

# National Monitor of Guyana

## Role and Approach

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# The Role of the Monitor?

- Existing severity
- Projections
- Mitigate/reduce impacts
- Relief..
- ...Based on known/historical impacts
- Aid in developing drought and flood plans

# Drought impacts

- Droughts have different physical characteristics
- Society is dynamic so each drought event is superimposed onto society—impacts reflect changing vulnerabilities
- Does your country have a monitoring system for recording drought impacts?
- How do you incorporate impacts into a drought early warning system?

# Attributes of the CDPMN

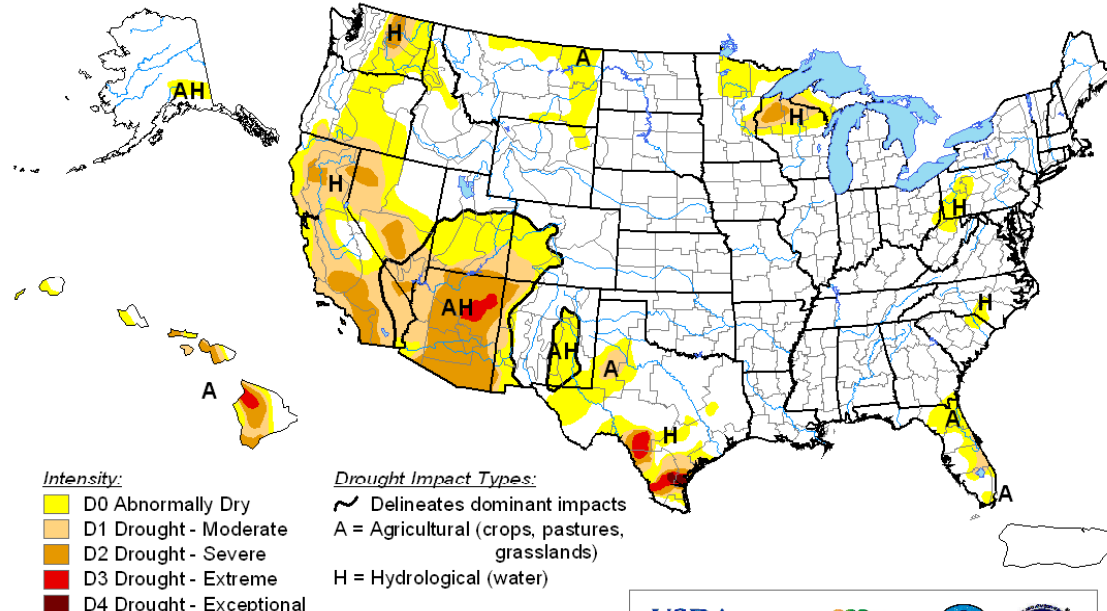
- Precipitation status monitored using a number of indices
- ...Standardized Precipitation Index; Palmer Drought Severity Index; Crop Moisture Index
- Other indicators (e.g. water levels, state of vegetation and ecosystems)
- Final precipitation status determined, by consensus, by a network of persons from different sectors, institutions and communities embracing the diversity in definitions and impacts of drought
- Short term and seasonal precipitation forecasts to provide a projection of future drought (1 - 6 months possible)

**CDPMN**

**NETWORK OF PEOPLE,  
AGENCIES, COMMUNITIES,  
BACKGROUNDS**

# Is something similar to the US Drought Monitor the goal?

## **U.S. Drought Monitor** November 24, 2009 Valid 7 a.m. EST



The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

<http://drought.unl.edu/dm>

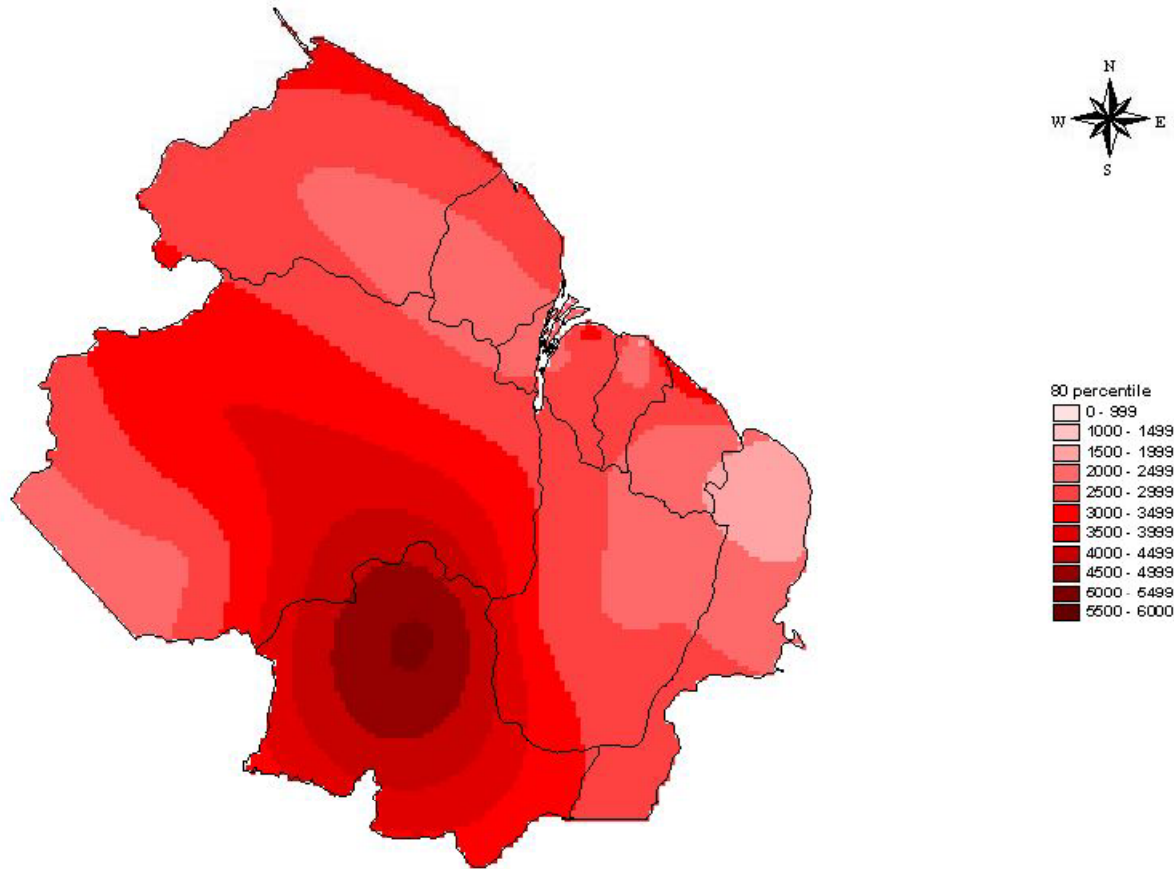


Released Wednesday, November 25, 2009  
Author: Eric Luebehusen, U.S. Department of Agriculture

# Challenges?

- Data, particularly in southern portion of Guyana
- ‘There are too many agencies with a role to play in the management and operation of Guyana’s drainage and irrigation systems. In addition, the institutional framework is characterised by a lack of clear policy objectives, inadequate supervision and coordination, multiple overlapping jurisdictions, significant variations among Regions in organisation and effectiveness, and imprecise roles of the various agencies. The institutions also differ in professional capability, in their knowledge and utilisation of modern technology, and in their managerial infrastructure’

# The 80th percentile of the annual total rainfall for northern Guyana





# Challenges?

- ‘The National Meteorological and Hydrological Station Network has been affected over the past two decades by a lack of spare parts and the rapid loss of skilled staff’
- Impacts of drought and flood recorded?

How can CARIWIN, CIMH  
Assist?

Once established can assist  
in enhancing plans and  
strategies

# 10-Step Planning Process

**Step 1**

**Appoint** a drought task force or commission

**Step 2**

**State** purpose and objectives of the drought plan

**Step 3**

**Seek** stakeholder participation and **resolve** conflict

**Step 4**

**Inventory** resources and **identify** groups at risk

**Step 5**

**Develop** organizational framework and **prepare** the drought plan



# 10-Step Planning Process

(continued)

- Step 6** **Identify** research needs and **fill** institutional gaps
- Step 7** **Integrate** science and policy
- Step 8** **Publicize** the drought plan, **build** public awareness
- Step 9** **Develop** education programs
- Step 10** **Evaluate, test** and **revise** drought plan

# CAMI

- Funded by the European Union's ACP Science and Technology Programme
- Partnership between CIMH (Applicant), WMO, CARDI, Ten Meteorological Services

# Ten National Meteorological Services

- Guyana
- Trinidad and Tobago
- Grenada
- St. Vincent and the Grenadines
- Barbados
- St. Lucia
- Dominica
- Antigua and Barbuda
- Jamaica
- Belize

The overarching objective of the Action is to increase and sustain agricultural productivity at the farm level in the Caribbean region through improved applications of weather and climate information using an integrated and coordinated approach.



# Specific Activities of the Action

- Preparation and wide diffusion of a user-friendly weather and climate information newsletter for the farming community
- Organization of regular forums with the farming community and agricultural extension agencies to promote a better understanding of the applications of weather and climate information
- Building capacity of the Meteorological and Agricultural Services and research institutions

# Cost of Action

- The total cost of the Action is estimated at **1,112,714.40 EURO**
- The Contracting Authority undertakes to finance a maximum of **720,388.20 EURO**, equivalent to **64.74%** of the estimated total eligible cost of the action

# Technical Approaches

- Training workshops for National Met Service and Agricultural Extension Service Personnel
- Attachments to the region of experts on (i) DSS for pest management (ii) Crop-weather models and Irrigation Models
- Attachment of CIMH and CARDI staff at international research institutes (mainly to finish/improve upon work begun at regional training workshop
- Publication and Dissemination of Agromet Bulletins and other forms of weather and climatic information for farming and wider agricultural communities