

# Interdependence, Diffusion and Dissemination of Caribbean Crop Diversity in the Context of Climate Change

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# Caribbean Agriculture

Uniquely endowed  
Uniquely challenged

**Geography** – isolated yet near, a bridge between hemispheres

**History and Prehistory** – (agri)cultural crossroads for over 2,000 years!

**Diversity** – of crops, agricultural conditions, and farming cultures

**Interdependency** – at local, national, regional and global levels

**Vulnerability** - finite natural resources, emerging economies

- difficult transportation and communication

- hurricanes, earthquakes, volcanic eruptions

- **climate change**: what will it bring?

# Caribbean “Melting Pot”

## *Fusion Cuisine at its Best*





## The diverse origins of Caribbean crops

# The diverse origins of Caribbean crops

**Antilles** – allspice (pimenta), acerola, lima bean, mamee apple

**Amazonia** – cassava, tannia, yam, arrowroot, peanut, pineapple, guava, cashew, hot pepper, tobacco, cotton

**Mesoamerica** – sweet potato, maize, red bean, pumpkins, cacao, avocado, pawpaw, tomato, sapodilla,

**Africa** – cowpea, okra, yam, coffee, watermelon,

**South Pacific** – coconut, dasheen, breadfruit, jackfruit, ackee,

**South Asia** – rice, sugarcane, banana, citrus, mango, pigeonpea, nutmeg, ginger, neem, sorrel,

# Caribbean Crop Diversity

(Where is it?)

## ***Ex situ***

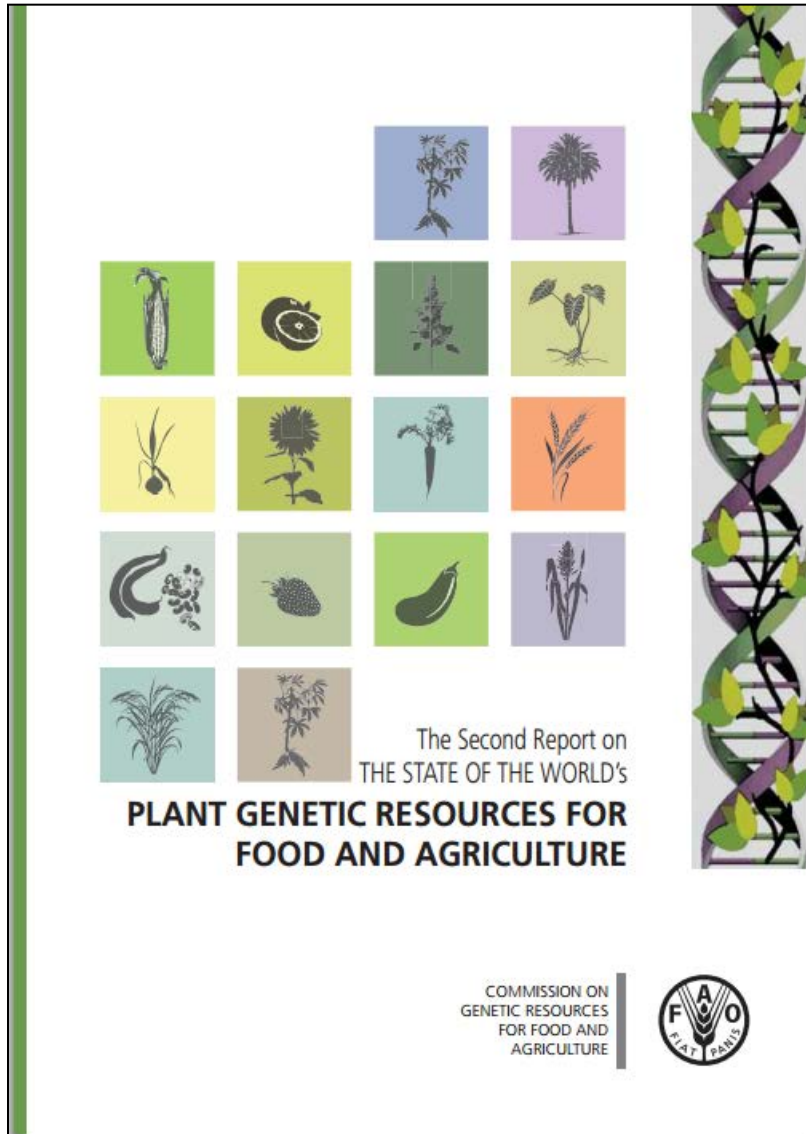
- Genebanks
- Universities and research institutions
- Development organizations
- Botanical Gardens

## ***In situ***

- On-farm (“landraces”, local varieties)
- Crop wild relatives

# 2<sup>nd</sup> Report on the State of the World's PGRFA

(FAO 2010)



## Country Reports

- Cuba
- Dominica
- Dominican Republic
- Grenada
- Guyana
- Jamaica
- Saint Vincent and the Grenadines
- Suriname
- Trinidad and Tobago

# Interdependence

- **Global** – international community (ITPGRFA)
- **Regional** – networks of partner nations (CAPGERNet)
- **National** – role of farmers, researchers, extensionists
- **Local** – rural farming communities and families, informal seed systems

**Interdependence**, at all levels, will *increase* with climate change.



# Opportunities for Access and Exchange

## *Ex situ*

- Root & Tuber crops - CIAT, CIP, IITA, Pacific Community
- Vegetable crops - AVRDC, USDA, CARDI
- Fruit crops - CATIE, Bioversity, USDA-Miami/Mayaguez/Hilo, Fairchild Tropical Gardens



## *In Situ*

- cassava, tannia, arrowroot
- tree fruits
- pineapple
- leafy vegetables
- hot peppers

