9th Set of Research Grants, July 2005

1. An Economic Evaluation of the Effects of Effluent Water Discharged from Raw Natural Rubber (NR) Manufacturing Industries on Human Health in Sri Lanka, Jagath Edirisinghe , Sri Lanka

Natural rubber manufacturing industries discharge the effluents generated during rubber production into natural waterways without much treatment, thus posing threat to human health. Jagath, in this study, will identify the health impacts of such effluents and will value these impacts. .In addition, he will estimate the costs of abating effluents in order to identify suitable policy options. Jagath's study is part of the Rubber Research Institute's efforts to develop and promote abatement technologie s for effluent discharge.

2. Economic Valuation of Health and Agricultural Impacts of Households: Case of Cement Air Pollution in Puttalam District of Sri Lanka, C. Bogahawatte and H.M.S.J.H. Bandara, Sri Lanka

Even though the problem of air pollution is often associated with metropolitanareas, certain natural resource based industries operating in suburbs or rural areas also cause air pollution. In his study, Herath will try to investigate the impact of rural air pollution caused by a large cement factory in Puttalam district of Sri Lanka. This research seeks to estimate the magnitude of pollution impacts on health and agricultural productivity for households in proximity of the cement factory. Herath will also assess how changes in pollution standards can contribute to better health and improved agricultural production.

3. Poverty, Environment and Microcredit: An Assessment of the Micro-credit Based Social Forestry of Proshika in Bangladesh, M. Jahangir Alam Chowdhury, Bangladesh

Long-term sustainability of micro-credit based social forestry programs will depend on their capacity to alleviate poverty. The poor are likely to lose interest in participating in such programs if they do not generate adequate income. In this study, Jahangir seeks to examine the impact of 'Proshika,' a micro-credit program that seeks to improve the environment through social forestry and reduce poverty. The study will be based on a careful use of quantitative program evaluation tools.

4. The Productivity of Pesticide in Cole Crops Production: A Case Study of vegetable production pockets of Bhaktapur Districts of Nepal, Ratna Kumar Jha and Adhrit Regmi, Nepal

Several studies have claimed that the use of pesticide for pest control in production system is unsustainable. In this study, Ratna Kumar will examine the contribution of pesticide to crop yields and identify the determinants of pesticide use in Cole crop production. The study also seeks to find out how farmers perceive pests and assess their beliefs and practices related to crop protection problems. This study will directly contribute to Nepal's pesticide policies since one of the principal investigators is part the Plant Protection Directorate of the Ministry of Agriculture.

5. Cost Benefit of Indoor Air Pollution Control Initiatives in Nepal: A Case Study at Rashuwa District, Min Bikram Malla Thakuri, Nepal

The smoke caused by household burning of biomass as fuel is one of the four leading causes of death and disease in the world's poorest countries. A number of measures have been developed and disseminated that aim to reduce exposure to indoor air pollution. While the physical impacts of adopting an intervention, such as reduced emissions or improved fuel efficiency can be observed directly, the value in terms of monetary benefits is less evident. This study aims to generate empirical evidence on the cost and benefit of specific indoor air pollution control initiatives in rural Nepal that have provided households with different types of stoves and chimneys.

6. Community Forestry and Poverty Reduction in Nepal, Ridhish Pokharel, Nepal

Nepal's community forestry program was originally initiated in order to achieve the national goal of poverty reduction. But, despite two decades of successful implementation, the program's contribution to poverty alleviation is far from satisfactory. In this study, Ridhish seeks to examine how community forestry funds,

which are established through the collection of fees, fine and donations, contribute to poverty reduction. Investments made from these funds will be carefully scrutinized as well as the factors that contribute to these investments.

7. Economic Valuation of Storm Protection Function: A Case Study of Mangrove Forests of Orissa, Soudamini Das, India

The role of mangrove forests in providing protection to the lives and properties of coastal communities during natural calamities such as cyclones is well-known. However, there has been no systematic attempt to value this crucial protective service. In this study, Soudamini aims to evaluate the storm protection function of mangrove forests and compare it with the storm protection value of Casurina forests that are planted by the government as cyclone buffers. She also seeks to compare the relative costs of different anti-cyclone measures.

8. Vulnerability of Indian agricultural farmers to climate change and globalization, K. S. Kavi Kumar, India

This proposal brings together two important issues that concern Indian agriculture in the future – global climate change and globalization. The study seeks to examine different strategies that might effectively reduce the vulnerability of Indian farmers to these combined forces. Kavi Kumar proposes to use an agent based social simulation model (ABSSM) to analyze the effectiveness of existing mechanisms to reduce farmer vulnerability. The ABSSM will be based on secondary and primary data from two specific locations, Anantapur district in Andhra Pradesh and Chitradurga district in Karnataka, in south India.