USAID/Kenya and East Africa Planning for Resilience in East Africa through Policy, Adaptation, Research, and Economic Development (PREPARED) Project

COMMUNITY BASED CLIMATE CHANGE ADAPTATION ASSESSMENT

Presentation by Scott McCormick
Fifth International Conference on Climate Services (ICC5)
February 28th, 2017
- East African Community (EAC/LVBC)
- IGAD Climate Prediction and Applications Center (ICPAC)
- Famine Early Warning System Network (FEWS NET)/USGS
- Regional Centre for Mapping of Resources for Development (RCMRD/SERVIR)
- PREPARED Project, implemented by Tetra Tech
Regional USAID Programs:

- Support and work through regional organizations
- Promote best practices and innovations
- Harmonize regional policies, protocols, practices, and tools in support of transboundary (e.g. climate change adaptation)
- Build capacity of regional institutions to deliver on their mandates
- Complement bilateral and multilateral programs
Mainstream climate change adaptation strategies – conduct Vulnerability, Impacts and Adaptation Assessment (VIA) in Lake Victoria Basin (LVB CC Adaptation Strategy and Action Plan)

- Improve access to and sharing of climate change information

- Support the growth of the EAC Climate Change Coordination Unit (CCCU)

- Improve access to and future management of adaptation funds – Regional Implementing Entity (RIE) accreditation for the EAC Secretariat
Conducting Vulnerability, Impacts and Adaptation Assessment (VIA)

- VIA baseline reports completed for five IPCC sectors
- VIA future climate projections completed for 2030, 2050, and 2070 (for RCP 2.6, 4.5, and 8.5)
- Impact scenarios for five IPCC sectors completed
- Options Development Workshop with 85 representative stakeholders held July 21st – 22nd in Entebbe
- Lake Victoria Basin Climate Change Adaptation Strategy and Action Plan (LVB CCSAP) to be submitted to LVB SECOM in 2017
- Completed Community Climate Change Adaptation Assessment (C3A2) and implementing projects within 17 community adaptation plans
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<th>Rank</th>
<th>Adaptation Option</th>
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<tbody>
<tr>
<td>1</td>
<td>Strengthen, integrate and coordinate national food security EWIS to be responsive to priority user needs</td>
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<td>2</td>
<td>Develop &amp; implement community—based climate change resilient programs on water catchment management</td>
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<td>3</td>
<td>Promote climate—smart agriculture programs (e.g. applied R&amp;D, risk management, crop/livestock insurance)</td>
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<td>4</td>
<td>Develop climate information hub in the EAC region</td>
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<td>Develop community—based biomass reduction and efficiency best—practices models</td>
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<td>6</td>
<td>Prepare regional approach to address community—based climate change impacts on wildlife and tourism</td>
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<td>7</td>
<td>Develop and sustain financing mechanism &amp; regional policy framework</td>
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COMMUNITY CLIMATE CHANGE ADAPTATION ASSESSMENT – WHY DID WE DO THIS?

• VIA requires information about impact climate variability and change (CVC) and adaptation strategies at community level

• Need to correlate climate science and information with community perceptions and impacts

• Based upon experiences from the USAID African and Latin American Resilience to Climate Change (ARCC) Project, developed and conducted C3A2 approach
Assessing Community Perceptions of Climate Variability
What is GeoCLIM?

Climate Hazards Infra-Red Precipitation With stations

CHIRPS

Station Data

Smart Interpolation

Blended/gridded rainfall
ICPAC Training Team was developed and trained

5 Partner States trained in GeoCLIM and contributed station data to build gridded datasets (35 year database)

Merged regional GeoCLIM gridded dataset built and housed at ICPAC

Working with Regional WMO office and ICPAC to support GeoCLIM and integrate with CLIMSOFT

Using GeoCLIM for Crop Insurance pilot in Kenya
CHIRPS Driven- Decision-Support-Tools

support analysis and inform policies in the EAC region

- **GeoCLIM**: Climate data-visualization and analysis tool for "climate risk mapping"
- **GeoCOF**: Statistical forecasting & Interpretation tools that allows for automated "seasonal forecasts & Early Warning with improved spatial scale"
- **GeoWRSI**: Basic crop modeling tool for crop monitoring, forecasting and "agricultural risk mapping"
- **GeoMOD**: "Statistical tool that allows for downscaling future climate scenarios"
- **VI Mapping**: "Geospatial tool that assists technical teams and stakeholder identify sector – specific vulnerabilities"
Rainfall Variability Gridded Data Sets Using GeoCLIM
C3A2 Tools

- Local government level:
  - Adaptation Attributes
  - Story Telling

- Community level:
  - Community Protocol
  - Risk Mapping
  - Techno Transect
  - Resilience Ranking
  - Community Calendars
  - Story Telling
  - Adaptation Attributes
  - Community – based Adaptation Plans (CBAPs)
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The community has been accustomed to four seasons yearly with two rainy seasons.

Dry seasons have been extended and the short rains (SOND) often fails.

Farmers perceive shorter SOND season, with onset in November and rains ending in December.

Experienced long – rains starting later in April, instead of March.

Trends indicate shorter rains, longer dry seasons and increasing intensity during the rains.
Community Climate Change Adaptation Assessment (C3A2)

Objectives

1. Identify climate change “hot-spots” at community-level, their risks and adaptation strategies (C3A2)

2. With communities, develop adaptation options and projects

3. Support small scale pilot climate change adaptation projects at community level (17 communities)

Using C3A2 results to plan and implement community adaptation projects

Source: VI mapping supported by PREPARED Project through CIESEN, RCMRD, FEWSNET and EAC Partner States
DEVELOPING AND IMPLEMENTING COMMUNITY CLIMATE ADAPTATION PLANS
CONCLUSIONS

- C3A2 is one of many approaches to identifying risk, hazard and vulnerability due to climate change.
- At least in the Lake Victoria Basin, based upon the C3A2 results, communities perceive CVC and feel the impacts on their production and livelihoods.
- Perceptions, resilience, and adaptation knowledge provides key information in facilitating CBAPs and implementing community – based adaptation projects.
- Process could be extremely useful in designing and implementing “climate – smart” agriculture programs.
- Difficult to find “home” for institutionalizing or sustaining the approach and methods.
Asanteni

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