Holistic approaches to community adaptation to climate change, Namibia.



Momentum for Change Lighthouse Activities Doha, Qatar, 5 December 2012







CLIMATE CHANGE IMPACTS IN NAMIBIA; the most arid country south of the Sahara

- Droughts interspersed with floods
- Increasing temperatures
- Land degradation and desertification are increasingly a threat to agricultural productivity



- Human impacts: Deforestation and soil destructive farming methods
- Rapidly declining food and water security
- Lack of education on the causes and effects of climate change increase risk





THE COMMUNITY BASED ADAPTATION (CBA) Programme

The Community-Based Adaptation Programme (CBA) is a five-year United Nations Development Programme (UNDP) global initiative funded by the Global Environmental Facility (GEF) within the Small Grants Programme (SGP) delivery mechanism.

The UN Volunteers partners with UNDP and GEF/SGP to enhance community mobilization recognize volunteers' contribution and ensure inclusive participation around the project, as well as to facilitate capacity building of partner NGOs and CBOs. In addition, funding is provided by the Government of Japan. The CBA's goal is to strengthen the resiliency of communities to address climate change impacts. The programme is piloted in **Namibia**, Bangladesh, Bolivia, Guatemala, Jamaica, Kazakhstan, Morocco, Niger, Samoa and Viet Nam.

WHO WE ARE AND WHAT WE DO

- Creative Entrepreneurs Solutions (CES): Namibian
- Our motto: We identify resources where people only see problems. We view the communities as the solution, not the passive beneficiary. We begin with the assumption of competence and unleash resources in the communities we are serving.
- We employ a holistic and practical bottom-up approach where participants are encouraged and supported to form Self Help Groups (SHGs).
- We mobilize partners and support systems to communities in urban and rural areas

CBA PROGRAMME FORMATION PROCESS IN NORTHERN NAMIBIA

<u>October 2009</u>

- UNDP-GEF SGP Planning grant : USD 12,000
 December 2009 - December 2011
- UNDP-GEF SGP CBA grant for six adaptation concepts: USD 300,000



COMMUNITY PARTICIPATION

- Local and national consultations with government, NGOs, CBOs, traditional authorities and communities for programme formulation
- Current number of CBA participants: 455 Self Help Group members (youth, women and men out of which 85% are women and 45% are youth)



• 250 Grade 9 and 10 pupils





PARTICIPATORY VRA AND ADAPTATION CONCEPTS DESIGN WITH COMMUNITIES AND THEIR LOCAL SUPPORT SYSTEMS

- Vulnerability Reduction Assessment (VRA) is a form of participatory impact assessment which is part of a comprehensive Monitoring and Evaluation framework.
- It is a tool for creating baseline information and to measure impacts.
- This assessment is based on FOUR locally defined impact INDICATOR QUESTIONS answered in an H FORM which allows the capturing of both qualitative and quantitative portfolio level responses.



 On average the CBA groups scored 0.96 points <u>less</u> vulnerability in the mid-term VRA compared to the initial VRA sessions.





ADAPTATION CONCEPTS DESIGNED BY AFFECTED COMMUNITIES

- (1) Awareness building interventions on climate change and coping strategies. Social mobilization of community members into Self Help Groups;
- (2) Improving dry land crops production through the application of soil improving methods such as conservation agriculture and horticulture by container cultivation of vegetable in micro drip irrigation systems;





- 3) Use of improved seed and new crops such as sunflower, rice and oyster mushrooms;
- (4) Ensuring water security by flood and rain water harvesting for agricultural irrigation, livestock and fish farming;
- (5) Ensuring food security using harvested flood and rain water for irrigation of vegetables;
- (6) To develop and introduce an energy efficient cook stove and agroforestry.



IMPLEMENTATION STRATEGY: BOTTOM-UP APPROACH



CES

 Plans, organizes and coordinates CBA implementation with SHGs, support system and other stakeholders
Direct support to CCs and CBA SHGs
Procurements, trainings and reporting



Support system

• Creates enabling environment • Offers support, trainings and services to CBA SHGs



Cluster Coordinators

• Coordinates the CBA SHGs • Planning and organizing at community level



Self Help Groups

 Addressing CC issues of their concern and implementing adaptation strategies, improving livelihoods and creating savings



Vulnerability Reduction Assessments

• Establishes baseline information and measures vulnerability reduction at various stages of implementation • M & E

MOBILIZATION OF SUPPORT SYSTEM / COUNTERPARTS FROM THE PUBLIC, CIVIC AND PRIVATE SECTORS

- Regional Councils
- Ministry of Agriculture, Water and Forestry
- Ministry of Fisheries and Marine Resources
- Ministry of Education





- Traditional Authorities
- NGOs (the CONTILL project, Namibia National Farmer's Union, Hand-in-Hand RSA, Orphan and Vulnerable Children organisations)
- Faith based organisations
- University of Namibia
- Other Private Sector Agencies

SUPPORT SYSTEM

Adaptation to climate change does not occur in a vacuum.
Well organized and empowered community mobilization is fundamental, and an active and engaged support system for capacity building, services and subsidized inputs from public, civil and private sectors is vital.





UNDP GEF-SGP AND UNV; NATIONAL AND INTERNATIONAL SUPPORT



BUILDING CLIMATE CHANGE AND ADAPTATION AWARENESS

Plant Mahangu

- A Community Toolkit; comprehensive resource to learn about climate change in general and specific impacts/risks for Namibia
- A series of 8 tools designed to be used in participatory working sessions that will assist practitioners and communities in their daily livelihoods and potential strategies to adapt
- All participating communities were trained and schools use the toolkit as a teaching tool

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ADAPTATION STRATEGIES PREFERRED BY THE PARTICIPATING COMMUNITIES

- The energy efficient EzyStove
- Micro drip irrigation systems
- Conservation Agriculture for dry land crops
- Adaptation in school





EZY STOVE

The EzyStove was developed together with Ergonomidesign and rural and urban women concerned with rapid deforestation, desertification and respiratory illnesses.

It contributes to:

- Improved health due to less indoor air pollution;
- Reduced greenhouse gases emissions globally;
- Local environmental benefits by reducing pressure on wood reserves;
- Economic benefits due to household savings on wood.





LOCAL MANUFACTURING

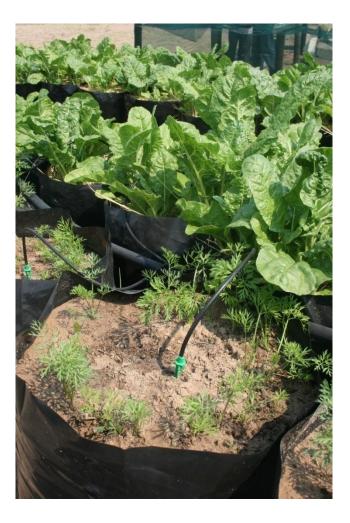


- Easy to assemble
- Creates assembly and sales jobs
- Each EzyStove reduces 0.5 metric tonnes emissions of CO 2 per year

MICRO DRIP IRRIGATION USING POLY BAGS

- Allows farmers to improve soil in a container cultivation system for up to 8 years in the same poly bags
- Is water efficient, irrigates to the roots
- Is mobile and high production output





RIPPING AND FURROWING CONSERVATION TILLAGE METHODOLOGY; combating soil degradation, drought and flood effects



- Increases yields with 500%
- Conserves soils
- Cracks open the hard plough pan and creates in-field water harvesting





COMMUNITY BASED ADAPTATION IN SCHOOL





- A. Practical exercises and experiences gained makes it easy for the learners to interpret the theoretical information on climate change and adaptation taught in the classroom. It helps them master the lessons compared to only using textbooks. All in all, it gives them insight and wisdom about the topics and it simplifies the lessons.
- B. Examination results have improved significantly.
- C. Learners have already started to producing vegetables at their homes and are informing their parents about adaptation methodologies.

DRIVERS OF ADAPTATION

- Desperation in the face of climate change impacts is a powerful drive to actively engage in adaptation. This drive must be recognized, captured and supported to become a positive and creative energy.
- The hunger for Why? What? and How? Again, a powerful drive to act.





LESSONS LEARNED

 Adaptation to climate change does not occur in a vacuum.
Organized and empowered community mobilization is fundamental, and an active and engaged support system from public, civic and private sectors is vital.



• A pattern of preferred choice of adaptation methods by communities emerged:

1. After the initial awareness raising and formation of SHGs community members firstly aimed for securing their household food security by applying conservation tillage, improved seed and new crops as well as micro drip irrigation. Energy efficient EzyStoves were called for by all households.

2. Once household food security has been ensured SHG members venture into adaptation measures such as water harvesting, aqua culture and cattle fodder production carried out as a group.

- CBA should be inclusive of all ages and gender.
- CBA is a powerful tool to CC adaptation, to improve household and community food and water security, and to improve livelihoods by enterprise creation.

SUSTAINABLE COMMUNITY BASED ADAPTATION

Support system to SHGs who are engaging in adaptation must include:

- Bottom-up approach
- Cluster Coordinator capacity building
- Climate Change and Adaptation trainings
- Skills trainings
- Subsidized inputs and services
- Group savings are necessary, and micro loans to CBA SHGs would be helpful



OPPORTUNITIES FOR THE WAY FORWARD IN ADAPTATION, NAMIBIA

- Voluntary carbon market finance opportunities to scale up subsidized EzyStoves to 200,000 households in Namibia;
- USAID is funding through CLUSA International a programme for scaling up Conservation Agriculture to 10,800 Namibian smallholder farming households. The programme is based on training demonstration farmers who in their turn will train their neighbours.

THANK YOU!

