CC DARE: Climate Change and Development – Adapting by REducing Vulnerability

A Joint UNEP/UNDP Programme for Sub-Saharan Africa funded by the Danish Ministry of Foreign Affairs

24 Jan 2012

NEWSFLASH

CC DARE Spurs Crab and Fish Farming in Mozambique

Offshoots of Using Small scale Ecosystem-based Adaptation approaches to addressing climate change and food security

Mozambique is one of the eleven countries funded by the CCDARE Programme jointly implemented by UNEP and UNDP using funds from the Ministry of Foreign Affairs of Denmark. In an effort to minimize climate change risks on development efforts in this country, CC DARE is charting the course with the implementation of timely-targeted activities that remove barriers impeding the integration of adaptation into development planning. One of the projects amongst those implemented in the country is a national project on crab and fish farming with aim to enhancing the contribution of seafood productivity in addressing food security and poverty alleviation under climate change, for sea shoreline communities.

With an expected increase in human population to 9 billion by 2050, we will need to draw from other sources of food productivity such as seascape in addressing the additional food supply. The case study from Mozambique showcase intensive crab production to supplement food productivity especially protein needs of the population, and also addressing poverty through alternative livelihoods. Following the extended coastline of Africa and the intensive population of coastal cities, capitalizing on seafood productivity provides an important source of food security in Sub-Saharan Africa and the potential for up-scaling and expanding the programme to cover the whole of Africa and other developing country regions.

Building on a pilot phase implemented in February 2010 in collaboration with IUCN Mozambique, the purpose of this project was to improve the adaptive capacity of local community by ensuring that the governance framework recognizes the importance of ecosystem-based practices as an adaptation measures to climate change. As a result of this project ecosystem-based adaptation practices have been introduced and implemented leading to:

Established 2 fish ponds; established 70 crab growth cages; assessed 3 species for farming and 1 crab specie; trained 28 persons in fish and crab farming including local family members who are beneficiaries; 36 in hydrological rehabilitation; 22 in mangrove seed harvesting; 14 in the establishment of mangrove nursery and 78 in mangrove plantation; rehabilitated the hydrologic system in the mangrove reforestation area: established 4 channels and a small dike for irrigation of the mangrove reforestation area; conducted 6 trainings (Establishment of fish ponds and crab cages; monitoring of fish ponds and crab cages; establishment of mangrove nursery; hydrological rehabilitation mangrove seed harvesting; mangrove plantation etc.

The implementation of the fish and crab farming has increased change resilience to local community. Fishermen, who previously relied solely on fishing in the sea for their livelihood, have crab farming as an opportunity to overcome the crisis of catches in the fishery activity. The crab farming is also having an effect in reducing the deforestation of mangroves at the local level. The implementation of the project has brought a new mind-set in the local community and the local government has set up a District Development Fund to support the community to starting the fish and crab farming projects. The outcomes of this project have helped the college of Marine Science to develop a fish and shrimp farming in the same area.

Families that once depended only on fishing activity at the sea are now involved in fish and crab farming sells the products from these activities, diversifying their livelihoods and ensuring food security. The mangrove is a nursery for many marine species, most of which are important for food like fish, crabs and shrimps. Reforestation of mangrove has boosted the functioning of this ecosystem which in turn has improved fishery productivity.

Quotes from the beneficiaries

"At the moment the project built 2 fish ponds and about 70 crab cages benefiting directly a total of 30 family members. The production of fish and crab is about to start and families that once depended only on fishing activity at the sea are now involved in fish and crab farming which provide employment to them and will contribute to the income and food security through the sell and consumption of crab and fish from farming. The project has a major impact in reducing absolute poverty and activities such as these will receive special attention for funding by District Development Fund" local mayor said. ", ***Veronica Rungo: Local mayor (Chief of the Zongoene Administrative Post)***

"Local fisherman used to go fishing and the catches were decreasing more and more. Some family members used to cut trees from the mangrove to sell in Xai-Xai town for charcoal, firewood or construction material. These peoples were identified and involved in the CC DARE project activities.

They were trained in mangrove recovery, crab and fish farming. Now they have gained new skills and tools for mangrove reforestation, making and monitoring crab cages and fish ponds thanks to the CC DARE project," local leader says. ***Vasco Mula: Leader of Zongoene Administrative Post headquater (leader of the first echelon): crab and fish farming area***

"Many people were unaware of the ecological importance of mangrove, because it was thought that could only be used for firewood, charcoal and building materials, but the awareness campaigns on this ecosystem provided by the project brought about another approach that was well understood by the community. The example of this is the strong community involvement including schools in the mangrove planting campaigns. The crab farming is also having an effect in reducing the deforestation of mangroves at the local level because it also created awareness in local communities in the need for conservation of this ecosystem since they learned that they can use the mangroves for farming and get more benefits without necessarily degrading them" ***Luís João Nhanzimo: Leader of Mahielene community within Zongoene (mangrove reforestation area)***

This success story from Mozambique is just one amongst many under the CC DARE programme that has helped removed barriers for the implementation of climate change adaptation actions in addressing food insecurity in Sub Saharan Africa.

For more information visit: www.ccdare.org

For further information please contact:
Richard Munang Richard.Munang@unep.org;
Johnson Nkem Johnson.Nkem@undp.org

Mangrove planted area

Crab growing in a cage