14th Set of Grant, July 2007

Post tsunami Coastal Fishery issues in Sri Lanka, by Asha Gunawardena and Kanchana Wickramasinghe

The Fisheries sector was most adversely affected by the tsunami of 2004 and in the rehabilitation effort received greater attention from donors. However, the delivery of post tsunami livelihood related benefits for the affected fishers was not a systematic and planned effort and ended up with poor targeting and distributional issues. Absence of accurate reliable pre-tsunami data on the composition of the fishing fleet and genuine fishers especially the small scale fishers due to informal nature of their jobs was a main problem. A recent government survey revealed that only 46% of the genuine beneficiaries (pre-tsunami boat owners) had been compensated with new boats and the number of boats reported as repaired is larger than the boasts reported damaged. Asha intends to study the issues related to the targeting of beneficiaries especially the distributional impact of post tsunami livelihood interventions such as boats for tsunami affected fishers. This would help her understand the current problems of fishers with reference to income, profitability, accessibility to fishing, input availability and input and output prices and thereby recommend relevant policy options to address current fishery management issues.

Valuing Health Benefits of Air Pollution Reduction in Kathmandu Valley, by Naveen Adhikari, Nepal

There is increasing air pollution in Kathmandu valley due to vehicular emissions, poor infrastructure, re-suspension of street dust and litter, black smoke plums from bricks kilns and refuse burning. The number of vehicles has grown at a rate of 17 % per annum and the complex topography of Kathmandu often has resulted in limited air pollution dispersion. The government has taken initiatives to improve the air quality, including enactment of Industrial and Environmental act, vehicle emissions exhaust test, ban on three wheelers diesel tempos, introduction of electric and gas powered vehicles, import of EURO-1 standard vehicle, ban on new registration of highly polluting brick kilns, etc. Naveen will study whether environmental policies to control the air pollution in valley have worked or not. He will also estimate benefits to different stakeholders in regard to air pollution regulation initiatives. This could have implications for long term alternative energy initiatives in the valley.

The recreational use value of Diyawanna Oya wetland eco- system: An application of travel cost method, by Thusitha Dilhani Marawila and Manoj Indika Thibbotuwawa, Sri Lanka

Urban wetland eco systems generate a wide spectrum of ecosystem services. Diyawanna Oya wetland, an important recreational site in the greater Colombo area of Sri Lanka is prone to severe threats from reclamation and constructions for urban development purposes having recreational and non-recreational benefits. There are proposals for more such projects for

constructing leisure centers, a golf course, apartment blocks, cricket and football grounds, etc. Thusitha will study the preferences of regular visitors and their willingness to conserve this endangered resource using the Travel Cost method (TCM). The findings may give directions for policy formulation on sustainable utilization and conservation of this natural ecological system.

The Relative Efficiency of Water Use in Bangladesh Agriculture, by Nasima T Chowdhury, Bangladesh (Study Grant)

Water is scare in the non-monson months in Bangaldesh and farmers cultivating boro rice, wheat and some other winter crops have to rely on irrigation. There are many large surface water irrigation projects but some of these became ineffectual after 1974 due to the operation of the Farakka Barrage. Since then many farmers switched to 2 rice crops and vegetables and other crops which require less water instead of 3 rice crops during the boro season. This was the time when government promoted groundwater irrigation and farmers moved to shallow tube wells instead of deep tube wells. Nasima will estimate the actual cost of irrigation water for alternative modes of irrigation by farmers in in 3 districts of the Northwest region (NW) of Bangladesh for different boro (winter) rice varieties. This region faces the severest water scarcity during the dry season due to low annual rainfall.

Valuation of the Storm Protection Services of Mangroves forests under storm surges and cyclones, by Sakib Mahmud, Bangladesh (Conditional Grant)

Bangladesh has been periodically hit by cyclonic storms impacting on life and property. Climate change is expected to further increase the frequency and intensity of the cyclones raising fears greater expected damage in future. One of the natural barriers to storm surges is the mangrove forest in the coastal areas of Bangladesh and these services of mangroves are not taken into account while deciding on land use choice. Consequently, these forests have rapidly declined due to various human interventions. Sakib wishes to examine the whether the mangrove aforestation efforts is an effective strategy for sustainable development.

Estimation of marginal cost of electricity and elasticity of demand for ground water in agriculture in Karnataka, P.S.Srikantha Murthy, India (Conditional Grant)

Overdraft of groundwater resources is resulting in declining groundwater levels, initial and premature failure of wells, increased real cost of well irrigation and inefficiency and inequity in groundwater irrigation in the hard rock areas of peninsular India. Karnataka, the Southern state is no exception to this phenomenon. Srikantha wishes to study if the provision of electricity subsidy either in terms of flat rate tariff, or in terms of low pro rata tariff is responsible for indiscriminate drilling of irrigation wells and pumping groundwater. He would examine responses of farmers to differential pricing of electricity for irrigation in Karnataka. This has implications on efficiency of groundwater use as well as on equity. Depending upon the price elasticity of demand, the appropriate pricing strategy for farmers can be developed and will be relevant for the proposed groundwater legislation in Karnataka.

Decentralization in Forest Management: Changing Incentives And Attitudes Through JFM, by Rucha Ghate, India (Conditional)

The first 'participatory' forest policy in India (1988), of which the Joint Forest Management (JFM) was the most acclaimed fallout, not only accepted that the forest dwellers have the first claim on the resource, but also promoted their active involvement in the management of the resource. Rucha Ghate had studied 23 (erstwhile) forest villages spread across Maharashtra (India) in 1985. She will revisit these villages and study the whether there has been a shift in attitudes between communities and the forest department towards each other. She will also look at impacts of incentives offered under JFM including programmes for poverty alleviation.