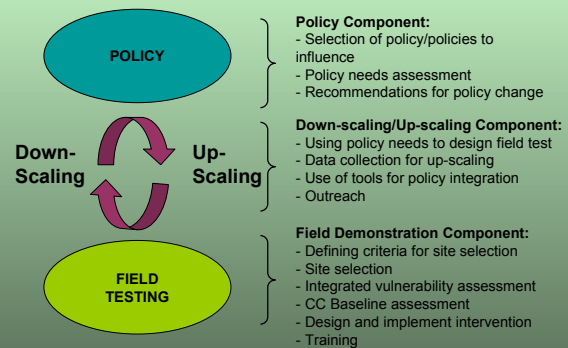Increasing Community Resilience to Drought in Makueni District, Kenya

"Integrating Socio-Economic Information and Community Capacity building to respond to Drought"

Maggie Opondo

UNFCCC Workshop: 10-12 March 2008, Port of Spain

Pilot Project Conceptual Framework

POLICY

Down-Scaling   Up-Scaling

FIELD TESTING

Policy Component:
- Selection of policy/policies to influence
- Policy needs assessment
- Recommendations for policy change

Down-scaling/Up-scaling Component:
- Using policy needs to design field test
- Data collection for up-scaling
- Use of tools for policy integration
- Outreach

Field Demonstration Component:
- Defining criteria for site selection
- Site selection
- Integrated vulnerability assessment
- CC Baseline assessment
- Design and implement intervention
- Training

Pilot project

- GOALS
  - Reduce community vulnerability to drought exacerbated by climate variability and change
  - Gather information from the field and relate it to the information needs for policy makers in order to inform relevant policies
- FUNDS: United Nations Environment Program (UNEP)
- Executing Agency: African Centre for Technology Studies (ACTS), International Institute for Sustainable Development (IISD) and Centre for Science Technology Innovations
- BUDGET: US$300,000
- DURATION: 3 years (2006 – 2009)

Sakai Community in Makueni District

- Site selection
  - Vulnerability (sensitivity) of mixed farming livelihoods to drought or climate change
  - High concentration of population hence possibility of maximizing project impact
  - Ease of up-scaling since the livelihood is widespread in Makueni District
  - Ease of access
  - Piggy-back => drought Management activities of the Arid Lands Resource Management Project (ALRMP)

1

Project activities. . .1

- Putting together a multi-sectoral implementation project team

- Needs and priorities assessment and rapid vulnerability assessment at community level

- Community awareness and sensitization on the reality of climate change

- Identification and documentation of specific constraints to communities adaptive strategies

Project activities. . . 2

- Participatory engagement for preparation of action plans based on the identified problems and needs to enhance adaptation strategies

- Mapping of baseline information through GIS

- Matching information needs at the policy level with community needs to scope field activities and priorities

- Development of a website: www.csti.or.ke

Generation of socio-economic data

- Secondary data collection (Statistical Abstracts, HWMES, Poverty Reports)
- Interactions with communities by headquarter and district teams
  - Household Survey (Research)
  - Participatory stakeholders engagement
    - ✓Meetings with end users
    - ✓Meetings with policy makers at district level
  - Meetings with the Communities
  - Discussions, Interviews, Focus Group discussions

Socio-economic data

- Baseline information:
  - Demographic characteristics
    - Gender
    - Age
    - Level of education
    - Household composition

  - Socio-economic indicators
    - Household incomes & expenditures
    - Household food security (Child nutrition)
    - Landuse characteristics
    - Energy (fuels)
    - Access & availability of water
    - Production systems
    - Seed production & bulking activities
    - Coping mechanisms

2

Socio-economic data

- Mapping of baseline information through GIS
  - Makes interpretation easier
  - Good for comparison

- Policy review
  - Identification of policies that reinforce adaptation
  - Plans to mainstream successful interventions in the current and emerging policy process
  - Plans to cover gaps in the current policies
  - Plans to make adaptation issues more explicit in the current policies

Outputs . . . 1

- Participatory project site selection and baseline surveys

- Presentation of the project concept and components for consideration and approval by the District Steering Group (DSG)

- Community consultation and awareness creation through a series of 3 main community meetings *(Barazas)*

Outputs . . . 2

- Downscaling of weather forecasts, packaging into brochures and dissemination through community meetings, local radio announcements and a newspaper

- Participatory selection of pilot farmers and self help groups
  - Out of the total population of 4800 people comprising approx. 500 households, 150 people attended the community selection baraza
  - An initial 60 farmers from 5 villages were selected out of which 40 were to be prioritized based on a selection criteria designed by the community
  - Making a total of **40 initial selected** farmers in the first season - this has been up scaled to 120 farmers altogether

Outputs . . . 3

- Capacity building/training of pilot farmers:
  - Soil and water conservation
  - Weather prediction and interpretation
  - Importance of Drought escaping/tolerant crops
  - Choice of the appropriate drought escaping/ tolerant crops/ varieties for the area
  - Importance of early land preparation and planting

- Farmer led crop variety identification and selection

- Procurement, distribution and field application of farm yard manure for early land preparation and planting

Outputs . . . 4

- Acquisition and distribution of an assortment of drought tolerant crop seeds to initial 40 pilot farmers

- Provision of extension services to participating farms
  - 98% of pilot demonstration farms dry planted by October 2007
  - 85% of other non-pilot farms practicing dry planting
  - 90% germination achieved before end of the first week of rains
  - Crop performance monitored at every stage and emerging cases noted by the farmers and the field extension staff

- The 40 farmers got a bumper harvest in early 2007

- This process was repeated for the long rains (MAM) and short rains (OND) and a total of 120 farmers have benefited from the seed pilot project by end 2007

Some stages to first bumper harvest

Farmer's bean crop as a result of current enhanced rains

The positive impact of water management efforts in the demo plots

Healthy maize crop

2005/01/19

A typical farm without intervention

A maize crop in a demo site in an adjacent farm

A farmers field day

A trainer at work in one of the field days

2005/01/19

Opportunities

- Community running off with project

- ALRMP in up-scaling and funding of project activities (climate info, sand dams, alternative livelihoods)

- Draft policy =>incorporation of climate change

4

Lessons?

- Participatory stakeholder engagement

- Encouraging community capacity building (training, demos, diversification of livelihoods)

- Database – "An academic pursuit or sustainability goal?"

Conclusion

The participation in and ownership of the project by local communities ensuring sustainability and replicability (upscaling)

The project has enabled social learning by enhancing common knowledge, awareness, and skills by engaging different stakeholders in sharing diverse perspectives, and thinking and acting together