National Forest Management and Conservation Plan (NFMCP):

Annual Progress Report 2019-2020

and

Draft Implementation Plan 2020-2021

August 2020

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National Forest Management and Conservation Plan - Annual Progress Report 2019-2020 & Draft Implementation Plan 2020-2021.

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Vision for the Forest Sector:

The National Forest Management and Conservation Plan (NFMCP) forms part of the policy tools to facilitate the implementation of the Forest Policy (2017) and guides the work of the Forestry Department, and as such its vision statement is the same as presented in the Forest Policy for Jamaica 2017:

"By 2062, Jamaica's forests and its biodiversity are sufficiently restored and sustainably managed, so once again the island can adequately be described as "the land of wood and water", capable of meeting the social, economic and ecological needs of current and future generations."

Goal and Strategic Objectives NFMCP:

Guided by its planning processes, the obligations under the United Nations Forest Forum (UNFF) and the Jamaica's National Development Plan-Vision 2030, the Forestry Department has articulated the goal of NFMCP as:

"Sustainably manage and utilise Jamaica's forest resources to enhance social and economic development and contribute to building the country's climate resilience."

The NFMCP seeks to achieve this goal through four (4) Strategic Objectives (SOs):

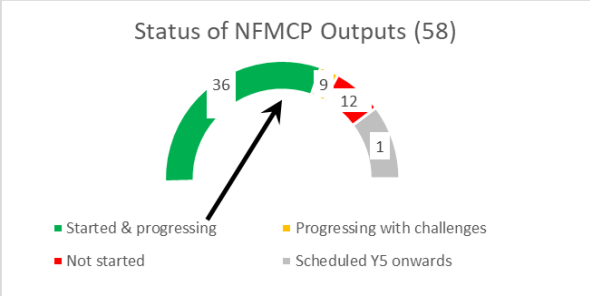
SO1: Reverse forest degradation, deforestation and the loss of forest biodiversity, through conservation and sustainable forest management, as well as strengthening the legislative, policy and institutional framework of the sector.

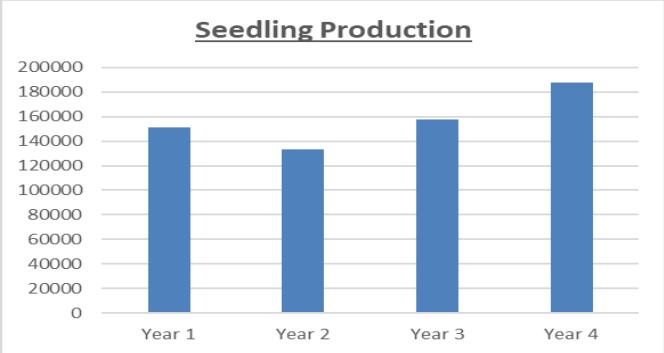
SO2: Enhance economic, social and environmental benefits of forests through the sustainable utilisation of forest resources.

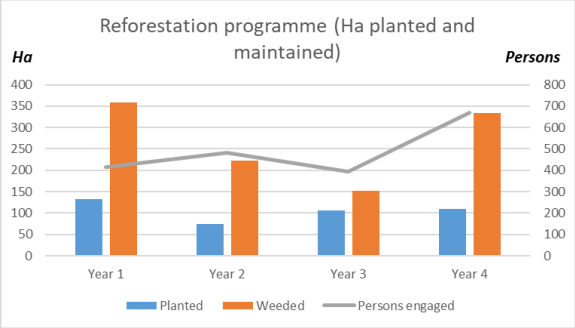
SO3: Build the capacity within the Forestry Department, its partners and forest communities to manage, protect and conserve the forest resources.

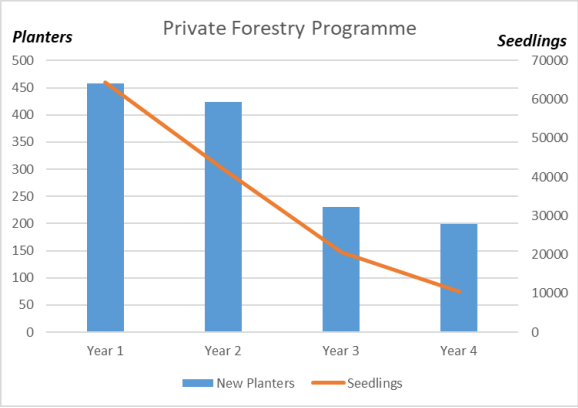
SO4: Increase public education and awareness to protect, conserve, restore and manage Jamaica's forests.

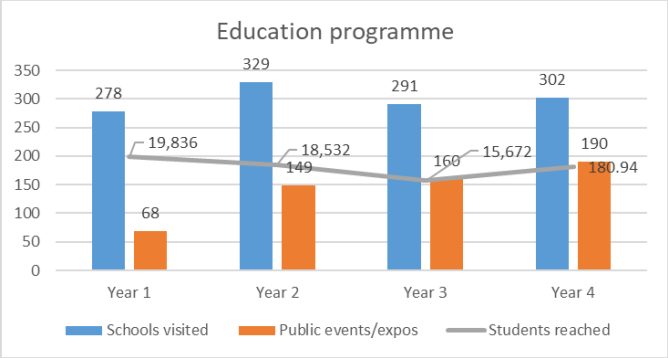
Dashboard on Status of the NFMCP as at 31 March 2020











FOREWORD

(By CEO and Conservator of Forests)

ACRONYMS AND ABBREVIATIONS

AF	Adaptation Fund
AGC	Attorney General Chambers
BSJ	Bureau of Standards Jamaica
BJCM	Blue & John Crow Mountains
CATIE	Tropical Agricultural Research and Higher Education Center
CBO	Community-based Organisation
CCD	Climate Change Division (MEGJC)
CDC	Community Development Committee
CMS	Centre for Marine Sciences (UWI)
CPC	Chief Parliamentary Counsel
DRR	Disaster Risk Reduction
EFJ	Environmental Foundation of Jamaica
ERMB	Environment and Risk Management Branch (MEGJC)
EIA	Environmental Impact Assessment
ESSJ	Economic and Social Survey of Jamaica
EU	European Union
FAO	Food and Agriculture Organisation (UN)
FY	Financial Year
FD	Forestry Department
FMA	Forest Management Area
FMP	Forest Management Plan
FMU	Forest Management Unit
FRA	Forest Resource Assessment
FSE	Forward Spending Estimates
FTE	Full-Time Effort
GCF	Green Climate Fund
GEF	Global Environment Facility
GFFFN	Global Forest Financing Facilitation Network
GHG	Greenhouse gases
GIS	Geographic Information System
GOJ	Government of Jamaica
IFMJ	Improved Forest Management for Jamaica
IDB	Inter-American Development Bank
IIF	International Iguana Foundation
IIED	International Institute for Environment & Development
IOJ	Institute of Jamaica
IUCN	International Union for Conservation of Nature
JAMPRO	Jamaica Promotions Corporation
JBDC	Jamaica Business Development Corporation
JCDT	Jamaica Conservation and Development Trust
JCF	Jamaica Constabulary Force
JET	Jamaica Environment Trust
JFB	Jamaica Fire Brigade
JNHT	Jamaica National Heritage Trust
JSIF	Jamaica Social Investment Fund
KPI	Key Performance Indicator
LFMC	Local Forest Management Committee
LUCA	Land Use Cover Assessment
M&E	Monitoring and Evaluation
MC	Municipal Corporation
MDA	Ministries, Departments and Agencies
MEGJC	Ministry of Economic Growth and Job Creation
MGD	Mines and Geology Division (MTM)
MICAF	Ministry of Industry, Commerce, Agriculture and Fisheries
MLGCD	Ministry of Local Government and Community Development
MOE	Ministry of Education
MOFPS	Ministry of Finance and the Public Service
MOJ	Ministry of Justice
MOT	Ministry of Tourism
MSET	Ministry of Science and Technology
MSJ	Meteorological Service of Jamaica
MTF	Medium Term Socio-Economic Policy Framework of Vision 2030
MTM	Ministry of Transport and Mining
MTRBB	Medium Term Results Based Budgeting
NAO	National Authorising Officer (PIOJ)
NBSAP	National Biodiversity Strategy and Action Plan
NCU	Northern Caribbean University
NDA	National Designated Authority
NEPA	National Environment and Planning Agency
NERGIS	National Emergency Response GIS
NFFS	National Forest Finance Strategy
NFEL	National Forest Emission Level
NFMCP	National Forest Management and Conservation Plan
NGO	Non-Governmental Organisation
NHT	National Housing Trust
NLA	National Land Agency

NRV	Natural Resource Valuation
NSWMA	National Solid Waste Management Authority
NTFP	Non Timber Forest Products
NWC	National Water Commission
ODPEM	Office of Disaster Preparedness and Emergency Management
PIE	Primary Implementing Entity
PIF	Project Identification Form
PIOJ	Planning Institute of Jamaica
PMER	Performance Monitoring, Evaluation and Reporting
PSIP	Public Sector Investment Programme
PSOJ	Private Sector Organisation of Jamaica
PSP	Permanent Sample Plot
RADA	Rural Agricultural Development Authority
REA	Rapid Ecological Assessment
REDD	Reducing Emissions from Deforestation and Forest Degradation
SCPU	Strategic Corporate Planning Unit (Forestry Department)
SDC	Social Development Commission
SDG	Sustainable Development Goal
SES	Socioeconomic Survey
SFM	Sustainable Forest Management
SIDS	Small Island Developing State
SIS	Safeguards Information Systems
SRC	Scientific Research Council
STATIN	Statistical Institute of Jamaica
TA	Technical Area / Technical Assistance
TAC	Technical Advisory Committee (NFMCP)
TCF	Technical Cooperation Facility (EU)
TPDCo	Tourism Product Development Company
PAC	Protected Areas Committee
PASMP	Protected Areas System Master Plan
PDC	Parish Development Committee
PES	Payment for Ecosystems Services
PFP	Private Forestry Programme
TEF	Tourism Enhancement Fund
TOR	Terms of Reference
TWG	Thematic Working Group (Vision 2030)
UAV	Unmanned Aerial Vehicle
UDC	Urban Development Corporation
UN	United Nations
UNCBD	United Nations Convention on Biological Diversity
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNESCO	United Nations Educational, Scientific and Cultural Organisation
UNFCCC	United Nations Framework Convention on Climate Change
UNFF	United Nations Forum on Forests
USFS	United States Forest Service
UTech	University of Technology
UWI	University of the West Indies
UWI/CSG	UWI– Climate Studies Group
UWI/DLS	UWI– Department of Life Sciences
WRA	Water Resources Authority
WWF	World Wildlife Fund

EXECUTIVE SUMMARY

This report provides an overview of the progress achieved in the implementation of the National Forest Management and Conservation Plan (NFMCP) 2016-2026 during its fourth year of execution (Financial Year 2019-2020). The NFMCP serves as the implementation tool for the Forest Policy for Jamaica 2017.

The implementation of the NFMCP is being led by the Forestry Department (FD) and six (6) partner organizations, referred to as the Primary Implementing Entities (PIE). Other actors, from a range of sectors also participate in the implementation of the NFMCP, including government entities, private landowners, NGOs, community groups, international development partners, private sector and research institutions.

The NFMCP is comprised of fifty-eight (58) outputs, fifty-seven (57) of which have associated targets slated for implementation (commencement & continuation) throughout the year. One (1) output had no targets for the reporting period, as implementation is scheduled to start in year 5 (FY 2020/2021). Of the fifty-seven (57) Outputs being reported on, sixteen (16) were identified as behind schedule at the end of the 18/19 FY and were to start implementation in the 19/20 FY. As at the end of the 19/20 FY a total of 12 outputs have not started due to challenges. While there has been a reduction over the previous year, analysis has identified within that number, some outputs that were previously progressing now stalled.

Overall, at the end of year 4 of the NFMCP, a total of forty-five (45) or 79% of the Outputs detailed in the ten-year plan saw some progress (even with challenges) being made in relation to implementation. The remaining twelve (12) Outputs had either not started or no progress was reported. During the data collection and analysis process for the preparation of this report, several challenges were identified that account for the lack of progress made in relation to these twelve (12) Outputs. These include:

- Insufficient resources, human, financial and technical resources that were vital as well as technical capacity.
- Poor scheduling- several outputs were scheduled using the same timelines (i.e the implementation/execution would start simultaneously), when the results of one Output serves as an input for the implementation/ execution of another.
- Outputs/Targets – that were not clearly defined
- Lack of ownership for Output by assigned/responsible lead entity- While lead entities were identified for all Outputs in the plan and are detailed in the PMER Strategic Framework and Plan no ownership has been assumed of the Output.

Specific interventions will be undertaken to address these shortfalls going forward in order to improve the implementation process.

The NFMCP is being implemented through five (5) Thematic Areas that are linked to five (5) sector Outcomes from which each output is derived. The first four (4) Thematic Areas can be considered as the foundation of the NFMCP, while the fifth Thematic Area seeks to build capacity for the sector and facilitates monitoring, data and knowledge management activities. This in turn supports the

implementation of the other four (4)Thematic Areas. The Thematic Areas and Outputs can be summarized as below:

1. Forest Governance and Conservation- **Outcome 1**-*(Ten (10) Outputs are progressing (even with challenges), while one (1) has not started due to challenges and is behind schedule)*
2. Forest Utilization- **Outcome 2**-*(Eight (8) Outputs are progressing(even with challenges) , and three (3) have not started due to challenges and are behind schedule)*
3. Capacity for Sustainable Forest Management- **Outcome 3**-*(Twelve (12) Outputs are progressing (even with challenges) , one (1) has been completed, three (3) have not started due to challenges and are behind schedule.)*
4. Education, Training and Awareness -**Outcome 4**-*(All six (6) Outputs are progressing even with some challenges.)*
5. Monitoring and Information Management -**Outcome 5**- *(Eight (8) Outputs are progressing (even with challenges), five (5) have not started due to challenges and are behind schedule.)*

The major results achieved in Year 4 include:

- Continued operation of the Technical Advisory Committee (TAC) of the NFMCP - two (2) meetings were held (**Output 1.1.1**);
- Completion and submission of revised Drafting Instructions to align the Forest Act 1996 with the Forest Policy for Jamaica 2017. Revised drafting instructions sent to the CPC (**Output 1.1.2**);
- Confirmation of three (3) Parish Development Orders, one (1) was prepared and one (1) revised (**Output 1.1.3**);
- Implementation of additional new mechanisms to detect encroachment on forest estates (**Output 1.1.5**);
- Continued execution of the boundary verification programme including demarcation of the area proposed for protection as the Cockpit Country (**Output 1.1.7**);
- Continued progress on the preparation of control plans for invasive species (**Output 1.2.2**), development of Species Conservation Plans (**Output 1.2.3**) and the identification of target species most relevant to the forest sector for future conservation efforts;
- Reforestation of 100 ha of denuded lands islandwide (**Output 3.1.1**)
- Forest restoration activities incorporated within Watershed Management Planning (**Output 3.1.3**);
- Completion of two (2) Forest Management Plans (FMP) supporting sustainable forest management **(Output 3.1.2);**
- Under the school visit programme, 267 schools were visited, and 18,094 students and 887 teachers were reached. FD participated in 190 public awareness events, including expos and exhibitions island-wide and staged nine (9) community meetings which were attended by 336 persons (**Output 4.1.1**);

- Execution of seven (7) Forest Fire Management Training sessions reaching 237 persons across the island. Additionally, FD developed and aired a forest fire awareness radio jingle and utilized over 350 radio slots to air forest fire management messaging (**Output 4.1.2**);
- Execution of one (1) Technical Transfer Session with Private Forestry Programme (PFP) participants held; twenty-eight (28) persons attended (**Output 4.1.3**);
- Capacity Building for thirty-two (32) technical officers in Natural Resource and Economic Valuation Training conducted by CATIE (**Output 4.2.1**);
- Expansion of database of private forest land owners with parcel information for 1000 parcels. (**Output 3.1.8** & **Output 5.1.4**);
- Comprehensive mapping and assessment of Mangrove and Swamp forests island-wide. (**Output 5.1.2**);
- Expansion of the FD recreational trails dataset to include trails used for the annual Forest Treks (2011-2019) as well as the inclusion of a GIS web application (**Output 5.1.5**);

Several activities for targets under the plan which were scheduled for the last quarter of the FY, were impacted by the COVID 19 pandemic and its arrival to the island in March 2020. As a result of the 1st imported case, the Government of Jamaica implemented several restrictions which inadvertently affected several activities. It is believed however that overall implementation progress for the period was fair.

CHAPTER 1: INTRODUCTION

BACKGROUND

The National Forest Management and Conservation Plan (NFMCP) is the 10-year plan (2016-2026) for the forest sector. It outlines the objectives and strategies of the forest sector to help ensure that Jamaica's forests are sustainably managed, protected, healthy, economically viable and socially beneficial to all.

At the heart of the Plan is the engagement of the Jamaican people in the protection, conservation and management of Jamaica's forests and its biodiversity. The NFMCP encourages the participation of all sectors of society in protecting and preserving the ecosystem services provided by Jamaica's forests for present and future generations. The Forestry Department (FD) together with six partner entities, referred to as the Primary Implementing Entities (PIE), leads the implementation of the NFMCP. Other actors from a range of sectors also have roles and responsibilities in the implementation of the NFMCP, including government entities, private landowners, NGOs, community groups, international development partners, private sector and research institutions.

The Plan is firmly aligned to national and international strategies and policies to promote more wholesome and coherent resilient development planning in Jamaica. As such, it aims to support the good governance of forest resources within the context of a national approach for sustainable and inclusive growth. The NFMCP was tabled and approved in both Houses of Parliament on the 6th and 8th of February 2018 respectively.

This report covers progress in relation to the development and implementation of activities at year 4 (financial year 2019-2020) of the NFMCP based on targets projected for the Outputs listed. Implementation of the NFMCP is being done using a sector wide approach. For several Outputs, execution of activities utilised budgetary allocations of the PIEs. Programme and projects have also been identified to support implementation of the NFMCP and its various outputs including the GEF/GOJ/IDB Yallahs Hope Watershed Project and the GCF/REDD+ Readiness project, (these are further detailed in **Chapter 4**). It should be noted that the four-year Budget Support Programme funded by the European Union for the forest sector is currently being implemented by the FD and has a Technical Assistance component which will provide additional support and capacity to the organisation.

RATIONALE OF THIS REPORT

This progress report seeks to present a summary of achievements per Output as well as a synopsis of the Outcomes as detailed in the logic model for the NFMCP. **Chapter 2** presents using the logic model, templates with information for each Output within the NFMCP; highlighting the key performance Indicator, baseline, target for the year, and status of the annual targets for each Output. It also outlines the major challenges and lessons learned, partnership/stakeholder information as well as major targets for the 2020/2021 FY.

Chapter 3 presents the major risks that were reported by the various PIE, while implementing the outputs. Risk levels are indicated, and the risks are described as risk statements with mitigation strategies detailed. For the period the new risk of the COVID-19 pandemic was added, and the rating related to Stakeholder engagement/buy-in increased.

Chapter 4 provides an update on the financing available for implementing the NFMCP.

Chapter 5 provides updates on governance and oversight for the NFMCP.

Chapter 6 summarises the lessons learned, challenges, conclusions and recommendations.

The implementation plan for Year 5 of the NFMCP presenting the latest updates on annual targets for the remainder of the implementation period of the NFMCP is detailed in **Chapter 7**.

In order to enhance the accessibility of the information contained in this report, there are many internal links between related pieces of information.

APPROACH & METHODOLOGY FOR THE PREPARATION OF THE REPORT:

Due to the COVID-19 pandemic which presented in the island in March 2020, data collection and validation of the report was conducted using online methods. In June 2020 contact was made with each PIE as well as designated activity leaders within the FD for updates on their respective Outputs. Templates specific to each Output were designed and submitted for completion. Data verification of information reported was done using annual reports and available information. One on one validation sessions were also had on several Outputs to ensure that the data presented was comprehensive and represented actual status of implementation.

For several of the Outputs, information was not available on the financial progress as such a financial report could not be presented. Additionally, information related to Stakeholder/Partnership updates was not available for all Outputs, highlighting the need for more coordinated stakeholder engagement. To present the data in a clear and succinct format, colour schemes were used to clearly identify Outputs and their status throughout the report. **GREEN** font is used to indicate Outputs which are progressing with annual targets either in progress or completed. **GREEN WITH YELLOW HIGHLIGHT** is used to indicate Outputs that though progressing, do have some challenges. The **RED** font is used to reflect Outputs that have not started or progress has stalled due to various issues/challenges and need to be reviewed. This is visually presented in **Table 2** below.

It should also be noted that as the fourth year of implementation is still early in the life of the NFMCP, no analysis towards overall programme outcomes are presented in this Report.

CHAPTER 2: STATUS OF IMPLEMENTATION OF THE NATIONAL FOREST MANAGEMENT & CONSERVATION PLAN (NFMCP)

OVER-ALL STATUS

The NFMCP contains fifty-eight (58) outputs, with fifty-seven (57) slated for implementation within the first four years. Information/ progress on one output- *Output 5.1.3* is therefore **not reflected** in this report, as it is scheduled to start in year 5 of the NFMCP.

By the end of year four (FY2019/2020), implementation and progress was reflected in relation to 45 of the 57 Outputs (79%). Fair progress has therefore been made in relation to the execution of the majority of the targets for the year. Of the 45 outputs reporting some progress: ***35 outputs (61%) are progressing well,*** with one output- **Output 3.2.3** noted as completed having met the reporting requirement of its KPI –*'(Yes/No) Analytical report produced and disseminated'*. These are reflected in green in **Table 2** below. ***Ten (10) outputs, (18%), though progressing, are experiencing challenges*** which if not addressed could stall/halt implementation (these are reflected in green with yellow highlight). The remaining ***twelve (12) outputs (21%) (represented in red), have reported no progress/ have not started due to challenges***.

When looking at progress across the thematic areas***,*** ***Thematic Area 4*** saw commendable advances being made to the achievement of the targets. Currently 5 of the 6 outputs are progressing and have no challenges. ***Thematic Area 1*** is the next best performer with 9 of the 11 Outputs seeing progress when compared with the performance of annual targets. This is then followed by ***Thematic Area 3*** where 11 of the 16 Outputs are progressing.

Of concern with respect to progress are ***Thematic Area 2*** ***and*** ***Thematic Area 5***, which only have 4 of 11 Outputs and 6 of 13 Outputs respectively, reporting progress with no challenges. These thematic areas therefore represent the grouping with the most Outputs which have not started due to challenges.

Table 2 below presents this data using the colour scheme detailed above.

While overall progress towards implementation over the last four years has been fair, several areas of concern have emerged that must be addressed in the short-term in order to ensure maximum execution of the targets under the NFMCP. These challenges relate to capacity (institution, human, financial) as well as dependency linkages between other inputs/resources which were not been adequately scheduled or planned. Additionally, some specific areas of concern are:

- **Output 5.2.1** & **Output 5.2.3** that need committed leads for the associated activities as no work towards progress has been reported.
- The current execution of the GCF REDD+ readiness project as it has been recognised that several activities related to the development of capacity for REDD+, and REDD+ readiness for Jamaica

detailed in the NFMCP, may be duplicated under this project. A review of these targets in light of this project, which came onstream after the development of the NFMCP, is therefore warranted.

- Concerns related to implementation strategies for activities not being led by the FD .

The overall success and progress of the implementation of the NFMCP will therefore depend on the FD as the lead for the sector to engage key stakeholders and work to address these gaps identified ahead of the remaining years for implementation.

Table 1: Overview of the status of implementation of the NFMCP Outputs.

Output	Number of Outputs	Output #
Started and Progressing well	**35**	**1.1.1, 1.1.2, 1.1.3, 1.1.4, 1.1.5, 1.1.7, 1.2.2, 1.2.3,1.2.4, 2.1.1, 2.1.4, 2.2.2, 2.3.4, 3.1.1, 3.1.2, 3.1.3, 3.1.4, 3.1.7, 3.1.8, 3.2.1, 3.2.2, 3.2.3, 3.3.1, 3.3.3, 4.1.1, 4.1.2, 4.1.3, 4.2.1, 4.2.3, 5.1.2, 5.1.4, 5.1.5, 5.2.2, 5.3.4, 5.3.6**
Progressing but experiencing challenges	**10**	**1.2.1, 2.1.3, 2.3.2, 2.3.3, 2.3.5, 3.1.6, 3.2.4, 4.2.2, 5.1.1, 5.3.2**
Not started, Review of Output/ Interventions needed to address issues	**12**	**1.1.6, 2.1.2, 2.2.1, 2.3.1, 3.1.5, 3.2.5, 3.3.2, 5.2.1, 5.2.3, 5.3.1, 5.3.3, 5.3.5**
Scheduled for Year 5 onwards and not reported on here	**1**	**5.1.3**
Total	**58**	

The NFMCP Logic Model is presented below in ***Table 2***, with the status of implementation of the fifty-seven (57) outputs colour coded**.** Those in **GREEN** represent outputs that are progressing. **GREEN with YELLOW HIGHLIGHT** indicated those outputs that though progressing, are experiencing some challenges, while **RED** indicate outputs that have not started and need to be reviewed. Details on each are provided in the rest of this Chapter by Thematic Area.

TABLE 2: Logic Model of NFMCP 2016-2026, highlighting the status of implementation of the 57 Outputs by Year 4.

Alignment	**UNFF SDGs Jamaica Vision 2030**	**UNFCCC Forest Policy**	**UNCBD Ramsar Climate Change Policy Framework**	**UNESCO World Heritage Sites PASMP**	**NBSAP**
Thematic Areas	**1. Forest Governance & Conservation**	**2. Forest Utilisation**	**3. Capacity for Sustainable Forest Management**	**4. Education, Training and Awareness**	**5. Monitoring and Information Management**
Outcomes	**Outcome 1.1:** Strengthened governance, policy and legislative framework to ensure sustainable development of the forest sector. **Outcome 1.2:** Forest biodiversity protected.	**Outcome 2.1:** Innovative mechanisms established for financing sustainable forest management and obtaining benefits from forest use. **Outcome 2.2:** Sustainable harvesting and use of timber products from forests. **Outcome 2.3:** Sustainable use of non-timber products and services of forests.	**Outcome 3.1:** Improved participatory planning to manage, protect and conserve Jamaica's forests. **Outcome 3.2:** Strengthened institutional capacity for REDD+ readiness. **Outcome 3.3:** Strengthened capacity of Local Forest Management Committees and other community groups.	**Outcome 4.1:** Forest communities, the general public as well as targeted groups have increased capacity regarding sustainable forest practices. **Outcome 4.2:** Strengthened capacity for natural resource valuations, Carbon Stock Monitoring and silviculture.	**Outcome 5.1:** Improved availability of spatial data for sustainable forest management practices, promoting investment, and assessing vulnerabilities and risks in the forest sector. **Outcome 5.2:** Strengthened capacity for impact and vulnerability assessments and for management of research and knowledge systems. **Outcome 5.3:** Improved collaborative monitoring of forest resources.
Status of Implement-ation of Outputs	***Output 1.1.1:*** *Cross sectoral mechanism established for integrating the Forest Sector into relevant national decision making processes.* ***Output 1.1.2:*** *Forest Act amended.* ***Output 1.1.3:*** *Support for the preparation of Parish*	***Output 2.1.1:*** *Incentives programme evaluated.* ***Output 2.1.2:*** *New or revised incentives for SFM made available and promoted.* ***Output 2.1.3:*** *Programme developed for payment of ecosystem*	***Output 3.1.1:*** *Reforestation programme for forest estates developed.* ***Output 3.1.2:*** *Forest Management Plans (FMP) for forest estates in clusters developed.* ***Output 3.1.3:*** *Watershed restoration plan developed, implemented.*	***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.*	***Output 5.1.1:*** *Spatial representation of disturbance within broad leaf forests developed* ***Output 5.1.2:*** *Mangrove and swamp forests mapped and assessed.* ****Output 5.1.3:*** *Gap analysis conducted identifying spatial data*

	Development Orders provided. ***Output 1.1.4**: Crown lands transferred by Commissioner of Lands to the Forestry Department for sustainable management.* ***Output 1.1.5**: Enforcement capacity of FD increased.* ***Output 1.1.6**: Regulations developed for special recreational use permits, research permits, licence programmes.* ***Output 1.1.7**: Boundary verification programme implemented.* ***Output 1.2.1**: List of invasive plant and animal species in forested areas developed, maintained.* ***Output 1.2.2**: Invasive species control (management) plan designed and implemented.* ***Output 1.2.3**: Species (pilot) conservation plans developed.* ***Output 1.2.4**: Identification of target species most relevant*	*services within forested areas.* ***Output 2.1.4**: Alternative livelihoods in forest communities promoted.* ***Output 2.2.1**: Economic viability of wood product species assessed and appropriate timber processing methods recommended.* ***Output 2.2.2**: Sustainable harvesting programme developed.* ***Output 2.3.1**: Research programme on non-timber forest products developed.* ***Output 2.3.2**: Producers and consumers of non-timber products identified.* ***Output 2.3.3**: Economically viable non-timber market opportunities developed.* ***Output 2.3.4**: Recreational sites rehabilitated.*	***Output 3.1.4**: Nursery programme implemented & evaluated.* ***Output 3.1.5**: Mangrove and swamp forest management plan developed & implemented. **REVIEW OF OUTPUT NEEDED** * ***Output 3.1.6**: Guidelines developed for management practices for riparian forests along rivers and streams within forest estates.* ***Output 3.1.7**: Appropriate guidelines developed for the establishment and maintenance of trees in urban settings; for cultural, aesthetics and shade purposes.* ***Output 3.1.8**: Database of private forest land owners created and maintained.* ***Output 3.2.1**: Existing forest inventory approach reviewed and revised to support Carbon Stock Monitoring (CSM) and potential carbon trading agreements.* ***Output 3.2.2**: REDD+ readiness Strategy completed.* ***Output 3.2.3**: Analytical Report on the drivers for deforestation/forest degradation produced (REDD+ readiness).***Report produced***	***Output 4.1.2**: Forest fire-related public awareness and education programme designed, implemented.* ***Output 4.1.3**: Outreach programme for private forest owners developed and evaluated on an ongoing basis.* ***Output 4.2.1**: Training programmes for natural resource/ecosystem valuations (NRVs) for all types of forests conducted.* ***Output 4.2.2**: Training in silviculture conducted.* ***Output 4.2.3**: Training in Carbon Stock Monitoring conducted.*	*and other information to better map the risks and vulnerabilities of forests and communities to climate change and related hazards (e.g., fire, floods, landslides).***(NOT SCHEDULED TO START UNTIL YEAR 5)*** ***Output 5.1.4**: Lands verified and mapped in the private lands reforestation programme.* ***Output 5.1.5**: Recreational, cultural and heritage sites identified and mapped.* ***Output 5.2.1** Working group established for research that will improve knowledge regarding the management of mangrove forests, swamp forests and short open dry limestone forests; and on the impact of climate change on all forest types. ***REVIEW OF OUTPUT NEEDED** * ***Output 5.2.2**: Forest fire assessments conducted.* ***Output 5.2.3**: Impact assessment of mining and other permitted activity on forest goods, services, and values over time conducted.-***REVIEW OF OUTPUT NEEDED** *

	to the forest sector for future conservation efforts.	***Output 2.3.5**: Guidelines for the use of cultural and heritage sites on Forest Reserves and FMAs developed.*	***Output 3.2.4**: National forest reference emission level established (calculated) (REDD+ readiness).* ***Output 3.2.5**: Safeguards Information System (REDD+ readiness).* ***Output 3.3.1**: Strengthened capacity of LFMCs and other community groups in project development and management* . ***Output 3.3.2**: Governance and decision making processes related to LFMCs strengthened. **REVIEW OF OUTPUT NEEDED **** ***Output 3.3.3**: Fire suppression teams established and trained within community groups in high priority/high risk areas.*		***Output 5.3.1**: Improved availability of data for driving the growth and investment in the forest sector (both timber & non timber). * **REVIEW OF OUTPUT NEEDED **** ***Output 5.3.2**: REDD+ preparedness – Strengthened forest monitoring systems.* ***Output 5.3.3**: Weather stations placed in strategic locations within forested areas to garner additional data to support sustainable forest management practices.* ***Output 5.3.4**: Forest monitoring system using Permanent Sample Plots (PSPs) established.* ***Output 5.3.5**: Targeted species (giant swallowtail, yellow-and-black-billed parrot, water mahoe and bitter wood) surveyed, mapped. * **REVIEW OF OUTPUT NEEDED**** ***Output 5.3.6**: Knowledge Management and Strategic Planning of the NFMCP achieved.*
Cross-cutting issues	**Climate change**		**Coordination and harmonisation among stakeholders**		**Resource mobilisation**

THEMATIC AREA 1: FOREST GOVERNANCE AND CONSERVATION

The first thematic area of the NFMCP is intended to address several activities that have over the last twenty years, contributed to the loss of quality forest in Jamaica. The outputs relate to the development and maintenance of comprehensive national policy and legislative frameworks to govern the sector as well as afford protection to biodiversity in forested areas. Under this Thematic Area, the two (2) Outcomes have specific Outputs which are geared towards the amendment of the Forest Act and the development of Parish Development Orders with priorities related to forest resources and the conservation of biodiversity among other key areas. Additionally, in light of the vulnerability of mangrove forests, areas owned by the Commissioner of Lands should be transferred to the FD to ensure the sustainable development and management of the island's forest systems. Under Outcome 1.1, progress was seen during the period with the continued engagement of the TAC formed for the NFMCP, the preparation by the MEGJC of the Drafting Instructions for the Amendment of the Forest Act 1996 for submission to the CPC , confirmation of Development Orders for three parishes, continued increase in enforcement and compliance mechanisms to protect lands managed by the FD, as well as boundary verification and planting of the first monuments in the area proposed for protection as the Cockpit Country. No activity has started for Output 1.1.6. For Outcome 1.2, progress was seen with the completion of the 2019-2020 annual status report on the Jamaican Iguana released under the Headstart programme, as well as the preparation of a Management Plan for the American Crocodile. While significant progress was made towards the preparation of the release of 30 Jamaica Iguana into the Hellshire Hills in March 2020, this was delayed due to the COVID 19 pandemic.

Outcome 1.1: Strengthened governance, policy and legislative framework to ensure sustainable development of the forest sector. In progress:

- **Output 1.1.1:** Cross sectoral mechanism established for integrating the Forest Sector into relevant national decision-making processes.
- **Output 1.1.2:** Forest Act amended.
- **Output 1.1.3:** Support for the preparation of Parish Development Orders provided.
- **Output 1.1.4:** Crown lands transferred by Commissioner of Lands to the Forestry Department for sustainable management.
- **Output 1.1.5:** Enforcement capacity of FD increased.
- **Output 1.1.6**: regulations developed for special recreational use permits, research permits, licence programmes
- **Output 1.1.7:** Boundary verification programme implemented.

Outcome 1.2: Forest biodiversity protected.

- **Output 1.2.1**: List of invasive plant and animal species in forested areas developed, maintained.
- **Output 1.2.2**: Invasive species control (management) plan designed and implemented.
- **Output 1.2.3**: Species (pilot) conservation plans developed.
- **Output 1.2.4**: Identification of target species most relevant to the forest sector for future conservation efforts.

Progress towards targets for the year for all seven (7) Outputs for Outcome 1.1 and three (3) Outputs for Outcome 1.2 are detailed below:

***Output 1.1.1:* Cross sectoral mechanism established for integrating the Forest Sector into relevant national decision-making processes.**
Primary Implementing Entity: MEGJC & FD

<table>
<tr><td>KPI</td><td colspan="3">(Yes/No) National multi-stakeholder coordination policy dialogue mechanism in place, to ensure that the forest sector is integrated into decision making processes</td></tr>
<tr><td>BASELINE</td><td>No mechanism in place</td><td rowspan="2">STATUS
☐Not started
☐Challenges.
☒In progress.
☐Completed.</td><td rowspan="2"> </td></tr>
<tr><td>TARGETS/MAJOR ACTIVITIES FOR FY 2019/20</td><td>-Consolidation of TAC as the actively leading and coordinating structure of the NFMCP.

-Interlinkages and synergies of TAC with relevant Committees and working groups promoted.

-Process evaluation done.</td></tr>
<tr><td colspan="4">SUMMARY OF PROGRESS: (31 March 2020)

As co-chairs for the Technical Advisory Committee of the NFMCP, the Ministry of Economic Growth & Job Creation has participated in all meetings of the TAC and provided recommendations on issues before the committee. For the reporting period two (2) meetings of the TAC were held. The TAC mechanism is currently demonstrating a level of synergy for the forest sector by simultaneously serving as the Steering Committee for the Budget Support Programme currently funding components of the implementation of the NFMCP.

-No process evaluation was completed. This will be done at the end of year 5.</td></tr>
<tr><td colspan="4">PARTNER / STAKEHOLDER RELATIONSHIP UPDATE:

The MEGJC works with the FD, the Planning Institute of Jamaica and other key Agencies in the execution of this Output.</td></tr>
<tr><td colspan="4">CONCLUSIONS / RECOMMENDATIONS / OTHER COMMENTS:
It is recommended that was the PIOJ serves as chair of the TAC, the reporting on this target should be done in collaboration with the PIOJ.
The process evaluation of the TAC was inadvertedly scheduled for this year (year 4) however it is to be completed at the end of year 5 as part of the overall mid-term evaluation of the NFMCP.</td></tr>
<tr><td colspan="4">TARGETS/MAJOR ACTIVITIES FOR FY 2020/21: Continued engagement with the TAC and establishment of synergies with other key committees, stakeholders.</td></tr>
</table>

Output 1.1.2: Forest Act amended
Primary Implementing Entity: MEGJC & FD

<table>
<tr><td>KPI</td><td colspan="3">(Yes/No) Amended Forest Act approved and promulgated</td></tr>
<tr><td>BASELINE</td><td>Drafting Instructions exist to support revision of the Forest Act 1996</td><td rowspan="2">STATUS
☐Not started
☐Challenges
☐ In Progress
☒Completed.</td><td rowspan="2"> </td></tr>
<tr><td>TARGETS/MAJOR ACTIVITIES FOR FY 2019/20</td><td>-Submission of request by MEGJC to approve the preparation of drafting instructions to Cabinet.

-Drafting instructions finalised for submission to the CPC</td></tr>
<tr><td colspan="4">SUMMARY OF PROGRESS: (31 March 2020)

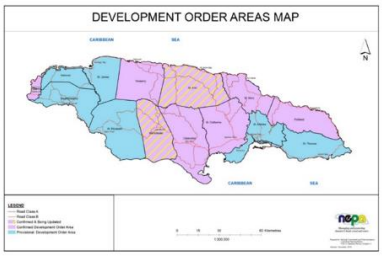
Meetings held with National Environment & Planning Agency (NEPA), Jamaica National Heritage Trust (JNHT) and the FD to clarify aspects of preliminary Drafting Instructions.

Draft Cabinet Submission requesting approval for the preparation of drafting instructions prepared and circulated for comments from key stakeholders including the AGC, CPC, JNHT and NEPA.

As at March 31, 2020 the Drafting Instructions were with the MEGJC awaiting approval from Cabinet for submission to the CPC. This was expected to be done by the Q1 of FY 2020/2021</td></tr>
<tr><td colspan="4">CHALLENGES AND LESSONS LEARNED:

Delays in receiving comments from key stakeholders to inform finalization of Cabinet Submission.</td></tr>
<tr><td colspan="4">MAJOR RISKS:
Drafting Instructions not properly prepared;
Relevant Agencies fail to resolve issues related to overlapping legal jurisdiction;
Delays in the preparation of drafts by the CPC;
Delays in responding to the drafts prepared by the CPC</td></tr>
<tr><td colspan="4">CONCLUSIONS / RECOMMENDATIONS / OTHER COMMENTS: The AGC needs more staff to respond to the Ministry's submissions in a timely manner.</td></tr>
<tr><td colspan="4">TARGETS/MAJOR ACTIVITIES FOR FY 2020/21:
(1) To obtain approval from the Cabinet for the preparation of the Drafting Instructions.
(2) Submission of Drafting Instructions to the CPC and respond to subsequent drafts.
(3) Consultations with key stakeholders including NEPA and the JNHT to inform the revision of drafting instructions.</td></tr>
</table>

Output 1.1.3: Support for the preparation of Parish Development Orders provided.
Primary Implementing Entity: NEPA

KPI	Number of Parish Development Orders drafted and updated which prioritise forest resources		
BASELINE	No Parish Development Orders which prioritise forest resources	**STATUS** ☐Not started ☐Challenges. ☐In progress. ☒**Completed.**	
TARGETS/MAJOR ACTIVITIES FOR FY 2019/20	**Preparation of draft Manchester Development Order**		

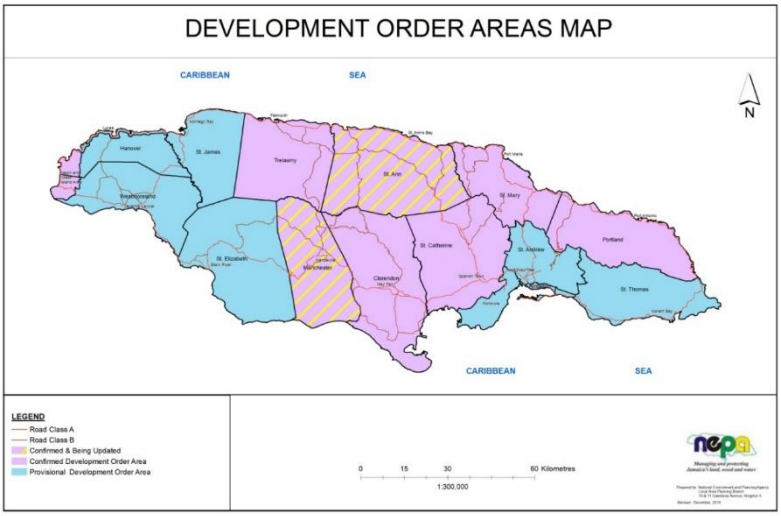
SUMMARY OF PROGRESS: (31 March 2020):

The targets for the FY were achieved.

1. Three (3) Development Orders were confirmed for:
   - St. Catherine
   - Clarendon
   - St. Mary

Map shows the status of the country's Development Orders

2. Draft Manchester Development Order prepared
3. St. Ann Development Order revised



PARTNER / STAKEHOLDER RELATIONSHIP UPDATE:

Local Municipal Corporations, Parish Development Committee, MDAs, and Community groups, are engaged.

CHALLENGES AND LESSONS LEARNED:

- Getting up-to-date data on forest reserve, e.g demarcation of forest reserve
- The format data is received in
- Timeliness of required data.
- Constant changes to the Development Orders

MAJOR RISKS:

- Timeline to get development orders confirmed.
- Implementation of policies**.**

TARGETS/MAJOR ACTIVITIES FOR FY 2020/21: Revised /new Trelawny Parish Development Order (draft)

Output 1.1.4: *Crown lands transferred by Commissioner of Lands to the Forestry Department for sustainable management.*
Primary Implementing entity: *NLA*

KPI	**Area (Hectares) of mangrove and swamp forests transferred by the Commissioner of Lands for Forestry Department's management**		
BASELINE	2,267 ha of mangroves managed as forest estates	**STATUS** ☐Not started ☐Challenges. ☐In progress. ☒**Completed.**	
TARGETS/MAJOR ACTIVITIES FOR FY 2019/20	-Series of workshops has been started for mangrove owners and users and is to be implemented by FD. -The identification of parcels continues, followed by the inspection of those properties; amend the valuation and information; have the property spatially represented.		
SUMMARY OF PROGRESS: (31 March 2020) Targets for the year achieved. The NLA preliminarily identified 8 properties and continue to research others that will be referred to Forestry Department for assessment, and to determine if they will be included in the parcels to be managed/transferred to the Forestry Department. Some of the properties identified are privately owned. Two workshops organised by the Agency were held targeting key stakeholders of mangrove & swamp forests (including users, owners & managers) in November 2019.			
CONCLUSIONS / RECOMMENDATIONS / OTHER COMMENTS: The phase of this process that is currently being undertaken is the identification and inspection of parcels, which is primarily done by the Forestry Department. The phases that the NLA will lead in (valuation, spatial representation, and transfer) typically come after.			
TARGETS/MAJOR ACTIVITIES FOR FY 2020/21: Documents submitted to NLA. Update NLA property inventory. Prepare handover letters. Hand-over management of parcels.			

Output 1.1.5: Enforcement capacity of FD increased.
Primary Implementing Entity: Forestry Department

KPI	***Quality and applicability of approaches for detection of offences regarding encroachment on forest estates***		
BASELINE	Mechanisms currently in place (Patrol Plans & reports from rangers) to detect encroachment on forest estates.	**STATUS**	

TARGETS/MAJOR ACTIVITIES FOR FY 2019/20	-Implement and monitor approaches for effectiveness of enforcement. -Community consultations done. -The training course on forest law enforcement in 2020 should include practical exercises, regarding how effective patrolling is done.	☐Not started ☐Challenges. ☒**In progress.** ☐Completed.	

SUMMARY OF PROGRESS: (31 March 2020):

Encroachments on forest estates are tracked using a monthly tracker which is incorporated in the monthly reports prepared and submitted by the Legal and Enforcement Division. Patrols are planned to monitor all areas as assigned to each forest ranger using a weekly itinerary. In addition, based on trends in infractions, patrols are planned at staggered times as well as on weekends where necessary. Where infractions were detected, and the offender/s is identified a Notice of Contravention is served as a warning. Intra and inter regional patrols were also utilised as a new mechanism.

Where compliance with the Notice of Contravention is not achieved and / or the nature of the offence warrants more than a warning, other enforcement action such as prosecution under the legislation is pursued. The level of compliance with notices served is also tracked through the monthly reports.

Although no Forest Law Enforcement training sessions were completed this FY, previous sessions conducted in February/March of 2019 continue to prove useful in assisting the rangers particularly as it relates to preparing summons and casefiles for court matters. This particular training, however, did not address in a fulsome manner practical exercises on the planning and execution of effective patrols.

The Compliance and Enforcement Branch continuously engaged community members through presentations made in community meetings organised by the PRCC Branch. Presentations usually include the offences and penalties as outlined by the Forest Act (1996) and Forest Regulation (2001).

PARTNER / STAKEHOLDER RELATIONSHIP UPDATE:

- Joint Patrols were frequently conducted in partnership with external entities, who are usually stakeholders. Depending on the entity the objective and outcome of the patrol varies. Joint patrols are most frequently conducted with entities: JCDT, RADA, JCF, NLA and NWC.
- Community meetings were used to engage community stakeholders. Meeting are usually used as a means of sharing information and encouraging compliance.

CHALLENGES:

- Although various patrolling mechanisms are utilized consistently, the identification of offenders in order to take the necessary actions is still a challenge.
- Animal pasturing is one of the primary infractions that take place within forest estates. The lack of functioning animal pounds in areas most affected by animal trespassing remains a challenge as it limits the forest officer's ability to act, especially in instances where the offender is unknown.

LESSONS LEARNED:

Frequent follow-up and maintaining strong presence in areas where offences are prevalent tend to yield higher levels of compliance.

COMMENTS ON INPUTS: (resources)

Safety gear – All officers need safety gear. The absence of safety gear put officers at greater risk of physical injury while on the job. Additionally, it engenders low staff morale and decreases motivation. Human Resource – Insufficient staff complement in some areas contributes to officers becoming overwhelmed with increased workload. This also impacts the patrolling activities due to the large number of forest estates to cover.
MAJOR RISKS: • Not being able to recruit suitable staff. • Not being able to retain recruited or current staff. • Risk of physical injury to officers due to lack of safety gear. • Risk of harm to officers' in areas where offenders are hostile towards forest rangers.
CONCLUSIONS / RECOMMENDATIONS / OTHER COMMENTS: Patrols plans and reports submitted prove to be fairly effective in monitoring encroachments. However, additional training in patrol techniques along with practical exercises can be used to improve the effectiveness of patrols. The provision of the necessary resources will enhance the officer's capacity thereby enhancing their effectiveness in monitoring.
TARGETS/MAJOR ACTIVITIES FOR FY 2020/21: • Deployment of additional trail cameras in forest estates island wide.

Output 1.1.6: *Regulations developed for special recreational use permits, research permits, licence programmes*
Primary Implementing Entity: *MEGJC*

KPI	***(Yes/No) Regulations for special recreational use permit, research permits, license programmes developed and introduced.***		
BASELINE	Existing Forest Regulations 2001 and Forest Act 1996	**STATUS** **☒Not started** ☐Challenges. ☐In progress. ☐Completed. **INPUT FROM ANOTHER OUTPUT NEEDED**	
TARGETS/MAJOR ACTIVITIES FOR FY 2019/20	-START IMPLEMENTATION OF OUTPUT -Process to review Special Use Permits to commence.		
SUMMARY OF PROGRESS: (31 March 2020) The Ministry of Economic Growth and Job Creation (MEGJC) is awaiting request from the Forestry Department regarding the amendment of the Forest Regulations 2001. No activity for Output started.			
CONCLUSIONS / RECOMMENDATIONS / OTHER COMMENTS: Commencement of this activity is tied to the completion of the revision of the Forest Act (Output 1.1.2)			
TARGETS/MAJOR ACTIVITIES FOR FY 2020/21: No target- Revision of Forest Act may need to be completed before this Output can progress.			

Output 1.1.7: Boundary verification programme implemented.
Primary Implementing Entity: Forestry Department

KPI	***Area (hectares) covered in the boundary verification programme***		
BASELINE	6-8 parcels per annum	**STATUS** ☐Not started ☐Challenges. ☐In progress. ☒**Completed.**	
TARGETS/MAJOR ACTIVITIES FOR FY 2019/20	-PR and stakeholder meetings implemented. -At least 5 parcels per annum verified. -The process to establish Cockpit country boundary well organised.		

SUMMARY OF PROGRESS: (as of March 31, 2020): This Output continues to progress well. The major targets for the year have been achieved.

In FY 19/20 five (5) forest estates were investigated and verified in the parishes of Portland (2) and St. Thomas (3). While no areas were declared or submitted to the Minister for declaration or gazetting during Year 4, work involved verifying boundaries and preparing legal descriptions for more than five (5) parcels in Portland and St. Thomas representing over ~117 ha.

The following forest estates were identified for boundary verification and the preparation of legal descriptions: *Bybrook Estate, Caenwood 2, Cambridge, Gudtz Mountain, and parcels in Golden Valley and Kildare 2*. Descriptions were also completed for Cedar Valley, Mount Felix, and Rockfort, although these estates were not investigated in Year 4. On submission of these descriptions to the Minister, it is anticipated that these areas will be declared forest management areas or forest reserves.

Cockpit Country Area Proposed for Protection (CCAPP) -Boundary Establishment Activity:

The process to establish the boundary for the area to be protected as the Cockpit Country continues to progress well. Significant attention was paid during Year 4 to the Cockpit Country and its environs, as the Government continued the process to define the boundary to ensure the protection of its rich biodiversity, freshwater resources, unique geological feature**s,** and cultural heritage.

Additionally, as the FD surveying team conducts ground-truthing and traverses open land areas, there will be slight modifications to the CCAPP boundary. Notably, such changes occurred in the south-eastern section to include the boundary perimeter from Aenon Town to Cascade and the southwestern section between Aberdeen and Accompong (Figure 1). Such modifications included a minimal shift in the boundary perimeter due to the presence of impassable waterways. These modifications increased the boundary perimeter by 3km as of December 31, 2019; to approximately 251km.

As of March 2020, the FD has completed boundary establishment for 106 kilometres of the area to be protected as the Cockpit Country. Of this amount, 65 km were verified in Year 4. Public Relations and stakeholder activities have been ongoing with site visits conducted with key stakeholders.

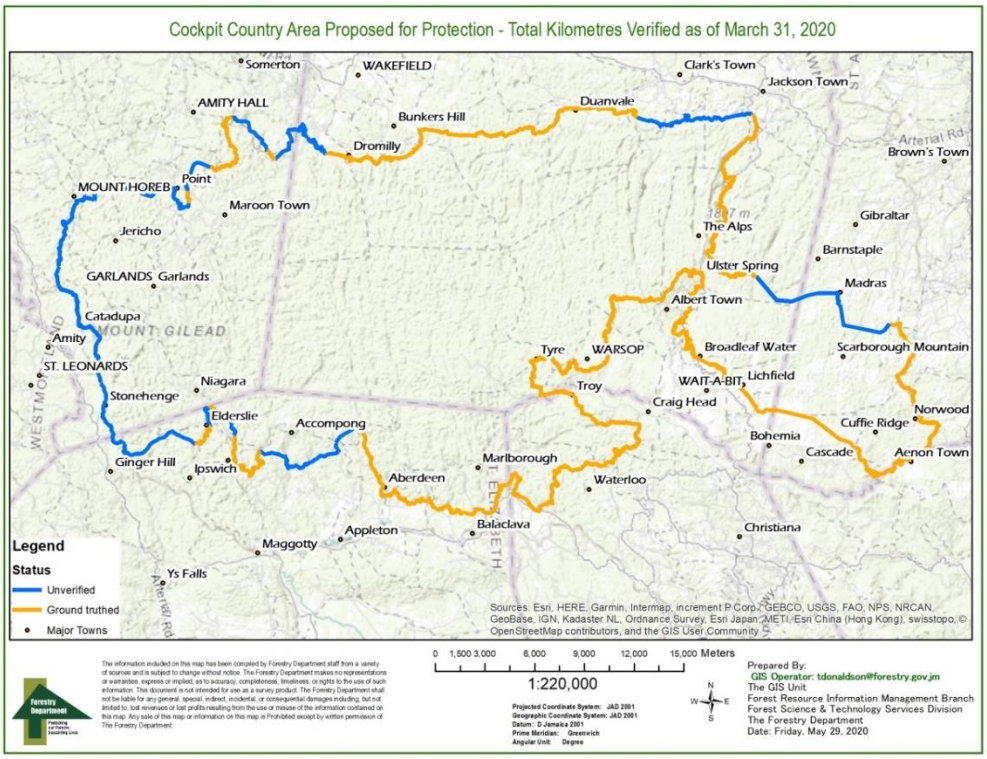


Figure 1: Map showing the CCAPP Boundary verified as of March 2020.

PARTNER / STAKEHOLDER RELATIONSHIP UPDATE:

- Jamaica Environment Trust, as directed by the Access to Information Commission requests and receives quarterly updates on the CCAPP boundary verification / ground-truthing activity.
- The National Land Agency and the FD formed a technical advisory working group to provide technical guidance on the survey techniques, equipment, and quality checking processes which should be implemented and /or used to complete the establishment of this new boundary
- The National Land Agency (NLA) created a ground control network at 5km intervals around the eastern section of the boundary from Troy to Duanvale, which were used as a control/reference for the observation of the monuments erected for FY 2019/2020.
- A draft MOU was also submitted to NLA legal team for their review. This document should guide further collaborative activities between FD and NLA to complete the full boundary establishment

CHALLENGES AND LESSONS LEARNED:

1. Easy dislodgement of CCAPP custom permanent monuments	· Field reconnaissance assessments will include rock type and terrain to allow for better estimation of new design monument placement.

	· If temporary markers are erected, another on-ground indication will show the placement of redesigned monuments at the location where they are required.	
	· Activity scheduling and cost estimates will also include the manufacturing of redesigned monuments.	
2. Inconsistent data collection and data reporting standards	· Weekly check-ins and power meetings by the FD survey team lead with CCAPP field survey team reduce data collection and collation error.	
	· Data dictionaries are reviewed during weekly team meetings and updated as needed.	
	• All CCAPP geospatial information stored on the GIS server with backups in surveyfrim@gmail.com google drive and external hard drive. Backup of CCAPP geospatial data conducted weekly by GIS team lead.	
3. No real-time upload of changes in CCAPP boundary reference files to guide fieldwork	· New CCAPP Field Survey Technicians will be trained in ArcGIS Collector.	
	· Provision of Wi-Fi or Internet service for CCAPP Field Survey Technicians to allow easier download of changes to reference data or upload of field mapping discrepancies for review or resolution.	
4. Malfunctioning of FD vehicle	· FD Field survey team will schedule verification of difficult in-land areas early in the project activity calendar.	
	· Team member with own vehicle will traverse straight-ways concurrently. This approach will ensure the required perimeter is verified; while reducing the negative effect of a slowed work programme on the expected final target kilometres.	

MAJOR RISKS: This activity is a project in itself and is resource-intensive; the performing team also has other operational obligations.

CONCLUSIONS / RECOMMENDATIONS / OTHER COMMENTS:
This activity will require Temporary Survey Field- Assistants. This approach would reduce the heavy reliance on the steady recruitment of casual workers once we have shifted field activity location along the proposed boundary.

TARGETS/MAJOR ACTIVITIES FOR FY 2020/21:

- Complete boundary investigation for five (5) forest estates
- Complete boundary establishment for CCAPP by December 2020
- Complete Survey observations of the eastern side of the boundary for FY 20/21

Output 1.2.1: List of invasive plant and animal species in forested areas developed, maintained.
Primary Implementing Entity: Forestry Department

KPI	(Yes/No) Up to date list of invasive flora and fauna species in forested areas in place		
BASELINE	None	**STATUS** ☐Not started ☒**Challenges.** ☒**In progress.** ☐Completed.	
TARGETS/MAJOR ACTIVITIES FOR FY 2019/20	-Listing of invasive plant species in mangrove forest types completed.		

SUMMARY OF PROGRESS: (31 March 2020)

Commenced in FY 18-19. The FD has developed the assessment criteria for invasiveness in the forest context. These criteria were used to evaluate invasiveness within forested area by forest classification types. Since then floral assessment for Broadleaf and Mangrove forests were completed and reports generated. The assessment for Dry Open Forest has being deferred until FY 21-22.

PARTNER / STAKEHOLDER RELATIONSHIP UPDATE:

- NEPA- provided the FD with the initial listing of invasive species.
- IOJ also provided the FD with information on species. This organisation also serves as the clearing house for invasive species information.

CHALLENGES. Insufficient capacity to complete the faunal invasive assessment within the various forest types. This challenge is still relevant n addition to the current human capacity that is stretched hence the deferral.

LESSONS LEARNED:

The definition for invasiveness varies according to stakeholders. Species identified as invasive by Stakeholders (based on international literature) in the forest context ecologically, do not display such behaviour. Hence the species identified are unique in/to the forest context. Additionally, trees and herbaceous shrubs are identified).

COMMENTS ON INPUTS: (resources)
An independent faunal ecologist consultant is needed to assist with this Output. The FD is seeking to recruit a Forest Biologist in the 2020/2021 FY to offset this capacity need.

MAJOR RISKS: No funds to procure faunal ecologist to provide information on invasiveness in forests estates. Additionally, the capacity to conduct the ground floral assessment may also be deployed to another urgent deliverable.

CONCLUSIONS / RECOMMENDATIONS / OTHER COMMENTS:

Some capacity review and resource levelling around this Output will need to be explored.

TARGETS/MAJOR ACTIVTIES FOR FY 2020/21:
Conduct the assessment of invasives in Open Dry Forest types.

Output 1.2.2: Invasive species control (management) plan designed and implemented.
Primary Implementing entity: NEPA

KPI	***Number of invasive flora & fauna species controlled***	
BASELINE	Information contained in Invasive species strategy and working group reports	**STATUS** ☐Not started ☐Challenges. ☒**In progress.** ☐Completed.
TARGETS/MAJOR ACTIVITIES FOR FY 2019/20	-NEPA and FD to determine list of agreed invasive species for the preparation of monitoring and control plans. -NEPA to actively pursue inclusion of forest aspects in their M&E of biodiversity activities for areas outside of the forest reserves (FD operates mainly within the forest reserves). -Report Jamaica Iguana Headstart programme prepared. Monitoring of live predator traps completed (April-June 2019). -30 Jamaican Iguanas released between Jan-March 2020.	

SUMMARY OF PROGRESS: (31 March 2020):

- The 2019-20 annual report entitled '*Population Status Report on the Jamaican Iguana released under the Headstart Programme'* was completed.
- The March release of Jamaican Iguanas into Hellshire Hills was cancelled due to the COVID-19 pandemic. As a result of the implementation of GOJ guidelines, the international partners were unable to travel to Jamaica for the release due to restrictions on travel. As a result, only one (1) of two (2) Iguana release activities was conducted during the 2019/2020 Financial Year. Fourteen (14) Iguanas were released. These iguanas were health screened and met the conditions (health and size) for release. This resulted in a total of 468 iguanas being released from the headstart programme, since the first release in 1996. The release represents a 3% increase in iguanas released over last year (2018 - 2019) and a 5.6% increase over the baseline year of 250 iguanas in 2014 - 2015. Cumulatively, the project has resulted in an overall increase of 87.2% in the number of headstart iguanas released since 2014 - 2015.

PARTNER / STAKEHOLDER RELATIONSHIP UPDATE:

- NEPA has received equipment support from the GEF/Small Grants project for the Hope Zoo. A MOU was signed between NEPA and Hope Zoo Preservation Foundation in support of the small grants programme
- NEPA has received additional funding from the US Fish & Wildlife Grant through the International Iguana Foundation (IIF) support, for the hiring of one (1) additional ranger for the 2020-21 Financial Year. The Agency (NEPA) has commenced the process of converting the existing casual worker to the position of Field Technician with this funding support.

CHALLENGES :

Inability to undertake release of animals due to COVID-19 pandemic.

Continues dialogue between NEPA and the FD needed.

LESSONS LEARNED:

A Risk Based Analysis needs to be undertaken for the Iguana programme so as to identify possible risk associated with the execution of the project and map the possible solutions to mitigate these risks.
The programme has associated risk such as:

- Emergency evacuation of the field staff
- Contingencies for forced or mandated stay in place orders as experienced during the early part of covid-19. This has major implications for food rations, water and sanitation.
- Funding requirement for the full staff complement. The IIF was able to assist for the 2020-21 period, however, additional financing will be required going forward.

CONCLUSIONS / RECOMMENDATIONS / OTHER COMMENTS:

- Secured funding at the start of the programme.
- Undertake risk analysis of the programme

TARGETS/MAJOR ACTIVITIES FOR FY 2020/21:
Five per cent (5%) increase in the number of the Jamaican Iguana released from the Headstart programme since the baseline year at a population of 250 individuals. Plans are being put in place to undertake a release of approximately 25 iguanas by the end of July 2020.

Output 1.2.3: Species (pilot) conservation plans developed
Primary Implementing Entity: NEPA

KPI	***Number of species conservation plans developed***		
BASELINE	Management/ recovery plans species for specific species about 8 major fauna.	**STATUS** ☐Not started ☐Challenges. ☒**In progress.** ☐Completed.	
TARGETS/MAJOR ACTIVITIES FOR FY 2019/20	-Process evaluation on pilot species conservation plans done. -Recommendation to establish a headstart programme for the American Crocodile. -Species for the future conservation plans to be identified (Year 7 and Year 10).		

SUMMARY OF PROGRESS: (31 March 2020)

- The document 'Management Plan for the American Crocodile (Crocodylus acutus) in Jamaica: 2020 – 2030 (Draft)' was prepared March 2020. The primary objective of this management plan is to ensure the maintenance of viable populations in the wild through research and effective conservation strategies.
- The comments of the Endangered Species Working Group have been incorporated in the draft document towards the finalization of the 'American Crocodile Head-start Programme Guidelines: 2019-2020. The programme aims to repopulate the diminishing population of *Crocodylus acutus* in the wild through a

headstart programme, targeting suitable crocodile habitat with low population densities. The crocodile headstart programme has four stages:

1. Collection of eggs or young animals
2. Release
3. Immediate post-release monitoring
4. Long-term monitoring.

This model has been adopted from the Philippine crocodile headstart programme.

PARTNER / STAKEHOLDER RELATIONSHIP UPDATE:

- Endangered Species Working Group
- Holland Crocodile Conservation Sanctuary
- Urban Development Corporation (UDC)
- Caribbean Coastal Area Management Foundation (CCAM)
- Hope Zoo
- University of the West Indies (UWI)
- Jamaica Swamp Safari Village
- J. Charles Swaby Safari/ Southcoast Safaris
- Jamaica Constabulary Force
- Jamaica Defence Force

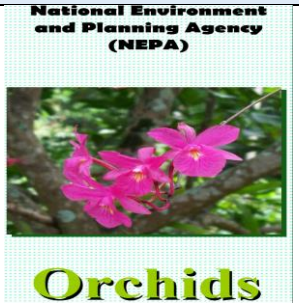
CHALLENGES AND LESSONS LEARNED:

- Lack of financial support for persons housing protected species including the American crocodile.

TARGETS/MAJOR ACTIVITIES FOR FY 2020/21:

- Finalize Management Plan for the American Crocodile (*Crocodylus acutus*) in Jamaica based on comments received from stakeholders.
- American Crocodile population size determined for habitats across three locations.

Output 1.2.4: Identification of target species most relevant to the forest sector for future conservation efforts
Primary Implementing Entity: NEPA

KPI	***Number of target species identified for future conservation efforts***		
BASELINE	Two (2) plant species currently being looked at	**STATUS** ☐Not started ☐Challenges. ☐In progress. ☒**Completed.**	
TARGETS/MAJOR ACTIVITIES FOIR FY 2019/20	-Finalise target species list and develop conservation approach.		

SUMMARY OF PROGRESS: (31 March 2020)

On Thursday, 26 September 2019, two specimen of *Prosthechea fragrans* orchid species were removed from the Holywell nursery and transferred to the Scientific Research Council (SRC) as this was the species nominated for propagation. This species along with two other species (*Epidendrum ramson* and *Pleurothallis laxa*) from the

previous batch of orchids will be propagated via tissue culture for subsequent reintroduction into the Catherine's Peak, Blue Mountain locality.

The initiation process was done in November 2019; however it was subsequently reported that the SRC was experiencing setbacks regarding the propagation process. Preparations are now in place to conduct another trial as the SRC awaits new growth from the orchids in order to obtain explants for propagation.

CHALLENGES AND LESSONS LEARNED:

- The SRC has indicated challenges with the slow growth of the orchids which continues to delay the propagation process.

TARGETS/MAJOR ACTIVITIES FOR FY 2020/21: Tracking of the propagation process to allow for the reintroduction of species.

THEMATIC AREA 2: FOREST UTILISATION

Outcome 2.1: Innovative mechanisms established for financing sustainable forest management and obtaining benefits from forest use. In progress:

- **Output 2.1.1:** Incentives programme evaluated.
- **Output 2.1.2:** New or revised incentives for SFM made available and promoted.
- **Output 2.1.3**: Programme developed for payment of ecosystem services within forested areas
- **Output 2.1.4:** Alternative livelihoods in forest communities promoted.

Outcome 2.2: Sustainable harvesting and use of timber products from forests.

- **Output 2.2.1**: Economic viability of wood product species assessed and appropriate timber processing methods recommended.
- **Output 2.2.2**: Sustainable harvesting programme developed.

Outcome 2.3: *Sustainable use of non-timber products and services of forests.*

- **Output 2.3.1**: Research programme on non-timber forest products developed.
- **Output 2.3.2**: Producers and consumers of non-timber products identified.
- **Output 2.3.3**: Economically viable non-timber market opportunities developed.
- **Output 2.3.4:** Recreational sites rehabilitated.
- **Output 2.3.5**: Guidelines for the use of cultural and heritage sites on Forest Reserves and FMAs developed.

Thematic Area 2 of the NFMCP acknowledges that forests provide many more benefits and services than the traditional focus of timber production. A diversification of the scope of forest utilisation activities within forest estates needs to be undertaken by engaging many other sectors of society. The economic viability of local wood species is not readily available and the country lacks a central repository of data on the market price, supply, and demand for local timber. Infrastructure and related facilities to support ecotourism and forest recreational activities are inadequate. There is a need for greater capacity and resources to promote sustainable alternative livelihood in forest dependent communities, as well as to support development of payment mechanisms for ecosystem services and the development of new incentives. Under the Outcome 2.1, while no new incentives for private owners of forests have been promoted **(Output 2.1.2),**

progress has been made with the review and evaluation of current incentives which will guide this activity. The final report is expected by late 2020. Additionally the production of a Payment for Ecosystem Services (PES) Management Framework for the Yallahs Hope Watershed under the GEF/IDB Yallahs HOPE project made available during the FY, is expected to provide significant guidance for the development of a PES within forested areas, This Output is currently experiencing challenges. Good progress was seen however with **Output 2.1.4** as Alternative livelihoods in forest communities continue to be promoted by the sector. Under Outcome 2.3, one Harvesting plan to support sustainable management of forests was drafted. The execution and findings from a market research survey on non-timber forest products is needed to inform several of the outputs- and this activity is expected to be executed in the 2020/2021 FY. As a result, progress on implementation is restricted until this information is available.

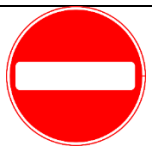
Progress towards targets for the year for all four (4) Outputs associated with Outcome 2.1, two (2) Outputs associated with Outcome 2.2, and five (5) Outputs associated with Outcome 2.3 are detailed below:

Output 2.1.1: Incentives programme evaluated.
Primary Implementing Entity: Forestry Department

<table>
<tr><td>KPI</td><td colspan="3">(Yes/No) Evaluation of the incentives programme completed</td></tr>
<tr><td>BASELINE</td><td>No evaluation</td><td rowspan="2">STATUS
☐Not started
☐Challenges.
☒In progress.
☐Completed.</td><td rowspan="2">
</td></tr>
<tr><td>TARGETS/MAJOR ACTIVITIES FOR FY 2019/20</td><td>-Evaluation of programme of potential feasible incentives completed by 2020</td></tr>
<tr><td colspan="4">SUMMARY OF PROGRESS: (31 March 2020) : Report/ Evaluation of current Incentives offered by the FD is in draft.</td></tr>
<tr><td colspan="4">TARGETS/MAJOR ACTIVITIES FOR FY 2020/21: Final report is expected to be completed in third quarter.</td></tr>
</table>

Output 2.1.2: New or revised incentives for SFM made available and promoted.
Primary Implementing Entity: Forestry Department

<table>
<tr><td>KPI</td><td colspan="3">Number of incentives (new or revised) available to private landowners.</td></tr>
<tr><td>BASELINE</td><td>Three incentives: Technical assistance, free seedlings under PFP & Land Declaration programme</td><td rowspan="2">STATUS
☒Not started
☐Challenges.
☐In progress.
☐Completed.</td><td rowspan="2">
</td></tr>
<tr><td>TARGETS/MAJOR ACTIVITIES FROR FY 2019/20</td><td>-Consultation on new and revised incentives</td></tr>
</table>

		INPUT FROM ANOTHER OUTPUT NEEDED	
SUMMARY OF PROGRESS: (31 March 2020) - No activity took place for the period. The activity is dependent on the findings from **Output 2.1.1** which is not yet completed.			
CHALLENGES: This activity is depended on the results of **Output 2.1.1.** which has experienced significant delays.			
COMMENTS ON INPUTS: (resources) An evaluation on current incentives and gaps is currently underway and needs to be completed before new or revised incentives become available. A consultant to guide this activity would also need to be engaged.			
CONCLUSIONS / RECOMMENDATIONS / OTHER COMMENTS: This activity would have been guided by the completed evaluation report **(Output 2.1.1)** which is still in draft.			
TARGETS/MAJOR ACTIVITIES FOR FY 2020/21: To be determined as findings from **Output 2.1.1** needed.			

Output 2.1.3: Programme developed for payment of ecosystem services within forested areas.
Primary Implementing Entity: Forestry Department

KPI	***(Yes/No) Programme for payment of ecosystem services in forested areas in place***		
BASELINE	None		
TARGETS/MAJOR ACTIVITIES FOR FY 2019/20	-START IMPLEMENTATION OF OUTPUT- Process evaluation implemented. -Ecosystem services to be potentially utilised included in the research programme. -Consideration of Yallahs/Hope project for water as ecosystem service. Potential development of volunteer programme with NWC. NRV training **(Output 4.2.1)** will provide an input.	**STATUS** ☐Not started ☒**Challenges.** ☒**In progress.** ☐Completed. **INPUT FROM ANOTHER OUTPUT NEEDED**	
SUMMARY OF PROGRESS: (31 March 2020): Process evaluation for PES for forested areas has yet to commence. However, The FD in the FY 19-20 trained 32 technical persons on how to conduct Natural Resource & Economic Valuations- especially in the forest context. This capacity building will lend itself to pre-assessments which will be needed for any PES study.			
PARTNER / STAKEHOLDER RELATIONSHIP UPDATE: As partners in the NEPA IDB project with one of its main objectives being to develop and pilot PES (for water) within the Hope - Yallahs watershed units, the FD participated in several of the developmental activities including stakeholder consultations and plan validation. To date NEPA is reported that they have successfully designed a			

PES for the Hope- Yallahs watershed units and are currently awaiting the Political support and subsequent approval.

See link to Operational Manual for PES Management framework for Yallahs- Hope Watersheds - NEPA

https://www.dropbox.com/s/esaqm26ql8mzntd/Deliverable%2022%20Operational%20Manual%20PES%20Final%20Nov.pdf?dl=0

CHALLENGES

Insufficient technical and economic capacity to spearhead this activity at this time

LESSONS LEARNED:

Lessons learnt from the Costa Rican Model is that there has to be complete buy -in from all stakeholders at all levels especially from the political and legal fronts. Additionally, such a scheme has to be well thought out, best managed by a non-government entity, funded by government in the formative years if the scheme is to be beneficial to stakeholders over the medium to long term period which is often associated with PES.

MAJOR RISKS: PES for forested areas may not be realised.

CONCLUSIONS / RECOMMENDATIONS / OTHER COMMENTS:

Postpone the execution of this activity by a year or two as the pilot developed for Hope- Yallahs is being implemented. Valuable insights can be learnt from this.

If NEPA is challenged with implementing in the very near future, the recently developed PES framework and Management plan, we could use their findings, customised it to Forestry and with the assistance of consultancy services from countries that have successfully implemented PES, adapt+/adopt one such scheme for forested areas.

TARGETS/MAJOR ACTIVITIES FOR FY 2020/21: To be determined

Output 2.1.4: Alternative livelihoods in forest communities promoted.
Primary Implementing Entity: Forestry Department

KPI	***Number of alternative livelihoods projects supported***		
BASELINE	16 LFMCs with livelihood projects	**STATUS** ☐Not started ☐Challenges. ☐In progress ☒**Completed.**	
TARGETS/ MAJOR ACTIVITIES FOR FY 2019/20	-Sensitisation carried out. -Training developed and implemented. -Livelihood project grants awarded to community groups		

SUMMARY OF PROGRESS: (as at 31 March 2020)

2019/2020 marked the second year of the European Union Budget Support Programme (EUBSP) and saw (under Indicator 4 which is related to this Output) the execution of three (3) calls for proposals and selection of forty-six (46) projects for a total of $J240,000,000.00. Of the 46 projects, six (6) were awarded to LFMC groups. **(NOTE:**

The three call for proposals and selection of a total of forty-six projects were completed over the period April 2019 to June 2020). The EFJ continues to administer the grant. Four (4) proposal writing workshops held island wide. 93 proposals received. Sensitization sessions conducted at twenty (20) community meetings island wide. Nine hundred and sixty-two (962) persons (556 males & 406 females) attended.
PARTNER / STAKEHOLDER RELATIONSHIP UPDATE: EFJ continues to administer the execution of grants under Indicator 4. Work continued with our LFMCs, PFP, Social Forestry and schools programmes.
CHALLENGES AND LESSONS LEARNED: With the advent of COVID 19 and the protocols put in place by GOJ we had to shift focus especially as it relates to our social programmes. Increase dependence on technology is needed if we are to carry out our social mandate going forward.
MAJOR RISKS: Low commitment of persons in the PFP as well as the LFMCs programmes. Capacity of community groups to take on EUBSP grants is limited.
TARGETS/MAJOR ACTIVITIES FOR FY 2020/21: Implementation of 50% of projects awarded.

Output 2.2.1: *Economic viability of wood product species assessed and appropriate timber processing methods recommended.*
Primary Implementing Entity*: Forestry Department*

KPI	**Percentage of identified wood species assessed and information collected on economic viability and pertinent processing methods**		
BASELINE	List of economic wood species in Jamaica relevant to timber harvesting.	**STATUS** **☒Not started** **☒Challenges.** ☐In progress. ☐Completed. **INPUT FROM ANOTHER OUTPUT NEEDED**	
TARGETS/MAJOR ACTIVITIES FOR FY 2019/20	-START IMPLEMENTATION OF OUTPUT -Consultancy social surveys timber products.		
SUMMARY OF PROGRESS: (31 March 2020) For this activity to commence there needs to be the input from the market research survey on demands for wood and non-timber forest products **(Output 2.3.2)**. This will provide a reference point as to the favoured species across the island.			
PARTNER / STAKEHOLDER RELATIONSHIP UPDATE:			

- Internal partners- PRCC and Finance and accounts.
- STATIN
- Private sector of Jamaica.
- European Union- technical assistance from the European Union is being sought with this Output and its related **Output 2.3.2**

CHALLENGES:

The FD needs to define this variable with some degree of clarity on what is the expected output/outcome of this activity. The Output is assigned internally to the Forest Science & Technology Services Division which can only provide data on species by Plantation. To conduct the economic viability of the identified species, an environmental economist, would be needed to determine economic feasibility.

Additionally, the data required to do this kind of economic assessment may still be outstanding and should be collected in advance to credibility inform the valuation process.

LESSONS LEARNED:

The planning process supporting implementation must get down to the micro level and outline the linkages of one activity and Output to the next; for instance, there is one major survey that has to be completed- this over the years has been postponed, resulting in no activity relating to the above being able to materialise.

COMMENTS ON INPUTS: (resources)

A major input to this activity is the completion of a Market Research survey on non-timber wood products (Output 2.3.2) which is to be executed.

MAJOR RISKS: Market research survey data needed to inform this activity and Output not available

CONCLUSIONS / RECOMMENDATIONS / OTHER COMMENTS: This activity will need to be reviewed

TARGETS/MAJOR ACTIVTIES FOR FY 2020/21: To be determined.

Output 2.2.2: Sustainable harvesting programme developed.
Primary Implementing Entity: Forestry Department

KPI	**Number of harvesting plans developed**		
BASELINE	Two (Clusters 5 and 4)	**STATUS** ☐Not started ☐Challenges. ☐In progress. ☒**Completed.**	
TARGETS/MAJOR ACTIVITIES FOR FY 2019/20	-Cluster 3 harvesting Plan scheduled for Y4.		

SUMMARY OF PROGRESS: (31 March 2020)

Prior to the Harvesting Plans for forest estates in Cluster 3, the FD completed three (3) other Harvesting Plans. In FY 19- 20, the Harvesting Plans for forest estates in Cluster 3 was drafted but was not completed as volumetric data for the largest forest estate within the Cluster was not available at the time. The draft plan is to be reviewed and updated as soon data become available.
CHALLENGES : Current volume data for the plantations were not available for the larger estate and the extraction data was also unavailable **LESSONS LEARNED:** If Baseline data is not available, the resulting plan is going to be deficient in its recommendations.
COMMENTS ON INPUTS: (resources) Historical and current data Human capacity to collect much needed data – or at best, better scheduling of human capacity so as to facilitate the timely collection of the critical data/
MAJOR RISKS: Risk of formulating unsound recommendations due to the absence/dearth of critical volume information
CONCLUSIONS / RECOMMENDATIONS / OTHER COMMENTS: Volume assessment of plantations must be assessed in a more comprehensive manor rather than subsuming this assessment as a part of the biophysical assessment of natural forests. Additionally, proper schedule planning where the use of the trained staff is concerned. Avoid conflict of schedules and stick to priorities.
TARGETS/MAJOR ACTIVTIES FOR FY 2020/21: Harvesting plan for forest estates in Cluster 17 will be completed. If additional resources become available, then the data gaps will be filled. However, the challenges of available human capacity remain in current FY.

Output 2.3.1: *Research programme on non-timber forest products developed.*
Primary Implementing Entity: *Forestry Department*

KPI	***(Yes/No) Research programme for non-timber forest resources established***		
BASELINE	No research programme for non-timber forest resources.	**STATUS** **☒Not started** **☒Challenges.** ☐In progress. ☐Completed. **INPUT FROM ANOTHER OUTPUT NEEDED**	
TARGETS/MAJOR ACTIVITIES FOR FY 2019/20	-START IMPLEMENTATION OF OUTPUT -The research programme is to partly based on the results of the social survey non-timber products to be done under Output 2.3.2.		
SUMMARY OF PROGRESS: (31 March 2020) No activity to date as research programme is depended on the results from ***Outputs 2.3.2***			
CHALLENGES :			

The delays are currently due to scheduling and Capacity conflicts; with the current budget support programme taking precedence over other activities. Procurement of a suitable body/entity to conduct research has also presented some challenges. With the new procurement Director on board and with the assistance of the EU-BSP, the FD should be able to address this in FY20-21. **LESSONS LEARNED:** The FD through risk realisation has acknowledged that scheduling and scope adjustment should be a quarterly process in order to effectively align resources with planned activities.
COMMENTS ON INPUTS: (resources) To effect the research programme, the inputs of the market survey on non timber forest products is pivotal.
MAJOR RISKS: Not completing the preliminary market survey that would translate into the research programme on NTFP. Additionally, poor scheduling that will result in to having the resources (particularly human) to carry out the related activities. This activity would have to be prioritised above other competing activities.
CONCLUSIONS / RECOMMENDATIONS / OTHER COMMENTS: To projectized and outsource this activity, then operationalise the findings to achieve the benefits.
TARGETS/MAJOR ACTIVITIES FOR FY 2020/21: Under the Technical Assistance element of the budget support programme the FD has incorporated a research component to gather information on the use and preference of non-timber products. The results of a Nutra and pharmaceutical market study with possibilities of implementation on completion are also expected.

***Output 2.3.2**: Producers and consumers of non-timber products identified.*
***Primary Implementing Entity**: Forestry Department*

KPI	***Number of producers and consumers of non-timber products identified***		
BASELINE	No baseline. Six (6) months research survey to establish the baseline.	**STATUS** ☐Not started ☒**Challenges.** ☒**In progress.** ☐Completed.	
TARGETS/MAJOR ACTIVITIES FOR FY 2019/20	-START IMPLEMENTATION OF OUTPUT -Potential researchers identified. Budget for the social survey non-timber products ($8m) specified, as well as research output, identifying the potential non-wood forest products and secondly relevant demands in society. (Different parts of the trees serve different purposes and this is to be assessed first on economic viability.		

	Example: pine cones of a certain size and weight.)		

SUMMARY OF PROGRESS: (31 March 2020)

This activity is to be executed as part of the Business Development Consultancy being sponsored by the European Union, which commenced in January 2020. The market research for non-timber forest products is to be included among a wider market research of the FD products and forest products to be undertaken by the business development consultants hired under a technical assistance project being funded by the European Union (EU). The market research is to take place in 2020/2021.

PARTNER / STAKEHOLDER RELATIONSHIP UPDATE:

European Union (EU) is funding the research as part of a business development technical assistance project being provided to the Forestry Department. The relationship with the EU is strong and continues to grow as the Technical Assistance progresses.

CHALLENGES AND LESSONS LEARNED:

The arrival of Covid-19 in Jamaica in March has delayed the execution of the market research. However, this activity is expected to be undertaken in the 2020/2021 financial year.

COMMENTS ON INPUTS: (resources) Main resource required was funding, however that is now in place

MAJOR RISKS: COVID-19 restrictions may delay execution of market research

TARGETS/MAJOR ACTIVITES FOR FY 2020/21: Execution of the market research on non-timber forest products

Output 2.3.3: *Economically viable non-timber market opportunities developed.*
Primary Implementing Entity: *Forestry Department*

KPI	***Number of investment profiles for non-timber products prepared***		
BASELINE	One- Christmas Tree		
TARGETS/MAJOR ACTIVITIES FOR FY 2019/20	-START IMPLEMENTATION OF OUTPUT -The species for which the profiles are to developed, are to be determined. The products need to be identified and agreed. Target audiences for these investment profiles to be identified as well. The profiles further need to be part of a larger PRCC programme.	**STATUS** ☐Not started. ☒**Challenges.** ☒**In progress.** ☐Completed.	

SUMMARY OF PROGRESS: (31 March 2020)

Discussion and identification of two non-timber products identified for the development of investment profiles during the period. Activity now slated for completion in 2020/2021.

COMMENTS ON INPUTS: (resources) Information and accurate costings for the species identified and funding to undertake the promotion of the investment profiles. Results of the market research activity on non-timber forest products (output 2.3.2) can provide valuable information/data for this Output.
TARGETS/MAJOR ACTIVITES FOR FY 2020/21: Completion of Investment profiles for Bitterwood wood chips and Christmas Trees (Cupressus)

Output 2.3.4: *Recreational sites rehabilitated.*
Primary Implementing Entity: *Forestry Department*

KPI	***Number of recreational sites rehabilitated***		
BASELINE	None	**STATUS** ☐Not started ☐Challenges. ☒**In progress.** ☐Completed.	
TARGETS/MAJOR ACTIVITIES FOR FY 2019/20	-Feasibility study on access and attractiveness of sites (to see why people would go to Gourie, instead of e.g. Blue Mountains.) -Development of fundraising strategy for this output.		

SUMMARY OF PROGRESS: (as at 31 March 2020)

Development of a strategy for this output was included in a consultancy to develop a business model for the FD which will include a review of the existing documents for the Gourie Recreational Facility to develop a roadmap to market, promote and operate the facility as an economically viable forest recreational facility.

PARTNER / STAKEHOLDER RELATIONSHIP UPDATE:

The EU-Budget Support Programme '*Addressing Environmental and Climate Change Challenges through Improved Forest Management for Jamaica*' (IFMJ) aims to assist the GOJ with implementing the Forest Policy 2017 and the supporting NFMCP 2016-2026, to sustainably manage and utilize Jamaica's forest resources to enhance social and economic development and contribute to building the country's climate resilience.
The EU Budget Support Programme Technical Assistance has engaged a consultancy firm to develop a Forest Business Model for the FD. The business model is to include a review of the existing documents for the Gourie Recreational Facility to develop a roadmap to market, promote and operate the facility as an economically viable forest recreational facility.

COMMENTS ON INPUTS: (resources)
The Technical assistance was sought as the FD seeks to optimize revenue generation, thereby promoting/enhancing sustainable forest management in Jamaica.

CONCLUSIONS / RECOMMENDATIONS / OTHER COMMENTS:
The target for the conduct of a feasibility study on access and attractiveness and development of fundraising strategy for Gourie is an output for the consultancy.

Therefore, it is recommended that this activity be moved to be <u>executed between years 5 and 10</u> of the implementation of the Plan
TARGETS/MAJOR ACTIVITIES FOR FY 2020/21: To be determined- Recommended activity be moved to later in the plan

<u>Output 2.3.5:</u> *Guidelines for the use of cultural and heritage sites on Forest Reserves and FMAs developed.*
<u>Primary Implementing Entity</u>: *JNHT*

KPI	***Number of guideline documents for use of cultural/heritage sites developed***		
BASELINE	Two sites identified as cultural sites: Blue and John Crow Mnts and Cockpit Country. No guidelines have been developed and therefore none in use.	**STATUS** ☐Not started ☒**Challenges** ☒**In progress** ☐Completed.	
TARGETS/MAJOR ACTIVITIES FOR FY 2019/20	START IMPLEMENTATION OF OUTPUT Request shape files of forest reserves and FMAs. Identify the cultural sites within the Forest Reserves and FMAs: - Desk-based assessment conducted; - Field survey conducted; - GPS Coordinates for cultural sites. - Create data base and info management system. - Enter data into data base. Submit info to FD.		

SUMMARY OF PROGRESS: (31 March 2020)

- **Desk-based Assessment – In Progress**
  The Jamaica National Heritage Trust (JNHT) is currently conducting the Desk-based assessment for the Cockpit Country and the Blue and John Crow Mountains area.

- **Field survey – In Progress**
  <u>Blue and John Crow Mountains</u>
  No survey was conducted in the Blue and John Crow Mountains for the 2019- 2020 period.

  <u>Cockpit Country</u>
  Members of the Archaeology Division performed an Archaeological Impact Assessment and conducted two field surveys in the Cockpit Country area during 2019 period. Archaeological surveys in the parishes of Saint Ann and

Trelawny were completed and cover approximately 8,335 hectares. The study was conducted over fifteen days, in two phases.

- Phase 1 - June 24-28, 2019
- Phase 2 - September 9-18, 2019.

This area however is immediately outside the eastern delimitation of the Cockpit Country Protected Area.

- **GPS Coordinates for cultural sites**
  Blue and John Crow Mountains (BJCM)

  See below cultural sites identified in the BJCM. GPS coordinates & Shape files available.

Site Name	Parish	Status
Bowden Pen	St. Thomas	Extant
Brownsfield	Portland	Abandoned
Charles Town	Portland	Extant
Comfort Castle	Portland	Extant
Cornwall Barracks Maroon Settlement	Portland	Extant
Dinner Time	St. Thomas	Abandoned
Gun Barrel	Portland	Abandoned
Guy's Town	Portland	Abandoned
Hayfield	St. Thomas	Extant
John's Hall	Portland	Extant
Johnson Mountain	Portland	Extant
Katta-a-Wood	Portland	Abandoned
Look Out Hill	St. Thomas	Abandoned
Mammee Hill	Portland	Abandoned
Marshall's Hall	Portland	Abandoned
Moore Town	Portland	Extant
Nanny Falls	Portland	Extant
Nanny Town	Portland	Abandoned
New Crawford Town	Portland	Abandoned
Old Crawford Town	Portland	Abandoned
Pumpkin Hill	Portland	Abandoned
Three Finger Springs	Portland	Extant
Watch Hill	Portland	Abandoned

Cockpit Country

The cultural sites surveyed does not fall within the FR and FMAs (shape files available). Additional surveys focussing on the FR and FMAs are required to generate these coordinates.

- **Create data base and info management system.**
  Limited resources, hence this activity was not achieved.

- **Enter data into data base.**
  Not done

PARTNER / STAKEHOLDER RELATIONSHIP UPDATE:

- Greater collaboration is needed between the JNHT and the FD to conduct joint surveys to minimize the cost to both agencies.

CHALLENGES AND LESSONS LEARNED:

The resources of the JNHT are limited and therefore the team was hampered by lack of updated equipment and resources in conducting the surveys. One of the major challenges the Archaeology team faced while conducting the surveys was the use of a 4-wheel drive vehicle to traverse the rugged terrain of the area. Outdated Geographic Positions Systems (GPS) also posed a challenge as the team was not able to identify the FR or FMAs while in the field. Furthermore, the vast area to surveyed also proved challenging. Access to drones would have been useful in some of the areas surveyed.

Additional, funding was sought to complete the activities for the 2019-2020 period however, these were unsuccessful.

LESSONS LEARNED

- Updated and modern GPS (with software - JAD 2001 map data) should be used while conducting surveys in the FR and FMAs.
- Having a tablet or laptop with ArcGIS is necessary while in the field as it allows you to plot the coordinates and assess the area.
- Proper vehicle needed to survey these areas.

FINANCIAL PROGRESS REPORT: Archaeological Survey for Cockpit Country Area

Quantity	Description	Total JMD$
	Period June 24 – 28, 2019 (5 days)	
	Field Survey Team:	
1	Technical Director	100,000.00
1	Senior Archaeologist	60,000.00
2	Archaeologist	100,000.00
2	Archaeological Field Assistant	50,000.00
1	Curator	60,000.00
1	Artist/Illustrator/Surveyor	30,000.00
2	Petrol for Motor Vehicle	50,000.00
2	Payment to Tour Guides	50,000.00
	Hotel Accommodation	295,200.00
	Rehydration Fluids	25,000.00
	Contingency	80,000.00
	Subtotal for period	***900,200.00***
	Period Sept. 9-18, 2019 (10 days)	
	Field Survey Team:	
1	Technical Director	200,000.00
1	Senior Archaeologist	120,000.00
2	Archaeologist	200,000.00
2	Archaeological Field Assistant	100,000.00
1	Curator	120,000.00
1	Artist/Illustrator/Surveyor	60,000.00
2	Petrol for Motor Vehicle	200,000.00
2	Payment to Tour Guides	200,000.00
	Hotel Accommodation	590,400.00
	Rehydration Fluids	45,000.00
	Contingency	100,000.00
	Subtotal for period	***1,935,400.00***

	GRAND TOTAL	**2,835,600.00**

MAJOR RISKS:
Risk of falling into sink holes, trapped in caves, bad weather conditions, attack by animals, insect infestation and diseases, hostility of property owners and extortions. Occupational hazards - broken limbs and stranded in wilderness as a result of malfunctioned vehicle.

TARGETS/MAJOR ACTIVITIES FOR FY 2020/21:

- Create database and information management developed.
- At least 2 additional guidelines developed

THEMATIC AREA 3: CAPACITY FOR SUSTAINABLE FOREST MANAGEMENT

Outcome 3.1: Improved participatory planning to manage, protect and conserve Jamaica's forests. In progress:

- **Output 3.1.1:** Reforestation programme for forest estates developed.
- **Output 3.1.2:** Forest Management Plans (FMP) for forest estates in clusters developed.
- **Output 3.1.3:** Watershed restoration plan developed, implemented.
- **Output 3.1.4:** Nursery programme implemented & evaluated.
- **Output 3.1.5**: Mangrove & Swamp forest management plan developed & implemented
- **Output 3.1.6**: Guidelines developed for management practices for riparian forests along rivers and streams within forest estates
- **Output 3.1.7:** Appropriate guidelines developed for the establishment and maintenance of trees in urban settings; for cultural, aesthetics and shade purposes.
- **Output 3.1.8:** Database of private forest land owners created and maintained.

Thematic Area 3 seeks to strengthen the capacity for sustainable forest management in Jamaica at all levels, recognising that planning for the management and conservation of Jamaica's forests should involve a wide range of stakeholders and collaborative partnerships. The activities under this Thematic Area focus are geared towards enhancing the country's capacity to manage, protect, & conserve forests through the development and implementation of a number of planning initiatives such as forest management plans for forest estates in clusters, watershed restoration plans, a reforestation programme, mangrove and swamp forest management plans, and guidelines for the establishment & maintenance of trees in urban settings. Work to strengthen, through participatory and gender-based approaches, engagement and contributions of community-based groups, as well as readiness under the REDD+ programme, will play essential roles in the implementation of the outputs in this thematic area. Thematic Area 3 is supported by three Outcomes. Progress in implementation for this year under Outcome 3.1, saw the reforestation of 100ha of denuded lands, the completion and approval by the Minister with responsibility of two forest management plans as well as the expansion of the National forest database under Output 3.1.8. Of concern however under this outcome is the development of a National Mangrove & Swamp Forest Management Plan under Output 3.1.5 which needs to be reviewed.

For Outcome 3.2 several of the outputs are tied to deliverables under the GCF REDD+ Readiness project, currently being executed by the CCD and implemented by the FD but has been experiencing delays. The completion of this project will therefore prove vital to the progress on targets & activities. Of note however was the revision under **(Output 3.2.1)** of the forest inventory approach, and the execution of a pilot carbon stock assessment in a forest estate. The Analytical Report on the drivers for deforestation and forest degradation **(Output 3.2.3)** drafted in FY 17/18 has now been finalised. While over the years a revision/ update to this report may be likely as technical capacity and understanding increases, the KPI for the Output has been achieved, revision to the output and its indicators will therefore need to be considered.

Outcome 3.2: Strengthened institutional capacity for REDD+ readiness.

- **Output 3.2.1:** Existing forest inventory approach reviewed and revised to support Carbon Stock Monitoring (CSM) and potential carbon trading agreements.
- **Output 3.2.2:** REDD+ readiness Strategy completed.
- **Output 3.2.3:** Analytical Report on the drivers for deforestation/forest degradation produced (REDD+ readiness)- **KPI ACHIEVED**
- Output 3.2.4: National forest reference emission level established (calculated) (REDD+ readiness).
- Output 3.2.5: Safeguards information system (REDD+ readiness).

Outcome 3.3: Strengthened capacity of Local Forest Management Committees and other community groups. In progress:

- **Output 3.3.1:** Strengthened capacity of LFMCs and other community groups in project development and management.
- **Output 3.3.2:** Governance and decision making processes related to LFMCs strengthened.
- **Output 3.3.3:** Fire suppression teams established and trained within community groups in high priority/high risk areas.

The capacity of Community-based organisations, such as Local Forest Management Committees (LFMC) is also vital for sustainable forest management. Outcome 3.3 seeks to strengthen their institutional capacity for project development and management as well as decision-making and governance processes. LFMCs are also critical in forest fire control and fire suppression teams are being established and trained. Successful forest fire prevention and containment will preserve forest cover, while simultaneously protecting biodiversity, protecting stocks of timber and other forest products and reduce the release of CO2 into the atmosphere. For the period community groups including LFMCs were trained in project proposal writing and management and awarded grants under Output 3.3.1. Additionally forest fire management training sessions (Output 3.3.3) were held in five (5) communities to build capacity in forest fire management & suppression.

Progress towards targets for the year for all eight (8) Outputs associated with Outcome 3.1, five (5) Outputs associated with Outcome 3.2, and three (3) Outputs associated with Outcome 3.3 are detailed below:

Output 3.1.1: *Reforestation programme for forest estates developed.*
Primary Implementing Entity: *Forestry Department*

KPI	***Area (hectares) planted under Reforestation programme***		
BASELINE	100 ha planted; 218 ha maintained		
TARGETS/MAJOR ACTIVITIES FOR FY 2019/20	-150 ha planted. Additional 426 ha maintained. -Reforestation programme finalised and adopted. -Search for plantable lands to be done in previous year before commencement of planting activity.	**STATUS** ☐Not started ☐Challenges. ☒**In progress.** ☐Completed.	

SUMMARY OF PROGRESS: (as at 31 March 2020):

The FD completed planting of a total of 157 ha in denuded areas across the island for 2019/2020 providing employment for 535 persons (472 males, 63 females) living and working close to forested areas. 301 ha of plantations were weeded during the 2019/2020 period.

The creation of fire lines and boundaries to protect newly planted sites as well, as well as to strengthen forest establishment and management practices, continued during the period. Performance for other maintenance activities are detailed as follows:

- Firelines and Boundaries: Planned 96 km; Actual: 51 km.
- Roads and Trails: Planned 76 km; Actual: 79 km.

The planting target for the year of the plan was achieved. Unfortunately, the maintenance target was not met due to several challenges which affected the planned schedule.

Utilization of the land bank established in FY 2016 has allowed for plantable lands to be identified and verified in the FY prior to when planting is expected however challenges still exist.

Additionally, work continues on the development of the FD reforestation programme.

CHALLENGES AND LESSONS LEARNED: Search for plantable lands is still an issue. Presently the search for land commences the middle of the preceding financial year.
Finding labor to do planting is always a challenge. Community awareness programme continued to be undertaken in the areas to be planted prior to execution of activities. There was also issues with fires destroying areas (newly planted and under maintenance) as well as incidents of animal trespass.

COMMENTS ON INPUTS: (resources) A formalized comprehensive reforestation programme has not been developed.

MAJOR RISKS: Insufficient data. Inaccuracy of data. Other risks reported on during the assessment:

1. *Unable to attract able labour force for employment. Low pay scale for casual labour leads to the inability to attract able labour force for employment. This also creates a problem for work schedule*
2. *Inaccessibility of lands*
3. *Conflict with landowners due to unclear boundaries and existing lease agreements*
4. *Low survival rate and low growth rate of newly planted seedlings*

5. *Unavailability of seedlings to meet demands* 6. *Presence of offences such as the kindling of fires and animal trespass* 7. *Social encumbrances (squatting etc)*
CONCLUSIONS / RECOMMENDATIONS / OTHER COMMENTS: Search for plantable lands at least one year before commencement of planting activity. Development of a comprehensive reforestation programme to be undertaken.
TARGETS/MAJOR ACTIVITIES FOR FY 2020/21: Reforestation of 100 ha of denuded lands. Maintenance of 200 ha under FD recurrent programme.

Output 3.1.2: *Forest Management Plans (FMP) for forest estates in clusters developed.*
Primary Implementing Entity: *Forestry Department*

KPI	***Number of FMPs developed for forest estates in clusters.***		
BASELINE	As at March 2017 the Agency had a total of nine (9) forest management plans (7 for forest estates and 2 for private areas) representing approximately 55,931 ha	**STATUS** ☐Not started ☐Challenges. ☐In progress. ☒**Completed.**	
TARGETS/MAJOR ACTIVITIES FOR FY 2019/20	Stephney- John's Vale FMP revised.		

SUMMARY OF PROGRESS: (31 March 2020) For the FY 19/20, two (2) forest management plans were completed and approved by the Minister.

The revised Forest Management Plan for the Dolphin Head Forest Management Unit (FMU #18), which was developed for 1639.2 ha, was approved by the Minister on July 2, 2019.The Forest Management Plan for Estates within Forest Management Unit #3 (Stephney-John's Vale) was finalized and submitted on March 31, 2020 and the Minister approved it on April 2, 2020. The plan was developed for 7776.33 ha. Since both plans were revised to include all of the estates in the FMUs, the total area under forest cover was increased by 1536.83 ha.

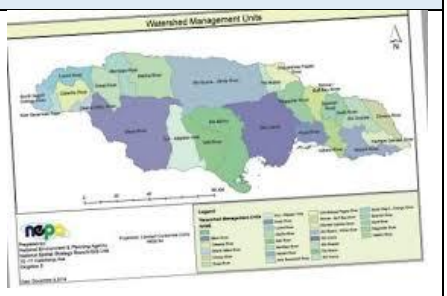
A draft FMP for FMU #4 (Western Blue Mountain) was submitted at the end of the FY. The document will be finalized during the FY 20/21.

To date, Local Forest Management Plans have been developed for eight (8) FMUs and one (1) Watershed Management Unit; a total of 60,258.01 ha. However, only five (5) of these Local Forest Management Plans are active, which account for a total of 13, 412.01 ha.

PARTNER / STAKEHOLDER RELATIONSHIP UPDATE: External stakeholders continue to collaborate with the Forestry Department by participating in the planning process for the development of the FMPs. Three consultations were conducted with external stakeholders during the FY. Two of the consultations were held in FMU # 4 and a total of 58 persons (30 females, 25 males and three persons did not disclose gender) participated in the sessions. A total of 63 persons (19 males, 40 females and three persons who didn't disclose gender)

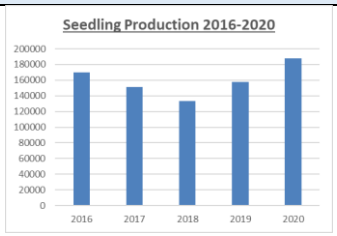
participated in the consultation that was held in FMU # 3. A validation meeting was also conducted with members of the management team.
CHALLENGES AND LESSONS LEARNED: Timely submission of information from internal stakeholders and the absence of relevant data. For this financial year, the absence of the SES for the development of the FMP highlighted possible deficiencies in the plan which is needed for proper implementation as it will guide the strategies implemented in this plan area. **LESSONS LEARNED:** FMPs were not incorporated as part of the FD planning process and as such the challenges experienced alluded to this fact. The FD has since agreed that in order to plan for the development and monitoring of these plans properly, they should be included in the FD overall planning process.
COMMENTS ON INPUTS: (resources) The resources to undertake the consultations with stakeholders were provided and deemed adequate
MAJOR RISKS: The risk of potential for delay or non-completion due to untimely of report submission or information from stakeholders was manifested. The FMP for FMU #3 was prepared for submission without the SES. This information to be included once it becomes available.
CONCLUSIONS / RECOMMENDATIONS / OTHER COMMENTS: The SOP for FMPs will be reviewed to take into consideration the FD planning process flow. Communication with relevant internal stakeholders will continue.
TARGETS/MAJOR ACTIVITIES FOR FY 2020/21: *Cluster 4[i] (Western Blue Mountain) FMP prepared and submitted for approval by Minister and draft FMP for Cluster 2 prepared and submitted.*

Output 3.1.3: *Watershed restoration plan developed, implemented.*
Primary Implementing Entity: *NEPA*

KPI	***Number of watershed restoration plans implemented***		
BASELINE	Two (2) plans developed (Rio Cobre and Rio Grande).	**STATUS** ☐Not started ☐Challenges. ☒**In progress.** ☐Completed.	
TARGETS/MAJOR ACTIVITIES FOR FY 2019/20	-Draft Watershed Management Plans prepared for Rio Cobre and White River, which include restoration plans.		
SUMMARY OF PROGRESS: (31 March 2020) • Outline of the Management Plans for Rio Cobre and Drivers River WMUs prepared. The Draft Management Plans are to be prepared for the 2020 – 2021 Financial Year. • The activity relating to White River is the undertaking of a Rapid Ecological Assessment (REA). The REA report entitled "***Component 3 of Watershed Area Management Mechanism (WAMM): Reconnaissance***			

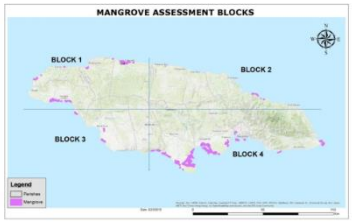
of Resources" has been prepared. The REA aims to establish baseline information on the natural resources that are within the White River Sub-Watershed Management Unit (WRSWMU). During the survey 60 plant species belonging to 30 families were recorded. Of these, 11 species (18%) are endemic to Jamaica. In total, 59 species were seen across all three sites assessed for avifauna and they represented 26 different bird families. A total of 10 species of butterflies were observed with four species being endemic. Four (4) sites within the coastal limits of the WMU were examined, these are the Choicy reef, Dickies reef, Hermosa cove and the Sewage end coral reef sites. The four (4) sites were all observed to have low fish densities and biomass and high macro algae cover. NEPA in its continued thrust to improve ecosystems, continued to embark on the implementation of additional WAMM activities during the 2019 - 2020 financial year in two selected Watershed Management Units (WMUs). Component 8 which was undertaken in two WMUs involved the staging of Farmer Field Schools (FFS) to enable the dissemination of information to farmers and the community at large. A total of 40 persons were positively impacted during the delivery of the FFS; 20 participants at Fruitfulvale (Swift River) and 20 participants at Harkers Hall (Rio Cobre).
CHALLENGES AND LESSONS LEARNED: The absence of community based organizations with the capacity to receive funding from donors for the implementation of watershed management activities.
MAJOR RISKS: Lack of financial support for the implementation of follow-up activities in target WMUs.
TARGETS/MAJOR ACTIVITIES FOR FY 2020/21: Watershed restoration plan developed for 3 WMUs (Rio Minho, Rio Cobre and Drivers River)

Output 3.1.4: *Nursery programme implemented & evaluated.*
Primary Implementing Entity: *Forestry Department*

KPI	***Number of seedlings produced and cost***		
BASELINE	151,383 seedlings produced (March 2017)	**STATUS** ☐Not started ☐Challenges. ☒**In progress.** ☐Completed.	
TARGETS/MAJOR ACTIVITIES FOR FY 2019/20	-Evaluation completed. -205,000 seedlings produced.		
SUMMARY OF PROGRESS: (as at 31 March 2020) For 2019/20, a total of 187,706 seedlings were produced. This represented 92% of the 205,000 target set. The nursery this year was unable to meet the demands for the respective programmes within the timelines specified. It may be argued that the production is not fully in sync with the demands of relevant programmes. The FD to develop Production and Sowing schedules a year in advance to help eliminate this problem.			
CHALLENGES : A thorough evaluation of the nursery programme is still ongoing. Steps have been taken and some realignment of operations done to help streamline production with demand of the various programmes.			

LESSONS LEARNED: To plan (at least 8 months ahead in the previous year) for execution as several risks can materialize which affect the scope, quality and schedule as initially planned.
COMMENTS ON INPUTS: (resources) Poor infrastructure and availability of seeds can also be an issue affecting production.
MAJOR RISKS: A business plan is being developed under a Technical Assistance programme for the FD, under which the Nursery operations will be transformed into a business unit with more efficient production to improve the revenue generation capacity within the FD. This process is ongoing and at the stage where recommendations for improvements are now being reviewed with a view to acceptance and implementation where practicable. The **unavailability of seeds** for key species is still an issue and at times can affect the production demands. Several strategies were implemented to mitigate the risks of **seedling loss due to pests**, such as weekly updates of the inventory, weekly inspection of seedlings and culling of infested seedlings. These actions mitigated the impact of the risks to some extent. The FD has reinstituted the collection of wildings and regular pesticide spraying have been implemented as mitigation strategies. Nonetheless, the challenge of **inadequate staff and poor infrastructure** remains, which may severely affect the targets.
CONCLUSIONS / RECOMMENDATIONS / OTHER COMMENTS: Data availability, accuracy and efficiency, Development and adherence to the Production and Sowing Schedules is important and should aid the timely delivery of required seedlings. Improvement of infrastructure and adequate staffing will improve productivity.
TARGETS/MAJOR ACTIVITIES FOR FY 2020/21: Findings from Technical Assistance Business Development programme related to Nursery Operations implemented. 205,000 seedlings produced.

Output 3.1.5: *Mangrove and swamp forest management plan developed & implemented*
Primary Implementing Entity: *To be determined*

KPI	**# of outputs implemented from the mangrove and swamp forest management plan**		
BASELINE	Mangrove Policy in place, Cays Policy	**STATUS** ☐Not started ☒**Challenges.** ☐In progress. ☐Completed.	
TARGETS/MAJOR ACTIVITIES FO RFY 2019/20	-START IMPLEMENTATION OF OUTPUT -desk research and stakeholder consultation commenced for the development of a TOR - Consultant services for the management plan .		

SUMMARY OF PROGRESS: (31 March 2020)

Output 5.1.2- '*Mangrove & Swamp forests assessed and mapped'* scheduled to be completed in the upcoming FY, is a critical input this Output. Output needs to be reviewed as the target set speaks to the recruitment of coordinator for implementation; however, the activity is not yet near that stage. There is also no active lead entity for the output. Internal discussion with the FD took place during the period on the engagement of consultants to draft the plan. Wider discussions with key stakeholders needed.

PARTNER / STAKEHOLDER RELATIONSHIP UPDATE:

- NEPA
- UWI /DSL continues to provide valuable input to create the TOR for the Consultant services to develop the said management plan

MAJOR RISKS:

- Failure to identify an owner/lead for the activity could result in no execution of the activity.
- Lack of capacity of the entity tasked with implementation to execute the activity.

CONCLUSIONS / RECOMMENDATIONS / OTHER COMMENTS: FURTHER REVIEW OF OUTPUT NEEDED.

In the PMER of the NFMCP, NEPA is identified as the lead entity with responsibility for this Output owing to their work with mangroves.

With the transfer of management responsibility of swamp and mangroves areas to the FD under the NFMCP (Output 1.1.4), as well as the work the FD is currently doing to map and assess over 7000ha of swamp and mangrove forests.

It is recommended the FD be assigned the primary lead for this Output. During the period the FD team began discussions on drafting of TOR for consultancy services for a SES to inform the plan, as well as to develop the management plan.

TARGETS/MAJOR ACTIVITIES FOR FY 2020/21: REVIEW OF OUTPUT NEEDED. Mapping & Assessment of Mangrove & Swamp forests areas to continue to inform the plan. Development of TOR and engagement of a consultant to draft management plan to begin.

***Output 3.1.6**: Guidelines developed for management practices for riparian forests along rivers and streams within forest estates.*
***Primary Implementing Entity**: Forestry Department*

KPI	***(Yes/No) Best management practices developed for riparian forests within forest estates.***		
BASELINE	None	**STATUS**	
TARGETS/MAJOR ACTIVITIES FROR FY 2019/20	-START IMPLEMENTATION OF OUTPUT -Approach to be developed and riparian zone to be defined.	☐Not started ☒**Challenges.** ☒**In progress.** ☐Completed.	
SUMMARY OF PROGRESS: (as at 31 March 2020) Internal dialogue initiated for developing criteria for definition of Riparian Zones.			
TARGETS/MAJOR ACTIVITIES FOR FY 2020/21: Best management practices and Special Regulations developed for Riparian Forests			

***Output 3.1.7**: Appropriate guidelines developed for the establishment and maintenance of trees in urban settings; for cultural, aesthetics and shade purposes.*
***Primary Implementing Entity**: Forestry Department*

KPI	***(Yes/No) Guidelines developed for the establishment and maintenance of trees in urban settings and for use in cultural, aesthetics and shade purposes.***		
BASELINE	None	**STATUS** ☐Not started ☐Challenges. ☒**In progress.** ☐Completed.	
TARGETs/ MAJOR ACTIVITIES FOR FY 2019/20	-Community engagement and public education. -Identify new communities, including in the Western Zone. -Planting started and first draft guidelines.		
SUMMARY OF PROGRESS: (as at 31 March 2020) A collaborative approach between the Forest Operations & Forest Science & Technology Services Divisions of the FD will be employed in completing these guidelines. While the first draft of the guidelines was not prepared during the period as targeted, preliminary discussion on resources and inputs needed for the activity, took place during the FD strategic planning retreat in October 2019.			

Targeted community engagement and public education around Urban Forests however saw significant progress over the period with several activities held promoting Urban Forestry:

- The FD mounted a display over a three (3) day period from June 7-9, 2019 at the Green Expo 2019 held at the National Arena in Kingston, which focused on Urban Forestry and REDD+.
- At the 17th staging of National Tree Planting Day held on October 4, 2019, the FD in collaboration with the Office of the Prime Minister, launched the National Three Million Tree initiative- 'One for every Jamaican', which has a component that encourages planting of trees in urban areas. Several community and urban planting activities were held islandwide on the day with 1000 seedlings planted at Jamaica House where the main ceremony was held. Since the launch, the FD continues distribution of seedlings to the public. Over 25,000 seedlings have been distributed specifically to companies, schools, and civil society groups (Churches, community groups etc) for urban planting projects under this initiative as at March 31, 2020.
- The FD dedicated its Calendar for 2020 to promoting the message of Urban Forestry. The Urban Forestry themed calendar provided valuable information on Urban Forestry, including popular tree species suited for planting in urban settings. Over 8000 copies were produced and distributed islandwide.

PARTNER / STAKEHOLDER RELATIONSHIP UPDATE:

See above regarding inter-divisional approach

CONCLUSIONS / RECOMMENDATIONS / OTHER COMMENTS: The production of the guideline document is a critical deliverable and will be given the priority which it deserves in the new FY. However, the initial plan to buttress its development/implementation by the engagement of various communities may be adversely affected by the COVID-19 pandemic and its resultant restriction on large group gatherings. Therefore, the emphasis for the upcoming financial year will be the preparation of the guidelines with subsequent implementation in the next financial year.

TARGETS/ MAJOR ACTIVITIES FOR FY 2020/21: Completion of guideline document by Quarter 4. Community engagement and public education. More urban planting done in more communities.

Output 3.1.8: *Database of private forest land owners created and maintained.*
Primary Implementing Entity: *Forestry Department*

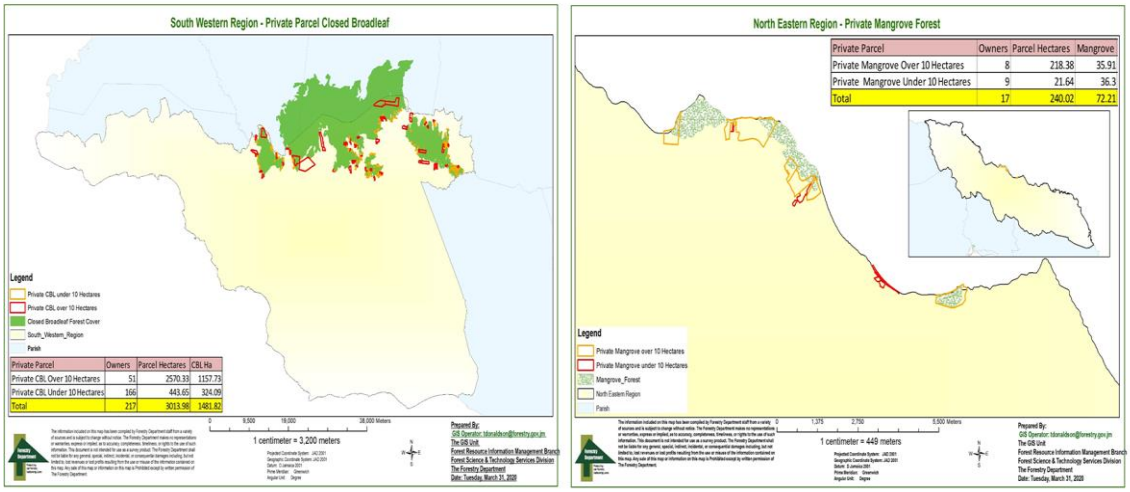
KPI	***Number of identified private forest landowners whose profiles are included in the database***		
BASELINE	No database	**STATUS** ☐Not started ☐Challenges. ☐In progress. ☒**Completed.**	
TARGETS/MAJOR ACTIVITIES FOR FY 2019/20	Database expanded and maintained-		

SUMMARY OF PROGRESS: (as at 31, March 2020)

Database was created and is currently being maintained. One thousand (1000) parcels with attendant data on Closed Broadleaf forest and Mangrove was extracted and investigated from the core data set received from the NLA. The national forest database was populated with this verified information, significantly increasing the number of such parcels from a baseline of 1330 parcels (Figure 2).

The activities associated with this output have been progressing well, and progress achieved corresponds to what was initially planned.

Figure 2: Maps showing extract of Private Parcels with CBL for South Western Regions and parcels with Mangroves in North Eastern Region:



CHALLENGES AND LESSONS LEARNED:

Challenges	Lessons Learnt
1. Duplicate of parcel data	A comparison and meticulous examination of the extracted parcel will take place before data is further verified.
2. Unclean Data- Parcels geometry and topological boundaries intertwine	The topology tool function will now be a part of the data verification process.
3. Parcel data has a unique missing identifier	In cases where no adjoining parcel possesses a valuation number, the shape of parcels, roads, or any outstanding (line/ polygon feature) will be used to identify the parcel on the eLandjamaica database visually.
4. Incomplete reference data layers added to ArcGIS map document.	The forest reserve dataset will also be part of the reference data used. This layer would provide additional verification reference data.
5. Access to elandJamaica to conduct an in-house investigation	The parcel documents will be accessed and purchased via eLandJamaica online. Subscription is renewed one week before the FD eLandJamaica user account is depleted.

6. Attribute data backup and translation	Adherence to data backup procedures and data entry standard

COMMENTS ON INPUTS: (resources)

NLA- eland Jamaica subscription access is renewed monthly. A credit of 50,000 is added to the FD account, which is accessed by Forest Technician Survey and Senior Surveyor, to retrieve other cadastral information for further parcel data verification.

MAJOR RISKS:
Corruption of data. Unreliability and unavailability of corroborating data from NLA.

CONCLUSIONS / RECOMMENDATIONS / OTHER COMMENTS:
The procurement for eland-Jamaica subscription should start in the first quarter of FY

TARGETS/MAJOR ACTIVITIES FOR FY 2020/21:
Database expanded and maintained- 1000 additional parcels added

Output 3.2.1: *Existing forest inventory approach reviewed and revised to support Carbon Stock Monitoring (CSM) and potential carbon trading agreements.*
Primary Implementing Entity: *Forestry Department*

KPI	***(Yes/No) Forest inventory approach revised***		
BASELINE	Current forest inventory approach	**STATUS** ☐Not started ☐Challenges. ☐In progress. ☒**Completed.**	
TARGETS/MAJOR ACTIVITIES FOR FY 2019/20	-Forest inventory approach revised to include carbon estimates. -First pilot study launched. Workshop to be held (see output 4.2.3)		

SUMMARY OF PROGRESS: (31 March 2020)

Review of national inventory approach is ongoing with conversation being had with United States Forestry Services (USFS).

Carbon stock assessment manual has been developed and first pilot study conducted in Bogue II, St Ann.

Training workshop with CATIE conducted -see **(Output 4.2.3).**

PARTNER / STAKEHOLDER RELATIONSHIP UPDATE:

- USFS – responsible for training FD staff in the new inventory approach
- CATIE – trained FD staff in Carbon Stock Assessment

CHALLENGES AND LESSONS LEARNED:

- Calculation of Carbon requires the use of wood density for each species. The wood density may be different for the same species in different location. Jamaica has not developed any country specific wood density therefore, regional wood density or in some cases for climatological zone would be used. This has the potential to introduce a large amount of error into the final calculations.
- Adequate tools are needed to conduct activity. There is a shortage of callipers and DBH tapes. Timely procurement is needed going forward
- Additional oven drying capacity is needed. Alternative methods to determine carbon in understory being sought.

LESSONS LEARNED:

- The level of uncertainty will increase where there is an increased diversity of plants. This will translate to an increased sampling effort to reduce the level of uncertainly in the calculation.
- The need for adequate instruments is paramount to capturing the data effectively and efficiently (DBH tapes, callipers, scales etc.)
- Dual monitors needed to carry out data cleaning and data analyses on the large volume of data being handled.

COMMENTS ON INPUTS:

- Tools used in the normal forest inventory are needed to collect data such as DBH tape, distance tape, calliper, clinometer etc.

MAJOR RISKS:

- Airports being closed due to COVID 19 restrictions will further hamper the commencement of the work shop.
- Absence of wood density data for endemics will force the continued use of generic values that increase the level of uncertainty
- Resignation of staff members

CONCLUSIONS / RECOMMENDATIONS / OTHER COMMENTS:

- See final report for Carbon Stock Assessment in Bogue II Forest Reserve
- The pilot study should be conducted in an area with limited variability such as a plantation to help to reduce the risk of high uncertainty values so as to build a baseline.
- Field teams should comprise a minimum of four persons for effective and efficient data collection
- Data loggers would help to lessen the human error in transcribing and inputting of data
-

TARGETS/MAJOR ACTIVITIES FOR FY 2020/21:

- Further discussion with USFS and complete National Forest Inventory Manual (NFI)
- Carbon Stock Assessment (CSM) conducted in three Forest Estates

***Output 3.2.2**: REDD+ readiness Strategy completed.*
***Primary Implementing Entity**: Forestry Department*

KPI	(Yes/No) REDD+ readiness Strategy approved		
BASELINE	No REDD+ readiness Sector Plan.	**STATUS** ☐Not started ☐Challenges. ☒**In progress.** ☐Completed.	
TARGETS/MAJOR ACTIVITIES FOR FY 2019/20	-Approved national strategy and action plan. -Working group on REDD+ established.		

SUMMARY OF PROGRESS: (31 March 2020)

This Output is being outsourced with funding from GCF. While the National strategy and action plan was not approved, in the FY, the FD worked with the CCD to hold the official launch for the GCF REDD+ capacity project on June 20, 2019, as well as formulated the National REDD+ Steering Committee and develop TORs to guide the establishment of the 4 working groups. Additionally, the procurement process completed to identify a Consultant entity (IIED was the successful applicant) to execute the project with the assistance of the Project Coordinator who was also recruited earlier in the FY.

PARTNER / STAKEHOLDER RELATIONSHIP UPDATE:

Climate Change Division-MEGJC – the executing entity since. The Principal Director – CCD is the NDA to the GCF. The annual funding from GCF for Capacity and climate change readiness programmes come directly to this entity. The FD works closely with the MEGJC and the CCD.

CHALLENGES :

The recruitment process was protracted and onerous in part due to missed deadlines which required repeat requests for extensions from the interested applicants. The circuitous process was a frustrating one and raised questions as to the level of priority assigned to it by the executing entity. There was a further delay due to the restrictions under COVID-19.

Additionally, the FD lost its REDD point person (this person had received all the training and sensitisation in relation to REDD) and is yet to successfully fill this position capacity gap.

LESSONS LEARNED:

From the outset, REDD capacity and training should be afforded to more than one person in the entity to avoid and / or minimise risks associated with capacity deficit.

The role of the executive and the implementing partners of this Project must be clearly documented from the outset as expectations on either side may be different. In the end, it is the implementing entity who is agitating for this REDD readiness and the aim is to ensure that this initiative does not conflict with the CCD and the national climate change agenda.

The implementing entity should manage procurement of good and services to mitigate the risk of not meeting scheduled timelines and to reduce the numerous iterations of project documents, activities, and output.

COMMENTS ON INPUTS: (resources)

Novel opportunity for FD and the CCD and the country by extension, as such, the need for resources (human and physical) is critical.

MAJOR RISKS:

- Inability to secure a consulting entity with sufficient REDD experience to develop the REDD framework.
- Insufficient financial resources to pay consulting entity to effect project components
- Time- COVID -19 will have major impacts on the stakeholder consultations which are pivotal to the development of all the components of the REDD strategy framework.

CONCLUSIONS / RECOMMENDATIONS / OTHER COMMENTS:

FD should increase its efforts to ensure that CCD's involvement in the execution aspects of this project is more visible.

FD should work closely with the consulting entity to ensure that the outcome of this REDD capacity project is in keeping with the stated vision and objectives.

TARGETS/MAJOR ACTIVITIES FOR FY 2020/21:

Continuation of the execution of the GCF REDD capacity project according to amended timeline and the revised workplan submitted by the consultation entity.

Output 3.2.3: *Analytical Report on the drivers for deforestation/forest degradation produced (REDD+ readiness)*
Primary Implementing Entity: *Forestry Department*

KPI	**(Yes/No) Analytical report produced and disseminated**		
BASELINE	No Analytical Report on the drivers for deforestation/forest degradation.	**STATUS** ☐Not started ☐Challenges. ☐In progress. ☒**Completed.**	
TARGETS/MAJOR ACTIVITIES FOR FY 2019/20	-Social Safeguards and Gender operationalised. -Satellite imagery expected to be procured by FY 2019/2020.		

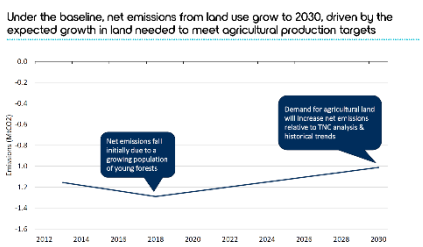
SUMMARY OF PROGRESS: (31 March 2020)

While the Social Safeguards were not operationalised, and satellite imagery procured, the KPI for this Output has been achieved. The report was generated in FY 17- 18 and during the FY was disseminated to several key stakeholders. During the period the report was shared with and utilised by international consultants working with the CCD to revise the country Nationally Determined Contributions under the UNFCCC to include the forest sector. Work on Social safeguards will be completed under the GCF REDD+ Readiness project.

CONCLUSIONS / RECOMMENDATIONS / OTHER COMMENTS:
Output from this assessment represents a snapshot of what was happening then and its quite likely that the drivers of deforestation and degradation have changed. A new Output building on the production of this report should be considered especially in light of the execution of the GCF REDD+ Readiness project.

TARGETS/MAJOR ACTIVITIES FOR FY 2020/21: To be determined. KPI for output achieved. A review of this process under the GCF REDD capacity project may be considered.

***Output 3.2.4**: National forest reference emission level established (calculated) (REDD+ readiness).*
***Primary Implementing Entity**: Forestry Department*

<table>
<tr><td>KPI</td><td colspan="3">(Yes/No) Forest reference emission level established</td></tr>
<tr><td>BASELINE</td><td>No Forest Reference Emission Level</td><td rowspan="2">STATUS
☐Not started
☒Challenges.
☒In progress.
☐Completed.</td><td rowspan="2"> 
</td></tr>
<tr><td>TARGETS/MAJOR ACTIVITIES FOR FY 2019/20</td><td>-START IMPLEMENTATION OF OUTPUT

-Based on the BPI Manual produced, ability established to calculate the National Forest Reference Emission level.</td></tr>
<tr><td colspan="4">SUMMARY OF PROGRESS: (31 March 2020)

Even though the FD did not directly conduct any assessment that would have resulted in the NFEL, the revision of the BPI manual and execution of a pilot CSM assessment has strengthened its capacity in this area. Additionally, during the period the FD was a key stakeholder in the process to revise the country's Nationally Determined Contribution (NDC) under the Paris Agreement to include the forest sector. In this capacity the FD provided data and had several meetings with the consultants. Utilising the data provided, the Consultants generated current emission levels from forestry and other vegetative land use with projections until 2030. The output of this modelling was instrumental in the revision of the NDCs which is expected to be finalised in the new FY.</td></tr>
<tr><td colspan="4">PARTNER / STAKEHOLDER RELATIONSHIP UPDATE:

• CCD-MEGJC</td></tr>
<tr><td colspan="4">CHALLENGES:

The availability of current data is a persistent challenge. Additionally, there is need to build the capacity to determine NFELs. The latter will be addressed under the current GCF REDD capacity project over the next 24 months

LESSONS LEARNED:

There is never a situation where you have more than enough data.</td></tr>
<tr><td colspan="4">MAJOR RISKS: Availability of relevant and current data with the necessary capacity may stymie the determination of the NFEL.</td></tr>
<tr><td colspan="4">CONCLUSIONS / RECOMMENDATIONS / OTHER COMMENTS :

The deliverables from the current GCF-REDD capacity project is pivotal for the FD to execute this activity. Once acquired, the capacity will be shared throughout the organisation.</td></tr>
<tr><td colspan="4">TARGETS/MAJOR ACTIVITIES FOR FY 2020/21: The sourcing and collation of geospatial data as well as biophysical inventory data so as to commence the analysis of the NFEL.
Training in IPCC methodologies to determine NFEL.</td></tr>
</table>

Output 3.2.5: Safeguards information system (REDD+ readiness).
Primary Implementing Entity: Forestry Department

KPI	**Adherence to seven principles (Cancun)**		
BASELINE	PIOJ has Safeguards Information System (SIS)	**STATUS** ☒**Not started** ☒**Challenges.** ☐In progress. ☐Completed.	
TARGETS/MAJOR ACTIVITIES FIR FY 2019/20	-START IMPLEMENTATION OF OUTPUT -RSC Meetings held. Inter-sessional meeting held. Consultancy to develop the Safeguards Information System (SIS)		
SUMMARY OF PROGRESS: (31 March 2020) Nothing to date – successfully identified entity to execute GCF REDD project wherein the SIS will be developed.			
COMMENTS ON INPUTS: (resources) The outputs from the current GCF REDD capacity project will address this Output			
TARGETS/MAJOR ACTIVITIES FOR FY 2020/21: Stakeholder engagements, socio-economic assessments, the development of a grievance mechanism and a gender strategy will be done. These will be feed into the SIS. The SIS will be completed under this project in 24 months commencing in July 2020.			

Output 3.3.1: Strengthened capacity of LFMCs and other community groups in project development and management
Primary Implementing Entity: Forestry Department

KPI	***Number of community groups trained***		
BASELINE	No formal targeted training in this area completed by the Agency. EFJ conducts with eligible groups	**STATUS** ☐Not started ☐Challenges. ☐In progress. ☒**Completed.**	
TARGETS/MAJOR ACTIVITIES FOR FY 2019/20	-Two SES completed and finalised.		
SUMMARY OF PROGRESS: (as at 31 March 2020) -Two (2) Socio Economic Surveys were completed as per the target set: • SES for forest estates in Cluster 2 (Bull Head, Clarendon) • SES for forest estates in Cluster 4 (Western Blue Mountain, St Andrew) The SES seeks to explore the social and economic characteristics, land use, timber and forest resource awareness, community issues and communication patterns in the area as a way for the FD to assess the needs of the society			

and identify ways under its social and community forestry initiatives to meet specific capacity gaps and needs to target interventions.
CHALLENGES: Ability to conduct surveys and input data was negatively affected due to limited staff capacity. **LESSONS LEARNED:** Contracting of labour to assist with data collection.
COMMENTS ON INPUTS: (resources) Persons were contracted to assist with the collection, inputting and analysis of the data.
MAJOR RISKS: Data not captured or analysed properly.
CONCLUSIONS / RECOMMENDATIONS / OTHER COMMENTS: While the FD has two Rural Sociologists on staff, capacity should be enhanced to properly execute the collection and analysis of the requisite data.
TARGETS/MAJOR ACTIVITIES FOR FY 2020/21: To be determined. Targets for this activity is linked to Output 3.3.2

Output 3.3.2: Governance and decision making processes related to LFMCs strengthened.
Primary Implementing Entity: Forestry Department

KPI	***Number of recommendations from LFMC study implemented***		
BASELINE	Study incomplete	**STATUS** ☐Not started ☒**Challenges.** ☐In progress. ☐Completed. **REVIEW OF OUTPUT NEEDED**	
TARGETS/MAJOR ACTIVITIES FOR FY 2019/20	-START IMPLEMENTATION OF OUTPUT -Study has been dropped. Internally, recommendations were articulated, and FD will go ahead with those to set up the training programme (output will be maintained), to be adopted by end of Year 4.		
SUMMARY OF PROGRESS: (as at 31 March 2020). There was no traction on this matter since the 2018/2019 FY. The FD has decided to take a different approach in relation to this Output. No timelines have been set.			
CHALLENGES AND LESSONS LEARNED: Inability to get consultant to commit to set deadlines			
COMMENTS ON INPUTS: (resources) : A preliminary report was submitted on September 26, 2016 by the contracted consultant, entitled "*The Status of the Local Forest Management Committees, Jamaica - Findings from a Snapshot Survey*." The report had been due from FY 2015/2016, but is still incomplete with several gaps identified. A preliminary draft of a final report was also submitted in January 2017. These inputs it is anticipated can be used to inform the final recommendations.			
MAJOR RISKS: Delays with submission from consultant.			
CONCLUSIONS / RECOMMENDATIONS / OTHER COMMENTS:			

The consultant's contract has been terminated and we are now seeking a new consultant to complete the study.
TARGETS/MAJOR ACTIVITIES FOR FY 2020/21: To be determined

Output 3.3.3: *Fire suppression teams established and trained within community groups in high priority/high risk areas.*
Primary Implementing Entity: *Forestry Department*

KPI	***Number of community groups trained in Forest Fire Management***		
BASELINE	3 community groups in high risk areas trained in forest fire management.	**STATUS** ☐Not started ☐Challenges. ☐In progress. ☒**Completed.**	
TARGETS/MAJOR ACTIVITIES FOR FY 2019/20	-5 additional community groups established and trained.		

SUMMARY OF PROGRESS: (as at 31 March 2020):

Forest Fire Management Training Sessions: The FD continued the execution of training sessions in forest fire management in communities located close to forested areas and prone to forest fires. The one-day training sessions, done in collaboration with the Jamaica Fire Brigade (JFB), consist of three modules: (1) Basic Concept of Forest Fires, (2) Forest Fire Prevention, and (3) Forest Fire Suppression, with a practical simulation exercise conducted in the field under the supervision of the JFB. The FD distributes a forest fire management manual to participants as part of the sessions.

Five (5) communities participated in these training sessions during Year. The five communities involved were:

- Clifton, St. Andrew – July 16, 2019
- Minto, St. Thomas – July 30, 2019
- Chepstowe, Portland – August 10, 2019
- Constitution Hill, St. Andrew – August 13, 2019
- Content Gap, Andrew– June 17, 2019

PARTNER / STAKEHOLDER RELATIONSHIP UPDATE:

- The FD continues to work with the JFB in the execution of this Output

MAJOR RISKS: Poor knowledge retention of community groups

TARGETS/MAJOR ACTIVITIES FOR FY 2020/21: Minimum of four (4) community groups trained in Forest fire management & suppression.

THEMATIC AREA 4: EDUCATION, TRAINING AND AWARENESS

The conservation and sustainable management of the island's forest resources is dependent on all stakeholders (public and private sector interests that own or manage forest areas) becoming involved in its protection, conservation, sustainable use and restoration. The NFMCP seeks to nurture continuously the knowledge and awareness of all parts of Jamaican society of the value of forests and trees as part of Jamaica's cultural, economic and ecological heritage as well as the importance of forests to climate resilience. The two (2) Outcomes under this Thematic area, seeks to address gaps identified in relation to public education awareness and training for the forest sectors. Targets related to outputs under both outcomes saw some progress for the reporting period. Challenges were experienced with Output 4.2.2 due to its technical and specialized nature.

Outcome 4.1: Forest communities, the general public as well as targeted groups have increased capacity regarding sustainable forest practices. In progress:

- **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.
- **Output 4.1.2**: Forest fire-related public awareness and education programme designed, implemented.
- **Output 4.1.3**: Outreach programme for private forest owners developed and evaluated on an ongoing basis.

Outcome 4.2: Strengthened capacity for natural resource valuations, carbon stock monitoring and silviculture.

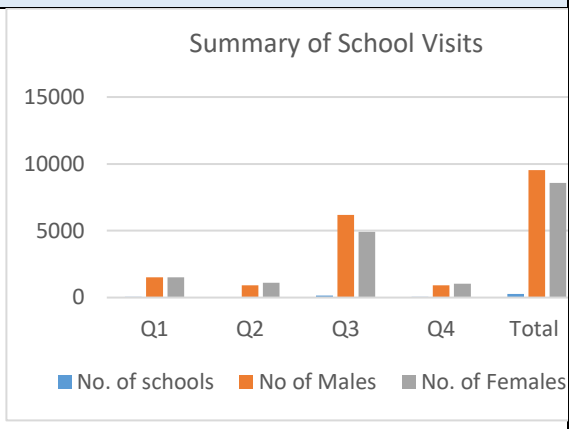
- **Output 4.2.1:** Training programmes for natural resource/ecosystem valuations (NRVs) for all types of forests conducted.
- **Output 4.2.2:** Training in silviculture conducted.
- **Output 4.2.3**: Training in Carbon Stock Monitoring conducted.

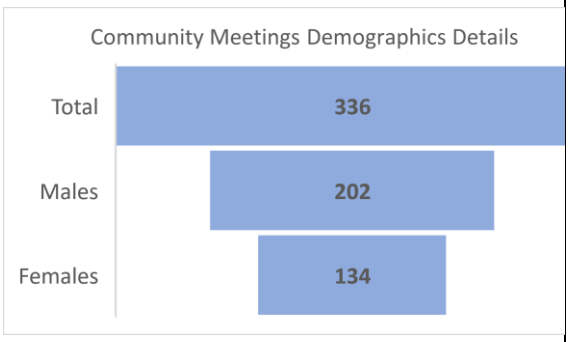
Progress towards targets for the year for all three (3) Outputs associated with Outcome 4.1, and three (3) Outputs associated with Outcome 4.2 are detailed below:

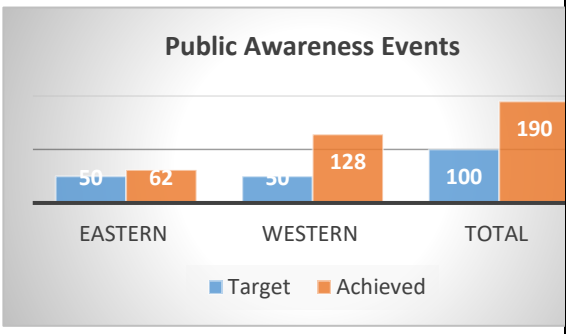
Output 4.1.1: *Education programme developed to strengthen the public's understanding on the benefits of forests and its resources, the importance of sustainable forest management and conservation practices.*
Primary Implementing Entity: *Forestry Department*

<table>
<tr><td>KPI</td><td colspan="3">Number of communities where public education/awareness sessions and school awareness programmes have been delivered (by type and stakeholder)</td></tr>
<tr><td>BASELINE</td><td>School visits: 278 across 14 parishes.

Expos: 63

Community mtgs- 12 (8 general and 4 around forest fire awareness).</td><td rowspan="2">STATUS
☐Not started
☐Challenges.
☒In progress.
☐Completed.</td><td rowspan="2"> 




</td></tr>
<tr><td>TARGETS/MAJOR ACTIVITIES FOR FY 2019/20</td><td>-KAP study done. Public education materials prepared.

-FD will introduce strategies to standardise the programme's implementation across all schools targeted or engaged. The programme will be given more structure to allow for greater ease in evaluating its effectiveness. This will include guidelines for the programme's implementation and the development of pre and post testing tools to demonstrate knowledge transfer.

-Forest Trek implemented.</td></tr>
<tr><td colspan="4">SUMMARY OF PROGRESS: (31 March 2020)

The KAP study which was to be done in the 2019/2020 financial year has been rescheduled for the 2021/2022 due to inadequate funding to undertake the activity. Additionally the FD major public awareness event, Forest Trek which was schedule for March 2020, was postponed due to the Covid-19 pandemic in Jamaica. Progress for this Output</td></tr>
</table>

however was made with revisions to programme implementation for the school visits programme and continued execution of public awareness events.

Schools Visits

The school visits programme was also updated and the new school visit reporting form and database were introduced.

The FD completed a Teaching Manual for use by the Forest Technicians in delivering information to students across the various educational levels. The Ministry of Education and Youth reviewed and provided feedback on the Manual. The Public Education Programme document was updated and a new school visit reporting form was also introduced. The guidelines for the programme's implementation and the development of pre and post testing tools to demonstrate knowledge transfer are still being finalised and only some post testing tools were introduced.

A total of 302 schools were visited over the financial year, 60 of which were to schools in areas classified as forest dependent communities. The 302 visits reached 18,094 students- 9,526 males and 8,568 females. A total of 887 teachers were also reached through the visits.

Community Meetings

The FD staged nine (9) community meetings during the year, which were attended by 336 persons, 202 males and 134 females. Information about the FD, Forests and activities in the area were the focus of the community meeting.

Public Awareness Events

The FD sought to participate in 100 public awareness events which include expos, community meetings organised by other organisations; inter-agency meetings etc. The FD participated in 190 public awareness events.

PARTNER / STAKEHOLDER RELATIONSHIP UPDATE:

- The relationship with the National Environment and Planning Agency, Ministry of Economic Growth and Job Creation, Ministry of Education and Ministry of Industry, Agriculture and Fisheries is fairly good but could do with some strengthening. The FD continues to work on strengthening this relationship to increase support from these entities in the implementation of the Forestry Department's public education and awareness programmes.

CHALLENGES: The spread of COVID-19 to Jamaica in early March and the subsequent restrictions imposed by the Government of Jamaica to curtail its spread, significantly impacted the FD public education and public awareness activities. All activities including school visits and public awareness activities ceased upon the GOJ's orders for schools to be closed and the limitations on the number of persons who could gather was reduced to 20 and then 10, leading to the cancellation of several public awareness events and Forest Trek. As a result, the FD PR&CC Branch's team had to commence a process of brainstorming new ways of engagement, which would facilitate safe interaction between the FD officers and the public to ensure the sharing of information.

LESSONS LEARNED: Need to have other mechanisms requiring less person to person contact to disseminate information to target audiences. This includes strengthening our online platforms and utilising other online platforms such as social media to maintain the reach of our programmes. This is particularly important should a disaster occur.

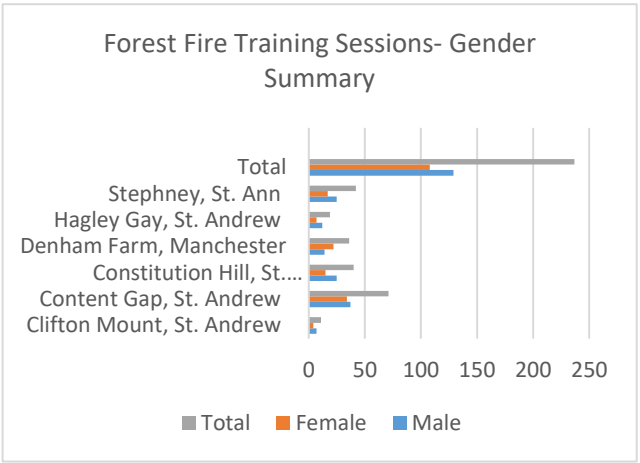
We also learnt that an early start to pursuing our targets can reduce the fallout, should a disaster occur later in the year. Thankfully we started the targets early and so completed them in advance of the arrival of COVID-19, so we had achieved most of our targets prior to the pandemic's arrival and subsequent restrictions.

COMMENTS ON INPUTS: (resources) Multimedia (videos, photographs, interactive online content) is required to reach target audiences via online platforms. Funding is also required to support other activities such as Forest Trek, which require a lot more resources to execute. Also, resources are required to print and distribute other public education material as well as to carryout video production and distribution of this material as well.

MAJOR RISKS: COVID-19 Restrictions could impact the reach of activities in 2020/2021

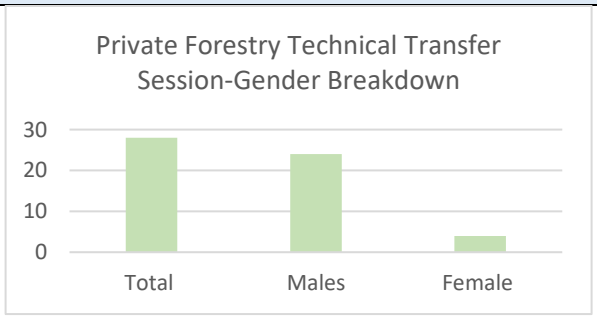
CONCLUSIONS / RECOMMENDATIONS / OTHER COMMENTS: Utilise online and virtual platforms as much as possible. Print and widely distribute relevant educational material to stakeholder groups, especially communities adjoining forest estates, who often have challenges accessing online resources.
TARGETS/MAJOR ACTIVITES FOR FY 2020/21: Completion of 100 school visits to schools in Forest Dependent Communities. 25 public awareness events in the coming year, staging of Forest Trek 2020 and 2021. Due to the Covid-19 restrictions no community meetings are scheduled for the upcoming financial year.

Output 4.1.2: Forest fire-related public awareness and education programme designed, implemented.
Primary Implementing Entity: Forestry Department

<table>
<tr><td>KPI</td><td colspan="3">Number of fire awareness and education programmes conducted (and number of participants)</td></tr>
<tr><td>BASELINE</td><td>Baseline of 152 forest awareness radio ads aired established as of 31 March 2016
# of communities trained/impacted by Forest fire awareness training – 3 communities, 50 persons trained in 16/17 FY.</td><td rowspan="2">STATUS
☐Not started
☐Challenges.
☒In progress.
☐Completed.</td><td rowspan="2"> 
</td></tr>
<tr><td>TARGETS/MAJOR ACTIVITIES FOR FY 2019/20</td><td>-Publishing of new brochure.
-Additional educational video and radio drama developed.
-Training of 15 additional communities.</td></tr>
<tr><td colspan="4">SUMMARY OF PROGRESS: (31 March 2020)
The FD continued to promote forest fire awareness via its awareness campaign. During the 2019/2020 financial year, we
▪ Used more than 350 slots on radio to air forest fire management messaging
▪ Developed and aired a forest fire awareness radio jingle
▪ Completed Forest Fire Awareness Poster Series – three (3) posters to be printed and used in our displays at expos and exhibitions
▪ Tweaked and finalized the Forest Fire Awareness Brochure
▪ Ran a forest fire awareness campaign on social media during both dry seasons of July and August and January to March</td></tr>
</table>

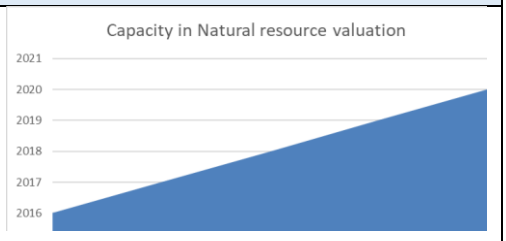
Forest Fire Management Training The FD staged seven (7) forest fire training sessions reaching 237 persons; 129 of which were male and 108 were females. In addition, the FD participated in two (2) other forest fire management training sessions carried out by external organisations, namely; the Northern Rio Local Forest Management Committee and the Caribbean Coastal Area Management (C-CAM).
PARTNER / STAKEHOLDER RELATIONSHIP UPDATE: • Our relationship with the Jamaica Fire Brigade (JFB) is quite strong and continues to grow. The JFB has consistently lent its assistance to the FD to execute the training. In 2019/2020 we also sought the assistance of the Rural Agricultural Development Authority (RADA) in the executing the training activities.
MAJOR RISKS: Covid-19 restrictions may impact staging of group training sessions in the coming financial year.
CONCLUSIONS / RECOMMENDATIONS / OTHER COMMENTS: Look at alternatives, such as smaller training sessions or online platforms where possible to deliver the material.
TARGETS/MAJOR ACTIVITES FOR FY 2020/21: Conduct four (4) sessions in the 2020/2021 financial year; Continue forest fire management awareness campaign activities to include airing of additional forest fire management messaging on radio, printing and distribution of forest fire management posters; printing and distribution of forest fire management brochure; execution of the social media campaign during both dry seasons .

Output 4.1.3: Outreach programme for private forest owners developed and evaluated on an ongoing basis.
Primary Implementing Entity: Forestry Department

KPI	***Number of private forest land owners participating in outreach programme***		
BASELINE	Baseline exists based on Technical Transfer Meeting with private farmers held in FY 16/17. Approximately 30 persons trained. Baseline of total registered farmers in private forestry programme as at FY 2016- just under 6000 persons registered.	**STATUS** ☐Not started ☐Challenges. ☐In progress. ☒**Completed.**	
TARGETS/MAJOR ACTIVITIES FOR FY 2019/20	-A structured outreach programme will be developed and put in place		
SUMMARY OF PROGRESS: (31 March 2020) The FD includes in its mandate to "Promote agroforestry and social forestry programmes for the benefit of farmers, schools and any other interested persons or groups of persons." Therefore, under			

its Private Forestry Programme (PFP), the FD has a structured outreach programme that encourages and works with owners of private lands to plant forest trees on their properties (including farms) in support of sustainable land management. During the 2019/20 FY the FD registered 199 new planters and distributed for free, 10,406 tree seedlings. Additional outreach was done through one (1) technical transfer workshop held on Tuesday, November 26, 2019, in Catherine Hall, St James targeting farmers in the North West Region), to share technical knowledge to these private planters which will enable them to sustainably manage seedlings planted. The session was well attended by 28 participants (24 males and 4 females). 46% of the participants were between 55-64 years. Since starting the Technical transfer sessions in 2017 a total of four (4) sessions have been held island wide engaging approximately 80 participants of the PFP.
PARTNER / STAKEHOLDER RELATIONSHIP UPDATE: • Not much engagement has been done with the Ministry of Industry, Commerce, Agriculture and Fisheries and the Rural Agricultural Development Authority (RADA) in executing this target. This activity has primarily focused on the training requested by the planters.
CHALLENGES: Many farmers though willing are unable to attend the training due to other day to day commitments. This curtails the potential reach of the programme. **LESSONS LEARNED**: Need to vary the approach used to engage the farmers, so that as many of them as possible can be exposed to the relevant concepts.
MAJOR RISKS: The covid-19 restrictions may affect the ability to execute a training exercise in a group setting. The lack of a structured outreach programme affects ability to evaluate successes and impact of the programme in reaching ultimate goal.
CONCLUSIONS / RECOMMENDATIONS / OTHER COMMENTS: It has been recognised that there is a need for the development of a monitoring framework for the programme in an effort to have clearly stated and measurable goals and objectives, as well as an evaluation criteria which also shows the clear linkage between the training and the overall goal of the PF programme.
TARGETS/MAJOR ACTIVITES FOR FY 2020/21: Develop a comprehensive/structured, monitoring /programme framework for the PFP Outreach programme.

Output 4.2.1: Training programmes for natural resource/ecosystem valuations (NRVs) for all types of forests conducted.
Primary Implementing Entity: Forestry Department

KPI	***Number of individuals trained NRV within the Forestry Department***		
BASELINE	None	**STATUS** ☐Not started ☐Challenges. ☐In progress. ☒**Completed.**	
TARGETS/MAJOR ACTIVITIES FOR FY 2019/20	-Training programme on NRV of forest ecosystems conducted for 15 staff of FD and stakeholders.		

SUMMARY OF PROGRESS: (31 March 2020)

NRV training was successfully completed on December 9-12 and December 16-19, 2020. Thirty-two (32) persons from three (3) Divisions of the FD, (L& E, FO and FSTS) benefitted from this training. The two-week intensive course was facilitated by presenters from CATIE and the delivery of content included lectures, group activities with presentations, problem solving, data gathering a practical field visit.

At the end of the training, trainees were able to develop a plan for Natural Resource Valuation in Jamaica. The trainers stated that they believed the trainees grasped the information well, however they would have liked more time to properly help trainees develop the skills they will need.

From the field visit participants were able to complete an exercise of assessing the potential value of the area. This was important in taking the first step necessary in doing the pilot project that the FD hopes to complete this financial year. The participants stated that more time was needed for training to be more effective despite learning much from the training. They were particularly grateful for the group exercises as they helped the participants to understand content better.

PARTNER / STAKEHOLDER RELATIONSHIP UPDATE:

- CATIE – Costa Rica- willing to assist in the development and solidification of competency in undertaking credible forested NREVs.

CHALLENGES AND LESSONS LEARNED:

The course is rather intensive, so participants must have at least a first degree in natural resources management /environmental science/ forestry or related subjected area to be able to fully grasp and process the constituent parts.

Individuals must be able to process large quantity of quantitative data and conduct some statistical analysis. Advance competency in Excel is useful.

Much more pre-study/assessments which would generate the quality data for the computations is needed. Additionally, data for non-tangible assets must also be available.

COMMENTS ON INPUTS: (resources)

Detailed data (qualitative and quantitative) must be available beforehand. As much information about the estate for which the NREV is being done is needed to compute credible values and future costs for the ecosystem functions and services within the forested areas of interests.

MAJOR RISKS: Insufficient data coupled with inadequate time needed to facilitate the computation of the NRE values.

CONCLUSIONS / RECOMMENDATIONS / OTHER COMMENTS :

In the near future the FD with its technical team needs to determine which areas NREV will be required and plan in advance (one year minimum) to collect and or generate the data which will serve as inputs to the computations. Additionally, as some inputs are outside the remit of the FD, through collaborative partnership, stakeholders must be made aware of what would be expected of them. Critical stakeholders would include WRA, NWC, NEPA+/ TPDCo and the relevant private sector entities – e.g. Hotels, the Jerk industry etc.

TARGETS/MAJOR ACTIVITIES FOR FY 2020/21: The FD will be working under the GEF 6 project (which is scheduled to start implementation in FY 20/21) to begin preliminary activities for the execution of a NRV in Stephaney Johns Vale Forest Reserve by years 3 & 4 of the project.

Output 4.2.2: *Training in Silviculture conducted.*
Primary Implementing Entity: *Forestry Department*

KPI	Number of individuals trained in Silviculture within the Forestry Department		
BASELINE	Current capacity within the Agency: One (1) person.	**STATUS** ☐Not started ☒**Challenges.** ☒**In progress.** ☐Completed.	
TARGETS/MAJOR ACTIVITIES FOR FY 2019/20	-START IMPLEMENTATION OF OUTPUT -Regional technical meeting on Forestry training conducted. -Training course implemented for at least 6 individuals.		

SUMMARY OF PROGRESS: (31 March 2020)

Training objective and content developed and submitted to the FD Training Unit. Procurement has commenced and had to be postponed due to scheduling conflicts.

PARTNER / STAKEHOLDER RELATIONSHIP UPDATE:

- CATIE- Costa Rica (provided training in short technical forestry courses)

CHALLENGES:

Protracted nature of procurement processes pushed the training to the last quarter of the FY. As such the training had to be suspended seeing the time was not available to commit personnel to that training.

There is also the need for constant internal dialogue between the Training Unit and the Forest Science & Technology Services Division for which the Technical training is needed.

LESSONS LEARNED:

To ensure that the desired training is received, detailed training objectives- contents, methods of assessments etc should be provided. The key stakeholders in this process (persons organising the training sessions as well as lead persons requesting the training sessions) should work together to achieve this.

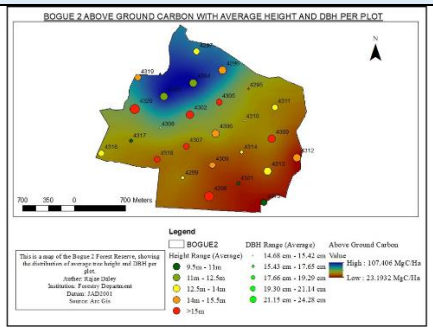
MAJOR RISKS: Inability to execute or meet a deliverable because the much-needed capacity (training) is still outstanding.

CONCLUSIONS / RECOMMENDATIONS / OTHER COMMENTS:

Training Officers must be trained/sensitized in basic Forestry so that they can develop and appreciate the technical component/training needed by the field team. This will allow them to be proactive in developing the training needs and objectives in these technical areas eliminating bottlenecks and accelerating the procurement process.

TARGETS/MAJOR ACTIVTIES FOR FY 2020/21:
Silviculture training session to executed

Output 4.2.3: *Training in Carbon Stock Monitoring conducted.*
Primary Implementing Entity: *Forestry Department*

<table>
<tr><td>KPI</td><td colspan="3">Number of individuals trained in Carbon Stock Monitoring within the Forestry Department</td></tr>
<tr><td>BASELINE</td><td>None</td><td rowspan="2">STATUS
☐Not started
☐Challenges.
☐In progress.
☒Completed.</td><td rowspan="2"> 
</td></tr>
<tr><td>TARGETS/MAJOR ACTIVITIES FOR FY 2019/20</td><td>-START IMPLEMENTATION OF OUTPUT

-Workshop in Puerto Rico for selected staff members of FD, July 2019. A consultant from CATIE in Costa Rico is expected to arrive in October/November 2019 to training a larger selection of FD technical staff in CSM.</td></tr>
<tr><td colspan="4">SUMMARY OF PROGRESS:

Three (3) Technical members of the FD Forest Resource & Information (FRIM) Branch (Research Officer, Forest Resource Assessment Officer & Manager, FRIM) attended a workshop in Puerto Rico in July 2019.

Representatives of CATIE arrived in October 2019 to conduct training in Carbon Stock Monitoring/Assessment. Training was conducted during the period October 28- November 8, 2019. Four (4) members of the Research Branch were a part of the training.

Manual has since been drafted and the pilot carbon assessment study conducted in Bogue II, St Ann in early 2020.</td></tr>
<tr><td colspan="4">PARTNER / STAKEHOLDER RELATIONSHIP UPDATE:

• Training conducted by CATIE</td></tr>
<tr><td colspan="4">CHALLENGES AND LESSONS LEARNED:

• Training was intense. A longer training period with only persons who are genuinely interested and will do the actual analyses should be considered.
• Retention of capacity built is a challenge as by the end of the year one of the technical officers who attended the workshop in Puerto Rico was no longer with the FD, which highlighted that a system for knowledge sharing/transfer must be in place.</td></tr>
<tr><td colspan="4">MAJOR RISKS:
• COVID 19 limiting future assessments
• COVID 19 has delayed the training to be received from the USFS on National Inventory methods and the transfer of dataloggers.</td></tr>
<tr><td colspan="4">TARGETS/MAJOR ACTIVITIES FOR FY 2020/21:
• Execute Carbon Stock Assessment in three (3) Forest Estates</td></tr>
</table>

THEMATIC AREA 5: MONITORING AND INFORMATION MANAGEMENT

To ensure the sustainable management of Jamaica's forests, decision making must be informed by evidence. Currently, scientific knowledge is insufficiently used to inform decision making by policymakers, practitioners, and other stakeholders. In light of this, the NFMCP emphasises the ready availability of data and pertinent information and promotes institutional capacity for adequate monitoring, impact assessments and research. The three (3) associated Outcomes (Outcome 5.1, Outcome 5.2 and Outcome 5.3) of this Thematic Area, seek to dismantle the barriers to forest research and promote collaboration with and between academia and other interested parties, through conducting various assessments and establishing research working groups in the areas deemed most important at this stage. These areas include: (i) management of mangrove forests, swamp forests and short limestone forests; (ii) improving knowledge on the impact of climate change on all forest types; and (iii) non-timber forest products. Additionally, a number of inter-institutional joint forest monitoring and biodiversity initiatives will be supported. While progress was seen with the assessment and mapping of over 3000ha of mangrove and swamp forests for the period (Output 5.1.2) , as well as with the developing (ongoing) of a M&E system to support knowledge management and strategic planning (Output 5.3.6) of the NFMCP for the period, more than half of the Outputs under this thematic area are experiencing challenges and need to be reviewed and gaps addressed.

Outcome 5.1: Improved availability of spatial data for sustainable forest management practices, promoting investment and assessing vulnerabilities and risks in the forest sector. In progress:

- **Output 5.1.1:** Spatial representation of disturbance within Broad Leaf forests developed.
- **Output 5.1.2:** Mangrove and swamp forests mapped and assessed.
- **Output 5.1.4:** Lands verified and mapped in the private lands reforestation programme.
- **Output 5.1.5:** Recreational, cultural and heritage sites identified and mapped.

Outcome 5.2: Improved availability of spatial data for sustainable forest management practices, promoting investment and assessing vulnerabilities and risks in the forest sector. In progress:

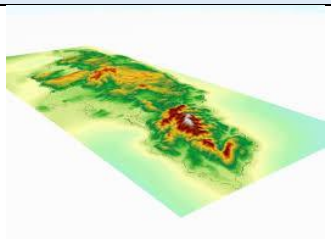
- **Output 5.2.1**: Working group established for research that will improve knowledge regarding the management of mangrove forests, swamp forests and short open dry limestone forests; and on the impact of climate change on all forest types.
- **Output 5.2.2**: Forest fire assessments conducted.
- **Output 5.2.3:** Impact assessment of mining and other permitted activity on forest goods, services, and values over time conducted.

Outcome 5.3: Improved collaborative monitoring of forest resources.

- **Output 5.3.1**: Improved availability of data for driving the growth and investment in the forest sector (both timber & non timber).
- **Output 5.3.4**: Forest monitoring system using Permanent Sample Plots (PSPs) established.
- **Output 5.3.5**: Targeted species (giant swallowtail, yellow-and-black-billed parrot, water mahoe and bitter wood) surveyed, mapped.
- **Output 5.3.6**: Knowledge Management and Strategic Planning of the NFMCP achieved

Progress towards targets for the year for all five (5) Outputs associated with Outcome 5.1, three (3) Outputs associated with Outcome 5.2, four (4) Outputs associated with Outcome 5.3 are detailed below:

***Output 5.1.1**: Spatial representation of disturbance within broad leaf forests developed*
***Primary Implementing Entity**: Forestry Department*

KPI	***Level of disturbance in spatial representation of disturbed broadleaf used to develop protection efforts***		
BASELINE	Aggregated spatial representations	**STATUS** ☐Not started ☒**Challenges.** ☒**In progress.** ☐Completed.	
TARGETS/MAJOR ACTIVITIES FOR FY 2019/20	-Procurement of drones and new 25cm aerial imagery collection for the island. -Training of employees in spatial analysis implemented.		

SUMMARY OF PROGRESS: (as at March 31, 2020): While the targets were not met, for year 4, Technical Evaluation on two (2) bids for drone (UAV) technology to capture 3-band ortho-rectified imagery to assess mangroves forest cover in two (2) pilot areas were done but the bids did not meet the technical specifications. As such, the UAV solution was revised to reflect the advances in technology and was resubmitted. The procurement of a UAV solution should be completed by 2020.

Procurement for 25cm aerial imagery for the island was delayed as though the Direct Bid Contract was submitted to a selected supplier this supplier refused to provide the required deposit security – bank guarantee to confirm the mobilization disbursement. The procurement was terminated and recommended for re-tender. Currently, a new procurement is in -train; expected completion is for 2021.

The output is behind schedule as there is a delay in the procurement of aerial imagery and a full Drone solution for the better mapping of terrestrial resources.

CHALLENGES AND LESSONS LEARNED: Up-to-date aerial imagery is required to determine more recent disturbance levels within the broadleaf category. As such, conducting the same analyses on images present in the FD imagery database will yield results which are not current. As the UAV solution is a novel procurement for FD, more research and consultations with current UAV users were carried to develop our proposal. However, internally, several processes are still being finalized to facilitate this procurement.
COMMENTS ON INPUTS: (resources): High- level spatial and imagery analysis required to fully process and analyze data from both UAV and Aerial imagery procurement. Training for such skillsets is already included in both procurement solutions. However, several knowledge transfer sessions will have to be conducted to increase in-house technical staff capacity to meet established deliverables timelines.
MAJOR RISKS: Delay in the procurement and deployment of UAV technology. Inclement weather which may prevent planned UAV flights or delay aerial imagery collection timelines. Inability to secure a full UAV solution provider that provides a proposal suitable for the FD use-case scenario.
TARGETS/ MAJOR ACTIVITIES FOR FY 2020/2021: -Procurement of drones and new 25cm aerial imagery collection for the island. -Commencement of UAV mapping of changes in disturbance within CBF cover types

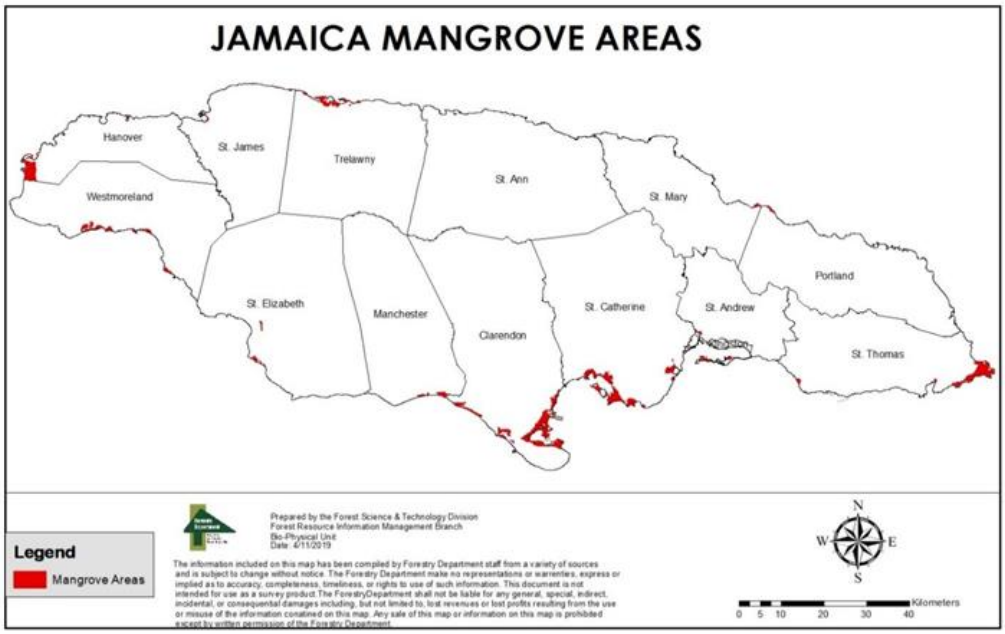
Output 5.1.2: *Mangrove and swamp forests mapped and assessed.*
Primary Implementing Entity: *Forestry Department*

KPI	***Area (Hectares) of mangrove and swamp forests that are assessed/mapped***		
BASELINE	Zero ha of field mapped information to date. Zero stratification maps exist (including level of disturbance and mangrove gradient etc).	**STATUS** ☐Not started ☐Challenges. ☒**In progress.** ☐Completed.	
TARGETS/MAJOR ACTIVITIES FOR FY 2019/20	-Project manager & temporary staff recruited. – -Sites selected and access organised. -Equipment purchased.		

SUMMARY OF PROGRESS: (as at March 31 2020):

While no Project Manager has been engaged, or equipment purchased, temporary staff (forest technicians) have been engaged and relevant sites elected and access organised. The activities associated with this output have been progressing well, and progress achieved corresponds to what was initially planned.

Discussions with UWI on methodology and assessment areas for activity continued. For Year 4, ~3900 hectares of Mangrove and swamp forests was assessed across 10 parishes containing 34 sub-blocks areas. As such, a total of ~6000 hectares has been assessed to date.



PARTNER / STAKEHOLDER RELATIONSHIP UPDATE:

UWI/DLS continues to provide valuable input and review of created methodology to capture the on-ground assessment of mangrove areas in designated sub-blocks. The UWI/DLS team also provided resource contacts of fishers and other boat owners to access and assess remote off-shore areas. Inputs from CCAM, UWI, and NEPA, provided valuable inputs in data acquisition and assessment approach, which were included in the methodology for year 4. Additionally, several stakeholders were engaged in technical scoping workshops held by the Forestry Dept in November 2019 geared at informing the design of a GEF-7 Project Identification Form (PIF), on Mangrove conservation in Jamaica. The current findings on the mangrove assessment process was shared with stakeholders involved in this workshop.

CHALLENGES AND LESSONS LEARNED:

Challenge	Lessons Learnt
1. **Difficulties in completing lines with a large number of plots when traversing harsh terrain.**	• Shorter transect lines that are more in numbers were constructed to allow for a more even sample. • Generate a list of field guidelines to abandon difficult and dangerous lines to accommodate the safety and well-being of the team.
2. **Measuring risks within a hazard-prone area**	• Revisit the proposed sub-block area. • Abandon lines that are inaccessible and dangerous.
3. **Organizing and sorting data**	• Team leads in charge of areas for better accountability. • Data entered more regularly and cleaned several times a month. • Establish data management standards to facilitate formula related calculations.
4. **Major delays in the procurement of essential tools to conduct the assessment**	• Improvise and be resourceful • Rotate the tools so that all teams have all the equipment needed.
5. **Access to computers for data entering and analysis**	• Maintaining the computers more frequently and additional units are needed. • Stagger the number of persons who come in the office • Procure a sufficient amount of computers to facilitate faster and easier data entry.
6. **Low uptake by casual workers**	• Contract less experienced personnel for areas fairly well known to team members

FINANCIAL PROGRESS REPORT : Not available

COMMENTS ON INPUTS: (resources)

UAV needed to conduct field reconnaissance of mangroves in Negril- Westmoreland

Activity is tied to **Output 3.1.5**

MAJOR RISKS:

- Delay in the procurement and deployment of Drone technology.
- Significant disturbance to crocodile nesting area

CONCLUSIONS / RECOMMENDATIONS / OTHER COMMENTS:

• Engagement of all major stakeholders

• Early notice or permission to access lands should be sought from owners of private Mangrove and Swamp parcels

TARGETS/MAJOR ACTIVITIES FOR FY 2020/21:

Assessment of 3000 hectares of mangrove and swamp forests island wide.

Output 5.1.4: *Lands verified and mapped in the private lands reforestation programme.*
Primary Implementing Entity: *Forestry Department*

KPI	***Area (Hectares/parcels) of private CBL forest lands identified, verified and mapped and ownership information collected***		
BASELINE	At FY 2016/2017, 111 parcels (equivalent to 4414 hectares) identified & ownership information collected	**STATUS** ☐Not started ☐Challenges. ☐In progress. ☒**Completed.**	
TARGETS/MAJOR ACTIVITIES FOR FY 2019/20	-1,000 additional parcels (CBL forests) identified and verified		

Ownership Information	Number of Parcels	Amount of CBF (ha) in parcels
Bauxite companies	1	
Government	17	1746.10
Individual	78	2368.95
Private Companies	4	668.16
Unidentified ownership	32	2830.38

SUMMARY OF PROGRESS: (March 31 2020)

Ownership information of CBL privately owned totalling 9,654.6 ha (divided in under 10 ha and over 10 ha). The database was created and is currently being maintained. Ownership information has been retrieved for 1000 parcels. Within these 1000 parcels, 519 parcels (8682.79 ha) are Closed Broadleaf forest (unprotected) across twelve (12) parishes. Five hundred and nineteen (519) parcels (all having different owners) were identified as having Closed Broadleaf forest less than 10ha totaling 971.81 ha.

PARTNER / STAKEHOLDER RELATIONSHIP UPDATE: The FD continues to work with NLA on this activity.

COMMENTS ON INPUTS: (resources) *Activity linked to* ***Output 3.1.8***

CONCLUSIONS / RECOMMENDATIONS / OTHER COMMENTS:
This Output is linked to **Output 3.1.8**. Consolidation of these two Outputs are needed.

TARGETS/MAJOR ACTIVITIES FOR FY 2020/21: Consolidation of Outputs 3.1.8 & 5.1.4 needed.

Output 5.1.5: Recreational, cultural and heritage sites identified and mapped.
Primary Implementing Entity: Forestry Department

KPI	***Number of new trails/sites on forest reserves and FMAs identified and mapped (disaggregate by type – recreational, cultural and heritage)***		
BASELINE	JCDT (2008); FD (2015); JNHT	**STATUS** ☐Not started ☐Challenges. ☐In progress. ☒**Completed.**	
TARGETS/MAJOR ACTIVITIES FOR FY 2019/20	-Trail info from various sources to be merged. -Full review of developed index.-		

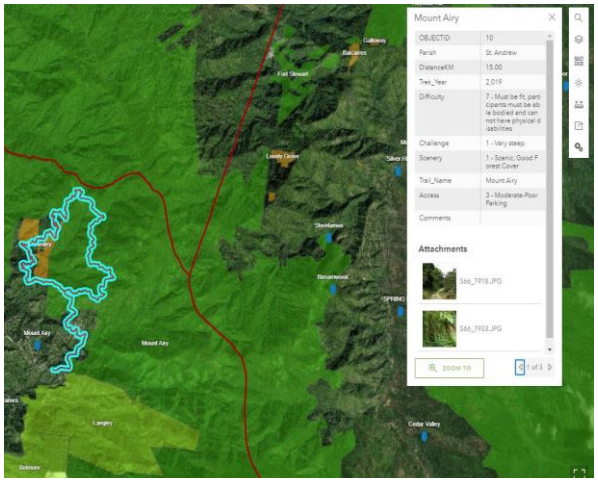
SUMMARY OF PROGRESS: (as of March 31, 2020)

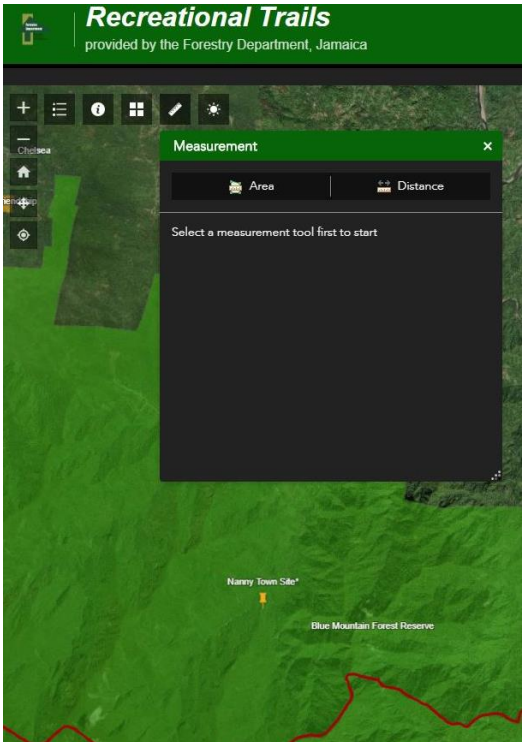
This output has been progressing well with targets for the FY achieved. For Year 4, this output was extended to include a GIS web application that can be accessed internally and externally through any internet platform (Figure 3-Images). Also, the FD recreational trails dataset was expanded to include past Forest Trek activity (2011-2019). Therefore, FD recreational trails dataset currently has 16 records/trails (Table-Figure A). 14 of the 16 trails were added in Year 3. The selected criteria

for recreational trails were developed in collaboration with the PRCC Branch. To determine the definition and values for each criterion chosen, discussions were held with the FD PRCC Branch and FO Divisions. The developed rating was applied to each trail.

Figure A: Table showing extracted recreational trails from FD recreational trails dataset. Images of GIS Web application.

ID	Parish	Distance (KM)	Trek Year	Difficulty	Challenge	Scenery	Trail Name	Access
1	St. Andrew	To be determined	2011	7 - Must be fit, participants must be able bodied and cannot have physical	2 - Moderate-Gentle Sloping & 1 - Very steep	1 - Scenic, Good Forest Cover	Redlight - Hollywell	2 - Acceptable Parking
2	St. Andrew	9.25	2013	7 - Must be fit, participants must be able bodied and cannot have physical	3 - Moderate-Gentle Sloping (most parts) & 1 - Very steep	1 - Scenic, Good Forest Cover	Gordon Town - Hollywell	2 - Acceptable Parking
3	Trelawny	13.34	2013	2 - Anybody can do it	2 - Moderate-Gentle Sloping	1 - Scenic, Good Forest	Cockpit Country	2 - Acceptable Parking
4	St. Ann	11.60	2014	6 - Must be reasonably fit, participants must be able bodied and cannot have physical disabilities	1 - Very Steep (First 2 km) & 3 - Undulating	1 - Scenic, Good Forest Cover	Union Hill	1 - Spacious Parking
5	St. Andrew	7.80	2015	5 - Must be reasonably fit, participants must be able bodied and cannot have physical disabilities	2 - Moderate-Gentle Sloping	3 - Little or no forest cover, through communities, paved roads, etc	Newcastle - Silver Hill Gap	1 - Spacious Parking
7	Manchester	10.00	2017	7 - Must be fit, participants must be able bodied and cannot have physical	3 - Undulating (Winding Trails)	1 - Scenic, Good Forest Cover	Gourie	3 - Moderate-Poor Parking
8	Portland	16.00	2018	5 - Must be reasonably fit, participants must be able bodied and cannot have physical disabilities	3 - Undulating	1 - Scenic, Good Forest Cover	Cambridge Backlands	2-Acceptable Parking, 1-Spacious Parking - Pick-Up
9	St. Ann	10.00	2018	8 - Must be fit, participants must be able bodied and cannot have physical disabilities	2 - Moderate-Gentle Sloping	1 - Scenic, Good Forest Cover	Bogue 2	1 - Spacious Parking
10	St. Andrew	15.00	2019	7 - Must be fit, participants must be able bodied and cannot have physical	1 - Very steep	1 - Scenic, Good Forest Cover	Mount Airy	3 - Moderate-Poor Parking
11	St. Andrew	9.20	2016	7 - Must be fit, participants must be able bodied and cannot have physical	2 - Moderate-Gentle Sloping	2 - Little Forest Cover, Uneventful Scenery	St Peter's (Wolf) - Cinchona	2 - Acceptable Parking
12	Clarendon	10.00	Proposed trail	7 - Must be fit, participants must be able bodied and cannot have physical	2 - Moderate-Gentle Sloping	1 - Scenic, Good Forest Cover	Bull Head	1 - Spacious Parking
13	St. Andrew	8.00	Proposed trail	7 - Must be fit, participants must be able bodied and cannot have physical	2 - Moderate-Gentle Sloping	2 - Little Forest Cover, Uneventful Scenery	Bowden Hill	3 - Moderate-Poor Parking
14	St. Andrew	10.00	Proposed trail	7 - Must be fit, participants must be able bodied and cannot have physical	1 - Very steep	1 - Scenic, Good Forest Cover	Cuna Cuna Pass	2 - Acceptable Parking
15	St. Andrew	18.00	Proposed trail	7 - Must be fit, participants must be able bodied and cannot have physical disabilities	1 - Very steep	1 - Scenic, Good Forest Cover	Guava Ridge-Orchard Forest Reserve onto Mount Rosanna Trail	2 - Acceptable Parking
16	St. Andrew	10.00	Proposed trail	7 - Must be fit, participants must be able bodied and cannot have physical	2 - Very steep	2 - Scenic, Good Forest Cover	Oatley-Wakefield	2 - Acceptable Parking





CHALLENGES AND LESSONS LEARNED:

- Accessibility to forest trails is difficult
- Early involvement of the relevant Forest Operations Division team in trail reconnaissance

COMMENTS ON INPUTS: (resources):

UAV solution to conduct field survey on proposed recreational routes.

MAJOR RISKS:

- Human capacity to conduct trail assessments.
- Inability to source funding for consultants to do feasibility studies.
- Malfunction of assessment team member's 4WD vehicle
- ICT network delay resulted in no connectivity or minimal access to database and web application

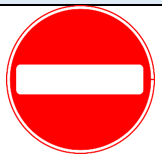
CONCLUSIONS / RECOMMENDATIONS / OTHER COMMENTS:

- Designated vehicle to transport field team members to conduct surveillance of identified trails

TARGETS/MAJOR ACTIVITIES FOR FY 2020/21:

Increase dataset by two (2) new trails

Output 5.2.1: *Working group established for research that will improve knowledge regarding the management of mangrove forests, swamp forests and short open dry limestone forests; and on the impact of climate change on all forest types.*
Primary Implementing Entity: *Department of Life Science (DLS), UWI*

KPI	***Number of research outputs (by type) delivered by the working group as per work plan***		
BASELINE	None	**STATUS** ☒**Not started** ☒**Challenges.** ☐In progress. ☐Completed. **REVIEW OF OUTPUT NEEDED**	
TARGETS/MAJOR ACTIVITIES FOR FY 2019/20	-START IMPLEMENTATION OF OUTPUT -Working group established.		
SUMMARY OF PROGRESS: (31 March 2020) : No progress			
CONCLUSIONS / RECOMMENDATIONS / OTHER COMMENTS: While discussions were held previously with the FD and the UWI/ DLS Head on the output, no formal engagement with the UWI/DLS either by MOU or MOA was made to guide execution. Capacity issues and funding for the establishment of a working group also present challenges to execution. The UWI/DLS during the period suggested that consideration be given to utilizing the RAMSAR committee (an existing mechanism) for achievement of this output. Currently this committee is an established grouping that deals specifically with wetland management, providing a good base and scope for expansion to meet the indented results of this output.			
TARGETS/MAJOR ACTIVITIES FOR FY 2020/21: **FURTHER REVIEW OF OUTPUT NEEDED.** A review of this output, its associated activities and lead implementing entity is needed.			

Output 5.2.2: *Forest fire assessments conducted.*
Primary Implementing Entity: *Forestry Department*

KPI	***Number of forest fire assessments (by type) conducted.***		
BASELINE	FD (2015): One	**STATUS** ☐Not started ☐Challenges. ☒**In progress.** ☐Completed.	
TARGETS/MAJOR ACTIVITIES FOR FY 2019/20	-START IMPLEMENTATION OF OUTPUT -Series established of forest fire assessments (by type) to be conducted		
SUMMARY OF PROGRESS: (as at 31 March 2020) Draft template for post fire assessment form developed and currently under revision.			

TARGETS/MAJOR ACTIVITIES FOR FY 2020/21: Finalise template for post fire assessment form and circulate to internal users.

Output 5.2.3: *Impact assessment of mining and other permitted activity on forest goods, services, and values over time conducted*

Primary Implementing Entity: *To be determined*

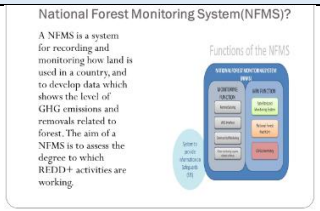
KPI	**This indicator establishes whether appropriate impact assessments have been conducted**		
BASELINE	TBD	**STATUS** ☒**Not started** ☐Challenges. ☐In progress. ☐Completed. **REVIEW OF OUTPUT NEEDED**	
TARGETS/MAJOR ACTIVITIES FOR FY 2019/20	-START IMPLEMENTATION OF OUTPUT -An agreement on how to handle impacts assessments of mining activities in forest areas need to be drawn up between FD, NEPA and MTM/MGD. -Sample sites selected.		
SUMMARY OF PROGRESS: (31 March 2020) Progress on activity is unknown as no information reported.			
PARTNER / STAKEHOLDER RELATIONSHIP UPDATE: While NEPA is stated in the PMER as the lead for this Output and its associated activities, NEPA has noted this is not in their capacity to lead or execute.			
CHALLENGES: No ownership/lead for output is affecting implementation. **LESSONS LEARNED**: Focused stakeholder engagement and dialogue is critical to support implementation of the NFMCP			
MAJOR RISKS: Inability to identify lead for Output leading to failure to execute activities in support of the Output.			
CONCLUSIONS / RECOMMENDATIONS / OTHER COMMENTS: Review of Output urgently needed to determine a way forward.			
TARGETS/MAJOR ACTIVITIES FOR FY 2020/21: To be determined- Review of Output needed			

Output 5.3.1: *Improved availability of data for driving the growth and investment in the forest sector (both timber & non timber).*
Primary Implementing Entity: *Forestry Department*

KPI	**Number of Growth & Yield curves for primary commercial species developed**		
BASELINE	Growth & Investment data for 2 species (Caribbean Pine & Blue Mahoe) exist	**STATUS** ☒**Not started**	

TARGETS/MAJOR ACTIVITIES FOR FY 2019/20	Specific data capture programme started. Methodology developed.	☒**Challenges**. ☐In progress. ☐Completed. **REVIEW OF OUTPUT NEEDED**	
SUMMARY OF PROGRESS: (31 March 2020) No data capture has commenced since the pivotal training on forest growth, yield and assessment is still outstanding.			
PARTNER / STAKEHOLDER RELATIONSHIP UPDATE: • Forestry Academic institution/ forest statistician or consultant with these skills set.			
CHALLENGES: Identifying and sourcing an institution or person to facilitate this training. The growth data needed by species as far back as possible may be very challenging to source and or generate due to the limited data gathering from plantations and the poor archiving of such information. **LESSONS LEARNED**: Resources needed to facilitate core training is rather challenging to source therefore lead time for pre planning and procurement should factor into the timelines.			
COMMENTS ON INPUTS: (resources) Growth yield data by species as far back as possible is needed.			
TARGETS/MAJOR ACTIVTIES FOR FY 2020/21: To be determined-REVIEW OF OUTPUT NEEDED			

***Output 5.3.2*: REDD+ preparedness** – *Strengthened forest monitoring systems.*
Primary Implementing Entity: *Forestry Department*

KPI	Number of initiatives to strengthen forest monitoring systems completed		
BASELINE	None	**STATUS** ☐Not started ☒**Challenges.** ☒**In progress.** ☐Completed.	
TARGETS/MAJOR ACTIVITIES FOR FY 2019/20	-START IMPLEMENTATION OF OUTPUT -Training session on forest monitoring conducted.		
SUMMARY OF PROGRESS: (31 March 2020) The FD completed the first draft of a manual which outlined a new approach to FIA using a national grid system. While no training session on forest monitoring was conducted, training in CSM executed in the FY was useful to this Output and its activity as aspects of this methodology is now used to conduct CSM. Additionally, discussions took place during the period with the CCD, to identify training opportunities.			
PARTNER / STAKEHOLDER RELATIONSHIP UPDATE: • United States Forest Service Southern Research Station (USFS)			
TARGETS/MAJOR ACTIVITIES FOR FY 2020/21: Initiatives to develop forest monitoring systems harmonised.			

Output 5.3.3: *Weather stations placed in strategic locations within forested areas to garner additional data to support sustainable forest management practices.*
Primary Implementing Entity: *MSJ*

KPI	***Number of weather stations placed in strategic locations within forested areas by the MSJ***		
BASELINE	MET OFFICE (2016): None within forest areas	**STATUS** **☒Not started** **☒Challenges.** ☐In progress. ☐Completed. **REVIEW OF OUTPUT NEEDED**	
TARGETS/MAJOR ACTIVITIES FOR FY 2019/20	START IMPLEMENTATION OF OUTPUT - Identify the type of weather stations. - Identify the type of computer & server for data collection. - Identify the locations for stations to be installed. - Purchase 6 weather stations. Station installation and security.		

SUMMARY OF PROGRESS: (31 March 2020)

There has been no progress made in so far as the target for the installation of the weather stations are concerned as, MSJ is still waiting on FD to state when this activity should begin. MSJ had made several attempts to engage FD in data collection and dialogue.

The type and frequency of the data the FD wishes to collect will determine what equipment will be needed.

PARTNER / STAKEHOLDER RELATIONSHIP UPDATE:

- Primary Implementing Entity

CHALLENGES :

The need to improve the levels of communication between both entities.

Depending on the locations selected there may be challenges with having real-time access to data.

LESSONS LEARNED:

From previous experiences there were challenges with finding suitable locations in forested areas, which would make the use of the data comparable for input into MSJ's statistical analyses.

FINANCIAL PROGRESS REPORT:

No funds have been expended due to the lack of progress.

COMMENTS ON OTHER INPUTS: (resources)
Due to the likely scope of work and limitations of the MSJ, the MSJ would be able to suggest the type of weather stations to be procured, and possibly the computer and server equipment needed for data collection. The FD would need a procurement officer to facilitate the acquisition of the weather stations, as well as to employ the services of a contractor for the installation of the stations.

MAJOR RISKS: Once the weather stations are installed they will be exposed to severe weather conditions, as well as to the risk of bush/forest fires. There is also the risk of vandalism to the instruments after installation.
CONCLUSIONS / RECOMMENDATIONS / OTHER COMMENTS: Develop a small working group spearheaded by the FD, to draft a Terms of Reference (TOR) as to the way forward for the project.
TARGETS/MAJOR ACTIVITIES FOR FY 2020/21: To develop the TOR, identify suitable locations for the weather stations, procure the weather stations.

Output 5.3.4: *Forest monitoring system using Permanent Sample Plots (PSPs) established.*
Primary Implementing Entity: *Forestry Department*

KPI	**Number of PSPs in place, to investigate and determine climate change impacts**		
BASELINE	FD 2011-2017, 32 PSPs	**STATUS** ☐Not started ☐Challenges. ☒**In progress.** ☐Completed.	
TARGETS/MAJOR ACTIVITIES FOR FY 2019/20	-Development of new methodology (use of grid). First series of PSPs to be established identified.		

SUMMARY OF PROGRESS: (31 March 2020)

The FD has 32 PSPs which were established at different times using the rectangular main plot with a sub plot and sub-subplot approach to assess various parameters. This methodology is not congruent with the new national approach going forward.

Grid system has been developed for the entire island at various intensification. The methodology to develop new intensification using the Grid system is now in house.

PARTNER / STAKEHOLDER RELATIONSHIP UPDATE:

- USFS

CHALLENGES:

The pre-existing approach to the establishment of PSPs was limited to crown lands and therefore does not provide sufficient information across forest types as 73.6% of the national forest cover is privately owned. The data provided from these PSPs is therefore very limited

LESSONS LEARNED:

A national approach is needed which includes PSPs across all land use types on private and publicly owned lands. The design should also afford replicability bearing in mind the capacity of the FD. As the name suggests the plots are of a permanent nature and therefore should be able to provide data over the long term to look at trends etc.

MAJOR RISKS: Capacity to undertake a national PSP programme without competition from other priorities for the limited resources.
Access to private estates may be challenging but can be mitigated

The loss of PSPs plots and the subsequent inability to generate data from these areas is quite likely.
CONCLUSIONS / RECOMMENDATIONS / OTHER COMMENTS : A progressive and persistent stakeholder participation and sensitisation programme will be needed to be executed alongside the field activities.
TARGETS/MAJOR ACTIVITIES FOR FY 2020/21: None. Postponed because of capacity – competing activities relating to the current EU BSP.

Output 5.3.5: *Targeted species (giant swallowtail, yellow-and-black-billed parrot, water mahoe, and bitter wood) surveyed, mapped*

Primary Implementing Entity: *To be determined*

KPI	Number of Population of targeted flora and fauna species by type		
BASELINE	None	**STATUS** ☐Not started ☐Challenges. ☐In progress. ☐Completed. **REVIEW OF OUTPUT NEEDED.**	
TARGETS/MAJOR ACTIVITIES FOR FY 2019/20	-Review if orchid species are on the list of protected species/trade in endangered species in order to develop legislation.		

SUMMARY OF PROGRESS: (31 March 2020) Progress on activity is unknown as no information is being reported.
PARTNER / STAKEHOLDER RELATIONSHIP UPDATE: While NEPA is stated in the PMER as the lead for this Output and its associated activities, NEPA is now noting this is not in their capacity to lead or execute.
CHALLENGES: No ownership of activity is affecting implementation. **LESSONS LEARNED**: Greater stakeholder engagement and dialogue needed to support implementation of the NFMCP
MAJOR RISKS: Inability to achieve Output
CONCLUSIONS / RECOMMENDATIONS / OTHER COMMENTS: Output to be reviewed and lead entity for implementation identified.
TARGETS/MAJOR ACTIVITIES FOR FY 2020/21: To be determined. Review of Output needed.

***Output 5.3.6**: Knowledge Management and Strategic Planning of the NFMCP achieved*
***Primary Implementing Entity**: Forestry Department*

KPI	***Number of evaluations, planning documents and annual reports produced.***		
BASELINE	NFMCP 2017 document.	**STATUS** ☐Not started ☐Challenges. ☐In progress. ☒ **Completed.**	
TARGET	Annual progress report produced (FY2018/2019).		

SUMMARY OF PROGRESS: Consultant Jan Voodrouw was engaged by the Forestry Department to complete the Annual progress report for the FY 2018/2019. The Report was completed and submitted in October 2019 and was shared with all PIEs and other key stakeholders (PIOJ).

Consulting firm Baastel was engaged during the FY to develop an online monitoring and evaluation system for the NFMCP. While activity was not completed during the FY, significant progress was seen with development of specific functionalities of the system including: the Alert/Early warning system integration, Automatic Report Generation, Interactive and user- friendly Dashboard, Annual workplan & Budget &Procurement process and contract management functions. The system is expected to be launched in the next FY.

PARTNER / STAKEHOLDER RELATIONSHIP UPDATE:

For the 2019/2020 FY several workshops were held with representatives from the seven PIEs as well as other key stakeholders. On June 12 & July 16 workshops were held to support the development of the Annual progress report with data validation and introduce PIEs to the online M&E system being developed. These were facilitated by the consultant Jan Voordouw and team members from Baastel.

Additional workshops were also held in Jan 2020 with PIEs and Baastel on the M&E system. stakeholders were taken through a demo of the system.

The Technical Advisory Committee of the NFMCP met twice for the FY.

While no new stakeholders were identified during the period, the commitment of some existing PIE was acknowledged as a concern.

CHALLENGES AND LESSONS LEARNED:

Stakeholder engagement/involvement continues to be a significant challenge with implementation of the NFMCP. While some progress has been seen over the last FY, in particular, the incorporation of activities from the NFMCP into the Operational & Corporate plans /annual implementation of the respective entities. A formal medium for engaging implementing entities in particular, as well as other stakeholders involved in the implementation of the plan should have been established before the final approval of the NFMCP.

One lesson learned is that a stakeholder analysis should have been completed during the development of the NFMCP with a core team of primary stakeholders identified from the start. These individuals would lead/champion engagement of NFMCP activities within the operations of their respective entities to ensure activities make their way into the operational plans of the Agencies. While efforts started early to have an M&E framework for the plan – which was a significant achievement from the past 2010 NFMCP, more needed to have

been done to identify and engage key persons in implementing entities from the start of the process which would then flow into implementation.
COMMENTS ON OTHER INPUTS: (resources) Staff costs as well as Consultancy services are critical inputs to this activity as with the current capacity of the SCPU & PMU of the FD in this area; external support will be needed to complete the relevant planning documents, progress reports and evaluations.
MAJOR RISKS: -Instability in the macroeconomic environment- this could affect the execution of the EU budget support programme which would affect the implementation of the NFMCP. -Wavering levels of commitment by partner entities in implementation -Contract risks exist with consultancy services. -COVID-19 pandemic and government restrictions
CONCLUSIONS / RECOMMENDATIONS / OTHER COMMENTS: Overall, the FD is making good progress in ensuring that necessary frameworks are in place for the knowledge management & strategic planning of the NFMCP which is a significant step from the previous NFMCP. The meetings of the TAC, the development of an Online M&E software which support the initial PMER Plan & SF, continue to be significant steps.
TARGETS/MAJOR ACTIVITIES FOR FY 2020/21: Annual Progress report for FY 2019/2020 completed and disseminated. M&E software system launched, and M&E working group established with PIEs. Consultant engaged to conduct mid-term evaluation of the NFMCP.

CHAPTER 3: RISK MANAGEMENT

For the latter part of the FY, risks associated with the COVID-19 pandemic began to emerge as the 1st imported case of COVID-19 was recorded on the island. By March 2020 there were several restrictions across the island in respect to movement, gatherings, travel etc. The effect of uncertainties that will emerge from this pandemic and the impact on implementation of the NFMCP are yet to be seen and will likely emerge in the upcoming FY. It is therefore expected that in the next report, more details as to COVID-19 associated risks will be reflected.

Table 3 below summarises major risks identified for the NFMCP and its associated outputs. As the lead agency for the NFMCP, the FD seeks to monitor risks through its Enterprise Risk Management Framework.

TABLE 3: Statements for the ten major Identified risks and mitigation strategies

IDENTIFIED RISK STATEMENT	OUTPUT #	RISK LEVEL	RISK MITIGATION STRATEGY	ADDITIONAL COMMENTS
COVID-19 Pandemic- Jamaica announced its 1st imported case in March 2020.	ALL	HIGH	To be determined	This risk was realised in the latter part of the reporting period (March 2020)
STAFF TURN-OVER/ LIMITED HUMAN CAPACITY: Due to staff turn-over and re-allocation of staff	1.1.2 1.2.1	High	Timely recruitment of specialised staff.	This risk was realised during the period with the resignation from the

IDENTIFIED RISK STATEMENT	OUTPUT #	RISK LEVEL	RISK MITIGATION STRATEGY	ADDITIONAL COMMENTS
within various agencies (to take up new tasks), the capacity of individuals working on specialised outputs (such as the list of invasive plant and animal species) is insufficient, which decreases the quality of the output. There is also an associated risk when the staff turnover is in respect to a technical/specialised area.			Training of a sufficient number of staff in specialised fields.	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 activities and outputs of the NFMCP.
MISSING SKILLS SETS IN TECHNICAL AREAS*:* Several PIEs have gaps in staff skills for instance in species identification, silviculture, payment for ecosystem services & ecosystem management areas. Additionally, instances of turn-over of qualified and specialised staff.	1.2.1 1.2.2 1.2.3 1.2.4 4.2.1 5.3.2 5.3.4 5.3.5	High	Continuous training and staff rotations should be done in specialised areas (for applicable PIEs), resulting in other personnel gaining solid knowledge in technical areas. Succession planning should be in place.	Significant progress was made during the FY 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
LONG LAG TIMES TO GET WORK UNDERWAY*:* Long lag time in getting work underway may jeopardize the proper implementation of outputs, causing a less than expected quality outcome.	General 5.3.6	High	Regular monitoring of progress by the PIEs and TAC. Early mobilisation of inputs and resources. Improved planning / projectization of activities.	
POOR DATA MANAGEMENT*:* Due to inadequate capacity (human and technical) in relation to data and information management, outputs could suffer from poor data management, which would jeopardize their usefulness within NFMCP.	2.2.2 3.1.3 3.1.4 3.2.1 3.2.2 3.3.3	High	Synergies within the PIEs (and other key agencies with capacity for data management) needed. Regular training and capacity development for information management.	
MISSION CREEP WITHIN OUTPUTS & POOR SCHEDULING OF RELATED OUTPUTS*:* The scope of some outputs has grown tremendously over the first years of NFMCP;	1.1.7 3.1.1 3.1.2	HIGH	Prioritise Outputs and resource needs. Organise all inputs and resources in a timely manner- Significant	While this risk was initially stated as Low in previous reports, its continued manifestation across several outputs

IDENTIFIED RISK STATEMENT	OUTPUT #	RISK LEVEL	RISK MITIGATION STRATEGY	ADDITIONAL COMMENTS
however the outputs have not been transformed into proper projects, causing great risk to their successful completion. Additionally linkages between Outputs have not been sufficiently scheduled in terms of what is needed from one output to execute another.			attention must be paid to procurement as it is a key resource process,. Appoint a coordinator for each of these outputs, with day-to-day management responsibilities.	resulted in its ranking rising.
STAKEHOLDER BUY-IN: If several members of the broad group of stakeholders involved in the TAC re-prioritise their interest to other fields or structures, the NFMCP may lose its momentum and become less effective as a joint management and planning instrument and generator of substantive results. Failure of assigned lead entity to execute/support activity Low commitment and/or capacity, particularly of community groups, to take on project funding reduces opportunities for improved alternate livelihoods.	1.1.1 1.1.3 2.1.4 3.1.5 3.1.7 4.1.2 5.1.3 5.2.3 5.3.5	HIGH	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.	The need for greater engagement by the lead entity for implementation of the plan with other implementing entities and stakeholders continues to be seen.
UNAVAILABILITY OF REQUIRED SPECIES/ SEEDS: At times there are limited variety of seeds available, which results in the nursery being unable to meet the production demands for all species requested. If the nursery programme is not expanded, FD may experience the unavailability of seedlings to meet demands.	3.1.4 3.1.1	Medium	FD has reinstituted 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.	Several strategies were implemented to mitigate the risks, such as weekly updates of the inventory, weekly inspection of seedlings and culling of infested seedlings.
UNAVAILABILITY OF SUITABLE LANDS FOR REFORESTATION EFFORTS : If lands are inaccessible, the output cannot be implemented.	3.1.1	Medium	Early search for appropriate (denuded) lands.	
INSECURITY OF FINANCIAL RESOURCES*:* For outputs where significant financing is needed for their implementation, fund sourcing	1.1.5 2.3.4 3.3.1 4.1.3	Medium	A number of specific outputs can be a focus for fundraising, including (for 2.3.4) because of its	

IDENTIFIED RISK STATEMENT	OUTPUT #	RISK LEVEL	RISK MITIGATION STRATEGY	ADDITIONAL COMMENTS
is essential, since the output is at risk if funding is not identified.			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.	
INACCESSIBILITY OF SOME SITES: Several of the mangrove and swamp forests have access limitations, due to difficulty in sourcing fishermen with boats to visit remote offshore areas, crocodile nesting, or lack of permission to access private mangrove and swamp areas. These will halt or delay the conduct of the assessment.	1.1.4 5.1.2	Low	Reconnaissance trips should be made. Specific difficulties can be discussed with partner organisations, to seek solutions.	

CHAPTER 4: UPDATE ON FINANCING THE NFMCP

The full costing plan of the NFMCP was drawn up during Year 3 and estimated that a total of over 13 billion JMD, would be required for the implementation of the NFMCP over a 10-year period. The overview is presented in ***Table 4.***

TABLE 4: Costing of the NFMCP.

COSTING OF THE NFMCP	TOTAL 10 YEARS: 2016-17 to 2025-26		
Results	**Total costs (in J$'000)**	**Consolid. fund**	**Other sources**
Thematic Area 1: Forest Governance and Conservation	1,721,163	1,599,921	121,242
Thematic Area 2: Forest Utilisation	3,004,176	2,202,592	801,584
Thematic Area 3: Capacity for Sustainable Forest Management	4,174,613	3,813,704	360,909
Thematic Area 4: Education, Training and Awareness	718,531	695,541	22,990
Thematic Area 5: Monitoring and Information Management	3,395,661	2,626,867	768,794
GRAND TOTAL	**13,014,144**	**10,938,625**	**2,075,519**[1]

[1] *J$90,027,000 committed and J$1,985,492,000 to be raised.*

By FY 2018/2019 over J$11 billion or 84.7% of the funding required to implement the entire NFMCP had already been identified. It is estimated that funding of approximately J$1,985 million or US$15.9 million is still needed to finance the NFMCP.

TABLE 5: Financing for the implementation of the NFMCP contributed or committed *(*Figures presented represent estimated commitments identified in 2017/2018).*

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Source	Amount (in J$'000)	Percentage of total requirement	Timeline
Consolidated Fund, including EU/BSP contribution	J$10,938,625 (EU/BSP direct contribution to Outputs: J$1,068,016)	84.1%	Year 1-10. For EU/BSP Year 4-7.
Green Climate Fund	J$74,827	0.6%	Year 4 and 5.
Global Environment Facility GEF- 6	J$4,580	0.035%	Year 4.
UWI/Core	J$10,620	0.08%	Year 4-10
TOTAL FINANCED	**J$11,028,652**	**84.7%**	
FINANCING REQUIRED	**J$1,985,492**	**15.3%**	

The sector remains challenged however in identifying and linking expenditure per outputs to capture total amounts needed and spent to date in the implementation of the NFMCP. This is evidenced by the reporting templates detailed in Chapter 2, as though financial progress information was requested for each output, information was only provided from one. Significant work is needed to fill/ address this gap.

The implementation of the NFMCP is however also being financially supported through current projects. These include:

- GEF/IDB Integrated Management of the Yallahs and Hope Rivers Watershed Management Areas Project, executed by NEPA with several implementing partners.
- GCF Support for REDD+ Readiness Preparation in Jamaica, executed by the CCD and implemented by Forestry Dept.

Grants secured by NEPA through the GEF Small Grants programme and US Fish & Wildlife have also supported implementation of related outputs. Details on the total amount provided by these sources was not provided.

Work to secure funding for implementation continued during the period however, with the FD working with several key stakeholders in this area. Work started under the GFFFN, progressed during the period with the development and submission to the FAO regional office, (for submission to GEF for consideration under GEF 7), a PIF for a medium sized, 48 month project valued at USD 1.65 million entitled: *'Jamaica Mangroves Plus: Protection and Sustainable Management of Jamaica's Mangrove Ecosystems and*

Biodiversity', which would support the implementation of the National Mangrove Management Plan (Output 3.1.5). Additionally, under the technical assistance component of the EUBSP, the FD secured two consultancies valued at Euro 1.25 million detailed below:

- Business Development consultancy to support productivity and growth for the Forest Sector of Jamaica. The results from this consultancy will support several outputs under Outcome 2 of the NFMCP.
- Visibility consultancy for Addressing Environmental and Climate Change challenges through Improved Forest Management in Jamaica. The deliverables from this consultancy will support several outputs under Outcome 4 of the NFMCP.

CHAPTER 5: PROGRESS RELATING TO GOVERNANCE AND OVERSIGHT

The TAC of the NFMCP met twice during the period on July 4, 2019 & March 17, 2020. The committee is chaired by the PIOJ, with the MEGJC designated as co-chairs. The TAC is comprised of senior representatives from the GOJ institutions with responsibility for environmental management, social and economic development, financing, and watershed and environment management. Representation also includes private forest land owners, and non-governmental organisations. Present at the meetings held were representatives from the FD, PIOJ, MEGJC, NEPA, NLA, Bureau of Gender Affairs, and NGOs. A private landowner was also represented. Currently the TAC also serves as the project steering committee for the Budget Support Programme (2018- 2022) funded by the EU, as such a representative of the EU also sits on the committee as Observers.

The development of an Online Monitoring and Evaluation (M&E) System for the NFMCP and its corresponding PMER Strategic Framework & Plan progressed well during the FY with the engagement of Canadian consultancy firm Baastel (Le Groupe-conseil baastel ltée) in June 2019. The online M&E System will feature the following:

- A Performance Measurement Framework (PMF);
- A Dashboard;
- An Early Warning System;
- Automatic Report Generation;
- Include risk analysis and scenarios of Theory of change (how to transform outputs into immediate outcomes) or logframe;
- Project portfolio management, and;
- A Geographic Information System (GIS) on projects.

The web-based system to be developed, will replace the current MS Excel Database for the PMER and will significantly reduce the monitoring and reporting burden on stakeholders involved. Workshops were held

with the consultants and the PIEs in January 2020 (January 13 & 15) to introduce the system. Representatives from six (6) of the seven (7) PIEs attended these sessions. The system is expected to go live by the third quarter of 2020.

CHAPTER 6: LESSONS LEARNED, CONCLUSIONS AND RECOMMENDATIONS

The 2001-2010 NFMCP provided several valuable lessons which informed the development of the current NFMCP 2016-2026. One key lesson was that given the cross-cutting nature of the sector and the demonstrated value of forests, as well as the number of entities involved directly as well as indirectly in its execution, effective collaboration for its successful implementation must remain a priority. Another key lesson is the need for the NFMCP to be properly resourced from its inception and there be critical scheduling and alignment between resources (financial and human) and outputs it the desired outcomes are to be achieved.

It was for these reasons that significant attention was placed on developing supporting mechanisms for the NFMCP. While the PMER and the Financing plan of the NFMCP (completed in 2017 & 2018 respectively) provide the frameworks for monitoring and reporting of the plan, gaps exist with the utilization of these frameworks in the implementation process. Additionally, more attention needs to be placed by the FD as the lead for the sector, on driving the collaboration needed for the implementation of the plan. For many of the PIE, while commitment was secured in the initial consultation process towards implementation, the necessary direct and specific engagement/follow up utilizing for example MOUs or MOAs has stalled.

It must be noted however that despite the challenges, the implementation of the NFMCP has seen fair progress overall. At the end of year 3 (FY 18/19), only 38 outputs (67%) had started and reported progress. By the end of year 4 (FY 19/20) however, this increased to 79% with 45 outputs started and reporting some progress. While currently twelve (12) outputs as detailed in this report have been identified for urgent review owing to challenges; one key way forward recognized for the plan is to address these.

After four years of implementation therefore, the NFMCP, through its sector wide implementation approach, is providing support for the achievement of the Forest Policy for Jamaica 2017 and its vision for Jamaica's forests and its biodiversity to be sufficiently restored and sustainably managed, so once again the island can adequately be described as "the land of wood and water", capable of meeting the social, economic and ecological needs of current and future generations.

CHAPTER 7: Draft NFMCP Implementation Plan for 2020-2021 and targets for remaining years

Table 6 below presents the main results/ targets to be achieved in Year 5 (second column). Based on the work done during Year 1-4, through data gathering, the targets for the remaining years were revised. Of note is that with the impact of the COVID-19 pandemic across the island the budgetary allocation of MDA's were cut for the FY 2020/2021. As a result several targets stated initially were revised and could be further impacted.

TABLE 6: Draft NFMCP Implementation Plan for 2020-2021 and targets for remaining years

Output	2020-2021 YEAR 5	2021-2022 YEAR 6	2022-2023 YEAR 7	2023-2024 YEAR 8	2024-2025 YEAR 9	2025-2026 YEAR 10
1.1.1	Interlinkages and synergies of TAC with relevant Committees and working groups promoted.		Additional working relationships between the TAC and other coordinating bodies.			Full integration of the forest sector in relevant national decision-making processes.
1.1.2	-Obtain approval from the Cabinet for the preparation of the drafting instructions. -Submission of drafting instructions to the CPC and respond to subsequent drafts. -Consultations with key stakeholders including NEPA and the JNHT to inform the revision of drafting instructions.	Forest Act amended.	Promulgation implemented.			

Output	2020-2021 YEAR 5	2021-2022 YEAR 6	2022-2023 YEAR 7	2023-2024 YEAR 8	2024-2025 YEAR 9	2025-2026 YEAR 10
1.1.3	Revise/New Trelawny Parish Development Order drafted		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.
1.1.4	Documents submitted to NLA. Update NLA property inventory. Prepare handover letters. Hand-over management of parcels.			Transfer of Management Responsibility Completed. Update NLA Property inventory.		
1.1.5	New protection and enforcement approaches in place to support enforcement activities. -Deployment of trail cameras in forest estates					
1.1.6	TBD- Revision of Forest Act maybe needed to be completed before this Output can progress		Process to review Special Use Permits to commence.	Special regulation starts. Media promotions of regulations.	Media promotions of regulations.	Completed.
1.1.7	-Boundary investigation completed for five (5) forest estates - Boundary establishment for CCAPP completed by December 2020		45 parcels			

Output	2020-2021 YEAR 5	2021-2022 YEAR 6	2022-2023 YEAR 7	2023-2024 YEAR 8	2024-2025 YEAR 9	2025-2026 YEAR 10
1.2.1	-Updated list for 4 forest types for plant species (open dry forest -short & tall- added). -Conduct the assessment of invasiveness in open dry forests.	On the ground verification and Updated list for 4 forest types.	Ensuring the inclusion of fauna in the listings.	Complete document on forest invasive plant species for all 6 forest types (added are Disturbed Broadleaf & Sec. forest).	.	
1.2.2	Five percent (5%) increase over baseline (250) in the number of the Jamaican Iguana released from the Headstart Programme					.
1.2.3	Finalise the Management Plan for the American Crocodile in Jamaica	-Process evaluation on pilot species conservation plans done Species for the future conservation plans to be identified (Year 7 and Year 10).	Additional species conservation plan produced.			4 species conservation plans produced.
1.2.4	Tracking of the propagation process of the Prosthechea fragrans, Epidendrum ramson and Pleurothallis laxa orchid species			Conservation approach develop for 2 additional new species.		5 new species for conservation identified and conservation approach developed.
2.1.1	Completion of the Report on the Evaluation of programme of potential feasible incentives					

Output	2020-2021 YEAR 5	2021-2022 YEAR 6	2022-2023 YEAR 7	2023-2024 YEAR 8	2024-2025 YEAR 9	2025-2026 YEAR 10
2.1.2	-TBD- Evaluation report on incentives to be completed for Output to progress					
2.1.3	TBD- Input needed from other Output for progress of Output	Consultancy on incentives for PES pilot programme implemented. Link it to the business model for FD.	Programme development started.	Pilot project operational.		Pilot project conducted and completed.
2.1.4	By June 2020, minimum 40 livelihood projects should have been selected and awarded. -Implementation and monitoring of 50% of Livelihood projects awarded	By June 2021, 20 projects must be completed. Registration of planters & distribution of seedlings continues.	By June 2022, all 40 must be completed.			
2.2.1	TBD-Results from social survey non-timber products to be done under output 2.3.2 needed for this Output to progress.		List of identified wood species.	50 % of list completed.		Assessment and recommendations completed.
2.2.2	Harvesting plan for forest estates in cluster 17 will be completed.	Eight harvesting plans completed.		Twelve harvesting plans completed.		Sixteen (16) harvesting plans completed, for 16 of the 26 clusters.
2.3.1	TBD- The research programme is to partly based on the results of the social survey non-timber products to be done under output 2.3.2*.	Feed in by market research, output 2.3.2. Based on this info, it will be decided which inventories to carry out.				

Output	2020-2021 YEAR 5	2021-2022 YEAR 6	2022-2023 YEAR 7	2023-2024 YEAR 8	2024-2025 YEAR 9	2025-2026 YEAR 10
		Research programme developed.				
2.3.2	Market research survey on non-timber forest products conducted.	Public education materials prepared.				
2.3.3	-Completion of Investment Profiles for Bitterwood chips and Christmas Trees (Cupressus -Feasibility study for the identified products conducted.	Two Investment profiles completed and promoted.	Inventories implemented.			To be determined.
2.3.4	TBD- Progress of Output to be guided by results of business development consultancy under Technical Assistance programme	Feasibility study on access and attractiveness of sites (to see why people would go to Gourie, instead of e.g. Blue Mountains.) Development of fundraising strategy for this output.	Gourie rehabilitated and at least one business strategy implemented.		Clydesdale rehablitated.	Feasibiliy study for third site done.
2.3.5	Create database and information management developed. At least 2 additional guidelines developed		Completed. Promotional activities on trails and sites.			
3.1.1	**100 ha** planted. **200ha** maintained. Search for plantable lands to be done for next year.	100 ha planted additionally	100 ha planted additionally / 788 ha maintained.	100 ha planted additionally.	100 ha planted additionally.	Total 1,100 hectares planted. 1,200 ha maintained.

Output	2020-2021 YEAR 5	2021-2022 YEAR 6	2022-2023 YEAR 7	2023-2024 YEAR 8	2024-2025 YEAR 9	2025-2026 YEAR 10
	Reforestation programme finalised and adopted.	Search for plantable lands to be done for next year.	Search for plantable lands to be done for next year.	Search for plantable lands to be done for next year.	Search for plantable lands to be done for next year.	
3.1.2	Cluster 4 (Western Blue Mountain) FMP prepared and submitted for approval by Minister and draft FMP for Cluster 2 prepared and submitted.	Cluster 2 FMP (St. Andrew) revised.	Cluster 17 FMP (Hanover) developed.	Buff Bay Pencar country FMP revised.	.	One FMP revised or developed per year.
3.1.3	- Watershed Restoration Plans prepared for 3 WMUs (Rio Cobre, Rio Minho and Drivers River and White River)		Another watershed management plan added, which includes restoration plans.			5 watershed management plans completed, which include restoration plans.
3.1.4	Findings from Technical Assistance Business Development programme related to Nursery Operations implemented. 205,000 seedlings produced.	205,000 seedlings produced.	120,000 seedlings produced.	120,000 seedlings produced.	120,000 seedlings produced.	Completed: 1,540,000 seedlings accumulated
3.1.5	REVIEW OF OUTPUT NEEDED. Mapping & Assessment of Mangrove & Swamp forests areas to continue to inform plan. Development of TOR and engagement of consultant to draft management plan to begin.	Mangrove Management Plan developed (NEPA to be consulted).		Implementation of Plans started	Plans implemented by 25%	Plans implemented 50%.
3.1.6	Best Management practices and special Regulations developed for Riparian Forests	40% Implementation of research and collection management practices.	80% Implementation of research and collection best practices.	Guidelines for best management practices published.		

Output	2020-2021 YEAR 5	2021-2022 YEAR 6	2022-2023 YEAR 7	2023-2024 YEAR 8	2024-2025 YEAR 9	2025-2026 YEAR 10
3.1.7	- Completion of guideline document by Quarter 4. -Community engagement and public education. -More urban planting done in more communities.	More planting done and lessons learned collected.	More planting done and lessons learned collected	Review and revise guidelines.	More planting done and lessons learned collected	Guidelines Completed.
3.1.8	-Database expanded and maintained- 1000 additional parcels added					All forest land owners included and updated
3.2.1	• Further discussion with USFS and complete National Forest Inventory Manual (NFI) • Carbon Stock Assessment (CSM) conducted in three Forest Estates	Carbon stock monitoring implemented	Carbon stock inventory completed.			
3.2.2	-Execution of the GCF REDD capacity and the development of the Approved National Strategy and Action Plan Promotion and communication of strategy & action plan.					
3.2.3	TBD- KPI FOR OUTPUT REPORTED ACHIEVED AT END OF YEAR 4. -Review of Output and determination of way forward needed. New			Land use revision completed; a new analytical report of the drivers of deforestation and		New analytical report completed. The conclusion of each land use study is followed by the analytical

Output	2020-2021 YEAR 5	2021-2022 YEAR 6	2022-2023 YEAR 7	2023-2024 YEAR 8	2024-2025 YEAR 9	2025-2026 YEAR 10
	landuse/satellite imagery not likely until 2022/23			forest degradation done. Consultations, training sessions, workshops.		report to understand the changes being observed.
3.2.4	-Sourcing and collation of geospatial data as well as BPI data to commence the analysis of the National Forest Emission Level (NFEL) -Training in IPCC methodologies to determine NFEL.	Training done and Calculation performed.				Forest emission level calculated.
3.2.5	-START IMPLEMENTATION OF OUTPUT - Stakeholder engagements, socio-economic assessments, the development of a grievance mechanism and a gender strategy will be done. These will feed into SIS. - Consultancy to develop the Safeguards Information System (SIS) to begin.	RSC Meetings held. Inter-sessional meeting held. Consultancy to develop the Safeguards Information System continues -7 Cancun principles integrated into PIOJ safeguards information system.	Financial audits performed.			All 7 Cancun principles adhered to.
3.3.1	TBD-. Output is linked to Output 3.3.2					Minimum of 45 groups trained / 375 persons sensitised.
3.3.2	REVIEW OF OUTPUT NEEDED	Training on governance and decision-making started.	Continuation training programme.	Continuation training programme.	Continuation training programme.	Continuation training programme.

Output	2020-2021 YEAR 5	2021-2022 YEAR 6	2022-2023 YEAR 7	2023-2024 YEAR 8	2024-2025 YEAR 9	2025-2026 YEAR 10
	Study has been dropped. Way forward needs to be determined.					
3.3.3	Minimum of four (4) community groups trained in Forest fire management & suppression.	5 additional groups trained.				To be determined.
4.1.1	-100 schools visited; 25 public awareness events participated in/implemented. Forest Trek executed in recognition of UN International Day of Forests	290 school visits, 150 public awareness events. Forest Trek executed in recognition of UN International Day of Forests Website upgraded. Public awareness and perception survey implemented.	290 school visits, 150 public awareness events. Forest Trek	290 school visits, 150 public awareness events. Forest Trek implemented.	290 school visits, 150 public awareness events. Forest Trek implemented.	Cumulatively, 2,850 school visits (in 14 parishes) and 1,425 public awareness events implemented.
4.1.2	Conduct four (4) sessions in the 2020/2021 financial year; Continue forest fire management awareness campaign activities to include airing of additional forest fire management messaging on radio, printing and distribution of forest fire management posters; printing and distribution of forest fire					To be determined

Output	2020-2021 YEAR 5	2021-2022 YEAR 6	2022-2023 YEAR 7	2023-2024 YEAR 8	2024-2025 YEAR 9	2025-2026 YEAR 10
	management brochure; execution of the social media campaign during both dry seasons .					
4.1.3	Develop a comprehensive/structured, monitoring /programme framework for the PFP Outreach programme.			Registration of planters continues.		Full registration of planters.
4.2.1	-	Training programme on NRV of forest ecosystems conducted for 15 staff of FD and stakeholders.	Course evaluated.			To be determined.
4.2.2	-Training course implemented for at least 6 individuals.	Course evaluated.		Regional technical meeting on Forestry training conducted.		To be determined.
4.2.3	Execute Carbon Stock Assessment in three (3) Forest Estates					To be determined.
5.1.1.	-Procurement of drones and new 25cm aerial imagery collection for the island. -Commencement of UAV mapping of changes in disturbance within CBF cover types	Procurement of new 25cm aerial imagery collection for the island. Training of employees in spatial analysis implemented. Research implemented on spatial representation of disturbance	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%).

Output	2020-2021 YEAR 5	2021-2022 YEAR 6	2022-2023 YEAR 7	2023-2024 YEAR 8	2024-2025 YEAR 9	2025-2026 YEAR 10
5.1.2	Minimum of 3,000 ha of Mangrove/ swamp forest formations assessed/ mapped.	Equipment purchased Minimum of 7,000 ha of Mangrove/ swamp forest formations assessed/ mapped.	Mangrove Management Plan in place		9,000 ha assessed and mapped.	
5.1.3	Stakeholder meetings started off.	First risks and vulnerability maps produced and validated.				Completed.
5.1.4	OUTPUT 3.1.8 AND 5.1.4 TO BE COMBINED. 1,000 additional parcels identified and verified	Database utilised to support development and promotion of new/revised incentives.				To be determined
5.1.5	2 or more trails mapped in Forest Reserves.					To be determined
5.2.1	REVIEW OF OUTPUT NEEDED		8 research outputs			To be determined
5.2.2	Finalise template for post fire assessment form and circulate to internal users.	Two forest fire assessments conducted.				To be determined
5.2.3	TBD- OUTPUT TO BE REVIEWED	At least one forest impact assessment conducted.	Report produced on Impact of mining and quarrying on forest goods, services and values.			To be determined
5.3.1	TBD- OUTPUT TO BE REVIEWED					Growth & Investment data for 6 species (Cedar, Spanish Elm, Santa Maria Teak, British Honduras

Output	2020-2021 YEAR 5	2021-2022 YEAR 6	2022-2023 YEAR 7	2023-2024 YEAR 8	2024-2025 YEAR 9	2025-2026 YEAR 10
						Mahogany and WI Mahogany completed.
5.3.2	Initiatives to develop forest monitoring systems harmonised.			Forest monitoring systems strengthened.		To be determined
5.3.3	START IMPLEMENTATION OF OUTPUT REVIEW OF OUTPUT NEEDED. - Develop TOR - Identify the type of weather stations. - Identify suitable locations for weather stations to be installed.	Minimum of 6 weather stations installed in forest areas. -Data collection and analysis. Purchase 6 weather stations.	Data collection and analysis. Station installation and security continued.	Data collection and analysis.	Data collection and analysis.	Data collection and analysis supporting sustainable forest management practices.
5.3.4	Year 5 activities postponed	90 PSPs established (30 series of 3*).***Target carried forward from year 5* Additional 18 series of 3 PSPs.	Additional 18 series of 3 PSPs.	Additional 18 series of 3 PSPs.	Additional 18 series of 3 PSPs.	360 PSPs established.
5.3.5	TBD- REVIEW OF OUTPUT NEEDED	Artificial propagation and reintroduction. 4 species surveyed and mapped.	Artificial propagation and reintroduction.	Artificial propagation and reintroduction.	Artificial propagation and reintroduction.	8 species surveyed and mapped. Artificial propagation and reintroduction.

Output	2020-2021 YEAR 5	2021-2022 YEAR 6	2022-2023 YEAR 7	2023-2024 YEAR 8	2024-2025 YEAR 9	2025-2026 YEAR 10
5.3.6	Annual Progress report for FY 2019/2020 completed and disseminated. M&E software system launched. Consultant engaged to conduct mid-term evaluation of the NFMCP.	Progress report 2021; Mid-Term Review. Reg. Conference on SFM & Conservation.	Progress report 2022	Progress report 2023. Update Knowledge Management Database.	Progress report 2024. Development of next NFMCP (stakeholder workshops)	Progress report 2025. Final Evaluation. Next NFMCP finalised.