
Output 5.3.5: <i>Targeted species (giant swallowtail, yellow-billed and black-billed parrot, water mahoe and bitterwood; others) surveyed, mapped.</i>	Number of populations of targeted flora and fauna species mapped by type.	Baseline to be assessed. Action Plan Giant Swallowtail exists (including maps?). Location of Black-billed Parrot and Yellow-billed Parrot mapped.	Two flora species surveyed and mapped: Hernandia and Bitterwood. Updates on the fauna species.	H	Reports from Survey/Mapping/ Transect Walk.	Document review, verification of records.	Annually	Total: 62,300 (CF 62,300; Other sources 0)	L: National Environment and Planning Agency and Forestry Department / FS&TSD S: IOJ, Birdlife, UWI/DLS, UDC, Windsor Research Centre
Output 5.3.6: <i>Knowledge Management and Strategic Planning of the NFMCP achieved</i>	Number of evaluations, planning documents and annual reports produced.	One (1) process evaluation conducted (2018). One (1) Mid Term Review planned (2021-2022), Four Annual Progress Reports completed. M&E technical working group formed. Online M&E system (BMES) introduced.	Annual Progress reports prepared. 2025. Final Evaluation. One planning document to support development of revised NFMCP produced. Forestry Conference supporting SFM held- year 7.	M	Performance Reports FD.	Verification of documents produced.	Annually.	Total: 358,322 (CF 337,643; Other sources 20,679)	L: Forestry Department/ CSD S: None

Table 2: Baselines and Targets for the Outputs of NFMCP 2021-2026

Ref Sheet #	BASELINE (2020-21):	2021-22 :	2022-23 :	2023-24 :	2024-25 :	2025-26 :
1.1.1	At least 5 agencies actively involved in Technical Advisory Committee (TAC), chaired by MEGJC and PIOJ.	.	Additional working relationships between the TAC and other coordinating bodies. Agreement on EIAs in forested areas between FD and NEPA.	Mangrove management addressed by a cross-sectoral mechanism, including private land owners. Nursery established for mangroves.	.	Full integration of all the agencies and private sector engaged in the forest sector in national decision-making processes relevant to the forest sector and their implementation.
1.1.2	Draft bill is under review by both OCPC and FD (re-scoping).	Text drafted by OPC. Rescoping of amendments by FD. Regulations 2001 are also being amended.	All inputs provided by FD and OPC to finalise amendments to the Forest Act.	Existing regulations 2001 updated by ERMB, based on instructions by FD.	Legislation promulgated (Y9)	.
1.1.3	4 Development Orders prepared and including forest management maps. (Define forest resources priorities, how to assess, how new are DCs)	FD and NEPA/Spatial planning division elaborate how to approach a section on forest estates and their management priorities in the Development Orders.	6 Development Orders prepared and updated regarding forest management priorities.	.	8 Dev. Orders prepared and updated regarding forest management priorities.	9 Development Orders prepared and updated regarding forest management priorities. Completed.

Ref Sheet #	BASELINE (2020-21):	2021-22 :	2022-23 :	2023-24 :	2024-25 :	2025-26 :
1.1.4	Documents submitted to NLA. SCJ has 1000 ha of wetland available, Canoe Valley has over 2000 acres of wetlands. Properties where ownership cannot be identified (some are natural lands). 2,267 ha of mangroves managed as forest estates (2015)	700 ha of mangrove forest under management of FD.	Set up inventory application and start off database (funding needed). Research possibility of contributing terrestrial and swamp lands (e.g. returned from bauxite, SCJ lands) for REDD+ implementation. Agreement with SCJ needed.	Transfer of Management Responsibility for Mangroves Completed. Update NLA Property inventory.	Further research of other areas with potential for transfer to FD (North Negril Morass, Lands east of N/S Highway, Canoe valley, etc)	Transfers of terrestrial lands (1000 ha) for REDD+ completed and of mangroves and swamp lands initiated. Updates NLA Property inventory done.
1.1.5	Protection and enforcement approaches in place. Mechanisms to detect encroachment on forest estates include patrol plans and rangers reports. Surveillance solutions being introduced. Data system on incidents in protected areas (held by NEPA) and particular	TBD	Capacity increased to address specific offences (e.g. land tenure issues). Legal support within stakeholders increased. Share "lease monitoring system". More signage.	Community meetings to share information, engage stakeholders and encourage compliance.	TBD	Package of approaches introduced and operational, documented and assessed on quality and applicability. Relationships for enforcement established with co-managers and stakeholders.

Ref Sheet #	BASELINE (2020-21):	2021-22 :	2022-23 :	2023-24 :	2024-25 :	2025-26 :
	breaches are shared with FD. Co-management partners (NEPA, FD, MAF, JNHT, NLA) meet quarterly.					
1.1.6	Existing Forest Regulations 2001 and Forest Act 1996.		New regulations being prepared by ERMB in tandem with the amendments to the forest act and regulations.	Media promotions of new regulations, in particular of specific recreational areas.	Completed. New permit and license programmes fully introduced (Y9).	
1.1.7	6-8 parcels are verified per annum. CCPA marked. BJCM boundaries have received some visibility and marking.	(EU BSP.) 219 km boundary for Cockpit Country completed. Bring the FD approach in alignment with NLA, have it approved and subsequently apply it	Bring the FD approach in alignment with NLA, have it approved and subsequently apply it	Regular operation of the boundary verification programme.	Regular operation of the boundary verification programme.	Regular operation of the boundary verification programme, aligned to national standards (NLA). Specially protected areas have signage to mark boundaries.
1.2.1	Invasive species are catalogued. IOJ houses the Clearing House Mechanism (database) on invasive species. Some species with location data. List available of flora in Closed Broadleaf Forest and Disturbed Broadleaf Forests.	On the ground verification and updated faunal list for 4 forest types (open dry forest - short & tall- added).	Floral component finalized for CBL, Short- and tall- limestone, and wetland, mangrove added. Ensuring the inclusion of fauna in the listings.	Complete document with lists on forest invasive plant species for all 6 forest types (added are Disturbed Broadleaf & Secondary Forest).		NFI completed.

Ref Sheet #	BASELINE (2020-21):	2021-22 :	2022-23 :	2023-24 :	2024-25 :	2025-26 :
1.2.2	Invasive species not managed within forest areas. However, invasive species removal combined with forest restoration activities in parts of BJCM PA. Also, IOJ manages Mason River Protected Area.	Tracking tool created and sent to implementing organizations for data collection.	National Invasive Species Strategy and Action Plan 2014-2020 updated. At least management of three or four invasive species is addressed within CBL forest cover class, as part of the Strategy and Action Plan.	Continuation of the implementation of the National Invasive Species Strategy and Action Plan, with regard to forest types.		Management of invasive species in all forest classes ensured through the Invasive species strategy and action plan.
1.2.3	Management/species recovery plans are included in NEPA's 10-year strategic plan: (a) Orchid Policy 2014-19 being revised; (b) Plant Conservation Strategy (being updated); (c) Jamaica Iguana Strategy and Implementation Plan; (d) Whistling Duck Management Plan; (e) Crocodile Action Plan; (f) Tree fern management plan 2020-2030.	Updates of existing species management and recovery plans. Species to be considered: 1. Water Mahoe <i>Hernandia</i> ; 2. Bitterwood (<i>Picrasma excelsa</i>), and 3. Juniper Cedar (<i>Juniper Barbedensis</i> var. <i>lucayana</i>).	Species management plan developed for Juniper Cedar (<i>Juniper Barbedensis</i> var. <i>lucayana</i>)	Species management plan developed for Bitterwood (<i>Picrasma excelsa</i>),	Species management plan developed for Water Mahoe (<i>Hernandia</i>) (Y9).	

Ref Sheet #	BASELINE (2020-21):	2021-22 :	2022-23 :	2023-24 :	2024-25 :	2025-26 :
2.1.2	Assessment report finalised as basis for follow up action. Three incentives: Technical Assistance; free seedlings under PFP; and Land Declaration Programme. (2015)	In-depth discussion of additional incentives with private land owners and other stakeholders. Action plan for the operationalization of all private forestry incentives as outlined in the Forest Act and Regulations developed.	In-depth discussion of additional incentives with private land owners and other stakeholders.	One additional incentive designed.	Additional (new /revised) incentive tested.	One (new / revised) incentive made available and promoted.
2.1.3	Experience of Yallas/Hope River scheme to be used. Position paper regarding PES prepared and sent to MEGJC, for subsequent submission to Cabinet Office.	.	Based on response MEGJC and cabinet to position paper, establish working group on PES. Consultancy on incentives for PES pilot programme implemented. Link it to the business model for FD.	PES within forested areas programme development started.	Pilot project PES operational.	PES within forested areas Pilot project conducted and completed.

Ref Sheet #	BASELINE (2020-21):	2021-22 :	2022-23 :	2023-24 :	2024-25 :	2025-26 :
2.1.4	46 alternate livelihood projects selected and awarded to forest community groups and NGOs. Project themes included: Agroforestry, Apiculture, Bamboo Utilization, Craft Item Production, Eco-Tourism, Medicinal/Nutritional Products, Rainwater Harvesting, Reforestation, Smart Agriculture - Water Catchment Areas, & Yam Stick Production. Lessons learned and results from livelihood activities (sustainable tourism, agroforestry) in BJCM PA.	25 projects awarded, completed implementation and close out reports submitted.	21 projects completed and close out reports submitted. Use learnings of the projects to provide guidelines for social enterprise development. At least one social forestry project supported.	Agro-foresters have roadmap to support the process (job description being developed).	At least one additional social forestry project supported.	Capacity built with the 16 LFMCs to continue and sustain the livelihood promotions. Social enterprises initiated and supported (bridge implementation gap of business planning).

Ref Sheet #	BASELINE (2020-21):	2021-22 :	2022-23 :	2023-24 :	2024-25 :	2025-26 :
2.2.1	List available of economic wood species in Jamaica relevant to timber harvesting (over 100 species).	Consultancies wood technology implemented to outline assessment.	Selection of priority wood species for assessment done through collection of information on economic viability and pertinent processing methods.	Detailed assessments done.	.	Assessment and recommendations on 3-5 wood species completed.
2.2.2	Five sustainable harvesting plans completed (3 clusters) to inform AAC calculations and harvesting projections for FMPs.	Categories of allowable annual cut (AAC) per plantation/ forest stand / block established and included in FMPs.
2.3.1	No formal research programme exists for non-timber forest resources.	Based on market research survey done (under output 2.3.2), decide which inventories to carry out.	Research programme developed.	Pertinent marketing efforts established following the programme's recommendations.	.	Research programme and marketing actions evaluated, to support best approaches for future programing.
2.3.2	Market Research Survey on Non-timber Forest Products (Aug 2021) executed under Business development consultancy-EUBSP. Draft market research report was received.	Public education materials prepared based on market survey conducted.	Guidance documentation generated on identified products and their potential (Y7).	.	.	.

Ref Sheet #	BASELINE (2020-21):	2021-22 :	2022-23 :	2023-24 :	2024-25 :	2025-26 :
2.3.3	Two Investment profiles completed and promoted for Christmas trees and Bitterwood wood chips. Volumes and sales is: xxxx	Continuation of promotional activities regarding identified materials.	Inventories implemented. Increased distribution of bitterwood in planting programmes.	Continuation of promotional activities regarding identified materials. Establishment of plantations of bitterwood with high Quassin content.	Continuation of promotional activities regarding identified materials. Increased sales.	Non-timber market opportunities fully developed for sales (as indicated by increased sales).
2.3.4	One business strategy developed, which includes recreation. JCDT manages Portland Gap and Holywell.	Feasibility study on access , attractiveness & economic viability of Gourie site conducted. Development of fundraising strategy for this output.	Opportunities to expand recreational facilities/ opportunities in forested areas explored- at least one concept document developed. Preparation plan for establishing recreational activities in forested areas.	Development of visitors guidance and monitoring.	Opportunities to expand recreational facilities/ opportunities in forested areas explored- at least one concept document developed. Preparation plan for establishing recreational activities in forested areas.	Minimum one (1) recreational facility launched - in Bogue 2, St Ann.
2.3.5	Preservation scheme finalised for BJCM and submitted to OPC. JCDT draft ecotourism guidelines for Cockpit country available. Quarterly meetings JNHT and JCDT conducted.	.	Guidelines BJCM completed and gazetted by JNHT. Promotional activities on trails (eg Cuna-Cuna) and sites (eg Ladysfield Great House in Hayfield) implemented. Sensitive list for UNESCO WHS regarding Cockpit Country. Forest reserves information to be included. Trails and sites in Cockpit Country to be researched.	Draft Guidelines for cultural sites, monuments, trails and other sites in Cockpit Country.	One Guideline for use of cultural/ heritage trails and sites in the Cockpit Country completed (by Y9 - 2025).	.

Ref Sheet #	BASELINE (2020-21):	2021-22 :	2022-23 :	2023-24 :	2024-25 :	2025-26 :
3.1.1	Forest Estates: 600 ha (375,000 seedlings) for 2016-2021 planted. 526 ha maintained. Urban forestry: Guidelines drafted to support urban forestry programme. Urban planting: 180,641 trees. Mangroves: None.	150ha reforested. Minimum 370ha of forest plantations maintained. Urban forestry- Minimum 2,000 seedlings planted in urban spaces.	Minimum 100 ha reforested/70,000 seedlings planted to support urban forestry & other reforestation initiatives. Minimum 370 ha of forest plantations maintained. Mangrove rehabilitation- minimum 2ha rehabilitated (min 2,000 mangrove seedlings planted).	Minimum 70,000 seedlings planted to support urban forestry & other reforestation initiatives. Minimum 200ha of forest plantations maintained. Mangrove rehabilitation- TBD.	Minimum 70,000 seedlings planted to support urban forestry & other reforestation initiatives. Minimum 200ha of forest plantations maintained. Mangrove rehabilitation- TBD.	Total 700,000 tree seedlings planted (approx. 1,120 ha reforested). Over 1,000ha of forest plantations maintained. 2,000 ha of mangroves rehabilitated/restored.
3.1.2	As at March 31, 2021 a total of twelve (12) FMPs have been developed covering approximately ninety-four (94) estates or 41% of the island's 228 forest estates .	Cluster 2 FMP (St. Andrew) revised and Cluster 4 developed.	Cluster 17 FMP (Hanover) developed. Management Plan and economic valuation for Stepney-John Vale Forest Reserve (GEF-6). One FMP Framework document for all 25 FMU developed by Yr 7.	Buff Bay Pencar country FMP revised.	.	One FMP covering a FMU revised or developed per year.
3.1.3	Plans available for: Rio Cobre, Rio Minho, Drivers River. Plan for Swift River in draft.	.	Another watershed management plan added, which includes forest restoration activities. With MEGJC, work being done on watershed policy.	Watershed protection Act to be amended with collaboration of MEGJC/ERMB.	.	5 watershed management plans completed, which include forest restoration activities.

Ref Sheet #	BASELINE (2020-21):	2021-22 :	2022-23 :	2023-24 :	2024-25 :	2025-26 :
3.1.4	205,000 seedlings produced in 2021. J\$5 million generated in nursery revenue.	205,000 seedlings produced.	1.2 million seedlings produced. Seedling production offerings expanded - eight (8) new seedling species added to nursery production.	500,000 seedlings produced.	500,000 seedlings produced.	Seedling production capacity increased to 500,000 seedlings produced annually. Cumulative: 2.8 million. - J\$20million in nursery revenue generated cumulatively.
3.1.5	No mangrove management plan.	Mangrove Management Plan developed (NEPA to be consulted).	Implementation of Plan started. Mangrove seedlings nursery established as well as support for restoration seagrass beds.	Plan implemented by 25%	.	Plan implemented 50%.
3.1.6	No guidelines for management practices for riparian forests exist.	Research Plan for inventory of species composition (using remote sensing) in 20m bands from water.	5% Implementation of research and collection management practices.	40% Implementation of research and collection best practices.	60% Implementation of research and collection best practices.	Guidelines for best management practices published. 80% Implementation of research and collection best practices.
3.1.7	Draft guidelines for the establishment and maintenance of trees in urban settings developed for review.	Document (guidelines) being developed and approved	Implementation of guidelines. An Urban Renewal and Action Plan is being prepared by MEGJC. Also, MEGJC/URB works on green corridors programme.	Implementing guidelines. Review and revise guidelines.	More planting done and lessons learned collected. At least 6 different green corridors created by MEGJC (urban renewal development programme).	Guidelines developed and utilised as evidenced by execution of urban tree planting activities.
3.1.9	Initiative started in 2019. Design underway for GPS enabled tree tracking	NTPI underway. Total of 511,947 trees planted.	Three million seedlings planted and distributed (Y7).	.	.	.

Ref Sheet #	BASELINE (2020-21):	2021-22 :	2022-23 :	2023-24 :	2024-25 :	2025-26 :
	application-876 trees.					
3.2.2	No REDD+ readiness Strategy. Analytical report on DFDD produced. (2019). Manual for NFI drafted. Forest monitoring being done by PSPs (carbon stock), MSJ (weather data). JCDT has a wide area network of forest sensors (air temperature and humidity).	Land use revision completed; a new analytical report of the drivers of deforestation and forest degradation done. Consultations, training sessions, workshops.	National REDD+ strategy developed and approved. National validation workshop held. New analytical report completed. The conclusion of each land use study is followed by the analytical report to understand the changes being observed.	Phase 2 of REDD + readiness initiated. Carbon stocks and emission levels calculated.		REDD+ strategy detailing adherence to all 7 Cancun principles developed and approved. (Year 7?). Leveraging the REDD+ mechanism. Forest emission reference levels calculated.
3.3.1	30 groups trained / 250 persons sensitised through EUBSP Indicator 4 activities. In 2019-2020 Proposal writing workshops held islandwide targeting community groups. More that 20 community groups successfully secured project funding under EUBSP.	Executed for additional 2 groups per zone.	Additional 2 groups per zone.	Additional 2 groups per zone.	Additional 2 groups per zone.	Minimum of 20 additional groups trained / 375 persons sensitised.

Ref Sheet #	BASELINE (2020-21):	2021-22 :	2022-23 :	2023-24 :	2024-25 :	2025-26 :
3.3.2	Training on governance and decision-making started.	Continuation governance training/capacity building. One (1) Annual meeting of the National LFMC Executive Committee held to address Governance issues.	Roadmap for sustained engagement of LFMC developed and finalised. Continuation Governance training/capacity building.	One (1) Annual meeting of the National LFMC Executive Committee held to address Governance issues. Continuation Governance training/capacity building.	One (1) Annual meeting of the National LFMC Executive Committee held to address Governance issues. Continuation Governance training/capacity building.	Minimum three (3) recommendations from LFMC study executed (<i>Support provided for National LFMC executive; LFMC roadmap developed and implemented; Governance Capacity building executed</i>).
3.3.3	FD: Total of 25 community groups (over 500 persons) across forest fire hotspot areas trained in Forest Fires Management. JCDT: Fire management training conducted and equipment provided in BJCM NP.	Training suspended temporarily due to COVID-19. Focus on revision and dissemination of training materials/manual. MSJ working on bush fire warning index.	5 additional groups trained. Bush fire warning index to be streamlined.	5 additional groups trained.	5 additional groups trained.	40 groups trained. Bush Fire Warning Index utilised.

Ref Sheet #	BASELINE (2020-21):	2021-22 :	2022-23 :	2023-24 :	2024-25 :	2025-26 :
4.1.1	Cumulatively, 1,400 schools (in 14 parishes) visited and 675 public education/ awareness sessions implemented. Forest Trek implemented.	Targeted participation of the Agency in school visits, expos, public awareness events island wide: •260 school visits •50 public awareness events. •Public awareness and perception survey executed •Forest trek executed. Website upgraded.	290 school visits, 50 public awareness events. Public awareness and perception survey completed. Forest Trek implemented.	290 school visits, 50 public awareness events. Forest Trek implemented.	290 school visits, 50 public awareness events. Forest Trek implemented.	Cumulatively, 2,850 school visits (in 14 parishes) and 875 public awareness events implemented.
4.1.2	Between 2016-2021- A total of 360 forest fire awareness advertisements were aired. One new forest fire brochure designed and promoted.	One Localised public education campaign, connected to training.	5 Localised public educ campaigns, connected to training	5 Localised public educ campaigns, connected to training	5 Localised public educ campaigns, connected to training	20 localised public awareness campaigns launched.
4.1.3	150 persons registered under the private forestry programme, participating in technical transfer meetings.	Outreach programme activities identified and further developed to support technical knowledge transfer.	Outreach programme document finalised. One (1) technical transfer meeting held.	Outreach programme implemented. One (1) technical transfer meeting held.	Outreach programme implemented. One (1) technical transfer meeting held.	150 ++ planters benefiting from outreach programme. Materials produced.
4.2.1	32 team members participated in 2 week NRV course (supporting SFM) in 2019.	.	Process evaluation NRV training executed.	Training course CSM for 6 FD staff implemented.	Training course NRV for 6 FD staff implemented.	Training course Silviculture for SFM for 6 FD staff implemented.

Ref Sheet #	BASELINE (2020-21):	2021-22 :	2022-23 :	2023-24 :	2024-25 :	2025-26 :
5.1.1	Research implemented on spatial representation of disturbance. Updated map initiated for BJCM PA.		Assessment of level of disturbance in spatial representation of disturbed broadleaf forests.			Use of Dis-aggregated spatial representation (defined levels of disturbance between 5% and 15%).
5.1.3	Some vulnerability maps exist under the NAP. Under AP-FM project, vulnerability maps were done for Rio Minho Watershed. Between 2019 and 2021 several gap analyses and vulnerability assessments were completed for four (4) sectors (Transport, Energy, Agriculture, Forestry & Land use) as part of climate change adaptation & mitigation planning. For the forest sector, vulnerability assessments were completed to support the enhanced/revised		First risks and vulnerability assessments, as they relate to carbon stocks and carbon emissions in forests and forest communities, produced and validated.	Risk and vulnerability assessment will contribute to next NDC. This will include the forest sector.	Data collection for the NDC update. Revisit the estimates done for the 2021 NDC submission.	Risks and vulnerability assessment on carbon stocks and emissions in forests within the NDC completed (June 2025).

Ref Sheet #	BASELINE (2020-21):	2021-22 :	2022-23 :	2023-24 :	2024-25 :	2025-26 :
	NDC for the country which was submitted in June 2020.					
5.1.4	700 established sites - 164 sites surveyed and mapped representing 106 ha.	40 sites surveyed and mapped.	40 sites surveyed and mapped.	40 sites surveyed and mapped.	40 sites surveyed and mapped.	200 sites surveyed and monitored.
5.2.1	Few research outputs available. Clearing House Mechanism not established.	TBD.	.	TBD.	.	To be determined
5.2.2	Seven (7) forest fire assessment were conducted and reports submitted between April 2020 to February 2021 estimating a total of 8 ha lost.	2 assessments per year. MSJ collects water catchment data on timely basis.	2 assessments per year	2 assessments per year	2 assessments per year	Protocols for fire assessments developed and implemented.
5.2.3	FD is not engaged in consultations on impact assessments regarding mining and quarrying proposed activities in forest lands.	.	Interagency agreement on EIAs in forested areas concluded.	Report produced on Impact of mining and quarrying on forest goods, services and values.	.	FD fully engaged in consultations on impact assessments in forested areas.

Ref Sheet #	BASELINE (2020-21):	2021-22 :	2022-23 :	2023-24 :	2024-25 :	2025-26 :
5.3.1	Growth & Investment data for 2 species (Caribbean Pine & Blue Mahoe) exist (2015)	.	Two more species examined.	Four more species examined.	.	Growth & Investment data for 6 species (Cedar, Spanish Elm, Santa Maria Teak, British Honduras Mahogany and WI Mahogany) completed.
5.3.3	One station established in forested area (Bull Head Mountain).	Climate and weather data/Information provided to FD as requested. AWS (Automatic Weather Station) collects hourly data.	Climate and weather data/Information provided to FD as requested. Development of models by MSJ. Link to bush fire index.	Climate and weather data/Information provided to FD as requested.	Climate and weather data/Information provided to FD as requested.	Three-four AWS Data collection and analysis supporting sustainable forest management practices. Models are developed and linked to bush fire index, biodiversity (temperature and rainfall, etc.), storm damage.
5.3.4	Some PSPs established in certain forest types (2015-16).	Strategy and plan developed for establishing over 450 PSPs across all forest types, private and publicly owned and for the long term. Initiatives to develop forest monitoring systems harmonised.	Additional 53 PSPs established.	Additional 50 PSPs established. Forest monitoring systems strengthened.	Additional 50 PSPs established. Documentation produced regarding use and effectiveness of existing and new forest monitoring systems.	Additional 50, bringing the total to 200 PSPs established. Carbon stocks and other parameters calculated based on harmonised forest monitoring systems.
5.3.5	Baseline to be assessed. Action Plan Giant Swallowtail exists (including maps?). Location of Black-billed Parrot and Yellow-billed Parrot mapped.	Priority flora species to be assessed by FD (Water Mahoe, Bitterwood and Juniper). Work on fauna needs to be projectised by NEPA.	.	.	.	Two flora species surveyed and mapped: Hernandia and Bitterwood. Updates on the fauna species.

Ref Sheet #	BASELINE (2020-21):	2021-22 :	2022-23 :	2023-24 :	2024-25 :	2025-26 :
5.3.6	One (1) process evaluation conducted (2018). One (1) Mid Term Review planned (2021-2022), Four Annual Progress Reports completed. M&E technical working group formed. Online M&E system (BMES) introduced.	Progress report 2021; Mid-Term Review. Reg. Conference on SFM & Conservation. Update NFMCP	Progress report 2022. Update/revision NFMCP. Forestry Conference on SFM held.	Progress report 2023. Update Knowledge Management Database.	Progress report 2024. Development of next NFMCP (stakeholder workshops)	Annual Progress reports prepared. 2025. Final Evaluation. One planning document to support development of revised NFMCP produced. Forestry Conference supporting SFM held- year 7.

Table 3 Institutional involvement in the implementation of NFMCP 2021-2026

Number	Name of Institution	Abbreviation	Engaged in following Outputs (& Outcomes)
Primary Implementing Entities (PIEs)			
PIE1	Forestry Department	FD	L: 0.a, 0.b, 0.c, 1.1.b, 1.1.1, 2.1, 2.2, 2.3, 3.1.a, 3.1.b, 3.2.a, 3.2.b, 3.3.a, 3.3.b, 4.1.a, 4.1.b, 4.2, 5.1, 5.2, 5.3.a, 5.3.b S: 1.1.a, 1.2
PIE2	Forestry Department/CCMD	FD/CCMD	L: 2.3.1, 2.3.2, 2.3.3, 4.1.1
PIE3	Forestry Department/CSD	FD/CSD	L: 2.3.4, 4.2.1, 5.3.6 S: 2.3.5,
PIE4	Forestry Department/FOD	FD/FOD	L: 2.1.4, 3.1.1, 3.1.4, 3.1.5, 3.1.7, 3.1.9, 3.3.1, 3.3.2, 3.3.3, 4.1.2, 4.1.3, 5.1.4, 5.2.2
PIE5	Forestry Department/FS&TSD	FD/FS&TSD	L: 1.1.7, 1.2.1, 2.1.3, 2.2.1, 2.2.2, 2.3.1, 3.1.2, 3.1.5, 3.1.6, 3.2.2, 5.1.1, 5.1.4, 5.2.2, 5.3.1, 5.3.4 S: 1.2.2, 1.2.3, 3.1.3, 5.1.3, 5.2.1, 5.2.3, 5.3.3, 5.3.5
PIE6	Forestry Department/ICTD	FD/ICTD	L: 5.1.4
PIE7	Forestry Department/L&FESD	FD/L&FESD	L: 1.1.5, 2.1.2 S: 1.1.2, 1.1.3, 1.1.4, 1.1.6
PIE8	Institute of Jamaica	IOJ	L: 5.2.1 S: 5.2, 5.3.a, 1.2.1, 1.2.2, 1.2.3, 3.1.5, 5.3.5
PIE9	Jamaica National Heritage Trust	JNHT	L: 2.3.5 S: 1.1.1
PIE10	Meteorological Service of Jamaica	MSJ	L: 3.3.a, 5.3.3 S: 1.1.1, 3.3.3, 4.1.2, 5.2.2
PIE11	Ministry of Economic Growth and Job Creation/CCD	MEGJC/CCD	L: 5.1, 5.1.3 S: 0.c, 5.3.a, 3.2.2, 4.1.1, 5.3.a, 5.3.3
PIE12	Ministry of Economic Growth and Job Creation/ERMB	MEGJC/ERMB	L: 1.1.2, 1.1.6 S: 1.1.5, 3.1.3, 3.1.5, 4.1.2, 5.2.2
PIE13	Ministry of Economic Growth and Job Creation/ Planning Dept.	MEGJC/Planning	L: 1.1.a, 1.1.1 S: 3.1.7
PIE14	National Environment and Planning Agency	NEPA	L: 1.2, 1.1.3, 1.2.2, 1.2.3, 3.1.3, 5.2.3, 5.3.5 S: 0.a, 1.1.a, 2.1, 4.1.a, 5.3.a, 1.1.1, 1.1.2, 1.1.5, 1.1.6, 1.2.1, 2.1.3, 2.3.5, 3.1.1, 3.1.2, 3.1.5, 3.1.6, 3.1.9, 3.2.2, 4.1.1, 4.1.3, 4.2.1, 5.1.1, 5.1.3, 5.2.1

Number	Name of Institution	Abbreviation	Engaged in following Outputs (& Outcomes)
PIE15	National Land Agency	NLA	L: 1.1.4 S: 1.1.1, 1.1.5, 1.1.7, 3.1.2, 5.1.4
PIE16	University of the West Indies/ Dept. of Life Sciences	UWI/DLS	S: 0.c, 5.2, 1.1.1, 1.2.1, 1.2.2, 1.2.3, 2.2.1, 3.1.1, 3.1.5, 4.2.1, 5.2.1, 5.3.1, 5.3.4, 5.3.5
Secondary Implementing Entities			
MDAs			
MDA1	Bureau of Standards Jamaica	BSJ	S: 2.2.2, 2.3.3
MDA2	Cabinet Office	CO	S: 1.1.a, 1.1.2, 1.1.6
MDA3	HEART Trust NTA	HEART	S: 2.1.4
MDA4	Jamaica Business Development Corporation	JBDC	S: 2.1.4, 2.2.1, 2.3.3, 5.3.1
MDA5	Jamaica Constabulary Force	JCF	S: 1.1.5, 2.2.2, 4.1.3
MDA6	Jamaica Customs Agency	JCA	S: 1.1.2
MDA7	Jamaica Defense Force	JDF	S: 1.1.5
MDA8	Jamaica Fire Brigade	JFB	S: 3.3.a, 3.1.2, 3.3.2, 3.3.3, 4.1.3, 5.2.2
MDA9	Jamaica Promotions Corporation	JAMPRO	S: 2.3.3
MDA10	Mines and Geology Division	MTM/MGD	S: 1.1.2, 5.2.3
MDA11	Ministry of Agriculture and Fisheries	MAF	S: 1.1.5, 2.3.3, 3.1.4, 3.1.7, 3.1.9
MDA12	Ministry of Education and Youth	MOEY	S: 4.1.1
MDA13	Ministry of Finance and Public Service	MOFPS	S: 2.1, 1.1.1, 2.1.2
MDA14	Ministry of Local Government and Community Development	MLGCD	S: 3.1.7, 3.3.3
MDA15	Ministry of Science, Energy and Technology	MSET	S: 0.c
MDA16	Ministry of Tourism	MOT	S: 1.1.6
MDA17	Ministry of Transport and Mining	MTM	S: 5.2.3
MDA18	Municipal Corporations	MC	S: 2.1, 1.1.3, 2.1.2, 5.1.1
MDA19	National Emergency. Response GIS Team	NERGIS	
MDA20	National Irrigation Commission	NIC	S: 3.1.6
MDA21	National Solid Waste Management Authority	NSWMA	S: 2.1.3, 3.1.4, 3.1.7, 3.1.9
MDA22	National Spatial Data Management Division (GIS-ELA)	NSDMD	S: 4.2.1
MDA23	National Water Commission	NWC	S: 1.1.7, 3.1.6, 5.1.1

Number	Name of Institution	Abbreviation	Engaged in following Outputs (& Outcomes)
MDA24	Office of the Chief Parliamentary Council	OCPC	S: 1.1.a, 1.1.2, 1.1.6
MDA25	Office of Disaster Preparedness and Emergency Management	ODPEM	S: 3.1.3, 5.1.3, 5.2.2
MDA26	Office of the Prime Minister	OPM	S: 3.1.9
MDA27	Parish Development Committees	PDC	S: 2.1, 1.1.3, 2.1.2
MDA28	Planning Institute of Jamaica	PIOJ	L: 1.1.1 S: 3.1.3, 4.2.1
MDA29	Rural Agricultural Development Authority	RADA	S: 1.1.5, 2.1.4, 3.3.3, 4.1.2, 4.1.3, 5.2.2
MDA30	Scientific Research Council	SRC	S: 2.2.1, 5.3.1
MDA31	Social Development Commission	SDC	S: 2.1.4, 3.1.2, 3.3.1, 3.3.3, 5.1.3, 5.2.2
MDA32	Tourism Product Development Company	TPDCO	S: 1.1.6, 1.1.7, 2.1.4, 2.3.4, 3.1.2
MDA33	Urban Development Corporation	UDC	S: 1.1.5, 1.2.3, 3.1.5, 3.2.2, 5.1.1, 5.3.5
MDA34	Water Resources Authority	WRA	S: 2.1.3, 3.1.3, 3.1.6
CSOs and Academia			
CSO1	4-H clubs/ youth environmental clubs (JET)		S: 4.1.3
CSO2	Alligator Head Foundation		S: 3.1.5
CSO3	Birdlife	BL	S: 5.3.5
CSO4	Caribbean Coastal Area Management Foundation	CCAM	S: 1.1.7, 3.1.1, 3.1.5, 3.2.2, 5.1.1
CSO5	Caribbean Tree Planting Project/ Car. Philanthropic Alliance	CTPP	S: 3.1.4, 3.1.9
CSO6	Community based organisations	CBOs	S: 2.1.4, 2.3.4, 2.3.5, 3.1.1, 3.1.7, 3.3.3, 5.3.1
CSO7	Environmental Foundation of Jamaica	EFJ	S: 2.1.4, 3.3.1
CSO8	Food for the Poor	FFP	S: 3.1.4, 3.1.9
CSO9	Jamaica Agricultural Society	JAS	S: 2.1.4, 4.1.3
CSO10	Jamaica Conservation for Development Trust	JCDT	S: 0.a, 1.1.5, 1.1.7, 1.2.1, 1.2.2, 2.1.4, 2.3.4, 2.3.5, 3.1.9, 3.2.2, 3.3.3, 5.1.1
CSO11	Local Forest Management Committees	LFMC	S: 1.1.3, 2.1.4, 2.3.4, 2.3.5, 3.1.1, 3.1.2, 3.1.4, 3.1.9, 3.3.3, 5.3.1
CSO12	Natural History Society of Jamaica	NHSJ	
CSO13	Non-gov. Organisations (various)	NGO	S: 3.1.3, 3.1.5, 3.3.1
CSO14	Northern Caribbean University	NCU	S: 2.2.1, 4.2.1, 5.3.1
CSO15	Oracabessa MPA		S: 3.1.5

Number	Name of Institution	Abbreviation	Engaged in following Outputs (& Outcomes)
CSO16	Portland Environmental Protection Agency	PEPA	S: 3.1.5
CSO17	Trees that Feed	TTF	S: 3.1.4, 3.1.9
CSO18	University of Technology	Utech	S: 2.2.1, 4.2.1, 5.3.1
CSO19	Windsor Research Centre	WRC	S: 1.1.7, 5.1.1, 5.3.5
Private Sector			
PS1	Bauxite Companies		S: 3.1.9
PS2	Furniture makers, wood workers		S: 2.2.1
PS3	Home Owners		S: 2.1.3
PS4	Importers		S: 2.2.1
PS5	Local Farmers		S: 1.2.2
PS6	Private Forest Land Owners	PLO	S: 1.1.3, 1.1.7, 2.1.2, 2.2.2, 3.1.1, 3.1.9, 5.1.1, 5.1.4, 5.3.1, 5.3.4
PS7	Private Sector Organisation of Jamaica	PSOJ	S: 2.3.3, 3.1.7
PS8	Private Tree Nurseries		S: 3.1.4, 3.1.9
PS9	Security agencies	SA	S: 1.1.5
International Agencies			
IA1	Food and Agricultural Organisation	FAO	S: 2.3.1, 3.2.2
IA2	International Institute of Environment and Development	IIED	S: 0.a
IA3	International Institute of Tropical Forestry	IITF	S: 4.2.1
IA4	The Nature Conservancy	TNC	
IA5	Tropical Agricultural Research and Higher Education Centre	CATIE	S: 4.2.1
IA6	United Nations Development Programme	UNDP	S: 5.3.a, 3.2.2, 5.2.3
IA7	United Nations Environment	UNEP	S: 5.3.a, 3.2.2
IA8	US Forest Services	USFS	S: 5.3.4
IA9	World Conservation Union	IUCN	S: 2.3.1

Table 4: Risk Register 2022

Output #	Risk Level	Identified Risk Statement (Top 10) and some new ones provided by respondents	Risk Mitigation Strategy (for negative risks)	Additional Comments
1.1.1	L/M	STAKEHOLDER BUY-IN & WEAK ENGAGEMENT/COORDINATION	<p>Ensure that the participation in the TAC is useful day-to-day work in the institutions.</p> <p>Establish efficient structures for sharing information.</p> <p>When appropriate, ensure buy in from stakeholders in day-to-day management planning and the inclusion of these new forest sector areas in development orders.</p> <p>Address capacity needs of groups.</p> <p>Sustain government engagement through a combination of high level, public, and working level meetings in order to leverage maximum commitment. All major agreements and key discussions will be clearly documented and communicated to all government/partner agencies/stakeholders.</p> <p>Foster broad agency ownership and cooperation to develop capacity from the onset and at all levels. Broad sectoral engagement and incorporation of partners' goals and aspirations at all levels. Cross sectorial mechanism to be utilised as well to support and strengthen gender coordination & inclusiveness. Communication structures to be maintained. Improve the TAC process in terms of contributions and roles.</p>	(Y6) The need for greater engagement by the lead entity for implementation of the plan, together with other implementing entities and stakeholders, continues to be unrealised.
1.1.1	M	POOR DATA MANAGEMENT	Encourage development of sound and well-designed systems to support information management and knowledge exchange across the sector. Shift focus from silos to central data management pools.	
1.1.1	M	SUSTAINABILITY OF OUTCOMES	Ongoing planning and identification of programmes, projects and resources to support /fund continued activities geared at supporting outcomes. Increase collaboration with other sectors as well as with CBOs and NGOs	

Output #	Risk Level	Identified Risk Statement (Top 10) and some new ones provided by respondents	Risk Mitigation Strategy (for negative risks)	Additional Comments
1.1.2	H / M	STAFF TURN-OVER	Timely recruitment of specialised staff. Training of a sufficient number of staff in specialised fields. • Effective succession Planning should be implemented Staff with institutional knowledge should ensure complete handover of materials and information. New legal team at FD. Need to be brought up to speed.	
1.1.2	M	COVID-19 PANDEMIC	• Where possible, anticipate delays from usual turnaround times; • Arrange virtual meetings where possible; NB - This risk is becoming less significant over time.	
1.1.2	H	STAKEHOLDER BUY-IN	As with all legislation, the public (as well as the responsible Ministry) may be resistant to change. This can be mitigated through greater stakeholder engagement from an earlier stage. However, it is noted that the process is far underway.	
1.1.2	H	DELAYS WITH PARTNER AGENCIES	• Seek high level interventions to expedite/prioritise output (e.g. Minister, Permanent Secretary) • Keep informal communication channels open where possible; • Ensure submissions to Partner Agencies are thoroughly vetted and clear prior to submission to limit back and forth. NB This risk is inherent in the legislative process and may not be effectively mitigated, especially given that process is at an advanced stage.	
1.1.2	H	LONG LAG TIMES TO GET WORK UNDERWAY	FD to speed up rescoping process.	

Output #	Risk Level	Identified Risk Statement (Top 10) and some new ones provided by respondents	Risk Mitigation Strategy (for negative risks)	Additional Comments
1.1.3	L/ H	STAKEHOLDER BUY-IN	<p>Ensure that the participation in the TAC is useful day-to-day work in the institutions.</p> <p>Establish efficient structures for sharing information.</p> <p>When appropriate, ensure buy in from stakeholders in day-to-day management planning and the inclusion of these new forest sector areas in development orders.</p> <p>Address capacity needs of groups.</p> <p>As with all legislation, the public (as well as the responsible Ministry) may be resistant to change. This can be mitigated through greater stakeholder engagement from an earlier stage. However, it is noted that the process is far underway.</p>	
1.1.3	M	COVID-19 PANDEMIC	<ul style="list-style-type: none"> • Where possible, anticipate delays from usual turnaround times; • Arrange virtual meetings where possible; <p>NB - This risk is becoming less significant over time.</p>	
1.1.3	H	DELAYS WITH PARTNER AGENCIES	<ul style="list-style-type: none"> • Seek high level interventions to expedite/prioritise output (e.g. Minister, Permanent Secretary) • Keep informal communication channels open where possible; • Ensure submissions to Partner Agencies are thoroughly vetted and clear prior to submission to limit back and forth. <p>NB This risk is inherent in the legislative process and may not be effectively mitigated, especially given that process is at an advanced stage.</p>	

Output #	Risk Level	Identified Risk Statement (Top 10) and some new ones provided by respondents	Risk Mitigation Strategy (for negative risks)	Additional Comments
1.1.3	H	POLICY MISALIGNMENT	<ul style="list-style-type: none"> • Ensure that the policy basis for Management Priorities for Forest Estates, as well as their significance, is emphasised in communication with partner agencies; • Review draft Orders against management priorities prior to finalisation and public consultation • Ensure Partner Agencies are aware of current management priorities at the earliest possible stage to prevent entrenchment of incorrect management priorities for forest estates. 	
1.1.3	H	MISSION CREEP WITHIN OUTPUTS	Provision of financial resources for hiring of qualified staff to undertake task. Signing of agreements between parties to undertake tasks.	
1.1.4	L	INACCESSIBILITY OF SOME SITES	Reconnaissance trips should be made. Specific difficulties can be discussed with partner organisations, to seek solutions.	
1.1.4	M	STAKEHOLDER BUY-IN	Communication strategy to effectively communicate the urgency and necessity of urban forestry projects and the maintenance of mangroves and the specific actions, roles and support required from each stakeholder and why. (Must be demonstrable how their specific input will contribute to the greater good).	
1.1.5	L	INSECURITY OF FINANCIAL RESOURCES	A number of specific outputs can be a focus for fundraising, including (for 2.3.4) because of its social value. When support sourced for the output is not sufficient, the output will need to be redesigned, to assess useful elements which can be delivered cheaper.	

Output #	Risk Level	Identified Risk Statement (Top 10) and some new ones provided by respondents	Risk Mitigation Strategy (for negative risks)	Additional Comments
1.1.5	M	STAFF TURN-OVER	Review/improve compensation package (including travel allowance) and working conditions (including provision of adequate tools/equipment) Implement mechanisms to build institutional learning via targeted reporting/recording to facilitate continuity in the event of loss of (experienced) staff i.e. document experiences/encounters/areas covered/conditions and challenges re access etc. Use technology to map these experiences etc.	
1.1.6	H	LONG LAG TIMES TO GET WORK UNDERWAY	The development of an action plan in 2022/23 on the Agency’s approach to the development of recreational facilities. This action plan should include specific timelines for the identification of areas within which the Agency will seek to institute recreational facilities and the types of recreational facilities to be considered and what the requirements are for each. (Some context – The action plan is essential as a mitigation strategy for reducing the long lag time to getting work underway which introduces the risk of not achieving this output by 2026. Having the information on the recreational facilities is a precursor to the development of Regulations for any recreational facility, as the details of how a recreational facility will operate will guide the development of said Regulations. Additionally, the Agency does not control the timeline for the development of Regulations and cannot predict with certainty the delays that may occur where the drafting and approval of the Regulations is concerned. Commencing its planning in 2022/23 will ensure sufficient lead time to execute and implement within the NFMCP 2026 timeline.	
1.1.6	H	MISSION CREEP WITHIN OUTPUTS	Developing an Action Plan to transform this output into proper projects and activities geared towards successfully achieving this Output within a specified timeline.	

Output #	Risk Level	Identified Risk Statement (Top 10) and some new ones provided by respondents	Risk Mitigation Strategy (for negative risks)	Additional Comments
1.1.6	H	STAKEHOLDER BUY-IN	Commence early discussion with Parent Ministry and Minister on the Agency’s intentions to develop recreational facilities and the need for Regulations. The buy in and support of the Parent Ministry and the Minister with responsibility for Forestry is critical to the development of Regulations as the Ministry will be the direct liaison with the Office of the Chief Parliamentary Counsel who is responsible for drafting legislation and the legislative framework for the Agency indicates the Minister’s role in the development of Regulations.	
1.1.7	M	MISSION CREEP WITHIN OUTPUTS & POOR SCHEDULING OF RELATED RESULTS.	Prioritise procurement. Organise all inputs and resources timely. Appoint a coordinator for each of these outputs, with day-to-day management responsibilities.	While this risk was initially stated as Low in earlier years of NFMCP, its continued manifestation across several outputs resulted in its ranking rising.

Output #	Risk Level	Identified Risk Statement (Top 10) and some new ones provided by respondents	Risk Mitigation Strategy (for negative risks)	Additional Comments
1.2.1	H / M	MISSING SKILLS SETS IN TECHNICAL AREAS	<p>Training should be done in specialised areas, resulting in other personnel gaining solid knowledge of silviculture. IOJ needs an upgraded GIS (currently freeware - can be improved in collaboration with other agencies?)</p> <p>Broaden the skill set among (wider range of) staff members by:</p> <ul style="list-style-type: none"> Implementing regular training at the basic and intermediate level for core skills Promote, facilitate and implement training among staff members for intermediate and advanced level training in core skills. Identify interested, qualified and key staff members for intermediate and advance level training in core skills. Outsource work where current capacity is insufficient and facilitate knowledge transfer to staff members and key stakeholders. Collaborate with universities for output delivery. 	
1.2.1	H	STAFF TURN-OVER	<p>Timely recruitment of specialised staff.</p> <p>Training of a sufficient number of staff in specialised fields.</p> <p>Build technical capacity in a wide range of staff members to mitigate the effect of turn-over. Review current framework for incentives among staff members, explore other mechanisms for incentivising staff – promoting and implementing staff development training activities/avenues etc</p>	
1.2.1	M	COVID-19 PANDEMIC	Utilise virtual space to facilitate meetings, information sharing, information storage and access to facilitate delivery of outputs.	
1.2.1	M	LONG LAG TIMES TO GET WORK UNDERWAY	<p>Central database developed with access for internal and external stakeholders.</p> <p>Training in software/database management, depending on solution selected.</p>	

Output #	Risk Level	Identified Risk Statement (Top 10) and some new ones provided by respondents	Risk Mitigation Strategy (for negative risks)	Additional Comments
1.2.1	L	POOR DATA MANAGEMENT	Financial resources and skill sets needed. IOJ to network with other agencies which have the skill-sets. Internships? CEPF call could be relevant. Other IUCN options? Botanical gardens conservation international may also provide assistance.	
1.2.1	M	MISSION CREEP WITHIN OUTPUTS	Clearly defined outputs/ products and methods for each stakeholder.	
1.2.3	H	INSECURITY OF FINANCIAL RESOURCES	Firm commitment to be given to provide the funds e.g through MOU (NEPA). IOJ suggests to get project funding. Multitask, combine field trips and other tasks to be done (cover costs). Piggy-back on projects.	
1.2.3	H	MISSING SKILLS SETS IN TECHNICAL AREAS	Training should be done in specialised areas, resulting in other personnel gaining solid knowledge of silviculture. The core skillsets needed to drive the core process are not being selectively recruited by the entity. Extended training in core area. Include additional qualified persons in training to ensure there is some retention of skill sets Constant on the job application and training. Purposeful retention of skillsets posts training investment. Revisit planning process- recruit and train capacity before setting other output targets.	
1.2.3	M	COVID-19 PANDEMIC	Maintain C-19 Protocols Create fluid schedules Periodic team welfare and wellbeing check ins Constant monitoring and communication Higher reliance on of online meeting platforms.	

Output #	Risk Level	Identified Risk Statement (Top 10) and some new ones provided by respondents	Risk Mitigation Strategy (for negative risks)	Additional Comments
1.2.3	H	STAFF TURN-OVER	Retrain and re-tool (FD staff and key stakeholders) Get extended training in core areas Implement more focus strategies to retain capacity post training In the case of REDD- Institutionalize core competencies related to this area post project close out. Create and maintain repositories and other OPAs include manual for knowledge transfer.	
2.1.2	M	COVID-19 PANDEMIC	Work From Home schedule for business continuity employed	
2.1.2	M	STAFF TURN-OVER	Timely recruitment of vacant posts; Re-classification of posts to offer competitive salary package; Active/consistent staff engagement activities.	
2.1.2	L	MISSING SKILLS SETS IN TECHNICAL AREAS	Head hunting; Cross-training of current staff compliment; Consultancies.	
2.1.2	M	STAKEHOLDER BUY-IN	Continuous engagement of private land owners and other stakeholders via community sensitisation; Collaborate with LFMCS; Host additional cross-sectoral sessions/meetings as needed.	
2.1.2	H	INSECURITY OF FINANCIAL RESOURCES	Seek project funding from international donors; Defer implementation to another financial year Petition MoFPS for additional funding.	

Output #	Risk Level	Identified Risk Statement (Top 10) and some new ones provided by respondents	Risk Mitigation Strategy (for negative risks)	Additional Comments
2.1.3	H	MISSING SKILLS SETS IN TECHNICAL AREAS	<p>The core skillsets needed to drive the core process are not being selectively recruited by the entity.</p> <p>Extended training in core area.</p> <p>Include additional qualified persons in training to ensure there is some retention of skill sets</p> <p>Constant on the job application and training.</p> <p>Purposeful retention of skillsets posts training investment.</p> <p>Revisit planning process- recruit and train capacity before setting other output targets.</p>	
2.1.3	H	<p>LACK of OVERALL PRIORITISATION :</p> <p>Due to the absence of the skills set needed to drive this comprehensive process, focus is deferred to more achievable outputs hence activity is not given the necessary priority – gets lost in translation.</p>	<p>Risk deferred to NEPA who has through project funding prioritise PES and had made headway into this</p> <p>The pilot has not yet been implemented</p> <p>FD should delay actions in this area until the current PES by NEPA is implements and the legislative framework in place to support PES.</p> <p>Then we can take it from there onwards.</p> <p>Without this, we would be reinventing the costly wheel and still unsure if it would spin.</p> <p>Create the political platform for REDD and PES to offer the leadership and buying at the highest levels within government – demonstrating the benefits to the country economically and otherwise.</p>	
2.1.4	L	STAKEHOLDER BUY-IN	<p>Ensure that the participation in the TAC is useful day-to-day work in the institutions.</p> <p>Establish efficient structures for sharing information.</p> <p>When appropriate, ensure buy in from stakeholders in day-to-day management planning and the inclusion of these new forest sector areas in development orders.</p> <p>Address capacity needs of groups.</p>	

Output #	Risk Level	Identified Risk Statement (Top 10) and some new ones provided by respondents	Risk Mitigation Strategy (for negative risks)	Additional Comments
2.2.1	M	COVID-19 PANDEMIC	Utilise virtual space to facilitate meetings, information sharing, information storage and access to facilitate delivery of outputs.	
2.2.1	H	STAFF TURN-OVER	Build technical capacity in a wide range of staff members to mitigate the effect of turn-over. Review current framework for incentives among staff members, explore other mechanisms for incentivising staff – promoting and implementing staff development training activities/avenues etc	
2.2.1	H	MISSING SKILLS SETS IN TECHNICAL AREAS	Broaden the skill set among (wider range of) staff members by: Implementing regular training at the basic and intermediate level for core skills Promote, facilitate and implement training among staff members for intermediate and advanced level training in core skills. Identify interested, qualified and key staff members for intermediate and advance level training in core skills. Outsource work where current capacity is insufficient and facilitate knowledge transfer to staff members and key stakeholders. Collaborate with universities for output delivery.	
2.2.1	M	LONG LAG TIMES TO GET WORK UNDERWAY		
2.2.1	M	POOR DATA MANAGEMENT	Central database developed with access for internal and external stakeholders. Training in software/database management, depending on solution selected.	
2.2.1	M	MISSION CREEP WITHIN OUTPUTS	Clearly defined outputs/ products and methods for each stakeholder.	
2.2.1	M	INSECURITY OF FINANCIAL RESOURCES	Continuous submission of project proposals to access international funding for developing NTFP and supporting alternative livelihoods in forest adjacent communities.	

Output #	Risk Level	Identified Risk Statement (Top 10) and some new ones provided by respondents	Risk Mitigation Strategy (for negative risks)	Additional Comments
2.2.2	M	POOR DATA MANAGEMENT	Synergies within the agencies at divisional levels needed, as well as synergies between PIEs maximised. Regular training and capacity development for information management.	
2.3.1	M	COVID-19 PANDEMIC	Utilise virtual space to facilitate meetings, information sharing, information storage and access to facilitate delivery of outputs.	
2.3.1	H	STAFF TURN-OVER	Build technical capacity in a wide range of staff members to mitigate the effect of turn-over. Review current framework for incentives among staff members, explore other mechanisms for incentivising staff – promoting and implementing staff development training activities/avenues etc	
2.3.1	H	MISSING SKILLS SETS IN TECHNICAL AREAS	Broaden the skill set among (wider range of) staff members by: Implementing regular training at the basic and intermediate level for core skills Promote, facilitate and implement training among staff members for intermediate and advanced level training in core skills. Identify interested, qualified and key staff members for intermediate and advance level training in core skills. Outsource work where current capacity is insufficient and facilitate knowledge transfer to staff members and key stakeholders. Collaborate with universities for output delivery.	
2.3.1	M	LONG LAG TIMES TO GET WORK UNDERWAY		
2.3.1	M	POOR DATA MANAGEMENT	Central database developed with access for internal and external stakeholders. Training in software/database management, depending on solution selected.	
2.3.1	M	MISSION CREEP WITHIN OUTPUTS	Clearly defined outputs/ products and methods for each stakeholder.	

Output #	Risk Level	Identified Risk Statement (Top 10) and some new ones provided by respondents	Risk Mitigation Strategy (for negative risks)	Additional Comments
2.3.1	M	INSECURITY OF FINANCIAL RESOURCES	Continuous submission of project proposals to access international funding for developing NTFP and supporting alternative livelihoods in forest adjacent communities	
2.3.2	M	POOR DATA MANAGEMENT	Data needs to be collected as part of the Biophysical Inventory and reports generated and updated ongoingly.	
2.3.2	H	INADEQUATE BUSINESS PROCESSES: Insufficient or inadequate process flows are in place to facilitate production and sale of the agreed products/services. This can reduce potential sale and effectively prevent the actualisation of outputs.	Develop process flows with clear duties and responsibilities for the various activities to facilitate production and delivery of approved products to market.	
2.3.3	M	POOR DATA MANAGEMENT	Data needs to be collected as part of the Biophysical Inventory and reports generated and updated ongoingly.	
2.3.3	M	STAKEHOLDER BUY-IN	FD needs to assign resources to coordinate the efforts across the various stakeholders that are required for the effort.	
2.3.3	H	INADEQUATE BUSINESS PROCESSES	Develop process flows with clear duties and responsibilities for the various activities to facilitate production and delivery of approved products to market.	

Output #	Risk Level	Identified Risk Statement (Top 10) and some new ones provided by respondents	Risk Mitigation Strategy (for negative risks)	Additional Comments
2.3.4	L	INSECURITY OF FINANCIAL RESOURCES	A number of specific outputs can be a focus for fundraising, including (for 2.3.4) because of its social value. When support sourced for the output is not sufficient, the output will need to be redesigned, to assess useful elements which can be delivered cheaper. Seek project funding from international donors; Defer implementation to another financial year Petition MoFPS for additional funding.	
2.3.4	M	COVID-19 PANDEMIC	Work From Home schedule for business continuity employed.	
2.3.4	M	STAFF TURN-OVER	Timely recruitment of vacant posts; Re-classification of posts to offer competitive salary package; Active/consistent staff engagement activities.	
2.3.4	M	STAKEHOLDER BUY-IN	Continuous engagement of stakeholders via community sensitisation; Collaborate with LFMCS; Host additional cross-sectoral sessions/meetings as needed.	
2.3.5	M	MISSION CREEP WITHIN OUTPUTS	If included in operational plan, the scope has to be defined and results listed.	
2.3.5	H	INSECURITY OF FINANCIAL RESOURCES	Include NFMCP in budget in Operational Plan. Nomination of site provides opportunities for funding – such as Cockpit Country- UNESCO WHF).	
3.1.1	L	MISSION CREEP WITHIN OUTPUTS	Prioritise procurement. Organise all inputs and resources timely. Appoint a coordinator for each of these outputs, with day-to-day management responsibilities.	

Output #	Risk Level	Identified Risk Statement (Top 10) and some new ones provided by respondents	Risk Mitigation Strategy (for negative risks)	Additional Comments
3.1.1	M / H	UNAVAILABILITY OF REQUIRED SPECIES/ SEEDS	FD has reinstated the collection of wildings and will ramp up collection of seeds for desired species by field staff. The inhouse phenological chart will also be utilised as a reference point to identify flowering trees. <ul style="list-style-type: none"> • Increase wilding and seed collection by Forest Officers • Engage private nurseries Divesting the collection of seeds to field officers across the various Divisions (spearheaded by Forest Operations) Explore alternative means of propagation for target species – propagation from cuttings, feasibility of tissue culture for propagation e.g.	
3.1.1	M/L	UNAVAILABILITY OF SUITABLE LANDS FOR REFORESTATION EFFORTS	Early search for appropriate (denuded) lands. Lands are earmarked one year in advance. However, request can be made of the Commissioner of Lands for additional lands. Promote reforestation by private planters. Repurpose degraded parcels, new parcels, parcels dominated by bamboo for plantation establishment of Bitterwood	
3.1.1	M	COVID-19 PANDEMIC	Repeated use of the same cohort of contractors at multiple locations (accommodation and transportation provided) due to the inability to identify and recruit other contractors via community meetings and other gatherings. Planting exercises are COVID-19 safe.	
3.1.1	L	STAFF TURN-OVER	Staff members (Forest Technicians) are re-assigned to fill gap.	
3.1.2	L	MISSION CREEP WITHIN OUTPUTS	Prioritise procurement. Organise all inputs and resources timely. Appoint a coordinator for each of these outputs, with day-to-day management responsibilities.	
3.1.3	H	POOR DATA MANAGEMENT	Synergies within the agencies at divisional levels needed, as well as synergies between PIEs maximised. Regular training and capacity development for information management.	

Output #	Risk Level	Identified Risk Statement (Top 10) and some new ones provided by respondents	Risk Mitigation Strategy (for negative risks)	Additional Comments
3.1.4	H	POOR DATA MANAGEMENT	Synergies within the agencies at divisional levels needed, as well as synergies between PIEs maximised. Regular training and capacity development for information management.	
3.1.4	M	UNAVAILABILITY OF REQUIRED SPECIES/ SEEDS	FD has reinstated the collection of wildings and will ramp up collection of seeds for desired species by field staff. The inhouse phenological chart will also be utilised as a reference point to identify flowering trees.	(Y6) Several strategies were implemented to mitigate the risks, such as weekly updates of the inventory, weekly inspection of seedlings and culling of infested seedlings.
3.1.5	L	UNAVAILABILITY OF REQUIRED SPECIES/ SEEDS	Increased nursery capacity for mangrove (and seagrass) species.	
3.1.6	L	MISSING SKILLS SETS IN TECHNICAL AREAS	Promote appropriate archiving of pertinent information. Organise timely training sessions on the issues and techniques involved.	

Output #	Risk Level	Identified Risk Statement (Top 10) and some new ones provided by respondents	Risk Mitigation Strategy (for negative risks)	Additional Comments
3.1.7	L	STAKEHOLDER BUY-IN	<p>Ensure that the participation in the TAC is useful day-to-day work in the institutions.</p> <p>Establish efficient structures for sharing information.</p> <p>When appropriate, ensure buy in from stakeholders in day-to-day management planning and the inclusion of these new forest sector areas in development orders.</p> <p>Address capacity needs of groups.</p> <ul style="list-style-type: none"> • Conduct stakeholder analysis • Increase engagement with Community-based Organisations and Community Development Committees. 	
3.1.7	M	COVID-19 PANDEMIC	Virtual community engagement.	
3.1.7	M	UNAVAILABILITY OF REQUIRED SPECIES/ SEEDS	<ul style="list-style-type: none"> • Increase wilding and seed collection by Forest Officers • Engage private nurseries • Divesting the collection of seeds to field officers across the various Divisions (spearheaded by Forest Operations). 	
3.1.9	L	COVID-19 PANDEMIC	Planting exercises are COVID-19 safe.	
3.1.9	M	LONG LAG TIMES TO GET WORK UNDERWAY	Continuous and earnest engagement of stakeholders as well as redeployment of workers from outside the areas when necessary.	
3.1.9	M	UNAVAILABILITY OF REQUIRED SPECIES/ SEEDS	<ul style="list-style-type: none"> • Increase wilding and seed collection by Forest Officers • Engage private nurseries • Divesting the collection of seeds to field officers across the various Divisions (spearheaded by Forest Operations). 	
3.2.2	H	POOR DATA MANAGEMENT	Synergies within the agencies at divisional levels needed, as well as synergies between PIEs maximised. Regular training and capacity development for information management.	

Output #	Risk Level	Identified Risk Statement (Top 10) and some new ones provided by respondents	Risk Mitigation Strategy (for negative risks)	Additional Comments
3.2.2	M	COVID-19 PANDEMIC	Maintain C-19 Protocols Create fluid schedules Periodic team welfare and wellbeing check ins Constant monitoring and communication Higher reliance on of online meeting platforms.	
3.2.2	H	STAFF TURN-OVER	Retrain and re-tool (FD staff and key stakeholders) Get extended training in core areas Implement more focus strategies to retain capacity post training In the case of REDD- Institutionalize core competencies related to this area post project close out. Create and maintain repositories and other OPAs include manual for knowledge transfer	(Y6) This risk was realised during the period with the resignation from the FD of the Senior Research Officer (SRO) who also served as the country’s focal person for REDD+ activities. The loss of human capacity in this area has significantly affected implementation of several of the REDD+ related

Output #	Risk Level	Identified Risk Statement (Top 10) and some new ones provided by respondents	Risk Mitigation Strategy (for negative risks)	Additional Comments
				activities and outputs of the NFMCP.
3.2.2	H	LONG LAG TIMES TO GET WORK UNDERWAY	Improvement payment to Consultant Team. Provide timely inputs, so actively mitigate procurement delays.	
3.2.2	M	MISSION CREEP WITHIN OUTPUTS	Proposal drafted to seek funding for areas where creep is likely. Flag potential creeps and monitor accordingly. Focus and if creeps become a must, seek approval.	
3.2.2	H	STAKEHOLDER BUY-IN	Meeting fatigue is evident therefore SH engagement has to be more strategic, and enough information provided ahead of time for full engagement and output. Utilise a blended approach (online and face to face). Enhance leadership and position of REDD from the CEO and Minister's desk for better traction. Provide more physical support to stakeholders.	
3.2.2	M	UNAVAILABILITY OF SUITABLE LANDS FOR REFORESTATION EFFORTS	REDD+ strategy linked to available lands for reforestation-anchoring of carbon. Targeted stakeholder meetings with entities owning lands and solicit commitment of lands Demonstrate the values of SH commitment to the success of the process - constantly.	
3.2.2	H	INSECURITY OF FINANCIAL RESOURCES	Actively seek funding outside of Consol. funds (GEF, GCF etc). Creator partnerships for REDD which create funding opportunities Prioritize areas which are most likely to be funded. Look for and explore opportunities to integrate REDD into other climate change initiatives.	

Output #	Risk Level	Identified Risk Statement (Top 10) and some new ones provided by respondents	Risk Mitigation Strategy (for negative risks)	Additional Comments
3.2.2	M	LACK of OVERALL PRIORITISATION	Risk deferred to NEPA who has through project funding prioritise PES and had made headway into this The pilot has not yet been implemented FD should delay actions in this area until the current PES by NEPA is implemented and the legislative framework in place to support PES. Then we can take it from there onwards. Without this, we would be reinventing the costly wheel and still unsure if it would spin. Create the political platform for REDD and PES to offer the leadership and buying at the highest levels within government – demonstrating the benefits to the country economically and otherwise.	
3.3.1	L	INSECURITY OF FINANCIAL RESOURCES	A number of specific outputs can be a focus for fundraising, including (for 2.3.4) because of its social value. When support sourced for the output is not sufficient, the output will need to be redesigned, to assess useful elements which can be delivered cheaper. Fundraising.	
3.3.1	M	COVID-19 PANDEMIC	Risk acceptance and implementation of protocols	
3.3.1	H	MISSING SKILL SETS IN TECHNICAL AREAS	Risk Transfer--Utilize FD Human Resource branch to provide free training in key areas, notably governance and project management.	
3.3.1	L	STAKEHOLDER BUY-IN	Risk acceptance.	
3.3.2	M	COVID-19 PANDEMIC	Risk acceptance and implementation of protocols	
3.3.2	H	MISSING SKILL SETS IN TECHNICAL AREAS	Risk Transfer--Utilize FD Human Resource branch to provide free training in key areas, notably governance and project management.	
3.3.2	M	COVID-19 PANDEMIC	Risk acceptance and implementation of protocols	
3.3.2	M	INSECURITY OF FINANCIAL RESOURCES	Fundraising.	

Output #	Risk Level	Identified Risk Statement (Top 10) and some new ones provided by respondents	Risk Mitigation Strategy (for negative risks)	Additional Comments
3.3.3	H	POOR DATA MANAGEMENT	Synergies within the agencies at divisional levels needed, as well as synergies between PIEs maximised. Regular training and capacity development for information management.	
3.3.3	H	COVID-19 PANDEMIC	Reduce the number of participants to conform with COVID-19 protocols by targeting a core group of fire responders.	
3.3.3	M	STAKEHOLDER BUY-IN	<ul style="list-style-type: none"> • Conduct stakeholder analysis • Increase engagement with Community-based Organisations and Community Development Committees. 	
4.1.1	H	COVID-19 PANDEMIC	Alternative approaches such as distributing printed material, creating online portal for target audience to access information and use of media platforms should be utilised to disseminate information where gatherings are prohibited due to the pandemic.	
4.1.2	L	STAKEHOLDER BUY-IN	<p>Ensure that the participation in the TAC is useful day-to-day work in the institutions.</p> <p>Establish efficient structures for sharing information.</p> <p>When appropriate, ensure buy in from stakeholders in day-to-day management planning and the inclusion of these new forest sector areas in development orders.</p> <p>Address capacity needs of groups.</p>	
4.1.2	H	COVID-19 PANDEMIC	Alternative approaches such as distributing printed material, creating online portal for target audience to access information and use of media platforms should be utilised to disseminate information where gatherings are prohibited due to the pandemic.	
4.1.3	L	INSECURITY OF FINANCIAL RESOURCES	A number of specific outputs can be a focus for fundraising, including (for 2.3.4) because of its social value. When support sourced for the output is not sufficient, the output will need to be redesigned, to assess useful elements which can be delivered cheaper.	

Output #	Risk Level	Identified Risk Statement (Top 10) and some new ones provided by respondents	Risk Mitigation Strategy (for negative risks)	Additional Comments
4.1.3	H	COVID-19 PANDEMIC	Alternative approaches such as distributing printed material, creating online portal for target audience to access information and use of media platforms should be utilised to disseminate information where gatherings are prohibited due to the pandemic.	
4.2.1	H / L	MISSING SKILLS SETS IN TECHNICAL AREAS	Training should be done in specialised areas, resulting in other personnel gaining solid knowledge of silviculture. Use technical in-house staff as trainers to ensure the transfer of knowledge. Source technical trainers from overseas.	Significant progress was made during FY 6 with the training of over 30 Forestry Department field personnel in Natural Resource Valuation & Carbon Stock Monitoring, however this threat remains high as several technical gaps exist in the sector.
4.2.1	M	COVID-19 PANDEMIC	Continuous training in keeping with Covid-19 protocols eg. Virtual/online training	
4.2.1	H	INSECURITY OF FINANCIAL RESOURCES	Active scouting for training opportunities and fundraising for essential and needed courses.	

Output #	Risk Level	Identified Risk Statement (Top 10) and some new ones provided by respondents	Risk Mitigation Strategy (for negative risks)	Additional Comments
4.2.1	L	POOR DATA MANAGEMENT	Vacant positions related to data management are identified and filled within shortest time.	
5.1.1	M	MISSING SKILLS SETS IN TECHNICAL AREAS	Promote appropriate and timely training sessions on the issues and techniques involved.	
5.1.3	L	STAKEHOLDER BUY-IN	Ensure that the participation in the TAC is useful day-to-day work in the institutions. Establish efficient structures for sharing information. When appropriate, ensure buy in from stakeholders in day-to-day management planning and the inclusion of these new forest sector areas in development orders. Address capacity needs of groups.	
5.1.3	L	STAFF TURN-OVER	Ensure the continuation of knowledge through communicating the technicalities of the NDC and other technical outputs and a functional MRV system.	
5.1.4	L	COVID-19 PANDEMIC	Delay in implementation due to inhibiting factors and general workloads.	
5.2.1	M	COVID-19 PANDEMIC	Utilise virtual space to facilitate meetings, information sharing, information storage and access to facilitate delivery of outputs.	
5.2.1	H	STAFF TURN-OVER	Build technical capacity in a wide range of staff members to mitigate the effect of turn-over. Review current framework for incentives among staff members, explore other mechanisms for incentivising staff – promoting and implementing staff development training activities/avenues etc	
5.2.1	M	POOR DATA MANAGEMENT	Central database developed with access for internal and external stakeholders. Training in software/database management, depending on solution selected.	

Output #	Risk Level	Identified Risk Statement (Top 10) and some new ones provided by respondents	Risk Mitigation Strategy (for negative risks)	Additional Comments
5.2.1	M	MISSION CREEP WITHIN OUTPUTS	Clearly defined outputs/ products and methods for each stakeholder.	
5.2.1	H	STAKEHOLDER BUY-IN	Collaborate with key stakeholders early, to facilitate commitment to outcomes/outputs and implementation in their organizational work plans. Early and continuous stakeholder engagement with various entities & representatives involved in delivering outputs. Training/Assistance to build capacity for local groups to access funding/training.	
5.2.2	M/H	MISSING SKILLS SETS IN TECHNICAL AREAS	FSTS to conduct sensitisation/capacity-building sessions to equip FO officers with the necessary knowledge, template etc. Broaden the skill set among (wider range of) staff members by: Implementing regular training at the basic and intermediate level for core skills Promote, facilitate and implement training among staff members for intermediate and advanced level training in core skills. Identify interested, qualified and key staff members for intermediate and advance level training in core skills. Outsource work where current capacity is insufficient and facilitate knowledge transfer to staff members and key stakeholders. Collaborate with universities for output delivery.	
5.2.2.	M	COVID-19 PANDEMIC	Utilise virtual space to facilitate meetings, information sharing, information storage and access to facilitate delivery of outputs.	
5.2.2	H	STAFF TURN-OVER	Build technical capacity in a wide range of staff members to mitigate the effect of turn-over. Review current framework for incentives among staff members, explore other mechanisms for incentivising staff – promoting and implementing staff development training activities/avenues etc	
5.2.2	M	POOR DATA MANAGEMENT	Central database developed with access for internal and external stakeholders. Training in software/database management, depending on solution selected.	

Output #	Risk Level	Identified Risk Statement (Top 10) and some new ones provided by respondents	Risk Mitigation Strategy (for negative risks)	Additional Comments
5.2.2	M	MISSION CREEP WITHIN OUTPUTS	Clearly defined outputs/ products and methods for each stakeholder.	
5.2.2	H	STAKEHOLDER BUY-IN	Collaborate with key stakeholders early, to facilitate commitment to outcomes/outputs and implementation in their organizational work plans. Early and continuous stakeholder engagement with various entities & representatives involved in delivering outputs. Training/Assistance to build capacity for local groups to access funding/training	
5.2.3	H	STAKEHOLDER BUY-IN	Further clarification meetings to be held with NEPA and other agencies.	
5.3.1	H	INSECURITY OF FINANCIAL RESOURCES	Actively seek funding outside of Consol. funds (GEF, GCF etc). Creator partnerships for REDD which create funding opportunities. Prioritize areas which are most likely to be funded. Look for and explore opportunities to integrate REDD into other climate change initiatives.	
5.3.3	M	COVID-19 PANDEMIC	Utilise virtual space to facilitate meetings, information sharing, information storage and access to facilitate delivery of outputs.	
5.3.3	H	STAFF TURN-OVER	Build technical capacity in a wide range of staff members to mitigate the effect of turn-over. Review current framework for incentives among staff members, explore other mechanisms for incentivising staff – promoting and implementing staff development training activities/avenues etc. For specific times. Training needed on calibration, site classification. Equipment also needed. GIS capacity to be sustained.	
5.3.3	M	POOR DATA MANAGEMENT	Central database developed with access for internal and external stakeholders. Training in software/database management, depending on solution selected. Database issues. Data management is good, but storage and availability can be a problem.	

Output #	Risk Level	Identified Risk Statement (Top 10) and some new ones provided by respondents	Risk Mitigation Strategy (for negative risks)	Additional Comments
5.3.3	M	MISSION CREEP WITHIN OUTPUTS	Clearly defined outputs/ products and methods for each stakeholder.	
5.3.3	H	STAKEHOLDER BUY-IN	Collaborate with key stakeholders early, to facilitate commitment to outcomes/outputs and implementation in their organizational work plans. Early and continuous stakeholder engagement with various entities & representatives involved in delivering outputs. Training/Assistance to build capacity for local groups to access funding/training.	
5.3.3	H	MISSING SKILL SETS IN TECHNICAL AREAS	For specific times. Training needed on calibration, site classification. Equipment also needed. GIS capacity to be sustained.	
5.3.3	H	LONG LAG TIMES TO GET WORK UNDERWAY	Installing a stations is a risky business! Takes time to procure the right contractors, get goods cleared (COVID delays), small team with many commitments.	
5.3.3	M	UNAVAILABILITY OF SUITABLE LANDS	Land may be suitable, but land owner may not agree. MoA may be difficult.	
5.3.4	H	LONG LAG TIMES TO GET WORK UNDERWAY	Improvement payment to Consultant Team. Provide timely inputs, so actively mitigate procurement delays.	
5.3.4	H	UNAVAILABILITY OF SUITABLE LANDS	Land may be suitable, but land owner may not agree. MoA may be difficult.	

Output #	Risk Level	Identified Risk Statement (Top 10) and some new ones provided by respondents	Risk Mitigation Strategy (for negative risks)	Additional Comments
5.3.4	H/M	MISSING SKILLS SETS IN TECHNICAL AREAS	<p>Training should be done in specialised areas, resulting in other personnel gaining solid knowledge of silviculture.</p> <p>The core skillsets needed to drive the core process are not being selectively recruited by the entity.</p> <p>Extended training in core area.</p> <p>Include additional qualified persons in training to ensure there is some retention of skill sets</p> <p>Constant on the job application and training.</p> <p>Purposeful retention of skillsets posts training investment.</p> <p>Revisit planning process- recruit and train capacity before setting other output targets.</p>	
5.3.4	H	STAFF TURN-OVER	<p>Retrain and re-tool (FD staff and key stakeholders)</p> <p>Get extended training in core areas</p> <p>Implement more focus strategies to retain capacity post training</p> <p>In the case of REDD- Institutionalize core competencies related to this area post project close out.</p> <p>Create and maintain repositories and other OPAs include manual for knowledge transfer.</p>	
5.3.4	H	POOR DATA MANAGEMENT	<p>Central repository of all technical data with tier access.</p> <p>Recruit for a data Management administrator and a core data management unit to include statisticians.</p>	
5.3.5	H	MISSING SKILLS SETS IN TECHNICAL AREAS	<p>Training should be done in specialised areas, resulting in other personnel gaining solid knowledge of silviculture.</p>	
5.3.5	H	INSECURITY OF FINANCIAL RESOURCES	<p>Firm commitment to be given to provide the funds e.g through MOU.</p>	
5.3.6	H	LONG LAG TIMES TO GET WORK UNDERWAY	<p>Regular monitoring of progress by the agencies and TAC. Early mobilisation of inputs and resources.</p>	

Output #	Risk Level	Identified Risk Statement (Top 10) and some new ones provided by respondents	Risk Mitigation Strategy (for negative risks)	Additional Comments
5.3.6	H	POOR DATA MANAGEMENT	Synergies within the agencies at divisional levels needed, as well synergies between PIEs maximised. -Regular training and capacity development for information management.	

Table 5. Over-all Costing of the NFMCP 2021-2026 (per outcome and per Thematic Area) (in J\$'000)

Results	TOTAL 2021-2026			21. Compensation of Employees			22. Travel Expenses and Subsistence			23. Rental of Property and Machinery		
	Total costs (in J\$'000)	Consolid. fund	Other sources	Total costs (in J\$'000)	Consolid. fund	Other sources	Total costs (in J\$'000)	Consolid. fund	Other sources	Total costs (in J\$'000)	Consolid. fund	Other sources
Outcome 1.1	970,722	930,394	40,328	611,419	611,419	0	100,783	90,908	9,875	6,328	6,328	0
Outcome 1.2	201,210	164,310	36,900	123,359	96,359	27,000	23,660	23,660	0	774	774	0
Total TA1	1,171,932	1,094,704	77,228	734,778	707,778	27,000	124,443	114,568	9,875	7,102	7,102	0
Outcome 2.1	273,754	273,754	0	178,045	178,045	0	27,175	27,175	0	4,200	4,200	0
Outcome 2.2	107,946	107,826	120	71,218	71,218	0	10,874	10,874	0	0	0	0
Outcome 2.3	353,676	343,241	10,435	218,003	218,003	0	38,288	38,288	0	1,598	1,598	0
Total TA2	735,376	724,821	10,555	467,266	467,266	0	76,337	76,337	0	5,798	5,798	0
Outcome 3.1	1,594,006	1,376,061	217,945	936,940	936,940	0	149,018	149,018	0	11,816	11,816	0
Outcome 3.2	169,636	163,111	6,525	106,827	106,827	0	16,305	16,305	0	1,379	1,379	0
Outcome 3.3	172,701	162,696	10,005	106,827	106,827	0	16,305	16,305	0	1,377	1,377	0
Total TA3	1,936,343	1,701,868	234,475	1,150,594	1,150,594	0	181,628	181,628	0	14,572	14,572	0
Outcome 4.1	484,463	484,463	0	320,482	320,482	0	48,917	48,917	0	4,138	4,138	0
Outcome 4.2	59,347	59,244	103	35,609	35,609	0	5,435	5,435	0	459	459	0
Total TA4	543,810	543,707	103	356,091	356,091	0	54,352	54,352	0	4,597	4,597	0
Outcome 5.1	779,169	768,869	10,300	496,669	496,669	0	80,783	80,783	0	6,153	6,153	0
Outcome 5.2	293,011	287,711	5,300	174,327	174,327	0	36,555	36,555	0	1,729	1,729	0
Outcome 5.3	1,072,470	1,004,681	67,789	646,933	646,933	0	106,634	106,634	0	7,891	7,891	0
Total TA5	2,144,650	2,061,261	83,389	1,317,929	1,317,929	0	223,972	223,972	0	15,773	15,773	0
GRAND TOTAL	6,532,111	6,126,361	405,750	4,026,658	3,999,658	27,000	660,732	650,857	9,875	47,842	47,842	0

TABLE 5 CONTINUED.	24. Utilities and Communication Services			25. Use of Goods and Services			31. Land (Non Produced Assets)			32. Fixed Assets (Capital goods)			Apropiations -in-Aid
	Results	Total costs (in J\$'000)	Consolid . fund	Other sources	Total costs (in J\$'000)	Consolid. fund	Other sources	Total costs (in J\$'000)	Consolid. fund	Other sources	Total costs (in J\$'000)	Consolid. fund	
Outcome 1.1	33,346	33,346	0	172,543	172,543	0	3,000	3,000	0	43,303	12,850	30,453	0
Outcome 1.2	5,024	5,024	0	41,460	32,160	9,300	0	0	0	6,933	6,333	600	0
Total TA1	38,370	38,370	0	214,003	204,703	9,300	3,000	3,000	0	50,236	19,183	31,053	0
Outcome 2.1	9,819	9,819	0	50,300	50,300	0	0	0	0	4,215	4,215	0	0
Outcome 2.2	3,928	3,928	0	20,120	20,120	0	0	0	0	1,806	1,686	120	0
Outcome 2.3	11,907	11,907	0	65,837	65,337	500	0	0	0	18,043	8,108	9,935	0
Total TA2	25,654	25,654	0	136,257	135,757	500	0	0	0	24,064	14,009	10,055	0
Outcome 3.1	51,518	51,518	0	486,587	269,642	216,945	0	0	0	25,127	24,127	1,000	67,000
Outcome 3.2	5,891	5,891	0	36,705	30,180	6,525	0	0	0	2,529	2,529	0	0
Outcome 3.3	5,892	5,892	0	39,651	29,766	9,885	0	0	0	2,649	2,529	120	0
Total TA3	63,301	63,301	0	562,943	329,588	233,355	0	0	0	30,305	29,185	1,120	67,000
Outcome 4.1	17,673	17,673	0	85,665	85,665	0	0	0	0	7,588	7,588	0	0
Outcome 4.2	1,964	1,964	0	15,037	14,934	103	0	0	0	843	843	0	0
Total TA4	19,637	19,637	0	100,702	100,599	103	0	0	0	8,431	8,431	0	0
Outcome 5.1	27,226	27,226	0	153,378	144,278	9,100	0	0	0	14,960	13,760	1,200	0
Outcome 5.2	9,291	9,291	0	57,480	57,180	300	0	0	0	13,629	8,629	5,000	0
Outcome 5.3	39,607	35,307	4,300	210,222	189,543	20,679	0	0	0	61,183	18,373	42,810	0
Total TA5	76,124	71,824	4,300	421,080	391,001	30,079	0	0	0	89,772	40,762	49,010	0
GRAND TOTAL	223,086	218,786	4,300	1,434,985	1,161,648	273,337	3,000	3,000	0	202,808	111,570	91,238	67,000

Table 6. Over-all costing of Thematic Area 1 of the NFMCP 2021-2026 (in J\$'000)

Results	Lead Responsibility	TOTAL 2021-2026			21. Compensation of Employees			22. Travel Expenses and Subsistence			23. Rental of Property and Machinery		
		Total Costs (in J\$'000)	Consolid. fund	Other sources	Total Costs (in J\$'000)	Consolid. fund	Other sources	Total Costs (in J\$'000)	Consolid. fund	Other sources	Total Costs (in J\$'000)	Consolid. fund	Other sources
1.1.1	MEGJC	38,700	38,700	0	33,750	33,750	0	0	0	0	0	0	0
1.1.2	MEGJC	37,510	37,510	0	20,250	20,250	0	0	0	0	0	0	0
1.1.3	NEPA	59,250	59,250	0	33,750	33,750	0	10,125	10,125	0	175	175	0
1.1.4	NLA	67,316	50,145	17,171	33,750	33,750	0	20,000	10,125	9,875	175	175	0
1.1.5	FD	180,111	163,111	17,000	106,827	106,827	0	16,305	16,305	0	1,379	1,379	0
1.1.6	MEGJC	34,970	34,970	0	27,000	27,000	0	0	0	0	0	0	0
1.1.7	FD	552,865	546,708	6,157	356,092	356,092	0	54,353	54,353	0	4,599	4,599	0
Outcome 1.1		970,722	930,394	40,328	611,419	611,419	0	100,783	90,908	9,875	6,328	6,328	0
1.2.1	FD	54,970	54,370	600	35,609	35,609	0	5,435	5,435	0	459	459	0
1.2.2	NEPA	76,840	49,840	27,000	54,000	27,000	27,000	8,100	8,100	0	140	140	0
1.2.3	NEPA	69,400	60,100	9,300	33,750	33,750	0	10,125	10,125	0	175	175	0
Outcome 1.2		201,210	164,310	36,900	123,359	96,359	27,000	23,660	23,660	0	774	774	0
Total TA1		1,171,932	1,094,704	77,228	734,778	707,778	27,000	124,443	114,568	9,875	7,102	7,102	0

TABLE 6 CONT.		24. Utilities and Communication Services			25. Use of Goods and Services			31. Land (Non Produced Assets)			32. Fixed Assets (Capital goods)			Apropriatio ns-in-Aid
Results	Lead Respons -ibility	Total Costs (in J\$'000)	Consoli d. fund	Other sources	Total Costs (in J\$'000)	Consolid. fund	Other sources	Total Costs (in J\$'000)	Consolid. fund	Other sources	Total Costs (in J\$'000)	Consolid. fund	Other sources	
1.1.1	MEGJC	1,700	1,700	0	3,250	3,250	0	0	0	0	0	0	0	
1.1.2	MEGJC	1,360	1,360	0	15,900	15,900	0	0	0	0	0	0	0	
1.1.3	NEPA	1,700	1,700	0	13,500	13,500	0	0	0	0	0	0	0	
1.1.4	NLA	1,700	1,700	0	3,115	3,115	0	0	0	0	8,576	1,280	7,296	
1.1.5	FD	5,891	5,891	0	30,180	30,180	0	0	0	0	19,529	2,529	17,000	
1.1.6	MEGJC	1,360	1,360	0	6,000	6,000	0	0	0	0	610	610	0	
1.1.7	FD	19,635	19,635	0	100,598	100,598	0	3,000	3,000	0	14,588	8,431	6,157	
Outcome 1.1		33,346	33,346	0	172,543	172,543	0	3,000	3,000	0	43,303	12,850	30,453	0
1.2.1	FD	1,964	1,964	0	10,060	10,060	0	0	0	0	1,443	843	600	
1.2.2	NEPA	1,360	1,360	0	10,800	10,800	0	0	0	0	2,440	2,440	0	
1.2.3	NEPA	1,700	1,700	0	20,600	11,300	9,300	0	0	0	3,050	3,050	0	
Outcome 1.2		5,024	5,024	0	41,460	32,160	9,300	0	0	0	6,933	6,333	600	0
Total TA1		38,370	38,370	0	214,003	204,703	9,300	3,000	3,000	0	50,236	19,183	31,053	0

Table 7. Over-all costing of Thematic Area 2 of the NFMCP 2021-2026 (in J\$'000)

Results	Lead Responsibility	TOTAL 2021-2026			21. Compensation of Employees			22. Travel Expenses and Subsistence			23. Rental of Property and Machinery		
		Total Costs (in J\$'000)	Consolid. fund	Other sources	Total Costs (in J\$'000)	Consolid. fund	Other sources	Total Costs (in J\$'000)	Consolid. fund	Other sources	Total Costs (in J\$'000)	Consolid. fund	Other sources
2.1.2	FD	53,911	53,911	0	35,609	35,609	0	5,435	5,435	0	0	0	0
2.1.3	FD	53,911	53,911	0	35,609	35,609	0	5,435	5,435	0	0	0	0
2.1.4	FD	165,932	165,932	0	106,827	106,827	0	16,305	16,305	0	4,200	4,200	0
Outcome 2.1		273,754	273,754	0	178,045	178,045	0	27,175	27,175	0	4,200	4,200	0
2.2.1	FD	51,520	51,520	0	35,609	35,609	0	3,044	3,044	0	0	0	0
2.2.2	FD	56,426	56,306	120	35,609	35,609	0	7,830	7,830	0	0	0	0
Outcome 2.2		107,946	107,826	120	71,218	71,218	0	10,874	10,874	0	0	0	0
2.3.1	FD	54,020	54,020	0	35,605	35,605	0	5,435	5,435	0	113	113	0
2.3.2	FD	21,783	21,783	0	12,962	12,962	0	3,013	3,013	0	0	0	0
2.3.3	FD	54,125	54,125	0	35,609	35,609	0	5,435	5,435	0	214	214	0
2.3.4	FD	162,863	162,863	0	106,827	106,827	0	16,305	16,305	0	1,131	1,131	0
2.3.5	JNHT	60,885	50,450	10,435	27,000	27,000	0	8,100	8,100	0	140	140	0
Outcome 2.3		353,676	343,241	10,435	218,003	218,003	0	38,288	38,288	0	1,598	1,598	0
Total TA2		735,376	724,821	10,555	467,266	467,266	0	76,337	76,337	0	5,798	5,798	0

ANNEX 7 CONT.	Results	Lead Respons-ibility	24. Utilities and Communication Services			25. Use of Goods and Services			31. Land (Non Produced Assets)			32. Fixed Assets (Capital goods)			Apropratio ns-in-Aid
			Total Costs (in J\$'000)	Consoli d. fund	Other sources	Total Costs (in J\$'000)	Consolid. fund	Other sources	Total Costs (in J\$'000)	Consolid. fund	Other sources	Total Costs (in J\$'000)	Consolid. fund	Other sources	
	2.1.2	FD	1,964	1,964	0	10,060	10,060	0	0	0	0	843	843	0	
	2.1.3	FD	1,964	1,964	0	10,060	10,060	0	0	0	0	843	843	0	
	2.1.4	FD	5,891	5,891	0	30,180	30,180	0	0	0	0	2,529	2,529	0	
	Outcome 2.1		9,819	9,819	0	50,300	50,300	0	0	0	0	4,215	4,215	0	0
	2.2.1	FD	1,964	1,964	0	10,060	10,060	0	0	0	0	843	843	0	
	2.2.2	FD	1,964	1,964	0	10,060	10,060	0	0	0	0	963	843	120	
	Outcome 2.2		3,928	3,928	0	20,120	20,120	0	0	0	0	1,806	1,686	120	0
	2.3.1	FD	1,964	1,964	0	10,060	10,060	0	0	0	0	843	843	0	
	2.3.2	FD	728	728	0	4,237	4,237	0	0	0	0	843	843	0	
	2.3.3	FD	1,964	1,964	0	10,060	10,060	0	0	0	0	843	843	0	
	2.3.4	FD	5,891	5,891	0	30,180	30,180	0	0	0	0	2,529	2,529	0	
	2.3.5	JNHT	1,360	1,360	0	11,300	10,800	500	0	0	0	12,985	3,050	9,935	
	Outcome 2.3		11,907	11,907	0	65,837	65,337	500	0	0	0	18,043	8,108	9,935	0
	Total TA2		25,654	25,654	0	136,257	135,757	500	0	0	0	24,064	14,009	10,055	0

Table 8. Over-all costing of Thematic Area 3 of the NFMCP 2016-2026 (in J\$'000)

Results	Lead Responsibility	TOTAL 2021-2026			21. Compensation of Employees			22. Travel Expenses and Subsistence			23. Rental of Property and Machinery		
		Total Costs (in J\$'000)	Consolid. fund	Other sources	Total Costs (in J\$'000)	Consolid. fund	Other sources	Total Costs (in J\$'000)	Consolid. fund	Other sources	Total Costs (in J\$'000)	Consolid. fund	Other sources
3.1.1	FD	747,133	574,388	172,745	356,092	356,092	0	54,353	54,353	0	4,599	4,599	0
3.1.2	FD	147,711	147,711	0	106,827	106,827	0	16,305	16,305	0	1,379	1,379	0
3.1.3	NEPA	77,500	62,300	15,200	33,750	33,750	0	10,125	10,125	0	175	175	0
3.1.4	FD	312,178	297,178	15,000	249,264	249,264	0	38,047	38,047	0	3,220	3,220	0
3.1.5	FD	170,142	170,142	0	106,827	106,827	0	16,305	16,305	0	1,379	1,379	0
3.1.6	FD	51,499	51,499	0	35,609	35,609	0	7,623	7,623	0	459	459	0
3.1.7	FD	66,984	51,984	15,000	35,609	35,609	0	3,247	3,247	0	459	459	0
3.1.9	FD	20,859	20,859	0	12,962	12,962	0	3,013	3,013	0	146	146	0
Outcome 3.1		1,594,006	1,376,061	217,945	936,940	936,940	0	149,018	149,018	0	11,816	11,816	0
3.2.2	FD	169,636	163,111	6,525	106,827	106,827	0	16,305	16,305	0	1,379	1,379	0
Outcome 3.2		169,636	163,111	6,525	106,827	106,827	0	16,305	16,305	0	1,379	1,379	0
3.3.1	FD	60,524	54,593	5,931	35,609	35,609	0	5,435	5,435	0	459	459	0
3.3.2	FD	54,969	54,969	0	35,609	35,609	0	7,094	7,094	0	459	459	0
3.3.3	FD	57,208	53,134	4,074	35,609	35,609	0	3,776	3,776	0	459	459	0
Outcome 3.3		172,701	162,696	10,005	106,827	106,827	0	16,305	16,305	0	1,377	1,377	0
Total TA3		1,936,343	1,701,868	234,475	1,150,594	1,150,594	0	181,628	181,628	0	14,572	14,572	0

TABLE 8
CONT.

Results	Lead Responsibility	24. Utilities and Communication Services			25. Use of Goods and Services			31. Land (Non Produced Assets)			32. Fixed Assets (Capital goods)			Apropiations-in-Aid
		Total Costs (in J\$'000)	Consolid. fund	Other sources	Total Costs (in J\$'000)	Consolid. fund	Other sources	Total Costs (in J\$'000)	Consolid. fund	Other sources	Total Costs (in J\$'000)	Consolid. fund	Other sources	
3.1.1	FD	19,635	19,635	0	303,023	131,278	171,745	0	0	0	9,431	8,431	1,000	
3.1.2	FD	5,891	5,891	0	14,780	14,780	0	0	0	0	2,529	2,529	0	
3.1.3	NEPA	1,700	1,700	0	28,700	13,500	15,200	0	0	0	3,050	3,050	0	
3.1.4	FD	13,745	13,745	0	69,000	54,000	15,000	0	0	0	5,902	5,902	0	67,000
3.1.5	FD	5,891	5,891	0	37,211	37,211	0	0	0	0	2,529	2,529	0	
3.1.6	FD	1,964	1,964	0	5,001	5,001	0	0	0	0	843	843	0	
3.1.7	FD	1,964	1,964	0	24,862	9,862	15,000	0	0	0	843	843	0	
3.1.9	FD	728	728	0	4,010	4,010	0	0	0	0	0	0	0	
Outcome 3.1		51,518	51,518	0	486,587	269,642	216,945	0	0	0	25,127	24,127	1,000	67,000
3.2.2	FD	5,891	5,891	0	36,705	30,180	6,525	0	0	0	2,529	2,529	0	
Outcome 3.2		5,891	5,891	0	36,705	30,180	6,525	0	0	0	2,529	2,529	0	0
3.3.1	FD	1,964	1,964	0	16,214	10,283	5,931	0	0	0	843	843	0	
3.3.2	FD	1,964	1,964	0	9,000	9,000	0	0	0	0	843	843	0	
3.3.3	FD	1,964	1,964	0	14,437	10,483	3,954	0	0	0	963	843	120	
Outcome 3.3		5,892	5,892	0	39,651	29,766	9,885	0	0	0	2,649	2,529	120	0
Total TA3		63,301	63,301	0	562,943	329,588	233,355	0	0	0	30,305	29,185	1,120	67,000

Table 9. Over-all costing of Thematic Area 4 of the NFMCP 2021-2026 (in J\$'000)

Results	Lead Responsibility	TOTAL 10 YEARS			21. Compensation of Employees			22. Travel Expenses and Subsistence			23. Rental of Property and Machinery		
		Total Costs (in J\$'000)	Consolid. fund	Other sources	Total Costs (in J\$'000)	Consolid. fund	Other sources	Total Costs (in J\$'000)	Consolid. fund	Other sources	Total Costs (in J\$'000)	Consolid. fund	Other sources
4.1.1	FD	380,066	380,066	0	249,264	249,264	0	38,047	38,047	0	3,220	3,220	0
4.1.2	FD	54,370	54,370	0	35,609	35,609	0	5,435	5,435	0	459	459	0
4.1.3	FD	50,027	50,027	0	35,609	35,609	0	5,435	5,435	0	459	459	0
Outcome 4.1		484,463	484,463	0	320,482	320,482	0	48,917	48,917	0	4,138	4,138	0
4.2.1	FD	59,347	59,244	103	35,609	35,609	0	5,435	5,435	0	459	459	0
Outcome 4.2		59,347	59,244	103	35,609	35,609	0	5,435	5,435	0	459	459	0
Total TA4		543,810	543,707	103	356,091	356,091	0	54,352	54,352	0	4,597	4,597	0

TABLE 9 CONTINUED.		24. Utilities and Communication Services			25. Use of Goods and Services			31. Land (Non Produced Assets)			32. Fixed Assets (Capital goods)			Apropriations-in-Aid
Results	Lead Responsibility	Total Costs (in J\$'000)	Consolid. fund	Other sources	Total Costs (in J\$'000)	Consolid. fund	Other sources	Total Costs (in J\$'000)	Consolid. fund	Other sources	Total Costs (in J\$'000)	Consolid. fund	Other sources	
4.1.1	FD	13,745	13,745	0	69,888	69,888	0	0	0	0	5,902	5,902	0	
4.1.2	FD	1,964	1,964	0	10,060	10,060	0	0	0	0	843	843	0	
4.1.3	FD	1,964	1,964	0	5,717	5,717	0	0	0	0	843	843	0	
Outcome 4.1		17,673	17,673	0	85,665	85,665	0	0	0	0	7,588	7,588	0	0
4.2.1	FD	1,964	1,964	0	15,037	14,934	103	0	0	0	843	843	0	
Outcome 4.2		1,964	1,964	0	15,037	14,934	103	0	0	0	843	843	0	0
Total TA4		19,637	19,637	0	100,702	100,599	103	0	0	0	8,431	8,431	0	0

Table 10. Over-all costing of Thematic Area 5 of the NFMCP 2021-2026 (in J\$'000)

Results	Lead Responsibility	TOTAL 10 YEARS			21. Compensation of Employees			22. Travel Expenses and Subsistence			23. Rental of Property and Machinery		
		Total Costs (in J\$'000)	Consolid. fund	Other sources	Total Costs (in J\$'000)	Consolid. fund	Other sources	Total Costs (in J\$'000)	Consolid. fund	Other sources	Total Costs (in J\$'000)	Consolid. fund	Other sources
5.1.1	FD	544,908	543,708	1,200	356,092	356,092	0	54,353	54,353	0	4,599	4,599	0
5.1.3	MEGJC/CCD	71,150	62,050	9,100	33,750	33,750	0	10,125	10,125	0	175	175	0
5.1.4	FD	163,111	163,111	0	106,827	106,827	0	16,305	16,305	0	1,379	1,379	0
Outcome 5.1		779,169	768,869	10,300	496,669	496,669	0	80,783	80,783	0	6,153	6,153	0
5.2.1	IOJ	62,300	62,300	0	33,750	33,750	0	10,125	10,125	0	175	175	0
5.2.2	FD	168,111	163,111	5,000	106,827	106,827	0	16,305	16,305	0	1,379	1,379	0
5.2.3	NEPA	62,600	62,300	300	33,750	33,750	0	10,125	10,125	0	175	175	0
Outcome 5.2		293,011	287,711	5,300	174,327	174,327	0	36,555	36,555	0	1,729	1,729	0
5.3.1	FD	401,747	380,547	21,200	249,264	249,264	0	38,047	38,047	0	3,220	3,220	0
5.3.3	MSJ	68,990	61,080	7,910	33,750	33,750	0	10,125	10,125	0	175	175	0
5.3.4	FD	181,111	163,111	18,000	106,827	106,827	0	16,305	16,305	0	1,379	1,379	0
5.3.5	NEPA & FD	62,300	62,300	0	33,750	33,750	0	10,125	10,125	0	175	175	0
5.3.6	FD	358,322	337,643	20,679	223,342	223,342	0	32,032	32,032	0	2,942	2,942	0
Outcome 5.3		1,072,470	1,004,681	67,789	646,933	646,933	0	106,634	106,634	0	7,891	7,891	0
Total TA5		2,144,650	2,061,261	83,389	1,317,929	1,317,929	0	223,972	223,972	0	15,773	15,773	0

TABLE 10
CONT.

Results	Lead Responsibility	24. Utilities and Communication Services			25. Use of Goods and Services			31. Land (Non Produced Assets)			32. Fixed Assets (Capital goods)			Apropriations-in-Aid
		Total Costs (in J\$'000)	Consolid. fund	Other sources	Total Costs (in J\$'000)	Consolid. fund	Other sources	Total Costs (in J\$'000)	Consolid. fund	Other sources	Total Costs (in J\$'000)	Consolid. fund	Other sources	
5.1.1	FD	19,635	19,635	0	100,598	100,598	0	0	0	0	9,631	8,431	1,200	
5.1.3	MEGJC/CCD	1,700	1,700	0	22,600	13,500	9,100	0	0	0	2,800	2,800	0	
5.1.4	FD	5,891	5,891	0	30,180	30,180	0	0	0	0	2,529	2,529	0	
Outcome 5.1		27,226	27,226	0	153,378	144,278	9,100	0	0	0	14,960	13,760	1,200	0
5.2.1	IOJ	1,700	1,700	0	13,500	13,500	0	0	0	0	3,050	3,050	0	
5.2.2	FD	5,891	5,891	0	30,180	30,180	0	0	0	0	7,529	2,529	5,000	
5.2.3	NEPA	1,700	1,700	0	13,800	13,500	300	0	0	0	3,050	3,050	0	
Outcome 5.2		9,291	9,291	0	57,480	57,180	300	0	0	0	13,629	8,629	5,000	0
5.3.1	FD	13,745	13,745	0	70,369	70,369	0	0	0	0	27,102	5,902	21,200	
5.3.3	MSJ	6,000	1,700	4,300	13,500	13,500	0	0	0	0	5,440	1,830	3,610	
5.3.4	FD	5,891	5,891	0	30,180	30,180	0	0	0	0	20,529	2,529	18,000	
5.3.5	NEPA & FD	1,700	1,700	0	13,500	13,500	0	0	0	0	3,050	3,050	0	
5.3.6	FD	12,271	12,271	0	82,673	61,994	20,679	0	0	0	5,062	5,062	0	
Outcome 5.3		39,607	35,307	4,300	210,222	189,543	20,679	0	0	0	61,183	18,373	42,810	0
Total TA5		76,124	71,824	4,300	421,080	391,001	30,079	0	0	0	89,772	40,762	49,010	0