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Executive Summary

Overview

The purpose of this report is to assess the impact of 8 years of capacity building efforts in South Asia by the South Asian Network for Development and Environmental Economics (SANDEE), and to offer some suggestions on how its activities can be improved or enhanced. SANDEE is a donor-funded project based on Kathmandu, Nepal that builds human capital in South Asia in the field of environmental and resource economics by making small grants to researchers, mentoring these grantees over the life of their research projects, and offering a range of training courses. SANDEE is essentially 100% dependent on donor funds for the financial resources to support its capacity building activities. From 2003-2009, SANDEE used these donor funds to make a total of 61 research grants and organized 14 Research and Training workshops (R&Ts). The amount of most grants fell in the range of US\$10k-20K.

SANDEE offered an introductory course in Environmental and Resource Economics and a course on Research & Proposal Writing 8 times each, once a year from 2002-2009. In addition, SANDEE offered twelve advanced courses on the following topics: CGE Modeling, Advanced Econometrics, Household modeling, Survey Methods, Climate Change, Climate Science & Policy, Program Evaluation, Paying for Environmental Services, and Policy Tools for Climate Change. SANDEE also offered other, more basic training courses in microeconomics, policy dissemination, econometrics, and climate change research. Over the 2002-2010 period almost 800 participants took these SANDEE courses.

SANDEE's capacity building efforts are especially important and noteworthy in South Asia where transboundary academic collaboration has been extremely difficult due to geopolitical tensions. SANDEE has provided a mechanism for environmental and resource economists across the South Asia region to meet and collaborate. Fostering intellectual dialogue and exchange across the South Asia region is one of SANDEE's main achievements.

Findings

1. Cost effectiveness

SANDEE provides capacity building services to three groups of individuals in South Asia. In the first group (Group A) are recipients of SANDEE research grants. These grantees receive not only the grant funds, but also services at the R&Ts, specialized training courses, and assistance with manuscript publication. In 2009 there were 28 individuals in Group A.

In the second group (Group B) are individuals who may attend R&Ts and specialized training courses, but have not received a grant. Some individuals in Group B may receive a grant in the future, but some may not. However, even individuals who do not eventually receive a grant are beneficiaries. They receive feedback on their research proposals. They benefit from their interactions with resource persons

at the R&Ts and hear plenary lectures. They take specialized training courses. In 2009 there were 53 individuals in Group B.

In the third group (Group C) are individuals who have not received a grant, nor have they attended either specialized training courses or R&Ts. A few have received scholarships for study, but the largest portion of Group C beneficiaries receives a different form of assistance. The SANDEE team may spend time advising such individuals on their research, but in the end they do not submit a proposal. Or their proposal may not be selected for presentation at an R&T. Although individuals in Group C may be disappointed not to have been selected to attend a training course or R&T, in fact, in fact they received feedback and counseling. Indeed, the advice not to proceed down a certain research path can be especially valuable in the sense that SANDEE may save an individual a great deal of time and effort by avoiding an unproductive line of research. In 2009 there were about 47 Group C beneficiaries.

For every \$1 of administrative overhead expense, SANDEE's beneficiaries receive about \$5.4 in services. For beneficiaries in Groups A, B, and C, for every \$1 spent in administration, SANDEE delivered about \$4.5, \$6.8, and \$5.7 in services, respectively.

Individuals in Group A received direct services worth about \$8.7K per beneficiary (in 2009). Including direct and indirect costs, individuals in Group A receive services worth about \$10.6K per beneficiary. Individuals in Group B received direct services worth about \$3.7K, and direct + indirect services of about \$4.3K. Individuals in Group C received direct services worth about \$1.8K and direct + indirect services of about \$2.1K. SANDEE grantees stay involved with SANDEE for a few years. An estimate of the average value of the direct and indirect services delivered to a SANDEE grantee over an approximately 4-year period would be on the order of \$30K per beneficiary in Group A.

Cost effectiveness indicators indicate that SANDEE is extremely efficient in terms of delivering capacity building services to South Asian researchers and that the magnitude of these services is substantial for some beneficiaries, especially those who receive a research grant (Group A beneficiaries).

2. SANDEE's Impact

Six indicators are used to assess the effectiveness of SANDEE's capacity building efforts. In this evaluation I look at the impacts of SANDEE's activities on ...

- 1. The research of the grantees;
- 2. The teaching that grantees do;
- 3. The researchers' ability to network with other professionals;
- 4. The number and quality of the publications that researchers are producing;
- 5. The cumulative effects on researchers' careers; and
- 6. Adverse effects from researchers' involvement with SANDEE.

With regard to the first indicator, I found that SANDEE's activities have had two main impacts on the research focus of grantees. First, they have shifted researchers out of related fields into environmental

and resource economics. Second, SANDEE training activities – specifically R&T workshops, the introductory course on Environmental and Resource Economics, and the specialized training courses-have shifted the methods that grantees use to conduct their research.

With regard to the second indicator, SANDEE researchers are now developing new courses and curricula on environmental economics at their universities. As teachers they are introducing a new generation of students in South Asia to this field.

With regard to the third indicator, SANDEE has had an impact on the careers of some grantees in terms of connecting them to both national and international organizations and networks that they would not have otherwise been able to reach. This has had significant "multiplier effects" on their careers.

The fourth and arguably most impressive indicator of SANDEE's impact is the grantees' success in publishing their results, especially in refereed journals. Over the period 2001-2010 there have been 52 SANDEE publications. Over the period 2004-2009 SANDEE publications came out at a rate of about 7-8 publications per year, and almost half of these were in international journals. This also means that on average SANDEE researchers are producing almost one publication per grant. Several of these publications are already being cited in the environmental economics literature.

With regard to the fifth indicator, the evaluation documented a variety of ways that SANDEE has helped advance grantees' careers. Key parts of the researchers' stories are reported verbatim in the report.

Finally SANDEE researchers were asked whether there had been any negative consequences from their involvement with SANDEE. The purpose of this question was to uncover any unintended negative indirect consequences of SANDEE activities on researchers' careers. The vast majority of respondents simply said NO.

3. The SANDEE Family: The Secretariat, Resource Persons & instructors, and Researchers

SANDEE has a very strong team of professional and administrative staff who are deeply committed to its mission. This team manages a large flow of work in Kathmandu without the day-to-day supervision of the Director, who is based on Bangkok. Grantees praise the efficiency of the Secretariat staff, the Environmental Economist, and the Director. A large majority of grantees believe that they receive feedback on their proposal quickly; that email communications are efficient; and that the SANDEE Secretariat is working hard on their behalf.

SANDEE has had and continues to have a world-class group of environmental and resource economists serve as its resource persons. Interviews with the resource persons revealed a very high level of person commitment to SANDEE. They make considerable personal sacrifices to further SANDEE's objectives. Based on my interviews with the SANDEE grantees and the grantee survey, the SANDEE researchers are in general very appreciative of the resource persons. Not surprisingly, grantees would like even more of the resource persons' time—especially between the R&T workshops. Although grantees are very appreciative of the work of the resource persons, the majority of grantees felt that resource persons

should be appointed for fixed terms and that having more rotation among the resource persons would bring in fresh perspectives.

The researchers themselves are similar to those in the environmental economics networks in other parts of the world. They are young, enthusiastic, and hard-working. Many are academics at South Asian universities or researchers at institutes or NGOs. They are active in their academic and research circles, and generally optimistic about the future.

4. Research & Training Workshops; Specialized Training Courses

Almost 800 participants enrolled in SANDEE's introductory courses on Environmental and Resource Economics, Research & Proposal Writing, basic training (microeconomics, policy dissemination, econometrics, and climate change research) and advanced topics (CGE Modeling, Advanced Econometrics, Household modeling, Survey Methods, Climate Change, Climate Science & Policy, Program Evaluation, Paying for Environmental Services, and Policy Tools for Climate Change). SANDEE has kept detailed records of student evaluations of these courses, asking multiple questions about the quality of the teaching, course materials, and administration. Students recorded scores (grades) from 1 (low) to 5 (high) for each question.

The majority of participant scores for all questions across all courses were 4s and 5s. Equally impressive, the high ratings are not limited to a few instructors. SANDEE has used many different instructors in these courses, and almost all have received high ratings. There are a few low scores here and there for different instructors, but the SANDEE management team seems to have quickly addressed any problems that arose. The ratings by course participants show that the SANDEE management team pays great attention to the details of the SANDEE course offerings to ensure that they are of consistently high quality.

The grantees are pleased with both the R&Ts and course offerings. Grantees were queried about their preferences for new courses that SANDEE has not yet offered. There was no consensus among grantees on topics for new courses, but two commonly cited topics were "Water Resources Economics" and "Field Experiments and Experimental Design." There was an interest in more methods courses— e.g., more advanced econometrics, spatial econometrics, CGE modeling, computer simulation, geographical information systems, and sampling.

5. The Secretariat's Operations: The Grant-Making Process & the SANDEE Website

Overall grantees are quite happy with the grant-making process. Many grantees did feel that the SANDEE grant-making process favors certain types of projects and is biased against others. Some of the topics that grantees thought were discouraged included stated preference methods, qualitative analysis, interdisciplinary topics, and theoretical inquiries. To SANDEE's credit, grantees do not feel that the grant-making process is biased toward one country or another.

SANDEE grants appear to take longer to complete than grants made by the other environmental economics networks. For the 11 grants that started in the period 2005-2008, and that have now been

closed, the average length of a grant was 4.1 years. It is certainly a question worth exploring as to whether SANDEE grants could be completed in a shorter period of time and still maintain SANDEE's publication success. Even some of the researchers themselves seem to feel that the SANDEE research process takes longer than necessary.

SANDEE researchers like the content and layout of the SANDEE website and use it often. Similarly the SANDEE newsletter is used by researchers; the majority reports that they read it regularly and pass it on to others. Grantees had several specific suggestions on how the SANDEE website could be improved. These include better, more frequent updating of information and hosting a blog on environmental economics issues.

6. Governance Issues & Future Directions

SANDEE operates much like a non-governmental organization (NGO), but in fact SANDEE is not a legal entity. It is a creation of its donors and its network of friends and supporters. SANDEE continues to exist because of the financial support of its two largest donors (SIDA and IDRC) and the strong personal commitment of the Director, the resource persons, course instructors, and other friends and supporters of its activities. It has a Constitution that has no binding legal authority but is rather a statement of SANDEE's mission and how it proposes to operate. It is hosted by the International Centre for Integrated Mountain Research (ICIMOD) in Kathmandu, Nepal. SANDEE has a Management and Advisory Committee (MAC) that sets its overall strategic direction.

The most important strategic questions facing SANDEE are whether it should attempt to scale up its activities to reach more researchers, and, if so, the new direction(s) it should take. There are several possible new strategic directions that SANDEE might pursue, including putting more emphasis on: (1) incountry policy work; (2) cross-country research; and (3) capacity building in under-served areas. SANDEE resource persons and grantees were asked about these three possible new directions for SANDEE, and there is no consensus as to whether SANDEE needs to change. Nor is there any consensus on which of these three new strategic directions would make the most sense.

SANDEE's comparative advantage at present is its capacity building efforts. It offers world-class training programs extremely cost effectively, and there is thus a strong case for expanding its services to underserved areas. The question is how scalable SANDEE's training programs are. Cross-country research is an important potential comparative advantage for SANDEE, and the Director and resource persons are shaping research projects to look more and more like coordinated cross-country studies, especially in the area of climate change and agriculture. Efforts by SANDEE to sponsor cross-country projects would be especially valuable in South Asia from a geopolitical perspective in terms of demonstrating the importance of transboundary environmental research. The issues of water resources management, international rivers, and climate change would be obvious candidates for SANDEE cross-country work.

The more difficult question is whether SANDEE should move more into the policy analysis arena, and, if so, how far and how fast. Discussions with grantees indicate that many want their research to have more of a policy impact and that they want to get more involved in policy analysis. It would not be hard

for SANDEE to introduce some of the ideas and methods from the policy sciences to SANDEE researchers at the R&Ts and/or a more specialized training course on policy analysis.

The present membership of SANDEE's MAC is strong, and it is appropriate for a donor-funded capacity building network. However, If the MAC decides that SANDEE should move toward a different long-term role, one in which SANDEE relied less on donor financing, the MAC membership would need to change somewhat to include more private sector, government, and business expertise. The result would be a less "academically oriented" MAC. New members could assist the Director with the implementation of a different business model. Many Boards of Directors of NGOs include individuals who would be in a position to help establish a large endowment for the institution, or provide major financial help in some other way.

If SANDEE takes on new strategic initiatives, the present and former grantees will need to assume more ownership of the network. Although SANDEE grantees are deeply appreciative of SANDEE's efforts, they did not know much about how SANDEE operates. Even grantees who had been to multiple R&Ts and specialized training courses, and those who had been affiliated with SANDEE for years, do not really understand how decisions are made at SANDEE, or how SANDEE activities are financed. They were curious, but did not seem to feel comfortable asking. They knew that SANDEE is donor-funded, but they know little about SANDEE's finances.

Recommendations

The recommendations cover four areas:

- a) Scaling up, Strategic Partnerships
- b) Governance
- c) Training
- d) Organizational and Administrative Issues

Scaling up, Strategic Partnerships

SANDEE has world-class training materials and expertise in the field of environmental and resource economics. After 10 years of training hundreds of participants, the SANDEE Secretariat has a wealth of experience teaching both introductory and advanced topics in environmental and resources economics in developing countries, obviously with a focus on South Asia. SANDEE has tested case study materials and assignments on dozens of highly topical issues in environmental and resource economics. It has assembled a network of some of the best instructors in these subjects in the world, and it has detailed empirical evidence as to precisely who are the best instructors to teach specific topics. The set of courses that SANDEE offers in environmental and resource economics is both broader and deeper at the undergraduate and masters levels than probably any single university in the world.

Recommendation No. 1: Examine and Assess Alternative Business Models for Scaling Up SANDEE's Training Activities

There are different ways that SANDEE's training expertise could be deployed for wider use and impact. First, in collaboration with a university that has the necessary infrastructure, SANDEE could offer a world-class, on-line MSc degree in environmental and resource economics. The fact that SANDEE is not a legal entity is a barrier that would need to be solved in order to partner with a university or institute to ensure that SANDEE's intellectual capital would not be captured by another institution for its own financial and reputational benefit, but I do not see this as an insurmountable barrier.

Another business model might be to design training modules in environmental and resource economics, based on SANDEE courses, and license them to universities in South Asian. Many of SANDEE's grantees say that they use the materials that they receive from SANDEE in their courses. This relationship could be formalized and better managed. SANDEE could seek additional funds from its donors to scale up its activities in order for SANDEE to maintain the "public goods" character of its intellectual capital, and continue to offer its training for free or a nominal charge. I could envisage an on-line MSc degree in environmental and resource economics offered by a SANDEE-Beijer Institute Partnership, and supported by SANDEE's donors. An important question would be whether SANDEE's resource persons and "friends" would allow their intellectual capital to be used in such strategic partnerships.

Even if SANDEE were to conclude that scaling up its training activities was not advisable, I would still recommend that some of the lectures in its training courses be captured on video and perhaps made available on YouTube. This would be a SANDEE series entitled something like, "Great Lectures in Environmental and Resource Economics."

Governance

Recommendation No. 2: Share more information about SANDEE operations with SANDEE grantees.

Grantees will feel more ownership in the network if more information is shared with them about important decisions, especially financing and governance issues. This is also a learning opportunity for participants at the R&T's in the sense that they can come more familiar with the operational details of donor-funded network such as SANDEE. The MAC might consider having a few "senior" grantees serve on a rotating basis in an observer capacity at the MAC meetings.

Recommendation No. 3: Consider expanding the membership of the Management and Advisory Committee to include more individuals from the private sector and government.

SANDEE has distinguished members on its MAC. However, if SANDEE decides to scale up its activities, the composition of the MAC should more closely reflect its ambitions. This will mean that more members should be appointed who can help with the new strategic vision in terms of planning, networking, and funding.

Training

Recommendation No. 4: Explore the possibility of offering specialized training courses on policy analysis and environmental dispute resolution.

The SANDEE Director and MAC should consider adding specialized training courses on policy analysis and environmental dispute resolution. One potential advantage of giving SANDEE researchers more training in policy analysis and negotiations would be that some might be encouraged to use new research methods.

Organizational & Administrative Issues

Recommendation No. 5: Examine ways to reduce the duration of SANDEE grants.

Currently the period between the start of a grant and the publication of a SANDEE working paper is about 4 years. I think this period can be reduced without sacrificing the quality of a grantee's work.

Recommendation No. 6: Consider fixed-term, renewable appointments for resource persons.

SANDEE should consider the idea of appointing resource persons for fixed terms. Fixed-term appointments could be renewed. This proposal was discussed at the Dec. 15, 2005 MAC meeting in Waikkal, Sri Lanka, and the minutes suggest that there was general agreement that resource persons should be appointed for fixed terms. However, I do not see such a change as a matter of any urgency. SANDEE has already had significant rotation among the group of resource persons.

Recommendation No. 7: Adopt a policy on conflict of interest between resource persons and potential grantees.

Researchers should know that SANDEE has an explicit policy on conflict of interest with respect to research persons and members of the MAC with respect to the funding their own students or colleagues.

Recommendation No. 8: Determine whether SANDEE resource persons and members of the MAC have any corporate liability shield for their SANDEE activities.

The resource persons and members of the MAC should be informed as to whether they have any liability protection from charges of professional misconduct that might result from their SANDEE activities.

Recommendation No. 9 – Explore the possibility of using Facebook to communicate with researchers and disseminate announcements and materials.

The Director should determine whether Facebook would be a useful means to communicate with and distribute announcements and other materials to SANDEE researchers.

Recommendation No. 10 – The MAC should think deliberately and strategically about the role and responsibilities of the Secretariat staff, including the Director.

If the MAC makes a decision to scale up SANDEE's activities, and SANDEE enters into new strategic partnerships, the responsibilities of the Secretariat staff, including the Director will need to reflect such changes. It would be hard to overstate how fortunate SANDEE has been to have—and continue to have—Dr. Priya Shyamsundar serve as Director over the past 10 years. With luck, she will continue to serve in this capacity. But the MAC should think now about the role and responsibilities of the Director and issues of succession. The MAC also needs to plan now for expanding the Secretariat staff if the decision is made to scale up its activities and pursue new strategic directions.

Recommendation No. 11 – The MAC should build upon the work of this evaluation of SANDEE's activities to include further discussions with other institutions and stakeholders in the environmental community in South Asia about how SANDEE's activities could be improved.

One of the limitations of this evaluation is its focus on the internal workings of SANDEE. It would be useful to conduct discussions with external stakeholders in the environmental economics and policy community in South Asia about the policy impacts of SANDEE's activities and how SANDEE's activities can be improved.

Preface

This preface is a disclaimer, a warning to the reader. The purpose of this report is to assess the impact of 8 years of capacity building efforts in South Asia by the South Asian Network for Development and Environmental Economics (SANDEE), and to offer some suggestions on how its activities can be improved or enhanced. SANDEE activities are best viewed as human capital investments and their main consequences will occur in the future. Thus this evaluation must inevitably involve a qualitative, interpretative assessment of the available evidence. It is impossible to assess the outcomes of SANDEE's activities using rigorous program evaluation techniques.

In certain respects someone without any experience with or knowledge of SANDEE or the other regional environmental economics networks would be best placed to sift through the available evidence with a fresh mind and evaluate SANDEE without any preconceptions. It would be disingenuous for me to claim to be such an unbiased, neutral observer. I currently serve as a resource person for three of the regional environmental economics networks (EEPSEA, LACEEP, and CEEPA), and I am assisting a fourth (MENA). I have devoted a substantial part of my professional career over the past 15 years to these regional environmental economics networks. Obviously I believe they are doing good, important work, or I would not be associated with them.

Also, some of the SANDEE resource persons are close personal friends of mine; others I know through their professional work. I have great admiration for all of them, both for the work they are doing for SANDEE and their many contributions to the field of environmental and resource economics. The flip side of my admitted lack of objectivity is that fact that I am a strong supporter of the regional environmental economics networks, and I would like to see SANDEE get even better. I hope my recommendations at the end of this evaluation are seen in this light.

On the other hand, the reader should not imagine that I have been closely affiliated with SANDEE. Before this evaluation, I had only minimal contact with SANDEE over the past eight years. I had never been to a SANDEE workshop or training course. Moreover, much of the information reported in this evaluation comes directly from the SANDEE researchers themselves, and I have presented these data as simply and objectively as possible.

Chapter 1 - Introduction

Background

SANDEE was launched in 2000 with technical support from the Beijer Institute of Ecological Economics and financial support from the Swedish International Development Cooperation Agency (SIDA). In 2000 I had already been working as a resource person for the Economy and Environment Program for Southeast Asia (EEPSEA) for five years, and I heard about the launch of the SANDEE network at the EEPSEA biannual meetings and through my work with the Environmental Department at the World Bank. I was naturally curious how SANDEE would develop. I wondered whether SANDEE would grow and be as successful as EEPSEA. Conducting this present evaluation has made me think back to SANDEE's beginnings and remember what my thoughts were at the time. It seemed to me then that SANDEE faced one obstacle and had two advantages.

The obstacle was the regional tension between India and Pakistan, and the difficulty for researchers from either country to get visas to travel to the other. This made finding a home base for SANDEE challenging, and complicated the logistics of arranging biannual workshops (research and training workshops, or "R&Ts"). In contrast EEPSEA was based on Singapore, a regional transportation and communications hub that was easy to reach from anywhere in Southeast Asia and the rest of the world. Singapore was also an extremely efficient location for holding EEPSEA meetings.

The first advantage was the commitment and involvement of two of the world's preeminent environmental economists: Karl-Göran Mäler and Partha Dasgupta. Neither EEPSEA nor any of the networks established later had the active involvement of such giants in the environmental and resource economics field. But given my experience with EEPSEA, I knew firsthand how labor intensive the training of young scholars in South Asia would be, and I wondered whether Karl-Göran Mäler and Partha Dasgupta would really have the time or commitment needed. The second advantage was that English was a common language across the region, much more so than in Southeast Asia. So despite the political obstacles, the researchers could more easily communicate with each other if they could find a place to meet.

Looking back now 10 years after SANDEE's launch, my initial worries about the logistical and financial problems associated with the regional tensions in South Asia were legitimate. SANDEE has been largely unable to hold meetings in India, even though India has the best infrastructure in the region. SANDEE has been based in Kathmandu, first hosted by the International Union for the Conservation of Nature (IUCN) and now by the International Centre for Integrated Mountain Research (ICIMOD). Kathmandu has been politically unstable, and SANDEE has suffered from poor telecommunications and transportation infrastructure. The result has been the necessity to hold some R&Ts and other meetings in other cities in South Asia, as well as in Bangkok (a location outside the SANDEE network's region).

Actually it was only during the course of this evaluation that I learned how difficult the legal and financial hurdles to SANDEE have been (and continue to be). SANDEE has been unable to achieve a legal

status that is recognized across the countries in the region. Money transfers between some countries can be impossible. After September 11, 2001, the increased monitoring of financial transfers to and from South Asia from the United States made incorporation by SANDEE in the United States or Europe impractical. Keeping SANDEE functioning in such turbulent times has taken considerable entrepreneurial and administrative skill and perseverance.

What I failed to see back in 2000 was that these very obstacles presented an opportunity in one important sense. If SANDEE succeeded, its work would be even more valuable because it would offer a model of success in a region where transboundary academic collaboration has been extremely difficult. SANDEE has provided a mechanism for environmental and resource economists across the South Asia region to meet and collaborate. During the course of this evaluation, many people have stressed to me the geopolitical importance of SANDEE in South Asia. I am convinced that fostering intellectual dialogue and exchange across the South Asia region is indeed one of SANDEE's main achievements over the past 10 years.

With regard to the two advantages, I was completely off the mark to have worried about the commitment of Karl-Göran Mäler and Partha Dasgupta. They have been an inspiration to SANDEE researchers over the last ten years. It is hard to overstate their importance to the success of SANDEE. They gave the network credibility in the economics communities across South Asia from day one. They have also provided advice, guidance, and political support to the Director and Secretariat. Their presence conveyed to grantees that the grantees' research was important. My impressions from the July 2010 workshop is that having English as a common language has indeed been a plus for the network, although perhaps not as much as I had initially thought.

Objectives of the Evaluation

As detailed in the terms of reference, this evaluation has two main objectives:

- "1. To assess SANDEE's effectiveness in building research, policy and teaching capacity related to environment-development economics in South Asia and provide SANDEE's Management Committee members, including donors, with information on its benefits and impacts.
- 2. To provide feedback to SANDEE on its goals, on how it can further strengthen its effectiveness and efficiency, and, to help identify new options and partnerships for the future."

Information & Data Sources

To accomplish these objectives, I have relied on three main sources of information. First, in March 2010 the SANDEE Secretariat sent me a large amount of background materials on SANDEE activities over the past 10 years. These materials included the following ...

- Information on Grantees
- Peer-reviewed publications and other published work
- Descriptions of training courses
- Participant evaluations of R&T's and specialized training courses
- Lists of Plenary Presentations at R&T's
- List of donors
- Governance and related documents (e.g. constitution, Agreement with International Centre for Integrated Mountain Development)
- Minutes of Management and Advisory Committee meetings

Second, from July 6-12, 2010, I attended the SANDEE R&T workshop in Colombo, Sri Lanka. During this R&T I interviewed all of the resource persons except Jean-Marie Baland (who did not attend). I held focus groups that included all of the SANDEE grantees at the workshop, as well as numerous one-on-one interviews with grantees. The Director made herself available throughout the R&T, and we have had multiple subsequent extended discussions. I also interviewed the SANDEE staff who attended the R&T, and interviewed others over the telephone. I was present at the grantees research presentations, both final reports and proposals. I sat in on one-on-one discussions between grantees and resource persons. I have also interviewed some of the members of SANDEE's Management and Advisory Committee (MAC).

Third, I conducted a survey of SANDEE grantees, both past and present, during late June and early July, 2010. I developed a first draft of the survey instrument in June, and received detailed feedback from both the Director and the SANDEE resource persons before it was finalized. In total the survey was sent via email to 78 SANDEE grantees, and 55 individuals returned their completed questionnaires (a response rate of 71%). The survey instrument is included in the Appendix to this report. In addition, the Appendix also includes a complete tabulation of the raw data provided by the 55 respondents. After each closed-ended question in the survey, I present a statistical summary of the responses. Some answers to the open-ended questions are not easy to summarize. For these questions, I present a complete listing of the responses of all of the respondents who answered that question. It is thus possible for the interested reader of this evaluation to read each question in the survey, and then see precisely what the respondents answered.

In this report I refer often to the grantees' responses to questions in this survey. Many of the most insightful answers provided by grantees were given in response to open-ended questions. In the text I often summarize a few of these answers that I consider most representative of my discussion with grantees at the July R&T, or of other grantees' answers to that open-ended question. I have not attempted a more systematic quantitative analysis of these open-ended answers, but all are included in the Appendix for the interested reader to study.

One of the limitations of this evaluation is that I focused my attention almost solely on the internal workings of SANDEE. I interviewed almost exclusively the SANDEE researchers, resource persons, and staff. I did not have the time or resources to talk with other stakeholders in the South Asia region about their impressions of the work of SANDEE and its impacts. In the recommendations, I suggest that it

would be useful to conduct discussions with external stakeholders in the environmental economics and policy community in South Asia about SANDEE activities and how they could be improved.

Overview of SANDEE Activities

From 2003-2009, SANDEE made a total of 61 research grants and organized 14 R&T's. Table 1.1 shows the distribution of the 61 grantees by country by year over the period 2003-2009. The amount of most grants fell in the range of US\$10k-20K (mean = US\$13k). Indian researchers received 25 grants (41% of the total), with researchers from Bangladesh, Pakistan, and Nepal receiving 10 grants each. Male researchers received 62% of the total grants, female researchers 38%. As shown in Table 1.2, over this period, the R&T workshops were held in Thailand (5), Sri Lanka (4), Nepal (3), and India (2). No workshops were held in Pakistan or Bangladesh.

Table 1.1 – SANDEE research grants – by country of grantee, by year (2003-2009)

Year	Bangladesh	India	Nepal	Pakistan	Sri Lanka	Total
2003	2	4				6
2004		5	2			7
2005	3	3	3	2	2	12
2006		1	2	1		4
2007	1	1	1		2	5
2008	1	6	1	4	2	14
2009	3	6	1	3		15
Total	10	25	10	10	6	61
	(16%)	(41%)	(16%)	(15%)	(10%)	(100%)

Table 1.2 – Location of SANDEE R&Ts, by country, by year (2003-2009)¹

Year	Bangla-	India	Nepal	Pakistan	Sri Lanka	Thailand	Total
2003	desh				Colombo June 10-15	Bangkok Nov. 18-22	2
2004		Bangalore Nov 5-9			Colombo June 13-14		2
2005		Bangalore July 22-26			Colombo Dec 14-18		2
2006						Bangkok June 26-July 1 & Dec 6-10	2
2007			Kathmandu July 8-12				1
2008			Kathmandu Dec 9-13			Bangkok Jan 8-11, June 30-July 3	3
2009			Pokhara Dec 8-12		Negomo June 28-July 3		2
Total	0	2	3	0	4	5	14

SANDEE offered its introductory course in Environmental and Resource Economics and its course on Research & Proposal Writing 8 times each, once a year from 2002-2009. In addition, SANDEE offered twelve advanced courses on the following topics: CGE Modeling, Advanced Econometrics, Household modeling, Survey Methods, Climate Change, Climate Science & Policy, Program Evaluation, Paying for Environmental Services, and Policy Tools for Climate Change. SANDEE also offered other, more basic training courses in microeconomics, policy dissemination, econometrics, and climate change research.

Table 1.3 summarizes the number of participants in these courses by country over the 2002-2010 period. As shown, almost 800 participants took these courses. Because many participants took multiple courses, it is not possible from these data to determine how many different individuals received training. Although participants came from all countries in the region, the majority were from Bangladesh (133), India (195), Nepal (182), and Pakistan (155). On a per capita basis the smaller countries have a higher representation, reflecting their greater needs. Sri Lanka is even better represented than it might

¹ Prior to 2003 SANDEE tried holding R&Ts and specialized training courses in Bangladesh. But the participants were once trapped for 24 hours by smog and unable to depart. SANDEE has not held R&Ts and specialized training courses in Bangladesh since this episode.

appear because for most of this period researchers from Sri Lanka were part of both the SANDEE and the EEPSEA environmental economics networks.

Table 1.3- Number of Participants who attended SANDEE training courses, by country (2002-2010)

Country	Environmental &	Advanced	Research &	Other	Total
	Resources	Training	Proposal	Courses	
	Economics	Courses	Writing		
Bangladesh	42	31	22	38	133
Bhutan	3	2	1	5	11
India	43	82	17	53	195
Nepal	39	60	23	60	182
Maldives	1	1	0	2	4
Pakistan	29	38	32	56	155
Sri Lanka	32	38	5	8	83
Others	5	28	0	1	34
Total	194	280	100	223	797

Organization of Report

This evaluation report is organized in nine chapters. The next, second chapter provides the reader with an overview of SANDEE's budget situation and presents a few simple cost effectiveness indicators that I think provide important contextual information for understanding the scale and efficiency of SANDEE's activities. The third chapter presents my assessment of the impact that SANDEE's activities have had in the region, using multiple indicators. In the fourth chapter I describe the "SANDEE family": - the Director and Secretariat staff, the resource persons & instructors, and the researchers. I present findings from the grantee survey about how the researchers view the resource persons & instructors, and the Director and Secretariat staff.

In the fifth chapter I analyze SANDEE's principal training activities – the R&T workshops and the specialized training courses. The sixth chapter presents data on the Secretariat's operations—the grant-making process itself and the SANDEE website. In the seventh chapter I discuss SANDEE's governance arrangements. In the eighth chapter I look ahead at possible options for new directions for SANDEE. Chapter 9 presents my recommendations.

Chapter 2 - Observations on SANDEE's 2009 Budget Expenditures and Estimates of a Few Cost-Effectiveness Indicators

Introduction

To understand any organization, a good place to start is an examination of its budget. This is especially true of the donor-funded, environmental economics capacity building networks such as SANDEE because there are several unusual features of the SANDEE budget situation that merit careful reflection. In this second chapter I discuss both SANDEE's revenues and its 2009 expenditures. I then calculate a few simple "cost-effectiveness indicators."

Revenues

SANDEE is 100% dependent on donor funds for the financial resources to support its capacity building activities; it has only very modest other source of revenues (e.g. membership dues and small donors). Over the period 2000-2010, SANDEE received grants totaling US\$5,683,268.² Table 2.1 shows the total grants over this period that SANDEE has received from each of its donors.

Table 2.1 – SANDEE's Donors and Level of Support

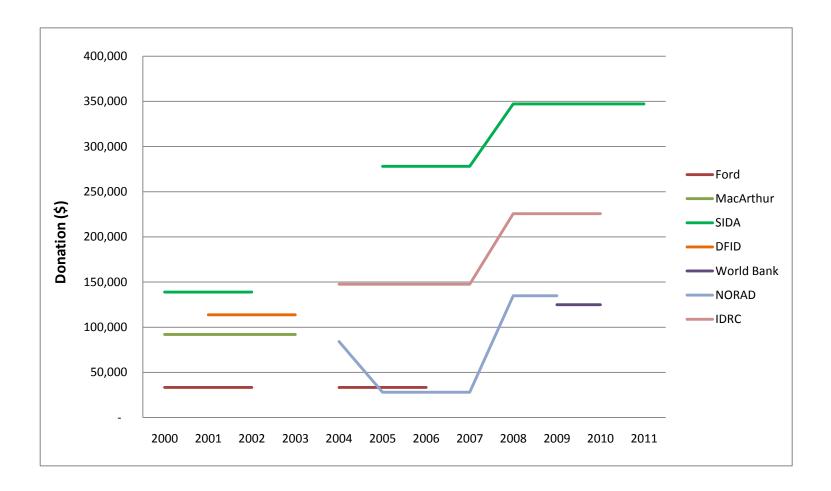
Donor	No. of grants	Total
Swedish International Development Corporation (SIDA)	3	US\$2,639,982.
International Development Research Centre (IDRC)	2	US\$1,267,176.
Norwegian Agency for Development Cooperation	4	US\$ 606,676.
Beijer Institute/MacArthur Foundation	1	US\$368,000
Department for International Development (DFID)	1	US\$341,434
The World Bank	2	US\$260,000.
Ford Foundation	2	US\$200,000.
Total	15	US\$5,683,268.

SANDEE has received a total of 15 grants from 7 donors. As shown in Table 2.1, the majority (69%) of its funds over the 2000-2010 period has come from the Swedish International Development Corporation (47%) and the International Development Research Centre (22%). SIDA was particularly important since it provided the Beijer Institute of Ecological Economics some early, critical support to help launch SANDEE through a regional workshop organized by IUCN, Nepal, in November 1999.

² Note that the most recent SIDA grant extends until 2012.

Figure 2.1 shows the amount and timing of these same grants over the 2000-2012 period. Figure 2.1 indicates clearly the long and stable support of Swedish International Development Corporation and the International Development Research Centre. NORAD has also played an important role over a long period.

Figure 2.1 – SANDEE Donors - Amount of Grant and Time Profile (2000-2012)



2009 Expenditures and "Hidden Subsidies"

For the expenditure side, I focused on SANDEE's 2009 budget because this was the most recent year for which expenditure data were available and easily accessible. In 2009 SANDEE spent US\$625K Table 2.2 shows the principal budget expenditures categories.

Table 2.2 - SANDEE Budget - 2009

Budget Expenditure Category	2009 Expenditure	Percent of total
Grant payments to researchers	US\$144K	23%
R&T Workshops	US\$118K	19%
Specialized Training Courses	US\$128K	20%
Proposal & manuscript reviews, scholarships, new research	US\$28K	4%
Policy Advocacy, Dissemination, Publications	US\$41	7%
Total Secretariat Costs	US\$166K	27%
Total	US\$625k	100%

This breakdown of the 2009 budget shows that the majority of SANDEE expenditures are for the delivery of direct capacity building services to South Asian researchers. These services are in the form of grants for research (23% of total expenditures), supervision of this research and training at the R&T's (19%), and specialized training courses (20%). Dissemination, publication, and policy advocacy activities are also services to South Asian researchers and the broader policy community, as well as proposal & manuscript reviews, and scholarships also represent services to researchers. Expenditures to the resource persons and instructors in the specialized training courses are included in both the subtotals for "R&T Workshops" and "Specialized Training Courses." Expenditures for SANDEE staff salaries are included in "Total Secretariat Costs."

However, there are important features of SANDEE's operations that make this budget summary incomplete. For example, a substantial portion of the Secretariat's expenditures are actually technical services provided to researchers. The most important component of these "hidden" research services is the time of the Director herself, who plays not only an administrative role in SANDEE, but also provides technical support to the researchers, just as the resource persons and instructors in the specialized courses do. Similarly, SANDEE's Environmental Economist provides important technical services. These expenditures are not true administrative overhead.

As another example, SANDEE receives three types of unaccounted for "hidden" subsidies. First, the SANDEE budget does not include the real economic cost of the Director. In reality, this has been close to a full-time position for the Director, not a part-time position. As described above, the Director is providing research support services to the grantees and other beneficiaries. The second "hidden subsidy" is provided by the resources persons and other instructors. SANDEE pays these individuals a modest daily rate, and an honorarium for manuscript and proposal reviews. In 2009 the total payments

to the resource persons was about US\$50K, about 8% of total expenditures. For the international resource persons, their involvement in SANDEE's activities should not be seen as a traditional consultancy or commercial transaction; it is best viewed as pro bono work. As evidence of this, in 2009 some of the resource persons and instructors occasionally waved their fees for some activities.

The third "hidden subsidy" is that the International Union for Conservation and Nature (IUCN) provided SANDEE with office space and other services from (2001-2009). Currently the Integrated Centre for Integrate Mountain Development (ICIMOD) in Kathmandu provides SANDEE with office space and an institutional home. SANDEE pays ICIMOD a modest amount for these facilities. The value of an institutional home is hard to estimate, but substantial. SANDEE has been able to operate without establishing itself as a legal entity, and has received for free the "branding" services of first the IUCN and now ICIMOD.

For purposes of illustration, I assume that the total value of these three hidden subsidies that SANDEE receives to support its operations is about US\$150K per year, or about one quarter of its annual budget. A recognition of the approximate magnitude of these hidden subsidies is important for several reasons. First, SANDEE is actually deploying more resources – i.e., it has a bigger "footprint"—than it would at first appear. Second, the continuation of these hidden subsidies cannot be taken for granted. The Director herself has provided about two thirds of these hidden subsidies. A different Director or a different group of resource persons who were less devoted to SANDEE might not be willing to work at rates below their market value. Without a change in the budget, such a shift could substantially alter the magnitude of the services that SANDEE could offer researchers.

Third, and perhaps most importantly, the magnitude of the hidden subsidies provided by the Director, the resource persons, and the instructors is a convincing indicator of their commitment to SANDEE and their belief that it is doing important work. Otherwise it is inconceivable that such a talented group of individuals would stay involved in SANDEE over such a long period of time. It also means that the Director, the resource persons, and the instructors cannot be viewed simply as consultants or employees of a donor-funded organization. They have all put substantial "sweat equity" into SANDEE and rightly perceive themselves to be "part owners" – or shareholders – in the organization. On balance this "shared ownership" is extremely positive for SANDEE, but it does mean that the management and governance of SANDEE is different, and somewhat complicated, an issue discussed in Chapter 7.

A First Step toward Cost-effectiveness Indicators

Ideally a cost-effectiveness indicator compares some nonmonetary program outcome (e.g., lives saved, number of people trained, number of refereed publications) to the financial input (cost) needed to achieve this outcome. In Chapter 6 I discuss the outcomes or results of SANDEE's capacity building efforts. Here I simply compare the monetary value of the direct services that SANDEE beneficiaries receive per administrative dollar spent. I also report the monetary value of the direct (and direct plus indirect) services that different "types" of SANDEE beneficiaries receive per individual.

SANDEE provides capacity building services to three groups of individuals in South Asia. In the first group (Group A) are recipients of SANDEE research grants. These grantees receive not only the grant funds, but

also services at the Research and Training Workshops (R&Ts, specialized training courses, and assistance with manuscript publication). In 2009 there were 28 individuals in Group A.

In the second group (Group B) are individuals who may attend R&Ts and specialized training courses, but have not received a grant. Some individuals in Group B may receive a grant in the future, but some may not. However, even individuals who do not eventually receive a grant are beneficiaries. They receive feedback on their research proposals. They benefit from their interactions with resource persons at the R&Ts and hear plenary lectures. They take specialized training courses. SANDEE has made expenditures to provide all of these services. In 2009 there were 53 individuals in Group B.

In the third group (Group C) are individuals who have not received a grant, nor have they attended either specialized training courses or R&Ts. A few have received scholarships for study, but the largest portion of Group C beneficiaries receives a different form of assistance. Especially in the early years of SANDEE many individuals contacted the SANDEE Secretariat about their research, and they were provided services, even though they were never invited to a training course or an R&T. For example, the Environmental Economist or Director may spend time advising such individuals on their research, but in the end they do not submit a proposal. Or their proposal may not be selected for presentation at an R&T. Sometimes the staff may send a proposal for an outside review, and the reviewer's comments are provided to the individual.

From my perspective it is important that these individuals in Group C not be regarded as "failures." Although they may be disappointed not to have been selected to attend a training course or R&T, in fact, in fact they received feedback and counseling. Indeed, the advice not to proceed down a certain research path can be especially valuable in the sense that SANDEE may save an individual a great deal of time and effort by avoiding an unproductive line of research. It is difficult to estimate precisely the number of individuals in Group C but in 2009 we estimate that there were 47 such beneficiaries. Based on my experience and discussions with persons in SANDEE and other networks, the number of individuals in Group C is especially high in the early years of the network's work. Probably as a network get more established, there are fewer individuals in Group C because the protocols are better developed to efficiently move more Group C individuals into Group B and eventually Group A.

I worked with the SANDEE Director to calculate cost-effectiveness indicators for Groups A, B, and C using SANDEE budget expenditures for 2009. I made two sets of calculations. The first did not include estimates of "hidden subsidies (Table 2.3). The second set did include estimates of the hidden subsidies (Table 2.4).

The results presented in Table 2.3 show that SANDEE's administrative costs relative to the value of services delivered to beneficiaries are extremely low. For every \$1 of administrative overhead expense, SANDEE's beneficiaries receive about \$5.4 in services. For beneficiaries in Groups A, B, and C, for every \$1 spent in administration, SANDEE delivered about \$4.5, \$6.8, and 5.7 in services, respectively.

Table 2.3 also shows that individuals in Group A received direct services worth about \$8.7K per beneficiary (in 2009). If we include the direct and indirect costs, individuals in Group A receive services worth about \$10.6K per beneficiary. Individuals in Group B received direct services worth about \$3.7K,

and direct + indirect services of about \$4.3K. Individuals in Group C received direct services worth about \$1.8K and direct + indirect services of about \$2.1K.

It is important to be clear about what these estimates do and do not represent. First, they are not an estimate of the economic value of these services to the beneficiary. The estimates are simply what SANDEE paid per individual for a package of capacity building services. The economic value of this package to the individuals themselves could be much more (or less). The economic value of this package of services to the individual is very hard to estimate, but for many individuals I am convinced that it has been a life-transforming experience (see Chapter 3).

Second, a single year's perspective is not really adequate to obtain a clear picture of the magnitude of the services that SANDEE grantees are receiving. However, I was only able to make these calculations for 2009. More analysis of the SANDEE financial records would be needed to take a multi-year perspective. But some simple calculations are possible. The average SANDEE grantee takes approximately 4 years to complete a grant (though he/she is actively involved in research only during the first two years as described in Chapter 6) during which period he/she attends several R&Ts and a few training courses. Even before the grant is awarded, a grantee may have attended a R&T and a specialized training course. I think an estimate of the average value of the direct and indirect services delivered to a SANDEE grantee over an approximately 4-year period would be on the order of \$30K per beneficiary in Group A. Some grantees receive more than one grant. Others attend specialized courses after they finish their grant. This \$30K estimate is thus not an upper bound. Some grantees have received considerably more services than this.

Given these limitations, Table 2.4 presents similar results with the hidden subsidies included in the calculations. Including the hidden subsidies from the Director, the Resource Persons, and the instructors increases the numerator in the cost-effectiveness ratio; and including the hidden subsidy for from ICIMOD increases the denominator. On balance, the cost-effectiveness ratios in Table 2.4 are slightly lower than those in Table 2.3. However, the value of the direct and indirect services per beneficiary in Group A and B increase substantially when the three hidden subsidies are included.

Table 2.4 shows that individuals in Group A received direct services worth about \$10.7K per beneficiary (in 2009). If we include the direct and indirect costs, individuals in Group A receive services worth about \$13.1K per beneficiary. Individuals in Group B received direct services worth about \$4.7K and direct plus indirect services worth about \$5.4K. Over a 4-year period an estimate of the average value of the direct and indirect services delivered to a SANDEE grantee after the hidden subsidies are included would be on the order of \$40K per beneficiary in Group A.

Table 2.3 – Cost-effectiveness without "hidden subsidies"

	Group A -	Group B –	Group C –	Total
	Grantees	Received	Received	
		training but no	neither grant	
		grant	nor training	
Budget expenditures delivered	\$244K	\$198K	\$86K	\$527K
to beneficiaries (1)				
Administrative/overhead	\$54K	\$29K	\$15K	\$ 98K
expenditures (2)				
Total (3)	\$298K	\$227K	\$100K	\$625K
Cost-effectiveness Indicator	4.5	6.8	5.7	5.4
(1) ÷ (2)				
No. of beneficiaries in 2009 (4)	28	53	47	128
\$ value of direct services	\$8.7K	\$3.7K	\$1.8K	\$4.1K
delivered per beneficiary	per beneficiary	per beneficiary	per beneficiary	per beneficiary
$(1) \div (4)$				
\$ value of direct + indirect	\$10.6K per	\$4.3k per	\$2.1K	\$4.9K
services delivered per	beneficiary	beneficiary	per beneficiary	per beneficiary
beneficiary (3) ÷ (4)				

Table 2.4 – Cost-effectiveness with "hidden subsidies" included

	Group A -	Group B –	Group C –	Total
	Grantees	Received	Received	
		training but no	neither grant	
		grant	nor training	
Budget expenditures + \$	\$300K	\$248K	\$104K	\$527K + \$100K +\$25K
value of subsidies delivered to				= \$652K
beneficiaries (1)				
Administrative/Overhead	\$68K	\$37K	\$18K	\$98K + \$25K = \$123K
expenditures + subsidy (2)				
Total (3)	\$368K	\$285K	\$122K	\$652 + 123 = \$775K
Cost-effectiveness Indicator	4.4	6.7	5.8	5.3
(1) ÷ (2)				
No. of beneficiaries in 2009 (4)	28	53	47	128
\$ value of direct services	\$10.7K	\$4.7K	\$2.2K	\$5.1K
including subsidies delivered	per beneficiary	per beneficiary	per beneficiary	per beneficiary
per beneficiary (1) ÷ (4)				
\$ value of direct + indirect	\$13.1K	\$5.4k	\$2.6K	\$6.1K
services delivered per	per beneficiary	per beneficiary	per beneficiary	per beneficiary
beneficiary (3) ÷ (4)				

Summary

On the revenue side, SANDEE is heavily dependent on grants from the Swedish International Development Corporation (SIDA) and the International Development Research Centre (IDRC). An important question for the Management and Advisory Committee and the SANDEE Director is whether there is a business model that could move SANDEE part way along the path from a donor-funded project to a self-financing organization, and, if so, whether this would be desirable. This issue is discussed in Chapters 8 and 9.

The analysis of the hidden subsidies that SANDEE receives suggests that there is something special about what SANDEE is doing, and that the resource persons, instructors, and the Director believe strongly in SANDEE's is work.

The cost effectiveness indicators indicate that SANDEE is extremely efficient in terms of delivering capacity building services to South Asian researchers and that the magnitude of these services is substantial for some beneficiaries, especially those who receive a research grant (Group A beneficiaries).

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Chapter 3 – Assessing SANDEE's Impact

Introduction

In the minutes of the SANDEE's Management and Advisory Committee meeting held on December 5, 2006 in Bangkok, it is recorded that,

"Tracking SANDEE researchers over time and identifying their accomplishments is possible, but can be very costly to get right. Publications are always the best way of tracking value-addition. We can also try to obtain data on other indicators such as promotions, presentations, citations, and so on. However, we cannot obtain information on researchers who did not come through SANDEE to match these results with a control group."

In essence, this statement summarizes succinctly the challenges involved in assessing SANDEE's impact. The consequences of SANDEE's capacity building efforts over the past ten years will unfold over the coming decades. SANDEE's grantees are largely young researchers and university teachers with the majority of their careers ahead of them. As instructors at universities and research institutes throughout South Asia, SANDEE grantees will touch the lives of literally thousands of students. SANDEE's efforts are best conceptualized as long-term investments in human capital, and the impacts of these efforts will be diffuse and ultimately impossible to track accurately. The most important research and policy outcomes will likely occur a few decades from now when these grantees are in the prime periods of their careers.

Perhaps I can illustrate this point with a personal story. In the 1977 the Ford Foundation awarded me a dissertation fellowship to work on Nile water management issues. I spent a year in Cairo working at the Egyptian Academy of Science and Technology, and published a handful of journal articles and a book based on my dissertation work. These early Nile publications based on my dissertation work were relatively unimportant and have not been widely cited. But my interest in Nile water management continued. In 1983 I was awarded a Fulbright Scholarship to teach at the Institute of Environment Studies at the University of Khartoum. My knowledge of Nile water issues deepened, and my subsequent papers were more influential and some were widely read, sometimes picked up and quoted in the international media.

When the World Bank launched the Nile Basin Initiative in 1987 in collaboration with the Eastern Nile riparians, I became part of the Bank's core team, advising on both economic issues. As the Nile Basin Initiative developed during the 2000s, I taught and held consultations about Nile water management with high-level policy makers in the Nile basin. In 2008-2009 I was a member of the Blue Ribbon Commission "Scoping Panel" constituted to offer strategic advice to the Eastern Nile Water Ministers. Today I am leading a consultant team studying the economics of infrastructure investment options on the Eastern Nile for the World Bank.

What was the impact of the Ford Foundation dissertation fellowship on my subsequent career? The fellowship was critical in terms of focusing my interests on Nile water management issues. Without it I might well have done a dissertation on another topic, and none of my own subsequent Nile activities would ever have happened. Of course, the counterfactual is unknowable. Perhaps my career would have had a greater policy impact if I had not received the Foundation dissertation grant and had become interested in something else. But this seems unlikely to me. And in this counterfactual, surely the World Bank would have found another economist to play my role, perhaps one much better qualified than me.

At the time I received this dissertation award, I was deeply appreciative, and intuitively I knew that my career had taken a certain, serendipitous direction. But there would have been no way for anyone back in 1980 to know where this fellowship would lead in terms of future policy impacts. Nor would it be appropriate to attribute the policy impacts of my work on Nile management solely to the Ford Foundation fellowship. There were many additional contributing factors, such as the interests and assistance of my dissertation advisor.

My conversations with SANDEE grantees and their responses to the questions on the grantee survey resonated with me. The SANDEE grantees sounded much like I would have 33 years ago when I received the Ford Foundation dissertation grant—deeply appreciative of the opportunity that SANDEE had given them, but uncertain where it would lead.

Because SANDEE's grants were not made with the objective of influencing environmental policy in South Asia, and due to time, resource, and information constraints, I have thus not attempted to assess the policy impacts of SANDEE's activities in this evaluation.

Six indicators

From my perspective it is thus impossible to know now all of the outcomes associated with having better trained, highly skilled environmental economists carrying out research and teaching activities in South Asia. In my judgment the best approach to assess the effectiveness of SANDEE's capacity building efforts is to look at multiple indicators that are suggestive of the possibility of positive future consequences. In this evaluation I focus on six such indicators.

First, I look at the impacts of SANDEE activities on the research of the grantees. I use the results of the grantee survey to see what grantees say about how SANDEE has affected their research focus, their methods, and the quality of their work.

Second, I examine the impacts of SANDEE activities on the teaching that grantees do. As noted, many of SANDEE's grantees are lecturers or professors at "secondary universities" in South Asia. In my judgment one of the main outcomes of the SANDEE network over the long term will be the students that SANDEE-trained teachers reach.

Third, one of the important outcomes from SANDEE is networking. SANDEE researchers are establishing links with each other and with other environmental and government organizations in South Asia and

outside the region. I report what the grantees say about how SANDEE is helping them make these kinds of connections.

Fourth, one measure of the research output that SANDEE supports is the number and quality of the publications that researchers are producing. I assess the evidence on both quantity and quality of publications from SANDEE research.

Fifth, all of these outcomes – research, teaching, networking, publishing- help researchers in their promotion and career advancement. SANDEE gives its researchers credibility and prestige. I summarize what SANDEE grantees say about these cumulative effects on their careers.

Finally, sixth, in the grantee survey I asked SANDEE researchers about any negative effects from their involvement with SANDEE. I report their responses to this question as well.

Research Activities of SANDEE grantees

SANDEE's activities have had two main impacts on the research focus of grantees. First, they have shifted researchers out of related fields into environmental and resource economics. Second, SANDEE training activities – specifically R&T workshops, the introductory course on Environmental and Resource Economics, and the specialized training courses-- have shifted the methods that grantees use to conduct their research.

In the grantee survey, respondents were asked how their research focus would be different today if they had not been involved with SANDEE. Many grantees who answered this question said that they would probably not be doing environmental economics today if it had not been for SANDEE. Table 3.1 lists 5 typical responses in which the respondent explains how SANDEE activities shifted their focus from other fields of economics to environmental economics.

There are many more responses like these. It is thus clear to me from such answers that one important consequence of SANDEE activities is to move students with more general economics training into the field of environmental economics. Moreover, even researchers who answered this question by saying that their research focus has not changed, often commented that SANDEE training activities strengthened their quantitative skills and enabled them to conduct higher quality research in environmental and resource economics.

Table 3.1 – SANDEE's effect on grantees' research focus

Question	How would your research focus be different today if you had not been involved with
#3:	SANDEE? For example, if your research interests have changed, explain what they
	were before and what they are now?
Response 1	Before getting SANDEE grant, I was mainly working on Technology Transfer issues. Post-
	SANDEE, I have worked on three projects pertaining to environmental economics.
	SANDEE project opened the door for me in environmental economics.
Response 2	I have completed my Ph.D. in Development Economics by carrying out research in the
	banking sector of Pakistan. The topic of my Ph.D. dissertation was "Efficiency Analysis of
	Commercial Banks in Pakistan". So, before SANDEE's grant, my area of interest was
	banking sector of the economy but now my focus is on the environmental aspect of the
	economy.
Response 3	Before SANDEE, I did my research work on marketing and pricing policy on Agricultural
	commodities. But after the involvement of SANDEE, I orderly developed and enriched my
	research skills and subject knowledge on Environment and Natural Resource Economics
	through various capacity building programmes of SANDEE to carry out the research
	activities effectively. Now I am very confident and interested to handle the Climate
	Change and Environment Related Projects.
Response 4	I had obtained a master degree in agricultural economics, and my research were also
	related to that field only. I got opportunity to participate in EE course by SANDEE and
	that motivated me to further study in this field, and I took another master degree in
	environmental economics later. Now I see its very useful as there are lots of issues
	common/joint to agriculture and environment. Now my research interest and focus is in
	agriculture-environment related area, and currently also doing the SANDEE project in this
	theme.
Response 5	My research focus has shifted after being involved with SANDEE. After attending the
	training courses I have grown immense interest in the field of environmental economics.
	If I were not involved with SANDEE and had not attended SANDEE workshop my research
	focus could have been on globalization, trade, and monetary policy. The training course
	has helped me to look into the field of environmental economics in a different way. It has
	changed my perception of the current research and publications. It has continuously
	challenged my perception and helped me rethink about my future research work.

The next question in the grantee survey asked researchers directly whether their involvement with SANDEE had changed the methods or techniques they used in your research. Here the grantees were nearly unanimous in praising the new skills and ways of thinking that they had obtained from the SANDEE R&T's and specialized courses, as well as the opportunity of working with the resource persons. Table 3.2 gives a few examples of this enthusiasm in the grantees' own words. Many more such examples are presented for this question in the Appendix.

Table 3.2 – SANDEE's effect on grantees' research focus

Question #4	Has your involvement with SANDEE changed the methods and/or techniques you use
	in your research? If so, please explain.
Response 1	Yes SANDEE changed the method/technique of my research. Before SANDEE grant, mostly I used secondary data for analysis but now my focus is on the primary data. Moreover, due to SANDEE's grant, first time in my academic carrier, I shall be using multi dummy dependent variable model (i.e. Multinomial Logit model) to find out the determinants of particular crop residue practice in Punjab, Pakistan.
Response 2	Firstly, everything I learnt about primary survey and data analysis has its roots in SANDEE's training programmes, R&T presentations and discussions (of others' presentations as well). Secondly, I got the confidence to carry out a large survey-based work (my ongoing project, for example) because I know I will get proper guidance from accomplished experts in SANDEE R&Ts. It relieves me from the tension regarding successful completion of such a project. I know if I am sincere and honest, SANDEE will steer me out of any problem I might face at any stage of the project. Thirdly, SANDEE's R&T discussions have trained my eyes to single out a good and doable research issue from the day-to-day happening around me. I can focus on a research agenda, I can think of a proper sampling frame that will be required, can produce a good questionnaire on my own. These value additions become very apparent to me when I look at the way research projects are being carried out by many of my colleagues at my present university, who are not initiated to such trainings. The textbook rules are known to everybody, but an exposure such as this makes one a good player in the field.
Response 3	I think SANDEE had a profound influence on guiding me about how to construct, develop, and then conduct a household survey in a developing country. Moreover, presenting the pre-proposal and proposal in front of the SANDEE resource persons and fellow researchers also helped me to improve my theoretical model by looking at it from different angles. Needless to say, my presentation skills also improved as a result of the feedback I received from the SANDEE advisers and other participants.
Response 4	Significantly. The involvement with SANDEE refined my skills in survey methods. A course on modeling of household behaviour was especially useful. I learned new approaches to data analysis using econometrics.
Response 5	Well with sandee I have understood the real issues of this field and now I am independently doing three more studies. I have done a consultancy for the WWF Pakistan because of a course on PES which was organized by sandee and epsea in chinagmai. By continuously attending the workshops I even now understand research in a broader spectrum and I am helping my friends and student and the credit goes to sandee.(by God there is no exegeration). Now I undersand and even teach econometrics because of a course which was organized by sandee. You would not believe but till the PhD no body properly taught us econometrics and I am a teacher of econometrics and now you know why?

Teaching Activities of SANDEE grantees

Environmental economics is a new field in many universities in South Asia, and SANDEE researchers are in the vanguard of developing new courses and curricula. As teachers they are introducing a new generation of students to this field. As noted above, the long-term consequences of this integration of environmental economics into local universities in South Asia is difficult to quantify, but it is obvious from the results of the grantee survey that it is beginning to happen.

The SANDEE experience has given grantees the confidence to teach environmental and resource economics courses, and provided them with case studies and teaching materials. The responses in Table 3.3 below give a flavor of the different ways that SANDEE activities have encouraged and facilitated the teaching of environmental economics in universities in South Asia.

Table 3.3 – SANDEE's effect on teaching activities

Question #5	If you are a teacher, how has your involvement with SANDEE affected your teaching and the design of any courses that you offer in environmental and resource economics? For example, were you teaching environment and resource economics before you received your SANDEE grant? Are you teaching environmental and resource economics now? Please elaborate.
Response 1	Though I am not teaching the environmental and resource economics courses directly, however, after being in touch with SANDEE, I have been planning to propose for changing the course-curricula of the courses. I have already discussed with my colleagues informally in this regard and hope to materialize it soon. Furthermore, I have strong desire to teach the environmental economics course at undergraduate/masters level in the near future.
Response 2	Only now I am teaching environmental economics. I am able to teach with confidence. I refer to SANDEE working papers for case studies on environmental valuation method – change in productivity method, Contingent valuation method in my course.
Response 3	Before SANDEE grant, I taught three times an introductory course in economics to BS (Hons) student of environmental sciences department. At that time, no specific course was offered on environmental economics by the department of Economics. Now, economics department has made environmental economics as a core course for M.A. students. I have plans to teach this course in near future. Moreover, due to SANDEE grant, I am able to supervise in better way to one of my M.Phil student who intends to work on an environmental issue under local conditions.
Response 4	The effect is immense. Previously I was teaching in an undergraduate college where I used to teach microeconomics, statistics and public finance. I was not initiated to environmental economics before the SANDEE EE course in 2004. After I did my first SANDEE project, I was able to move into a central university (Visva-Bharati, West Bengal) in 2007. My selection was certainly facilitated by my SANDEE work. In my new university, I was requested by the Department to teach environmental economics and

Computer Application. It is obvious that my SANDEE connection and the project work had prompted my Department to ask for it. So, I started teaching environmental economics from 2007 at P.G. level. Also, the 'Computer Application' course, which mainly deals with data management and econometric softwares, was a recent inclusion in the standard PG curriculum in Economics in all the universities in the neighbourhood. There was a dearth of experienced teachers to develop and teach this course in all the universities in this part of the world. I could confidently develop the course in my university banking on the learning from SANDEE R&Ts. Apart from this, I was asked by the University of Calcutta to teach 'Computer Application' to their PG students as a guest faculty from 2007. In 2008 I was invited by the University of Burdwan (West Bengal) to teach a part of their 'environmental economics' course at PG level (as guest faculty). Both these jobs I am discontinuing from this year to free some time for my present project. But the University of Calcutta had recently invited me as External Examiner to evaluate the dissertation works their MA students had done as part of their degree requirement. I listened to a total of 18 presentations on various topics for two days and could advice them on their shortcomings and 'do's and don'ts' in empirical research – all learnt in SANDEE R&Ts. All these I could confidently do because of the SANDEE trainings, numerous study material and working papers collected from SANDEE coupled with my own readings and synthesis. So, my present teaching is thickly loaded with SANDEE.

Response 5

I had been teaching Environmental economics course before joining SANDEE. But references, publications, case studies from SANDEE are used more frequently. SANDEE speakers sometimes were invited to university to address students.

SANDEE's effect on Networking

SANDEE has also had an impact on the careers of some grantees in terms of connecting them to both national and international organizations and networks that they would not have otherwise been able to reach. It is impossible to know precisely what would have happened if these researchers had not become part of the "SANDEE family," but I find their testimonies (Table 3.4) persuasive that SANDEE has had significant "multiplier effects" on their careers.

Table 3.4 – SANDEE's effect on networking

Question #5	Could you please list any examples of professional relationships with international organizations (e.g. consultancies, research collaborations) that you think you probably would not have today if you had not been involved with SANDEE?
Response 1	Getting consultancy projects from a) IUCN on Vehicular Pollution in Kathmandu; b) Kumaon University and JNU on Valuing environmental benefits of a lake ecosystem – a study of Nainital; and c) ANSAB on valuing benefits of Himalayan Forests – would not have been possible, if I had not taken SANDEE project.
Response 2	Yes I have done a consultancy for WWF and I have developed the feasibility of PES like scheme for growing 'Green Cotton' in SINDH region of Pakistan. It was possible because of sandee. They sponsored me to do the PES Course in Chiang Mai Thailand.
Response 3	As a Sandee researcher, I have received three awards since I started my SANDEE work – from the Global Development Network (Japanese Award for Outstanding Research on Development 2005), from Tamilnadu Agricultural University (Best Researcher Award 2006) and the recent Australian government (Endeavour Executive Award 2009). I strongly believe that this is mainly as a result of my association with SANDEE. In fact, my established network though Sandee, I could able to visit Deakin University, Australia for four months as an Endeavour Executive Awardee.
Response 4	Honestly, my entire research career has been shaped by the one SANDEE grant. I certainly would not have moved out of a 10-years old permanent government service to an ad-hoc research position in a private research institute without the grant. The support from Prof Kadekodi has been a defining influence in my professional life.
Response 5	I'm starting work on a groundwater project with a collaborator from the International Water Management Institute (IWMI), with a large grant from 3ie. Some relationships with researchers from IWMI happened because they read our SANDEE work. The interest in water was also sustained because SANDEE provided a great opportunity to do a primary survey and some good research. 3ie also probably thought well of the experience from the SANDEE project.

From such responses to questions in the grantee survey and my interviews with researchers at the R&T, it is hard to exaggerate how important SANDEE has been to shaping their careers and how thankful they are for this help.

Both the Secretariat and the resource persons have played key roles in providing this kind of personal career guidance and help with networking. The grantees repeatedly mention the names of resource

persons and the SANDEE Director when they say who is responsible for making these connections and guiding them in their careers. The desire for this kind of hands-on mentoring and guidance is one of the main things students seek from the best PhD programs in the world, and the SANDEE researchers in South Asia are receiving this now without studying abroad.

On the other hand, one would hope that the informal relationships SANDEE researchers form at the R&T's and specialized training courses would lead to collaborative, cross-country research projects, and to more joint consulting and policy work. To date there does not appear to be much of this kind of networking happening among SANDEE researchers. In part this may be due to the logistical and political difficulties of traveling and working across countries in the South Asia region. But this is unlikely to be the main reason.

When I asked researchers about this at the July 2010 R&T, some seemed unsure and puzzled by the question, as if they did not feel this was expected of them. There was an apparent lack of entrepreneurial drive or interest on the part of some researchers in expanding the scope of SANDEE activities in this direction.

SANDEE researchers have had some success in establishing collaborative relationships. The Director has informed me of a number of examples. Arabinda Mishra involved several SANDEE researchers in a team that obtained DFID support (USD 200,000) for a project on paying for environmental services. Another SANDEE team worked together on a national CGE program. A SANDEE team of Pakistani researchers came together for a WWF review meeting on valuation work. Probably the researchers at the July 2010 R&T with whom I spoke were unaware some of these examples. But these collaborations are difficult, and leadership will need to be required to make these kind of collaborations happen more often.

Publishing

The single most impressive indicator of SANDEE's impact is the grantees' success in publishing their results, especially in refereed journals. Table 3.5 categorizes each of the 52 SANDEE publications over the period 2001-2010 by year and type of publication. It takes time after a grant is made before publications emerge from the pipeline, so it is to be expected that in the early years of SANDEE activities there would be few publications. Since 2010 is not yet over, there will be additional publications coming out this year.

The publications over the period 2004-2009 are the best indicators of the SANDEE publication pipeline, and during these years publications came out at a rate of about 7-8 publications per year, and almost half of these were in international journals. This also means that on average SANDEE researchers are producing almost one publication per grant.

Of course, one does not have a good counterfactual, i.e., we don't know what these researchers would have published if they had not received SANDEE grants. But there is no doubt in my mind that the

publication success demonstrated in Table 3.5 is due to SANDEE's capacity building efforts. Nor is there any doubt in the minds of the SANDEE researchers themselves (See Appendix).

SANDEE researchers are not simply publishing in international journals, they are publishing in some of the best international field journals in environmental and resource economics. Table 3.6 lists the SANDEE publications in international journals, the impact factor of each journal, and the number of Google citations that the paper has received for a sample of 21 SANDEE publications. Most impressive is the fact that some very recent papers (i.e., 2009, 2010) are already being widely cited. Another impressive indicator of SANDEE's publication success is the fact that generally speaking the publications are not heavily concentrated with a few individuals; they are spread out over many SANDEE researchers.

Table 3.5 – SANDEE Publications by year and type

	Books	Book	Grey	Local	International	Total
Year		Chapters	Literature	Journals	Journals	
2001				1		1
2002		2				2
2003		1				1
2004			2	2	2	6
2005		1		2	3	6
2006		1		1	3	5
2007		3		2	3	8
2008	1	3	1	1	5	11
2009		2	2	3	3	10
2010	1				1	2
Total	2	13	5	12	20	52

Note: The publication date of the second SANDEE book has been moved to 2011.

Table 3.6 – SANDEE Publications: Journal Impact Factor and Number of Paper Citations

Grantee	Co-authors	Title	Journal	Publication Date	Journal Impact Factor	Number of Google citations
Amita Shah		Water Scarcity Induced Migration in Gujarat: How Far Watershed Development Can Help?	Economic and Political Weekly	2001		15
Himayatullah Khan		Willingness to pay for Margalla Hills National Park: Evidence from the Travel Cost Method	Lahore Journal of Economics	2006		3
Vinish Kathuria		Controlling water pollution in developing and transition countries: Lessons from three successful cases	Journal of Environmental Management	2006	2.367	14
Vanish Kathuria		Informal regulation of pollution in a developing country – Evidence from India	Ecological Economics	2007	2.422	17
Vinish Kathuria		Managing pollution from SSIs: Designing for a sustainable institution	Environment, Development and Sustainability	2007	0.954*	0
Kishor Atreya		Farmers' willingness to pay for community integrated pest management training in Nepal	Agriculture and Human Values	2007	1.123	3
Kishor Atreya		Pesticide use knowledge and practices: a gender differences in Nepal	Environmental Research	2007	3.237	9

Muhammad Irfan		Impact of Open Sewage Smell on House Rent in Rawalpindi City	Pakistan Development Review	2007		0
Krishna Prasad Pant		Valuing Interventions to Reduce Indoor Air Pollution-Fuelwood, Deforestation, and Health in Rural Nepal	Pakistan Development Review	2007		0
Kishor Atreya		Health costs from short-term exposure to pesticides in Nepal	Social Science and Medicine	2008	2.71	1
Kishor Atreya		Probabilistic assessment of acute health symptoms related to pesticide use under intensified Nepalese agriculture	International Journal of Environmental Health Research	2008	1.066	0
Himayatullah Khan	M.S. Anjum and Laura G. Vasilescu	Valuation Issues of Travel Time and Money Expenditures in Travel Cost Models: A Review	The Journal of Humanities and Social Sciences	2008		N.A.
E Somonathan	Jyotsna Jalan	The Importance of Being Informed: Experimental Evidence on Demand for Environmental Quality with Jyotsna Jalan, Journal of Development Economics, 87(1): 14-28, August 2008.	Journal of Development Economics	2008	1.791	18
Usha Gupta		Valuation of urban air pollution: a case study of Kanpur city in India	Environmental and Resource Economics	2008	1.314	7
Saudamini Das	Jeffrey R Vincent	Mangroves protected villages and reduced death toll during Indian	Proceedings of the National	2009	9.432	13

		super cyclone	Academy of Sciences			
Saudamini Das	Jeffrey R Vincent	Mangroves and Storm Protection- getting the numbers right	Proceedings of the National Academy of Sciences	2009	9.432	0
E Somonathan	Jyotsna Jalan and Saraswata Chaudhuri	Awareness and the Demand for Environmental Quality: Survey Evidence on Drinking Water in Urban India	Environment and Development Economics	2009	0.861	6
Indra Devi		Pesticide Application and Occupational Health Risks among Farm Workers in Kerala-An Analysis using Dose Response Function	Indian journal of Agricultural Economics	2009		0
Indra Devi		Health risk Perceptions, Awareness and Handling Behaviour of Pesticides by Farm Workers	Agricultural Economics Research Journal	2009		0
D Suresh Kumar	K. Palanisami	An Economic Inquiry into Collective Action and Household Behaviour in Watershed Management	Indian Journal of Agricultural Economics	2009		2
Rucha Ghate	R Ghate, H Nagendra	Role of monitoring in institutional performance: Forest management in Maharashtra, India	Conservation and Society	2010		18

^{*5-}year unofficial impact factor reported in the journals website.

Citations and journal impact factors are imperfect indicators of quality. I want to call attention to a selection of papers by SANDEE researchers that I personally found especially noteworthy and that were published in top field journals (Table 3.7).

Table 3.7 – SANDEE Publications in Top International Field Journals (2001-2010)

Authors	Title	Journal
Adhikari B, S di	Household Characteristics and forest	Ecological Economics, 48 (2):
Falco, JC Lovett	dependency: Evidence of Common Property	245-257.
	Forest Management in Nepal	
Adhikari B	Poverty, Property Rights and collective action:	Environment and Development
	understanding the distributive aspects of	Economics, 10 (1): 7-31
	common property resources management	
Mukhopadhyay P	Now that Your Land is My Land Does it Matter?	Environment and Development
	A Case Study in Western India	Economics, 10 (1): 7-87-96
Ghate R, H	Role of monitoring in Institutional performance:	Conservation & Society, 2(2):
Nagendra	forest management in Maharshtra, India	509-532
Kathuria V	Informal Regulation of Pollution in a developing	Ecological Economics, 63 (2-3):
	country – evidence from India	403-17
Atreya K	Health costs from short-term exposure to	Social Science & Medicine,
	pesticides in Nepal	67:511-519
Gupta U	Valuation of Urban Air Pollution: A Case Study of	Environmental & Development
	Kanpur City in India	Economics, 2008.
Somonathan E, J	The Importance of Being Informed: Experimental	Journal of Development
Jalan	Evidence on Demand for Environmental Quality	Economics, 87(1): 14-28
Das S, J Vincent	Mangrove protected villages and reduced death	Proceedings of the National
	tolls during the Indian super cyclone	Academy of Sciences USA,
		106:7357-7360
Ojha VP	Carbon Emission Reduction Strategies and	Environmental and
	Poverty Alleviation in India	Development Economics, 14
		(3).
Shah A	Land degradation and mitigation in a dry land	Environmental and
	region in India: extent , nature, and determinants	Development Economics,
		15(1):173-196

It is difficult to find the relevant benchmarks to assess the success of SANDEE grantees in getting their research published in refereed journals. One difficulty is that the training of SANDEE grantees varies widely. The majority of SANDEE grantees have probably never published in an international journal prior to the award of their SANDEE grant. Many have skills sets upon entry into the SANDEE family that I believe are roughly comparable to masters-level students at universities in Europe or the United States, but not equivalent to the PhD students who have completed their course work at a top PhD program in environmental and resource economics at world-class universities.

One benchmark by which to judge SANDEE grantee's publication success would be the publication success of students in graduate programs in environmental and resource economics in the United States and Europe. Masters-level students at world class universities rarely mange to publish in the journals listed in Table 3.7. The average quality of Masters theses at major universities in Europe and the United States is below the quality of many SANDEE working papers and research reports.

PhD students who have completed their dissertation research in environmental and resource economics would be delighted to publish the findings of their dissertation work in the journals listed in Table 3.7. Many do not manage to achieve this. Some PhD students at the best universities do in fact publish multiple papers based on their dissertation research, but the cost of this training is several times greater than the cost per SANDEE grantee discussed in Chapter 2. This makes the SANDEE publication story even more impressive because it has been done at such a low cost compared to graduate education in the United States or Europe.

Another obvious benchmark would be the other environmental economics networks. Only EEPSEA has been in operation sufficiently long to offer a good comparison. I do not have up-to-date statistics on EEPSEA publications per grant, but SANDEE researchers are definitely publishing in international referred journals at a greater rate than EEPSEA researchers per grant or per dollar of grant awarded. Moreover SANDEE researchers are publishing more papers in the better field journals.

There are, however, three factors that need to be considered in any comparison of EEPSEA publications to SANDEE publications. The first is that EEPSEA makes more grants than SANDEE for policy analyses. Generally speaking, one would not expect applied policy analyses to be published in international journals. SANDEE's objective at the start of every grant is to help the grantee publish in an international journal. This has never been EPESEA's objective.

The second is the fact that EEPSEA grants are shorter in duration. SANDEE researchers receive more assistance from resource persons and the Director over a longer period of time than EEPSEA researchers. This may be due in part to the EEPSEA expectation that resource persons not co-author papers with their advisees.

Third, EEPSEA is a larger organization than SANDEE and allocates less resource person's time per grant. Many SANDEE grantees are now receiving the attention given to PhD students at the best universities in the United States and Europe. Grantees want more time from resource persons, but resource persons' time is a quantity in very scarce supply. In order to scale up its operations to the size of EEPSEA and continue the publication record of its grantees, SANDEE would need to hire more resource persons with an equal level of commitment to the success of South Asian researchers. I think this is probably possible, but it is not a simple task. One should not assume that it will be easy to scale up SANDEE's publication success to the scale of EEPSEA's operation.

In addition to the refereed journal articles, I would also like to comment on the two SANDEE book publications:

1. *Promise, Trust, and Evolution – Managing the Commons of South Asia*. Edited by R. Ghate, N. Jodha, and P. Mukhopadhyay. Oxford University press, U.K. 2008.

2. *Environmental Valuation in South Asia*. Edited by A.K.E. Haque, M.N.Murty, and P. Shyamsundar, Cambridge University Press. 2011.

Both of these books are major publications by world-class publishers. The editors of *Promise, Trust, and Evolution – Managing the Commons of South Asia* are SANDEE grantees, and many of the chapters are written by SANDEE grantees. *Environmental Valuation in South Asia* is a collection of SANDEE case studies edited by the SANDEE Director and two SANDEE resource persons. Both books are definitive contributions to the field of environmental and natural resource economics in South Asia and will be read and referenced for many years. None of the other regional environmental capacity building networks has yet achieved this kind of academic success publishing major books with top-tier publishers.³ I view these two publications as milestones in SANDEE's development, and compelling evidence of its scholarly contributions.

Cumulative, Other Impacts on Researchers' Careers

In the grantee survey I asked respondents a rather long sequence of questions about the impact SANDEE had had on their research, teaching, and career. I concluded this section with an open-ended question that asked if they had any other thoughts about how SANDEE had affected their career. You might expect that respondents would have been exhausted, but many had much more to say. Some of their answers are recorded in Table 3.8.

Table 3.8 - Other Impacts

Question #9	Any other thoughts on how your involvement with SANDEE has affected your career? Please comment.
Researcher 1	Yes, my involvement SUNDEE has changed my career positively (indirectly). For example, my colleagues and friends often give reference of my SANDEE grant while discussing or gossiping. It seems that, people are adding values to my career for my involvement with SANDEE. They are placing importance to the incident of my getting SANDEE grant.

³ In EEPSEA's case, this is partly due to the fact that it places less emphasis on academic output, but it is also because EEPSEA wants to ensure that its books are affordable in Southeast Asia. The price of academic books from international publishers can easily exceed USD 100, which puts them out of reach of Asian audiences (some international publishers do put out a less expensive edition for regional audiences). EEPSEA self-publishes in the Philippines at a cost of less than \$10 a book and distributes its books free of charge.

Researcher 2	SANDEE gave me support to keep building my skills. Without SANDEE I would be doing "field work and surveys" in education, population AIDS, Water just like so many other market research agencies in India. SANDEE grant helps me remain a economist, and environmentalist and a researcher And, I really don't have other research projects to trade this off anyway. Will there be other grants or programs that would make me better off than SANDEE? There are virtually no government organizations in India I can or will "ever" apply for grant. NEERMAN is a not for profit research organization whereas limited funding that Indian government gives is for educational institutes. How can I explain what it means to get a funding in India without compromising your dignity and morals?
Researcher 3	So far I have made more than 40 presentations both in India and Abroad. The American Museum of Natural History, New York has produced a short movie based on our paper published in PNAS, Nature Conservation has written featured articles based on my research. There has been tremendous recognition to my work all over.
Researcher 4	My international exposure in academic world so far revolved totally around SANDEE. My entire student days were spent in Calcutta (West Bengal, India) in 1980's and early 1990's. Although in my University days I had got good teachers (some of them US trained), almost all of them were theoreticians and were engaged in pure classroom teaching in traditional chalk-and-board mode. The tradition of empirical research at that time was very poor in Calcutta mainly due to lack of infrastructure, but also due to the lack of attitude among my teachers. Through SANDEE, I came to know what an empirical research should be. Also, the EE course and the many short courses that it organized from time to time showed me how modern tools (powerpoint, softwares) can be combined to produce a great and effective teaching module. The precision and time-management in teaching and developing relevant assignments have greatly influenced my teaching orientation. I cannot resist telling that the two-day econometric workshop in Kathmandu (December, 2009) conducted by Prof. Jeffery Vincent was a mesmerizing experience for me. He could teach so much on applied econometrics in such a short time so precisely! I cherish to teach in that way. But presently I am constrained by the lack of infrastructure in my university and sadly carrying on with the traditional mode of classroom teaching.
Researcher 5	I think it's made a big difference. I met Jeff Vincent at Sandee and he suggested my name to Rob Stavins when Rob was looking for someone from India to join the Harvard project on international climate agreements. As a result, I re-connected with Rob. That led to my being invited to a workshop in Venice where I met Carlo Carraro who invited me to collaborate on some climate work. So two of my PhD students are now involved with Carlo's network and presenting their work at meetings. Rob also (I think) suggested me as an IPCC author, and I have been invited to be a Coordinating Lead Author for the 5th Assessment Report. I'm sure there have been other repercussions I haven't traced or figured out.
Researcher 6	Being a part of SANDEE, I realized the need and importance of doing Ph.D. Get motivated from SANDEE and now doing Ph.D. I got a project from National Agriculture Research and Development Fund due to being empowered through involvement in SANDEE activities or more specifically due to the proposal and report writing skill got from SANDEE

Negative Impacts of SANDEE Involvement

In the grantee survey I asked researchers the following direct question (#8) about any negative consequences on their involvement with SANDEE. The purpose of this question was to uncover any unintended, negative indirect consequences of SANDEE activities on researchers' careers. The vast majority of respondents simply said NO. Table 3.9 presents the answers of eight respondents who took the time to elaborate. Only Researcher 7 and 8 mention a problem. Researcher 7 comments on normal time management issues that intensive research always entails. Researcher 8 elaborates on how SANDEE training and research involved a serious commitment of time that at first his supervisor did not appreciate.

In summary, one can safely conclude that there are no negative consequences on researchers from SANDEE activities. As one respondent put it, "SANDEE has been a blessing for people like us from less developed countries."

Table 3.9: Negative Consequences of Involvement with SANDEE

Question 8	Have there been any negative consequences to you or your career from your SANDEE research grant(s) and/or your participation in SANDEE activities?
Researcher 1	Absolutely no negatives. SANDEE had only positive externalities.
Researcher 2	SANDEE organization is a blessing for the people like us from less developed countries where we do not have good sources of getting knowledge about Environmental Economics.
Researcher 3	I really cannot think of any unless I think from purely commercial view point, which will be wrong. I am a SANDEE grantee to develop my skills, network with others, and ultimately be able to lead my own projects in environmental health and policy sector in India. I don't view SANDEE as World Bank, Gates Foundation or WHO where I have had some recent luck in securing projects on commercial terms. I am grateful to SANDEE for providing me adequate funding to sustain myself without compromising my commercial interest as well as ability to hire a research assistant.
Researcher 4	Until now, almost all the experiences gathered from my involvement with SANDEE has been nothing but positive.
Researcher 5	Not at all. Maybe there are some colleagues who became jealous???
Researcher 6	Tried hard but could not think of any. There is however, a chance that a researcher may like SANDE environment so much might get stuck with that institution and as it provides that scope to keep the talents growing with the institution. But I think my involvement with multiple organizations and multiple tasks helped me to stay connected but not exclusively with SANDEE. But I feel nice to introduce my self as SANDEE output.
Researcher 7	I have started SANDEE grant in second semester of PhD program. Due to biannual R&T and field survey, I lose grades and GPA.
Researcher 8	Yes, I was removed from the management position because I was doing so many courses, I was involved in research activities. But later on the director admitted his mistake and gave me the other position later on. But even I was not appointed against that position again, I think it was worth it for me, because after all I had my teaching position, and I love teaching.

Summary

The quality and number of SANDEE publications is a phenomenal success story, and it is a testament to both the hard work and skill of the SANDEE researchers and to the quality of research direction and supervision that the SANDEE team and resource persons have provided SANDEE grantees. But in isolation no single indicator discussed above proves definitive proof about the long-run impacts of SANDEE's activities. Yet based on all six of these indicators--and talking with SANDEE grantees at the July 2010 R&T-- one knows that SANDEE has touched the lives of many grantees in a deep way. I would encourage the interested reader to peruse the full lists of respondents' answers to the survey questions in the Appendix. These verbatim responses convey a good sense of how important SANDEE has been to many grantees.

Chapter 4 - The SANDEE Family: the Secretariat, Resource Persons & Instructors, and the Researchers

Introduction

To be successful a regional environmental capacity building network must have four well-functioning parts: (1) the Director and Secretariat; (2) the resource persons and instructors; (3) committed researchers; and (4) supportive donors. In this chapter I offer some observations on how each of the first three of these parts is working in SANDEE.

The Director and Secretariat Team

SANDEE is fortunate to have a very strong team of professional and administrative staff who are deeply committed to SANDEE's work and manage a large flow of work in Kathmandu without the direct supervision of the Director, who is based on Bangkok. Mani Nepal and Pranab Mukhopadhyay provide professional support for many parts of the SANDEE work program, including proposal reviews, grantee mentoring, and teaching. Pranab Mukhopadhyay has scaled back his time commitment to SANDEE somewhat, but continues to provide a few months of his time to SANDEE. SANDEE is especially lucky to have Mani Nepal --a young, enthusiastic, well-trained environmental economist--based on Nepal.

There has been little staff turnover. Manik Duggar and Kavita Shresta only left after long periods of employment with SANDEE. Anuradha Kafle has been with SANDEE since 2002. Krisha Shrestha is the mostly recently hired staff member of the Secretariat, and she has been with SANDEE since November 2008.

Grantees are consistent in their praises for the efficiency of the Secretariat staff, the Environmental Economist, and the Director. In the grantee survey, I asked the respondents whether they agreed or disagreed with the following three statements:

- 1) I received feedback on my grant proposal (s) quickly.
- 2) There is often a long delay between the time I send an email to the Secretariat and when I hear back.
- 3) I feel the SANDEE Secretariat is working hard to help researchers like me.

The survey results are presented in Figures 4.1-4.3. A large majority of grantees believe that they receive feedback on their proposal quickly; that email communications are efficient; and that the SANDEE Secretariat is working hard on their behalf.

In the grantee survey, I also asked respondents for suggestions on how the Secretariat could improve its operations. The majority simply commended the Secretariat for its excellent work. The responses of the few grantees who had something to say are listed in Table 4.1.

Because the regional environmental economics capacity building networks are small organizations, their culture is heavily dependent on the management style of the Director. Because resource persons inevitably provide criticism of researchers' efforts, the feelings of researchers can be bruised. The Director must mediate these interpersonal relationships. Dr. Priya Shyamsundar, the SANDEE Director, is a master at this. In both my in-person interviews with researchers at the July 2010 R&T and in the grantee survey, SANDEE researchers had especially kind words for the Director. I have summarized a few of these comments from the grantee survey in Table 4.2.

Figure 4.1 – Respondents' Reactions to the statement, "I received feedback on my grant proposal (s) quickly."

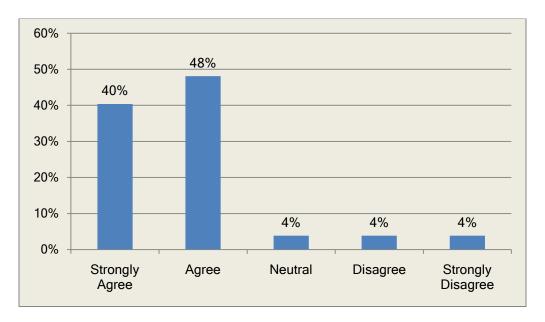


Figure 4.2 – Respondents' Reactions to the statement, "There is often a long delay between the time I send an email to the Secretariat and when I hear back."

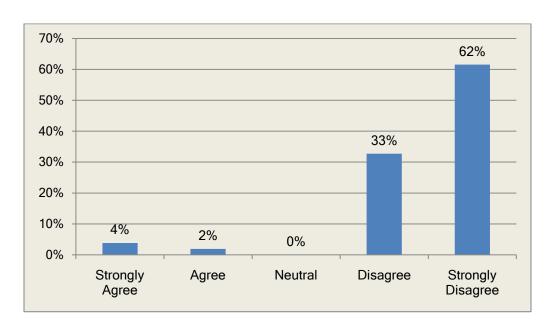


Figure 4.3 – Respondents' Reactions to the statement, "I feel the SANDEE Secretariat is working hard to help researchers like me."

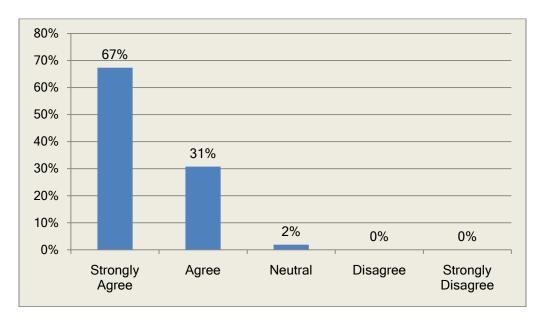


Table 4.1 – Grantees' suggestions for how the Secretariat could be improved

Question #40	Do you have any specific suggestions on how the SANDEE Secretariat could be more efficient?
Researcher #1	Financial details to be communicated clearly to researchers.
Researcher #2	They should develop some mechanism to monitor the work of the resource persons
	too.
Researcher #3	SANDEE should provide air ticket to its researchers before traveling instead of cost
	reimburse system.
Researcher #3	They sometimes don't respond quickly in general. They need to respond to every
	email.
Researcher #5	Make sure that grantees are given access to journals and books – this should be
	advertized more and reminders given of the access and its policy

Table 4.2 – Grantees' Opinions about the Director

Research #1	Priya Shyamsundar is found to be a dynamic, self-motivated and highly professional lady. Her devotion to SANDEE is un-measurable. I think SANDEE of her third child. That's why, alternate candidate is rare.
Research #2	No body can be like Dr. Priya Shyamsundar. She is a great lady. I do not think anybody can do this job as efficiently as she is doing.
Research #3	In my opinion, Priya Shyamsundar should continue. I am not sure about another committed person like Priya.
Research #4	I think she should continue at least next 5 years
Research #5	I did not find any other place to talk about the program director and the secretariat and thought I would do it here. From the day of my first presentation Dr. Shyamsundar guided me with the project that sometimes went beyond academic advises. There had been numerous instances when she facilitated communication with my advisors so that I would realize what my immediate task would be. She sorted out the directions in which I should continue my research when I received unfavourable comments from the discussants. Of course she chastised me when there are lags on my part. This project continued for long under many difficulties and the survey took a long time to complete. In the last R&T in Kathmandu 2009 there were questions regarding the model I was about to estimate . This came at a stage when I have already prepared the draft manuscript and about to finalize my estimation. She listened to the comments with me and asked me to sit aside from the day's presentation and rework my model. Later she sat with the modified model with me and my advisor and finalized the whole work. I sincerely believe that without her firm intervention this would never have been possible. There had been many other trivial instances where she intervened like during grant release, the issue of using particular data entry software where I found she understood the entire difficulty I faced without even me explicitly mentioning it. I am deeply indebted to her and the SANDEE secretariat for this wonderful work experience.

The Resource Persons and Course Instructors

SANDEE is extremely fortunate to have had and continues to have a world-class group of environmental and resource economists committed to its activities. Over the past 10 years there has been substantial turnover in the group of resource persons (Table 3.3). Thomas Sterner (Gothenburg University), Karl Goran Maler (Beijer Institute), Partha Dasgupta (Cambridge University), Kanchan Chopra (Institute of Economic Growth), and Herath Gunatilake (ADB) have either moved on, or now participate on a less regular basis. But other outstanding resource persons—E. Somanathan, Subhrendu Pattanyak, M.N. Murty, and Jean Marie Baland—have joined. Enamul Haque and Jeff Vincent are now the two longest serving resource persons, for 10 and 8 years, respectively.

Table 4.3- SANDEE Resources Persons (2000 to 2010)

Name of Resource Person	Affiliation	Began serving as R and T Resource Person in [Year]	Ended service as R and T Resource Person [Year]	Currently serving SANDEE as
Baland, Jean Marie	FUNDP Belgium	2006	N.A.	Resource Person
Chopra, Kanchan	IEG	1999	2006	Proposal Reviewer
Dasgupta, Partha	Cambridge U.	1999	2006	Teaching Faculty and occasional Resource person
Gunatilake, Herath	Asian Development Bank	2000	2004	Management and Advisory Committee
Haque, Enamul	United International U., Dhaka	2000	N.A.	Resource Person
Maler, Karl Goran	Beijer Institute, Stockholm	1999	2007	Teaching Faculty and occasional Resource person
Murty, M.N.	Institute of Economic Growth, Delhi	2005	N.A.	Resource Person
Pattanayak, Subhrendu	Duke U.	2005	N.A.	Resource Person
Somanathan, E.	Indian Statistical Institute	2006	N.A.	Resource Person
Sterner, Thomas	Gothenburg U.	2000	2004	Proposal Reviewer
Vincent, Jeff	Duke U.	2002	N.A.	Resource Person

A reader who is not active in the field of environmental and resource economists may not fully appreciate what an outstanding group of individuals this is, and what they mean to SANDEE's work. All of the resource persons have many other commitments on their time, so the opportunity cost of being a SANDEE resource person is very high, especially considering that they are remunerated only modestly for their work (see Chapter 2). It is a credit to the Director and the Management and Advisory Committee (MAC) that such a distinguished group of resource persons has been attracted to SANDEE and has stayed committed to its work.

My interviews with the resource persons revealed a very high level of person commitment to SANDEE, but it is important that the availability of such high caliber resource persons not be taken for granted. It is apparent that the Director does not take the resource persons for granted. It is also important for the grantees themselves to think consciously about why the resources persons stay involved with the network, and what grantees themselves can do to ensure that the resource persons' commitment to the network stays at such a high level. For younger, first-time grantees who are just learning how SANDEE

functions, this is of course too much to ask. But many of the grantees have attended multiple R&Ts and need to have a better understanding of what makes SANDEE so successful—and this includes understanding the resource persons.

Based on my interviews with the SANDEE grantees and the grantee survey, the SANDEE researchers are in general very appreciative of the resource persons. In the grantee survey, I asked grantees a series of questions to probe their level of satisfaction with their interaction with the resource person. The majority of grantees felt that their resource person provided them with sufficient assistance with fieldwork and data collection (Figure 4.4); and that their advice was understandable (Figure 4.5). They wanted more time with their resource person between workshops (Figure 4.6).

Figure 4.4 – Reactions to the statement "My resource person was **not** able to provide me with sufficient assistance related to fieldwork and data collection."

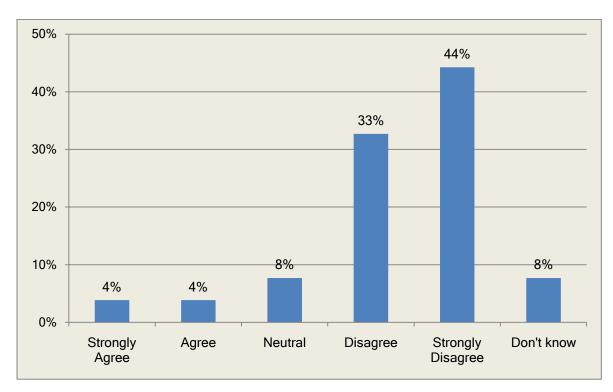


Figure 4.5 – Reactions to the statement: "I often did not understand the advice my resource person gave me during my SANDEE research project."

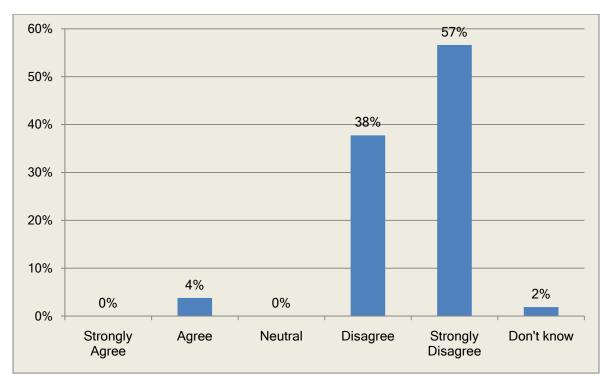


Figure 4.6 – Reactions to the statement – "I needed to have more time/interaction with my advisor in between the SANDEE R & T workshops."

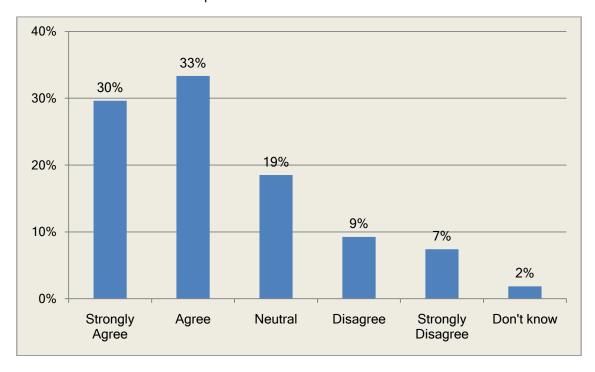


Table 4.4 gives a sample of ways that grantees think resource persons could be even more useful to them.

Table 4.4 Grantees' thoughts on how resource persons can be more useful

Question #28	Do you have any specific suggestions about how the resource persons (advisors)
	could be more helpful to SANDEE researchers?
Response 1	I have had a very good experience with my advisor. He was able to meet me in between R&Ts to discuss my work. That is not possible for all advisors. But their
	availability via email or skype etc would help a lot.
Response 2	SANDEE should make arrangement for the advisors' visit to the study area to make them familiar about the actual context.
Response 3	(1) Resource persons are busy and emails / telephone is not the best medium to communicate. If SANDEE resource persons are in the region on other projects, I hope SANDEE can make small travel grant available for us to travel and spend time with them. Even one interaction between 2 R&Ts should be sufficient. However, I am not sure how possible this is given time and money constraints. (2) It will be great if we get an advisory panel (2-3 advisors) similar to a graduate research committee. One on one interaction is great but with a committee we can get diverse opinions, resolve any differences in opinions, identify alternative research questions and methods, and have better chance of finding 1 of the committee members in case we need urgent technical guidance. SANDEE board does act like a committee but I am suggesting smaller (2-3 people committee instead of one mentor) (3) Deadlines and research don't go well together because of so many uncertainties. But it will be good of resource persons break down research tasks and give deadlines for each. This can help grantees track their own progress better.
Response 4	Resource persons' availability should be increased. If possible, advisors may reply to researchers' urgent queries through emails in between the SANDEE R & T workshops. This may speed up the work.
Response 5	Having a short skype call periodically would be more useful for researchers to share their progress, issues, and further plans and in seeking guidance from the advisors.

Not surprisingly, grantees would like even more of the resource persons' time—especially between the R&T workshops. As the responses in Table 4.4 above illustrate, grantees would like more communication via Skype and email with their resource person, as well as an opportunity to see the resource person in their country between the R&Ts. From my perspective, the resource persons are already giving a lot, and although such increased time from resource persons would be desirable, it is probably not practicable. However, I can imagine that there would be particular situations in which it would be possible and of great help to the researcher. The LACEEP network encourages such interaction between the resource

person and the grantee between R&Ts, but LACEEP also remunerates the resource person for any such time spent on preparation of comments for researchers.

Although most the grantees had only positive things to say about the resource persons, one of the grantees expressed a concern that some advisors adopted "a condescending approach towards the grantees …!"

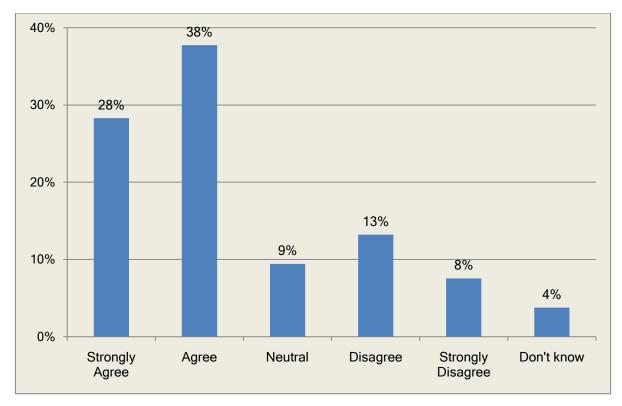
Another grantee said ...

SANDEE have a provision of advisors. These advisors guide and supervise research grantees. Some of them are very serious and guide properly. However, some are very surfacial. They talk too much but may not be outcome oriented. The grantees fear considering them like a PhD guide, if he become unsatisfied, his whole work will be in peril and he may suffer much. Finally the outcome may not be as desirable. These issues should be carefully addressed and monitored properly. In some presentation people (including advisors) involve seriously and discuss and give suggestions. In some presentation people did not care and did not provide suggestions. All presentations should be equally treated.

During my observance of discussions at the July 2010 R&T, I saw no evidence of such problems. I mention these two isolated comments to emphasize that such sensitivities that are always present in an open discussion, including criticism, of someone's work. A free-wheeling, honest discussion of ideas is one of the things that researchers value most about the SANDEE experience, and generally speaking this happens with a great deal of support and gentleness. The researchers' comments above are a reminder of the need for vigilance.

In the grantee survey, I also asked the SANDEE researchers whether they felt that resource persons should be appointed for fixed terms and whether having more rotation among the resource persons would bring in fresh perspectives. Although they are very appreciative of the work of the resource persons, the majority of grantees felt that this would be a good idea (Figure 4.7).

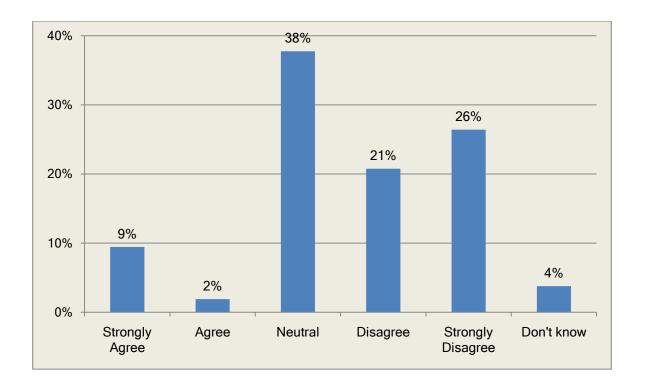
Figure 4.7 – Reactions to the statement, "I think resource persons should be appointed for **fixed terms** (e.g. 3-5 years). Having more turnover in the group of resource persons would bring in new, fresh perspectives."



In the grantee survey I asked the SANDEE researchers a few questions about who they would like to see if new resources persons were appointed. There was certainly no one name that jumped out of their recommendations (see Appendix). Many of the recommendations are famous individuals in the field of environmental and resource economics who would almost certainly not be able to commit the time and effort required of a SANDEE resource person. This emphasizes the problem researchers confront identifying up and coming scholars in the field.

I also asked who the grantees would recommend if SANDEE could appoint a woman as a resource person. Again, there were many good suggestions, but no consensus choice. One finding that does jump out from grantees' answers is that most see no need for a new resource person to necessarily come from South Asia (Figure 4.8). This is not to say that they would be opposed to this – but SANDEE researchers are not looking for more South Asia representation in the group of resource persons.

Figure 4.8 – Reactions to the statement, "I think any new resource person should be from within the South Asia region."



The Grantees

The researchers I met at the July 2010 R&T were similar to those I know from the other networks: young, enthusiastic, and hard-working. Many are academics at South Asian universities or researchers at institutes or NGOs. The grantees described themselves as busy with academic and other work. The majority feel that they have good access to the international literature in their field. They are active in their academic and research circles. Slightly over half said that in the past 12 months that they reviewed a paper or article for a peer-reviewed journal (for those that had, the mean number of reviews was 3.4). Although they were busy, many said they were able to take on new research or consultancies if the opportunities were financially attractive and interesting.

In the grantee survey I asked respondents which of two future scenarios was most likely. Scenario A described a world in which environmental and natural resources become increasing degraded due to economic growth and government policy failure (pessimistic scenario). Scenario B described a world in which economic growth proceeds and provides the means to address environmental problems (optimistic scenario).⁴ As shown in Figure 4.9, many SANDEE grantees were quite optimistic about the future. SANDEE researchers felt that drinking water contamination and air pollution were the most important environment problems in the region, ahead of global warming (Table 4.5).

⁴ See Appendix for the complete descriptions of Scenario A and Scenario B.

Figure 4.9 – SANDEE Grantees expectations about the future: Pessimistic Scenario (A) vs. Optimistic Scenario (B)

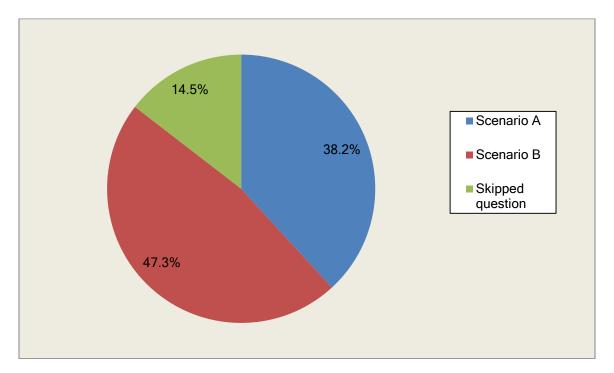


Table 4.5 – Environmental Priorities of SANDEE Grantees (% of first and second priorities combined)

Question: Please consider the following list of 9 environmental problems and check the ones that you feel should have the 1st and 2nd priorities in your country (choose only one choice for First an one choice for Second)

Environmental Problems	SANDEE
Air pollution	15.5
Contamination of drinking water	20.9
Poor solid waste disposal	9.1
Global warming	9.1
Soil erosion	2.7
Surface water pollution	6.4
Improper disposal of hazardous waste	6.4
Loss of biodiversity	7.3
Loss of wetlands	6.4
No answer	16.4
Total	100

In the grantee survey I also asked SANDEE grantees a series of other questions about their environmental attitudes and perceptions. Because I have asked EEPSEA researchers similar questions, it is possible to compare the answers of SANDEE researchers to EEPSEA researchers. Table 4.6 compares the social, environmental, and economic priorities of EEPSEA and SANDEE researchers. Their priorities were similar except that EEPSEA researchers thought global warming was a more serious problem than SANDEE researchers. SANDEE researchers felt poverty alleviation was more important that EEPSEA researchers.

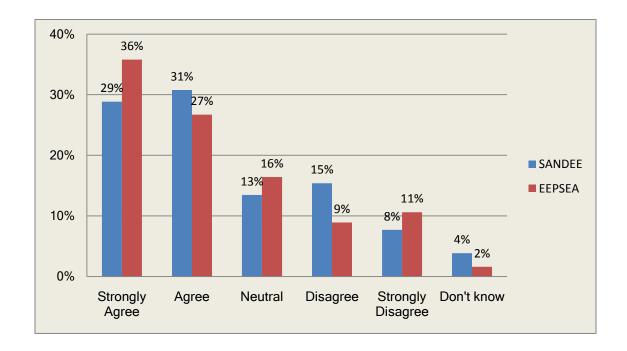
Table 4.6 – Comparison of Social and Economic Priorities: EEPSEA vs. SANDEE researchers (first and second priorities combined)

Question: Please consider the following list of problems that the Government in your country needs to address over the next ten years and check the ones that you feel should have the first and second priorities (choose only one choice for First and one choice for Second).

Problems	EEPSEA	SANDEE
Crime	4.9	5.5
Unemployment	8.6	11.8
Air pollution	5.8	1.8
Poverty alleviation	15.9	23.6
Water pollution	7.3	4.5
Public education	20.4	15.5
Health care	4.5	3.6
Economic growth	11.9	10.0
International terrorism	0.6	5.5
Global warming	19.4	5.5
No answer	0.6	12.7
Total	100	100

As another example, the majority of both SANDEE and EEPSEA researchers agreed with the statement, "Nature sets physical limits to economic growth" (Figure 4.10).

Figure 4.10 – Comparison of SANDEE and EEPSEA researchers' reaction to the statement, "Nature sets physical limits to economic growth."



Chapter 5 - Evaluation of the SANDEE Research and Training (R&T) Workshops and Specialized Courses

Introduction

The R&D workshops and specialized training courses are one of the two principal mechanisms SANDEE uses to build environmental economics capacity among researchers in South Asia (the other is the research grants themselves. The SANDEE training courses thus deserve special scrutiny in this evaluation of SANDEE activities. In this chapter I first report on what the grantees said about their experiences with the R&T workshops and the specialized courses, using both data from the grantee survey and the course evaluations conducted immediately after the training. I then add some additional thoughts based on my review of other background materials that I received from SANDEE.

Findings from the Grantee Survey

Many SANDEE grantees have attended multiple R&Ts. As shown in Table 5.1 below, it is normal for experienced, long-time SANDEE researchers to attend 5 or more R&T workshops. Because the grantees represented in Table 5.1 are both new and old grantees, these descriptive statistics do not accurately show how many R&Ts a researcher typically attends over the term of the grant. The current SANDEE policy is that a grantee should attend no more than 4 R&Ts over the period of a single grant.

Table 5.1 - Number of Research and Training (R&T) workshops attended

Number of workshops attended	Frequency
1-3	22
4-6	25
7-10	6
11-20	1

I asked grantees directly how the R&T workshops could be improved. The two most often mentioned responses were ...

- 1) that the R&T workshops were great they way they are; and
- 2) researchers would like more one-on-one time with their advisors.

I also asked grantees about whether they would favor specific changes in the structure of the R&T workshops. For example, I mentioned that two of the environmental economics networks (LACEEP and CEEPA) do not have plenary sessions at their biannual R&T workshops in order to free up more time for discussion between resource persons and researchers. I asked SANDEE grantees whether they thought "SANDEE should consider doing away with the plenary presentations by resource persons and outside speakers." As shown in Figure 5.1 below, the majority of respondents reported that for them the plenary presentations were a highlight of the R&T workshop, and they did not support such a change.

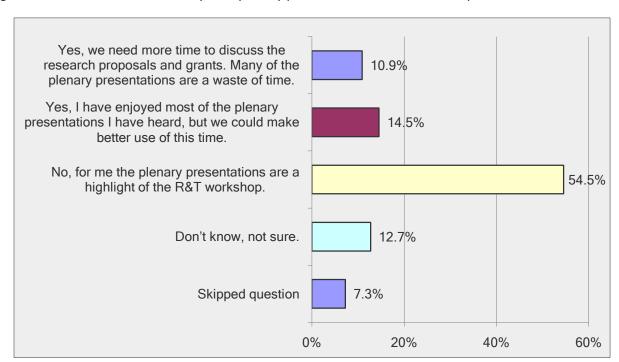
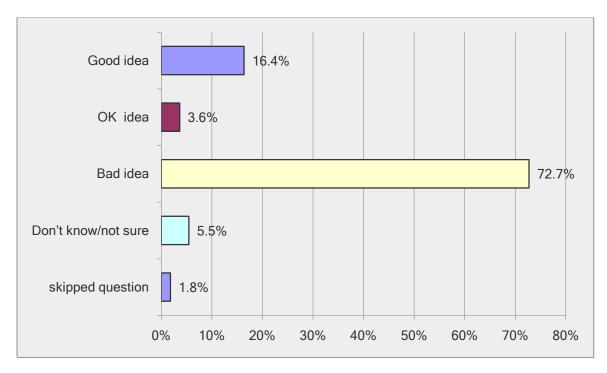


Figure 5.1: Should SANDEE do away with plenary presentations at R&T workshops?

I also asked whether SANDEE should hold R&T workshops less frequently "in order to focus the energies of the Secretariat on other activities." As shown in Figure 5.2, there was no support for this change either.

Figure 5.2 – "How would you feel about SANDEE reducing its workshops from twice a year to once a year?"



In addition to the R&T workshops, the average respondent in the grantee survey had attended 2.4 specialized courses – either short (<3 days) courses, or longer (> 3 days). Since this average includes some new researchers, grantees who have been in the "SANDEE family" for some time may take several specialized courses during their affiliation with SANDEE. The grantees are extremely positive about their experiences with these specialized courses, as reflected both in their response to the question in the grantee survey (Figure 5.3). Not a single respondent reported that a SANDEE course they had taken was "not useful at all."

SANDEE has established a reputation for high quality training courses. Grantees who had the opportunity to attend other training programs in the South Asia region felt that the courses offered by SANDEE were higher quality than other capacity building courses offered in the region (Figure 5.4).

Figure 5.3 – Overall, how useful were the training course(s) to you?

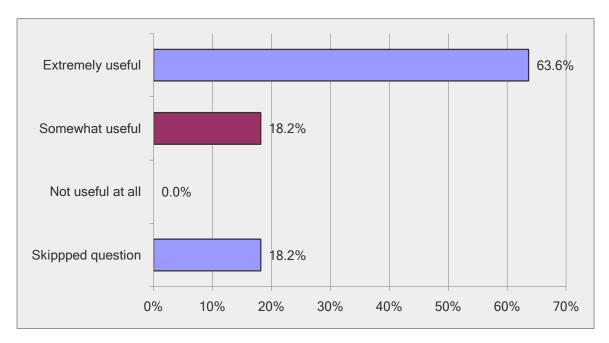
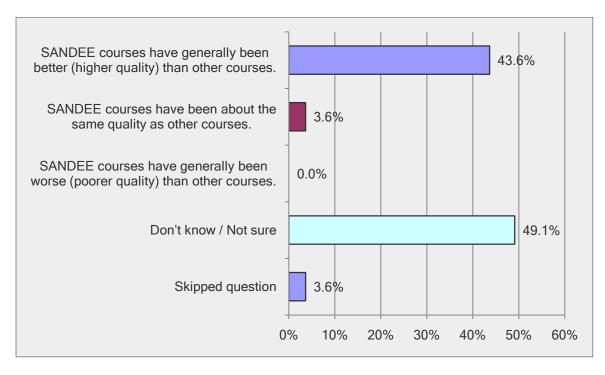


Figure 5.4 – Comparison of SANDEE training courses to other capacity building courses



I also asked grantees their preferences among a set of pre-selected topics on which SANDEE has not yet offered courses. As shown in Table 5.2, there was no consensus among grantees on topics for new courses. The two most commonly cited were "Water Resources Economics" and "Field Experiments and Experimental Design." In response to an open-ended question about possible topics for new courses, there was a strong interest in methods – e.g., more advanced econometrics, spatial econometrics, CGE modeling, computer simulation, geographical information systems, and sampling.

Table 5.2 – Priorities for short courses that SANDEE has not yet offered

	Percent first priority	Percent second priority	Percent total votes
Principles of Environmental Science for Economists	16%	9%	13%
Stated Preference Methods for Nonmarket Valuation	11%	9%	10%
Water Resources Economics	22%	15%	18%
Ethical Issues in Research Involving Human Subjects (Institutional Review Boards, researcher ethics certification, etc.)	0%	4%	2%
Environmental Policy Instruments	9%	22%	16%
Topics in Development Economics	6%	6%	6%
Field Experiments and Experimental Design	22%	15%	18%
Energy Economics	7%	15%	11%
Skipped Question	7%	7%	7%
Total	100%	100%	100%

Participants' Course Evaluations

As noted in Chapter 1, from 2002-2009 almost 800 participants enrolled in SANDEE's introductory courses on Environmental and Resource Economics, Research & Proposal Writing, basic training (microeconomics, policy dissemination, econometrics, and climate change research) and advanced topics (CGE Modeling, Advanced Econometrics, Household modeling, Survey Methods, Climate Change, Climate Science & Policy, Program Evaluation, Paying for Environmental Services, and Policy Tools for Climate Change). SANDEE has kept detailed records of student evaluations of these courses, asking multiple questions about the quality of the teaching, course materials, and administration. Students recorded scores (grades) from 1 (low) to 5 (high) for each question.

The majority of participant scores for all questions across all courses were 4s and 5s. Equally impressive, the high ratings are not limited to a few instructors. SANDEE has used many different instructors in these courses, and almost all have received high ratings. I have read a lot of course evaluations over my career, but I cannot remember ever seeing such uniformly positive evaluations. There are a few low scores here and there for different instructors, but the SANDEE team seems to have quickly addressed any problems that arose. The ratings by course participants show that the SANDEE team pays great attention to the details of the SANDEE course offerings to ensure that they are of consistently high quality.

Summary

On balance the grantees are pleased with the R&Ts and course offerings. Based on my own review of the course offerings and participant observations, I conclude that SANDEE has a strong, up-to-date set of courses for both new and experienced researchers in the environmental and resource economics field. I am particularly impressed with the climate change science and policy courses, which brought new materials to South Asian researchers in a timely, innovative manner. I think a priority for SANDEE now should be to better capture this intellectual property and make it more widely available in the region. I return to this topic in my recommendations in Chapter 9.

Chapter 6 – The Secretariat's Operations: The Grant-Making Process & the SANDEE Website

Introduction

Not surprisingly, many grantees have formed opinions about SANDEE's grant-making process. In this chapter I describe what the grantees think about the current SANDEE grant-making process, and how they would like to see it changed in the future. I then discuss the duration of SANDEE grants. Next I report the grantees' impressions and use of the SANDEE website.

Grantees' Perceptions of SANDEE's Grant-Making Process: The Current Situation

Many grantees feel that the process favors certain types of projects and is biased against others (Table 6.1).

Table 6.1 - Do you think the SANDEE grant-making process favors certain "types" of research projects?

Answer Options	Response Percent
Yes	33%
No	26%
Don't know, not sure	36%
Skipped question	5%

Some of the topics that grantees thought were discouraged included stated preference methods, qualitative analysis, interdisciplinary topics, and theoretical inquiries. Topics that grantees thought SANDEE liked included pure economics, mathematical analysis, climate change, revealed preference techniques, empirical research with primary survey data, and "those which interest the resource persons." To SANDEE's credit, grantees do not feel that the grant-making process is biased toward one country or another (Figure 6.1).

There is also a perception at least among some SANDEE grantees that some researchers are taking a relatively long time to revise their proposals and to complete their research projects. In response to an open-ended question in the grantee survey, one respondent said, ...

"Everyone including me are not worried much by time frame, which is unlikely in the case of other projects as it is understood that sandee gives sufficient time."

This respondent concluded that SANDEE should set, "a specific time frame of not more than three months to revise [a proposal] according to [reviewers']comments)."

Another respondent said, ...

"Interactions between grantees and supervisors should be improved in order to finish the study in lesser time (at least within one year). Waiting for the next R&T to carry on the research work wastes your time and discourages the grantees decreasing their interest on the study."

However, the majority of grantees were not concerned about the length of the research process. Only 20% agreed or strongly agreed with the statement, "SANDEE should strongly encourage researchers to finish their grants in 12-18 months." (Figure 6.2).

Figure 6.1 – Reactions to the statement, "Proposals from some countries are more likely to be funded, other things equal, than proposals from other countries."

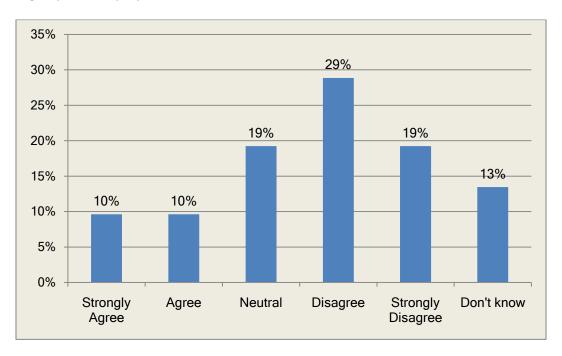
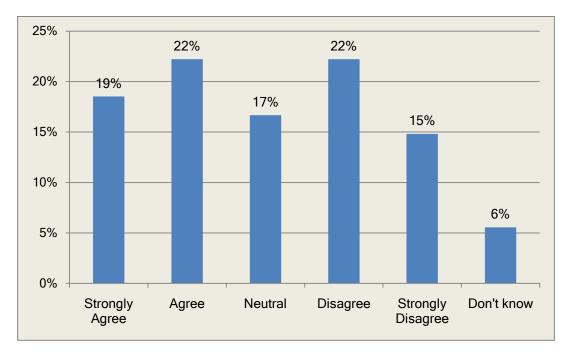


Figure 6.2 - Reactions to the statement, "I think SANDEE grants take too long to complete (i.e., 2 years or more). SANDEE should strongly encourage researchers to finish their grants in 12-18 months."



Grantee's Perceptions of SANDEE's Grant-Making Process: Looking to the future

I asked a few questions about what SANDEE researchers would like to see with regard to SANDEE's future grant-making activities. Most felt that grants should be split ("shared") between junior researchers and more experienced researchers (Figure 6.3). They were relatively evenly divided on the question of whether a researcher who applies for a second or third grant should face increasingly stringent standards (Figure 6.4). Many like the idea that SANDEE would make more grants for dissertation fieldwork (Figure 6.5).

Figure 6.3 – Responses to the question, "Different networks have devoted different proportions of their available grants to young, less experienced researchers and to older, more senior researchers. Which of the following statements is closest to your feelings about how SANDEE should allocate its grant monies?"

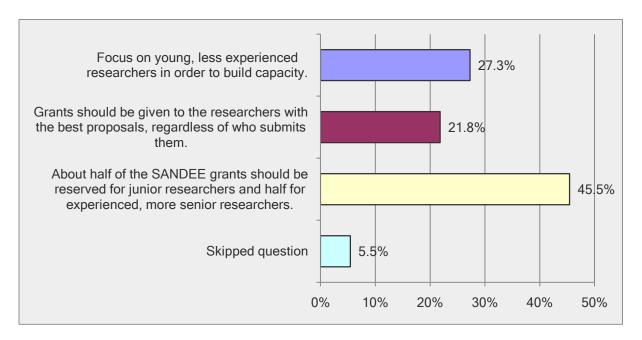


Figure 6.4 – Responses to the statement, "After an individual has received her (his) first research grant from SANDEE, it should become increasingly difficult to win subsequent grants."

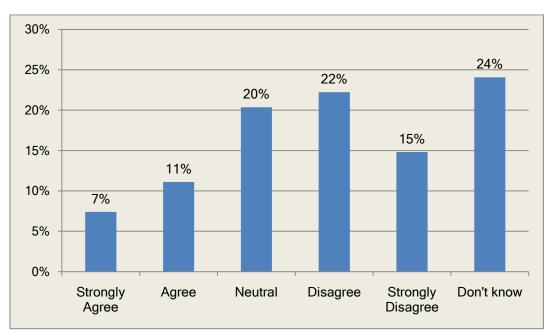
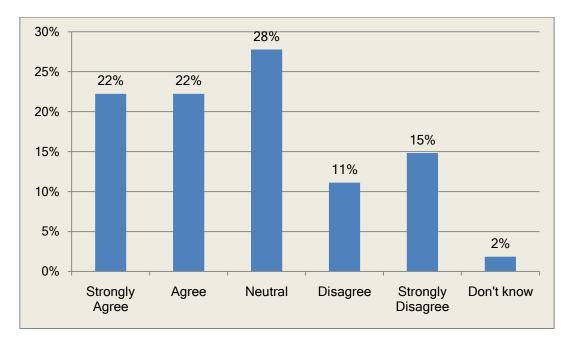


Figure 6.5 – Reactions to the statement, "SANDEE should make more research grants specifically to fund dissertation fieldwork for PhD students (both those studying at universities in the South Asia region and at universities outside the region)."



Finally, I asked grantees whether they had any specific suggestions on how SANDEE's grant-making process could be improved. Grantees had a number of specific requests for changes. These include

- 1) quicker funding decisions on proposals;
- 2) removal of the restriction of "one SANDEE grant at a time";
- 3) The disbursement of grant monies directly to the recipient rather than her university;
- 4) Avoiding conflicts of interest (e.g., when a resource person reviews the grant application of one of his own PhD students);
- 5) SANDEE should encourage more cross-country research.

Two grantees specifically urged SANDEE to allocate more grants to underserved areas:

Respondent A - "Should give some special consideration to women researchers/students especially from suppressed community. For example, In Nepal, women from Terai community, Dalit community would hardly be able to compete with others and get a grant. If things don't change, they would never come up."

Respondent B — "I think SANDEE should do positive discrimination in grant making process in favor of countries like Nepal, Bhutan and Maldivs from where very few researchers dare to apply for SANDEE. SANDEE should focus on these countries with special attention. SANDEE should create a

condition that can encourage researchers from other fields (not only economists) to take part in it. Researcher like me and [xxx] are among the few exceptions in the list of SANDEE Grantees. SANDEE should be more broad and multidisciplinary. It should create room for the researcher from relevant sectors concerning to Environment and Natural Resources."

But overall grantees seemed quite happy with the grant-making process. Table 6.2 gives typical verbatim responses.

Table 6.2 – Grantees' Comments on the Grant-making Process

Question #36	Do you have any specific suggestions on how the SANDEE grant-making process could be improved? Please elaborate.
Respondent #1	I think the grant making process is fair and fine.
Respondent #2	The process by far is excellent. A minor suggestion will be some hand holding to understand what the reviewers of the proposal are trying to say and help in preparing response.
Respondent #3	SANDEE grant-making process is not difficult.
Respondent #4	No, the process is fairly good.
Respondent #5	No it is perfect

The Duration of SANDEE Grants

SANDEE grants appear to take longer to complete than grants made by the other environmental economics networks. One view is that this is just the price to be paid for SANDEE's excellent publication record (see Chapter 3). However, it is certainly a question worth exploring as to whether SANDEE grants could be completed in a shorter period of time and still maintain SANDEE's publication success. Even some of the researchers themselves seem to feel that the SANDEE research process takes longer than necessary (see comments above).

Because many SANDEE researchers are academics, and because most SANDEE grants involve fieldwork, researchers need the summer vacation period to collect their data. There is thus inevitably some variation in the duration of SANDEE grants due to this academic schedule. Vacation schedules vary in South Asia, but I believe May-June are common vacations times. If a SANDEE grant is awarded after the summer R&T, it may be difficult for a researcher to receive funds from SANDEE to commence with fieldwork that calendar year. The fieldwork would then generally begin the following summer, perhaps 10 months later, which makes completion within 12 months practically impossible. On the other hand,

if a grant is made after the December R&T, then fieldwork and data collection should begin the following summer. If for some reason it does not, then the grant is going to take much longer to complete.

It is not straightforward to determine the duration of SANDEE grants or the factors that are associated with especially lengthy grants. The data in SANDEE's financial records are not organized to easily extract the relevant information. Table 5.3 presents data from the SANDEE records that illustrate this problem. The financial records for the early years of SANDEE's operations (up until 2005) are not easy for the Secretariat to assemble, and perhaps are not representative of current SANDEE practices anyway. Grants made in 2009 and 2010 actually should still be open, so it is not yet possible to determine how long they will take to complete. Thus, the only data I have to judge grant duration are for the years 2006, 2007, and 2008.

Determining the end date of a SANDEE grant is not straightforward either. There are three important milestones: (1) the date of the researcher's last R&T when the researcher presents her final report (or close to final report); (2) the date the grant is officially closed and (3) the date the SANDEE working paper is published. The first milestone is when the researcher presents his/her final report, and the data suggest that this usually takes about 4 R&T workshops SANDEE usually receives a researcher's revised final report within 3-6 months of her last R and T. For practical purposes, this is when the grant is finished. The remainder of the time before the grant is closed is involved with obtaining audited financial reports and the peer review process for the working paper publication.

In this evaluation I focus on (2) and (3); both are presented in Table 6.3. Neither is a perfect indicator.

For all 11 grants in Table 5.3 that started in the period 2005-2008 and that have now been closed, the average length of a grant was 4.1 years. However, this may be somewhat misleading because SANDEE does not close a grant until it receives a report from the researcher that incorporates her revisions to the comments received during the peer-review process, and the financial audit of the grant is complete. SANDEE final reports go back to resource persons, and after their comments are addressed, go to peer reviewers. Once SANDEE receives the comments from peer reviewers, the resource persons advise which comments are to be fully incorporated. The resource person sometimes reviews the researcher's report again after the peer reviewer comments have been incorporated. In the meantime, the Secretariat works with the researcher to help them address the peer reviewer comments. The working paper is published at the end of this long process.

Another important milestone is when a SANDEE working paper is published, and these data are available for some grants in Table 6.3. Data were available for only one grant made in 2005. That grant was made in October of 2005, and the SANDEE working paper was published in August 2010 (a duration of 4.8 years).

Grants made in 2006 and 2007 should be closed by now. Table 5.3 shows that 6 grants were made in 2006. All should be closed and they are. Of the six grants made in 2006, ...

- For two grants the SANDEE working papers were published in 2009.
- For two grants the working papers was published in 2010.
- For one grant the researcher still working on the manuscript.

- For one grant, the account is closed and there is no publication.

For the four grants made in 2006 for which working papers were published, the average period from the start of the grant to the date the working paper was published was about 4 years.

For 2007, data were only available for three grants. Of these three grants all are now designated as "closed," but none has yet completed their SANDEE working paper. All are in the editing stage or peer review stage of the publication process.

For 2008, data were provided for five grants. One of the five grants is closed, the remaining four are open. One of the five has submitted a final manuscript (a different grant than the one that is closed). The one 2008 grantee who has submitted a final manuscript took 2.3 years from the start of the grant until the submission of the final manuscript.

For 2009, data were provided for ten grants. All are open. None of the 2009 grantees has yet submitted a final manuscript. It is certainly possible that grants made in 2009 and 2010 will be of shorter duration that those started in 2006-2008.

Given the data limitations, and SANDEE's publication success, it is difficult to know precisely what to conclude from these data. However, 4 years is certainly a long time from the initiation of a grant to the publication of a SANDEE working paper. The publication review process is unpredictable, but the time to get a manuscript ready for submission to a refereed journal is under the control of the grantee and the SANDEE's own review process for working papers. It seems to me a reasonable goal would be to significantly cut down the time from the start of a grant to the publication of a SANDEE working paper.

I am less concerned about the time it takes to officially close a grant if this requires a financial audit. Still I think it would be useful for SANDEE to try to close its grants more quickly. This would streamline the administrative process and should reduce the workload on the Secretariat staff. It would also signal to the grantees that the SANDEE working papers should be finished more quickly.

My impression from discussions with researchers at the July 2010 R&T is that at least some of them would like to find a way to speed up the SANDEE research process. One respondent in the grantee survey said, "... it will be good of resource persons break down research tasks and give deadlines for each. This can help grantees track their own progress better." [Researcher 3, quoted in Table 3.4].

Table 6.3 – Duration of SANDEE Grants (2006-2010)

Grants Start and End Period 2007-2010

S.No	Name of Grantee	Grant Start Dates	Original Grant Closure Date	Grant Extensions	Grant Status (Date)	Working Paper Published	Financial Documents Received
	M. Jahangir Alam				Closed		
1	Chowdhury (JAC)	Oct-05	Nov-06		(Aug-10)	Aug-10	
2	Kavi Kumar	Jul-06	Jan-08		Closed (Nov-09)	Nov-09	
3	M. Jahangir Alam	Feb-06	Mar-07		Closed (Sept-10)	Nov-09	
4	Tanzir Chowdhury	Mar-06	Sep-07		Closed (Sept-10)	Jun-10	
5	Moeed Yusuf	Feb-06	Mar-07	Mar-09	Closed (March-10)	Delayed- Manuscript in Review	
6	Shabib H Syed	Jul-06	Jan-08		Closed (Dec-09)	Not Published	
7	Muhammad Irfan	Sep-06	May-08	May 2009	Closed (Aug-10)	Manuscript under peer review, editing done	
8	Bishnu Prasad Sharma	February- 07	August-08		Closed (April-10)	Peer review completed, editing required	
9	Ram Chandra Bhattarai	February-	March-09		Closed (April-10)	Peer review complete, editing doneWith researcher for revision	
3	Dilattalal	07	November-		Closed	Peer review completed, editing done - with researcher for final	
10	Rucha Ghate	October-07	09	July-10	(April-10)	response	
11	Udith Jayasinghe	March-08	April-09		Closed (Aug-10)	Manuscript under peer review, editing done	

						Final Manuscript Received (Sept	
12	Gautam Gupta	May-08	February-10	March-10	Open	10)	Third Financial received
13	Nayantara Nayak	May-08	May-10	May-10	Open	Awaiting final manuscript	Waiting for third financial
			September-				
14	Muhammad Rafiq	March-08	10	July-10	Open	Awaiting for final manuscript	Third Financial received
15	Khuda Baksh	October-08	April-10		Open	Awaiting final manuscript	Third Financial received
16	Yamini Gupt	July-09	March-11		Open	Progress Report	Second Financial received
17	Prakash Karn	April-09	October-10		Open	Progress Report	Second Financial received
	Ajantha						
18	Kalyanaratne	July-09	January-11		Open	Progress Report	Second Financial received
19	Kalyan Das	March-09	May-10		Open	Awaiting final manuscript	Second Financial received
		September-					
20	Kanupriya Gupta	09	March-11		Open	Progress Report	Second Financial received
	_	September-	_				
21	Sumeet Patil	09	March-11		Open	Progress Report	Second Financial received
2.2		September-					
22	Tanvir Ahmed	09	March-11		Open	Progress Report	Second Financial received
23	Ridhima Gupta	October-09	January-11		Open	Progress Report	Second Financial received
2.4	A.C I I	September-	September-		0	B B	Consideration of the
24	Afsana Haque	09	December-		Open	Progress Report	Second Financial received
25	Krishna Pant	December- 09	December-		Open	Progress Report	Second Financial received
23	KIISIIIIa Palit	February-	11		Ореп	Flogress Report	Second Financial received
26	Naeem Akram	10	May-11		Open	Progress Report	Second Financial received
	Tracerry and arri	February-	may 11		Орен	Trogress Report	Second Financial Feedbea
27	Saravana Kumar	10	August-11		Open	Progress Report	Second Financial received
		February-	J				
28	Prajna Mishra	10	August-11		Open	Progress Report	Second Financial received
		February-					
29	Ziaul Haider	10	August-11		Open	Progress Report	Second Financial received
30	Iftikhar Husnain	August-10	February-12		Open	Progress Report	Second Financial received
		February-					
31	Santadas Ghosh	10	February-12		Open	Progress Report	Second Financial received

					Process of closing		
32	Nasima Chowdhury	March-08	April-09		(waiting for 3rd financial)	Working Paper Completed	Waiting for third financial
32	ivasima chowanary	IVIAI CII-08	April-03		Process of	Working raper completed	waiting for time imancial
					closing		
					(waiting for	Manuscript peer reviewed with	
33	Asha Gunawardena	October-07	April-09	March-10	audit)	researcher for revisions	Waiting 3rd financial
					Process of		
					closing		
2.4	D'Illian d' Marian d'In	0.1.107	A		(waiting for	Manuscript peer reviewed with	Maritin 2 d and a d
34	Dilhani Marawila	October-07	April-09	July-10	audit)	researcher for revisions	Waiting 3rd received
					Process of closing		
					(waiting for	Manuscript peer reviewed with	
35	Sakib Mahmud	January-08	June-09	January-10	audit)	researcher for revisions	Third financial received
	Salkis Manifiad	Surraci y CC	June 03	January 10	Process of	researcher for revisions	Tim a imaneiar received
					closing		
					(waiting for	Peer review completed - with	
36	Ali Dehlavi	October-08	February-10		audit)	researcher for revisions	Waiting for 3rd Financial
						Delayed - Manuscript being	
37	Naveen Adhilkari	October-07	April-09		Open	reviewed by Advisor	Second Financial received
	Jogasankar		November-			Delayed- Waiting for Final	
38	Mahaprashasta	March-08	09		Open	Manuscript	Second financial received
						Delayed for many reasons and	
39	Prasenjit Sarkhel	August-06	August-08	October-10	Open	also because of Aila	3rd financial received
			September-				
40	Tehmina Mangan	March-08	09	December-10	Open	Delayed - Report Due	Second Financial received

The SANDEE Website

SANDEE researchers like the content and layout of the SANDEE website (Figures 6.6 and 6.7) and use it often (Figure 6.8). Thirty six percent of respondents report that they visit the website more than once a month; another 47% say they visit several times a year. Similarly the SANDEE newsletter is used by researchers. The majority report that they read it regularly and pass it on to others.

In the grantee survey, I asked respondents for specific suggestions on how the SANDEE website could be improved, and there were several ideas. These include better, more frequent updating of information and hosting a blog on environmental economics issues (Table 6.4).

Several grantees requested that the SANDEE website serve as an electronic library or clearing house. This is probably not appropriate. However, it might be helpful to researchers if the resource persons used the SANDEE website to call attention to important new papers in the literature.

The LACEEP network is now using Facebook to keep in touch with researchers, and distribute announcements and documents related to proposal preparations. Some LACEEP researchers are using Facebook to post announcements and link other "LACEEP friends" to articles and other websites they have found useful. Some researchers are also letting "LACEEP friends" know when they publish an article. There are as yet few discussions of topics in environmental economics, but this may happen.

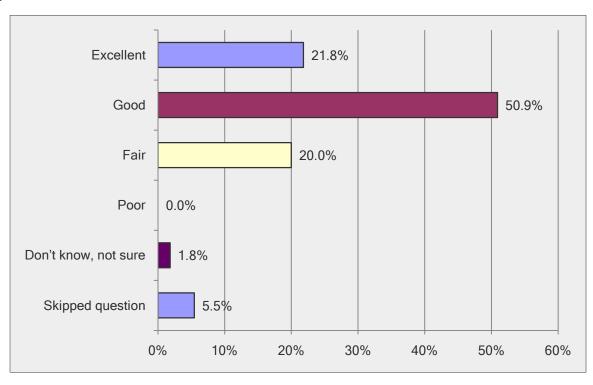


Figure 6.6 – SANDEE Grantees' Assessment of the Content of the SANDEE website

Figure 6.7 – SANDEE Grantees' Assessment of the Layout and Appearance of the SANDEE website

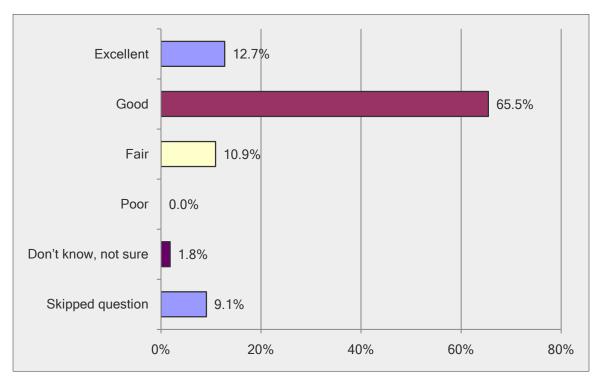


Figure 6.8 – SANDEE Grantees' Use of SANDEE Website

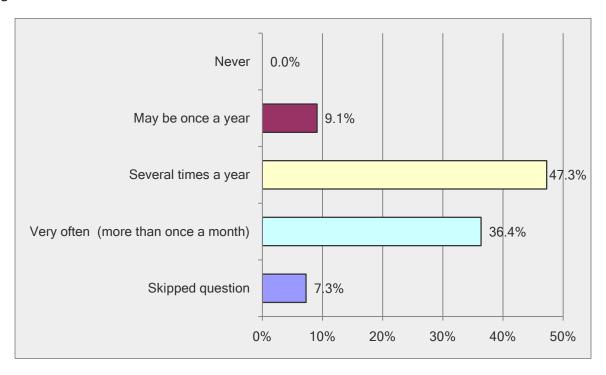


Table 6.4 – SANDEE Grantees' suggestions on ways to improve the SANDEE website

Question #44	Do you have any specific suggestions for ways that the SANDEE website could be improved?
Researcher 1	I think all the contents of the website including picture may be updated on regular basis. Similarly old contents may be removed after their expiry.
Researcher 2	Schedules of upcoming workshops and related logistics should be posted. Access to books and journals should be on the website.
Researcher 3	Including blog posts on specific subjects of current interest from different countries.
Researcher 4	System of uploading files (e.g. progress reports) is cumbersome. It should be simplified.
Researcher 5	It has to display the details of the SANDEE grantees after every R&T workshop.

Summary

I am not particularly worried about the grantees' perceptions that certain types of projects are favored. However, I do think that the Director, the Environmental Economist, and the resource persons should address these perceptions, and either explain why these perceptions are accurate, or state publicly that SANDEE is open to receiving proposals on topics that some grantees perceive to be out of favor.

Also, I think that any perceptions that resource persons have a conflict of interest in the grant-making process need to addressed, even if they are groundless.

I agree with the respondent who suggested that applicants for grants should be given a specified time period to respond to requested revisions. I think that SANDEE researchers would benefit from stricter guidelines as to the length of time a researcher is allowed from the start of a grant to the publication of a SANDEE working paper. One way that SANDEE might incentivize grantees to complete their SANDEE working paper more expeditiously would be to provide publication assistance through the journal review process only for grantees that complete their working papers within a specified time. With regard to the SANDEE website, personally I find it well organized and easy to navigate. It is not easy for me to assess how regularly it is updated, but if this is in fact a problem, as one respondent indicated, then this issue deserves the Director's attention. I also think SANDEE should explore the option of using Facebook to communicate with the SANDEE family.

Chapter 7 – Governance Issues

Introduction

SANDEE operates much like a non-governmental organization (NGO), but in fact SANDEE is not a legal entity. It is a creation of its donors and its network of friends and supporters. SANDEE continues to exist because of the financial support of its two large donors and the strong personal commitment of the Director and Secretariat team, the resource persons, course instructors, and other friends and supporters of its activities. It has a Constitution that has no binding legal authority but is rather a statement of SANDEE's mission and how it proposes to operate.

The Constitution [Article 1] states that "SANDEE will be administered by a previously registered non-profit organization" (presently ICIMOD). One important implication is that SANDEE does not maintain or have its own bank accounts. Its banking is done through the financial institution of the hosting institution. ICIMOD maintains a separate fund account for SANDEE in its financial system. Auditors of the host institution also audit SANDEE subaccounts. ICIMOD makes payments on SANDEE's behalf and subject to the authorization of SANDEE's Program Director. ICIMOD receives grants and donor contributions on behalf of SANDEE, and promises to use such funds only for SANDEE's activities. ICIMOD reviews all SANDEE grant proposals and draft agreements before they are executed.

A second implication is that the SANDEE Director is selected by the MAC in *consultation with ICIMOD's management*. While SANDEE is hosted by ICIMOD, the staff of the SANDEE Secretariat is subject to ICIMOD's staff employment terms and conditions.

A third implication is that the legal liability for SANDEE's actions would appear to rest with the SANDEE's host organization. It is not obvious to me that the Director, resource persons, instructors, or members of the Management and Advisory Committee have a corporate liability shield.

SANDEE is governed by a Board of Directors called the "Management and Advisory Committee (MAC)." Membership of the MAC includes:

- 1) Three regional experts;
- 2) No more than three representatives of major donors;
- 3) No more than two international experts;
- 4) The Program Director; and
- 5) A representative of the institution that hosts SANDEE.

Members of the MAC serve on a rotating basis. Table 7.1 shows the members of the MAC over the 2000-2010 period. The donor representatives and the Director herself have had the longest service on the MAC, and provide much of the institutional memory of the MAC's decisions.

Table 7.1 – SANDEE Management and Advisory Committee - Members and their Tenure Period

	Advisor	Start Date	End Date
1	Partha Dasgupta, Cambridge University	March 2000	Dec 2009
2	K-G Maler, Beijer Institute	March 2000	August 2006
3	Narpat Jodha, Retired ICIMOD	March 2000	2003
4	Pyarkuryal, Tribhuwan University Nepal	March 2000	2003
5	Kanchan Chopra, Institute of Economic Growth (former Director)	March 2002	2005
6	Enamul Haque, United International University	June 2002	June 2008
7	Jeff Vincent, Duke University	Dec 2001	Dec 2007
8	Shanta Devarajan, World Bank	Nov 2004	2007
10	Rehana Siddiqui, Pakistan Institute for Development Economics	June 2003	Dec 2006
11	Y.K. Alagh (Chair), Institute of Rural Management, Anand	Dec 2006	
12	David Glover, IDRC*	June 2004	
13	AnnaMaria Oltorp, Sida*	March 2000	
14	IUCN*	March 2000	Dec 2009
15	Eli Koefoed Sletten, NORAD*	June 2007	
16	Herath Gunathilake, Asian Development Bank	Dec 2009	
17	Madhu Khanna, University of Illinois	Dec 2010	
18	Andreas Schild/ICIMOD*	Dec 2009	
19	Priya Shyamsundar/SANDEE*	March 2000	
20	Bill Chameides, Duke University	Dec 2008	
	<u>I</u>	II.	1

^{*}Ex officio

There are three subcommittees that report to the MAC:

- 1) Program Advisory Committee (PAC);
- 2) Finance and Administrative Committee (FAC); and
- 3) Nominating Committee (NAC).

SANDEE is also open to institutional members. The Constitution states that institutions may become members of SANDEE simply by indicating their interest in SANDEE's missions and paying modest annual dues (US\$250). Table 7.2 presents a list of SANDEE's current institutional members.

Based on my conversations with the Director, the members of the MAC, and the Resource Persons, and on my reading of the minutes of the MAC meetings, it is clear that over the past ten years the SANDEE family has thought carefully about a number of issues that have arisen out of this unusual institutional structure. The following questions are even incorporated in the SANDEE Constitution itself:

- 1) What is the long-term role of SANDEE in the region?
- 2) What is the role of the founding members?
- 3) Should SANDEE continue to be hosted by an international agency or should it be registered?

Table 7.2 –Institutional Members of SANDEE⁵

No.	Institutional Member	Address	Website
1	Bhutan Trust Fund for	Thimpu, Bhutan	www.bhutantrustfund.o
	Environmental Conservation		rg
2	Centre for Development	Ahmedabad, Gujrat	
	Alternatives		
3	Centre for Development Studies	Kerala, India	<u>www.cds.edu</u>
4	Centre for Organization Development	Hyderabad,India	www.codhyd.org
5	Gujarat Institute of Development Research (GIDR)	Gujarat, India	www.gidr.ac.in
6	Indian Institute of Forest Management (IIFM)	Bhopal, M.P. India	www.iifm.org
7	Indira Gandhi Institute of Development Research (IGIDR)	Mumbai, India	www.igidr.ac.in
8	Institute of Social & Economic Change (ISEC)	Bangalore, India	www.isec.ac.in
9	Institute of Development, Environment and Strategic Studies (IDESS)	Dhaka, Bangladesh	www.northsouth.edu
10	Institute of Economic Growth (IEG)	Delhi, India	www.ieg.nic.in
11	IUCN Pakistan	Karachi, Pakistan	www.iucn.org/places/pakistan
12	School of Economics (MSE)	Chennai, India	www.mse.dc.in
13	Sherubtse College	Kanghung Trashigang, Bhutan	www.sherubtse.edu.bt
14	Resources for the Future	Washington DC	www.rff.org
15	Sustainable Development Policy Institute (SDPI)	Islamabad, Pakistan	www.sdpi.org
16	University of Madras	Tamil Nadu, India	
17	Institute of Rural Management Anand (IRMA)	Gujrat, India	www.irm.erenet.in
18	Department of Agricultural Economics	University of Agricultural Sciences Bangalore, India	www.toenre.ac.in

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⁵ Not all of the institutions and individuals listed in this table actually became paid members; some obtained the same benefit as the members but did obtain a paid membership.

19	WWF - Nepal	Baluwatar, Kathmandu	
20	The Library, NEFEJ	Thapathali, Kathmandu	
21	UNDP	UN House, Pulchowk	
22	The Library, Practical Action	Lazimpat, Kathmandu	
23	The World Bank	Hotel Yak & Yeti	
		Kathmandu, Nepal	
24	The Asian Development Bank	Kamaladi	
25	Ajay Dixit	Nepal Water Foundation	
		Patan Dhoka	
26	SWATEE	Baluwatar, Kathmandu	
27	Ramchandra Bhattarai	Department of Economics, Patan	
		Multiple Campus, Patan Dhoka	
28	Subodh Sharma	Department of Environmental	
		Sciences, Kathmandu University	
		Dhulikhel, Kathmandu, Nepal	
29	The Librarian	Kathmandu University	
		Dhulikhel, Kathmandu, Nepal	
30	The Librarian	Central Library, Tribhuvan	
		University, Kirtipur	
31	Central Department of	Tribhuvan University, Kirtipur	
	Economics		
32	Punya Prasad Regmi	Dept. of Agriculture Economics,	
		Institute of Agriculture and Animal	
		Sciences, Rampur Campus,	
		Chitwan, Nepal	
33	Ridhish Pokhrel	Institute of Forestry	
		Tribhuwan University	
		Pokhara, Nepal	
34	National Trust for Nature	Kupondole, Lalitpur	
	Conservation		
35	IUCN Nepal	Jawalakhel, Lalitpur	

The Role of Grantees in SANDEE Governance

During my interviews with SANDEE grantees at the July 2010 R&T, I found that although they are deeply appreciative of SANDEE's efforts, they did not know much about how SANDEE operates. Especially for first-time grantees, this is to be expected. They are simply trying to learn and understand what is expected of them. But I found that even grantees who had been to multiple R&Ts and specialized training courses, and those who had been affiliated with SANDEE for years, did not really understand how decisions are made at SANDEE or how SANDEE activities are financed. They were curious, but did not seem to feel comfortable asking. They knew that SANDEE was donor-funded, but they knew little about SANDEE's finances.

Grantees especially appreciated the work of the Director, but had little understanding of her multiple roles in the SANDEE organization. They appreciated the time that resource persons gave them, but had little understanding of the world of the resource persons or what might motivate them to serve SANDEE. Surely some long-time grantees know more about SANDEE than newcomers, and some have become more actively involved as SANDEE Fellows. But I think it is a fair generalization to say that most grantees do to perceive themselves to be involved in SANDEE decision-making, nor do they know much about how SANDEE works. In this sense they do not have "standing" in the organization.

This is perhaps not a big problem if SANDEE remains a donor-funded capacity building network. But if SANDEE moves toward becoming a financially self-supporting network, or if SANDEE branches out in new directions (see Chapter 8), I believe grantees need to feel a greater sense of ownership in the organization than they do now. They need to know more about financial and governance issues and become involved more quickly in SANDEE decision-making. I think that this could accomplished gradually and need not be disruptive to SANDEE operations.

I do not imagine that all grantees will want to become more involved in governance issues. Some surely are happy with the current situation. But I think all grantees would benefit from knowing more about how SANDEE works, and SANDEE would be strengthened if some grantees become more involved with governance issues.

Composition of the Management and Advisory Committee

The present membership of the MAC is strong, and it is appropriate for a donor-funded capacity building network. If the MAC should decide that SANDEE should move toward a different long-term role, one in which SANDEE relied less on donor financing, the MAC membership would need to change somewhat to include more private sector, government, and business expertise. The result would be a less "academically oriented" MAC. New members could assist the Director with the implementation of a different business model.

Many Boards of Directors of NGOs include individuals who would be in a position to help establish a large endowment for the institution, or provide major financial help in some other way. I do not want to

imply that all of the current and past members of the MAC have lacked these skills. SANDEE has been remarkably successful as a small "NGO-lite" type organization. But given this success, in my view it is certainly reasonable to aspire to scale up its activities, and move in new directions.

Such a change would necessitate some changes in its governance structure. For example, the Director would need to have more executive authority to pursue entrepreneurial opportunities. MAC meetings might need to be held more often. Ways would need to be found to increase SANDEE's budget and add more staff.

Chapter 8 - Future Directions

Introduction

In his 2007 book *Change or Die: The Three Keys to Change at Work and in Life*, Alan Deutschman examined the dynamics of organizational change and why it is so difficult to change behavior and organizational culture. Leaders of many organizations—both public and private—have accepted the message "Change or Die" as a strategic necessity. But I think the SANDEE Director and the Management and Advisory Committee should think carefully before changing an organization that has been so successful at what it does. SANDEE has accomplished a great deal in just 10 years and fills an important niche in the environmental economics field in South Asia. Without apologies to anyone, it could continue on its present path and simply maintain the status quo. It is impossible to argue that SANDEE's mission is accomplished, and that South Asia now has a sufficient number of environmental and resource economists.

Three New Strategic Directions

However, there are some possible new strategic directions that SANDEE might pursue. For example, the EEPSEA work program includes more emphasis on: (1) in-country policy work; (2) cross-country research; and (3) capacity building in under-served areas. Of course, EEPSEA has a larger budget with which to work. I spoke with SANDEE resource persons and grantees about these three possible new directions for SANDEE, and my impression is that there is no consensus as to whether SANDEE needs to change. Nor is there any consensus on which of these three new strategic directions would make the most sense.

In the grantee survey, I told grantees to suppose that SANDEE could only pursue one of these three new strategic directions, and asked them which of the three they would choose. Their answers were almost evenly divided among the three (Figure 8.1). Perhaps not surprisingly, grantees from Nepal felt that it was more important to focus on under-served areas than grantees from other countries (Table 8.1), but otherwise there were few differences across countries (although of course the sample sizes are too small to make much of any differences).

I asked respondents to explain their preferences for the new strategic direction they chose. In Table 8.2 below, I present three examples of explanations that respondents offered for each of these three new strategic directions. As illustrated, grantees have well-reasoned answers for their preferences and pertinent observations.

My own view is that all of these new directions represent opportunities for SANDEE. However, there is a significant risk that the Director, Secretariat and Resources Persons could become stretched too thinly if

new initiatives were added to SANDEE's activities. The Director, Secretariat staff, and resource persons are already working very efficiently, and any new programs would require more resources.

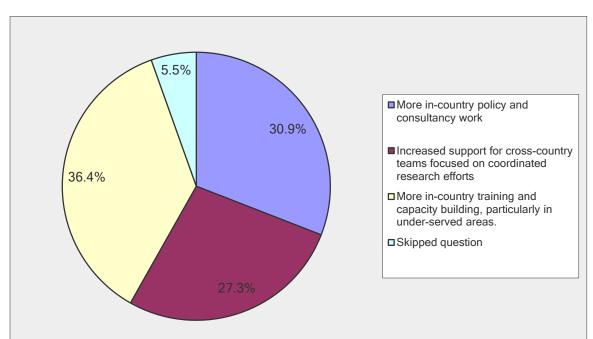


Figure 8.1 - Grantee Preferences for new strategic directions for SANDEE

Table 8.1: Respondent Preferences for Strategic Direction -- by Country

Answer Options	India	Pakistan	Nepal	Bangladesh	Sri Lanka
More in-country policy and consultancy work	8	3	1	3	2
Increased support for cross- country teams focused on coordinated research efforts	7	3	2	2	1
More in-country training and capacity building, particularly in under-served areas.	9	2	5	2	2
answered question	24	8	8	7	5
skipped question	0	0	0	0	0

Table 8.2 – Grantees' Explanation of their Preference for New Directions

Question #47 / Strategic Direction	Suppose that SANDEE could only pursue one of these three new strategic directions, which one would you favor? Please explain your reasons.
More in-country policy and consultancy work	SANDEE activities currently are at the optimum given the niche demand it meets and serves with uniqueness. If it has to go for any add on service it has to be track II service offered by SANDEE and needs a separate director and separate advisory board with overlaps so it maintains SANDEE character (of rigorous research support for policy making). My support for I is to enhance SANDEE's visibility . SANDEE trained researchers can produce quality consultancy service and quality controlled output can make regional policies stronger and better. It can bring in a culture of serious policy research supported policy formulation. But this has to be track II as I mentioned very clearly. SANDEE can grow as an institution as the products in the region from track I can provide a very important support to bridge a hug gap in the region for policy making. Experimentation in a small scale can be tried out but in track II mode.
u	SANDEE has certainly added to significant research capacity in the last 10 years in this region. The researchers all had important policy angles, but their results often went unheeded in policy circles. The capacity built is not fully utilized because individual researchers often do not have the clout to influence the policy makers. As a logical next step, SANDEE can now act as the mediating agency to fill the communication gap between the researcher and the implementing authority. That would be a natural follow up to the capacity building process it was mandated with.
u	Most of the SANDEE funded research addresses regional environmental problems that have got significant policy relevance. For an individual researcher it is difficult to initiate government liaisons for getting information and background data within the stipulated period of the project. If in addition to the grant making process SANDEE gets involved in government consultancies then the researchers could avail the benefits of such network and would get hold of required information at the lowest transaction cost. Moreover, if there is direct interaction of SANDEE and the government then individual research carried out in these areas would have certain amount of credibility. This would obviate the need to clarify the purpose of the project repeatedly to government and community officials.
More in-country training and capacity building, particularly in under-served areas.	I think SANDEE has an excellent method in training and capacity building. For research there are other organizations like this, perhaps.
u	First, third strategy is a natural extension to SANDEE, it can do this without burdening the advisors and resource persons too much. First two require a lot of thinking and capacity building within SANDEE itself which may spread the resources thin. In SE Asia, we are just learning to be good economists so I think 1st and 2nd could be a 10 year+ agenda. Second, first strategy does not seem to be SANDEEs comparative advantage. I agree with capacity building of govt and even advocating use of env economics in policy making (This is really needed!), but I hope SANDEE does not become the "solution provider" itself. If it does, then there will be conflict of interest, the members will withhold information from each other on projects they are pursuing, grantees and SANDEE may even be competitors. I also don't see the value addition by directory of environmental consultancies in the region; for jobs? Finally, the second strategy seems ambitious. We are unable to finish simpler inOcountry projects within 2 years (as you pointed out before), how can we finish something more complicated and involved? The coordination between different team members should be very good which seems difficult without adequate support. Even within SANDEE the capacity to handle multi country project would need to be developed and seems like it will take further toll on resource

	persons time.
"	Environmental economics particularly in South India is a recently introduced subject. Application of economics is also taught on so to so basis without proper practical application methods. Although the scores are high in exams the knowledge base is not strong. Therefore capacity building courses for such regions would encourage research on environmental problems and help them to learn.
Increased support for cross- country teams focused on coordinated research efforts	Policy work, while important and helpful in raising SANDEE's profile, is often driven by capricious and ignorant governments, be they in the developing or developed world. Given the very poor capacity in economics and environment in South Asia, serious capacity building needs a scale of intervention that SANDEE or most single organizations are incapable of. On the other hand, SANDEE's network across South Asia, and its more global base of resource persons can facilitate solid research on topics of regional, supra-national interest; research that can have a longer lasting impact and large geographical/political economic span.
u	Many of the issues faced by South Asian countries cut across the boundaries – eg, industrial pollution, vehicular pollution, managing a CPR etc., same times many issues are complex – collaborative research projects would be more useful in solving these problems
и	It will make possible to learn about experiences of various researchers of different countries and will also strengthen future collaboration among researchers

I agree with the grantees cited in Table 8.2 above that SANDEE's comparative advantage at present is its capacity building efforts. It offers world-class training programs extremely cost effectively, and there is thus a strong case for expanding its services to under-served areas. The question is how scalable SANDEE's training programs are. For example, the course evaluations consistently report that Enamul Haque and Jeff Vincent are wonderful teachers, but I question whether they have the time to take on additional training courses in underserved areas.

I also agree with the grantees cited above that cross-country research is an important potential comparative advantage for SANDEE (as it is for all of the regional environmental economics capacity building networks), and that SANDEE should selectively encourage more cross-country research. Indeed, my impression from the July 2010 R&T is that the Director and resource persons are shaping research projects to look more and more like coordinated cross-country studies, especially in the area of climate change and agriculture. Efforts by SANDEE to sponsor cross-country projects would be especially valuable in South Asia from a geopolitical perspective in terms of demonstrating the importance of transboundary environmental research. The issues of water resources management, international rivers, and climate change would be obvious candidates for SANDEE cross-country work.

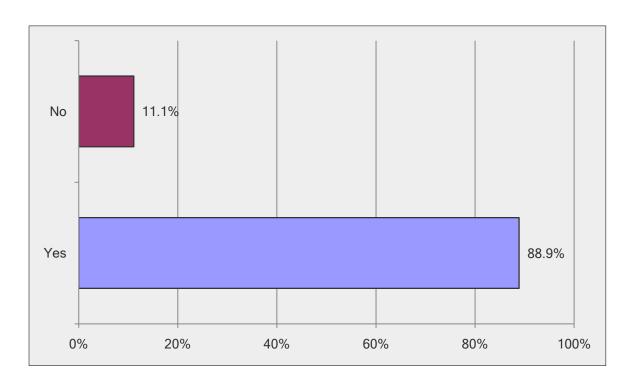
Should SANDEE support more policy analysis?

The more difficult question in my mind is whether SANDEE should move more into the policy analysis arena, and, if so, how far and how fast. There is no clear, simple answer, but I would like to share my thoughts on this decision.

The first question one might ask is: "Aren't SANDEE researchers already doing policy analysis?" My answer would be: "Not really – but that's fine." SANDEE researchers are doing research that I would characterize as "policy relevant." They are conducting research that provides important inputs — empirical findings— to the decision making process without in most cases trying to organize these findings into a larger body of information that decision makers need for policy choice.

In the grantee survey I asked respondents whether it was accurate to characterize their research project as "using survey methods to investigate microeconomic issues." About 9 out of 10 grantees agreed that this was a good description of their research (Figure 8.2). Based on my reading of a sample of SANDEE final reports and journal articles, what this usually means is that the researcher used cross-sectional survey data to examine the association between a dependent variable hypothesized to be of policy interest and a set of co-variates. Often (but not always) there was a policy (control) variable that government could change in the set of independent variables on the right-hand side of the researcher's model. The researcher could often make a statement based on her research about how much the dependent variable would change if the policy (control) variable changed.

Figure 8.2 - Many SANDEE grantees have used survey methods to investigate microeconomic issues. Is this an accurate description of your SANDEE research project(s)?



I believe that the estimation of such relationships is "policy relevant" in the sense that it may contribute valuable inputs into a decision process, especially if causality is convincingly demonstrated. On the other hand, if there are no right-hand variables in the relationship that can be manipulated to change the dependent variable of interest, the results may be of less immediate policy interest. Personally I have no problem with SANDEE funding research to test economic theory even if the policy relevance of the inquiry is presently unclear. For me the problem arises when SANDEE researchers confuse "policy relevant research" with "policy analysis".

A "policy analysis" requires more than simply the estimation of a causal relationship between a dependent variable and a set of right-hand side variables. Specifically, a set of alternative policy interventions (alternatives) must be assessed in terms of the multiple criteria of interest to decision makers. The change that results from a policy intervention is measured relative to baseline conditions. These baseline conditions may themselves be changing (i.e., a dynamic baseline). Each alternative must also be assessed in terms of how it affects multiple groups (stakeholders) from the perspective of each criteria (i.e., the distribution of costs and benefits must usually be examined). And the time profile of the effects of each policy alternative must be presented in comparison to (dynamic) baseline conditions. And all of this must be done in the context of uncertainty about future consequences and conditions. This kind of analysis is rarely done by SANDEE researchers.

Policy analysis is thus complex, uncertain, and messy. It requires thoughtful, strategic engagement with decision makers and the political process. Such issues as the timing of the release of results matter. Complex policy problems typically require analysis by interdisciplinary teams working together over long periods of time. The small size of SANDEE grants is a serious constraint of the ability of researchers to undertake policy analysis.

In my mind many of the SANDEE researchers now make a classic mistake. In their papers they report the results of their efforts to estimate a causal relationship such as described above, and then they conclude their paper with a section in which they discuss their "policy recommendations." But in reality the researcher is not in a position to make a policy recommendation because they have not considered:

- 1) Other possible interventions
- 2) Multiple stakeholders
- 3) Multiple time periods
- 4) Multiple objectives of decision-makers
- 5) Uncertainty about future outcomes

The "policy recommendations" section of the paper is often an add-on, an afterthought. Thus in some of the SANDEE papers and reports the policy recommendations are unconvincing. But I should not over generalize. I certainly acknowledge that some SANDEE researchers have moved part of the way down this road from "policy relevant research" to "policy analysis." Also, the SANDEE policy briefs are an important contribution to making the researchers' findings more accessible to a wider audience. But the policy briefs typically provide "policy relevant information," not synopses of policy analyses.

Based on my conversations with grantees, some SANDEE researchers are most comfortable with the social science side of things and are happy to learn how to carefully estimate causal relationships and empirically test economic theory. They are content to limit their inquiry to policy relevant research, and their involvement with the policy process may logically end with the publication of their research in a refereed journal and perhaps a policy dissemination workshop. In the future they may be consulted by government about their findings (or not). Such researchers are not especially interested in learning more about the techniques of policy analysis, and they would not benefit from or support a shift in SANDEE's strategic emphasis toward more policy analysis.

However, I believe that many SANDEE researchers actually want to better understand and be engaged in the policy process, but do not know how to do it. Many are frustrated and somewhat puzzled that their findings are not more useful to decision-makers. Listen to what they say (from the grantee survey) ...

Respondent 1 -"A majority of the SANDEE study contain some policy works. But, I am in doubt about how many of the policy suggestions are forwarded or disseminated to the policy makers to implement. I guess, all the researchers concentrate on completing their own research successfully first. But, later after completing the research they become busy with other works and fail to disseminate it in all of the appropriate bodies/places. If it is true, then the research becomes worthless. From that fear, I think SANDEE should think about this issue of practical dissemination/implementation of the research findings."

Respondent 2 — "I think all the policies set by government are according to international environmental standards and SANDEE should provide support to evaluate government policy implementation. Usually, in developing countries environmental projects are started but these projects are not implemented in its true spirit due to non proper checks and balances after implementation. When international organizations like SANDEE are ready to check the implementation of the environmental projects, governments try to implement project in its true spirit. Moreover, provision of funds for proposal and consulting services by SANDDE will provide a forum to identify environmental problems in South Asian region."

Respondent 3 – "Strong buy-in from government in favor of using environmental economics and related policy recommendations is achieved more rapidly when senior academics from SANDEE persuade officials than when non-governmental organizational organizations like WWF do so alone. The buy-in will lead to real chances of training and capacity building in the public sector, including at universities.

Respondent 4 – "There is a wide gap between economics research and its impact on policies in South Asia. This is more so in the case of environmental economics. Therefore, efforts should be made to fill this gap. The second reason is that there is lot of scope for carrying out research, especially Environmental Impact Assessment studies under consultancy mode. Therefore, this can be facilitated effectively by SANDEE."

I would characterize these grantees as searching for a greater understanding of how empirical research is used (or not) in a messy policy process. There is a tendency to think that if only the research was better disseminated, policy makers would act on it. Or that their policy recommendations are good, but

the problem lies with "implementation." During my in-person interviews at the July 2010 R&T, several SANDEE researchers told me they wanted help from SANDEE to make sure government uses their results.

The question I would pose is, "Should SANDEE provide more help to this group of researchers who are interested in policy analysis?" I think SANDEE could help its researchers think more systematically about policy analysis and how its researchers can more effectively engage in the policy process.

On the other hand, I would have no problem if the Director and the Management and Advisory Committee decided that this is outside its mandate and that training policy analysts is not its mission. Training first-rate economic researchers is itself a tremendous contribution, and there is always risk that more focus on policy analysis will dilute SANDEE's effort on rigorous research.

The SANDEE family has certainly given considerable thought to the policy impacts of SANDEE research. At the December 6-7, 2009, MAC meeting in Kathmandu, the minutes show that several options were discussed for enhancing the policy impact of SANDEE research, including ...

- 1) "Theme-based research as organized by NBER;
- 2) Bidding on policy contracts with donor agencies such as the World Bank and the Asian Development Bank;
- 3) Engaging Advisors [Resource Persons] to take the lead or be the Principal Investigator on such efforts;
- 4) Partnering with agencies that can bring in policy makers;
- 5) Taking a different approach [to grant making] for senior researchers who may not want to go through the full SANDEE process."

The minutes suggest that "theme-based research" was the most practical approach for SANDEE. I support this conclusion that theme-based research is a comparative advantage of the network, especially when it involves research projects in different South Asian countries on the same (or related) research questions.

However, I note that some of SANDEE's resource persons are themselves skilled policy analysts. It would not be hard for them to introduce some of the ideas and methods from the policy sciences to SANDEE researchers at the R&Ts and/or a more specialized training course on policy analysis. From my perspective, I think many SANDEE grantees would benefit from exposure to introductory texts like *A Practical Guide For Policy Analysis: The Eightfold Path To More Effective Problem Solving,* by Eugene Bardach (for a description of a policy framework to think about what is involved in a policy analysis); and *Getting to Yes: Negotiating Agreement Without Giving In,* by Roger Fisher, William Ury, and Bruce Patton (for insights into how their research findings and causal models may be used in negotiating political and environmental settlements). There is a large literature on negotiating environmental agreements and environmental dispute resolution that I think SANDEE researchers would find relevant to their work.

I would note that both EEPSEA and LACEEP have conducted specialized training courses in the concepts and techniques of basic policy analysis, and these courses have been well-received by researchers.

Chapter 9 – Recommendations

Introduction

I have organized this final chapter on recommendations into four parts:

- e) Scaling up, Strategic Partnerships
- f) Governance
- g) Training
- h) Organizational and Administrative Issues

Scaling up, Strategic Partnerships

Over the past 5 years, SANDEE made an average of 10 research grants per year. In 2008 and 2009, the number of grants increased to 14 and 15 respectively. SANDEE is providing this small group of researchers with superb services. In addition a larger number of individuals are being reached through the set of courses offered. The most important strategic question facing SANDEE is whether these services can be scaled up without a significant reduction in quality, and, if so, how can this change be financed.

After 10 years of training hundreds of participants, the SANDEE Secretariat has a wealth of experience teaching both introductory and advanced topics in environmental and resources economics in developing countries, obviously with a focus on South Asia. SANDEE has tested case study materials and assignments on dozens of highly topical issues in environmental and resource economics. It has assembled a network of some of the best instructors in these subjects in the world, and it has detailed empirical evidence as to precisely who are the best instructors to teach specific topics.

These are world-class training materials and expertise. I cannot think of any single university that could offer the training courses that SANDEE now has at its finger tips. Of course, there are PhD level courses in environmental and resource economics at a few universities that push beyond SANDEE's suite of courses. Nor does SANDEE have the supporting curriculum in terms of economic theory, other fields of economics, and related environmental science and policy courses that a student could find at a top tier university. But I believe that the set of courses that SANDEE offers in environmental and resource economics is both broader and deeper at the undergraduate and masters levels than probably any single university in the world.

Recommendation No. 1: Examine and Assess Alternative Business Models for Scaling Up SANDEE's Training Activities

There are different ways that I can envisage SANDEE's training expertise being deployed for wider use and impact. I do not propose to offer a business plan for doing this, but let me just mention a few options that I think would be worth exploring.

First, in collaboration with a university that has the necessary infrastructure, SANDEE could offer a world-class, on-line MSc degree in environmental and resource economics. The fact that SANDEE is not a legal entity is a barrier that would need to be solved in order to partner with a university or institute to ensure that SANDEE's intellectual capital would not be captured by another institution for its own financial and reputational benefit, but I do not see this as an insurmountable barrier.

If I ask myself, "What institution would find SANDEE training expertise most valuable?," the answer I could up with is a regional university that is striving to break into or move up in the world-class rankings. A regional private university with such ambitions would have the flexibility to negotiate a strategic partnership with SANDEE. Some public universities might be sufficiently entrepreneurial to see the opportunities of partnering with SANDEE. In India the Indian Statistical Institute may be a possibility. Outside the South Asia region, the National University of Singapore comes to mind, but this would probably require an EEPSEA-SANDEE partnership.

Another possibility might be to partner with a Swedish, Norwegian, UK, or Canadian university, with existing on-line instructional capability that could be used to reach a global audience. There are a variety of models through which students might interact with supervising faculty and other enrolled students online. For example, "Second Life" software could be used to link students in South Asia with SANDEE instructors and other students in a virtual classroom. Some sessions in the SANDEE R&Ts could be expanded to include students from the on-line MSc program.

Another business model might be to design training modules in environmental and resource economics, based on SANDEE courses, and license them to universities in South Asian. Many of SANDEE's grantees say that they use the materials that they receive from SANDEE in their courses. This relationship could be formalized and better managed. SANDEE could seek additional funds from its donors to scale up its activities in order for SANDEE to maintain the "public goods" character of its intellectual capital, and continue to offer its training for free or a nominal charge. I could envisage an on-line MSc degree in environmental and resource economics offered by a SANDEE-Beijer Institute Partnership, and supported by SANDEE's donors.

An important question would be whether SANDEE's resource persons and "friends" would allow their intellectual capital to be used in such strategic partnerships. I mentioned in Chapter 2 that SANDEE resource persons could not simply be viewed as consultants, but had put "sweat equity" into the development of SANDEE. They could need to be involved in any discussions about such strategic partnerships. But if SANDEE could bring to the negotiating table the participation of individuals such Partha Dasgupta and Karl-Goran Maler, the value of a strategic partnership would be greatly enhanced. I could envisage on-line students listening to a set of their taped lectures by Partha Dasgupta and Karl-Goran Maler, and then giving students enrolled in an on-line degree program the opportunity to ask questions of Profs. Maler and Dasgupta using real-time interactive video technology.

It is not my objective to suggest a specific strategic partnership or deal structure. Rather I want to point out that SANDEE's training expertise is a potentially valuable capital asset. This asset could be deployed in alternative ways to expand SANDEE's reach and impact. Even if SANDEE were to conclude that scaling

up its training activities was not advisable, I would still recommend that some of the lectures in its training courses be captured on video and perhaps made available on YouTube. This would be a SANDEE series entitled something like, "Great Lectures in Environmental and Resource Economics."

Governance

Recommendation No. 2: Share more information about SANDEE operations with SANDEE grantees

I recommend that the Director spend a little time at R&T's educating the grantees about SANDEE's organization and governance, and updating everyone on the budget situation. Grantees will feel more ownership in the network if more information is shared with them about important decisions, especially financing and governance issues. This is also a learning opportunity for participants at the R&T's in the sense that they can come more familiar with the operational details of donor-funded network such as SANDEE.

Grantees may also be consulted on important policy decisions. This does not mean that the MAC should ask grantees to vote on policy decisions and follow the majority opinion. But I think the network would be strengthened if SANDEE grantees were more knowledgeable about the policy issues with which the MAC wrestling. Grantees will feel more ownership in the network if they perceived that they were being consulted, and also more involvement by grantees may lead to some good ideas.

The MAC might consider having a few "senior" grantees serve on a rotating basis in an observer capacity at the MAC meetings. This should not usually be difficult to arrange because these meetings are held in conjunction with the R&T's. Of course, there would be matters that may arise in MAC discussions that would be inappropriate to have grantees involved, but this could be easily handled by going into executive session.

Recommendation No. 3: Consider expanding the membership of the Management and Advisory Committee to include more individuals from the private sector and government.

SANDEE has distinguished members on its MAC. However, if SANDEE decides to scale up its activities, the composition of the MAC should more closely reflect its ambitions. This will mean that more members should be appointed who can help with the new strategic vision in terms of planning, networking, and funding. For example, one option for SANDEE would be to seek funds to establish a major endowment from a private donor. Indeed SANDEE has moved in this direction with the appointment of Yoginder Alagh as the current Chair of the MAC. Although not an industrialist or entrepreneur himself, he could play a strategic role in convening members of the business community in India.

Training

Recommendation No. 4: Explore the possibility of offering specialized training courses on policy analysis and environmental dispute resolution.

My impression is that some SANDEE researchers want ...

- a) a better understanding of the policy process; and
- b) more training in policy analysis.

I recommend that the SANDEE Director and MAC consider adding specialized training courses on policy analysis and environmental dispute resolution. One potential advantage of giving SANDEE researchers more training in policy analysis and negotiations would be that some might be encouraged to use new research methods. Presently a majority of SANDEE researchers are conducting microeconomic studies that rely on primary data collected using household or firm surveys. These are undoubtedly powerful tools, but at least some researchers should be encouraged to expand their skill set.

Organizational & Administrative Issues

Recommendation No. 5: Examine ways to reduce the duration of SANDEE grants.

Currently the period between the start of a grant and the publication of a SANDEE working paper is about 4 years. I think this period can be reduced without sacrificing the quality of a grantee's work. When a grantee finally manages to publish their research in a refereed journal is variable and hard for SANDEE to predict. However the time until a SANDEE working paper is finalized and posted on the SANDEE website is under the control of the grantee, the resource person advising the project, and the Secretariat. I think streamlining the streamlining this process should enable everyone to use their time more efficiently.

Recommendation No. 6: Consider fixed-term appointments for resource persons

I think that SANDEE should consider the idea of appointing resource persons for fixed terms. This proposal was discussed at the Dec. 15, 2005 MAC meeting in Waikkal, Sri Lanka, and the minutes suggest that there was general agreement that resource persons should be appointed for fixed terms. I see three main benefits from implementation of such a decision.

The first is that fixed terms could be used as an opportunity to give the grantees themselves a voice in expressing their preferences about the composition of the group of resource persons. I am not suggesting that grantees should vote on who the resource persons should be, but am rather raising the possibility that they could be consulted. I think this is another opportunity to enhance grantees' sense of ownership in the SANDEE network.

The second is that fixed terms would give both the Director and each resource person an opportunity to assess their current situation and commitment, and jointly decide whether to continue. There would be no particular reason that all the resource persons would need to be on the same fixed term, i.e., their terms could expire in different years. I want to emphasize that I am not suggesting that a resource person could not be reappointed when their fixed-term expires. The Director should be able to reappoint a resource person as many times as s/he felt best served SANDEE's interests.

The third is that some rotation among resource persons could introduce new perspectives and skills to the grantees. Many SANDEE grantees have been affiliated with SANDEE for some time. Not many researchers have had more than one grant, but there are many individuals who have attended five or more R&Ts. To the extent that researchers stay affiliated with SANDEE for long period, the need for new perspectives and skills among the team of resource persons increases.

I do not see such a change as a matter of any urgency. SANDEE has already had significant rotation among the group of resource persons.

Recommendation No. 7: Adopt a policy on conflict of interest between resource persons and potential grantees.

I think it is important for the researchers to know that SANDEE has an explicit policy on conflict of interest with respect to research persons and members of the MAC with respect to the funding their own students or colleagues. I am not suggesting that this is in fact a problem, but researchers should not perceive that this happens.

Recommendation No. 8: Determine whether SANDEE resource persons and members of the MAC have any corporate liability shield for their SANDEE activities.

This recommendation may reflect a particularly USA-centric preoccupation, but I think it is reasonable for the resource persons and members of the MAC to know whether they have any liability protection from charges of professional misconduct that might emanate their SANDEE activities.

Recommendation No. 9 – Explore the possibility of using Facebook to communicate with researchers and disseminate announcements and materials.

I recommend that the Director monitor LACEEP's experience with Facebook, and determine whether Facebook would be a useful means to communicate with and distribute announcements and other materials to SANDEE researchers.

Recommendation No. 10 – The MAC should think deliberately and strategically about the role and responsibilities of the Secretariat staff, including the Director.

If the MAC makes a decision to scale up SANDEE's activities, and SANDEE enters into new strategic partnerships, the responsibilities of the Secretariat staff, including the Director will need to reflect such changes. It would be hard to overstate how fortunate SANDEE has been to have—and continue to have—Dr. Priya Shyamsundar serve as Director over the past 10 years. With luck, she will continue to serve in this capacity. But the MAC should think now about the role and responsibilities of the Director and issues of succession. The MAC also needs to plan now for expanding the Secretariat staff if the decision is made to scale up its activities and pursue new strategic directions.

Recommendation No. 11 – The MAC should build upon the work of this evaluation of SANDEE's activities to include discussions with other institutions and stakeholders in the environmental community in South Asia about how SANDEE's activities can be expanded and improved.

One of the limitations of this evaluation is its focus on the internal workings of SANDEE. It would be useful to conduct discussions with external stakeholders involved in environmental economics and policy in South Asia about how SANDEE's activities are viewed in this broader community and how SANDEE's activities can be improved.

Appendix: Results of June-July 2010 Survey of SANDEE Grantees	
Evaluation of the Activities of the South Asian Network for Development and Environmental Economics (2003-2010)	
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Ву	
Dale Whittington	
University of North Carolina at Chapel Hill (USA) and	
The Manchester Business School (UK)	
Appendix	_
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Results of June-July 2010 Survey of SANDEE Grantees: Survey Questions followed by respondents' answers following each question.

About your past involvement with SANDEE

1. How many research grants have you received from SANDEE?

Number of grants	Frequency
1	50
2	4
3	1

2. In the table below, please list the name of your SANDEE grant(s), the year it was started, and any publications that resulted from this work.[If you have received more than two SANDEE projects, please add an additional row to the table below and complete.]

Number of grants	Name of Research Project	Year of Award	List all publications in refereed journals/books/book chapters resulting from your SANDEE research (please give full citation)
1	Economics of Rice Residue Burning in the South-West Region of Bangladesh	2010	
1	An EPR Based Study of the Deposit-Refund System for Batteries in Delhi and the National Capital Region	2009	
1	a. Valuation of an Ecosystem and its Impact on Livelihood Support: The Case Study of East Calcutta Wetlands	2008	
1	Industrial Pollution: Choosing the right option (Jointly with HaripriyaGundimeda)	2000	 "Informal Regulation of Pollution in a developing country – Evidence from India", Ecological Economics, 63(2-3), 403-17 (2007) (Available online January 4, 2007). Managing Pollution from SSIs: Designing for a sustainable institution", Environment, Development and Sustainability, 9(2), 107-30, May (2007) (Published Online March 16, 2006

			(http://www.springerlink.com/content/9m268505u866k563/fulltext.pdf)). 3) "Controlling Water Pollution in Developing and Transition Countries: Lessons from three successful cases", Journal of Environmental Management, 78, 405-26 (2006). 4) "Industrial Pollution Control – Need for Flexibility (with G.S. Haripriya)", India Development Report – 2002 (eds.) K. Parikh and R. Radhakrishna, Oxford University Press, Delhi, 140- 56 (2002).
1	Valuation of Urban Air Pollution: A Case Study of Kanpur City in India in Uttar Pradesh	2004	1) Journal of European Association of Environmental and Resource Economics, 41: 315-326. 2) Estimation of welfare losses from Urban Air Pollution Using Panel Data from Household Health Diaries-in Environmental Valuation in South Asia, ed. SANDEE book.
1	Environmental externalities of shrimp farming on agriculture in coastal tracts of South India	2005	1) Policy brief of SANDEE. 2) Forthcoming SANDEE book IV chapter
1	Sustainable livelihood and tourism: Evidence from Kinjhar lake Sindh, Pakistan.		
1	MORBIDITY COSTS OF VEHICULAR AIR POLLUTION: EXAMINING DHAKA CITY IN BANGLADESH	2006	
1	Economics of Rice Crop Residue Burning in Rice – Wheat Cropping System of the Punjab, Pakistan	2009	
1	Effect of Climate on Water Quality and Adaptive Behaviors: A Household Production Approach	2009	PatilS., and S. Pattanayak. 2010. Behaviors exposed: Panel data evidence on environmental health externalities in rural India. 4th World Congress for Environmental and Resource Economists, Montreal, Canada, June 28-July 2, 2010. SANDEE Working Paper.
1	Economic Valuation of Storm Protection Services of Mangroves and Super Cyclone of October 1999 in Orissa	2005	1)Das, Saudamini and Jeffrey R Vincent (2009), "Mangroves protected villages and reduced death toll during Indian Super Cyclone", Proceedings of the National Academy of Sciences, USA, vol. 106, No. 18, 5th May: 7357-7360. 2) Vincent, J R and S Das, "Mangroves and Storm Protection- getting the numbers right", Proceedings of the National Academy of Sciences, USA, vol. 106, No. 40, 29 Sept. 3)Das, Saudamini, "Valuing the Storm Protection Services of Mangroves:

			Methodological and Data challenges", in Kumar, Pushpam and Mike Wood (ed) Valuation of Regulating Services of Ecosystems: Methodology and Applications, Routledge, London (2010). 4)Das, Saudamini, "Can Mangroves Stem Property Loss during Big Storms? An Analysis of House Damages due to the Super Cyclone in Orissa". In A. K.EnamulHaque, M. N. Murthy and P. Shyamsunder (ed) Valuing the Invaluable: The Practice of Environmental Valuation in South Asia, Oxford University Press, New Delhi (2010)
1	Economic Impact of Climate Change on Yield Variability of Major Food Crops in Tamil Nadu	2010	
	A. "Estimation of Recreational Demand in Indian Sundarbans and its Impact on Local Economy" (Along with IndrilaGuha as Principal Investigator)	A.2005	A. 1) GuhaIndrila&GhoshSantadas(2009), "Tourism, Local Livelihood and Conservation: A Case Study In Indian Sundarbans", in Kumar. P and Muradian. R (ed.),Payment For Ecosystem Services, Oxford University Press, New Delhi. 2) GuhaIndrila&GhoshSantadas (Forthcoming) "Valuing the Land of Tigers: What Indian Visitors Reveal?" In Haque A. K. E., Murty M. N. and Shyamsundar P (ed.) Valuing the Invaluable: The Practice of Environmental Valuation in South Asia, SANDEE (Cambridge University Press)
	B."Dynamics of Households' Adaptation and Resilience: Sundarban after Cyclone Aila"	B.2010	B. NIL
3	C."Local strategy to a global threat: exploring policy alternatives in the Sunderbans" (study grant)	C.2009	C.NIL
1	Introducing Risk in the Valuation of Storm Protection Services of the Mangroves	2007	Mahmud, S. (2009), "Using Private Coping Behavior to Value Storm Protection Services of Mangrove Forest," in Environmental Economy: lessons for Latin America, IV Congress of Environmental Economists and Natural Resources of Latin American and the Caribbean (ALEAR)

		A.2001	
	A.Institutional structures and Sustainable Collective Action		
			A.1) Role of monitoring in institutional performance: forest management in Maharashtra, India', (Joint) 2006, Conservation and Society, Vol. 3(2), July-December. Pp. 509-532.
			2)'Integrating Informal with Formal Forest Management Institutions for Sustainable Collective Action in India', (jointly with DeepshikhaMehra) In Decentralization, Forests and Rural Communities edited by Edward Webb and Ganesh Shivkoti, 2008, Sage Publications.
			3) 'Good in Intention, Bad in Practice: Forest Development Agency: Nesting of JFM committees', (jointly with DeepshikhaMehra) in Joint Forest Management in India (Vol II), Edited by P. Bhattacharya, A.K. Kandya, and K.N. Krishna Kumar, Aavishkar Publishers, Jaipur, 2008 (pp 519-533).
2	B.Decentralization in Forest Management: Changing Incentives and Attitudes through JFM	B.2007	4) 'A Tale of Three Villages: Practiced Forestry in India', in Promise, Trust and Evolution Managing the Commons of South Asia, Edited by RuchaGhate, NarpatJodha, and PranabMukhopadhyay, Oxford Universtiy Press, U.K. 2008 (pp 122-143).
1	The Economic Causes of Residue Burning in the Rice- Wheat System of Western IGP	2009	
1	The Productivity of Pesticide in Cole Crops Production: A Case Study of vegetable production pockets of Bhaktapur Districts of Nepal	2005	Productivity of Pesticides in Vegetable Farming in Nepal, by Ratna Kumar Jha and AdhritRegmi, SANDEE Working Paper No.43-09
1	"Assessment of Transactions Costs and Evolution of New Institutions in Community	2006	"Transaction Costs in Farmer Managed Irrigation Systems in Nepal: A case study of some selected FMIS in Kathmandu Valley" in Irrigation in transition: interacting with internal and external factors and setting the

	Managed Irrigation System (CMIS) in Nepal".		strategic actions, proceedings of the Forth International Seminar Held on 6-7 November 2006, Kathmandu, Nepal, PrachandaPradhan et.al (eds), Farmer Managed Irrigation System Promotion Trust, Kathmandu Nepal, April 2007
			1)Evaluating Gains from De-Eutrophication of the Dutch Canal in Sri Lanka: A Cost Benefit Analysis; Working Paper 29-08, South Asian Network for Development & Environmental Economics (SANDEE)
1	. Evaluating Gains from De- Eutrophication of the Dutch Canal in Sri Lanka: A Cost Benefit Analysis	2002	2)SANDEE Policy Brief No 28-08; Water Pollution Lowers Returns to Shrimp Farms - Evidence from Sri Lanka; based on SANDEE working paper No. 29-08, 'Evaluating Gains From De-Eutrophication of the Dutch Canal in Sri Lanka: A Cost Benefit Analysis', by W.R. Rohitha, ActionAid.
1	a. Reducing vulnerability against natural disasters: a study of risk coping behaviour of coastal communities in Sundarban, India	2006	
1	Impact of climate change on paddy production in Nepal	2009	
1		2010	
1	Managing the Arsenic Disaster in Water Supply: Risk Measurement, Costs of Illness and Policy Choices for Bangladesh	2005	1) A chapter in the book titled by "Environmental Valuation in South Asia", by SANDEE (forthcoming). 2) Article has been published by affiliated organisation Economic Research Group, Dhaka
1	a. Alternatives to Fuel wood use in Tobacco Curing in India The Economic Feasibilities and determinants of their use	2008	
1	The relative efficiency of water use in Bangladesh agriculture	2008	Forthcoming in Quarterly Journal of International Agriculture
1	Climate Change and Economic growth Nexuses: Evidence from selected Asian Countries	2010	
1	a. Evaluating the impact of	2006	Irfan, Muhammad "Impact of Open Sewage Smell on House Rent in

	Disamenity (open sewerage system) on Housing prices(rent) in Rawalpindi City.		Rawalpindi City", Pakistan Development Review, vol 24- III, 2007
1	Factors that Influence two Conflicting Groups – Farmers and Fishermen - to Participate in the Integrated Water Resource Management: The Case of Coastal Areas of Bangladesh.	2009	
1	The Value of Reduced Risk of Injury & Deaths in Pakistan based on actual and perceived risk	2008	
1	Revisiting the Need of Improved Stoves: Estimating Health, Time and Carbon Benefits	2005	A book chapter in "Environmental Valuation in South Asia" Cambridge University Press (forthcoming)
1	The Recreational Use Value of DiyawannaOya Wet Land Eco-System	2007	
1	Economic assessment of soil conservation technologies for hill farmers in hill regions of Bangladesh	2004	1) Miah, M.A.M. and Islam, S.M.F. (2009). 'Valuing soil conservation benefits in hill areas of Bangladesh' in Water, Agriculture, and Sustainable Well-being, Edited by UnaiPascual, Amita Shah and JayantaBandopadhyay, Oxford University Press, 360p. Source: www.shop.com. 2)Miah, M.A.M., Islam, S.M.F. and Haque, A. K. E. (2010). Impact of Fallow Period on Topsoil Depth and Crop Productivity in Shifting Cultivation of Bangladesh. Journal of Agriculture and Environment, 1(1):June, 2010 (in press).
1	"Climate Change Impacts on Indian Agriculture: Role of Information Diffusion, Technological Development and Multiple Stressors"	2006	1) "Climate Sensitivity of Indian Agriculture: Role of Technological Development and Information Diffusion", The Future of Indian Agriculture: Technology and Institutions, Institute of Economic Growth (forthcoming). 2) "Climate Sensitivity of Indian Agriculture: Do Spatial Effects Matter?", communicated to Cambridge Journal of Regions, Economy and Society.
	A.Demand for Alternative Technologies for Reduction of Indoor Air Pollution in Rural Areas of Central Nepal	A.2005	A.Pant, K P (2007) Valuing Interventions to Reduce Indoor Air Pollution-Fuelwood, Deforestation, and Health in Rural Nepal. The Pakistan Development Review, 46 (4) Part II: 1169–1187.
2			

	B.Payment for reducing open-field Rice-straw Burning in plains of Nepal		
		B.2009	
			1) K. Atreya (2008). Health costs from short-term exposure to pesticides in Nepal. Social Science and Medicine, 67: 511-519.
			2) K. Atreya (2008). Probabilistic assessment of acute health symptoms related to pesticide use under intensified Nepalese agriculture. International Journal of Environmental Health Research, 18 (3): 187-208.
	Pesticide use, human health		3) K. Atreya (2007). Farmers' willingness to pay for community integrated pest management training in Nepal. Agriculture and Human Values, 24 (3): 399-409.
1	and household productivity in a watershed of Nepal	2001	4) K. Atreya (2007). Pesticide use knowledge and practices: a gender differences in Nepal. Environmental Research,104 (2): 305-311
1	Valuing Damages of Flood Induced Sand Deposition: Case of a Rice Bowl in Assam, India	2009	
	A.An Analysis of Demand for water Quality in Arsenic prone areas of West Bengal	2001 or 2002	A. Roy Joyashree (2008), Economic Benefits of Arsenic Removal from Ground Water -A Case Study from West Bengal, India. Science of the Total Environment, (STOTEN), Vol 397/1-3 pp 1-12.
2	B. Capacity building through institutional support from Jadavpur University to accommodate Students from SAARC countries willing to pursue M.Phil or Ph. D programme In Economics . It was institutional support and I had been coordinating person		

		2006	
1	Air Quality and Cement Production: Examining the Implications of Point Source Pollution in Sri Lanka Working paper No. 35-08	2005	JanaranjanaHerath and Cyril Bogahawate (2007), Health Impacts of Cement Production Process in Puttalam District of Sri Lanka. Journal of Health and Development, Vol 3, No 1&2 pp 113-121, India
1	Valuing Impact of Diarrhea on Child Health in Slum: Evidence on Water and Sanitation	2006	Alam, M. Jahangir (2009): 'Children in the slums of Dhaka – Diarrhoea Prevalence and its Implications', in M. N. Murty, P. Shyamsundar, and E. Haque (eds), Valuing in Invaluable – The Practice of Environmental Economics in South Asia, United Kingdom: Oxford University Press, Vol. 2 (Forthcoming).
1	Recreational Demand in Indian Sundarbans: Estimation and Exploration	2004	Guhalndrila, GhoshSantadas(2009), "Tourism, Local Livelihood and Conservation: A Case Study In Indian Sundarbans", in kumar. P and Muradian. R (ed.),Payment For Ecosystem Services,Oxford University Press, New Delhi
1	Pesticide use in rice production and human health-A study in Kerala	2004	1) Devi.P.I.2010.Pesticides in Agriculture: A boon or a curse? Economic and Political Weekly(Accepted for publication) 2) Devi.P.I.2009.Pesticide Application and Occupational Health Risks among Farm Workers in Kerala-An Analysis using Dose Response Function Indian journal of Agricultural Economics. 64 (4) 3) Devi.P.I.2009. Health risk Perceptions, Awareness and Handling Behaviour of Pesticides by Farm Workers Agricultural Economics Research Journal 22(9):263-268 4) Devi.P.I.2008.Health Damages due to Pesticides Use –A study. LEISA INDIA 9(3);28
1	Demand for Eco-tourism: Estimating Recreational Benefits from the Margalla Hills National Park in Northern Pakistan	2003	1)Himayatullah Khan (2006) "Willingness to pay for Margalla Hills National Park: Evidence from the Travel Cost Method". Lahore Journal of Economics, Vol. 11 No. 2: pp 43-70. 2)Himayatullah Khan and Laura G. Vasilescu (2008), "The Willingness to Pay for Recreational Services: An Empirical Investigation with the Application of Multivariate Analyses of two Public Parks in Northern Pakistan ", Social Science Research Netwrok, New York, USA. 3)Himayatullah Khan, M.S. Anjum and Laura G. Vasilescu (2008), "Valuation Issues of Travel Time nd Money Expenditures in Travel Cost Models: A Review", The Journal of Humanities and Social Sciences. Vol. XVI, No.2. pp: 27-40.
2	A.Income and Information elasticities of demand for water quality	A.2002	A.1)Awareness and the Demand for Environmental Quality: Survey Evidence on Drinking Water in Urban India with JyotsnaJalan and SaraswataChaudhuri, Environment and Development Economics, 14(6):

			665-692, December 2009.
			2)The Importance of Being Informed: Experimental Evidence on Demand for Environmental Quality with JyotsnaJalan, Journal of Development Economics, 87(1): 14-28, August 2008.
	B.Air Pollution, Climate Change and Agricultural Burning in South Asia	B.2008	B. Ongoing. This was not a regular grant but rather a consultancy. The money was used to visit Jeff, but its been painfully slow due to difficulties in getting and processing the data.
			1)Suresh Kumar, D. Can Participatory Watershed Management be Sustained ? Evidence from Southern India, SANDEE Working Paper No 22- 07, (Nepal : South Asian Network for Development and Environmental Economics), 2007
	Economic Inquiry into		2)SureshKumar,D and K.Palanisami. An Economic Inquiry into Collective Action and Household Behaviour in Watershed Management, Indian Journal of Agricultural Economics, 64 (1): 108-123, 2009.
1	Collective Action and Household Behaviour in Micro Watersheds		3)SureshKumar.D and PriyaShyamsundar. Sustainable Management of Participatory Watershed Management in India - Evidence and Policies for the Future, Society and Natural Resources. (under review)
1	Economic Impact of Leasehold Forestry (LHF) on Household Welfare in Nepal	2007	Two Manuscripts under review
1	Interrelationship between Poverty, Private Property and Common Property Natural Resource Management in South India	2001	1.Balasubramanian, R. and K.N.Selvaraj Poverty, Private Property and Common Pool Resource Management: The Case of Irrigation Tanks in South India, SANDEE Working Paper No. 2-03. Kathmandu, Nepal, 2003. 2. Balasubramanian, R. Community Tanks vs Private Wells: Coping strategies and Sustainability Issues in South India, in R.Ghate, N.S.Jodha and P.Mukhopadhyay (eds.), Promise, Trust and Evolution: Managing the Commons of South Asia. Oxford: Oxford University Press, 2008. 3.Balasubramanian, R., and C.Chandrasekaran, Poverty and Natural Resource Degradation: Irrigation Tanks in South India, in Steele, P., G. Oviedo, and D. McCauley, Eds. 2007. Poverty, Health, and Ecosystems: Experience from Asia. IUCN, Gland, Switzerland and Asian Development Bank, Manila, Philippines.

1	Economics of adopting Bt cotton: Evidence from Pakistani Punjab	2008	Nil
			1) Gunawardena A. and K. Wickramasinghe (2009) Social and Economic Impacts of Resettlement on Tsunami Affected Coastal Fishery Households in Sri Lanka . In Fernando P., Fernando K. and M. Kumarasir (ed). Forced to move –Involuntary Displacement and Resettlement: Policy and Practice, 8th Annual Symposium, Centre for Poverty Analysis (CEPA), Sri Lanka.
			2)Gunawardena A. and K. Wickramasinghe (2010) Targeting and Distribution of Post-Tsunami Aid in Sri Lanka, Working paper, SANDEE, Kathmandu, Nepal
1	Policy Options to Solve Post tsunami Coastal Fishery Issues in Sri Lanka	2007	3) Gunawardena A. (2010), Targeting and Distribution of Post Disaster Aid : A Case of the Fishery Sector of Post Tsunami Sri Lanka, Research Studies: Environmental Economic Policy Series, Institute of Policy Studies of Sri Lanka, Colombo, Sri Lanka
			1) Khatri-Chhetri, A. 2006. Local Institutions and Forest Products Extraction: Evidence from Forest Management in Nepal. SANDEE Working Paper No. 16-06. South Asian Network for Development and Environmental Economics (SANDEE), Kathmandu, Nepal.
	Economics of Non-Timber Forest Products		2) Khari-Chhetri, A. 2006. Non-Timber Forest Products and Community Forestry – A Tale of Two Villages. SANDEE Policy Brief. South Asian Network for Development and Environmental Economics (SANDEE), Kathmandu, Nepal.
1	Conservation and Management in Pyuthan District of Nepal	2003	3) Khari-Chhetri, A. 2008. Who pays for Conservation: Evidence from Forestry in Nepal? In Ghate et al. Promise, Trust and Evolution: Managing the Commons of South Asia. Oxford University Press, UK.
		2001 (first	1) Shah, A. (2002), 'Uneven development and Migration: Insights from Micro Initiatives', in Surat, in G. Shah, M. Rutten, H. Streefkerk (eds), Development and Deprivation in Gujarat, SAGE Publications, New Delhi. 2)Shah, A. (2009) Land Degradation and Migration in a Dry Land Region in India: Extent, Nature, and Determinants, Environment and Development Economics, @ Cambridge University Press (doi: 10/1017/S1355770X09990131)
1	Land Degradation and Migration in Dry Land Region in Gujarat (India)	batch of Research Grant)	3)Water Scarcity Induced Migration in Gujarat: How Far Watershed Development Can Help? Economic and Political Weekly, vol. 36, no.35, 2001.
1	Valuing Recreational Use of Pakistan's Wetlands: A Travel Cost Model for Keenjhar Lake	2008	Nil (awaits comments from external referees)

1	Impact of Housing Characteristics on Labour Productivity: The Case of Female Tea Pluckers in Sri Lanka	2009	Not published yet	
1	Impact of climate change in Bangladesh: A multi-sector analysis	2009		
1	Groundwater Irrigation in North India: Institutions and Markets	2005	"Groundwater Markets, Irrigation Efficiency and Sustainability: A Study from North India". (with JV Meenakshi and G Khanna). In S. Gill, L. Singh and R. Marwah. (eds). Sustainability of Asian Economic Development, 2010, Routledge.	

3. How would your *research focus* be different today if you had not been involved with SANDEE?For example, if your research interests have changed, explain what they were before and what they are now?

My earlier research focus was on Industrial Economics and I am still continuing my research on that topic. However, SANDEE has given me the scope to work on another new dimension, Environmental Economics. From that sense, SANDEE didn't divert my research focus, rather helped me to extend the focus on a new branch.

I have been working in the area of waste management (especially by the informal sector) and the SANDEE project is also related to that.

Before receiving the SANDEE grant, I had never done serious survey based econometric work. So it is a lesson for me. I did some theoretical research in natural resource economics (and other areas) before, but never did empirical work. I continue to do theoretical work even today, but I think now I know the nuances for carrying out research with cross section data that leads to estimation of production function, cost function and profit function. So, the SANDEE grant has definitely broadened my research focus, if not has changed it completely.

Before getting SANDEE grant, I was mainly working on Technology Transfer issues. Post-SANDEE, I have worked on three projects pertaining to environmental economics. SANDEE project opened the door for me in environmental economics.

Involvement with SANDEE has enhanced my research interest in the fields of environment and ecology. My research focus is now to understand how the changes in natural resource stocks and/or the changes in the assimilative capacity of the environmental resources have affected human health, production etc. Earlier I was more interested in analyzing the productivity growth in manufacturing sector.

My earlier research interest was Natural resource and environmental economics. SANDEE has helped me focus my research in the area of Environmental Economics.

When I was not involved with SANDEE my research focus was confined to using traditional research methodologies used in Agriculture. Involvement with SANDEE has broadened my research focus, especially in environmental economics.

I never had an exposure to Environmental and Resource Economics before attending SANDEE's basic course on Environmental and Natural Resource Economics. So involvement with SANDEE has brought an additional field of research area to my broader field of work. Although the focus of my PhD is not environmental economics, I would want to continue working in this field in future.

I have completed my Ph.D. in Development Economics by carrying out research in the banking sector of Pakistan. The topic of my Ph.D. dissertation was "Efficiency Analysis of Commercial Banks in Pakistan". So, before SANDEE's grant, my area of interest was banking sector of the economy but now my focus is on the environmental aspect of the economy.

I got attracted to SANDEE because my research interest matched with them well. However, SANDEE focus areas definitely made me include "climate change" in my research. I have been doing environmental health impact evaluations, environmental valuation, and health risk assessment work. I am no exception to myriad researchers who want to include climate change in their research interests. However, I didn't know how to build on my existing research portfolio instead of starting something afresh. SANDEE proposal development, subsequent cycle of review and revisions, and details comments during R&T truly help me find my focus (I want to focus on adaptive community and household level behaviors in response to climate change). I have taken only the first step, but I hope I will be able to study the interplay between climate change, health and infrastructure interventions, adaptation to these exogenous interventions, and averting or risky household behaviors. While working on my grant, I have developed enough capacity and confidence to even submit a concept proposal (un solicited) to Indian Planning Commission to pilot on carbon pricing and trading within India. I am also developing in-house capacity for health modeling by merging USEPA air pollution models with our custom climate change modules (this will be a slow process given resource constraints).

It is difficult to say, but definitely, my work would not have been as solid and famous as it is today. I owe my success to SANDEE resource person Jeff Vincent. I could have never been able to do this work without his help. Working with him was a wonderful learning experience. SANDEE gave me this exposure and the experience of working with such wonderful people like Jeff and Karl GoranMaler. Exposure to SANDEE also changed my research focus from theoretical topics to policy oriented topics.

Before SANDEE, I did my research work on marketing and pricing policy on Agricultural commodities. But after the involvement of SANDEE, I orderly developed and enriched my research skills and subject knowledge on Environment and Natural Resource Economics through various capacity building programmes of SANDEE to carry out the research activities effectively. Now I am very confident and interested to handle the Climate Change and Environment Related Projects.

My Ph. D. thesis (awarded in 2000, before my SANDEE association) was on Qualitative Input-Output Analysis using secondary data. At that time I had no experience about handling micro-econometric studies using primary data. After my doctoral degree, I was feeling uncomfortable with further research as (I realize now) deep in my mind I perhaps wanted to deal with something very down-to-earth, next-to-my-door happenings in real world. I cherished that my studies would have an immediate appeal to a larger audience, beyond the dry academic seminars which takes place perhaps only to utilize some grants or funds. I stopped further research till 2004. After attending SANDEE's EE Course in July 2004, my research motivation was rejuvenated. SANDEE's research agenda and method fitted exactly with my dream. And I jumped into it with all my enthusiasm. I am still continuing with that spirit. I have not taken up any other research project in between. It is only SANDEE so far, because I wanted to come back to its R&Ts. I learn a lot from them, and am still learning. Had I not been initiated to SANDEE and its research, I don't know what exactly I would have been doing in research front. At most it could have been a University Grant Commission (UGC in India is the Govt. Commission to promote academic research with funding) – sponsored research project that is usually taken up by college teachers at various levels. There is no help/guidance from experts in those projects. What quality addition or value addition it would have made to me, I myself have doubt.

After completion of my Masters in Arts (MA) in Economics from University of British Columbia (UBC), Canada – I was in a dilemma whether to pursue my career in academic / research position. But attending a course on Environmental and Natural Resource Economics offered by SANDEE changed my perception. Meeting resource persons like Sir ParthaDasgupta, Professor Karl Maler, Professor Jeff Vincent, Professor Maureen Cropper, etc. made me realize that I can further augment my academic career with research focus in Environmental and Natural Resource Economics. Currently, I am on the verge of completing my PhD in Economics. I presented one of the chapters of my doctoral thesis, which is also the paper I completed under SANDEE research grant, at the 4th World Congress in Environmental and Natural Resource Economics (WCERE), June 29th-July 2nd, 2010, Montreal, Canada. Overall, I think SANDEE has a big influence not only on guiding me what should be

my research area but also on what should I do with my future career goal.

My research interests are the same but I have gained valuable advice from SANDEE regarding questionnaire design and conducting surveys. I am glad to be a part of the SANDEE network as I find the advice of the resource persons invaluable.

Earlier my research focus was pest management from biological perspective only but, after SANDEE, it is shifting towards environmental economics applicable to agriculture (e.g. valuing the services of natural enemies in agro-ecosystem, effect of pollution on agriculture production and productivity etc.)

I may not be interested in intensive field research

It is not only the research, but also the different trainings that SANDEE has provided like econometrics, survey methodologies, and household economics courses were very useful in my job. If I was not associated with SANDEE I would not have the economics knowledge today I have.

I did my post-graduation from Calcutta University with environmental and resource economics as a special topic so in a way I was already initiated in the theory of environmental economics when I got the SANDEE grant. Besides, by then I had made advances in my PhD work that investigated household waste management issues in India like design of incentives to ensure proper waste disposal and estimating latent demand for improved waste management systems using non-market valuation techniques (Contingent Valuation). After attending couple of SANDEE workshop I began to see that my earlier research design was not specifically meant to clearly answer imminent policy questions. I shall express it exactly the way it occurred to me: previously the sign of the regression coefficient mattered to me (thus, validating the theory underlying the model) but now I also began to appreciate the magnitudes of the coefficients and use the marginal effects for hinting possible policy directions. In terms of issues previously I considered environmental regulations that are implementable through market institutions—for instance taxes and charges. The SANDEE project on the other hand gradually made me conscious about community institutions and their management practices of natural resources. In fact because of this project for the first time I was exposed to rural environmental problems that have become my current area of interest.

I had obtained a master degree in agricultural economics, and my research were also related to that field only. I got opportunity to participate in EE course by SANDEE and that motivated me to further study in this field, and I took another master degree in environmental economics later. Now I see its very useful as there are lots of issues common/joint to agriculture and environment. Now my research interest and focus is in agriculture-environment related area, and currently also doing the SANDEE project in this theme.

Research focuses are same. However, it has changed the way of thinking. Now I feel strong in many fields.

After getting EE course from SANDEE, I decided to do my MS Thesis on this topic and I used SANDEE grant for it. Otherwise, I would do my thesis on macro-economic issue, like public finance or trade issue. After conducting study, I have changed my area of interest and mostly focused on water, power and environmental issue. Following this study, I also conducted another study on the assessing the impact of arsenic on contamination on poor households, funded by SANEI. As a part of my current job, I have already conducted two more study on electricity and water resource management and another on water is going on.

My research interests remain almost the same. But, the focus of my research (or I can say even at my centre) all these days was to submit the completed project reports first to the funding agency or the government. We thought we will publish the results later after getting the comments from the sponsoring agency. While we waited for the comments new projects came in or we had to develop new proposals. In the mean time the study would lose its relevance or we ourselves would not have time to look in to the old results. Although my institute did pioneering work in the field of health economics and tobacco research the results were not published in journals. They remained in reports. In the case of SANDEE the focus is on manuscript submission so as to help the researcher to develop the paper for publication. Secondly SANDEE has been trying to help grantees disseminate their findings through sponsoring for conferences and encouraging them to apply for such events. There is thorough review of the work at every stage and the oral present at every stage helps the researcher to revise and be more focused. Lesson for me: Now onwards I am committed to myself to publish at least one paper from each project and I shall follow it up with my students and encourage them.

Research interests are the same as before.

I am doing PhD on the issue of pro-poor economic growth and I have also written couple of papers on Public Finance and One paper on the Development Economics. This SANDEE grant have pushed me to think on working on the issues of Environmental Economics in general and Climate change in particular.

Before 1) I was unable to do field survey, 2) I was unable to think policy implications

My research focus has shifted after being involved with SANDEE. After attending the training courses I have grown immense interest in the field of environmental economics. If I were not involved with SANDEE and had not attended SANDEE workshop my research focus could have been on globalization, trade, and monetary policy. The training course has helped me to look into the field of environmental economics in a different way. It has changed my perception of the current research and publications. It has continuously challenged my perception and helped me rethink about my future research work.

Well you would not believe but by God I am speaking the truth and with full impartiality. You know I am hailing from the backward region of Pakistan, which is the Pukhtunkwa (NWFP) Province. Till the highest level of my education, that is PhD no one even talked about environmental economics. I got to know about this field in 2004 when I attended the EE course. This has really shifted my research focus and currently I am involved in many studies back at home and helping even other and it is because of SANDEE.

There would not be any change in my research focus. But the quality I have, could not be achieved if I had not involved with SANDEE.

I am attached to the Agricultural Economic Unit of XXX. Thus, my primary research focus and interest consist of agricultural productivity and efficiency, agrarian poverty and equity, food security, international trade and marketing. Networking with SANDEE completely changed my research interests widening my research focus to include issue related to environment and natural resources as well.

Learned how to conduct a quality research. New door of research (environmental) has been opened to me. My personal image has been improved to our scientist's community.

I work in the field of climate change impacts and agriculture, and the SANDEE proposal was on the same lines. However, over the course of the project I have developed interest in economics of climate change adaptation.

I was trained for agricultural economics and teaching environmental economics. Had I not got SANDEE grant my research focus most probably would be agriculture and natural resources.

SANDEE directed me towards health aspects of agriculture and environmental problems; otherwise I would have gone to Soil Science

My research interest remains around labour and livelihood issues. My association with SANDEE, however has widened my understanding to address multifarious dimensions. I would never have thought of brining in environmental and health issues to address the labour market situations. I had no idea, prior to association with SANDEE, how one could address the climate change issues and valuation of statistical life.

Well prior to joining SANDEE as grantee my research focus was mostly in the field of Energy Economics. I got trained in Environmental Economics through course work under World Bank sponsored Capacity Building programme in Environmental Economics from IEG, New Delhi. Then I was in fact looking for funding as well guidance so that I can take up some serious research in the field of environmental economics. It was just perfect timing that I got funded by SANDEE after one rejection asking revision of original research proposal. I think Best in SANDEE is the mentors look for some talent and some good research idea and then help in shaping the thought to build up a good research idea. They are just not funding agency (many applicants mistake that) .they want capacity enhancement . I feel today through SANDEE grilling I know how to focus simply by asking what is the research question? It takes long but once a researcher knows this then first hurdle is overcome. I can see many real life problem through environmental economics lense. I think me winning an endowment of USD 1 million for my university from XXX was due to my enhanced capacity to think in right direction asking right research questions. I learnt how how a real life problem can be turned into a research question. The focus of the proposed winning grant was also related to sustainable development where environmental issues and interaction of society is major focus. I could combine very successfully energy and environmental economics in my climate change research now. Also being the director of the programme I follow many good practices of SANDEE in managing the programme: proposal submission within a defined structure: research questions, methodology, outcome; selection is done through open defense to win the fellowship grant, progress report workshops are followed in SANDEE format with experts in so researchers get constructive peer review in the process of research output and paper development. Success rate is tremendous in my university as all the grantees of XXXX programme have at least one peer reviewed journal published paper. I think my research management skill has improved from very low level to very high level.

For me, I always wanted to focus on issues related to valuation studies. Even today my main focus is on the same line, but different issues. Joined with SANDEE helped me lot to sharpen in my research area.

My research interest has been consistent over the years, although its intensity has increased due to SANDEE's influence.

I think the outlook to perceive a problem, analytical power and to comprehend it-these have changed with SANDEE training.

My primary focus became environmental economics. Had I not been exposed to SANDEE system, I wouldn't have dared to take up the task, though I have very much interest in the field. I would have rather a conventional agricultural economist, may be at the most a resource economist.

I think I would have been able to write articles in the area of Natural Resource Economics and Environmental economics if I had not been involved with SANDEE. It is due to SANDEE that my research focus changed from general economics to this specialized field.

I don't think it would have been any different. I applied to Sandee because of my interest in environment and development, and that interest has not waned.

After doing project with Sandee, certainly my focus of research was changed. Having trained by Sandee, now I propose projects with policy focus. I start my research questions with two or three local level issues and at least two or three policy relevant hypotheses. I learnt that researchers should 'think locally and write globally"

I learnt about environmental economics through a SANDEE organized Environmental Economics Workshop in 2002. I then decided to have my PhD in environmental economics and accordingly started exploring potential research areas. I enrolled for a PhD in XX University in 2005. I then applied for SANDEE grant on the same topic but SANDEE resource persons modified my study to focus on welfare impact of XXX. Before involvement with SANDEE, I had some research experiences on health economics.

Firstly, my involvement with SANDEE has sharpened my theoretical and empirical perspectives about conceiving and writing a research proposal. Before my involvement with SANDEE, I used to write and analyze empirical models without theoretical background. With my SANDEE experience, I started looking at empirical models from theoretical perspectives. This is an important contribution by SANDEE to my professional outlook and understanding.

Before SANDEE grant, I was only interested in issues relating to agriculture. However, I am making minds to work on other environmental issues in addition to agriculture.

I have not changed my research focus

I received SANDEE research grant while I was doing my master degree in agriculture economics. At that time I was little aware about environmental economics. From the participation in different workshops organized by SANDEE, I developed my theoretical and analytical knowledge base in environmental economics. Most importantly, I changed my career goal from agricultural economics to environmental economics. Now I am doing my PhD in environmental economics in the USA.

Possibly very different. The SANDEE grant was my first funded research project. At that stage my research interests were very much undefined. I didn't have a formal training in environmental economics. The grant introduced me to the subject area and since then I have been teaching and doing research in this field. (In fact, my project grant was preceded by a small study grant that enabled me to spend 4 months in a research institute under the mentorship of Prof GopalKadekodi, an

eminent environmental economist and a SANDEE resource person).	
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I got into SANDEE at a time when Environmental Economics was getting integrated into development studies in India and other parts of developing world. For some of us, who had missed a formal training in Environmental Economics, SANDEE came as major opportunity to learn and share the understanding across the two streams within Economics viz; environment and development economics. This was a major benefit i derived while undergoing a long process of SANDEE grant. In a way this helped me getting a broader perspective on the discipline having overarching implications for a large number of issues concerning development. In absence of this, I may have had to wait till more of applied environment-development related research came into public domain, to influence my understanding. Additionally I may say that the research focus may have remained more or less same, but the larger understanding may have been missing.

My research focus has deepened in the areas of applied valuation, best practices in valuation and policy upshot from such studies. In the absence of the SANDEE grant, I would have remained focused on "rapid assessment" type research, possibly avoiding research involving econometrics and modeling.

My research interest has changed from Health and Welfare Economics to Environmental Economics. I started doing a masters degree in Environmental Economics just because of the training I received from SANDEE.

Being an urban and regional planner I am trying my best to incorporate my understanding achieved from natural resource economic course offered by SANDEE. Nowadays I am interested to use non-market valuation techniques to find the recreational use values of heritage sites, wetlands etc.

I'm not primarily in environmental economics at all; but my SANDEE project has given me a good amount of environmental perspective outside of the narrow confines of the specific project itself. This has not yet led to a shift in research focus, though.

4. Has your involvement with SANDEE changed the methods and/or techniques you usein your research? If so, please explain.

Yes, SANDEE has changed the methods and techniques of my research significantly. For example, in my earlier research on Industrial economics mostly I used descriptive statistics and narrative style of writing. However, my involvement with SANDEE facilitated me to use quantitative methods in research. Moreover, SANDEE enhanced my research proposal writing techniques.

Not really

Yes. Now I am capable of using household survey based empirical methods to corroborate with the theoretical research.

Yes, some of the literature read and techniques used has facilitated me to broaden the horizon and helped me in formulating my future research agenda differently.

Could learn more about primary data and advanced econometric techniques.

I was basically a good researcher by myself. SANDEE workshops -discussions and comments from resource persons, etc have helped me to gain confidence in my research work, specifically it has improve my skill in framing objectives, hypothesis, design of questionnaire and coding of questionnaire, report writing and editing skills.

Now I am able to use various methodologies used in environmental economics such as Travel cost method and two stage least square method etc.

Through SANDEE's R&T workshops I have got an extensive training on developing and executing a research with primary data, especially on developing questionnaire and data collection. Also the constant feedbacks from the SANDEE advisors and other participants during the presentation of progress report led me to explore and incorporate different econometric and empirical techniques throughout my research.

Yes SANDEE changed the method/technique of my research. Before SANDEE grant, mostly I used secondary data for analysis but now my focus is on the primary data. Moreover, due to SANDEE's grant, first time in my academic carrier, I shall be using multi dummy dependent variable model (i.e. Multinomial Logit model) to find out the determinants of particular crop residue practice in Punjab, Pakistan.

I have been using household production models in my work even prior to SANDEE. I am also very interested and moderately skilled in econometric methods (Thanks to Wally Thurman of NCSU). However, with SANDEE grant I am able to include Geographic Information System (GIS) in my research. I had used GIS support when I developed environmental fate and transport models a few years back. However, GIS use in SANDEE grant is enabling me to do geo-spatial interpolation of climate variables, include political and various infrastructure variables (GIS layers) in my models, and represent results graphically. I have tied up with a GIS education and training institute in Mumbai to do this jointly (XXX). As a spillover, I am getting involved with XXX in doing some other environment and GIS related advocacy / research work. Besides without SANDEE grant, I would be doing simple cross tabs and group tests in my "usual social research" projects in India. SANDEE is the only project where I get to sharpen econometric skills and more importantly learn new from advisors like Subhrendu.

Yes, now I can handle complicated data sets and do rigorous testing of data using different software.

Proposed Research Design: To design the rainfall index based insurance product for major crops by using average weighted index of rainfall. Changed Methods during the SANDEE Workshop: Just and Pope production function was suggested to estimate the variability in yield of major food crops in Tamil Nadu due to climate variables with respect to temperature and rainfall. Proposed Research Design: The covariance analysis between two different crops was proposed to analyse the how the crop rotation practices affects the food security. Changed Methods during the SANDEE Workshop: Since the covariance analysis is very complicated, this may be dropped from the research proposal.

Firstly, everything I learnt about primary survey and data analysis has its roots in SANDEE's training programmes, R&T presentations and discussions (of others' presentations as well). Secondly, I got the confidence to carry out a large survey-based work (my ongoing project, for example) because I know I will get proper guidance from accomplished experts in SANDEE R&Ts. It relieves me from the tension regarding successful completion of such a project. I know if I am sincere and honest, SANDEE will steer me out of any problem I might face at any stage of the project. Thirdly, SANDEE's R&T discussions have trained my eyes to single out a good and doable research issue from the day-to-day happening around me. I can focus on a research agenda, I can think of a proper sampling frame that will be required, can produce a good questionnaire on my own. These value additions become very apparent to me when I look at the way research projects are being carried out by many of my colleagues at my present university, who are not initiated to such trainings. The textbook rules are known to everybody, but an exposure such as this makes one a good player in the field.

I think SANDEE had a profound influence on guiding me about how to construct, develop, and then conduct a household survey in a developing country. Moreover, presenting the pre-proposal and proposal in front of the SANDEE resource persons and fellow researchers also helped me to improve my theoretical model by looking at it from different angles. Needless to say, my presentation skills also improved as a result of the feedback I received from the SANDEE advisers and other participants.

Yes, in my first project I used the method of 'process analysis for the first. Similarly, for my second project I used multiple methods, which included field experiments. This too I did for the first time.

No

After being involved in SANDEE, .I learnt how to apply the research methods more effectively.

Yes, now I am aware of problems and issues of field research and also aware about the use of econometrics in research analysis.

Yes this gave me a good insight of research methodologies

According to me the most important thing I learnt in SANDEE is how to frame proper research questions that would lead to testable hypothesis. Earlier I spent a long time over a problem groping ways of how to address it. Without proper research question(s) the work took a long time to start even before I reach the complexities of model specification and econometric analysis. Secondly, I really learnt the importance of proper questionnaire design including framing of questions and their logical sequencing. I also learnt STATA as an econometric package along with discrete choice models and their applications but the training in survey methods and research methodology has been outstanding.

Yes, through involvement with SANDEE I have learnt many tools and techniques in environmental economics, writing, data analysis using STATA, and are able to apply.

Yes definitely. Discussions in R&T help using new methods and techniques. So do discussion with discussants and other training.

I have learned first the possibility of environmental valuation as well as the theory and application to measure the environmental bads like arsenic problem. I also learned to fit the right methodology as per objective and also interpretation of the analysis of data. I have gained lot of exposure to face the methodological as well as analytical challenges during the study. And I am still using the knowledge in determination of the methods of other study.

Scientific presentation of paper. Questions from theory or explanation in the background of theoretical framework

Not really

Definitely, during the process of proposal writing and the participation in the 18th R&T, the discussion with Dr. Jeffery Venecient, and Dr. Mani Nepal has enhanced my understanding of the Econometric techniques and Methodologies. Before that I have even committed some mistakes even in my PhD discretion and after that discussion I have corrected them. In this context I am really indebted to SANDEE.

Data collection procedure especially questionnaire development. The Pre testing of questionnaire took 8 month. Data editing and data analysis. I have used GPS software and weather station.

It has created a huge impact on my understanding of research method. Most importantly I learned various quantitative techniques, which I have applied in my research work. I have become familiar with recent literature, which I could not have probably read if I did not attend research workshops. Moreover, there are things to learn from other SANDEE participants. I would say that it is not always possible to measure the achievements only by looking at the number of publications. There are experiences we gather that help us critically analyze our research questions in the most meaningful ways.

Well with sandee I have understood the real issues of this field and now I am independently doing three more studies. I have done a consultancy for the WWF, XXX because of a course on PES which was organized by sandee and epsea in chinagmai. By continuously attending the workshops I even now understand research in a broader spectrum and I am helping my friends and student and the credit goes to sandee. (by God there is no exegeration). Now I undersand and even teach econometrics because of a course which was organized by sandee. You would not believe but till the PhD no body properly taught us econometrics and I am a teacher of econometrics and now you know why?

Yes. I learned to organize my research in systematic way. I learned to develop analytical framework, research design and analyze the data from different angles.

Yes. Before the involvement with SANDEE, I wasn't much familiar with non market valuation methods and application of negative binomial models. Also I have never used the STATA software until I start my first SANDEE project.

Yes, I usually used tabular method of analysis before involvement in the SANDEE research. Now, I always try to develop an econometric model in my analysis.

Yes, my original plan was to use Agent-based Modeling approach for understanding the network effects in adaptation. However, SANDEE advisors suggested that I look at the spatial issues using spatial econometric techniques first – that literature was new to me and I benefitted from the exposure.

There is not much change in the research methods, but my understanding in the econometric has deepened.

Yes, I am continuing the similar methods and techniques for my PhD study

I had limited exposure to the technique of quantitative research and my research primarily used qualitative methods. I am now acquainted enough to use the technique of quantitative methods and convinced how objectively we can address the issues.

I would say I was more into econometric applications but after SANDEE course on CGE I could expand my tool kit for applied studies. I have been in a team to work on CGE model for Indian economy with another SANDEE grantee and few non SANDEE grantees.

Definitely. The training courses, advice of resource persons and reading helped me a lot in making better theoretically sound research projects and later in many other places I could use that knowledge.

The methods or techniques have been greatly influenced by SANDEE through my discussions with the advisors, Subhrendu K. Pattanayak and A. K. EnamulHaque.

YES. The training on data handling, modern Econometric and Statistical tools and interpretation of results by continuous interaction with experts have enabled me to become a better researcher.

Yes ,Very much. Now I have a focused approach. I only attempt to solve specific problems and I make myself very clear on what I have to do. As a teacher/guide, I think this approach has helped the students also very much. Before that I was not very sure of what to do with the analysis ,and usually thought of it after the data collection. The importance to interview schedule preparation is another area ,where I am very careful now, after my sandee training.

Yes because I have been using more quantitative techniques and econometric models in my research since my involvement with SANDEE.

If I hadn't got the Sandee grant, I may very well not have done the research I did for that grant which involved a randomized trial, the only one I've done.

Sandee made me a very good and competitive researcher. The R&Ts helped a lot in my research such as writing proposals, designing questionnaire, developing theoretical and empirical framework, analysis and writing reports.

Through the regular R&T meetings of SANDEE, I learned research methodology to a great extent. I was very poor in econometrics and statistical software. SANDEE provided us with applied trainings in environmental economics using econometrics. I learnt to handle statistical software STATA through SANDEE training. Though it took me a long time, I did all the statistical and econometric analysis related to my SANDEE grant using STATA myself. The SANDEE grant and exposure to a wide range of research methods has significantly improved the quality of my PhD thesis too.

Of course, my participation in SANDEE Research and Training Workshops gave me lot of ideas about developing and using household models in natural resource economics. I attended a 15-days training program on Applications of Household Models in Natural Resource Economics which helped to develop a holistic perspective about household models and their practical applications.

I do not think so at this stage. However, I have chances to learn new analytical methods in various training workshop organized by the SANDEE which will be useful in my future research activities.

I learnt new impact evaluation methods and techniques. There is no much change in the use of methods and techniques in my research but I gained more understanding of use of methods and how to interpret results of econometric techniques with the help of SANDEE workshops.(both R& T and other econometric courses and course on survey methods)

SANDEE focuses on quantitative analysis and econometric modeling related to environmental problems. From the participation in SANDEE training workshops, I got technical knowledge on quantitative analysis and econometric modeling and now I am applying this knowledge in my PhD research. I should say that involvement in SANDEE arouse my interest on econometric modeling.

Significantly. The involvement with SANDEE refined my skills in survey methods. A course on modeling of household behaviour was especially useful. I learned new approaches to data analysis using econometrics.

Yes, it did help me doing simple quantitative analysis more systematically. Also, it helped me develop an analytical skill which combines both quantitative and descriptive data without having choose once over the other.

In the absence of a SANDEE grant, I would have continued to hire consultants who understood methods / techniques needed to carry out valuation. I now make use of STATA in my research and I also take much greater pains to justify my sampling.

Yes. Now I tend to use more Econometrics in my research than just using statistics.

SANDEE helped me to be more methodological while achieving focused objectives

No

5. If you are a teacher, how has your involvement with SANDEE affected your *teaching* and the design of any courses that you offer in environmental and resource economics? For example, were you teaching environment and resource economics before you received your SANDEE grant? Are you teaching environmental and resource economics now? Please elaborate.

I taught environmental economics earlier (in 2007-08). Later, due to unavailability of econometrician in my university, I had to sacrifice environmental economics course and took the charge of econometrics. However, I have the desire to back to environmental economics soon. Though I am not teaching the environmental and resource economics courses directly, however, after being in touch with SANDEE, I have been planning to propose for changing the course-curricula of the courses. I have already discussed with my colleagues informally in this regard and hope to materialize it soon. Furthermore, I have strong desire to teach the environmental economics course at undergraduate/masters level in the near future.

I have started using some of the reference material and research techniques learnt at SANDEE R&Ts to teach my research students.

I taught a course on resource economics only once and that is before I took up the SANDEE project. I did not teach resource economics and natural resource economics even after it. But, it definitely helps me as I teach the courses in public economics. It also helps me as I teach another course on sustainable development.

Except for few lectures on Environmental Economics that too occasionally, I am not teaching any course on Environment and Resource Economics. Prior to SANDEE project, I was working in a pure research institute.

I teach environment and resource economics course to undergraduate students. I have developed its syllabus at least three times during about ten years time. The latest syllabus (to be implemented from 2013) is more systematic and comprehensive.

Only now I am teaching environmental economics. I am able to teach with confidence. I refer to SANDEE working papers for case studies on environmental valuation method – change in productivity method, Contingent valuation method in my course.

After involvement with SANDEE I teach Environmental Economics

Since I did not have any exposure to Environmental and Resource Economics before attending SANDEE's basic course, I was not teaching any course in these areas. But after the training and starting SANDEE's research, I have designed a course for the undergraduate economics at BRAC University, Bangladesh, where I was faculty before starting my PhD. Although, I am not teaching Environmental and Resource Economics as a postgraduate teaching assistant while doing my PhD, but I am sure I will be teaching the subject again later in my teaching career.

Before SANDEE grant, I taught three times an introductory course in economics to BS (Hons) student of environmental sciences department. At that time, no specific course was offered on environmental economics by the department of Economics. Now, economics department has made environmental economics as a core course for M.A. students. I have plans to teach this course in near future. Moreover, due to SANDEE grant, I am able to supervise in better way to one of my M.Phil student who intends to work on an environmental issue under local conditions.

I am not in the teaching line. However, SANDEE grant has motivated one of my research assistant (he had a BS in Statistics

and Physics) to pursue a 1-yr diploma and demographic and economic studies from a reputed local institute. I am cost-sharing in his efforts to learn while working with me from other funds available at NEERMAN.

Unfortunately, I don't teach environment and resource economics, nor is it offered in my college. My gain has remained confined to my research so far.

So far, I was not teaching the Environmental and Resource Economics course. After attending the training course on "Environmental Economics and Natural Resource Economics", I expressed my interest to take the above course with full confident. Most probably, I may handle the course from the next academic year onwards.

The effect is immense. Previously I was teaching in an undergraduate college where I used to teach microeconomics, statistics and public finance. I was not initiated to environmental economics before the SANDEE EE course in 2004. After I did my first SANDEE project, I was able to move into a central university (XX) in 2007. My selection was certainly facilitated by my SANDEE work. In my new university, I was requested by the Department to teach environmental economics and Computer Application. It is obvious that my SANDEE connection and the project work had prompted my Department to ask for it. So, I started teaching environmental economics from 2007 at P.G. level. Also, the 'Computer Application' course, which mainly deals with data management and econometric softwares, was a recent inclusion in the standard PG curriculum in Economics in all the universities in the neighbourhood. There was a dearth of experienced teachers to develop and teach this course in all the universities in this part of the world. I could confidently develop the course in my university banking on the learning from SANDEE R&Ts. Apart from this, I was asked by the University of Calcutta to teach 'Computer Application' to their PG students as a guest faculty from 2007. In 2008 I was invited by the University of Burdwan (West Bengal) to teach a part of their 'environmental economics' course at PG level (as guest faculty). Both these jobs I am discontinuing from this year to free some time for my present project. But the University of Calcutta had recently invited me as External Examiner to evaluate the dissertation works their MA students had done as part of their degree requirement. I listened to a total of 18 presentations on various topics for two days and could advice them on their shortcomings and 'do's and don'ts' in empirical research – all learnt in SANDEE R&Ts. All these I could confidently do because of the SANDEE trainings, numerous study material and working papers collected from SANDEE coupled with my own readings and synthesis. So, my present teaching is thickly loaded with SANDEE.

I taught an introductory course on Environmental and Natural Resource Economics at undergraduate level when I was a junior lecturer in North South University (NSU), Bangladesh. Although I taught the course before receiving the SANDEE grant, but I think the SANDEE course on ENR helped me prepare the lecture notes in a constructive manner with real world examples from the developing countries. Hence, my students were able to relate the environmental issues that are affecting the society they are associated with.

I was teaching environmental economics till 2003 while I was doing my first SANDEE project. After that I have taught 1)At the Summer School in Goa for undergraduate students of The College of William and Mary, Virginia University, a course on 'Environment and Development in Indian context', from May 28 to June 8, 2007. 2)At Research Methods and Proposal writing training workshop at Mekong Institute Foundation, KhonKaen, Thailand, from 30th June to 5th July 2006. 3)At Asian Institute of Technology, Thailand, for two months (Sept-Oct. 2002). Have used SANDEE case studies while teaching.

I am not a teacher now. But hopefully will be a teacher after my Ph.D. and will use the learning's from SANDEE in my teaching.

Yes I am a teacher and teaching environmental economics for the MSc Students of Environmental Science. Now I am also teaching environmental economics to MA economics. But to be frankly speaking there is not much change in teaching.

After getting the SANDEE grant I was conferred two post-graduate teaching assignments: the first, though not directly related to Environmental and resource economics, is a course on compute application in economics in Calcutta University that involved data analysis and preparation of an empirical paper on problems of Indian economy. One of the reasons for being selected to teach the course is the familiarity with empirical practices from SANDEE teaching workshops. At the same time I took courses in Environmental Economics in Rabindrabharati University in West Bengal. Recently, following my SANDEE project that involved management of rural commons I had been entrusted to take a post graduate course on economics of common property resource in Calcutta University. For taking up case studies in these areas one of the SANDEE initiated book "Promise, Trust and Evolution: Managing the Commons of South Asia, "by RuchaGhate, NarpatJodha and PranabMukhopadhyay has been flagged in the reading list of the students.

I work in development sector, but also teach at university off and on. I wish to, but there is no resource/environmental economics course at the university where I teach. However, after discussion with the management I have been giving 1-2 lectures on environmental economics and climate change issues to let the students know about this field and explore more.

No. The focus of our centre is on research. We rarely (once in a year take up research methodology course for college faculty and researchers)

I am not teaching at the moment.

Sorry, I taught only as a visiting factuality member and I cannot gauge the impacts of SANDEE grant on my teaching.

I am unlucky to teach natural resource economics course at graduate level. However, I am using field experience in research method subject at graduate level.

I have never offered any course in environmental economics. So the rest of the questions are not applicable in my case. However, few months ago I organized a seminar in my department. There is a growing interest among the students about green accounting and natural resource economics. My involvement with SANDEE was one of the reasons why I was interested in organizing such seminar. About 200 students asked questions about climate change and valuation of natural resources in that seminar. From strict academic point of view this was not a theory based seminar. Instead, it has given the student a background of climate economics, especially carbon trading and its future.

No, I was not teaching this course before, but now I am teaching and it is really going well. It is now possible not only because of sandee s EE course but I also did the EEDP course organized by World Bank and it was also financed by SANDEE.

No. I have been teaching environmental economics and resource economics courses before getting SANDEE grant.

I am teaching environmental economics in Kathmandu University since 2003. After participating to the SANDEE training on environmental economics I revised the course. From the performance of my students in environmental economics, I feel that I am teaching better now than before the SANDEE grants. However, this is partly due to my experience and partly the SANDEE training.

No, I am not a teacher. Rather an independent researcher

I work in an institute which primarily does policy research. Since the year 2007 we are conducting a one year capacity development course in development studies for young researchers in north east region of India. This involves six months

course work and a dissertation. The course involves papers on research methods; regional development and governance; agriculture and food security; health, education and social security; and ethnicity, multiculturism and politics of identity. Since 2009 we have added a course of resource and sustainable development. This course is primarily result of input gathered from attending the training programmes at SANDEE.

I had been teaching Environmental economics course before joining SANDEE. But references, publications, case studies from SANDEE are used more frequently. SANDEE speakers sometimes were invited to university to address students.

I am not a teacher now

My involvement with SANDEE has had positive effects on my design of courses, especially ECO 313: Environmental and Resource Economics.

Since I teach in under graduate level and the course does not contain any element of these I have no direct impact on teaching as such. But shortly I would like to take up few classes with post graduate and M-Phil students to develop this skill. The talk is on with respective depts. and here will come my SANDEE training on EE courses.

There was a one credit course on Environmental economics to masters students .Onve I was trained in SANDEE , at the time of syllabus revision, I have made it into a (!+!) couse , and the scope is also widened to include resource economics. A similar course is also offered to masters students of Forestry programme as well. I was also offering an elective course on environmental economics, after my training, which several students have opted. Now the elective system is withdrawn. As a teacher, my trainings with SANDEE was immensely helpful. More so the confidence that I can seek help from anyone in SANDEE is giving much relief.

After I attended some training courses in environmental economics, I started a few basic courses in the resource and environmental economics. I have also trained my junior colleagues and we offer such courses in our institute.

Yes, I was teaching environmental economics before I got the grant. I understood the green accounting literature better and taught a little bit of it based on one of Partha's books. This probably wouldn't have happened if I hadn't met Partha at Sandee.

Now, I am teaching the Natural resource and environmental Economics course for the Masters students. I used to give the assignments and hands on exercises to the students from my sandee learning materials. My training from Sandee on NRE course is very much useful for my teaching.

After being introduced to environmental and resource economics through SANDEE, I along with my colleagues introduced this course in our department. I was in a study leave for the last few years. I shall now start teaching environmental and resource economics. After I developed my interest in environmental and resource economics, I have also started motivating and guiding Masters level students thesis in this area.

I taught and continue to teach before and after the receipt of SANDEE grant. But my involvement with SANDEE made me to include two important components in my teaching activities relating to Resource and Environmental Economics. They are: i) Application of household models in natural resource economics and ii) Poverty and Environment Linkages.

I am teaching two courses to post graduate students, one is environmental economics and the other one is resource economics even before I received SANDEE grant and still I am teaching these courses. As these new courses were

introduced recently in the Department of the University, therefore, design of these courses is the same.

I am not a teacher but I do supervise undergraduate students.

I am not teaching any environmental and resource economics course right now. However, research and teaching is my career goal. I am sure that my involvement with SANDEE will have profound effects in teaching and design of any courses in environmental and resource economics.

Substantially influenced my teaching. I have been teaching environmental economics to Masters students for the past 6 years which would not have been possible without SANDEE. I have used my SANDEE study as a learning resource, specifically the survey data.

No. But, we plan to initiate short term courses on Environment and Development at our Institute (GIDR). Much of this has drawn from the experiences I and other colleagues had at SANDEE-workshops.

As a follow up to a manual I prepared for the Ministry of Environment on best practices in applying valuation to the forest sector, I may soon introduce STATA and the calibration of basic valuation models to line officials in concerned ministries and research institutions. Without the SANDEE experience I would not feel sufficiently confident to do so.

Yes, my involvement with SANDEE has affected my teaching. I could introduce Environmental and Resource Economics into the undergraduates' curriculum at my University. Now I am teaching two courses for undergraduates: Environmental and Resource Economics, and Environmental Policy.

After attending the resource economics workshop in Bangkok organized by SANDEE, I felt confident to take classes at the undergraduate level on Environmental and Natural Resource Economics along with one of my colleagues. Prior to this initiative this course was not being offered in our department (Department of Urban and Regional Planning) though it was included in the curriculum as an optional course.

No

6. Could you pleaselist any examples of professional relationships with international organizations (e.g. consultancies, research collaborations) that you think you probably would not havetoday if you had not been involved with SANDEE?

I am sorry; I do not have any such example.

Getting consultancy projects from a) IUCN on Vehicular Pollution in Kathmandu; b) Kumaon University and JNU on Valuing environmental benefits of a lake ecosystem – a study of Nainital; and c) ANSAB on valuing benefits of Himalayan Forests – would not have been possible, if I had not taken SANDEE project.

SANDEE work has not helped me in this way.

At this stage, I have no professional relationships with international organizations. But after SANDEE grant, I submitted a project to higher education commission of Pakistan on "Determinants of Violence in Punjab, Pakistan" under thematic grant program theme "Economics of Extremism and Violence". In this project, to find out determinants of violence in Punjab, Pakistan, primary data and multinomial logit model shall be used (having same pattern as that of the project funded by SANDEE). So, SANDEE grant helps me to develop relations at local level.

This is a tough questions. Whatever "international" relationship I have today are because of my prior work with RTI, through my advisors at NCSU, and business relationships with World Bank. On other hand, SANDEE gave me an opportunity to continue to interact with my international collaborations. For example, SANDEE R&T and grant gave me an opportunity to constantly engage with Subhrendu. Top economists in India such as Som and Murthy know of my work and me which may result in more collaborations in future, SANDEE also supported my travel to WCERE2010 and prior to that EAERE2008 which helped me network internationally.

NA

NA

No

I have received some offers, but I have not joined any consultancy because of my family problem.

So far, I have not developed any such connection. I didn't try either. Honestly, I consider myself as a slow but a long distance runner. I started late, but want to go for a long time. Once I go for professional consultancy or collaborative research projects, perhaps I have to race against time without much learning time. I wanted to learn for some more time. That's why I came back with a research proposal to SANDEE for a second time (now ongoing). Till its completion I have no other agenda. But once I successfully complete this ongoing project, I will be confident to play in a larger arena. I will then certainly explore the links to develop international professional relationships. I estimate a timeline of two/three years from now to begin that phase.

Through participation in IV ALEAR Congress, 2009 and 4th WCERE pre-conference course, 2010 – I met researchers and academic professionals from multifarious backgrounds who are eager to collaborate with me on future research. Besides my research topic, I think my affiliation with SANDEE played a major role in helping me to network with both veterans and newcomers in the field of Environmental and Natural Resource Economics.

Joint recipient of the first Karl GoranMaler scholarship for 2009. This scholarship will allow the recipient to visit Beijer Institute, Stockholm, Sweden, for one month in the year 2009, and write a paper in collaboration with a faculty member at the Beijer Institute. Member of The Energy Research Institute team (as expert in institutional analysis) for conducting 'Situation Analysis of the poverty-ecosystem link in the Indo-Hindukush region', a project funded by Natural Environment Research Council (NERC), UK, August 2007 to February 2008. Coordinator, Workshop on 'Economic Development, poverty reduction and policy change: environmental economics for policy makers', organized by SANDEE, UNDP and UNEP, at AIT Bangkok, Dec. 10-13, 2007. Member, World Bank "Chhattisgarh Tribal Livelihoods Scoping Mission", from 31st March to 2nd April 2006. Guest Editor for South Asian Network for Development and Environmental Economics (SANDEE), Newsletter (from No 7 to 20 and ongoing). National consultant as Tribal Development specialist for World Bank funded project on "Need assessment of forest-dependent people from three states of 'tribal belt' of Central India".

I am an amateur PhD. Student so I have not yet had any such interactions.

Not involved in any international organizations related to EE.

I could not give such example

The livelihood intervention methodology I have developed for ActionAid Sri Lanka was highly influenced by the training I received on advance household economics course by SANDEE

Haven't got professional relationship with international organizations yet but got opportunity to interact with many Professors and veterans in the related fields through SANDEE network.

No

1) Global Development Network (GDN). 2) South Asian Network for Economic research Institute (SANEI)

No I cannot give such examples as the collaboration that have taken place are largely due to my centre's work

IUCN; Laura. O Taylor (Professor of Resource Economics, NC State University)

I have recently been involved with a research on political economy of climate change. This is a consultancy work for a project based in Sussex University. The project has not yet started. We are in the literature review phase and is expecting to start data collection in one month time.

Yes I have done a consultancy for WWF and I have developed the feasibility of PES like scheme for growing 'Green Cotton' in SINDH region of Pakistan. It was possible because of sandee. They sponsored me to do the PES Course in Chiang Mai Thailand.

Last year (25 April – 04 May 2009) I got an opportunity to work as a Short Term Consultant (STC): Technical Officer for the World Health Organization- EMRO to support indoor smoke alleviation programme and strategies in Iran. I think, there is contribution of SANDEE.

IUCN

FAO; ICARDA; CYMMIT; CIP

Latin American and Caribbean Association of Environmental and Natural Resource Economics – SANDEE gave me an opportunity to attend the IV Congress in March 2009 and present my work.

I got a six months consultancy on Environmental Economics from ICIMOD (International Centre for Integrated Mountain Development), Kathmandu. It would not be possible if I had not worked as a SANDEE Associate.

With the experience and publications of SANDEE work, I got full scholarship for my PhD study in Norwegian University of Life Sciences (UMB)

Work at my institute is focused on multi-disciplinary dimensions. We did consultancies for UNICEF, FHI etc. and personally involved with institutions like Asia Dialogue Society and SEPHIS and worked on human security and labour history.

Ph. D thesis guidance of a scholar to probe further into arsenic related issue beyond those covered in my SANDEE project. Institutional collaboration building between University of California Berkeley and Jadavpur university for Arsenic technology development and installation. CGE modeling work for ministry of forest and environment in India

IUCN, Building and Research Organization, Sri Lanka

Some of the international organizations are World Bank and Care.

Yes very much. World Bank. WWF, Asia-Pacific Regional Climate Change Adaptation Assessment-USAID.

Not many to list. Rather I was not keen in taking up international research/consultancy tasks, due to some personal reasons.

Yes due SANDEE I got chance to attend an advanced course in Natural resource economic which I attended in Jan-Fabruary 2003 in Gothenburg University, Sweden.

The one with the World Bank I'm involved in thanks to you. My collaboration with Thomas Sterner whom I met at Sandee. We wrote a chapter for a book on environmental policy instruments in developing countries. My current collaboration with Jeff Vincent on the impact of agricultural fires on air pollution in South Asia.

As a Sandee researcher, I have received three awards since I started my SANDEE work – from the Global Development Network (Japanese Award for Outstanding Research on Development 2005), from Tamilnadu Agricultural University (Best Researcher Award 2006) and the recent Australian government (Endeavour Executive Award 2009). I strongly believe that this is mainly as a result of my association with SANDEE. In fact, my established network though Sandee, I could able to visit Deakin University, Australia for four months as an Endeavour Executive Awardee.

I have my abstract accepted for presentation in the Annual Meeting of the International Association of the Study of the Commons (IASC) in Hyderabad for IFRI-CIFOR Panel on Inequality in Forest Commons. Likewise, I have my abstract submitted for UNDP conference on spatial issues and poverty November 24-26 th in Delhi. I hope to have more professional relationships in the future too. This would not have been possible without SANDEE.

I got the opportunity to write a paper entitled "Poverty and Natural Resource Degradation: Irrigation Tanks in South India" listed as # 3 in my answer to the question # 2. This paper was made possible because of my involvement with SANDEE. Having come across my SANDEE working paper, Paul Steele, one of the editors of the book in which this paper was

published requested me to write this paper with additional financial support from ADB and IUCN for additional field work.

Nil

I would not have started my career in environmental economics (PhD) if I had not been involved with SANDEE.

Honestly, my entire research career has been shaped by the one SANDEE grant. I certainly would not have moved out of a 10-years old permanent government service to an ad-hoc research position in a private research institute without the grant. The support from Prof Kadekodi has been a defining influence in my professional life.

Recently I got invited to submit a paper for the ABCDE (A World Bank Conference). I found it highy useful I got this invitation through SANDEE.

The consultancy listed in my answer to question 5 placed me in contact with the Food and Agriculture Organization of the United Nations. The manual has a pedagogical annex that refers to STATA commands (taught me by SANDEE).

Not yet developed

I'm starting work on a groundwater project with a collaborator from the International Water Management Institute (IWMI), with a large grant from 3ie. Some relationships with researchers from IWMI happened because they read our SANDEE work. The interest in water was also sustained because SANDEE provided a great opportunity to do a primary survey and some good research. 3ie also probably thought well of the experience from the SANDEE project.

7. Could you give examples of relationships with government officials, academia, and the policy community in your own country that you think you probably would not have today if you had not been involved with SANDEE?Please include examples of any relationships with local communities and/or village management institutions that have resulted from your SANDEE research.

Answer: Part 1: Yes. Member, Syllabus Design Committee, Masters Program, Environmental Science Discipline, Khulna University, Khulna-9208, Bangladesh. Part 2: Informal communication with local level governments of Bangladesh, such as, Thana Agricultural Office, Field-level Agricultural Officers, Union Parishad Chairman and Members. I hope to strengthen that relationship further in future, because I will have to contact with them more frequently in future when I will start my field level data collection. It may be noted that I have started my SUNDEE supported study in February 2010 and it is at a very beginning stage now.

Because of the SANDEE project, I have developed an association with School of Oceanographic Studies, Jadavpur University. As I complete the project I hope through the dissemination workshop I will develop some relationship with the officials involved in the development projects at the East Calcutta Wetlands region.

No relationship with govt. officials, and policy community in my country.

N.A.

No SANDEE work has not helped me in this way too.

After getting SANDEE project I meet with many government officials and different communities in order to collect information for my project.

My SANDEE research required data on air pollutants for the Dhaka City, which was collected by the Department of Environment of the Government of Bangladesh. Through SANDEE's research I have developed a working relationship with the Air Quality Management Project under the Department of Environment

Due to this project, our relations with the Agriculture Department and Provincial Directorate of Crop Reporting have been established in the project area.

My grant mainly involves collecting secondary data on climate and GIS support for spatial extrapolation of weather data as well as lining geophysical variables for the analysis. I have developed good relationship with KJ Sommaiyya college in Mumbai. I will be joining them ion organizing a small conference on use of GIS in policy. We are also exploring ways to combine my modeling skills with GIS for a few projects together (This is at "lets talk" phase only). I have developed a contact in World Bank through Priya to get weather data from a Hydrology Project that the World Bank funded. I have developed a good couple of contacts in climate and meteorology departments in India. They have been of some help on SANDEE grant and may be help me out even in future. In addition, I want to highlight some other indirect networking benefits of SANDEE as well. Frankly, only through SANDEE I came to know of Som, Murthy, Priya, Mani, Pranab and others from India are not only excellent advisors, but also potential collaborators on future project (If I can ever get projects from other agencies in India!). I also know so many fellow grantees and members who are interested in environmental economics. Today, I am confident of undertaking research projects in SE Asia because of this network. Indeed, I have recommended some of my colleagues from Sri Lanka when I got inquiry for a project there (Mark Sobsey of UNC). Initially I was so impressed with network potential of SANDEE, that I attempted establishing India chapter of Society of Risk

Analysis (My research interest in environmental risk remains). Unfortunately, I could not muster the resources needed to do something on lines of SANDEE and have backed out of SRA chapter. I am not a "active" member of any other organization.

SANDEE work has made me popular both in government and academia. Officers with both the Government of India and Orissa (Wild life division, Ministry of Environment and Forest) have discussed my paper, quote it in matters of mangroves and coastal protection.

After completion of the project only, the collaboration works to be started.

SANDEE's reputation is known among almost the entire university faculty (in Economics) in my part of the world (there are four universities in Southern West Bengal with which I have regular contacts). Among them, my primary reputation is as a sincere field researcher in Sundarban (XXX). The reflection of this can be evident as I was invited to author a chapter on 'Sundarban Delta' in the District Human Development Report of South 24 Parganas' by the District Administration. The report is slated to be officially published on 12th July, 2010. (the Sundarban delta, which is my study site, covers a major part of this district in the state of West Bengal) Apart from this, till date, I cannot claim to have developed a strong liaison with government officials and policy makers at higher level. This is primarily because I tend to shy away from ministers and high officials – perhaps because of a mismatch in objective and wavelength. But I am very comfortable in mixing with people in the field. I am visiting the study site since my first project in 2005. For the last five years, I developed an extensive network of acquaintances and friends in the field which involves common people, local leaders and NGOs. In the fields, I have met with many newsmen and they wanted to keep in touch with me as a news-source. One of the result of these acquaintances has been the publication of a recent article of mine on Sundarban (as an invited writer) in a leading national daily (Times of India, 25th May - the link to the article is available on the SANDEE website). Also, in another news portal (www.infochangeindia.org) I had an article on Sundarban last year and another is forthcoming. I have a very good relationship with many NGOs working in Sundarban in various capacities. At least two of them (Tagore Society for Rural Development and Nature Environment and Wildlife Society) had often sought advice and help from me in preparing their project reports/baseline surveys. All these have resulted from my SANDEE research. Otherwise, I had no other links with Sundarban – which is a set of low lying islands that are extremely difficult to commute and at least six hours journey from my place of stay.

In response to the liaison with government or local communities/ village management institutions in Bangladesh, in my view SANDEE may still be at an infant stage. During my household survey and secondary data collection phase in Bangladesh some of the offices heard about SANDEE first hand from me.

Though I may not be able to directly some of the following with my association with SANDEE, indirectly improved understanding due to this association could have helped — Forest Department granted evaluation study of thirty villages federated under Forest Development Agency in Gadchiroli Forest Division; seventeen villages under Bramhapuri division; and twenty seven villages under Central Chanda division, In Chandrapur and Gadchiroli districts, Maharashtra State, India, 2005-2006. Member, World Bank supervisory Mission on 'Andhra Pradesh Community Forest Management (APCFM) Project', from 8th to 19th December 2003. Member, World Bank supervisory Mission on 'Kerala Forestry Project', from 9th to 21st November 2003. Member, World Bank supervisory Mission on 'Andhra Pradesh Community Forest Management, (APCFM) Project' from 16th to 28th February 2003.

Nο

Not any specific (I am a Govt. Official and my institution has reasonably affirmative opinion about SANDEE)

I have good relationship with the Nepal Irrigation Water Users Association. It was mainly due to my research work on FMIS and which was possible due to SANDEE grant.

I cannot say like that but definitely the relationships I have with Ministry of Fisheries, provincial ministry of fisheries North western province of Sri Lanka, NARA, shrimp farmers association etc were further strengthened by the SANDEE research I have conducted

(Answers for 9 & 10 together): The SANDEE project required thorough field visits in areas where the communities suffered from frequent breaches in embankments. This had been my first intimate visit in rural areas and that too in as remote a place as Sundarbans. It took me lot of time (almost a year) before I could finally get these people to understand the purpose of the project. In later part of the work it often happened that we (I and my research assistant) took food in their places and in a couple of instance had to stay in the village in the night. In 2009 cyclone "Aila" devastated my study area and only a fortnight after the cyclone the village people arranged boats for me to move around the places and watch the damage. This happened despite them knowing the fact that I am not a government authority or a competent politician who would expedite the relief process. Secondly, working with district/block level officials and extension officers also gave me a clear sense of data availability in the rural areas that would be of help in designing future research projects. At about the same time Govt. of West Bengal commissioned a team of economists to prepare the "District Human Development Report of South 24 Parganas" that spanned a large portion of my study site. I was inducted in the team and wrote the section on Vulnerability and Human security that involved construction of vulnerability Indices at the block level(The report would coming out on 12th July,2010). At this time I am in the process of preparing the draft manuscript of my research the abstract of which had already been sent in ADB conference and IASCP conference. SANDEE has given me the opportunity to present my research in international forums.

Having learnt about environmental economics and climate change issues through SANDEE, I have given many presentations in government offices/trainings especially in Ministry of Forest. Currently I am working with Heifer International Nepal, and reach to household level in rural communities to work together with local NGO partners. Though climate change has not been the focus of my organization in Nepal yet, now gradually wants to incorporate some adaptation strategies in its community development projects, and has asked me to explore and develop it. I think its great opportunity for me too to be able to find and incorporate some adaptation activities for the community level people.

No

1) Economic Research Group and its distinguished academia like Professor Wahiduddin Mahmud, Chairman, ERG; Professor InunNishat, VC, BRAC University & Dr. SajjadZohir. 2) Bangladesh Paribesh (Environment) Andolon (Movement) or BAPA

I have been nominated by the Ministry of Health and Family Welfare, Govt. of India as a member of the Working Group on Alternative Crops to Tobacco[This recognition I attribute partially to SANDEE as part of the work related to the Working Group]. Secondly we have developed contacts with Central Tobacco Research Institute on account of SANDEE project. They helped us in organizing SANDEE workshop

Yes I was able to communicate with village communities, farmers.

Environmental Protection Agency: secondary data; National Institute of Health: water tests; Pakistan Metrology: metrology data; Pakistan Upper space technology: GPS data; National University of Science and technology: for basic information about dispersion model; Pakistan institute engineering and applied sciences: for dispersion calculation;

Population census: secondary data; Survey of Pakistan: secondary data

I have developed relationship with government officials, academia, policy community in last two years. This has been possible because of SANDEE. I needed to meet these people to formulate my research questions and get information from them. For last five months I have been regularly visiting Khulna, the southwest coastal district of Bangladesh to revise my research question. SANDEE may not be happy with my research outcome because I could not submit my revised proposal in time. It is difficult to explain the reasons I still could not convince myself of the research questions. However, I did not give up. I am continuously trying to come up with research methodology needed for my research.

Based on my SANDEE research my organization (XX) raised the need of a national policy to tackle the indoor air pollution problem. We carried out advocacy activities through Indoor Air Pollution and Health Forum Nepal. Eventually, last year the Government of Nepal endorsed the "National Indoor Air Quality Standards and Guidelines 2009". Likewise, this year we have entered into agreement with the Ministry of Environment, Nepal to work jointly to develop a strategies to implement the IAQSG, 2009. Many small follow-up activities are in progress. This year, in association with Department of Health, we published a training manual for Female Community Health Volunteers on "Indoor Air Pollution and Health". Association with SANDEE has increased my confidence level and also my recognition. Currently, I am the General Secretary of Indoor Air Pollution and Health Forum, Nepal. There are 38 members in the Forum including WHO, Winrock etc.

Central Environment Authority and Urban Development Authority

Dr. A. K. EnamulHaque, Professor, United International University, Dhaka. Headman and many villagers (Tribal) in the hill areas. To date, many of them communicate with me for many purposes.

SANDEE work enabled me to interact with farmers and getting a first-hand exposure to their perceptions about climate change and adaptation.

My membership to Indoor Air Pollution Forum, Nepal would not be possible without the SANDEE grant to research on indoor air pollution.

I have been interviewed by Sagarmatha FM, published findings in a weekly magazine, had talk programs at Department of Agriculture, Kathmandu University, and at village levels

Recently I got a research grant from V.V. Giri National Labour Institute, India to study valuation of life in tea plantation labour market in Assam. This competitive grant is largely result of the gain I gathered from association with SANDEE. The National Labour Institute is convinced that this study could provide enough input to push the pending bill at Indian Parliament to amend the Plantation Labour Act. My present study granted by SANDEE has also given enough opportunity to interact with local communities and institutions. I am completing the study soon and will be sharing the result with them.

SANDEE Research with policy focus and dissemination of research output has indeed pushed us to come out of only researcher's role to policy advocacy role as well: a.Connection with arsenic task force in the state of west bengal. b. Climate policy group: a later development and indirect outcome of SANDEE training in CGE modeling and lesson learnt to provide research support to policy maker.

I developed certain relationships with the local communities and the local government body in the research area , but at present I don't have as I am out of the country.

BRAC Development Institute (BDI)

Academic Institutions including Calcutta University, Jadavpur University-Global Change Programme; teri; British High Commission/British Council; Forest Dept, Govt of West Bengal; Sundarban Affairs Dept, Govt of West Bengal; American Consulate; Lead India; Local Panchayat of Sundarbans, Sagar Islands, Govt of West Bengal

Department of Agriculture, Government of Kerala, following my recommendations of the srtudy, has included worker training programmes. They were concentrating on farmers, not workers. They also use the policy brief, and the compendium of papers presented in the workshop, as reference material. I am invited for many talks in seminars on the topic.

Yes I have done the SANDEE project for the Margalla Hills National Park and the official is using my working paper for policy purpose as they used my suggestions to introduce entry fee.

I don't know of any that stemmed from my Sandee research.

After becoming as Sandee Grantee, I have developed a wider contacts with academia in my country and across countries.

It is just now that I have completed my SANDEE study and I am planning for the dissemination. I expect more exposure with government officials, academia and policy community.

I developed lot of contacts with academia in India due to my SANDEE project. I also developed contact with some NGOs working on tank irrigation in South India.

A local NGO (LokSanjh) working on sustainable agriculture in Pakistan invited me to present findings of the research project funded by the SANDEE to the gathering of cotton growers and requested me to maintain this relationship in future too. I acknowledge this to the SANDEE funding.

I was able to establish good rapport with the Ministry of Fisheries and Aquatic Resources and community based fishery organizations

I have developed good relationship with some high level forestry officials in my country during and after involvement with SANDEE. It helped to widen my academic network.

My SANDEE research was on displaced communities and led to links with the Panchayat, local NGOs, community leaders, and local irrigation officials. Whatever peer recognition I have in the research community working on environmental economics issues (e.g. INSEE) is certainly a SANDEE outcome. Importantly, some valuable friendships have developed.

I got to know more closely and informally a number of nationally and internationally acclaimed environmental economists, whom I can now approach for professional help more easily than otherwise.

Key informants whom I interviewed for my grant include the Ministry of Tourism (Sindh Tourism Development Corporation) and academics at the International Islamic University, Karachi University's Applied Economics Research Centre, Pakistan Institute for Development Economics, and the Institute for Business Administration. To the extent that the SANDEE work led to the consultancy referred to in my answer to question 5, I have been requested repeatedly to make policy recommendations in presentations to the Federal Minister for the Environment, Secretary Environment, and the

Inspector General of Forests. These presentations refer to SANDEE work. WWF had already (two years previous to my grant) trained, registered, or worked extensively with the local communities and community based organizations (CBOs) in the area where I applied my travel cost method. The exercise deepened our relationship. The involvement of yet another external party, in this case, SANDEE, helped improve the morale of the local community members and CBOs.

Not yet developed

These have included relationships with people working in agricultural science, water science, soil science, that we learned a lot from; second, people in the villages we rapidly appraised and the village where we did our field work.

8. Have there been any negative consequences to you or your career from your SANDEE research grant(s) and/or your participation in SANDEE activities? If so, please explain.
No
None
No
No
No
Absolutely no negatives. SANDEE had only positive externalities.
SANDEE organization is a blessing for the people like us from less developed countries where we do not have good sources of getting knowledge about Environmental Economics.
N/A
No
I really cannot think of any unless I think from purely commercial view point, which will be wrong. I am a SANDEE grantee to develop my skills, network with others, and ultimately be able to lead my own projects in environmental health and policy sector in India. I don't view SANDEE as World Bank, Gates Foundation or WHO where I have had some recent luck in securing projects on commercial terms. I am grateful to SANDEE for providing me adequate funding to sustain myself without compromising my commercial interest as well as ability to hire a research assistant.
None.
No
A strong 'NO'.
Until now, almost all the experiences gathered from my involvement with SANDEE has been nothing but positive.
None
No
Not any
No not any negative consequences
None

None
No
No
Absolutely no
No
No
No, not at all.
I have started SANDEE grant in second semester of PhD program. Due to biannual R&T and field survey, I loose grades and GPA
Never
Yes, I was removed from the management position because I was doing so many courses, I was involved in research activities. But later on the director admitted his mistake and gave me the other position later on. But even I was not appointed against that position again, I think it was worth it for me, because after all I had my teaching position, and I love teaching.
No. But during research period, there was need to attend every R&T workshop and stay for whole workshop period. It was really tough for me to manage the time.
No
Not applicable
No
I do not feel any negative consequence. SANDEE research process is a bit more time taking. Many times, we move back and forth. As we go on developing our career, the opportunity cost of time also increases. The time consuming process causes some problem to the regular work.
I do not think so!
No
Tried hard but could not think of any. There is however, a chance that a researcher may like SANDE environment so much might get stuck with that institution and as it provides that scope to keep the talents growing with the institution. But I think my involvement with multiple organizations and multiple tasks helped me to stay connected but not exclusively with SANDEE. But I feel nice to introduce my self as SANDEE output.

No never
No
Not yet
Not at all. May there are some colleagues who became jealous???
I don't think so
No
No
I have no such experiences.
No, nothing.
No negative consequences on my career (but on family life as one has to spend many days away from family. It's just kidding)
No
Cannot think of any.
No
As my office work continued at the same pace, and that WWF did not officially give me time off to undertake SANDEE work, the grant work ate into my leisure time.
No
No
No

9. Any other thoughts on how your involvement with SANDEE has affected your career?(e.g., grants, international presentations, promotions, consultancies). Please comment.

Yes, my involvement SUNDEE has changed my career positively (indirectly). For example, my colleagues and friends often give reference of my SANDEE grant while discussing or gossiping. It seems that, people are adding values to my career for my involvement with SANDEE. They are placing importance to the incident of my getting SANDEE grant.

Not so far

Before I attended the SANDEE workshops I did not know the variety of problems that can be dealt with in the area of environment and development. Once I finish the work, I hope I can present the papers resulting from it at international conferences and also can also look for publications at international journals. It may also bring in opportunities for further grants and consultancies.

As mentioned earlier, SANDEE project equipped me with some of the literature and techniques in the area – which helped me in getting few consultancy projects and research grants.

I acquired my Ph. D degree that has enhanced my career opportunities and promotion possibilities.

It has helped in my promotion from Assistant Professor to Asst Professor-Senior Scale.

As my Ph.D. research is based on economic valuation of natural resource and my SANDEE project is part of Ph.D. research therefore SANDEE has helped me a lot to improve my knowledge regarding environmental economics.

Right now I am working on two papers from my SANDEE research to publish in international refereed journals. That will be significant addition to my research career. Also I hope to present my SANDEE research in some international conference on Environmental Economics in future.

As SANDEE provided me exposure to new method and technique of research, so it will enable me to get more grants and consultancies from different organizations and have a positive effect on my career.

The counterfactual: what would have happened without SANDEE? Can I spend my time better somewhere else? I am certainly not so busy that I am trading off my time on SANDEE grant versus other research opportunities. Basically, SANDEE gave me support to keep building my skills. Without SANDEE I would be doing "field work and surveys" in education, population AIDS, Water just like so many other market research agencies in India. SANDEE grant helps me remain a economist, and environmentalist and a researcher.... And, I really don't have other research projects to trade this off anyway. Will there be other grants or programs that would make me better off than SANDEE? There are virtually no government organizations in India I can or will "ever" apply for grant. NEERMAN is a not for profit research organization whereas limited funding that Indian government gives is for educational institutes. How can I explain what it means to get a funding in India without compromising your dignity and morals?

So far I have made more than 40 presentations both in India and Abroad. The American Museum of Natural History, New York has produced a short movie based on our paper published in PNAS, Nature Conservation has written featured articles based on my research. There has been tremendous recognition to my work all over.

Not Applicable

My international exposure in academic world so far revolved totally around SANDEE. My entire student days were spent in Calcutta (West Bengal, India) in 1980's and early 1990's. Although in my University days I had got good teachers (some of them US trained), almost all of them were theoreticians and were engaged in pure classroom teaching in traditional chalk-and-board mode. The tradition of empirical research at that time was very poor in Calcutta mainly due to lack of infrastructure, but also due to the lack of attitude among my teachers. Through SANDEE, I came to know what an empirical research should be. Also, the EE course and the many short courses that it organized from time to time showed me how modern tools (powerpoint, softwares) can be combined to produce a great and effective teaching module. The precision and time-management in teaching and developing relevant assignments have greatly influenced my teaching orientation. I cannot resist telling that the two-day econometric workshop in Kathmandu (December, 2009) conducted by Prof. Jeffery Vincent was a mesmerizing experience for me. He could teach so much on applied econometrics in such a short time so precisely! I cherish to teach in that way. But presently I am constrained by the lack of infrastructure in my university and sadly carrying on with the traditional mode of classroom teaching.

Through my involvement with SANDEE, I have been able to present my research ideas and then moved onto data collection and finally present findings, at international conferences such as the IV ALEAR Congress in Costa Rica and 4th WCERE in Canada.

My involvement with SANDEE has given me lot of exposure to the world of research. Having taught in relatively backward (academically)Nagpur University for 17 years I did not have good training in research methods. Due to SANDEE I was able to meet some of the stalwarts of Environmental Economics, learn from them.

No

Being a part of SANDEE, I realized the need and importance of doing Ph.D. Get motivated from SANDEE and now doing Ph.D. I got a project from National Agriculture Research and Development Fund due to being empowered through involvement in SANDEE activities or more specifically due to the proposal and report writing skill got from SANDEE

I got an opportunity to participate and present a paper on "XXX" in a workshop organized by International Society for New Institutional Economics held in, June 21-23, 2007 Reykjavik, Iceland. I was promoted as an Associate Professor of Economics at TU recently. During my interview one of the Professor asked affirmative question regarding my SANDEE involvement. Though I would be promoted without this but this may have some positive impact on my ranking in the list.

Defenitely my knowledge base on economics, presentation and writing skills have been improved by the association I had with SANDEE

I did my post-graduation and doctoral research in India and so lacked the much needed international exposure .SANDEE provided me with this opportunity through its teaching and training workshops that made me aware of the frontiers of research in environmental economics.

As I am a new grantee, I am yet to see this but hope to have this in future.

This research experiences have significantly contributed to get my current job as a Researcher of Transparency International Bangladesh. International presentations and participation in different R&Ts have helped to increase the level of my confidence and also to learn the knowledge of globally renowned economists. Due to engagements with SANDEE, I have wider connection with several economists in South Asia and outside the ASIA. This study has given me the scope to be author of a chapter of the book that will be taught in several universities in different countries

After sandee project I have received two projects related to tobacco issues on which I worked under sandee grant. i) On "Air quality Monitoring for Environmental Tobacco Smoke"- by CFTFK, Washington, USA. ii) On "Assessing viability of alternative crops to cigarette tobacco" –by ICSSR, Govt. of India

SANDEE grant has stimulated my confidence level. After the grant I feel more confident on my abilities that I posses.

International exposure; R&T; SANDEE courses

There is one consultancy I have been involved with very recently. The work has not yet started. It is difficult to say how much of the understanding of the political economy of climate change in case of Bangladesh will be relevant to SANDEE in the future.

No it did not happened.

My office (XXX) received US\$200,000.00 grant from PCIA/USEPA in 2008 to scaling-up indoor smoke alleviating technologies in high hills of Nepal. The proposal was developed on the basis of my SANDEE research. With respect to my career growth, there is no direct link but indirectly the contribution of SANDEE is significant. In 2005, when I received the SANDEE grant, at that time I was in Project Officer position. I was promoted as the Senior Project Officer in 2007 and as the Project Manager in 2008. SANDEE helped me to build my confidence, analytical capacity and networks. Being associated with SANDEE, I also got opportunity to present my papers in various international forums as following: 1) At 16th Annual Conference of European Association of Environment and Resource Economists (EAERE 2008) at Gothenburg, Sweden. 2) At South Asia dissemination workshop of Fourth Assessment Report on Climate Change by Intergovernmental Panel on Climate Change (IPCC) at Kolkota, India during 11 to 12 October 2007. 3) At Ninth Biennial Conference organized by International society for Ecology Economics (ISEE) at Delhi India on 15 -18 Dec. 2006

Involvement with SANDEE has widened my knowledge frontier and made me more confidant in moving forward in my research career at the Institute of Policy Studies of Sri Lanka. Experience and exposure gained from presentations at SANDEE R&T improved my presentation ability to a significant extent and encouraged me in most of the later presentations at domestic and international level.

Received 02 Grants from FAO. CIMMYT gave me adequate fund for evaluating the impact of resource conservation tillage in Bangladesh. Presented three articles in the international conference (New Delhi, Netherlands, and Hong Kong). CIP, Australia has offered me to conduct a baseline study (regarding heat and drought tolerant potato) in Bangladesh.

The SANDEE work enabled me to work as a short-term consultant with the World Bank during Jan-July 2009.

Grant: Following SANDEE grant I got a grant from SANEI (South Asian Network of Economic Institutions) on "Health Effects of Dung-cake fuel burning in rural Nepal". I use the techniques learnt from SANDEE to this study. International presentations: I made at least five international presentations following the SANDEE grant. Promotions: Nil. Consultancies: ICIMOD consultancy as stated in Q9.

With SANDEE grants, I managed to publish few articles that could have well considered in the selection for my PhD study

See the answer to question number 10

SANDEE work helped me a lot and I got many experiences from there. I think the work with SANDEE affected me seriously

to getting my present s/ship of PhD in Natural Resource Economics in West Virginia University in US.

Through my work at SANDEE, the standards of my international presentations and type of consultancies has improved.

I have been invited by many international organizations to present SANDEE papers- Society for conservation Biology, KhonKhein University- Thailand, ISEE, Climate Change Leader Prog –Lead India and British High Commission

I could win a grant from Kerala State, Council for Science, Technology and Environment to further expand the scope of the study in other crops. Presented a paper in the Word Congress on Environmental Resource Economsts, Kyoto, Japan. Made presentation to the officers of Ministry of Agriculture, Government of Nepal, upon their request. One of the important achievement projected during my interview to the post of Professor, which I got.

I have been elevated to the position of Professor and SANDEE has been of pivotal importance in this connection.

I think it's made a big difference. I met Jeff Vincent at Sandee and he suggested my name to Rob Stavins when Rob was looking for someone from India to join the Harvard project on international climate agreements. As a result, I reconnected with Rob. That led to my being invited to a workshop in Venice where I met Carlo Carraro who invited me to collaborate on some climate work. So two of my PhD students are now involved with Carlo's network and presenting their work at meetings. Rob also (I think) suggested me as an IPCC author, and I have been invited to be a Coordinating Lead Author for the 5th Assessment Report. I'm sure there have been other repercussions I haven't traced or figured out.

Please see ANs 9

Being a SANDEE grantee itself is a challenging achievement. Through its proposal writing workshop, SANDEE helped to improve my research proposal a lot. Now, after completing my SANDEE study, I am confident that I have the necessary knowledge and skills to undertake good environmental studies. I recently got promoted to Associate Professor from Assistant Professor. I had shared about the SANDEE grant with the interviewers along with my other academic outcomes.

i) SANDEE grant was instrumental in my selection for the post-doctoral research fellowship under the World Bank Aided India Environmental Economics Capacity Building Project. ii) I was also selected for presentation at the Eleventh Conference of the International Association for the Study of Common Property, held at Bali, Indonesia, during June 19-23, 2006 entitled "Survival of the Commons: Mounting Challenges and New Realities,"

Yes, SANDEE project was one of the contributors in my promotion from lecturer to Assistant Professor in the Department.

My involvement with SANDEE helped me to get grants from other institutions such as Winrock International, Japanese ministry of education, and Fuji Xerox academic promotion fund.

My presentation skills certainly improved. The guidance from SANDEE resource persons has had a tremendous influence not only on my analytical ability but more importantly on my self-confidence. The couple of one-to-one sessions with Prof Kenneth Arrow are an unforgettable experience!

I feel I belong to a very powerful group of young and senior academics in the field. I continue to draw strength from them as peer professionals and at times, look forward to take up collaborative research with the SANDEE-group members.

The involvement can be used later to argue continued education and ability to carry out such education without significantly interrupting my office work. Some of the new consultancy work which it enabled reveals a beneficial effect on

my career since I was able to bring in more contracts to WWF.

No

For some reasons, we have not maintained a decent pace in getting work from the SANDEE project published in a refereed journal, though that may change soon as a paper is under revision for a top field journal. So our feeling has been that despite the great help and friendship provided by SANDEE, our tardiness on this particular work has held back its potential.

About the SANDEE Research and Training (R&T) Workshops and Specialized Training Courses

10. How many of the SANDEE Research and Training (R&T) workshops have you attended?

Number of workshops attended	Frequency
1-3	22
4-6	25
7-10	6
11-20	1

Mean number of workshops attended by country:

	All	India	Pakistan	Nepal	Bangladesh	Sri Lanka
Mean number of workshops attended	4.41	4.79	3.88	5.63	3.43	3.80
answered question	54	24	8	8	7	5
skipped question	0	0	0	0	0	0

11. Do you have any specific suggestions on how SANDEE's R&T workshops could be improved?

Increasing more one-to-one interaction among the researchers and resource persons.

The grantees should get more discussion time with their advisors/resource persons

In some of the R &Ts the plenary sessions could be made more interesting.

The last R&T I attended was in 2003 – I guess by now the format of R&T workshops would have changed. It is difficult for me to give any suggestion now.

No suggestions as I find them very well organized and quite useful.

R & t workshops - date and venue could be decided well in advance so that it would be easy for people like me to get government clearance and make travel arrangements easily. R& T workshops SANDEE can allot extra expenditure in providing fresh fruits to participants and need not be stingy on this. We could eat well and only then be attentive and make effective use of workshops or else remain dull with half or empty stomachs.

I have participated in two R&T workshops. Among these workshops, one has a pre R&T day while other has no pre R&T day. I thing R&T workshops which have no pre R&T day can be improved by adding pre R&T day to these workshops.

I wish there is more time available for one-on-one time with resource persons (or a smaller group of 2-3 resource persons). It will be great if a small training course (a bit advanced) is offered on cutting edge methods in econometrics or environmental economics. I also wish I could learn where the environmental discipline is going in US and Europe. US researchers get an opportunity to learn about new issues, methods, grants, etc in several conferences and universities. We don't have that great a interaction in SE Asia.

I found them quite perfect.

Since my first attending it (end of 2004), there has been continuous small experiments with its structure. Presently it is almost stabilized with past learning and participant feedbacks. I don't have any specific suggestion to change its overall structure right now.

No specific suggestions. Based on my experience with two SANDEE R&T Workshops that I had attended, I think SANDEE did a good job in organizing the events.

Not really. We had made some suggestions earlier and found that those were accepted and necessary changes were made.

SANDEE have a provision of advisors. These advisors guide and supervise research grantees. Some of them are very serious and guide properly. However, some are very surfacial. They talk too much but may not be outcome oriented. The grantees fear considering them like a PhD guide, if he become unsatisfied, his whole work will be in peril and he may suffer much. Finally the outcome may not be as desirable. These issues should be carefully addressed and monitored properly. In some presentation people (including advisors) involve seriously and discuss and give suggestions. In some presentation people did not care and did not provide suggestions. All presentations should be equally treated.

Along with its regular activities, I would prefer to have 1-2 days training on relevant topics/tools and techniques/data

analysis etc. during each R & T.

No

As the name of SANDEE website (SANDEE online.com) states the R&T can be enhanced by participation though Teleconferencing. In that not only R&T can be conducted even in Pakistan and India but well known professionals can share thereviews through online discussions.

SANDEE involves all grantees as discussants in fellow grantees. This activity enhances capabilities but since every grantee has pressure to do presentation therefore they have less comments and suggestions. If SANDEE resource person give summary lecture of research grants to all grantees about current progress with comments and suggestion at the end of R&T, it will improve grantee's knowledge about other areas.

They are already in a very good shape.

They are doing a great job, however during the R & T they some time offer courses, but it is not a continuous activity, so every one do not get the benefits, so I think just like the EE course which is regularly held, these courses should be held may be after two years if not every year, so that the new grantees should also be benefited.

Need more interaction/time between the resource person and researcher.

It seems to be much improved compared to before time.

While the R&T can happen twice a year, grantees may be asked to present their progress at every alternate R&T; further attending R&T need not be made compulsory. This will provide some much needed flexibility to the system.

The R&Ts are well organized. The only problem I see is that the SANDEE resource persons are burdened heavily during the workshop. Sometimes, it appears that some comments we get may not fit well to the integrity of the research as planned and it inadvertently leads to some modification of the research as such. Such frequent modification of the research makes the researcher less confident of the research what s/he is doing.

More focus on interdisciplinary research with more and active participation of social scientists as project collaborators

I am happy with the present format.

As to my experiences R&T workshops are good and get a chance to learn more. Anyhow changing of the advisers unnecessarily from workshop to workshop makes the work more confuse. We all know there are many ways of doing the same work and the advantages and disadvantages of them. Person to person different ideas and sometimes too many ideas and too many comments (some theoretically very sound but practically impossible ideas) hinder the work. I like to see one or two main advisers who do the best support for the researchers in their work rather than making them confused. Rather than this R&T provides an opportunity to do the research in right way.

My suggestion for SANDEE's R&T workshop would be allowing more time with advisor.

Continuous change of experts may call for sea change in the work of past six months. Its better that supervision is made by one advisor through out to stick to the original methodologies.

It is fine now.

I think SANDEE is doing a good job. I don't have any specific suggestion in this regards.

No. Too far back to think about my perspective as a grantee. But they were fun.

I think the existing practice is very fine.

I think the way R&T workshops are conducted are okay.

I think the SANDEE workshops are organized in an excellent manner and as such I don't have any suggestions.

R&T workshop is too much busy schedule and there should be some break during intensive work. In my hope, it will increase working efficiency of researchers and advisors as well.

Am not aware of current format; but the individual sessions with resource persons during my time were hugely helpful.

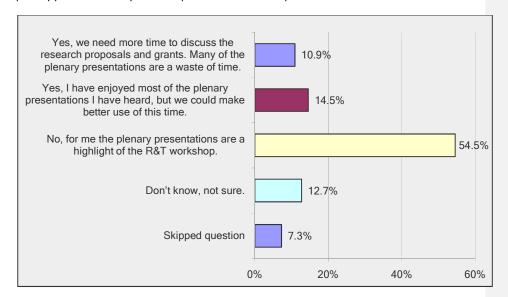
Could organize more events within the country/region in collaboration with the existing institutions like ours and/or INSEE. Could also invite scholars from other related disciples for sharing their perspectives on environment-development interface during some of the regular events by SANDEE.

There should be computer labs to familiarize grantees with STATA.

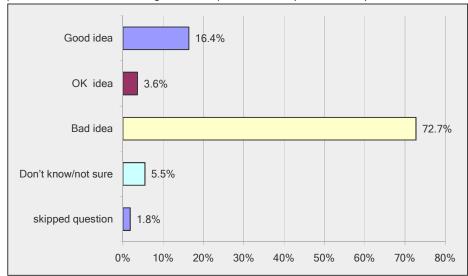
Currently SANDEE is having two parallel sessions which makes the participants attend selected presentations only. They miss half the presentations which they most probably wish to attend. Therefore, it's better if SANDEE could have one session rather than having two sessions at the same time.

No

12. Two of the environmental economics networks (LACEEP and CEEPA) do not have plenary sessions at their biannual R&T workshops in order to free up more time for discussion between resource persons and researchers. Do you think SANDEE should consider doing away with the plenary presentations by resource persons and outside speakers?



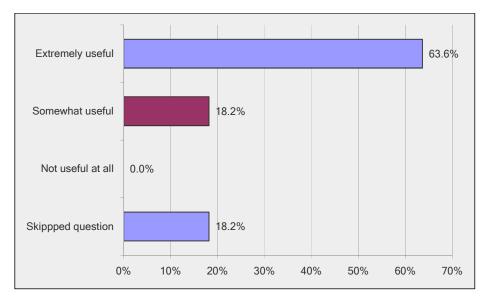
13. One of the other networks (EEPSEA) has considered holding its R&T workshop less frequently than twice a year in order to focus the energies of the Secretariat on other activities. How would you feel about SANDEE reducing its workshops from twice a year to once a year?



14. SANDEE has offered a number of specialized training programs for researchers. How many of these training programs have you attended?

	Response Average
Number of short courses (3 days or less) attended	.92
Number of longer courses (more than 3 days) attended	1.49
Total number of courses attended	2.40

15. Overall, how useful was this course(s) to you? [If you have taken more than one course, please report your overall assessment of the SANDEE courses you have taken.]



16. The following are examples of short courses that SANDEE has not yet offered. What would be your top two priorities for future courses? [1= highest priority, 2 = next highest priority]

	Percent first priority	Percent second priority	Percent total votes
Principles of Environmental Science for Economists	16.4%	9.1%	12.7%
Stated Preference Methods for Nonmarket Valuation	10.9%	9.1%	10.0%
Water Resources Economics	21.8%	14.5%	18.2%
Ethical Issues in Research Involving Human Subjects (Institutional Review Boards, researcher ethics certification, etc.)	0.0%	3.6%	1.8%
Environmental Policy Instruments	9.1%	21.8%	15.5%
Topics in Development Economics	5.5%	5.5%	5.5%
Field Experiments and Experimental Design	21.8%	14.5%	18.2%
Energy Economics	7.3%	14.5%	10.9%
Skipped Question	7.3%	7.3%	7.3%
Total	100%	100%	100%

17. Do you have any other suggestions for topics of future SANDEE specialized training courses?

Carbon Economics; Economics of Pollution

Use of GIS in environmental research

Spatial Econometrics

Advanced Econometric Techniques

Econometric methods

There should be a course on econometric modeling with application to environmental issues along with solutions to the problems (multicollinearity, heteroscedasticity, autocorrelation, error in variable) faced by researcher during model estimation.

I would wish an advanced course on sampling. Not only using those simple PPS based formulae but also newer simulation based approaches. Also want to learn about sample design for experiments.

Yes, Some training on simulation models and introduction to packages specializing on scenarios.

I feel Applied Spatial Econometrics would be a topic where many of the SANDEE project recipients have scope to learn something relevant. I personally have a great demand for a concise introduction to this topic in short time.

I think the all the topics suggested above will be more effective under future SANDEE specialized training courses.

GIS techniques and resource mapping

Non-Parametric Econometrics but it may be difficult to organize this course

Game theory -(non-coperative games in particular to understand the issues of coordination failure in provisioning and management of local resources)

Behavioural Economics or Experimental economics addressing environmental problems

Behavioural economics

As most of the models on climate change are developed in the context of "General Equilibrium" and "Simulation Methods". So a course may be offered on these issues with an applied focus.

Mathematical Economics

Socioeconomic dimension of environmental change. Climate change economics

Could think of a short programme on Geographical Information System

DEA (data envelopment analysis) and stochastic frontier analysis because they are very strong and useful tools and least understood with rigour in the region and are most useful to understand efficiency gap in any field of study which is major challenge in the region.

Yes, It would be useful to have a training program on Spatial Econometrics and resource economics, which help a lot for better research analysis. A course on dynamic optimization related to resource utilization (renewable and non renewable) is another issue too

Global Food security and Environmental concerns

Impact evaluation techniques, Game theory

Nil

SANDEE arrange course once a time and these courses are not organized for new members of SANDEE. My suggestion is to make plans arranging of these courses after some time intervals so new members/grantee can benefit from the courses.

C. G. E modeling in Environmental economics

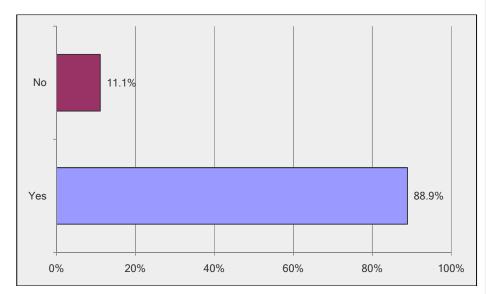
Dynamic Analysis of Natural Resource Management: Model and Methods

Economics of Climate Change, Trade and Environment, Economic Analysis of Public Policy, Law and Economics, Resource Scarcity, Conflict and Migration, etc

Sampling techniques using STATA

Referencing and creating bibliography

18. Many SANDEE grantees have used survey methods to investigate microeconomicissues. Is this an accurate description of your SANDEE research project(s)?



19. IF YES (i.e., your research used survey methods to investigate microeconomic issues), which of the following tasks/activities do you think are most important for you in terms of **future training needs?**What would be your top two priorities for more training? [1= highest priority, 2 = next highest priority]

	Percent first priority	Percent second priority	Percent total votes
Research design	32.7%	16.4%	24.5%
Sampling	9.1%	12.7%	10.9%
Questionnaire design	3.6%	9.1%	6.4%
Fieldwork logistics	1.8%	0.0%	0.9%
Data entry & management	5.5%	1.8%	3.6%
Econometric analysis	27.3%	23.6%	25.5%
Write up and interpretation of results	3.6%	14.5%	9.1%
Skipped Question	16.4%	21.8%	19.1%
Total	100%	100%	100%

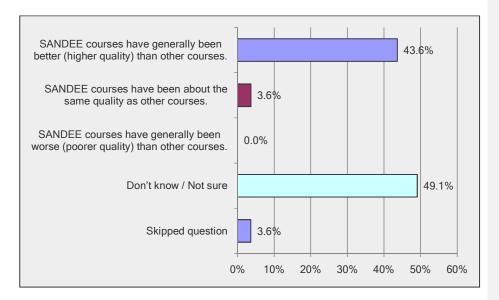
Total Votes to First and Second Priority by County:

Answer Options	India	Pakistan	Nepal	Bangladesh	Sri Lanka
Research design	10	3	5	3	4
Sampling	6	2	0	2	1
Questionnaire design	1	0	2	3	1
Fieldwork logistics	1	0	0	0	0
Data entry & management	2	0	1	0	1
Econometric analysis	13	6	5	2	2
Write up and interpretation of results	3	2	1	2	1
answered question	19	7	7	6	5

skipped question	5	1	1	1	0

Appendix

20. There are training programs (or courses) offered in South Asia on similar topics to those that have been offered by SANDEE (e.g., various international organizations, institutions of higher education, and think tankshave offered capacity building courses). You may have heard of similar courses in environmental and resource economics, or perhaps you have attended one or more of these non-SANDEE courses. How you would you compare the quality of SANDEE's courses with other capacity building courses offered in the region?



About the Resource persons (i.e., Advisors)

21. Suppose that SANDEE had the financial resources to add one new individual to its group of resource persons. Who would you like to see selected? Imagine that you could invite anyone in the world (don't worry about whether or not they would accept).

Suppose that SANDEE had the financial resources to add one new individual to its group of resource persons. Who would you like to see selected? Imagine that you could invite anyone in the world (don't worry about whether or not they would accept).	Frequency
Prof AmartyaSen	3
Prof ElinorOstrom	4
Prof. Simon Levin	1
Prof. M. L. Cropper	1
Dr KPC Rao, Consultant, ICRISAT, Patancheru, Hyderabad, India	1
Dr. Bashir Ahmed, Professor Emeritus, Department of Environmental and Resource Economics, Faculty of Agricultural Economics and Rural Sociology, University of Agriculture, Faisalabad, Pakistan. bashiruaf@gmail.com	1
I would like to see a non-theoretical economist. Someone who has taken research into practice. I would like "a" Jeffery Sachs Second suggestion: We are doing all this research but is it relevant to policy makers of India (Sorry I am not thinking of SE Asia just yet). I would love to get an economist from planning commission of India. I would take name of Dr. Montek Singh Ahluwalia (Dy. Commissioner, Planning Commission).	1
Prof Arup Mitra, Institute of Economic Growth, Delhi, India	1
Prof.R.Balasubramanium, Dept. of Agricultural Economics, Tamil Nadu Agricultural University, Coimbatore, India	1
Prof. Steve Polasky (University of Minnsota)	1
Professor Jason F. Shogren, University of Wyoming (UW)	1
PranabBardhan	1
Professor Jeffrey Racine. He can help all the grantees with Econometrics	1
A person who had knowledge in participatory research methodologies	1

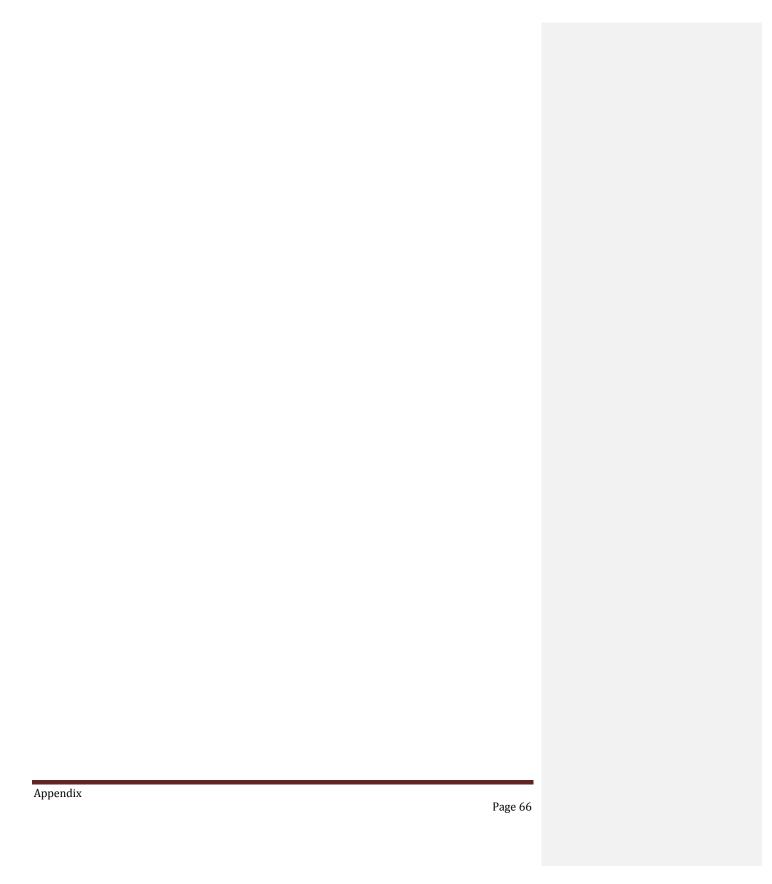
PranabBardhan	1
I would like to see Dr. Rob Dellink from Wageningen University. He is nice CGE modeler in GAMS and models environmental economic issues. Some of us could learn the modeling better!	1
Professor Syed M. Ahsan	1
Prof. Dr. Abdul Salam, Professor in Federal Urdu University of Arts Science and Technology, Islamabad. He has a vast experience on the issues of Agricultural Economics. He may be a good Choice for the people working on Agricultural Economics.	1
Dr. HishamZerriffi, Assistant Professor and Ivan Head South/North Research Chair, Liu Institute for Global Issues, University of British Columbia, Vancouver, CANADA	1
JhonMendelshon from World Bank	1
Prof. Robert Mendelsohn	1
Joseph E. Stiglitz	1
Dr. Clevo Wilson, Australia	1
Prof Subhas Ray to teach DEA; Prof subalKubhakar to teach Stochastic Frontier producton function; Prof Garkin to teach environmental economics, experiment design .	1
Prof. Dale Whittington, Prof. R. Costanza	1
SajjadZohir, BIDS	1
Not always an Economist but expert who can give us interdisciplinary perspective	1
Colin Price	1
M. Freeman	1
Prof. Lin Crase, Professor of Applied Economics, Executive Director, Albury-Wodonga Campus, La Trobe University, Australia	1
Daniel W.Bromley	1
DrSohail J Malik from Pakistan	1
Kirk R. Smith, School of Public Health, University of California, 50 University Hall, #7360	1

Berkeley, CA 94720-7360	

Appendix

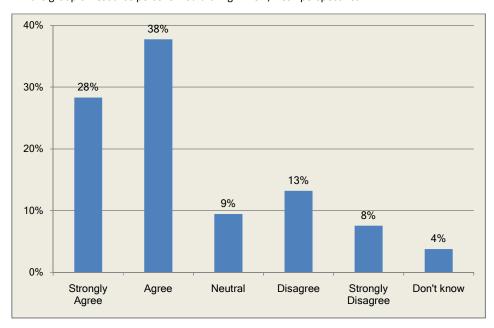
22. SANDEE does not currently have a female member on its team of resource persons. If you did not suggest a woman in your answer to the question above, can you recommend a woman that you would like to see appointed?

SANDEE does not currently have a female member on its team of resource persons. If you did not suggest a woman in your answer to the question above, can you recommend a woman that you would like to see appointed?	Frequency
Prof. ElinorOstrom	6
Prof. Maureen L. Cropper	3
Prof Kanchan Chopra of IEG, Delhi	4
Dr. RehannaSiddquie, Professor in PIDE, Islamabad	2
Unfortunately a name is not readily coming to my mind. However, I would suggest Dr. JyotsnaJalan of World Bank and Indian Stats Inst, DrPurnamitaDasgupta of Inst of Econ Growth, India	1
Prof PamiDua, Delhi School of Economics, Delhi	1
Dr.SmitaSirohi, Principal Scientist, Dairy Economics, Statistics and Management Division, National Dairy Research institute, Karnal, Haryana, India	1
JyotsnaJalan	1
Dr. Indira Devi, kerala Agricultural University, India	1
Dr Eva A. Rehfuess, Department of Medical Informatics, Biometry and Epidemiology, University of Munich Marchioninistrasse 15, 81377 Munich, Germany	1
It should not be obligatory	1
Prof. MadhuKhanna	1
RuchaGhate	1
Prof. Joyashree Roy	1
Myself??	1
Nancy E Bockstael	1

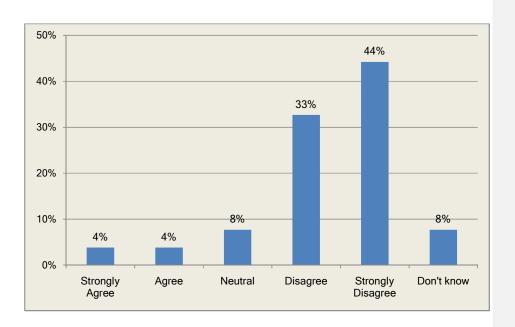


Please indicate whether you agree or disagree with each of the following statements:

23. I think resource persons should be appointed for **fixed terms** (e.g. 3-5 years). Having more turnover in the group of resource persons would bring in new, fresh perspectives.

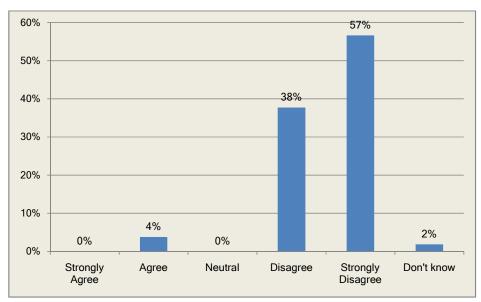


24. My resource person was **not** able to provide me with sufficient assistance related to fieldwork and data collection.

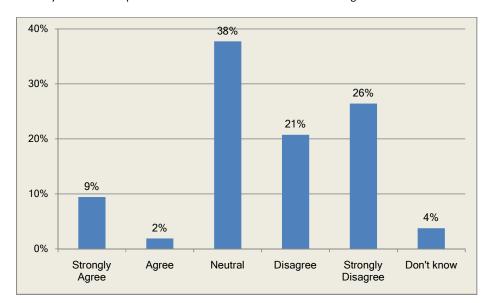


Appendix

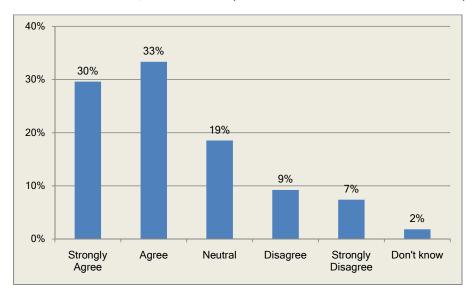
25. I often did not understand the advice my resource person gave me during my SANDEE research project.



26. I think any new resource person should be from within the South Asia region.



27. I needed to have more time/interaction with my advisor in between the SANDEE R & T workshops.



28. Do you have any specific suggestions about how the resource persons (advisors) could be more helpful to SANDEE researchers?

Asking monthly (formal or informal) updates from the researchers.

I have had a very good experience with my advisor. He was able to meet me in between R&Ts to discuss my work. That is not possible for all advisors. But their availability via email or skypeetc would help a lot.

Through interactions between the R & T workshops.

Same resource person should be attached to a researcher – otherwise different perspectives of resource persons create confusion in researcher's mind.

Resource persons' availability should be increased. If possible, advisors may reply to researchers' urgent queries through emails in between the SANDEE R & T workshops. This may speed up the work.

They can provide guidance until completion of the research work.

- (1) Resource persons are busy and emails / telephone is not the best medium to communicate. If SANDEE resource persons are in the region on other projects, I hope SANDEE can make small travel grant available for us to travel and spend time with them. Even one interaction between 2 R&Ts should be sufficient. However, I am not sure how possible this is given time and money constraints. (2) It will be great if we get an advisory panel (2-3 advisors) similar to a graduate research committee. One on one interaction is great but with a committee we can get diverse opinions, resolve any differences in opinions, identify alternative research questions and methods, and have better chance of finding 1 of the committee members in case we need urgent technical guidance. SANDEE board does act like a committee but I am suggesting smaller (2-3 people committee instead of one mentor) (3) Deadlines and research don't go well together because of so many uncertainties. But it will be good of resource persons break down research tasks and give deadlines for each. This can help grantees track their own progress better.
- 1. By devoting more time to respond to mails that call for some detailed suggestion that the researcher might need at times.
- 2. By sending references/links thereof that he/she had come across which might be helpful for the study under his/her guidance

Can't think of any, I think they do give enough time and attention.

SANDEE Researcher feel difficulty in two points (1) finalizing their methodology (2) preparing their paper. Resource person, considering the capability of the researcher, should give due time and should be clear himself in determining the methodology of the research. At this moment researchers take as granted what ever the advisors or resource persons tell them. However, during finalization process this may result sometimes difficult when researcher receive comment from the pear reviewer. Thus resource person should give clear idea regarding the methodology. They usually day we will see after data. It will be too late to develop methodology after data and researcher may suffer.

Having a short skype call periodically would be more useful for researchers to share their progress, issues, and further plans and in seeking guidance from the advisors.

SANDEE advisors each one as I have observed are down to earth. But, still I feel there is a gap between them and researchers. I don't know how to explain, may be the complex is within me.

It would be much appropriate if instead of getting progress report after six months, the continuous targets may be assigned and grantee may be directed to submit the monthly reports.

No they are doing great job.

SANDEE should make arrangement for the advisors' visit to the study area to make them familiar about the actual context.

They should be more interacted with the grantees even after R&Ts. At least there should be more email conversations between them. They should have more time available for grantees after R&Ts. Fixed term appointments can be one solution for this.

They are seemed to be very much helpful to their SANDEE grantees.

Sometimes there is a wide-gap between the advisors and the researchers in terms of knowledge – which to some extent is expected. I found in such cases some advisors – who were naturally frustrated – adopting a condescending approach towards the grantees. Since the advisors are presumably made aware of the level of knowledge of the researchers in this part of the world before hand, one would expect that the advisors are more tolerant. Interestingly such attitude is noticed more among the advisors of South Asian origin! Secondly, over time SANDEE in my view moved beyond its original objective of promoting research among the 'young'/'inexperienced' researchers. Now it is a good network of researchers working in the development and environmental economics field. However, the 'entry' to the network is only through the research grants. As a result if somebody had missed the bus when he/she was young, there is no option other than doing a project with the grant to enter the SANDEE network. Hence it is entirely feasible that some not-so-young and experienced researchers also undertake grants – as has been the case with many I knew. In such scenario the relationship between the advisor and the researcher should take a different form and not necessarily hierarchical in nature on knowledge front (as is generally the case).

The resource persons can be more informal to help the grantees even during the lunch, dinner or tea.

Initiating blogs, skype conversation, group emails

Should have one meeting at least once in 3 months

by telling one or two very weak points in the research process of the grantee and by highlighting how to cover come that

From my experience, the existing practice is the best one.

There should be some time at least a week of intensive consultation arrangement during questionnaire finalization and analysis of data to ensure good research design and useful analysis

Nil

There should be contact between advisor and researchers throughout research project period.

By not being prescriptive; patience with young researchers

They could send some of the readings, or, copy the secretariat when they recommend readings. The reason is that we rarely have access to what we need in libraries / online journals in Pakistan

I prefer the way the advisors are now interacting with researchers.

About The SANDEE Grant-making Process

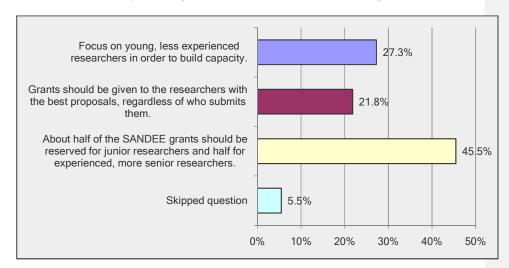
29. Do you think SANDEE grant making process favors certain "types" of research projects?

Answer Options	Response Percent
Yes	32.7%
No	25.5%
Don't know, not sure	36.4%
Skipped question	5.5%

What types of projects are favored?	What types are discouraged?
New areas not covered by SANDEE	Areas already covered by SANDEE
SANDEE favors more mathematical analysis in the research project	Qualitative analysis
Natural resources and environmental issues oriented projects	
Pure economics based but I prefer inter disciplinary ones	
Not sure but feel that climate change studies are getting more priority in recent times	
	Interdisciplinary (This is avoidable given that environmental issues often demand highly interdisciplinary approaches/methodologies)

Crucial issues related to development and environment. The research project must have applicable policy instruments and guidelines for the future researchers and academicians.	Researchers have already been conducted under SANDEE fund. This statement is applicable for a specific country.
	Stated Preference Methods of non-market valuation
Climate changes	Not sure
Reveled Preference	Contingent Valuation
Those which are of the interest of the resource persons	Those which are not of the interest of the resource persons (e.g) the issue of Urban solid waste management.
Proposals with quantitative analysis	
Those which have a focused research question, doable and having a potential policy implication	Those which are very broad in their scope and the doability being questionable
I cannot really explain, but I "feel" as if SANDEE likes very economics focused proposal. Economics can provide only a model or tool to understand certain aspects, but there can be strong epidemiological, climate, risk related component to the proposal. Econometric is powerful, but there could be non-parametric simulation based methods or even mathematical models. The solution also need not always be tax or "money" relatedthey could be policy recommendations. I think of environmental economics field as "policy research" which is not too stuck up about "where is the economics here? Why only behaviors? Climate change science is too complicated to model econometrically? Etc." But again, SANDEE is for promoting economics so above is just my wish list	
Empirical research with primary survey data	Theoretical research
CPR (I am commenting based on the grants given during my association with SANDEE (2000 to 2003))	
	Stated preference method in valuation

30. Different networks have devoted different proportions of their available grants to young, less experienced researchers and to older, more senior researchers. Which of the following statements is closest to your feelings about how SANDEE should allocate its grant monies?



31. [For researchers who have only received one SANDEE grant]. Have you ever applied for a second SANDEE grant?

Answer Options	Response Percent
Yes	5.5%
No	83.6%
Skipped Question	10.9%

Please explain why you have not applied for a second grant?	Response Percent
My first grant is not yet completed.	54.5%
Other (please specify)	45.5%

Other (please specify):

My main fields are not environment related. While I'm working on a groundwater related project right now, it's too large for a typical SANDEE budget.

Did not find time to develop a good proposal; once tried but the collaboration with other researchers could not be firmed up. Also the grant amount is rather small; as one moves up in seniority one has to take care of institutional responsibilities for raising funds etc.

availed other opportunities

After completing SANDEE funded research I am living out of South Asia. As per my knowledge, SANDEE normally does not provide fund to those who live and work outside the South Asia region.

The first reason that I had other preoccupations and I thought that since I already got support from SANDEE, "let someone else get the opportunity". Further, the SANDEE has started focusing only on climate change research in recent years. I am NOT convinced that we have reliable data (under Indian context) that will enable us to do sensible, meaningful and practically useful research on economics of climate change in India. In other words, I am NOT convinced that research on economics of climate change is a feasible, practically useful proposition under Indian context. I have seen some pieces of research —most of them on impact of climate on crop yields and / or farm incomes — on this, but I find many flaws and shortcoming in the methodology. It is my strong opinion that climate change research (especially impact studies) should be better carried out by agronomists using field experiments, rather than by economists using survey data.

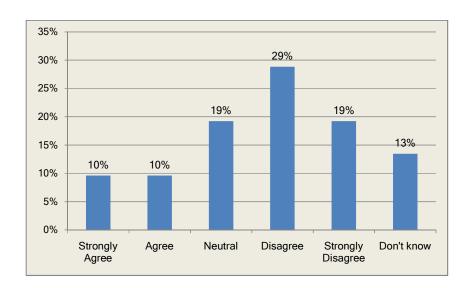
I know that the SANDEE is basically a capacity building network. It should give opportunities to new researchers. With

the experiences gained from Sandee, I try to get funding from other agencies. I have never thought of going again to Sandee. Probably in future I may apply for my second grant I'm a resource person. I could not get permission from my boss. looking for collaborative works and inter-disciplinary too I want to another with SANDEE but I am away from the country. However, I am trying to put a one with one of the others in Sri Lanka I had scope but maybe given my other commitments and time constraint I did not apply for second though I still want I am busy for my PhD study Not finding time due to other work load. Need was not felt by my organization. I am applying for second one After completion of my Ph. D, will apply again Considering some research ideas I have in mind, I will definitely apply again. But this is only possible after I complete my PhD program. I am planning to submit one proposal on climate change shortly. I have yet to identify my next research topic.

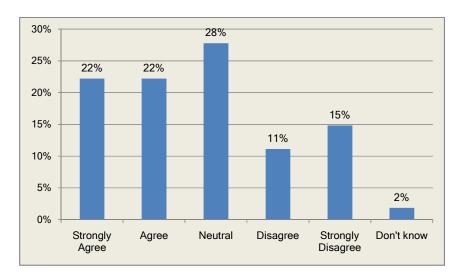
Not very much satisfied with the review process as well as R&T workshops during the grant.

Please indicate whether you agree or disagree with the following statements.

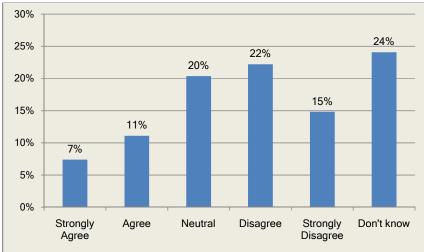
32. Proposals from some countries are more likely to be funded, other things equal, than proposals from other countries.



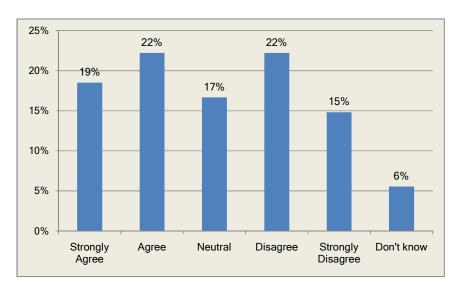
33. SANDEE should make more research grants specifically to fund dissertation fieldwork for PhD students (both those studying at universities in the South Asia region and at universities outside the region).



34. After an individual has received her (his) first research grant from SANDEE, it should become increasingly difficult to win subsequent grants.



35. I think SANDEE grants take too long to complete (i.e., 2 years or more). SANDEE should strongly encourage researchers to finish their grants in 12-18 months.



36. Do you have any specific suggestions on how the SANDEE grant-making process could be improved? Please elaborate.

I know some of the applicants do not get timely response (sometimes no response at all) to their applications. This should stop. A response with referee reports helps the applicants to improve their proposals.

SANDEE can release grants not every cycle but at least once a year.

I think, restriction that SANDEE will not provide funding for new project when a researcher is running project funded by SANDEE should be removed. If a researcher has ability to run two projects and his second project also meets the requirements of SANDEE, SANDEE should provide funding for the second project too.

The process by far is excellent. A minor suggestion will be some hand holding to understand what the reviewers of the proposal are trying to say and help in preparing response.

I know it is extremely difficult to implement, but things would have been much easier if the grant money could be transferred directly to the recipient, bypassing the institutional hosting process. The work culture in universities (which mostly host the projects) in South Asia, and even some of the government aided research institutes are so frustrating with all their rules and regulations and a negative minded clerical staff, that it becomes a nightmare for researchers to get the money in times he/she need it. It eats up a lot of energy running from table to table and writing applications for approvals from the authority. I know many researchers have the same experience. I think many researchers would readily agree to the idea if SANDEE disburses his/her sanctioned fund directly, even if in smaller installments and with lesser intervals. I accept that there is the risk of misappropriation of money in this process, without producing the result. But I think the SANDEE researchers who come to win his/her grant through such rigorous process, are usually not that dishonest lot. And even with the present system of routing through institutions, not all the sandee grants had ended successfully. That cannot be the case for any such network. So, for some time, this new approach can be tried. That's my suggestion.

I think SANDEE should cooperate with more for research grants specifically to fund dissertation fieldwork for PhD students (both those studying at universities in the South Asia region and at universities outside the region). Since I am a SANDEE Research Grantee while pursuing my PhD outside South Asia region, I sometime felt that SANDEE should have consulted with my Supervisor regarding the progress of my research. It became difficult when SANDEE advisers want me to do something which does not match with the perceptions I shared with my supervisor.

Need to make sure that the applicants are no way related/associated – students, acquaintances – of any of the member of decision making body to avoid conflict of interest. But this could mean injustice to some potentially deserving applicants. One way could be that the proposals are assessed by a body separate from advisors.

No suggestions as of now. Just make sure that the proposal is worth it.

I think SANDEE should do positive discrimination in grant making process in favor of countries like Nepal, Bhutan and Maldivs from where very few researchers dare to apply for SANDEE. SANDEE should focus on these countries with special attention. SANDEE should create a condition that can encourage researchers from other fields (not only economists) to take part in it. Researcher like me and Kishor are among the few exceptions in the list of SANDEE Grantees. SANDEE should be more broad and multidisciplinary. It should create room for the researcher from relevant sectors concerning to

Environment and Natural Resources.

Should give some special consideration to women researchers/students especially from suppressed community. For example, In Nepal, women from Terai community, Dalit community would hardly be able to compete with others and get a grant. If things don't change, they would never come up.

Specific time frame (not more than three months to revise according to comments). Everyone including me are not worried much by time frame, which is unlikely in the case of other projects as it is understood that sandee gives sufficient time

There is need to coordination between Universities in the developing countries and SANDEE. I think the Call for proposal may be circulated to leading Universities of the South Asian countries encouraging the Teachers and Students to submit the proposal. It will raise the number of proposals. Second I think the grant making process may be speedy and the final decision should not take more that Six months after the receipt of proposal.

No it is perfect

Interactions between grantees and supervisors should be improved in order to finish the study in lesser time (at least within one year). Waiting for the next R&T to carry on the research work wastes your time and discourages the grantees decreasing their interest on the study.

SANDEE grant-making process is not difficult.

No, the process is fairly good.

I think the grant making process is fair and fine.

No, but in certain specific cases amount of grant has to be increased. For instance regarding a project related to 'climate change impacts' it needs a bit big budget to make a better project.

I think SANDEE should fund individual paper presentations at recognized international conferences for further dissemination and collect feedback for further improvement

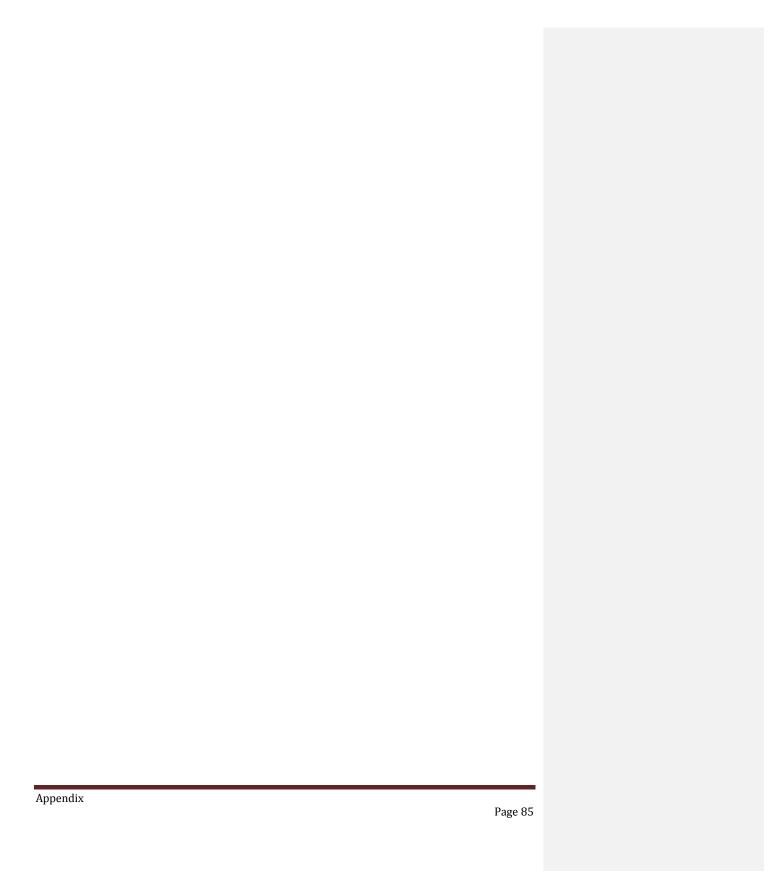
No. The existing process is OK.

Steps involved in the grant-making process should be minimized in order to save the time

SANDEE should encourage some cross-country collaborative research among the researchers.

Technical feedback on all submissions. Seed funding to develop collaborative proposals

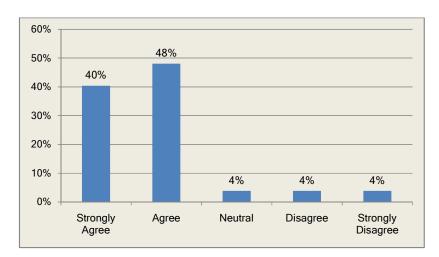
SANDEE may want to consider conditionality to ensure that the environmental economics work has impact in terms of policy change or teaching to impart knowledge learned by the grantee in their home country.



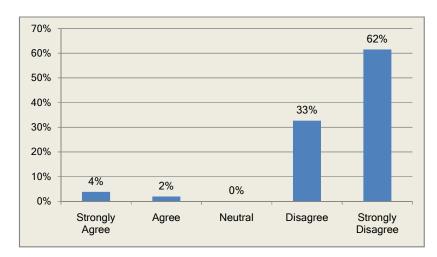
About the SANDEE Secretariat

Please indicate whether you agree or disagree with the following statements.

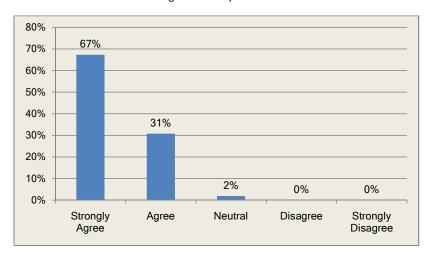
37. I received feedback on my grant proposal (s) quickly.



38. There is often a long delay between the time I send an email to the Secretariat and when I hear back.



39. I feel the SANDEE Secretariat is working hard to help researchers like me.



40. Do you have any specific suggestions on how the SANDEE Secretariat could be more efficient?

NO, as it is very efficient caring and cooperative.

Financial details to be communicated clearly to researchers.

SANDEE secretariat is doing work in an excellent manner so I have no suggestion for the SANDEE secretariat

I found it always very efficient.

I think it is working fine.

They should develop some mechanism to monitor the work of the resource persons too.

I don' know about other times. But during sandee workshop I find them exhausted although they do not show it up.

No they are doing a great job.

SANDEE should provide air ticket to its researchers before traveling instead of cost reimburse system.

SANDEE secretariat is doing excellent

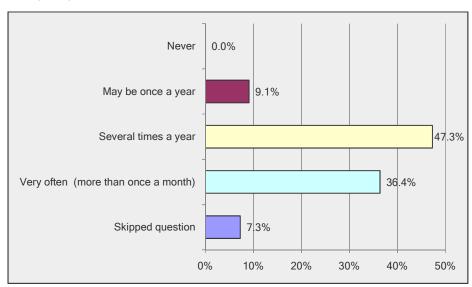
They are doing good

They sometimes don't respond quickly in general. They need to respond to every email.

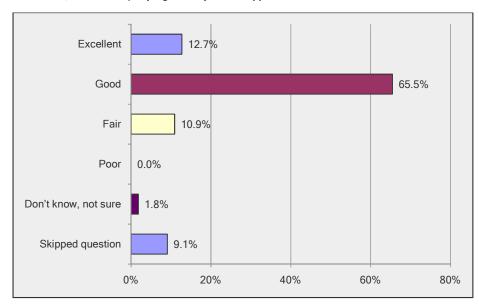
I think the Sandee Secretariat is doing excellent job. The existing level can be continued.
NIL
Make sure that grantees are given access to journals and books – this should be advertized more and reminders given of the access and its policy

About the SANDEE website and newsletter

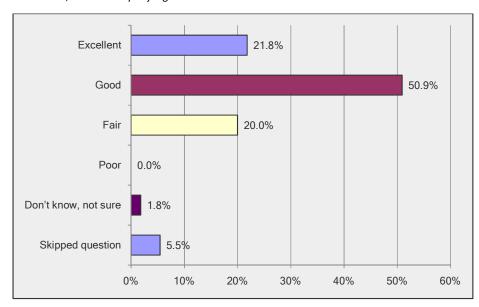
41. Aside from obtaining information on the proposal preparation guidelines, how often would you say that you visit the SANDEE website?



42. Overall, how would you judge the *layoutand appearance* of the SANDEE website?



43. Overall, how would you judge the *content* of the SANDEE website?



44. Do you have any specific suggestions for ways that the SANDEE website could be improved?

It could be made more user friendly

The new website is a significant improvement over the old one.

I think on SANDEE website, each grantee of SANDEE has an email account. It will make SANDEE website as an ehome for each grantee. Moreover, I think all the material provided in different training courses should also be placed on website.

I always think that there could be a knowledge clearing house. I learn more about research of other fellow grantees. If there could be link to IRDC library, it will be great.

It has to display the details of the SANDEE grantees after every R&T workshop.

It would tremendously benefit researchers if it can directly host an online library on environmental and ecological economics. I strongly believe and suggest it.

I think all the contents of the website including picture may be updated on regular basis. Similarly old contents may be removed after their expiry.

Including blog posts on specific subjects of current interest from different countries

More and updated photographs and news

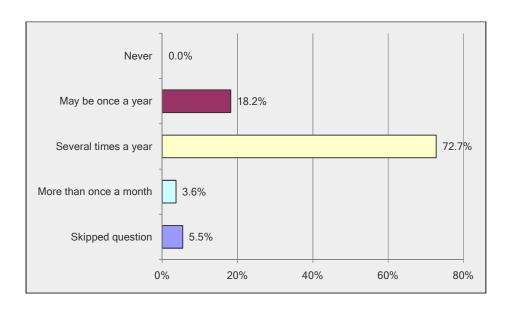
I don't have as I am not seeking information from there mostly

Nil

Schedules of upcoming workshops and related logistics should be posted. Access to books and journals should be on the website.

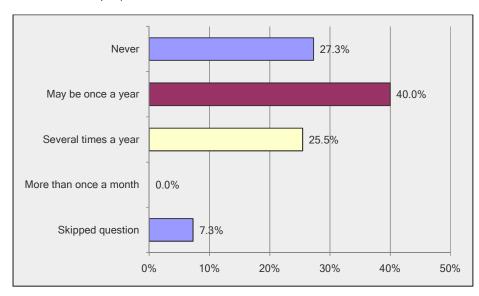
System of uploading files (e.g. progress reports) is cumbersome. It should be simplified.

45. How often do you read the SANDEE newsletter?



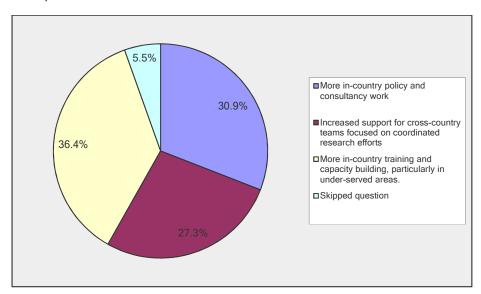
Appendix

46. How often do you pass on the SANDEE newsletter to someone else?



Looking toward the future

47. Suppose that SANDEE could only pursue one of these three new strategic directions, which one would you favor?



Choices By Country:

Answer Options	India	Pakistan	Nepal	Bangladesh	Sri Lanka
More in-country policy and consultancy work	8	3	1	3	2
ncreased support for cross-country teams focused pn coordinated research efforts	7	3	2	2	1
More in-country training and capacity building, particularly in under-served areas.	9	2	5	2	2
answered question	24	8	8	7	5
skipped question	0	0	0	0	0

Please explain the reasons for your answer ...

Suppose that SANDEE could only pursue one of these three new strategic directions, which one would you favor?	Please explain the reasons for your answer to the previous question.
More in-country policy and consultancy work	A majority of the SANDEE study contain some policy works. But, I am in doubt about how many of the policy suggestions are forwarded or disseminated to the policy makers to implement. I guess, all the researchers concentrate on completing their own research successfully first. But, later after completing the research they become busy with other works and fail to disseminate it in all of the appropriate bodies/places. If it is true, then the research becomes worthless. From that fear, I think SANDEE should think about this issue of practical dissemination/implementation of the research findings.
More in-country policy and consultancy work	This option also involves capacity building (like the third) with the advantage of it actually being useful from a policy perspective. Building research capacity in areas that don't interest the Government has very limited use.
More in-country policy and consultancy work	I think all the policies set by government are according to international environmental standards and SANDEE should provide support to evaluate government policy implementation. Usually, in developing countries environmental projects are started but these projects are not implemented in its true spirit due to non proper checks and balances after implementation. When international organizations like SANDEE are ready to check the implementation of the environmental projects, governments try to implement project in its true spirit. Moreover, provision of funds for proposal and consulting services by SANDDE will provide a forum to identify environmental problems in South Asian region.
More in-country policy and consultancy work	SANDEE has certainly added to significant research capacity in the last 10 years in this region. The researchers all had important policy angles, but their results often went unheeded in policy circles. The capacity built is not fully utilized because individual researchers often do not have the clout to influence the policy makers. As a logical next step, SANDEE can now act as the mediating agency to fill the communication gap between the researcher and the implementing authority. That would be a natural follow up to the capacity building process it was mandated with.
More in-country policy and consultancy work	Policy analysis and policy advocacy is more effective than other two options while remaining in capacity building portfolio.
More in-country policy and consultancy work	Most of the SANDEE funded research addresses regional environmental problems that have got significant policy relevance. For an individual researcher it is difficult to initiate government liaisons for getting information and background data within the stipulated period of the project. If in addition to the grant making process SANDEE gets involved in government consultancies then the researchers could avail the benefits of such network and would get hold of required information at the lowest transaction cost. Moreover, if there is direct interaction of SANDEE and the government then individual research carried out in these areas would have certain amount of credibility. This would

	obviate the need to clarify the purpose of the project repeatedly to government and community officials.
More in-country policy and consultancy work	Use of economic analysis in environmental decision making is still uncommon in the South Asian countries. Hence it is important that SANDEE type think-tanks provide the necessary push in that direction.
More in-country policy and consultancy work	Most of the policy decisions in India, more particularly in north east region of India is not backed by authentic studies
More in-country policy and consultancy work	SANDEE activities currently are at the optimum given the niche demand it meets and serves with uniqueness. If it has to go for any add on service it has to be track II service offered by SANDEE and needs a separate director and separate advisory board with overlaps so it maintains SANDEE character (of rigorous research support for policy making). My support for I is to enhance SANDEE's visibility . SANDEE trained researchers can produce quality consultancy service and quality controlled output can make regional policies stronger and better. It can bring in a culture of serious policy research supported policy formulation. But this has to be track II as I mentioned very clearly. SANDEE can grow as an institution as the products in the region from track I can provide a very important support to bridge a hug gap in the region for policy making. Experimentation in a small scale can be tried out but in track II mode.
More in-country policy and consultancy work	To make use of the capacity building already done by SANDE to its grantees
More in-country training and capacity building, particularly in under-served areas.	I think SANDEE has an excellent method in training and capacity building. For research there are other organizations like this, perhaps.
More in-country policy and consultancy work	There is a wide gap between economics research and its impact on policies in South Asia. This is more so in the case of environmental economics. Therefore, efforts should be made to fill this gap. The second reason is that there is lot of scope for carrying out research, especially Environmental Impact Assessment studies under consultancy mode. Therefore, this can be facilitated effectively by SANDEE.
More in-country policy and consultancy work	Strong buy-in from government in favor of using environmental economics and related policy recommendations is achieved more rapidly when senior academics from SANDEE persuade officials than when non-governmental organizational organizations like WWF do so alone. The buy-in will lead to real chances of training and capacity building in the public sector, including at universities.
More in-country training and capacity building, particularly in under-served areas.	The second one is technically difficult to implement and substitutable by comparison of country studies. There are many organizations with the first objective. But the third objective is seldom served and needs presence of an organization like SANDEE.

More in-country training and capacity building, particularly in under-served areas.	Reason being capacity building of agricultural economists like us are required.
More in-country training and capacity building, particularly in under-served areas.	First, third strategy is a natural extension to SANDEE, it can do this without burdening the advisors and resource persons too much. First two require a lot of thinking and capacity building within SANDEE itself which may spread the resources thin. In SE Asia, we are just learning to be good economists so I think 1st and 2nd could be a 10 year+ agenda. Second, first strategy does not seem to be SANDEEs comparative advantage. I agree with capacity building of govt and even advocating use of env economics in policy making (This is really needed!), but I hope SANDEE does not become the "solution provider" itself. If it does, then there will be conflict of interest, the members will withhold information from each other on projects they are pursuing, grantees and SANDEE may even be competitors. I also don't see the value addition by directory of environmental consultancies in the region; for jobs? Finally, the second strategy seems ambitious. We are unable to finish simpler inOcountry projects within 2 years (as you pointed out before), how can we finish something more complicated and involved? The coordination between different team members should be very good which seems difficult without adequate support. Even within SANDEE the capacity to handle multi country project would need to be developed and seems like it will take further toll on resource persons time.
More in-country training and capacity building, particularly in under-served areas.	Since Bangladesh is considered to be most vulnerable as a result of climate change, I think the 3rd option would serve its purpose better. But collaboration with the local government is a must. Without strong public-private relationship, the policies might fail.
More in-country training and capacity building, particularly in under-served areas.	Capacity building is most important, governments and other agencies can choose their consultants, but there is should be in-country capacity made available.
More in-country training and capacity building, particularly in under-served areas.	I think multidisciplinary research is the need of the hour. Many economists working on climate change require some knowledge of chemistry, physics etc. or need to collaborate with researchers from these fields. Hence my support for option
More in-country training and capacity building, particularly in under-served areas.	There is many under served area within this region hence it is necessary to provide training and capacity building in this region.
More in-country training and capacity building, particularly in under-served areas.	Capacity building should be the first step towards strengthening the country's development foundation, and there is a need for quality training organization in this region. If it is SANDEE, one can expect better quality training.
More in-country training and capacity building, particularly in under-served areas.	Environmental economics particularly in South India is a recently introduced subject. Application of economics is also taught on so to so basis without proper practical application methods. Although the scores are high in exams the knowledge base is not strong. Therefore capacity building courses for such regions would encourage research

	on environmental problems and help them to learn
More in-country training and capacity building, particularly in under-served areas.	Because I think still there are several issues particularly in Pakistan we need to do research on to serve people of those areas.
More in-country training and capacity building, particularly in under-served areas.	I feel that it might be relative easier and effective to work in in-country training and capacity building in under served knowledge areas. Capacity building and more scientific research would ultimately result in influencing country policies. Coordinated research between cross country teams are quite difficult in South Asia due to politically created barriers (eg. India and Pakistan) and difference in research interests.
More in-country training and capacity building, particularly in under-served areas.	Strategy 3 will encourage many people in under-served areas to focus environmental issues and develop suitable policy in the country as well as at the local level.
More in-country training and capacity building, particularly in under-served areas.	Has a greater impact in S Asian countries
More in-country training and capacity building, particularly in under-served areas.	Being a non-economist (I am an urban and regional planner), I think the third strategy will encourage researchers of different discipline to deliver their understanding in contemporary research issues along with the economic aspects. For example, a planner can highlight the importance of incorporating spatial dimension to promote effective policy objectives for achieving balanced regional development.
Increased support for cross- country teams focused on coordinated research efforts	Policy work, while important and helpful in raising SANDEE's profile, is often driven by capricious and ignorant governments, be they in the developing or developed world. Given the very poor capacity in economics and environment in South Asia, serious capacity building needs a scale of intervention that SANDEE or most single organizations are incapable of. On the other hand, SANDEE's network across South Asia, and its more global base of resource persons can facilitate solid research on topics of regional, supranational interest; research that can have a longer lasting impact and large geographical/political economic span.
Increased support for cross- country teams focused on coordinated research efforts	Many of the issues faced by South Asian countries cut across the boundaries – eg, industrial pollution, vehicular pollution, managing a CPR etc., same times many issues are complex – collaborative research projects would be more useful in solving these problems
Increased support for cross- country teams focused on coordinated research efforts	This would help exploring the environmental issues and problems at the regional levels. Studies may suggest more comprehensive policies to handle these issues.
Increased support for cross- country teams focused on	Professional linkages are poor in South Asia. Some countries are more competitive (front as well as back doors) whereas some other countries are not much competitive.

coordinated research efforts	Cross country team building will make the entire SA more competitive.
Increased support for cross- country teams focused on coordinated research efforts	Environment itself is not a local; it is integrated and interrelated with time and space
Increased support for cross- country teams focused on coordinated research efforts	I can see the value of the cross-country teams more clearly.
Increased support for cross- country teams focused on coordinated research efforts	It will make possible to learn about experiences of various researchers of different countries and will also strengthen future collaboration among researchers

48. What additional assistance and support could SANDEE offer researchers such as youto help with the dissemination and publication of your research? Please indicate your top three priorities.

[1= highest priority, 2 = next highest priority, 3 = third highest priority]

Answer Options	Percent first priority	Percent second priority	Percent third priority	Percent total votes
More support from the secretariat to get the word out to national and local policy makers	12.7%	14.5%	12.7%	13.3%
Financial support for individuals travel to international meetings	12.7%	16.4%	23.6%	17.6%
Organize SANDEE panels/groups at major conferences	16.4%	29.1%	7.3%	17.6%
Support for publishing in peer reviewed journals/books	40.0%	9.1%	12.7%	20.6%
More editing services	3.6%	1.8%	7.3%	4.2%
Greater financial incentives	0.0%	3.6%	0.0%	1.2%
Skipped Question	14.5%	25.5%	36.4%	25.5%
Total	100%	100%	100%	100%

Other (Please specify):

Trainings in emerging areas to teachers

Perhaps SANDEE could put together studies of similar kind in a book form and publish it in collaboration with some reputed publishers. I think SANDEE has taken this initiative already and I would only urge SANDEE to give it top priority. Also, the policy briefs of the SANDEE studies could be put together into some kind of policy reader.

SANDEE's work is highly qualified. Therefore, a quality journal should be published twice a year under SANDEE guidance.

anize one or two day workshop only for the SANDEE grantees who already completed the research.	
re support with the methodology and the analysis.	
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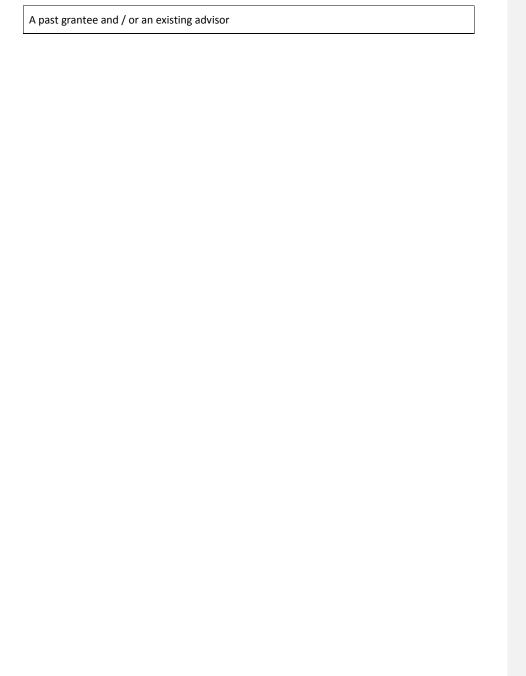
49. Two of the other networks (EEPSEA and LACEEP) have had their founding Director step down, and thus they have had to address the questions associated with a transition to a new Director. Suppose that for some reason PriyaShyamsundardecided to relinquish her current position as Director of SANDEE, who would you recommend as possible candidates for the next Director of SANDEE?

Rucha Gate
Jeff Vincent
PranabMukhopadhya
Prof. EnamulHaque
Jeff Vincent
i)Prof. A. K. EnamulHaque –Bangladesh ii)Dr. Mani-Nepal iii)Dr. Pranab -India
Dr. PranabMukhopadyay
I think she is the best choice.
INAM UL HAQ / JEF VINCENT
Prof. Enam or Prof. Pranab
Jeff Vincent (Pranab if it requires to be from South Asia)
EnamulHaque (Bangladesh)
PriyaShyamsundar is found to be a dynamic, self-motivated and highly professional lady. Her devotion to SANDEE is un-measurable. I think SANDEE of her third child. That's why, alternate candidate is rare.
If need arises I can offer my service for the same for at least two/three years. Besides, I can think of PranabMukhopadhyay, EnamulHaque, Amita Shah. I feel we all will follow Priya'sgood practices and example with passion to maintain SANDEE network going and growing as we all feel it has to stay there for a decade at least for regional interest.
Cant think beyond her-will respond when it comes into reality
No body can be like Dr. PriyaShyamsundar. She is a great lady. I do not think anybody can do this job as efficiently as she is doing.

In my opinion, PriyaShyamsundar should continue. I am not sure about another committed

person like Priya.

I think she should continue at least next 5 years



Appendix

50. I may have forgotten to ask you about something that you feelis important. Is there anything you would like to see SANDEE do differently? Or is there anything else you would like to tell me about SANDEE? Please remember that I will keep your identity confidential.

SANDEE should try to avoid treating all grantees like research students. Not all grantees have similar needs and abilities.

Research funding bias and resource persons bias - this may be there in any network. If can be minimized, SANDEE reach will improve.

SANDEE should sustain the way it is doing now.

I think, each South Asian country has an advisor (resource person) in the SANDEE. At this stage, resource persons are from India and Bangladesh but other South Asian countries are not represented. In my opinion, having an advisor from each South Asian country is necessary to make it true South Asian Network for Development and Environmental Economics.

SANDEE should also consider proposals that fall purely in the domain of development economics, without an explicit reference to environment or climate change. In the ultimate analysis, poverty and development are related to environment. But in a micro level study, the link is sometimes not explicit. It is difficult for a new researcher to bring environment into his/her research question and in a desperate attempt to bring it in, he/she might make the proposal clumsy and unattractive. But in reality, he/she might have identified a very crucial local issue that relates to poverty and development, which has an environmental implication in an indirect way. For example, there is a burning issue in my part of India (State of West Bengal) where land acquisition efforts by the state government for industrialization has resulted in a political chaos and a lot of bloodshed in recent times. It led to the rise in extreme left terrorist activities as well. There is all the potential of some good micro-level studies on households' behaviour regarding dispensing with their agricultural land. But there is little scope for such a proposal to get a SANDEE support because it might not directly address an environmental issue. I think 'EE' had taken up all the attention at the cost of 'D' in SANDEE so far.

I feel that SANDEE has created a unique facility for researchers in South Asia. Its current director has taken special efforts to see that real benefit goes to each and every research that comes to SANDEE. I have not come across any such network that offers this high quality guidance, including extra hand-holding. SANDEE has played a special role in my life and I would have missed on a lot had I not come in contact with the network. There is a suggestion that comes completely out of my personal interest, it is clearly not one of SANDEE's priorities - Create a small fund for those who are interested in taking research findings to the filed in the form of some developmental work in the field of conservation etc.

I find their mails asking me to submit the reports quite threatening. Instead of asking all researchers to submit the progress reports in a fixed format, they should allow for some flexibility. How can I submit summary statistics of the survey if it is yet not completed? They should also send a reminder mail at least 10 days before the progress reports are due. I found it quite annoying to get a reminder merely 4-5 days before the progress reports were due.

Enable SANDEE to accommodate scholars from relevant fields of EE rather than only economists

Most of the research conducted by SANDEE grantees are academic type. I feel SANDEE needs some focus on DRR and Climate change issues with the participation of affected communities (not only carbon trading but also assessments on adaptive measures).

I did not find any other place tot talk about the program director and the secretariat and thought I would do it here. From the day of my first presentation Dr. Shyamsundar guided me with the project that some times went beyond academic

advises. There had been numerous instances when she facilitated communication with my advisors so that I would realize what my immediate task would be. She sorted out the directions in which I should continue my research when I received unfavourable comments from the discussants. Of course she chastised me when there are lags on my part. This project continued for long under many difficulties and the survey took a long time to complete. In the last R&T in Kathmandu 2009 there were questions regarding the model I was about to estimate. This came at a stage when I have already prepared the draft manuscript and about to finalize my estimation. She listened to the comments with me and asked me to sit aside from the day's presentation and rework my model. Later she sat with the modified model with me and my advisor and finalized the whole work. I sincerely believe that without her firm intervention this would never have been possible. There had been many other trivial instances where she intervened like during grant release, the issue of using particular data entry soft wares where I found she understood the entire difficulty I faced without even me explicitly mentioning it. I am deeply indebted to her and the SANDEE secretariat for this wonderful work experience.

Most SANDEE researchers would appreciate if Secretariat based staffs, especially two women officers, were a bit more polite in their language and dealings!

Yes. SANDEE can promote action research, analytical research, advocacy and those that result in dialogues with the government for the welfare of the society and improving environment. I feel the current focus of researchers is mainly on econometric modeling.

Advisor should visit grantee's field area for better understanding of issue. Meeting with advisor between R&T

Even though SANDEE training courses are very important, certain courses are more compressed & inflexible and try to give a lot of things in less time. This makes it difficult to grasp a lot of things.

SANDEE should provide some refreshment allowance of its participants and trainees.

More focus on socioeconomic issues, interdisciplinary problem solving techniques. Should give priority to lab based experiment to support field based output.

Till now I am happy and grateful for the support received from SANDEE.

I think three other very high value added service of SANDEE in the region. First is to bring together otherwise every loose regional cooperation despite strong historical bonding. Second, to expose regional young researchers to top ranking teachers /personalities/nobel prize winning personalities and interact with them on one on one and comment on their research issues, progress. This has changed the perspective of researchers from the region , have given them confidence and made dreams come true. Third, to compile all case studies in book volumes which can now form a good reference material in the region in class room teaching. This helps students as they can grow up with examples from the region of theories and concepts.

The informal approach and family feeling. This perhaps is the strongest point. You feel free to interact with anyone, ask foolish questions, you feel at home. I think this atmosphere is very important for an efficient learning process.

SANDEE places too much emphasis on modeling. I think research based on in-depth analysis of qualitative information / simple analytic techniques should also be given adequate representation in its portfolio of research grants.

Greater engagement with policymaking community

SANDEE is really helping young researchers in building their capacity in the field of Environmental Economics research.

The social policy they maintain is really good in that they equally treat everyone irrespective of their level of experience, seniority or any other aspect. Their main objective is capacity building and they really do, not like an NGO in general.

During my participation in the R&T workshop, I found that there were diversified opinions from the advisors on the proposals. I do appreciate that most of them seem very relevant and enrich each and every research work. But in many cases the suggestions/comments were conflicting too. Therefore, it becomes difficult for the young researcher to satisfy all the panelists and to focus on the topic. I do not know the solution to the mentioned issue, but I think this point needs to be addressed.

About yourself and your current activities

51. Your gender?

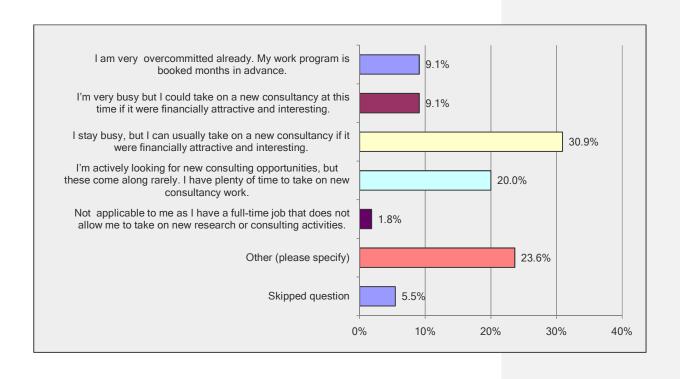
Answer Options	All	India	Pakistan	Nepal	Bangladesh	Sri Lanka
Male	37	13	7	8	5	4
Female	14	10	1	0	2	1
Skipped question	4	1	0	0	0	0

Comment [s1]: 3 of them did not report their country.

52. What is your home country (i.e. your citizenship)?

Answer Options	Frequency		
India	24		
Pakistan	8		
Nepal	8		
Bangladesh	7		
Sri Lanka	5		
No response	3		

53. How would you describe the time you have currently available to take on new consulting opportunities?



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Appendix

Choices By Country:

Answer Options	India	Pakistan	Nepal	Bangladesh	Sri Lanka
I am very overcommitted already. My work program is booked months in advance.	2	0	2	0	1
I'm very busy but I could take on a new consultancy at this time if it were financially attractive and interesting.	2	2	0	1	0
I stay busy, but I can usually take on a new consultancy if it were financially attractive and interesting.	6	2	5	2	2
I'm actively looking for new consulting opportunities, but these come along rarely. I have plenty of time to take on new consultancy work.	6	3	0	1	1
Not applicable to me as I have a full-time job that does not allow me to take on new research or consulting activities.	0	0	0	1	0
Other (please specify)	8	1	1	2	1
answered question	24	8	8	7	5
skipped question	0	0	0	0	0

Other (please specify):

At the moment I'm surprisingly busy, but hopefully this will change about 6 months down the road.

I am in my PhD work. From next Fall I am going to be free

Not in next one year given my prior commitments

My job keeps me occupied as I coordinate several research projects along with teaching responsibilities. However, I keep looking for interesting work on my topic of interest, namely economics of climate change adaptation.

I stay busy, but can take up new work if it is relevant to my work and interests as well meet the costs of assignment according to my institution's policy

At least for 6 months from now I do not have any time take up new consultancy opportunity.

Not applicable to me as I am a full-time Ph.D student.

I am not yet capable enough to offer consulting.

After completion of my PhD, I will be interested in Post Doctoral Fellow positions that could further augment my research and academic career

I am committed to add more time to my present research whenever I get it, instead of taking up new ones

I can take consultancy provided I can work being in Delhi.

I am Ph.D. scholar and very busy in Ph.D research

I'm very busy but I could take on a new consultancy at this time if it were related to my research interest (environmental or industrial economics) and related to my home country (Bangladesh), more specifically related to my interested study location (South-West region of Bangladesh)

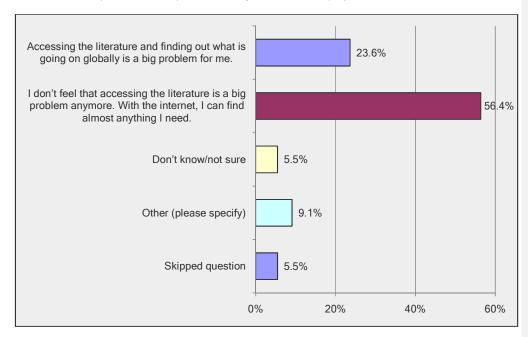
54. Over the past 12 months, have you reviewed an article or paper for a peer-reviewed journal?

Answer Options	Response Percent	
Yes	47.1%	
No	52.9%	

Mean number of reviews	3.4
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Appendix

55. If you were not involved with SANDEE, how would you describe your ability to access the global literature you need when you are starting a new research project?



Answers by Country:

Answer Options	India	Pakistan	Nepal	Bangladesh	Sri Lanka
Accessing the literature and finding out what is going on globally is a big problem for me.	4	4	4	1	0
I don't feel that accessing the literature is a big problem anymore. With the internet, I can find almost anything I need.	16	3	2	5	5
Don't know/not sure	2	1	0	0	0
Other (please specify)	2	0	2	1	0
answered question	24	8	8	7	5
skipped question	0	0	0	0	0

Comments:

Being an academic, I can access the literature through the subscription facility of my university.

I have excellent access to global lit in TERI through its library

Sometimes it is really difficult to find the literature related to my research interest

Accessing the specific literature is a problem especially in Nepal

I have a fantastic supervisor and access to a good library so I don't see this as a problem

56. In your current professional activities, do you have regular conduct with students and/or other researchers?

Answer Options	Response Percent
Yes	85.5%
No	9.1%
Skipped question	5.5%

57.	If YES, have you have encouraged your students or other researchers to apply for a SANDEE
	grant?

Total number of students and other researchers encouraged	36
---	----

IF YES, number of students or researchers encouraged:

Mean	6.3
Median	3

If NO, please explain why you have not encouraged others to apply to SANDEE:

People of my acquaintances are planners, architects and engineers. SANDEE is basically concerned with the economic issues.

not applicable as majority of my students are pursuing under graduate courses

because they think SANDEE is only for economists and thus they lack the confidence to face SANDEE's Tuff Grant making Process

I work with social science, environmental science, and marketing/finance researchers or consultants who are not eligible since they are not environmental economists. I am trying hard to recruit economics students and get them interested in policy work. I often try to entice them by a grant from SANDEE, but everyone is interested in BPO, IT and investment banking in and around Mumbai. I also could not find a student who has interest and more importantly some capability or inclination for research. I even tried to give 2 internships as MS project from SANDEE grant, but.... I think the problem is where I am located (Mumbai).

58. If you have encouraged other people to submit proposals to SANDEE, did any of these actually submit a proposal?

Answer Options	Response Percent
Yes	60.0%
No	16.4%
Skipped question	23.6%

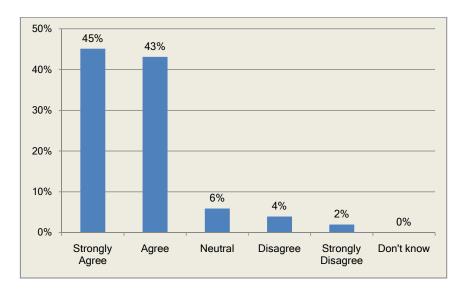
If YES, were any successful?

Answer Options	Response Percent
Yes	27.3%
No	23.6%
Skipped question	49.1%

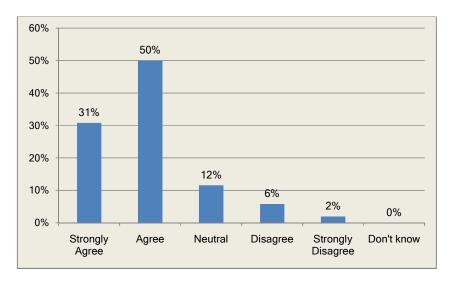
Your Environmental Attitudes and Perceptions

Please indicate whether you agree or disagree with the following statements:

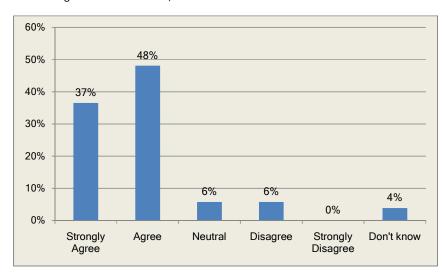
59. Too much consumption in rich countries poses a serious threat to the global environment.



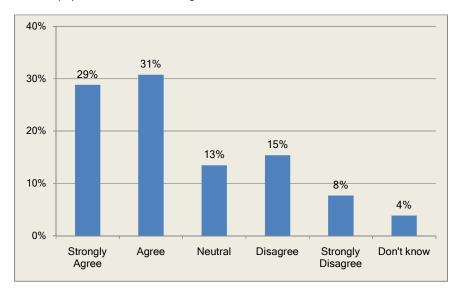
60. Rapid population growth in developing countries poses a serious threat to the global environment.



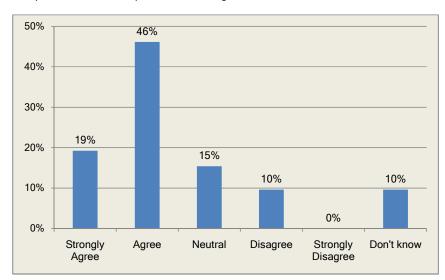
61. We are running out of raw materials, such as timber and oil.



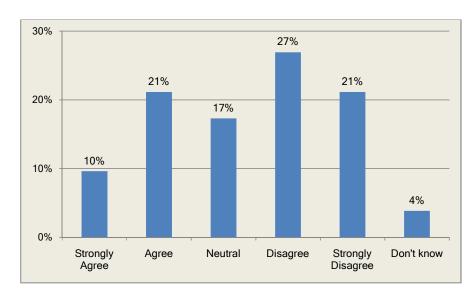
62. Nature sets physical limits to economic growth.



63. It is likely that the 21st century will see wars fought over water resources.

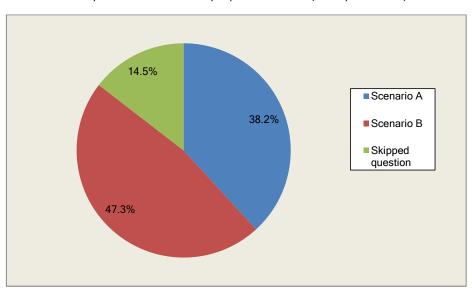


64. Society has sufficient adaptive capacity to avoid serious damage from climate change.



A question about the future

65. Which scenario do you think most accurately depicts the future? (check your answer)



Answers by Country:

Answer Options	India	Pakistan	Nepal	Bangladesh	Sri Lanka
Scenario A	9	3	3	3	3
Scenario B	14	4	5	2	1
answered question	23	7	8	5	4
skipped question	1	1	0	2	1

66. Please consider the following list of problems that the Government in your country needs to address over the next ten years and check the ones that you feel should have the first and second priorities (choose only one choice for First and one choice for Second):

Answer Options	Percent first priority Percent second priority		Percent total votes	
Crime	7.3%	3.6%	5.5%	
Unemployment	16.4%	7.3%	11.8%	
Air pollution	1.8%	1.8%	1.8%	
Poverty alleviation	32.7%	14.5%	23.6%	
Water pollution	3.6%	5.5%	4.5%	
Public education	12.7%	18.2%	15.5%	
Health care	1.8%	5.5%	3.6%	
Economic growth	7.3%	12.7%	10.0%	
International terrorism	3.6%	7.3%	5.5%	
Global warming	0.0%	10.9%	5.5%	
Skipped Question	12.7%	12.7%	12.7%	
Total	100%	100%	100%	

Total Votes to First and Second Priority by Country:

Answer Options	India	Pakistan	Nepal	Bangladesh	Sri Lanka
Crime	2	3	1	0	0
Unemployment	3	3	5	1	1
Air pollution	2	0	0	0	0
Poverty alleviation	17	2	2	3	2
Water pollution	4	1	0	0	0
Public education	8	4	4	1	0
Health care	3	0	0	1	0
Economic growth	4	1	2	1	3
International terrorism	3	2	0	0	1
Global warming	2	0	2	1	1
answered question	24	8	8	4	4
skipped question	0	0	0	3	1

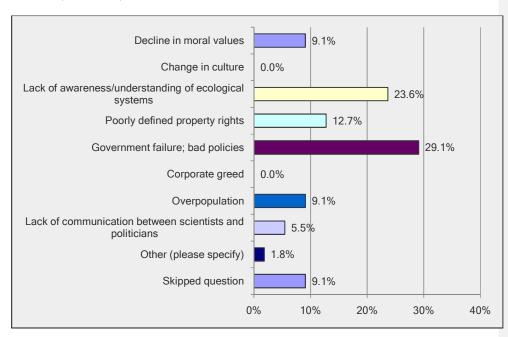
67. Please consider the following list of 9 environmental problems and check the ones that you feel should have the 1st and 2nd priorities in your country(choose only one choice for First an one choice for Second):

Answer Options	Percent first priority	Percent second priority	Percent total votes
Air pollution	16.4%	14.5%	15.5%
Contamination of drinking water	32.7%	9.1%	20.9%
Poor solid waste disposal	7.3%	10.9%	9.1%
Global warming	7.3%	10.9%	9.1%
Solid erosion	5.5%	0.0%	2.7%
Surface water pollution	9.1%	3.6%	6.4%
Improper disposal of hazardous wastes	1.8%	10.9%	6.4%
Loss of biodiversity	0.0%	14.5%	7.3%
Loss of wetlands	3.6%	9.1%	6.4%
Skipped Question	16.4%	16.4%	16.4%
Total	100%	100%	100%

Total Votes to First and Second Priority by Country:

Answer Options	India	Pakistan	Nepal	Bangladesh	Sri Lanka
Air pollution	7	4	1	3	2
Contamination of drinking water	14	4	2	2	1
Poor solid waste disposal	6	1	1	0	2
Global warming	4	0	5	1	0
Solid erosion	0	0	3	0	0
Surface water pollution	6	0	1	0	0
Improper disposal of hazardous wastes	2	3	1	0	1
Loss of biodiversity	5	1	2	0	0
Loss of wetlands	2	1	0	2	2
answered question	23	7	8	4	4
skipped question	1	1	0	3	1

68. What do you think is the most important underlying reason for environmental problems in your country(choose only one reason)?



Other (please specify):

Most of the politicians are corrupt and evolve populist policies.

Answers by Country:

Answer Options	India	Pakistan	Nepal	Bangladesh	Sri Lanka
Decline in moral values	2	1	1	1	0
Change in culture	0	0	0	0	0
Lack of awareness/understanding of ecological	9	1	1	1	1

systems					
Poorly defined property rights	5	1	0	0	1
Government failure; bad policies	5	2	6	2	1
Corporate greed	0	0	0	0	0
Overpopulation	2	1	0	1	1
Lack of communication between scientists and politicians	0	2	0	0	1
Other (please specify)	1	0	0	0	0
answered question	24	8	8	5	5
skipped question	0	0	0	2	o