

# CTA Science & Technology SWOT Analysis Workshop

Caribbean Agricultural Research & Development Institute (CARDI):

**Programmes and Priorities** 

Hotel De Reehorst, Ede, The Netherlands
13-15 November 20113

















# **Mandates**

- To provide for the research and development needs of the agriculture of the Region as identified in national plans and policies
- To provide and extend the application of new technologies in production, processing, storage and distribution of agricultural products of Member States
- To provide for the co-ordination and integration of the research and development efforts of Member States where this is possible and desirable

















### Where?



















# What?

- Commodity development Crops/Livestock
- Germplasm management
- Emerging issues
- Protected Agriculture
- Biotechnology development
- Technical systems and services
- Promotion of Science, Technology and Innovation
- Invasive species management
- Climate change
- Soil and water management
- Strategic Alliances



**CARDI** 

# How

Bottom-up & Client-Led

**Working Together** 

Transparency & Accountability





# Who (Beneficiaries, Clients, Partners)











- Consumers
- Farmers and Farmer Organisations
- Ministries of Agriculture
- National Organisations
  - UTT, NARI, NAMDEVCO, SRC
- Regional and Hemispheric Organisations
  - CARICOM, CFNI, CEHI, IICA, UWI
- International Organisations
  - FAO, CFC, CTA, CGIAR



















# **Institutional Capacity**

- Agronomy
- Entomology
- Plant Breeding
- Horticulture
- Post Harvest Technology
- Soil Management
- Livestock Science
- Biotechnology
- Biometrics
- Market Research & Analysis
- Information systems



# Why?

- Regional food import bill now stands in excess of US 4 billion dollars
- Rising unemployment, poverty, hunger and crime
- Decline in traditional sectors
- Global economic issues
- Global environmental issues

















# **Key Binding Constraints**

- Limited financing and inadequate new investment in agriculture
- Deficient and uncoordinated risk management measures including praedial larceny
- 3. Fragmented and unorganized agricultural private sector
- 4. Inadequate research and development
- 5. Outdated and inefficient agricultural health and food safety systems
- 6. Inefficient land and water distribution and management systems;
- 7. Inadequate transportation systems particularly for perishables
- 8. Weak and inadequate information and intelligence systems, weak markets, and lack of linkages and participation in growth market segments
- 9. Lack of skilled human resources.

















### The Issues

- Food and nutrition security that takes into consideration the availability of complex carbohydrate crops, diet changes, modern lifestyles with implications for health as well as energy and ageing populations.
- The numbers of poor and undernourished continues to rise even as global food production rises; the majority of these continue to live in rural areas
- Climate change and resulting ecosystems degradation are going to affect the rural poor disproportionately.
- The future growth of energy demand and increasing price volatility are major challenges for agriculture and food security.



### **Context Now**

"Climate Has Changed. Climate Will Change. Climate Demands Change."

- Increased temperatures in the Caribbean over the last 40 years
- Increased drying predicted over the next two decades
- Increased instability in the financial markets
- Energy and food price volatility





#### Roots and tubers

- Climate ready collections
- Value adding/processing
- Clusters and commodity groups
- Value chain analysis
- Enterprise development





### Livestock development

- Climate resilience
- Sustainable production systems
- Value adding/processing
- Clusters and commodity groups
- Value chain analysis
- Enterprise development





#### ICTs

- Livelihood improvement
- The delivery of extension and advisory services
- On farm production and productivity
- Market information systems
- Knowledge generation, diffusion and application
- Enterprise development







### Climate change



- Crop modelling



Pest modelling and IPM



Agro meteorology



- Water management
- Protected agriculture



- Germplasm management
  - Crops
  - Livestock











Stakeholder engagement



Evidence from science and practice



The Caribbean Week of Agriculture



Workshops



• The Alliance



- COTED
- Media engagement
- Policy briefs
- Public consultations



















# Conclusions

- Climate change
- Global financial challenges
- Energy volatility
- Effective partnership between research and those it serves
- Focused and effective research for development (AR4D)
- Global collaboration, particularly South-South
- Sustainable intensification



# THE END

# THANK YOU

