

Newsletter

ECONOMICS & THE ENVIRONMENT

WELCOME...

he South Asian Network for Development and Environmental Economics (SANDEE) is a regional network that brings together analysts from different countries in South Asia to address their developmentenvironment problems. It is based on the premise that the quality of economic growth matters and that environmental sustainability is key to the future of the region. SANDEE's activities cover Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan, and Sri Lanka.

This newsletter provides information on SANDEE activities during the last six months. Please read on and, as always, we would love to hear from you.

IN THIS ISSUE

Research	2
Focus	4
Publications and Presentations	5
Training	9



Dear Friends and Colleagues

s we bring this newsletter to you, we would like to remember, once again, Professor Elinor Ostrom, who was such a source of inspiration to many of us. We remember her for her deep contribution toward understanding the theory and practice of common property management, her commitment to strengthening the work of researchers around the world who studied the commons, and her generosity in sharing her time and knowledge with so many of us. Professor Ostrom very kindly gave the key note address at SANDEE's tenth celebration in Kathmandu. She reminded us how important it is to be optimistic about humanity's ability to solve the problems of the world. We hope her great spirit and her strong work ethic will keep the rest of us motivated to continue our work on environmental issues here in South Asia.

South Asia's environmental problems are well known. However, the grit and leadership of so many to solve these problems at the local, national and regional levels is also becoming increasingly obvious. We are, therefore, so very pleased to congratulate Syeda Rizwana Hasan, of the Bangladesh Environmental Lawyer's Association, for being awarded the Ramon Magsaysay Award. Rizwana, a member of SANDEE's Board, is recognized for her willingness to take different interests groups to court for not complying with her country's environmental laws. We are inspired by Rizwana's presence amongst us and wish her well in all her endeavours in the future. Our daughters and sons need role models such as Rizwana.

With best wishes Priya, Rucha and the SANDEE Team

No. 24 / Fall 2012

Research

Research Grants

ANDEE's research grants in the summer 2012 cycle focused on different regulations, instruments and technologies introduced to manage the environment and asked how effective they are, what are some issues with compliance and why households may or may not choose to adopt. We also have some interesting projects on valuation from the north-east of India and Bhutan. A total of 76 concept notes were received and eight grants were approved based on the Research and Training workshop in June 2012.

Name	Country	Торіс
Aggarwal, Aradhna	India	Acquisition of technological capabilities through the Clean Development Mechanism: Some quantitative explorations
Akram, Waqar	Pakistan	Adoption of biogas as an alternative energy source - Evidence from rural Pakistani Punjab.
Belal Uddin, Mohammad	Bangladesh	Non-Timber Forest Products extraction under different forestry institutions – An ecological economic analysis from Bangladesh
Borthakur, Monjit	India	Does urban greenery reduce the cost of cooling homes?
Dendup, Ngawang	Bhutan	Valuation of sewage water treatment services in Bhutan
Moazzem Khondaker, Golam	Bangladesh	Compliance in pollution management: A case study on the textile industry of Bangladesh
Nathan Hippu Salk, Kristle	India	Effectiveness and sustainability of electrification projects in India's remote villages where grid-extension is in-feasible
Wickramasinghe, Kanchana	Sri Lanka	Environmental management practices in post-conflict tourism in Sri Lanka

Working Papers

Is the Deposit Refund System for Lead Batteries in Delhi and the National Capital Region Effective? Yamini Gupt, WP No. 68-12

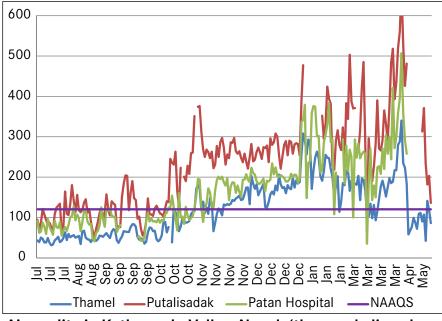
Lead acid batteries generate hazardous waste in the form of lead, with serious environmental and health implications. These batteries are recyclable and the present Deposit Refund System for recycling operating in Delhi provides a discount to consumers when they purchase a new battery and return used batteries to retailers. The retailers in turn determine whether the batteries will be recycled in an environment-friendly or unfriendly manner by selling them to manufacturers or informal sector scrap dealers, who then sell them to un-registered smelters. This study finds that the economic instrument that brings used batteries into the recycling system works exceptionally well. However, organized lead recycling is undertaken only in a limited manner. Rather, retailers prefer to sell used batteries to the informal sector because they obtain higher prices, and incur lower storage costs and taxes. Current rules prevent scrap dealers from selling batteries to regulated smelters. Relaxing these rules would reduce raw material shortfalls currently experienced by the sector and bring more batteries into the formal recycling market. In addition, an alternate policy instrument to consider is a green tax on batteries coupled with a partial or complete refund when the manufacturer ensures environment-friendly recycling.



Car battery lead smelting within the informal sector in India

Measuring the Health Benefits from Reducing Air Pollution in Kathmandu Valley, Naveen Adhikari, WP No. 69-12

The study estimates the health benefits to individuals from a reduction in current air pollution levels to a safe level in the Kathmandu metropolitan and Lalitpur sub-metropolitan areas of Kathmandu valley, Nepal. A dose response function and a medical expenditures function are estimated for the purpose of measuring the monetary benefits of reducing pollution. Data for this study were collected over four seasons from 120 households (641 individuals) and three different locations. Household data were matched with air pollution data to estimate welfare benefits. The findings suggest that the annual welfare gain to a representative individual in the city from reduction in air pollution from the current average



Air quality in Kathmandu Valley, Nepal (the purple line shows the safety standard).

Source: MOEST (Various Reports)

level to a safe minimum level is NRS 266 per year (USD 3.70). Extrapolating to the total population of the two cities of Kathmandu and Lalitpur, a reduction in air pollution would result in monetary benefits of NRS 315 million (USD 4.37 million) per year. If the Government of Nepal implements its energy Master Plan and pollution is reduced to meet safety standards, discounted benefits over the next twenty years would be as high as NRS 6,085 million (USD 80.53 million).

Analyzing Institutions in Resource and Development Econometrics: Recognizing Institutions, Exploring Levels and Querying Causes, Vikram Dayal, WP No. 70-12

This paper proposes three strategies to advance institutional analysis in resource and development econometrics: (1) recognition of institutional variables; (2) use of multilevel thinking and estimation; and (3) the adoption of causal graphs. Each strategy is illustrated with examples from three previously published studies: (a) biomass extraction from Ranthambhore National Park by Dayal (2006), (b) air pollution in Goa by Das et al. (2009), and (c) trade-offs and synergies between carbon storage and livelihood benefits from forest commons by Chhatre and Agrawal (2009). While there is no explicit institutional content in studies (a) and (b), by recognizing caste as a social norm and the role of norms in household decisions, it is possible to further integrate an institutional perspective into these studies. Further, using study (c), where forests are nested in countries, the paper shows how multilevel statistics can help unpack variation in the data at forest and country levels. Similarly, since causality is vital to policy though extremely difficult to establish with observational data, the paper shows how causal graphs can help separate the disagreements between scholars into disagreements about the underlying causal structure and the correspondence between an agreed to causal structure and the data on hand. The paper examines specific strategies to include institutional analysis in resource econometrics.

Focus

Economics of Solar Home Systems in Bangladesh

- A.K. Enamul Haque, akehaque@gmail.com

S olar power is an alternative to grid electric power in remote regions of the world. It is being popularized as a green product as well as one of the best alternatives for rural people who use kerosene for their lighting needs. Burning kerosene not only causes indoor air pollution but is also responsible for emission of greenhouse gases.

In Bangladesh, solar power is being propagated as an alternative source of energy to millions of rural houses who are not connected to the grid electricity. About 37% of Bangladesh's population is connected to the electricity grid, meaning the majority of people do not have access to a formal electricity connection. Solar energy is considered to be an alternative as it generates power independently in off-grid areas. It is also cleaner compared to fossil fuel fired power supplied by the grid. According to the Infrastructure Development Company (IDCOL), as of 2011, solar energy has given approximately 10 million rural people access to power, enabling them to explore various modern livelihood options. This story is based on a field tour to some villages with solar energy.

Solar power is seen as a success that has changed the lives of rural people. On the flip side, these households pay a hefty amount to connect to solar power, which is at least 10-20 times costly relative to alternative power sources (like diesel operated generators). Since NGOs, donors and also the government is pushing for solar power for off-grid users and are providing credit support for purchasing this, rural households see no alternative but to purchase solar if they want to use electricity for lighting. Consequently, they may well be paying the highest price per unit of electricity in the world. So while the rural population is purchasing solar power, city dwellers are not interested. City dwellers, instead, use diesel generators to deal with power outage from the grid line (about 10-12 hours a day in many cities of Bangladesh).

Impact studies on solar power often bypass the cost issue and focus on the benefits of having electricity. This is perhaps a gross overestimation of benefits. The true benefit study should do the following comparison – (a) benefit to households moving from kerosene to solar-powered electricity; b) benefit of households moving from kerosene to diesel powered electricity and then use the difference in difference method between (a) and (b) to see net benefits. Most studies, however, examine only (a) and attribute the change as benefit of having solar home systems.

To witness for ourselves how solar energy has changed the lives of village people, Dr. Rumi Shammin (Assistant Professor of Environmental Sciences at Oberlin College, Ohio, USA) and I visited rural areas in Khulna. We wanted to understand who uses solar power in rural Bangladesh, and how solar energy benefits them. Despite it being almost three times as costly as the next best alternative (lantern), solar energy is changing the lives of thousands. We wanted to see how people are adopting such instances of technological innovation and what do they do with the new found 'light' in their homes and businesses. Frankly, we were surprised by the ingenuity of village folk in using electricity 'by solar' to change their life and raise their income.

It starts with basic indoor lighting, and since solar energy became available, rural activities no longer stop with the sunset. We met a lady who, after being divorced by her husband, has taken up teaching school students privately at her home. She lives with her mother and brother, but one batch wasn't allowing her to earn enough. Now she teaches two batches, one in daylight, and one at night using solar lights. Her income has doubled. Even in parts that have grid electricity, solar powered power systems provide backup power, filling in for power cuts. We had tea at a roadside tea



stall which was using solar power. When asked, the stall keeper said he preferred to use a legal solar system, instead of using an illegal stolen connection which he could lose at any moment.

Solar energy has changed entertainment options as well. In a privately run game centre behind a tea stall, people were paying 8 taka per game to play carom board game at night, with the room lit up by a solar powered light bulb. Although we didn't have the opportunity to see one, we heard of irrigation pumps being run by solar power as well. Once we had left the poles of the power grid more than 20 kms behind, we were surprised to find that life was abuzz in villages, even at night. With almost every person in the country having access to mobile phones, there is a need to recharge batteries. We found mobile phone charging shops that charge by the hour to charge phones! The person running it also knew some light mobile engineering and operates a solar-powered mobile repair shop as well. Small businesses also exist where people can make phone calls from, at only 1 taka per call. These small businesses need to charge their phones constantly and are able to do so using solar power.

A solar home system would cost between 10,000 taka to 50,000 taka depending on its capacity and what really bothered me is that rural people were borrowing money to pay for this light source even though they perhaps never spent this much money to buy a comfortable bed in their houses. Yet, in city areas, we are set to use generators instead of solar lights to power our houses during power failures.

The cost of solar units in urban locations will be even cheaper if we promote a 'net meter' by which SHSs can be used to produce and sell electricity to the power distribution companies in the cities using the rooftops. Rough calculations show that there is opportunity in Dhaka city alone to produce nearly 600MW of electricity if we ensure that all dwellers produce 10-20% of their power consumptions using solar systems. However, instead of consuming at home they should supply it to the grid so that the need for batteries is reduced, in turn reducing the cost by at least 50% or more. Alternatively, government could think of reverse incentives scheme through a discriminatory pricing of electricity in urban areas. This means that houses who produce and sell electricity at least 10% of their consumed power needs to the distribution companies will continue to pay same price per unit of power while who does not will have to pay 50-100% greater price for a unit of electricity. There are various policy options that can be considered to make this a reality. Ironically, producing electricity through diesel costs very little (compared to solar energy) and so we are using diesel powered generators in the cities and polluting the air. This fact alone should make us respect our rural people more, who pay so much more for power.

(Enamul Haque is Professor of Economics at United International University, Dhaka. An earlier version of this article was published in The Star Insight of the Daily Star, vol.6(2), July 28, 2012.)

Publications and Presentations

Publications

- Adhikari, N (2012) 'Air Pollution and Human Health in Kathmandu Valley.' *Public Health Perspective*, Online Health Newsletter, 2 (5)
- Das, Saudamini (2012) 'The role of natural ecosystems and socio-economic factors in the vulnerability of coastal villages to cyclone and storm surge.' *Natural Hazards*, 64 (1): 531-546
- Nepal, A; Nepal, M (2012) 'Is child labor a substitute for adult labor? The relationship between child labor and adult illness in Nepal.' *International Labour Review*, 151 (1-2): 109–121
- Ghate, R; Nagendra, H; Mehra, D (2012) 'Is JFM Really Helping Communities and Forests? Need to Focus on Institution Building?' In J. Bandhopadyay, K. Chopra, N. Ghosh (eds) *Environmental Governance: Approaches, Imperatives and Methods.* INSEE and Bloomsbury, New Delhi
- Gundimeda, H; Shyamsundar, P (2012) 'Forest, Sustainability and Poverty in India', *Environment and Development Economics*, 17 (3): 1373 – 378



Congratulations

SANDEE Board member and Bangladesh Environment Lawyers Association's (BELA) Chief Executive Syeda Rizwana Hasan has won the prestigious Ramon Magsaysay Award 2012 for her campaign for environment justice.

The Board of Trustees of the Ramon Magsaysay Award Foundation announced on its official website that Rizwana Hasan is "being recognized for her uncompromising courage and impassioned leadership in a campaign for judicial activism in Bangladesh that affirms the people's right to a good environment as nothing less than their right to dignity and life".

Rizwana has taken on numerous legal cases on behalf of the environment and the poor in the face of significant opposition from powerful interest groups. We wish her all the best in her continued pursuit of environmental justice.



Rizwana Hasan, Winner of the Ramon Magsaysay Award, 2012

Dissemination

12th Congress of the International Society for Ecological Economics

16-19 June 2012, Rio de Janeiro, Brazil

The International Society for Ecological Economics's conference, 'Contributions and Challenges for a Green Economy', preceded the Rio+20 Earth Summit. SANDEE researches Udith Jayasinghe-Mudalige and Saudamini Das presented results from their projects on managing solid waste and adaptation to heat waves at the conference. The spirit of the Congress was in-line with the much larger Rio+20 Summit and focused on how to move forward towards a more sustainable world and the institutions that would be required for this.

The ISEE conference was attended by researchers from over 70 countries. Lord Nicholas Stern and Nitin Desai were prominent amongst presenters. Ecological economists focus more on the limits of the biosphere and its implications for the current and future inhabitants of the planet. Per Udith Jayasinghe, some interesting highlights were "the panel on the Gross National Happiness Index, chaired by the Prime Minister of Bhutan, and the plenary on Environmentalism of the Poor".

16th International Consortium on Applied Bioeconomy Research Conference-128th European Association of Agricultural Economics

June 24-27, 2012, Ravello, Italy

Khuda Baksh's paper "Bt Cotton Productivity in Pakistan: Use of Reduced-Form Panel Methods" was included in a Seminar on Political Economy of the Bio-economy: Biotechnology and Bio-fuel.



Seminars on Climate Change, Submergence and Rice Yield: Evidence from Coastal Barisal of Bangladesh

July 2012, Dhaka, Bangladesh

A seminar was organized by the Department of Urban and Regional Planning of BUET on July 1 2012 to disseminate findings from Afsana Haque's SANDEE project on agricultural impacts related to flooding and sea level rise. The findings of the study were also presented in a round table conference on climate change organized jointly by the URP Students' Association of BUET and the Department of Urban and Regional Planning on July 08, 2012. Panelists in the conference included Directors of different institutions such as the Climate Change unit of the Ministry of Environment and Forests, Institute of Water Modeling, climate change study division of CEGIS and the WBB Trust. The discussants felt that the study would pave the way for further research on the impacts of sea level rise induced by climate change on the agricultural sector.

Conference of Agricultural Economists

18-24 August 2012, Paraná, Brazil

Krishna pant presented a paper "Payment Experiment for Modification of Farm Practices: A Case of Rice Residue Burning in Nepal", based on his SANDEE work. The conference was attended by nearly 700 agriculture economists from all over the world.

Gender and Development – Take a Quiz

The Swedish International Development Cooperation Agency organized a regional workshop on 'Integrating Gender Equality into Development Cooperation' in May 2012 at Bangkok. The objective of the workshop was to share information on Sida's gender policy with its partners and to engage them in mainstreaming gender issues into all areas of development practice. SANDEE was represented at this workshop by Anuradha Kafley and Priya Shyamsundar. As part of its agreement with Sida, SANDEE will continue to look for ways to incorporate gender issues into its research and training activities.

Here is a small quiz, distributed at the Gender workshop, which you can take to check your own understanding of gender balance in the world.

- What percentage of the world's 1.3 billion people living in extreme poverty are women and girls?

 a) 50%,
 b) 60%,
 c) 70%,
 d) 80%
- 2. What percentage of the world's working hours are worked by women?
 a) 33%, b) 50%, c) 66%
- What percentage of property worldwide is owned by women?
 a) 1%, b) 5%, c) 10%, d) 25%

- 4. What percentage of parliamentary seats worldwide is held by women?
 - a) 10%, b) 16%, c) 25%, d) 50%
- 5. Which of the following is responsible for the most deaths of women aged 15 44?
 a) cancer, b) malaria, c) traffic deaths, d) war, e) gender-based violence
- 6. According to UNHCR, what percentage of refugees is estimated to be women and children?
 a) 35%, b) 50%, c) 65%, d) 80%
- 7. What percentage of women worldwide is homeless or live in inadequate dwellings, such as slums?
 a) 20%, b) 25%, c) 33%, d) 50%
- 8. In 2001, how many children under the age of 18 were acting as soldiers, guerrilla fighters or in combat support roles in more than 50 countries around the world according to UNICEF estimates?
 - a) 10,000; b) 100,000; c) 300,000; d) 1,000,000

(Answers on the last page)

KUDOS

Herath Bandara, a SANDEE graduate, completed his doctoral studies (Ph.D. in Natural Resource Economics) from Davis College of Agriculture, Natural Resources & Design, WVU, USA. Congratulations Dr. Herath.

"SANDEE gave me excellent opportunities and motivation to reach my dream of getting a PhD degree from USA. SANDEE gave me the very first international experience and training which I can never forget" Herath Bandara

- Indira Devi from the Department of Environment and Climate Change received a grant from the Kerala Government for setting up the Centre for Excellence in Environmental Economics at Kerala Agricultural University. This is a great boost for the department and a testament to Indira's leadership and commitment to environmental economics research.
- Indrila Guha from Vidya Sagar College for Women, Kolkata got a grant from University Grant Commission for a project titled 'Economic Adaptation Caused by Inundation of Islands: An Exploratory Study from Indian Sunderbans'.
- **Kanupriya Gupta**, joined Asian Development Bank as Project Officer in Programs and Development Effectiveness.
- Saravana Kumar is Principal Investigator for a grant received for a consortium project on "Costs and Returns in Milk Production: Developing Standardized Methodology and Estimates for Various Production Systems" from the Department of Animal Husbandry, Dairying and Fisheries, Ministry of Agriculture, Government of India, 2012-14.
- Vinish Kathuria was awarded the Mahalanobis Memorial Medal National Award for the year 2010. The award was given during the 48th Annual Conference of the Indian Econometric Society held at Pondicherry University, Pondicherry. The award is given by the Indian Econometric Society.
- SANDEE Fellow, Joyashree Roy of Jadavpur University, Kolkata, received a research project grant which SANDEE will support as a knowledge partner. Another SANDEE researcher, Indrila Guha, is the co- investigator. The project entitled, 'Coastal Ecosystem and Changing Economic Activities: Challenges for Sustainability Transition along Chinese and South Asian Coasts' has been granted by Asia Pacific Network for two years. Participating countries include India, Bangladesh, Sri Lanka and China.
- SANDEE graduates have been selected in various capacities in the Indian Society for Ecological Economics Board for 2012-14. Amita Shah is the new President; Pranab Mukhopadhyay is Secretary; Purnamita Dasgupta is Treasurer and Seema Purushothaman is a co-opted member.

An Artificial Glacier in Ladhak – Learning from my LEAD experience

- Indrila Guha

LEAD is an International non-profit organization with a network of sustainable development leaders spread in more than 90 countries. Their shared mission is to inspire leadership for a sustainable world. I was one of the LEAD associates this year. As part of our training, we visited an artificial glacier in Ladakh created by Mr. Norphel.

Norphel's watershed intervention – the 'artificial glacier' – came from the simple observation that "while there was such a shortage of water at the start of the cropping season, a lot of water was being wasted during winter". Norphel noticed that in winter water taps were left open to stop the water from freezing in the pipes. The water flowed into the drains surrounding the taps and froze. "And it is then that it occurred to me: why not try and make artificial glaciers in the vicinity of the village so that local farmers get a real head start when they need it most," says Norphel.

The technique uses a network of pipes to capture and channel precious snowmelt that would otherwise be wasted. No crops are grown during Ladakh's severe winters; the little water in the mountain streams generally goes waste. Using some local ingenuity, Norphel built his 'artificial glacier' from stone embankments and a few hundred meters of iron pipe. First, water from an existing stream was diverted through iron pipes to a shady area of the valley. From there, the water was made to flow out onto a sloping hill at regular intervals along the mountain slope. Small stone embankments impede the flow of water, creating shallow pools. During the winter, as temperatures drop steadily, the water in these small pools freezes. Once this cycle has been repeated over many weeks a thick sheet of ice forms, resembling a long, thin glacier. There are several advantages of an artificial glacier over a natural one. To start with, it's closer to the village and at a comparatively lower altitude. Early water release from an artificial glacier comes as a bonus for farmers. It enables them to get water a whole month before the snow starts melting on the mountain tops. This is particularly useful to start sowing, as the sowing season ends before water from natural glaciers begins to flow down the mountain.

The largest artificial glacier Norphel has built so far is near the village of Phuktsey. About 1,000 feet (300 metres) long, 150 feet (45 metres) wide, and four feet (1 metre) deep, it supplies irrigation water to the entire village of around 700 people. Norphel says the glacier was built at a cost of about Rs 90,000, which is about a tenth of what it would have cost to build a reservoir with similar storage capacity. This technology has become immensely popular with the people of Ladakh, not only because it is effective but also because it is simple and affordable and makes use of local resources and skills. And there's minimal maintenance required. "The villagers can understand this," Norphel says. "This is optimum utilization of water by using the simplest technique, at a low cost. It also helps recharge groundwater and nearby springs."



SANDEEite and LEAD associate Indrila Guha at an artificial glacier in Ladakh

Training

Environmental Regime Shifts organized by the Beijer Institute of Ecological Economics

26 - 27 June 2012 Prague

Saudamini Das, Vikram Dayal, Sravanakumar, Krishna Pant, Adaina Panmei, Menuka Udagama, Md. Mahmudul Alam represented SANDEE in a training program on "Economics of environmental regime

"Both the EAERE conference and the short course on Environmental Regime Shifts were inspiring and transformational experiences. It made me recognize the importance of proper qualitative analysis prior to quantitative study, which is mostly overlooked. Moreover, it helped me realize the need to overcome misunderstandings about other disciplines."

– Menuka Udagama, Sri Lanka.

shifts" organized just preceding the 2012 EAERE Conference. The course introduced the idea of regime shifts, identified complexities related to optimizing with regime shifts and policy implications. The course was jointly coordinated by Jeffry Vincent, Duke University and Aart de Zeeuw, Tilburg School of Economics and Management.

The course, on the one hand, dealt with optimizing regime shifts and the possibility of converting a stochastic model into a useful deterministic model to aid environmental decision making. On the other hand, it showed that it is important not to ignore the fact that a regime shift has tremendous implications for the rational underpinnings of 'economic man' who claim to have all the required information to make the right environmental decision.

- Adaina Panmei



SANDEEites at Prague attending EAERE meetings and a workshop organized by the Beijer Institute, June 2012

Summer School in Environment and Resource Economics

7–23 May 2012, Srinakarinwirot University, Bangkok, Thailand

SANDEE organized a three-week SANDEE Summer School 2012 on Natural Resource and Environmental Economics which covered issues in natural resource management, environmental economics, "It was, undoubtedly, a great learning experience. In fact, this course has changed the way (1) look at contemporary environmental issues that the world faces today, and more importantly, how to deal with these issues. Equipped with high quality faculty from across regions, this course is a blessing for environmental economists."

Md. Nasir, Pakistan

sustainable development, and climate change. Participants were exposed to theoretical issues and economic tools for analyzing environmental and

"The workshop was an excellent platform for sharing the knowledge and learning to uplift the research capacity of South Asians on Resource and Environmental Economics"

Ananthini Nanthakumaran, Sri Lanka

resource problems in developing countries. Week 1 of the course covered resource economics, week 2 focused on special topics such as ecosystem services, greening national accounts and common property management, while week 3 was used to impart valuation techniques to participants.



Participants at the Summer School in Environment and Resource Economics, May 2012

Influencing Curriculum Change



Dr. Prajna Mishra is capitalizing on SANDEE literature in her teaching activities. When she joined the University of Hyderabad in December, 2010 and offered Environmental Economics as an optional in July, 2011 semester eight students opted for the same. This year 23 students opted for her course. Her department is very happy to see student's interest in environmental economics. Prajna says 'I am thankful to SANDEE and my SANDEE family members for nurturing me over the years. The EE course in Bangkok, Econometrics course in Dhulikhel and all R&Ts have helped me a lot to strengthen myself in this area'.



Dr. Rehana Siddiqui, Pakistan Institute of Development Economics used SANDEE's latest book 'Environmental Valuation in South Asia' for teaching her M.Phil students. After teaching the theory of valuation, Dr. Siddiqui made each student read and present one chapter from the book to learn about how valuation is done in practice. This lead to 17 presentations.

(SANDEE hopes to strengthen curriculum across South Asia through its researchers and their teaching activities. Please let us know if your knowledge and training through SANDEE has contributed to curriculum changes or new courses in your institution.)

Economic Instruments for Greening Development – Poverty Environment Initiative

12-13 August, 2012, Paro, Bhutan

Ngawang Dendup, Lecturer, Sherubtse College, Bhutan

SANDEE along with the Poverty-Environmental Initiative (PEI) of UNDP and UNEP organized a workshop on Economic Instruments for Greening Development during August 12-13 in Paro, Bhutan. The two-day workshop brought together regional policy makers, planners and academicians from Pakistan, India, Nepal and Bangladesh, Lao PDR, Thailand and Myanmar, Indonesia and the Philippines and created a platform to discuss and share economic development and environment problems. Individual country representatives shared experiences from their countries related to how they were trying to address the interconnections between development activities and environment challenges.



The workshop's objectives were to a) expose policy makers to new research based developments in environmental economics that could be used for greening development; and b) to learn from policy makers on what new research should be done. Thus, the SANDEE team presented ideas and discussed various topics such as greening national accounting, valuation of environmental goods, common property management, economic instruments, climate change and energy management and covered vast areas of resource and environmental economics. Economic instruments that were discussed included examples such as wildlife insurance in Bhutan, Climate Expenditure Reviews in Bangladesh, payments for ecosystem services in Nepal and India's Perform Achieve Trade energy scheme. These discussions gave an opportunity for regional planners and policy makers to rethink some of the current policies in place. This meeting is expected to help regional planners and policy makers to come up with more holistic development plans.

Announcements

- Research and Writing Workshop, Duration & Venue: 6th 9th October, Dhaka, Bangladesh Application. Details on http://www.sandeeonline.org or http://www.erg.org
- ANZSEE Conference 2012 on "Green Growth or De-Growth?", Bond University, November 12, 2012 November 15, 2012. Details on http://anzsee2012.anzsee.org/index.php/anzsee2012/anzsee2012
- Institute of Policy Studies of Sri Lanka (IPS) has recently launched a virtual policy network on climate change called the IPS CLIMATEnet. Its main focus is on South Asian region with particular attention on Sri Lanka. Please visit http://www.ips.lk/climatenet/index.html
- IPCC announces call for applications for second round of awards under the IPCC Scholarship Program, Deadline: 30th Sept. 2012. Application forms at http://www.ipcc.ch/ipcc-scholarship-programme/ipcc_scholarshipprogramme. shtml
- Gujarat Institute of Development Research is organizing a four days Training Workshop on Ecology and Economics during 29th November to 2nd December in Ahmedabad. For further details visit www.ecoinsee.org, www.sandeeonline.org
- Winter Course in Ecological Economics, organized by Environment Europe, will take place in Oxford 17-21 December 2012. For more information visit http://www.geog.ox.ac.uk/staff/sshmelev.html
- SANDEE welcomes concept notes from South Asian researchers; please visit www.sandeeonline.org for full details. Deadline for the concept notes is Oct 31, 2012.



SANDEEites at the 24th Biannual Research Workshop in Sri Lanka, June 2012

Answers of the quiz: 1.c, 2.c, 3.a, 4.b, 5.e, 6.d, 7.c, 8.c



SANDEE

P.O. Box 8975, E.P.C 1056, Lalitpur, Nepal Street address: c/o ICIMOD, Khumaltar, Lalitpur, Nepal Tel: 977 1 5003222, Fax: 977 1 5003299 Email: info@sandeeonline.org Website: www.sandeeonline.org