GCP/MYA/009/EC - Support for Sustainable Agriculture and Rural Livelihoods in Northern Rakhine State (NRS) of Myanmar

FAO and EU: unlocking rural potential

Glance at major activities carried out during Jan. 2008 - Sep. 2009

"Everything else may wait but not agriculture." Agriculture, as the largest private enterprise in NRS, has been and will continue to be the lifeline of the NRS economy at least in the foreseeable future. No doubt, several problems are concurrently running in NRS but food security requires immediate attention. The proper solution to this problem lies in attaining food self-sufficiency and it could be achieved mainly by supporting sustainable agriculture and rural livelihoods.

1. The Project:

1.1. Immediate Objectives: The project is designed to address three immediate objectives: *i. Crop Intensification and Diversification* including the development of water harvesting and localised small scale irrigation; *ii. Livelihoods Diversification and Enterprise Development* aimed at expanding the range of income generating options and energy sources through small scale livestock production, value adding opportunities and bio-gas; and *iii. Capacity Building, Institutional Strengthening and Sustainability* intended to create community level organizations to support Objectives 1 and 2.

1.2. Approved Project Budget: The approved budget for three-year (Nov. 2007 – Nov. 2010) project is Euro 1,973,123. The project is 100 % funded by the European Commission (EC).

2. Major Activities Carried Out by the Project:

2.1. Special Rice Production Programme (SRPP) in NRS to Mitigate the Impact of Nargis Cyclone & High Price of Rice: The objective of the scheme is to bring a substantial increase in the productivity of low productivity areas. Under the scheme, the project had taken up using current budget available with the GCP/MYA/009/EC project, to improve the supply of inputs like quality seeds (Foundation, Certified, Hybrid and Quality Declared seeds) – 288.484 MT along with chemical fertilizers, pesticides, sprayers, water pumps, farm implements and technology.

2.2. Water Harvesting: *"Water is the life blood of plant life and is indispensable to any living system."* Project distributed 52 water pumps, 360 watering cans, installed 2 drip irrigation systems, and constructed 2 small earth dams.

2.3. Soil Fertility, Fertilizers and Integrated Nutrients Use: '*Crop without fertilizer is a lamp without oil'*. Fertilizers and manures are the king pins of improved technology contributing about 40 – 60 % increase in productivity of food grains, irrespective of soil and agro-ecological zone. But without an integrated supply and use of plant nutrients from chemical fertilizers and organic sources, increased production is not possible. Project distributed 225 MT chemical fertilizers and 12.500 MT bio-composer (Organic manure).

2.4. Vegetable Production: The project supported vegetable production by providing 545 kg vegetable seeds, 15 MT potato tuber seeds, and 5,000 meter plastic sheets.

2.4.1. Reaching the Unreached Through Women's Groups: Women farmers in NRS may be poor and illiterate, but at same time they are the principal force in the struggle against misery, backwardness and dependency. A total of 12 Women's Groups in three Townships namely Maungdaw, Buthidaung and Rathedaung were formed mainly for vegetable and watermelon cultivation. Each group has 15 members making the total participants 180.

2.4.2. Workshop on Vegetable: Project held a workshop on "Vegetables for Sustainable Food and Nutritional Security" during Dec. 22-23 in Yangon.

2.5. Oilseed Crops: It has been the first priority of the state to increase domestic rape-seed mustard, groundnut and sunflower production, so as to reduce its dependency on import of edible oil as far as possible. Project distributed 15.134 MT seeds of oilseed crops and installed 13 oil mills.

2.6. Support to Cowpea Production: Cowpea is one of the most successful crops in

NRS. Project distributed 28.155 MT seeds of cowpea.

2.7. Integrated Pest Management (IPM): As a part of sustainable agriculture it must be seen as a component of *Good Agricultural Practice (GAP)* or *Integrated Crop Management (ICM)*. Project distributed 52 kg & 32 litres chemical insecticides & fungicides, 500 litres neem (organic) insecticide and 15 knap sack sprayers.

2.8. Production of Quality Declared Seeds (QDS) of Rice, Cowpea and Groundnut: The seed growers multiplied seed for processing locally and distributing in the region.

2.9. Sustainable Animal Production From Small Farm Systems: The project has attached the highest priority to sustainable development of both plants and animal agriculture in its programme.

2.10. Distribution of Chicks for Family Poultry Production (FP): The major emphasis was placed on boosting poultry production through backyard poultry production. Project distributed 10,000 chicks, and vaccinated 470,000 chicken against Newcastle and Fowl Cholera diseases.

2.11. Installation of Cold Chain Facility: Project installed 3 solar-powered refrigerator systems to store livestock vaccines.

2.12. Distribution of Bucks: The project distributed 150 bucks of improved tropical breeds, namely, Htin Sam and Jadeni (Jamunapari and local cross-bred) for natural breeding.

2.13. Distribution of Sows: The project distributed 120 sows of improved breed namely Large White, Duroc and Bark Shine in Rathedaung Township.

2.14. Installation of Oil Mills: The project has installed 13 oil mills to add the value by processing oilseeds into oil.

2.15. Installation of Biogas Plants: Project has installed 75 biogas plants.

2.16. Agricultural Extension: Project carried out 6 farmer's field day, 25 field trainings, and published manual on 'Oilseed Crops, 77 pages' and proceedings of 'Vegetable Workshop, 181 pages', and so on.

3. Success Towards a Sustainable Development of Agriculture: The low productivity coupled with increasing demand for food due to population growth has led to the cultivation of fragile and unproductive marginal land which, in turn, has increased the incidence of natural hazards such as landslides, flooding, and siltation. NRS' traditional farming system displayed a careful balance of crops, livestock, and forestry. Livestock provided manure to crops, and also draft power for cultivation. Forest and cropping sectors provided feed to livestock. The depletion of forest has been breaking this finely tuned farming system and has been initiating a vicious cycle of low productivity and environmental degradation.

Success: *"The president of the South Commission and former president of Tanzania, Dr. Julius Nyerere, once remarked: "Many expatriate experts come to me and say that Tanzania has a rich productive potential. I tell them I am tired of hearing about the production potential of my country. What I want is production."*

Lately, a few patches of major success have begun to appear in NRS agriculture. Here are few examples.

- Production of cowpea as a winter crop has increased.
- Production of vegetables has also increased. Farmers have increased their income many folds.
- Poultry production has become an important source of income mainly for women.
- Small-scale irrigation systems managed by Farmer's Groups through water harvesting activities and use of water pumps have been exemplary.
- Production of summer paddy has increased.
- Installation of biogas plants has decreased the use of fire woods.

4. Acknowledgements: Project would like to acknowledge and thank the European Commission (EC) for funding the project GCP/MYA/009/EC.

Pls. contact Mr. Bir Mandal, Chief Technical Advisor at Bir.Mandal@fao.org for further information.