



Environmental Foundation of Jamaica

Preserving the Future... Today!

2020 Congressional Report on Jamaica's Enterprise for the Americas Initiative (EAI) & Tropical Forest Conservation Act (TFCA) Funds

Prepared: January 2021

Jamaica

Background and History

The Environmental Foundation of Jamaica (EFJ) was created through two bilateral debt reduction agreements signed in August 1991 and January 1993 with the United States of America under the Enterprise for the Americas Initiative (EAI). The two agreements reduced Jamaica's debt to USAID and PL480 by \$311 million. The interest on these debts provided the EFJ with approximately US\$21.5 million over a nineteen (19) year period (which ended in 2012). Operations of the EFJ began in May 1993.

The Forest Conservation Fund (FCF) was established pursuant to the Tropical Forest Conservation Act (TFCA) of 1998 which was enacted to offer eligible developing countries relief on identified official debt owed to the United States of America, while at the same time generating funds to support local tropical forest conservation activities. The Forest Conservation, Debt Swap and Swap Fee Contractual Agreements were signed on September 21, 2004 by the Governments of Jamaica (GOJ) and the United States of America (USG), The Nature Conservancy (TNC) and the Jamaica Protected Areas Trust (JPAT). This paved the way for the creation of the FCF. The GOJ will deposit US\$16 million into the FCF over a period of nineteen (19) years (ending in 2024). These monies are to be used solely for the purposes delineated in the Forest Conservation Agreement (FCA).

In 2012 a decision was taken to consolidate both entities EFJ and JPAT/FCF to create a "new" EFJ. The new Board of Directors, referred to as the Inception Board, of the new EFJ was empowered in December 2015 following signing of the new governing documents on June 29, 2015.

Given the aforementioned history the following mission and vision statements encapsulate the spirit of both documents and ultimately the mandate of the EFJ.

Mission:

To be a major funder of environmental protection and child survival initiatives in the interest of sustainable development.

Vision:

To be the regional leader in funding and influencing policy for environmental management and conservation, as well as child survival and development.

Major Achievements in 2020

This report covers EFJ's fiscal year, which is August 1, 2019 – July 31, 2020 and highlights the major activities for the period.

PROJECT HIGHLIGHTS

The EFJ still has open projects under all three USG funding sources (PL480, USAID and TFCA). For the fiscal year eleven (11) projects were active under the TFCA.

For this 2019/2020 report we highlight four (4) of the active projects below. These projects are now (almost) complete, and some of the information presented reflects a comprehensive overview of the project during its lifetime.

None of the PL480 and USAID Projects was active during the year and these projects will be subject to de-commitment in the 2020/2021 fiscal year.

Implementing Organization: Alligator Head Foundation

Project Title: Disaster Management through Mangrove Rehabilitation, Portland

Priority Area/Site: Other Forest Reserves and Crown Lands managed by the Forestry Department

Objectives:

- (a) To increase the appreciation of wetlands through the implementation of a public education campaign in four (4) communities (Salt Creek, Turtle Crawle, Anchovy, and Oyster Bay).
- b) Populating a mangrove nursery to produce seedlings for planting in selected locations.
- (c) Conducting a natural resource valuation and impact assessment of the Turtle Crawle wetlands.
- (d) Partnering with state agencies, private sector groups and community organizations to zone and protect critical areas of mangrove forest.
- (e) Creating jobs with mangrove replanting and the populating of the nursery to sell mangroves to assist others with disaster mitigation.

Achievements:

- ✓ 62 persons have been trained in how to plant mangrove seedlings. This was a part of the awareness program targeting persons from four (4) communities.
- ✓ A 2,500 seedling capacity nursery has been constructed using plastic tanks.
- ✓ 2,075 red mangrove seedlings have been planted out from the nursery. An additional 1,500 seedlings are being maintained in the nursery.
- ✓ A zonal map of the site has been completed.
- ✓ 25 persons have been employed on the project.

This project was 100% complete (July 2020) in its original scope. However the scope was broadened to include the Development of an Interactive Mangrove Education Pathway and a mangrove awareness program, Jamaica Awareness of Mangroves in Nature (J.A.M.I.N.).



Youth participants of the JAMIN awareness program.



Mangrove outplanting demonstration.

Implementing Organization: Jamaica Conservation and Development Trust (JCDDT)

Project Title: Reforestation and Sustainable Agriculture for Soil Stabilization in the Blue Mountains

Priority Area/Site: Southern Parts of the Blue and John Crow Mountains including Yallahs Watershed

Objectives:

1. Reforest and/or rehabilitate 25 hectares (ha) of land within the Blue and John Crow Mountains National Park:-

- (a) 10 ha invasive species control
- (b) 15 ha reforestation above Cinchona
- (c) 8 ha of earlier reforestation maintained

2. Improve and increase soil conservation practices on farms in target communities of Cascade, Woodford, Cedar Valley and Westphalia through:-

- (a) Greenhouse construction/repairs at Cascade and Woodford
- (b) Training (15 farmers from each of 2 communities)
- (c) Planting of pineapples on sloping land for soil conservation

Achievements:

✓ 10 ha invasive species control:

100% of target achieved as of May 2019, with the addition of 3 ha at Holywell and 2 ha at Mt. Horeb which were cleared of invasives and native non-lumber trees planted. In addition, native seedlings that sprang up were thinned and grown out for planting elsewhere. A total of 5 persons were used to carry out the activities – 4 for removal of the invasive red ginger and 1 to transport the material to dump.

✓ 15 ha reforestation around Cinchona:

A total of 17 ha (42.5 acres) of native tree seedlings (about 7,000) were planted in 2012. About 13 men benefitted directly from the tree planting (some sub-contracted others to help) and 1 woman at one of the National Park's nurseries which were improved in order to produce the needed stock. The target was over-achieved by 12% (2 ha) but a major fire which burned more than a total of 100 acres (over 50 ha) in the Cinchona area also destroyed about 80% of the total acreage (about 13.5 ha (33.5 acres) of the 17 ha (42.5 acres)) planted under this project in 2014. Approval was given in 2015 for an extension of the project to reforest the burned area. The 3.6 ha (9 acres) remaining were being maintained but this ceased in 2016 when the Forestry Department began to reforest the wider acreage (over 50 ha) that had been burned. This led to closure of this component of the project and a request was approved in 2017 to use the remaining reforestation funds for other purposes.

✓ 8 ha of earlier reforestation maintained:

8 ha of old reforestation were maintained in the Cinchona/Bellevue area. This was not burned in the major fire. A change in the use of funds remaining for the reforestation objective (after the fire and Forestry Department reforestation) to invasive species control and three new activities were approved for which the targets were 100% achieved.

✓ Bird Monitoring Analysis Reports and Plan:

The Consultant started work in mid-2017 with a review of the data but did not submit the final report on Bird Monitoring Analysis until the end of May 2019. The information was used to guide the development of a new Bird Monitoring Plan at the end of 2018.

✓ Volunteer Training & Activities – Holywell and Peak Trail areas:

A two-day training workshop in March 2019 was held for youth living in communities near to the trailhead i.e. Penlyne Castle and the nearby districts of Epping Farm and Minto. In addition, youths who do tour guiding at the National Park's main recreation area at Holywell and who are mainly from Buff Bay Valley communities were invited. 29 youth participated. The training focused on the Peak Trail hike. Community youth participated in the conducting of a Knowledge, Attitudes and Practices Survey throughout BJCM communities. There was also a focus on improving the impact of the Community Service provided by University of Technology students by giving them a presentation and tour during their first 8 hours and identifying useful projects as well as general work for them. In addition, several of the young people who

participated in a Volunteer Ranger Corps training conducted in July 2017 and a global World Heritage Youth Volunteers Program in September 2017 continue to assist JCDT on request.

✓ Repair of green houses in Cascade and Woodford communities:

Target: 100% achieved – Funds were transferred from Woodford to the Holywell nursery as the community could not organize to sign an agreement and raise some additional funds and did not generally show interest. The Cascade greenhouse was repaired and the school raised funds for expansion through the 4H Clubs. The repair of the Holywell nursery greatly assisted with the production of seedlings for National Park reforestation.

✓ Conduct training sessions in agroforestry and sustainable farming techniques (15 farmers in each of 2 communities - Woodford and Cascade - in a 2- day session):

The target was exceeded as 77 farmers and 11 students were trained from 4 communities (Woodford, Cascade, Westphalia, and Content Gap) and in addition, follow-up activities were conducted. A total 1,178 fruit and lumber tree seedlings were distributed. A training session was also conducted at Holywell with assistance from Jamaica Organic Agriculture Movement (JOAM) in 2014 which benefitted 24 farmers from Woodford and Cascade. And in 2018, four one-day “refresher” sessions were held in communities where training had previously been conducted and a few farmers were visited: Content Gap (17 farmers), Cascade (19 farmers), Johnson Mountain (14 farmers), and Westphalia (14 farmers).

- Use of pineapple to contour farmland and locations especially prone to soil erosion and land slippage:

Pineapple suckers were not available in the area and so the funds were re-assigned to

- (i) purchase agricultural tools used as prizes during the training
- (ii) conduct community outreach in Westphalia (nearest community to Cinchona) regarding fires. This included:
 - School visits and presentations
 - Community meetings
 - Signage



Volunteers tend a composting bin for the disposal on invasive species removed from the forest.



A farmer standing on his property where he planted seedlings which were distributed under the project.



Native seedlings collected in the wild being prepared at the Holywell Nursery for reforestation activities.



Invasive species for removal marked with pink ribbons.

Implementing Organization: Dolphin Head Cooperative Local Forest Management Committee

Project Title: Dolphin Head Cooperative Agro-forestry, Apiculture, Eco-Tourism and Alternative Livelihoods Initiative

Priority Area/Site: Dolphin Head Mountains

Objectives:

- (a) To select farmers to be trained in apiculture production.
- (b) To replant farm lands and create long- and short-term income; promote climate smart farming.
- (c) To build environmental awareness and education within the schools and communities.

Achievements:

- ✓ Thirty-five (35) people were trained to operate an apiary and to earn from this venture whilst preserving the environment in and around the community.
- ✓ Three (3) apiaries originally established with a total of 50 colonies increased to 68 colonies during the period December 2019 to January 2020. The group produced a total of 55 gallons of honey. Funds earned were used to purchase additional hive boxes, covers, and foundation to increase their colonies. Approximately 41 persons have benefited directly from the initiative.
- ✓ During this August 1, 2019 – July 31, 2020 fiscal year, fourteen (11) new farmers have been trained in agro smart technology, disease control and greenhouse technology.
- ✓ Twenty (20) farmers participated in the agro-forestry training and have been supplied with pineapple suckers, timber seedlings including Jamaican Mahogany and Cedar, along with fruit tree seedlings of sweet sop, limes, mangoes, and avocado pear. Each participant planted approximately ½ acre during the August 1, 2019 – July 31, 2020 fiscal year.

During the reporting period farmers were trained in the correct procedure on how to strip the pineapple sucker to the root before planting. The pineapples were used as barriers for soil stabilization and as short term crops for income generation.
- ✓ Two (2) community meetings were held and environmental education and awareness sessions held with over 62 persons in attendance. During the period, two (2) school plots were visited; however no additional visits were made to the schools due the Covid-19 pandemic.



Participants involved in training to plant pineapple suckers

Implementing Organization: Discovery Bay Marine Laboratory, UWI (DBML)

Project Title: Phase 2: Critical Coastal Area Restoration Project

Priority Area/Site: Long Bay/Lilliput, Bogue Lagoons, (Galleon Beach) mangroves, Airport Runway Lagoon roadway, Falmouth-West

Objectives:

- (a) Design, execute and manage restoration plans in five (5) project sites which involve the continuation of mangrove nurseries in Port Royal and Discovery Bay at the Marine Laboratories with a maximum of 15,000 plants.
- (b) Train stakeholders within project locations in the value of wetlands, restoration processes and monitoring processes for the entire duration of the project.
- (c) Increase in mangrove and coastal forest area in Jamaica.
- (d) Document and disseminate best practices in restoration techniques suitable for use in Jamaica and improve coastal restoration monitoring protocols.

Achievements:

➤ **Mangrove Nurseries**

A total of 15,000 mangrove plants were housed in the existing nurseries in the Port Royal and Discovery Bay Marine Laboratories.

➤ Stakeholder training

The training of stakeholders within project locations in the value of wetlands, restoration processes and monitoring processes was fully achieved. Stakeholders accompanied the project team during scoping, diagnosis of the damaging factors, restoration planning, field trips, etc. Community stakeholders were also intimately involved when restoration works were taking place. They were also incorporated into monitoring events.

➤ Increase in Mangrove and Coastal forest area in Jamaica

The project has directly enabled mangrove rehabilitation in four (4) areas across approximately 4.5 acres (18,700 m²), thus fully achieving the aim to increase mangrove and coastal forest areas in Jamaica. The following list shows the size of each rehabilitated site:

- Airport Runway - 400 m²
- Bogue - 5,000 m²
- Lilliput (Long Bay) - 1,300 m²
- Malcolm's Bay - 12,000 m²

The lessons learnt and skills set of the project team has contributed to the restoration or restoration planning of more mangrove projects islandwide.

➤ Document and Disseminate Best Practices in Restoration Techniques Suitable for use in Jamaica and Improve Coastal Restoration monitoring protocols

This will be fully achieved as the restoration practices have been documented in the PhD thesis titled “Hydrological Restoration Approaches for Degraded Mangrove Forest in Jamaica” by Camilo Trench. The thesis defense is anticipated in the upcoming year.

Protocols for improving coastal restoration and monitoring were fully achieved through public presentations, scientific seminars, social media posts, reports and articles and the production of a PhD thesis, based on work performed at three (3) mentioned sites - Malcolm's Bay, Long Bay and Bogue.

Restoration Sites

➤ Airport Runway

Restoration of mangrove trees at the selected site along the Airport Runway was not fully achieved. The site was screened from solid waste by a fence and plastic meshing and cleaned quarterly. This was effective in reducing the marine litter load and safeguarding any seedlings planted or recruited at the site. However there was no natural recruitment as the site lacked viable parent trees. The substrate of the site was very rough due to many years of erosion. A technique to stabilize the shoreline and keep sandy material in place was attempted. Coir logs

were imported and pinned along the shoreline using rigid metal rebar. A total of 200 mangrove seedlings were planted at the selected restoration site for National Tree Planting Day in October 2019.



Airport Runway prior to the mangrove restoration



Section of Airport Runway after fencing and coir logs installation



Backfill of sand along shoreline behind coir logs at Airport Runway



Seedlings planted along the shoreline behind coir logs at Airport Runway

➤ Malcolm's Bay

Restoration of mangrove trees at the selected site was fully achieved. The area was restored by removing numerous dead tree trunks, which were blocking the natural flow of mangrove propagules. Monitoring of the area was conducted after 24 months (Dec 2017) and 36 months (Dec 2018) respectively.



Malcolm's Bay facing north following tree clearing work



Natural recruits of mangrove seedlings in plot 2 after 24 months, with "BREDS" community partner doing measurements

➤ Bogue

Restoration of mangrove trees at the selected site along the Bogue was fully achieved.



Bogue site 1 month following mangrove restoration



Bogue site 24 months following restoration works

➤ Lilliput

Restoration of the selected pilot site at Long Bay was fully achieved. The area was cleared and a topographic survey conducted to determine the volume of material to be removed in order to restore the natural forest (reversing the degradation process), improving hydrology to facilitate the natural recruitment of seedlings.



Lilliput with mound of fill material prior to restoration



Lilliput immediately following restorative work with heavy equipment

➤ West Falmouth

Restoration of mangrove forest at the West Falmouth site was unfortunately only partially achieved due to delays. The site suffers from human impacts such as charcoal burning and clearing, resulting in sparse vegetation in the forest. Upon further investigation, the site/land ownership was found to be uncertain and the lands are the subject of a court battle. However, low level mangrove replanting occurred in some sections in conjunction with the Living Oceans Foundation and the University of the West Indies. The project also entailed students growing

seedlings in a classroom nursery and using the site as a replanting location. The replanting was preceded by the removal of garbage, leveling of soil to allow wetting of the seedlings and an informal agreement with a charcoal burner to stay out of the planting area. The replanting was with the permission of one of the land owners. However, no large scale earth moving modifications were done due to the land ownership uncertainty.



Sparse vegetation as result of human impact on the mangrove forest in West Falmouth

FCF Call for Proposals

There was no Call for Proposals under the TFCA funds during the August 2019-July 2020 fiscal year. The decision was taken to have a Call in 2020/2021.

EFJ as Fund Administrator for the Special Climate Change Adaptation Fund (SCCAF)

The Adaptation Programme and Financing Mechanism (AP&FM) for the Pilot Programme for Climate Resilience (PPCR) Jamaica (the Programme) is being executed by the Government of Jamaica (GOJ) through the Ministry of Economic Growth and Job Creation (MEGJC) which has been assigned thematic responsibility for climate change. The MEGJC is implementing the Programme through its Project Executing Unit (PEU) – a division in the Ministry. The Planning Institute of Jamaica (PIOJ) is responsible for the overall coordination, in accordance with its role as focal point for the Climate Investment Funds (CIF) programme.

The general objective of the AP&FM Project for PPCR Jamaica is to generate information on approaches to address climate challenges and help mainstream climate change in development planning and processes, and disseminate results across sectors.

The Programme is structured in three (3) components:

Component I: Mainstreaming Climate Change Adaptation Measures. The objective of this component is to assist the mainstreaming of climate change into development plans and planning processes and demonstrate adaptation measures in a vulnerable watershed.

Component II: Creation of Financial Mechanisms. The objective of this component is to create innovative climate financing mechanisms to help support implementation of climate resilience within Micro, Small and Medium Size Enterprises (MSMEs) and Community Based Organizations (CBOs).

Component III: Knowledge Management. The objective of this component is to develop a knowledge management programme for the entire Jamaica PPCR.

It is **Component II** that is the primary focus of the EFJ's involvement. Component II involves the setting up and operation of (i) a Line of Credit, and (ii) a Special Climate Change Adaptation Fund (SCCAF) where loans and/or small grants, respectively, will be made available to micro, small, and medium enterprises (MSMEs), non-government organizations (NGOs) and community based organizations (CBOs), particularly in the agriculture and tourism sectors.

The EFJ was selected to be the Fund Administrator for the SCCAF and a Fund Administrator Agreement (FAA) was signed with the EFJ on July 28, 2016. We are now in year four (4) of this programme. To date, three Calls for Proposals have been conducted, which resulted in 135 grants awarded J\$621.62 million and being actively managed by the EFJ. The first Call (Call 2016) saw 29 proposals receiving grant awards of J\$132.94 million, the second (Call 2017) had 56 grant awards (including 5 awarded in February 2018 and one grant beneficiary who subsequently withdrew their proposal) valued at J\$249.20 million, and the third (Call 2018) had 51 grant awards valued at J\$239.47 million. Each grant was subject to a J\$5 million cap.

For 2019/2020 over 90 active projects were being monitored. Grant disbursements during the year totaled J\$82.67 million.

Phase II

The PEU recommended that a Grant Fund be established to allow community groups /organizations to access grant funding to implement projects to construct MICRO Check Dams on individual properties. **USD 1.2M of Grant Resources** was used to establish the Grant Fund for MICRO Check Dams. 1,800 MICRO Check Dams were constructed through the use of grants allocated to community groups/organizations.

The Grant Fund was similar to the Special Climate Change Adaptation Fund (SCCAF) Phase I. This arrangement was established via a new FAA in June 3, 2019.

During the financial year 6 organisations received grant awards. Total Disbursements were J\$124.83 million.

EFJ as Fund Administrator for the European Union / Forestry Department

The European Union (EU) and the Government of Jamaica (GOJ) have agreed on a programme of action geared towards Improved Forest Management for Jamaica (IFMJ) which will see the EU assisting the GOJ/ Forestry Department by way of Budgetary Support in implementing components of the National Forest Management and Conservation Plan (NFMCP 2016-2026). The aim of the NFMCP is the sustainable management and utilization of Jamaica's forest resources in order to enhance social and economic development and contribute to building the country's climate change resiliency programme.

In implementing a component of the action for IFMJ, a Specific Objective (SO) is geared towards enhancing the economic, social and environmental benefits of forests through the sustainable utilization of forest resources.

An expected result (ER) of this SO requires that forest communities, the general public as well as targeted groups of professionals have increased knowledge / capacity and participate in sustainable forest practices.

An activity under this ER is the provision of assistance to forest communities through the up-scaling of alternative livelihood projects to encourage the establishment of sustainable income generating project options.

The EFJ was appointed Fund Administrator of the monies disbursed pursuant to the IFMJ and a Fund Administrator Agreement (FAA) which commenced on February 1, 2019, will continue until May 31, 2022. We are now in year two (2) of this program. To date, three Calls for Proposals have been conducted, which resulted in 46 grants awarded J\$240 million and being actively managed by the EFJ. The first Call (Call #1 - 2019) saw 27 proposals originally receiving grant awards of J\$133.04 million. However, 1 proposal was decommitted while the scope and budget of another was subsequently reduced, resulting in implementation of 26 proposals valued at J\$126.42. The second (Call #2 - 2019) had 13 grant awards valued at J\$69.98 million, and the third (Call 2020) had 7 grant awards valued at J\$36.60 million.

Total Grant disbursements during the year were J\$134.45 million.

Financial Reports:

Due to the merger of the operations of the EAI and the TFCA funds, the EFJ has merged its financial reporting. The table below shows consolidated figures.

Summary Data (US\$)

Fund Data	Merged - EFJ Funds			
	Total			Total
	1993-2018	2019	2020	1993 - 2020
No. of proposals submitted	3,743	2	0	3,745
No. of proposals approved	1,325	2	0	1,327
Total approved funding for grants	49,011,276.66	4,458.23	-	49,015,734.89
Total disbursed funding for grants	44,154,846.72	204,325.45	-	44,359,172.17
Total of counterpart match (grantee cost-share)	41,120,443.55	-	-	41,120,443.55
Other leveraged matches (e.g. co-finance)	3,818,887.75	-	-	3,818,887.75
Total matching funds as % of approved	92%			92%
Amount spent on administrative costs	16,345,203.28	349,162.33	327,591.14	17,021,956.75
Interest and capital gained on investments	19,779,592.86	295,488.38	(115,094.49)	19,959,986.75
Fund balance at the end of the year	7,856,242.24	9,103,079.37	8,911,493.58	n/a

Exchange rate J\$146.89 to US\$1.0 (2020); J\$134.58 to US\$1.00 (2019); J\$133.26 to US\$1.00 (2018)

(2018 figures were restated after external audit)