

THE SOUTH ASIAN NETWORK FOR DEVELOPMENT AND
ENVIRONMENTAL ECONOMICS

News - November, 2000

The South Asian Network for Development and Environmental Economics (SANDEE) is a new network that hopes to bring together analysts from the different countries in South Asia to address environment-development problems. SANDEE's mission is to strengthen the capacity of individuals and institutions in South Asia to undertake research on the inter-linkages among economic development, poverty, and environmental change and to disseminate practical information that can be applied to development policies.

Dear friends and colleagues:

Welcome to the second edition of SANDEE's newsletter. Much has happened over the last few months and this update should help you catch up with our activities. Read on...

**RESEARCH AND TRAINING
MEETING HELD IN DHULIKHEL,
NEPAL**

Approximately 40 people met in Dhulikhel from September 21-24 for SANDEE's second biannual meeting. As part of this meeting, SANDEE hosted a one-day discussion on training needs in the region. Trainers and university faculty from Pakistan, Bhutan, Nepal, India and Bangladesh identified opportunities in their own countries and ways in which SANDEE could support on-going activities.

As a result of the training discussions, SANDEE is currently exploring two options: 1) a 3-4 week regional training course in environmental economics (in collaboration with one or more university in the region), oriented towards university teachers who are trained economists and are interested in expanding their interests to environmental economics; 2) advanced one-two week courses on special topics in environmental and resource economics for researchers and teachers of environmental economics. We will keep you informed as our plans develop.

Further details about the training workshop are presented on SANDEE's website – www.sandeeonline.org. This includes a new survey conducted by the Sustainable Development Policy Institute on institutions

in Pakistan that offer environmental economics courses.

**SANDEE'S FIRST SET OF RESEARCH
GRANTS**

SANDEE is glad to announce its first set of research grants. Based on the response to SANDEE's 'request for proposals', nineteen proposals were selected and researchers were invited to present their proposals at Dhulikhel. SANDEE's technical advisory committee decided that six proposals would be supported with grants (please see SANDEE's website for the entire list of the proposals presented). The selected proposals are:

1. *Property Rights and Natural Resources: Equity, distributional implications and socio-economic performance of common property resources.* Bhim Adhikari, Nepal. The proposal investigates how socioeconomic asymmetry of resource users influences the efficiency of common resources use. The main goals of the project are to understand how heterogeneity among households can affect equity of resource distribution, empowerment, and the welfare of community members.
2. *Environment, Interest Groups, Property Rights and Local Self-government.* Pranab Mukhopadhyay, India. A system of local-self government in the Konkan region of India will be studied to

understand the dynamics of the interaction between institutions and stakeholders. The main question the study will address is how natural resources are impacted when one form of endogenous self-government is replaced by another that is exogenous in nature. These will lead to a better understanding of the implications of property rights for the use of natural resources.

3. *Migration and Induced Farm Investment under Fragile Natural Resources.* Amita Shah, India. The main objective of this study is to examine the nature of the linkages among migration, poverty, and land productivity. Of particular interest is how this relationship is influenced by state interventions in the form of watershed programs.
4. *Interrelationship between Poverty, Private Property and Common Property Natural Resource Management in South India.* R. Balasubramanian, India. This proposal seeks to understand how individuals and communities are coping with the degradation of communal irrigation tanks in Southern India and how these coping strategies in turn impact the performance of tanks.
5. *Industrial Pollution Control: Choosing the Right Option.* Vinish Kathuria, India. Despite numerous laws and new institutions, success in pollution abatement in India has been limited. This study seeks to understand why traditional methods have failed. It seeks to assess the effectiveness of current environmental policies and the feasibility of options such as pollution charges and two-tier monitoring to control pollution in industrial estates.
6. *Health Impact of Vehicular Air Pollution: An Empirical Estimate from Dhaka, Bangladesh.* Mainul Huq, Bangladesh. The challenge of this study is to assess the impact of vehicular pollution on human health in the absence of daily ambient air quality data, which is unavailable in Bangladesh. In this project, the investigator seeks to use information available from frequent 'hartal' days in Dhaka (when mechanized

vehicles are not allowed on the streets) to assess impacts on health .

GUIDELINES AND DEADLINE FOR 2001 GRANTS COMPETITION

SANDEE would like to announce its 2001 April research grants competition. Researchers are requested to send proposals on three broad themes: 1) Poverty and Natural Resource Management; 2) Economics of Environmental Health; and 3) Sharing of Transboundary Resources. **The deadline for receiving research proposals is January 8, 2001** (research guidelines are attached).

We would like to encourage collaborative projects between researchers from different countries and economists and non-economists. As before, priority will be given to junior faculty and researchers. Please send your research proposals electronically to Manik Duggar at manikd@sandeeonline.org or by mail to Manik Duggar, Program Manager, SANDEE, C/o IUCN Nepal, PO Box 3923, Kathmandu, Nepal Tel +977-1-528761; Fax +977-1-536 786.

We have also attached a paper that may be helpful to you titled 'How to design a research project in environmental economics?' by David Glover, Director of the Economy and Environment Program for South East Asia. We hope this paper is useful to you in preparing a proposal for SANDEE.

INTERNATIONAL OPPORTUNITIES

The Beijer Institute of Ecological Economics is organizing an Advanced Workshop on Property Rights and the Management of Natural Resources from March 19-28 in Egypt. SANDEE will be able to send 3-4 participants to this workshop. If you are doing post-doctoral or dissertation research on property rights and would like to present your work at this workshop, please send us a 5 page note about your work-in-progress. Please mail or

email this to Poonam Joshi (poonamj@sandeeonline.org) at SANDEE, along with your complete bio-data and address, no later than December 8, 2000. This workshop will include training on new developments in the field. Resource persons attending the workshop are Professors Kenneth Arrow, Karl-Goran Maler, Partha Dasgupta and Jean-Philippe Platteau.

The University of Gothenburg in Sweden is offering two Ph.D. level courses during the Spring of 2001 on: 1) Natural Resource Economics; and, 2) Environmental Economics and Policy Making. Six full scholarships are available for each course for candidates from developing countries with a strong economics background. The deadline for applications is November 15, 2000. If you are interested, please write **immediately** to Katarina Renstrom at eeu@economics.gu.se or look at their website at www.handels.gu.se/econ/EEU for further information.

JOURNAL AND WEB PUBLICATIONS

The South Asia Economic Journal is a new biannual journal published jointly by the Institute of Policy Studies in Sri Lanka and the Research and Information System for Non-Aligned and Other Developing Countries, India. The journal seeks to encourage debate and deliberation on South Asians issues and invites scholars to contribute articles. For further information about publishing in this journal contact Dushni Weerakoon at dushni@ips.lk

Coming soon to www.sandeeonline.org..... SANDEE's website will soon have links to several journals such as Environment and Development Economics, Economic and Political Weekly, Journal of Environmental Economics and Management, Ecological Economics etc. Please use these links to identify new articles, authors, and article abstracts. Please also watch out for our links to issue-specific web-based bibliographies.

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SELECTED ECONEWS

We would like to use this newsletter to share interesting news on economic development and its links to environmental change and on how economic analyses can result in policy and management changes in the environmental arena. We welcome stories from your corner of the world... do let us know if you wish to contribute.

The Prototype Carbon Fund – Creating A Market for Emission Credits. Under the Kyoto protocol, industrialized countries must reduce their carbon emissions by 2012 to approximately 5% below their 1990 levels. Industrial countries are, therefore, looking at different cost-effective options for meeting these emission reduction obligations. One mechanism allowed within the Kyoto protocol is carbon trade with developing countries. Described below is an innovative fund set up to mitigate climate change effects and to understand how a market can be created for a public bad.

The Prototype Carbon Fund (PCF) was established by the World Bank in 1999. Unlike most other investment funds, the PCF has as its objective mitigation of climate change through emissions trading. Like most other funds, the PCF has a group of investors that contribute to it. These are mainly large private companies and Governments that are interested in decreasing their carbon emissions. The PCF then uses its investment resources to purchase carbon offsets (or reductions in carbon emissions) by funding projects in the developing world or in economies-in-transition. The emission reductions are independently verified and transferred back to the Fund's investors in the form of emission reduction certificates instead of

cash. The value of global carbon trade is expected to be between \$10-20 billion per year. This makes a fund such as the PCF necessary.

According to an article by Fund Manager Kenneth Newcombe, investors are willing to pay an average price of \$20 per ton of carbon abated (Environment Matters, World Bank 2000). The PCF is likely to succeed since the cost of reducing greenhouse gases in developing countries is estimated to be \$5 to \$15 per ton of carbon. Currently, investors have contributed \$145 million to the PCF. Approximately half of these resources will go to economies-in-transition and half to developing countries. Major emphasis will be on renewable energy and energy efficiency projects, which have a greater potential for replication and for reducing climate change at a reasonable cost. These investments will be made over the next decade since the PCF is a pilot activity and scheduled to end by the year 2012. If you would like to find out more about the PCF, please take a look at www.prototypecarbonfund.org

Bhutan is interested in Gross National Happiness reports Chekki Wangchuk of Sherbutse College in Bhutan. Ever since embarking on its first socio-economic development plan, Bhutan's policy has been to ensure that the process of development should be consistent with maintaining the environmental and cultural integrity of the country. The country is committed to "The Middle Path" which focuses on the concept of sustainable development. This raises the question of how Bhutan can green its National Income Accounts. The greening of Bhutan's system of national accounts would contribute to the quantification of "Gross National Happiness." (Bhutan 2020 – A vision for Peace, Prosperity and Happiness, p 88, Planning Commission) and highlight win-win policy choices which would further both environmental protection and economic growth. This idea of greening SNA was discussed in the 'The Green Economics for Sustainable Development Workshop' an interactive workshop held earlier this year in

Bhutan and hosted by WWF Bhutan. The following questions and issues were discussed and continue to challenge economists and Bhutan's green accounting development team:

Can the costs of environmental degradation, e.g. cost of road and property damage resulting from soil erosion and landslides, siltation of rivers due to gravel extraction, etc, be correctly estimated?

Can and should Bhutan value non-marketed natural resources, e.g. fuelwood collected from the forests, herbal and medicinal plants gathered for consumption, etc.?

Can the value of non-marketed natural services such as watershed protection be identified?

Can Bhutan better account for natural resource depletion, e.g. timber extraction, either in monetary and non-monetary terms?

How can we develop a set of indicators that can be regularly monitored for changes in the relationship between economic development and environmental degradation?

Colleagues in the region who work on issues related to green accounts and valuation should feel free to communicate with Chekki Wangchuk at shercol@druknet.net.bt.

Solid Waste Management in Dhaka – An Innovative Means of Cleaning Up and Making Money?? As reported by Mainul Huq. Dhaka, like many other South-Asian cities, is facing serious solid waste management problems. Dhaka City Corporation (DCC) is supposed to regularly collect solid waste from DCC provided bins and dispose them properly. The service, however, is irregular and unreliable.

According to a recent study, only about 50% of waste generated get collected.

Reluctance on the part of some citizens to use garbage-bins appropriately is making the situation even more difficult.

Responding to garbage collection problems, a number of neighborhoods in Dhaka have begun to organize themselves, and have implemented a system of garbage collection

whereby garbage gets collected from the doorsteps of neighborhood houses. The collected load is then dumped into a DCC bin, which gets regular and reliable service from the DCC. The result is striking: neighborhoods with this system are really clean.

Most of these successful systems have been developed by neighborhood level welfare associations or sporting clubs. A small monthly fee, ranging from \$0.20 to \$0.40, is charged per household, irrespective of the amount of garbage collected. The money thus collected is used for hiring garbage collectors and buying/building garbage-carrying pushcarts. Smelling the possibility of making profit, a small number of private entrepreneurs have also started to provide garbage collection service from the households and business establishments, and, apparently, are making reasonable profits.

A recent survey suggests that the media played a crucial role in spreading the system throughout the city. Knowledge that a city neighborhood (Kalabagan) succeeded in maintaining a clean neighborhood and knowledge of how to organize themselves encouraged other neighborhoods in Dhaka to mimic Kalabagan's successful efforts. Apparently, neighborhoods with higher levels of education and social capital tend to be more successful in implementing such programs. If you are interested in finding out more about this survey or about organizing your neighborhood, please write to Mainul Huq at mhuq@bangla.net.

Which country in South Asia has the lowest genuine savings? Which country has the highest? Genuine domestic savings are equal to net domestic savings, plus education expenditure and minus energy depletion, mineral depletion, net forest depletion and carbon dioxide damage. According to the Little Green Data Book (IBRD 2000), which is based on data from the World Development Indicators, Genuine Savings in South Asia are, in descending order, 14.8% in Sri Lanka, 10.3% in India,

10% in Bangladesh, 4% in Pakistan, and – 1.8% in Nepal. Data for Bhutan and the Maldives are unavailable. If gross domestic savings are considered, India tops the list, followed by Sri Lanka, Bangladesh, Pakistan, and Nepal. Did you guess correctly?

MEMBERSHIP DRIVE

SANDEE needs institutional partners. We request all of you to ask your institutions or departments to become members. The annual cost is US\$25 for South Asian institutions and US\$250 for non-South Asian institutions. You can also become a life-time Institutional Supporter by paying \$1000. In return, we will send you electronic or non-electronic versions of SANDEE newsletters, working papers and information about SANDEE grants. Please fill the **Membership Form** and mail it along with a cheque for the appropriate amount in US dollars.

THANK YOU DONORS AND MEMBERS

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