



Planning Institute of Jamaica



# FACING CLIMATE CHANGE:

Jamaica's Journey with  
the Adaptation Fund



**GOJ/Adaptation Fund Programme**

Building the Resilience of the Agriculture  
Sector and Coastal Areas

**BREAKING THE TIDE, RENEWING THE LAND**





Jamaica, the largest English-speaking country in the Caribbean with over 2.8 million people, has been actively engaged in climate change awareness, adaptation and resilience building initiatives through the Government of Jamaica/Adaptation Fund Programme (GOJ/AFP).

In alignment with Goal 4 of the Vision 2030 Jamaica-National Development Plan, the GOJ/AFP is designed to secure the livelihoods of nearly 70 percent of the population living in coastal areas, as well as farmers in the vital agricultural sector that employs over 20% of the island's over 1.3 million workforce.



# PROGRAMME IMPACT



Since 2013, the Planning Institute of Jamaica (PIOJ) has been implementing the Government of Jamaica/Adaptation Fund Programme (GOJ/AFP) in partnership with a wide group of private and public sector stakeholders to protect livelihoods in rural and coastal communities, which are vulnerable to the adverse impacts of climate change.



The GOJ/AFP is funded by grant of approximately US\$10 million from the Adaptation Fund, which was established under the Kyoto Protocol of the UN Framework Convention on Climate Change.

The targeted interventions of the Programme have had a significant impact on building climate change awareness, and improving institutional and local capacity for adaptation and resilience in Jamaica.

GOJ/AFP impact has been most visible in the Agriculture Sector, where 2,500 farmers in over 100 communities have benefited directly from training and technical support provided by the Ministry of Commerce, Industry, Agriculture and Fisheries, and the Rural Agricultural

Development Authority (RADA) through the Farmer Field Schools and Water Users Group capacity-building modalities.

Farmers who have been trained and assisted under the GOJ/AFP have significantly increased their yields and earnings, and many have re-invested in their farms to achieve sustainable agribusinesses.

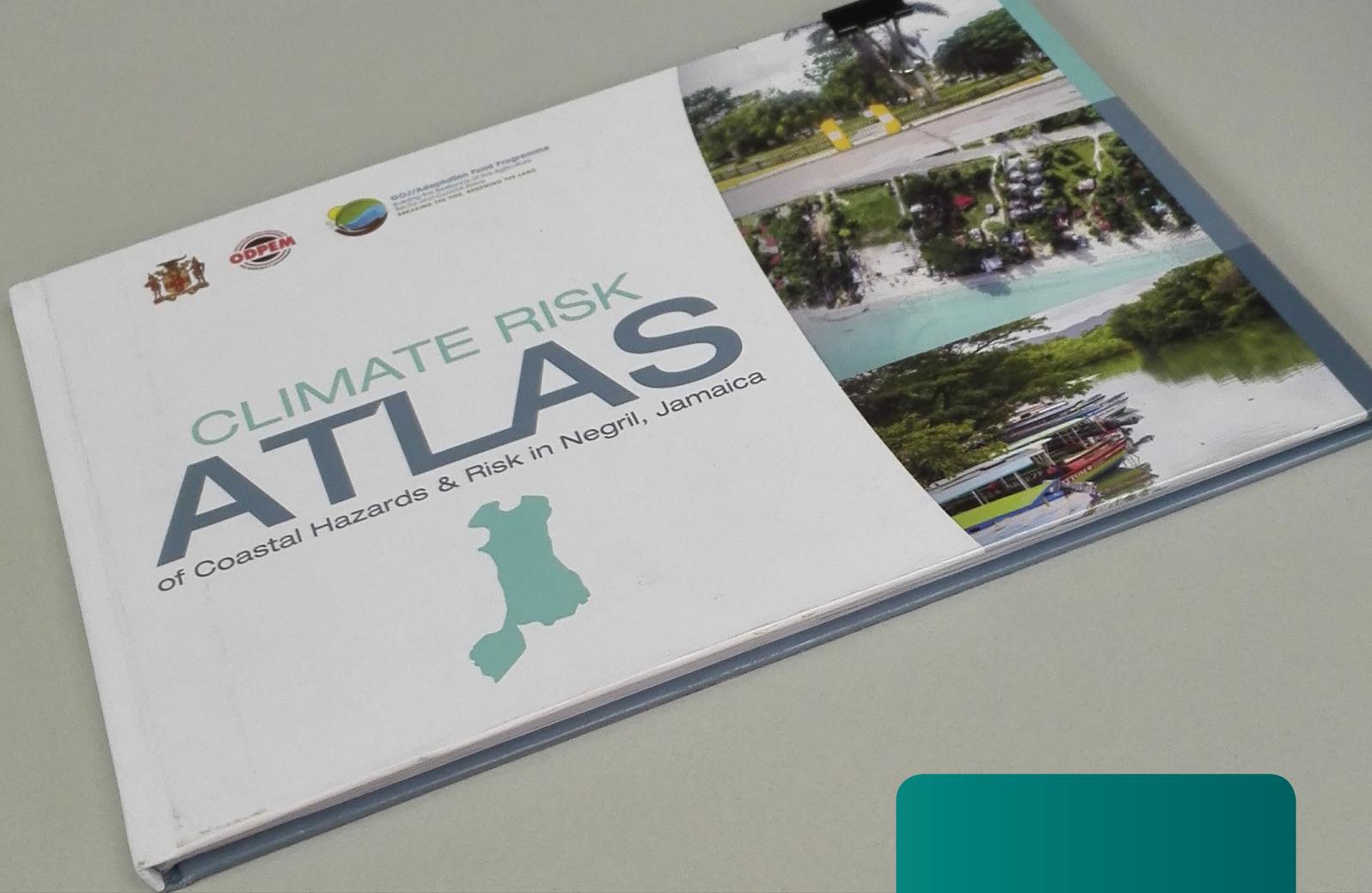
At the community level, the social intervention and capacity development elements of the GOJ/Adaptation Fund have been building sustainability among the farming communities through improved relationships and the advancement of gender equity.



## WHY ADAPT?



With a significant portion of the island's physical infrastructure, social and economic assets exposed to the risk of hurricanes, floods, storm surges and drought, Jamaica is highly vulnerable to climatic hazards. Over the past 17 years, data compiled by the PIOJ show damage and loss assessments amounting to J\$126 billion.



The Climate Risk Atlas was developed as a critical tool that will guide development planning for the community of Negril

By building climate change adaptation and resilience, the Government of Jamaica Adaptation Fund GOJ/ AFP's work to date, has contributed to the reduction of the heavy toll of disasters on targeted communities in many vulnerable rural areas in Jamaica.

# GOJ/AFP IMPACT BY THE NUMBERS

## \$6.9M

\$6.9M spent to conduct training in Disaster Risk Management and Business Continuity Planning for small businesses.

30 RADA extension officers trained as Farmers Field School Facilitators, and Land Husband Manual produced.

## 30



## \$27.6M

\$27.6m spent on training in smart agriculture.



11 land husbandry demonstration plots established.

## 11



## OVER 2300

Over 2300 farmers benefited directly from \$73.7m in production & productivity grants.



**21 WATER USERS GROUP**



21 Water Users Group established and strengthened to improve land and water management.

\$71m spent on rainwater harvesting and small-scale irrigation.

**\$71M**



**220**

220 gravity drip irrigation systems installed.



3,000 students in 16 rural schools benefited from support towards climate change awareness, school nutrition programmes and better environmental management.

**3,000 STUDENTS**



A Climate Risk Atlas produced to guide local and national-level planning in redefining high-water marks and setbacks in Negril.



Farmers trained and assisted under GOJ/AFP earned

**J\$1 BILLION**

from

**1,000 HECTARES**

**7500**

**TONS**

IRISH POTATOES REAPED

**174**

**TONS**

ONIONS REAPED

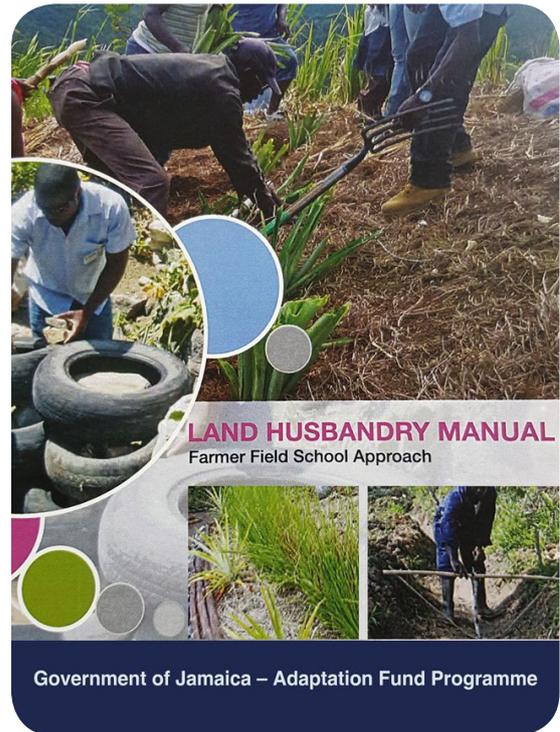
7500 tons of Irish potatoes and 174 tons of onions were reaped with inputs and support of the GOJ/AFP, positively impacting Jamaica's food security and import substitution strategy.

# BREAKING THE TIDE, ► RENEWING THE LAND



Land Husbandry Farmer Field School Graduation and Award Ceremony, 2017





The Government of Jamaica/Adaptation Fund Programme has been instrumental in influencing hundreds of farmers to adapt to climate-smart agricultural approaches and techniques



Clarendon farmers, Stanley and Roy (left), are all smiles because their fields withstood the recent flood rains due to the climate smart land husbandry treatments implemented under the GOJ/AFP.

# ▼ IN THEIR OWN WORDS...

## ALTON AND EULALEE HALL

MOTIVATED YOUNG FARMERS



"The GOJ/Adaptation Fund Programme is a **good programme**. I encourage it. I love it, because this is something we as farmers needed for years now! It **helped us a lot** as young farmers... it is not a lot of farmers who can buy a bag of fertilizer or a tin of onions, so this programme has been a help to us" - **Alton Hall, one of the shining examples of Jamaica's 'Youth in Agriculture' Programme, quickly realized and grasped the multiple opportunities offered by the Government of Jamaica/ Adaptation Fund Programme (GOJ/AFP).**

## good programme

"The GOJ/AFP is a major project in Clarendon and we have had **massive results**. We started with 30 farmers in the Farmer Field School and now we have over 100. Some farmers who were initially a bit reserved have now become lead trainers in the group; they are even assisting their neighbours miles away, passing on the information and **adopting the FFS technology** so that eventually we'll get adaptation right across the parish."



## BERTLAND BATES

RADA LAND HUSBANDRY OFFICER, CLARENDON

## more prepared

"At times past, you could try to determine the kind of weather in a particular month, now you can't predict any more because of climate change. However, with all the training I have received under the GOJ/Adaptation Fund Programme, I am **more prepared** and geared to put best practices in place in order to stem the great effects of climate change in order to produce to help myself, my community and our livelihoods."

- Patrick Solomon is an experienced farmer, who provides wise leadership for the PGR Water Users Group in St. Thomas, a parish that has had perennial droughts. Under the GOJ/AF Programme, Mr. Solomon and his fellow farmers are experiencing bountiful harvests due to better management of their land and water supply systems.



**PATRICK SOLOMON**

FARMER, PLANTAIN GARDEN RIVER IN EASTERN JAMAICA

## best practices



**PAMELITTA DANN**

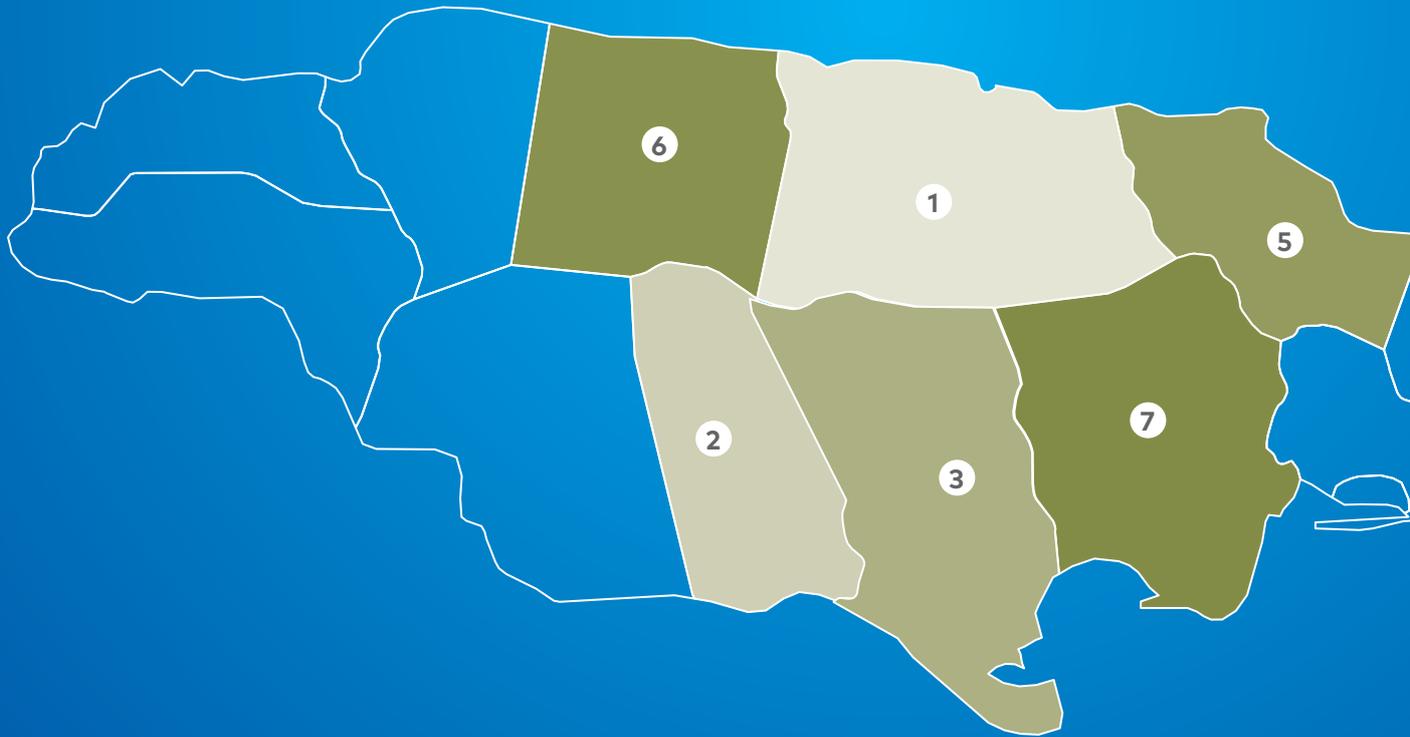
ONION FARMER,  
ST. THOMAS

"The GOJ/Adaptation Fund Programme came on board and offered me and the other farmers an irrigation system and introduced us to the Farmer Field Schools ways of learning, which **taught me the best practices** and rudiments of smart agriculture. It has really been great for my onion farm business."

Pamelitta Dann started out as an onion farmer in 2012, a year ahead of the introduction of the GOJ/AFP and suffered heavy losses during her first year of cultivation. Her onion farm business has blossomed under the Programme, which she credits for teaching her climate smart agriculture.

## BUILDING COLLABORATION, IMPROVING SUSTAINABILITY AMONG FARMERS

21 farmers' groups have been impacted by the GOJ/AFP ; 14 of them have been registered as formal legal entities.



Capacity-building activities to strengthen work relationships and networks in rural farming communities have been essential to the GOJ/AFP's efforts to achieve sustainability beyond the life of the Programme.

To this end, a rural sociologist was commissioned to work with the communities in the target parishes, to help to empower hundreds of farmers to unite in their efforts to adapt to climate change and to become more enterprising and self-sufficient.



Members of the Ballards River Farmers Benevolent Society receive mist blowers to assist in pest and disease management



## ST ANN

1 Seville Farmers Group  
Hinds Town/Orange Park (Progressive Farmers Benevolent Society)  
Blackstonedged Farmers Group  
Cowley Farmers Association  
McNie Farmers Association  
Walkerswood Farmers Association

## MANCHESTER

2 Medina Farmers Group  
Windalco/Kirkvine Council of Farmers

## CLARENDON

3 Ballards Rivers Farmers Benevolent Society  
Nine Turns Farmers  
Thompson Town Benevolent Society  
Sandy River Farmers Association  
John's Vale Farmers Association

## ST. THOMAS

4 Soho Farmers Benevolent society  
Yallahs Waters Users Group  
Plantain Garden River Cooperative

## ST. MARY

5 Jeffrey Town  
Carron Hall Farmers Association  
Enfield Farmers Association

## TRELAWNY

6 Braco Marketing and Production Farmers' Cooperative

## ST. CATHERINE

7 Colbeck Water Users Group



Mrs. Deneise Erskine-Jones, Rural Sociologist in discussion with the Seville Farmers Group



# IN THEIR OWN

**STACY ANN  
BECKFORD**

FARMER, ST. ANN



"I wasn't working for a while...and then I was introduced to the GOJ/AFP. Over the last 2 years, I have been **able to make a good living**, and I really enjoy what I do."

"Before the GOJ/AFP training, I was just using the same old techniques – furrowing. Now, since learning the new techniques, the amount of money I need to spend on chemical to spray the entire field, I could just use half of that. The yield that I get is much better and it uses less work force, less work power; **this is smart farming.**"



**GLADSTONE JARRETT**

FARMER AND TREASURER,  
SEVILLE FARMERS GROUP

**smart farming**

# OWN WORDS...

"Since the start of the Land Husbandry Training, I have seen a reduction in soil erosion, an increase in crop production as well as **improvement in the farmers' awareness** of these (adaptation) measures."

**ANDRE PRYCE**

RADA, ST. MARY;  
MOST OUTSTANDING  
FACILITATOR FOR FARMER  
FIELD SCHOOL TRAINING  
2017



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## better production

**YVONNE 'DONNA'  
BUDRAHAM**  
ENTERPRISING FARMER



"They started training sessions with us... they taught us about insects and how they affected the onions, Irish potatoes and other crops, what chemicals to use, what to look out for, and how to monitor the field in a 'W' format or an 'X-format'. I have learnt how to spray my onions to get a better yield. I get **better production** and more products because of the training."

- Yvonne 'Donna' Budrham, former hotel worker now enterprising farmer and employer of 5 male farm assistants.

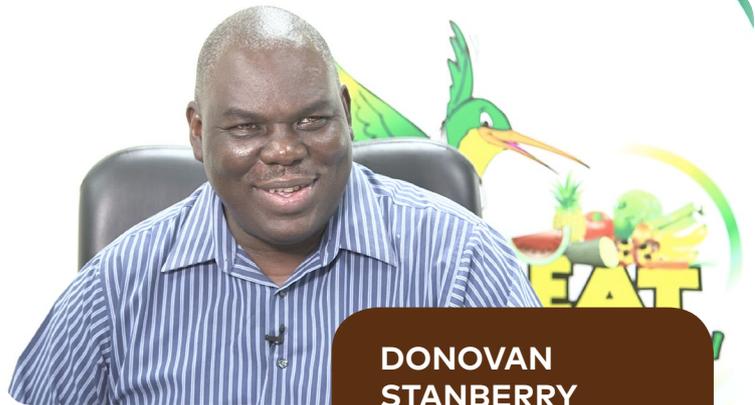


**UNA MAY GORDON**

PRINCIPAL DIRECTOR,  
CLIMATE CHANGE, MINISTRY  
OF ECONOMIC GROWTH AND  
JOB CREATION

"One of the great benefits of this project is that it operated at the community level where **lives were being impacted** by climate change, especially the lives of the farmers. This project has also **empowered** some of the farming communities and given them the voice that was required to enable them to take care of their own development."

"The GOJ/AFP has been a **game changer**, and we have seen the productivity gains. The adaptation is 2-fold: changing mind-sets to new technology, new ways of doing things and building resilience. We are seeing the **local impact of a global project** and we have to thank the Adaptation Fund for that."



**DONOVAN  
STANBERRY**

PERMANENT SECRETARY,  
MINISTRY OF  
AGRICULTURE



**CLAIRE BERNARD**

DEPUTY DIRECTOR GENERAL,  
PLANNING INSTITUTE OF  
JAMAICA

"The **knowledge gained** and demonstrated would be an **important legacy** of the GOJ/AFP...it is always important to show demonstration effect, and the Adaptation Fund provided that opportunity for us with the resources provided for this Programme."

# BUILDING CLIMATE CHANGE AWARENESS AMONG THE YOUTH

The GOJ/Adaptation Fund Programme has also taken the message of climate change adaptation to the Jamaican education system.

Financial and technical assistance geared towards improving school gardens and other climate change adaptation activities have been provided to schools in rural farming communities in the targeted parishes. Water Harvesting and Drip Irrigation

systems were also installed in several schools, and the Programme provided financial support for the construction of a Tunnel Ventilated House that will advance the teaching and learning experience and promote efficiency in production.

The Programme has supported many Youth in Agriculture activities such as the annual 4-H Achievement Day and National School Garden Competition.



# IMPROVING INSTITUTIONAL AND LOCAL CAPACITY

The Government of Jamaica/Adaptation Fund Programme has conducted training workshops to equip communities and local agencies with the required knowledge, skills and resources to respond effectively to the risks and challenges posed by climate change.

Many communities are not always aware of how human actions such as overfishing, poor farming practices and unregulated construction, can worsen the impact of climate change on natural resources.

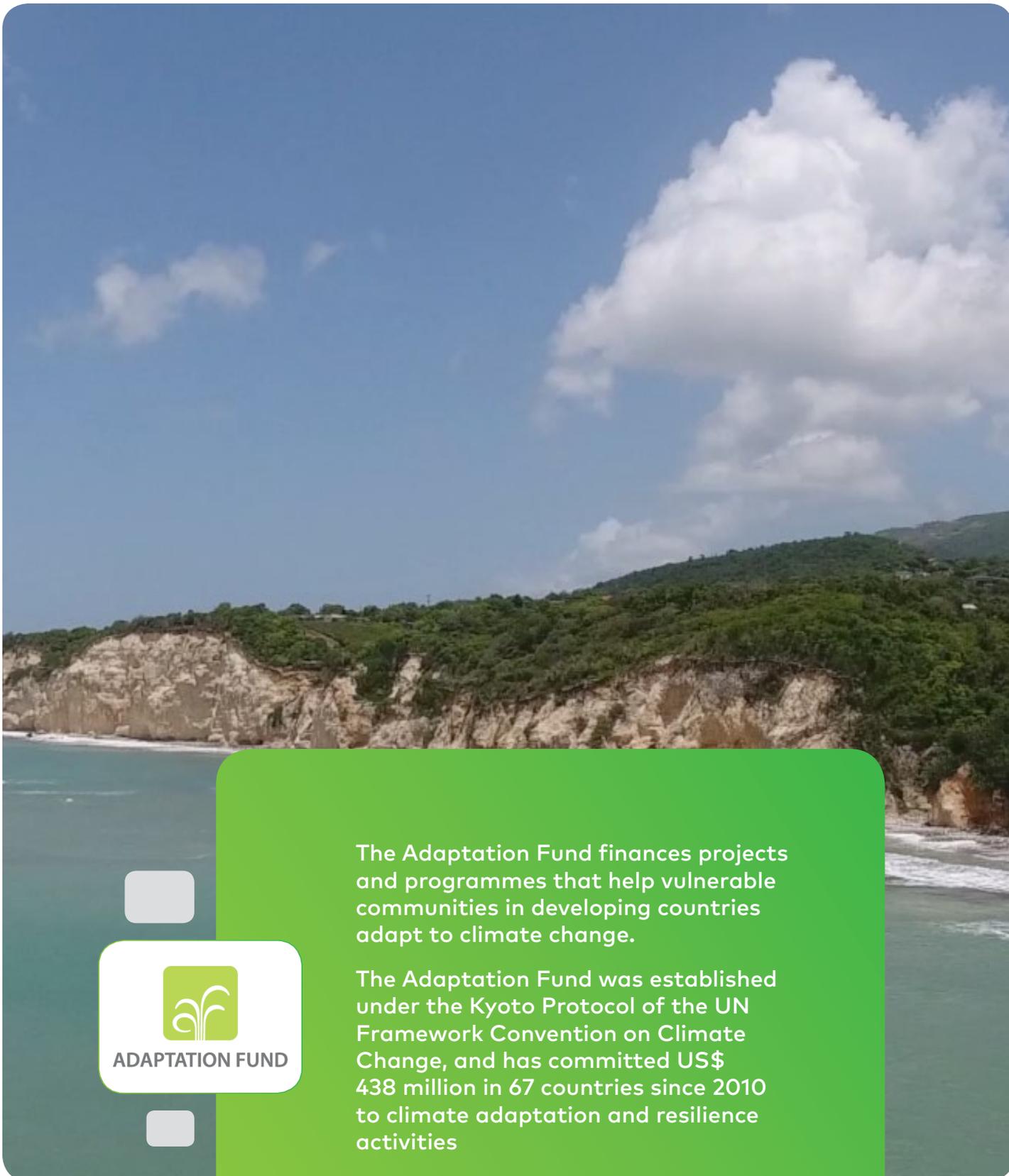


Farmers in Woodside, St Mary, proudly displaying A- Frames used to create contours across sloped lands which will help to alleviate soil erosion



The Ministry of Tourism and Entertainment as the Executing Entity for Component 3 of the Programme has collaborated with the Office of Disaster Preparedness and Emergency Management (ODPEM) and the National Environment and Planning Agency (NEPA) to deliver:

- Training of community members in basic disaster risk management, hurricane safety, earthquake safety, and climate change adaptation.
- Training in business continuity planning and basic disaster risk management for craft vendors, small hotel workers, fisher-folk, etc.
- Climate change awareness and education programmes
- Development of a Climate Risk Atlas for communities in and around the tourist resort town of Negril.



The Adaptation Fund finances projects and programmes that help vulnerable communities in developing countries adapt to climate change.

The Adaptation Fund was established under the Kyoto Protocol of the UN Framework Convention on Climate Change, and has committed US\$ 438 million in 67 countries since 2010 to climate adaptation and resilience activities

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MINISTRY OF TOURISM AND ENTERTAINMENT

MINISTRY OF AGRICULTURE AND FISHERIES

