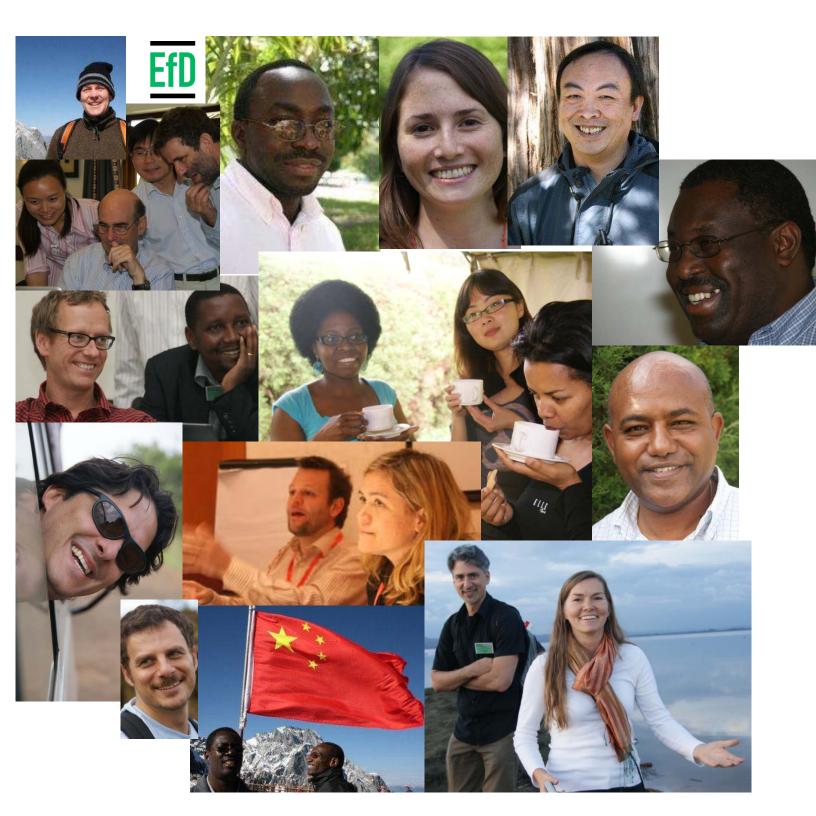
# Environment for Development Initiative-Annual report to Sida 2010



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# 1 EXECUTIVE SUMMARY AND MESSAGE FROM OUR DIRECTOR

This is the annual report for the Environment for Development initiative for 2010. This was a bridging year between the original three year agreement 2007-2009 that established the EfD initiative and the consolidation phase 2011-2014 that was decided upon late 2010. The overall objective of the program is to improve welfare among poor people in developing countries by preventing pollution and natural resource depletion, and to promote sustainable use of natural resources and ecosystems through the use of environmental economics. This is done through the establishment of EfD centers in China, Costa Rica, Ethiopia, Kenya, South Africa and Tanzania. These centers are supported through core administrative support, a research fund, and funds to strengthen academic training and policy interaction.

One of the important objectives in the EfD initiative is to establish sustainable research centers. An important ambition is to create a vibrant research environment through the attraction of at least a handful of PhD's. It is very rewarding to see that this has already been accomplished in half of the centers, as can be seen in Table 1. In four out of the six centers there is now a critical mass of 10 or more people working at the center on a day-to-day basis. The challenge seems to be in Ethiopia and Kenya, where the centers are located at government policy research institutes (EDRI and KIPPRA) but staffed with academics from the local universities. Another objective is to link the centers both to domestic and international researchers. Overall, this seems to have been a successful strategy which can be seen both in the number of associates but also in the number of joint publications. Tanzania seems to have fewer than the others, but these collaborations are on the other side very intensive. Another important indicator of sustainability is the number of donors and the reliance on the core support from Sida. Here we see a similar pattern as we saw regarding staffing, that the academic institutions have already been quite successful in diversifying the funding while Ethiopia and Kenya are still more reliant on the Sida-support. These centers share, however, the long-term staffing security of the other centers since key members have academic appointments.

	Staff	Staff				Funding/Donors		
	Research Fellow	Others	Domestic research associates	International associates	Number of Donors.	Sida %		
Central America	5	7	1	4	6	40		
China	6	4	2	6	6	55		
Ethiopia	3	2	4	10	2	79		
Kenya	3	1	9	2	1	100		
South Africa	5	4	5	5	4	44		
Tanzania	4	5	1	2	4	63		

Table 1: Staff and funding per center 2010

The EfD initiative has as an explicit objective to produce high quality, policy relevant research. The most conventional indicator for research is number of peer reviewed articles. As can be seen in Table 2, the EfD centers have now matured into publishing primarily in peer reviewed journals. This is in sharp contrast to the previous year when there were 50 discussion papers but only 14 journal articles. It is also

an expected, but still very welcome receipt that the research and publishing strategy has been working. The investment in copy editing of discussion papers has obviously paid off. We can also see that policy briefs are being produced, but that much more can be expected on that front in the future. We are also looking forward to a more even distribution of publications between the centers.

	Peer Reviewed Articles	EfD Discussion Paper	Discussion Papers	Book chapters	Books	Policy Briefs	Reports
Central America	1	6	1	4	2	3	7
China	15	2	5	3		7	1
Ethiopia	4	5	2	1		1	
Kenya	1	2			1		2
South Africa	11	3			1	3	6
Tanzania	4	1					
Total all centers	36	19	8	12	4	14	16

Table 2: Publications per category 2010

A third pillar in the EfD initiative is the link to academic programs. In Table 3 we can see the engagement of the EfD fellows in undergraduate, MSc and PhD courses and theses in environmental economics. More than 400 undergraduate students took environmental economics courses. Maybe even more impressive is the fact that almost 250 MSc students took masters courses in environmental and natural resource economics. This led to 23 MSc theses, a number we hope to see grow in the years to come. The table also reminds us of the fact that all centers are involved in PhD programs. EfD can play a pivotal role in making sure that these programs can also provide high quality courses and supervision.

	Undergraduate courses		Msc Courses			PhD courses		
	Courses	Students	Courses	Students	Students Theses		Courses Students	
Central America	2	60	4	48	9			1
China	1	40	1	50	3	2	26	
Ethiopia			2	27	5			
Kenya	4	186	2	33	3	2	14	1
South Africa	1	10	3	46				1
Tanzania	3	136	2	42	3	3	39	4

Table 3: Academic capacity building 2010

# 2 CENTER PRESENTATIONS

# 2.1 Central America

#### 2.1.1 Message from our coordinator

The year 2010 has been a good one, full of changes, new things, and above all, full of interesting challenges. From the moment we started working on planning activities for the period, we felt in the air that the transitions in 2010 were not going to be easy. As good competitors and sportspersons knowing that, helped us to speed up and get momentum for the challenges and opportunities we had to face. In this report we present the most important results achieved in EfD-CA/CATIE during the year.

I would like to highlight some achievements of this period that, from my perspective, are of especially value. First, at the beginning of the year we received Alex Pfaff here in CATIE and we presented him a concrete and timely idea. Just six months later that idea became a research project sponsored by the Tinker Foundation; an unprecedented achievement for us. Most importantly this achievement demonstrates our ability to compete as a center at the same level with universities and research centers worldwide.

Another major success in 2010 was simply the growth in number of staff. This year four new members and two doctoral students joined the Center. Our most senior staff has managed to consolidate their most important career aspirations and exorcise a very good leadership which benefits the whole team. Thus we have succeeded in forming a group of thoughtful people with a research agenda which profiles EfD-CA/CATIE as a true "Think Tank" in economics and environmental policy. This gives us a great sense of pride and commitment. On the one hand, proud to be able to have people of such high professional quality and on the other, commitment to provide the conditions necessary for all to realize release our full potential.

I also want to draw attention to our efforts in local capacity building through the EfD seminar series. Throughout the year, both EfD-CA staff and the whole community at CATIE enjoyed very stimulating presentations. These seminars not only allow us to discuss, share ideas, and learn about the remarkable work others are doing but in addition they allow us to expand our network of researchers and decision makers.

Finally, I like to thank the Center administrative staff for their phenomenal work. Keeping the house in order in a micro world of administrative details, donor relations, steady stream of small projects, activities, and workshops, is not easy. But they have been very successful in doing so. This allowed others to do better their tasks in the other micro world of research, training, and policy incidence.

Just like the year the 2010, the one to come will be very interesting and full of challenges as well. 2011 marks the beginning of new phase in other important projects related to the Centre, as is the case of LACEEP. We signed a four year agreement with EFD, from 2011 to 2014. We must look ahead in our challenge to maintain our strong relation with existing donors and to seek more. We continue working on it as there are many opportunities ahead.

Thanks to everyone for their commitment, for joining our ambition to create a world-class center for research and independent thought, and for your confidence in believing that it is here, together, that we can be achieved this goal.

Francisco Alpízar Coordinator EfD-CA

## 2.1.2 EfD Central America center staff

#### Local researchers and staff

Ph.D. Francisco Alpízar, Coordinator and senior research fellow Ph.D. Juan Robalino, Senior research fellow Ph.D. Alvaro Umaña, Senior research fellow Ph.D. Adriana Chacon, Research fellow M.Sc. Roger Madrigal, Research fellow M.Sc. Maria A. Naranjo, Research fellow MALD, MA. Carlos L. Muñoz , Policy Analyst and research fellow M.Sc. Laura Villalobos, Research fellow BSc. Irene Burgues, Research Fellow BSc. Catalina Sandoval and Susan Burton, Junior research fellows Lizette Delgado, Administrative and secretarial support BSc. Alberto Vargas, Administrative support Domestic research associates PhD. Raffaele Vignola, Research Fellow International research associates Ph.D. Allen Blackman, Research Associate Dr. Jorge Rivera, Research Associate Dr. Rodrigo Arriagada, Research Associate Anna Nordén, PhD candidate

### 2.1.3 Networks

EfD-CA has an extended list of national and international partners which provide a wide range of network support to projects and initiatives around the core issues in research, policy advice, and training. This network has been built on throughout the years the Center has been in operation. Our goal is to solidify our current alliances and to broaden our network in order to achieve greater impact in Central America.

We recently signed an agreement with **Costa Rica's** <u>National Forestry Financing Fund (FONAFIFO)</u> which would allow us to continue our work on Ecosystem Services and payments schemes. In collaboration with <u>Alexander Pfaff</u> from <u>The Sanford School of Public Policy</u> at Duke University, EfD-CA is working on evaluations of impacts of protected areas in Costa Rica, Mexico, and Brazil, with financial support from the <u>Inter-American Development Bank</u> and the <u>Inter-American Institute for Global</u> <u>Change Research</u>.

The work on protected areas in Costa Rica continues to tackle issues on evaluation, financing, and decentralization of the provision of basic services but is expanding by including institutional and policy analysis of the impacts of climate change on biodiversity and ecosystem services provision. This is done in collaboration with <u>The Nature Conservancy</u>, the <u>National System of Protected Areas</u>, and the <u>Forever</u> <u>Costa Rica Association</u>.

Furthermore, other important partners in the Latin America and the Caribbean are the Latin American and Caribbean Environmental Economics Program (LACEEP), and several programs within CATIE, and the National Institute of Ecology in Mexico.

## 2.1.4 Donors and funding

EfD-CA offers an attractive opportunity for donors and partners interested in supporting our activities and innovative programmatic agenda. We are grateful to our donors and partners who contributed to our work during 2010: Latin American and Caribbean Environmental Economics Program (LACEEP), The Tinker Foundation, Inter-American Institute for Global Change Research in collaboration with The

List of Donors	Funding by donor during 2010
1) LACEEP	17.1%
2) Tinker Foundation	3.2%
3) IAI via Duke University	9.7%
4) Tinker via RFF	11.9%
5) Other via EfD	18.2%
Sida/EfD funding as share of total center budget (incl eg univ salary)	39.9%

Sanford School of Public Policy at Duke University, Swedish International Development Cooperation Agency (Sida) through the EfD Initiative

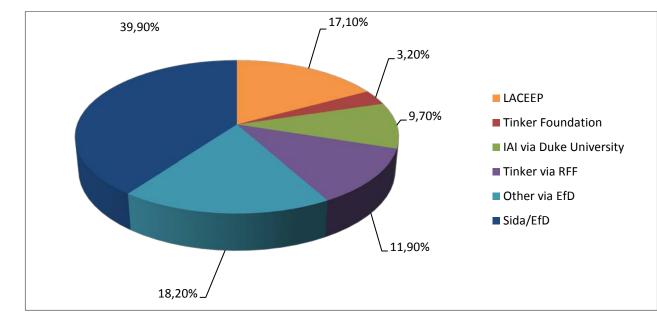


Table 4: List of Donors Central America

Figure 1: Total center budget in percentage by donor

# 2.2 China

#### 2.2.1 Message from our coordinator

Achieving balance between economic development and environmental protection, including natural resource conservation, has been the focus of attention both in the political and the academic arena. In China, many economic analyses point to the facts that the policy of environmental protection such as pollution control and emission reduction has been undercut by over-emphasis of economic development goals at the local level, while in natural resource side economic opportunity has been much limited by fast expansion of government sponsored ecological programs. Examples of failure of government program dealing with poverty reduction are abundant in the natural resource sector in particular, while the government is realizing the importance of sustainable development and paying more attention to it. The Chinese government, in the preparation of its "Twelfth Five-Year Plan (2011-2015)" with the determination and emphasis on clean, green technology and sustainable development, has been ranked as No.1 in clean energy investment globally, and believed to take the lead on Green Race while maintaining a stable economic growth rate at 7 per cent in the coming years.

Most of the EfD (China) center (also known as Environmental Economics Program in China, EEPC) works focused on forest policy, in recent years on reform of state forest sector and collective tenure system. These two themes have been top priority on the agenda of central government and have merged into the broader national agenda of establishing a new countryside. Researches and investigations of EEPC have provided academia and the government agencies most comprehensive information with regard to baseline situation in both state and collective forest sectors. During the period of 2006 and 2008, the collective forest tenure reform has spread to 14 provinces of China, while it has been widely acknowledged that lack of appropriate mechanism and incentive in the state forest sector underpins more severe poverty in forested areas and unsatisfactory performance of forest resource conservation. Policy recommendations made by EEPC researchers are influential.

EEPC is a research program focusing on applied policy research. In particular it attempts to identify the areas of environmental policy improvement and address the policy needs in conducting social and economic assessment of ongoing public program. The goal of EEPC is to build a world class environmental economics program at Peking University, which can produce high quality international publications, provide rigorous economic training to Master's and Ph.D. students, and actively engage in policy dialogue with policy makers on environment regulation and natural resource management.

During 2010 EEPC has been stick to rigorous environmental economics research in policy related spheres, with most of its focus on following up with China's collective forest tenure reform and providing policy recommendations to cope with current problems and future challenges. EEPC has also been involved in the preparation for mechanism improvement in state-owned forest areas, in terms of policy dialogues with relevant policy-making department in the State Forest Administration of China. Policy recommendations have been provided by EEPC in association with Beijing Transportation Research Center of Beijing Municipal Commission of Transportation, based on the co-organized international conference on urban transportation management and environmental policy in August 2010. In the context of the global climate change, EEPC has engaged in the monitoring and drafting reports on its projects of carbon accounting and credit market designing and agricultural carbon sequestration, commissioned by the Management Office on CDM Projects, SFA since 2008.

On capacity building, EEPC has devoted to graduate and undergraduate courses on environmental and natural resource economics at Peking University, and collaborating with international universities and institutions such as RFF, University of California, Berkeley, University of Gothenburg, and so on, by continuing to send students to study and exchange advanced theories and practical knowledge.

On academic research, in spite of actively presenting research findings in policy dialogues organized by policy-making departments of, for example, the State Forest Administration, EEPC has co-organized two international conferences on collective forest tenure reform and urban transportation management, by inviting a broad range of international scholars and sharing intensive experiences, and hence to improve EEPC's research productivity and quality. During 2010 the total number of peer-reviewed publication on international journals is 9, on domestic journals (in Chinese) is 6, books (chapters) is 2 in Chinese, as well as 6 policy briefs and 1 report, and 6 discussion papers.

Jintao Xu Coordinator EfD-China

# 2.2.2 EfD China center staff

#### Local researchers and staff

Professor Jintao Xu, Coordinator and Research Fellow

Professor Shiqiu Zhang, Research fellow

Ph.D. Jianhua Xu, Research fellow

Ph.D. Ping Qin Research fellow and deputy coordinator

Ph.D. Michael Bennett, Visiting scholar

Ph.D. Haipeng Zhang Post-doctoral fellow;

Ph.D Xuemei Jiang Post-doctoral fellow;

BSc. Hui He Senior research assistant,

Ling Li Administrative assistant,

M.Sc. Yuanyuan Yi Communication officer

#### Domestic research associates

Ph.D. Jing Cao of Dept. of Economics at Tsinghua University

Ph.D. Wanxin Li, School of Public Policy and Management at Tsinghua University and City University of Hong Kong *International associates* 

Lunyu Xie, Ph.D. Candidate, Dept. of Agricultural and Resource Economics at University of California, Berkeley, Ph.D. Priscilla Cooke St. Clair of Pacific Lutheran University

Professor Stein Holden of Dept. of Economics and Resource Management at Norwegian University of Life Sciences Professor Fredrik Carlsson of Dept. of Economics at University of Gothenburg

Ph.D. Haoran He who finished his PhD study in Economics at University of Gothenburg and will start working at Beijing Normal University in 2011.

## 2.2.3 Networks

EEPC has close collaboration with a broad range of domestic and international research networks, including the National Natural Science Foundation of China (NSFC) and our brother research institutes and universities such as Chinese Academy of Social Sciences ;, the Rural Development Institute, Chinese Academy of Sciences, Center for Chinese Agricultural Policy, Chinese Academy of Agricultural Sciences, Institute of Environment and Sustainable Development in Agriculture, Chinese Academy of Forestry Sciences, the Research Institute of Forestry Policy and Information, Tsinghua University , City University of Hong Kong, Renmin University of China, Beijing Forestry University, the National School of Development, Center for Economic and Development Research of State Forest Administration and more.

Internationally, EEPC's research networks cover the entire EfD network, the World Bank, Ford Foundation, Rights and Resources Initiative, Forest Trend in the US, International Institute for Environment and Development (IIED), UNEP, UNDP, EEPSEA (IDRC), Environmental Defense, and universities such as University of California, Berkeley, Norwegian University of Life Sciences, University of Gothenburg, Pacific Lutheran in Tacoma, Washington, University of Rhode Island.

## 2.2.4 Donors and funding

During the year of 2010 EEPC has received both financial and organizational support from the EfD Initiative, the World Bank, Rights and Resources Initiative, the State Forest Administration of China, and the National Natural Sciences Foundation of China (NSFC).

Through the five years since the foundation of EEPC, we have also received extensive support from the Ford Foundation, Forest Trend, International Institute for Environment and Development (IIED), International Development Research Center (IDRC), etc.

List of Donors	Funding by donor during 2010
1) EfD	RMB 1,256,690
2) NSFC	RMB 400,000
3) The World Bank	RMB 227,628
4) SFA	RMB 208,471
5) RRI+URI	RMB 181,374
Sida/EfD funding as share of total center budget (incl eg univ salary)	55%
Table 5: List of donors China	

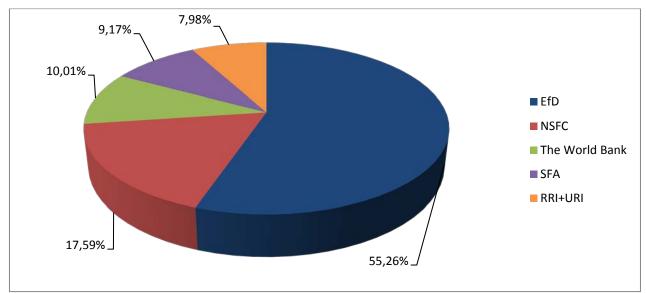


Figure 2: Total center budget in percentage by donor

# 2.3 Ethiopia

#### 2.3.1 Message from our coordinator

The Environmental Economics Policy Forum for Ethiopia (EEPFE) based at the Ethiopian Development Research Institute (EDRI) is one of six EfD (Environment for Development) Centers located in six countries. These centers are coordinated from the Environmental Economics Unit at the University of Gothenburg in Sweden (where the EfD secretariat is also based) with Resources for the Future as a partner involved in research and publication of discussion paper and book series. EEPFE has the main objective of supporting sustainable development and poverty reduction through increased use of environmental economics in policy making processes in Ethiopia. It attempts to achieve these through research, policy interaction and training.

The year 2010 has been a year of important achievements for EEPFE building on what has been done during previous years. The main research projects that have been implemented during the year include impacts of climate change on agriculture as well as its economy-wide impacts, of biofuel investments on food security in Ethiopia, impacts of land certification on private tree growing by rural Ethiopian households and household forest values under varying management regimes in rural Ethiopia.

In addition to participation of researchers of the Forum in a number of seminars, workshops and conferences in and outside Ethiopia, the Forum co-organized two important conferences in 2010. One is the Africa Regional Dialogue on Forests, Governance and Climate Change (co-organized with Rights and Resources Initiative based in Washington, D.C. as well as the UN Economic Commission for Africa, UNECA). The other is the 4th Annual Meeting of the Environment for Development initiative (co-organized with the EfD Secretariat and partly with UNECA).

The Forum was also involved in policy interaction activities including work on climate change issues focusing on climate conventions, climate finance, carbon trading, and carbon markets with focus on Africa in general and Ethiopia in particular. This is a joint activity with EDRI through partial funding from the African Capacity Building Foundation (ACBF) and this work is expected to be completed in 2011. Staff of the Forum have also been involved in work on green growth plan and strategy for Ethiopia sponsored by the Global Green Growth Institute (GGGI) and conducted by McKinsey and Co in collaboration with EDRI and other government institutions.

The Forum plans to continue its work on research, policy interaction and training over the coming years building on the achievements in the past. Details of the Forum's work during 2010 (presented in this report for 2010) as well as other information about the Forum can be found at <u>www.efdinitiative.org</u>

Alemu Mekonnen, Coordinator EfD-Ethiopia

### 2.3.2 EfD Ethiopia center staff

Local researchers and staff

Ph.D. Alemu Mekonnen, Coordinator and Research Fellow,

- Ph.D. Zenebe Gebreegziabher, Research Fellow
- Ph.D. Tekie Alemu, Research Fellow

M.Sc. Rahel Deribe, Junior Research Fellow

Freweini Berhane, Administrative Assistant

#### Domestic research associates

Ph.D. Gete Zeleke, Avallo International Research Development, Ethiopia

Ph.D. Fitsum Hagos, International Water Management Institute, Ethiopia

Ph.D. Candidate, Demissie Damte, Department of Economics, University of Gothenburg

Ph.D. Berhanu Gebremedhin, ILRI - Ethiopia

#### International research associates

Ph.D. Candidate, Yonas Alem, Department of Economics, University of Gothenburg Professor, Stein Holden, Norwegian University of Life Sciences, Norway Ph.D., Salvatore Di Falco, London School of Economics, United Kingdom
Associate Professor, Randall Bluffstone, Portland State University, USA
Ph.D. Mintewab Bezabih, University of Portsmouth, United Kingdom
Ph.D. Klaus Deiningen, The World Bank
Ph.D. Candidate, Haileselassie Medhin, Department of Economics, University of Gothenburg
Ph.D. Candidate, Hailemariam Teklewold, Department of Economics, University of Gothenburg
Professor, Fredrik Carlsson, Department of Economics, University of Gothenburg
Professor, Erwin Hendricus Bulte, Tilburg University, The Netherlands

## 2.3.3 Networks

To achieve its goal, EEPFE is working with different governmental and non-governmental organizations like Ministry of Agriculture and Rural Development (MARD), Forum for Environment (FfE), Climate Change Forum for Ethiopia, Sustainable Land Use Forum (SLUF), the International Food Policy Research Institute (IFPRI), and Environmental Protection Authority (EPA).

## 2.3.4 Donors and funding

Sida is the main funding agency for the Efd initiative. In 2010, EEPFE was involved in issues focusing on climate conventions, climate finance, carbon trading, and carbon markets with focus on Africa in general and Ethiopia in particular. This is a joint activity with EDRI through partial funding from the African Capacity Building Foundation (ACBF) and is expected to continue in 2011. In addition, RRI (The Rights and Resources Initiative) was also one of the co-organizers of Africa Regional Dialogue on Forests, Governance and Climate Change which was undertaken in Addis Ababa, Ethiopia, from 11 to 12 October 2010.

The Rights and Resources Initiative (RRI) is a strategic coalition of international, regional and community organizations engaged in conservation, research and development. RRI works to encourage greater global commitment and action on pro-poor tenure, policy and market reforms. RRI's mission is to support local communities' and indigenous peoples' struggles against poverty and marginalization by promoting greater global commitment and action towards policy, market and legal reforms that secure their rights to own, control and benefit from natural resources, especially land and forests.

List of Donors	Funding by donor during 2010
1)Sida	USD 259,000
2) RRI (Rights and Resources Initiative)	USD 70,000
Sida/EfD funding as share of total center budget	79%

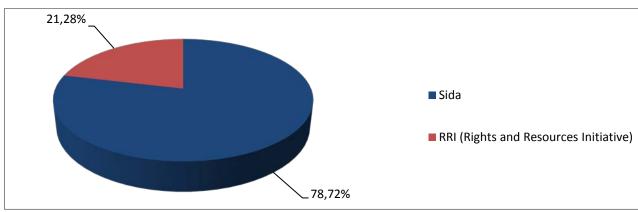


Table 6: List of donors Ethiopia

Figure 3: Total center budget in percentage by donor

# 2.4 Kenya

### 2.4.1 Message from our coordinator

In the last year, we made considerable strides towards promoting the use of environmental economics tools to successfully shape our country's future, however, much more still remains to be done. It is therefore my great pleasure to share with you some of the major events/activities of 2010 in this report.

Building on experience from the previous years, we managed to work in close collaboration with individuals and institutions in public and private sector, policy research institutes and academia. Notable key partners that we collaborated with in the course of the year include the World Wildlife Fund (WWF), United Nations Environment Programme (UNEP), National Environment Management Authority (NEMA) among others. Following the appreciation of our efforts we plan to upscale these collaborative efforts in the coming year, 2011.

Besides research, as a Centre we also strive to promote capacity building through training of students. In this respect we continue to work closely with universities, especially the University of Nairobi, School of Economics, where I and Paul were involved in teaching MSc and PhD classes. Geophrey, our Junior Research Fellow/Program Assistant was also involved in teaching undergraduate students in the University. We also managed to organize a seminar series on Forest Tenure Reforms in Kenya at the School in order to expose both students and teaching staff to our research and research themes.

At the research level, the Centre implemented two main projects which are detailed in the Annual Report. These were the Forest Management Reforms and Kenya's participation in the proposed REDD climate change mitigation scheme. We also gave one research grant to a PhD student from Wageningen University to support his thesis research work on the economics of sanitation in Kibera, Kenya's largest slum.

On the down side, the Centre has continued to operate on a lean staff. At the beginning of 2010, we had a total of 4 staff; the Coordinator, a Post-doc Research Fellow, the Program Assistant/Junior Research Fellow and a Young Professional (YP). The YP program is an in-service training module for civil servants. The YP left mid-year, when their training programme came to an end in June. Towards the end of 2010, the position of the Post-doc fellow also became vacant when Dr. Paul Guthiga left to join the International Livestock Research Institute (ILRI). We will welcome and appreciate any efforts towards helping us recruit dedicated post docs for our Centre from any part of the world. We are committed to upscale our efforts in the coming year to ensure greater success of the program.

Wilfred Nyangena, Coordinator EfD-Kenya.

## 2.4.2 EfD Kenya center staff

#### Local researchers and staff

Ph.D. Wilfred Nyangena, Coordinator and Research Fellow

Ph.D. Moses Ikiara , Executive Director, KIPPRA

Ph.D. Paul Guthiga - International Livestock Research Institute (ILRI)

MSc. Geophrey Sikei, Junior Research Fellow/ Program Assistant

#### **Domestic Research Associates**

MSc. Maurice Ogada - International Livestock Research Institute (ILRI)

Ph.D Candidate, John Mutua, University of Nairobi and Energy Regulatory Commission of Kenya

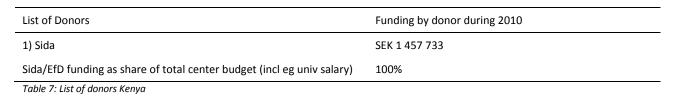
Ph.D. James Njogu – Kenya Wildlife Services (KWS)

John Omiti , KIPPRA Joshua Laichena, KIPPRA Richard Mulwa – Department of Agriculture Economics, University of Nairobi Ph.D. Joseph Onjala – Institute of Development Studies (IDS), UoN *International Research Associates* Ph.D. Candidate, Simon Wagura , Department of Economics, Gothenburg University PhD Candidate, Fred Owegi, World Bank and, Wageningen University

## 2.4.3 Networks

The center continues to grow into a reputable source of information on environmental challenges facing policy makers in the country. It is gaining considerable trust and credibility in the face of both public and private institutions. The number of institutions that are interested in partnering with Efd-K on various projects is a clear indication of the network strength that is growing. It has a strong working relationship with reputable institutions in the country that include, **National Environment Management Authority (NEMA)**, Kenya Institute for Public Policy Research and Analysis (KIPPRA), United Nations Environment Programme (UNEP), World Agroforestry Centre (ICRAF), World Wildlife Fund (WWF), Kenya Wildlife Service (KWS)

# 2.4.4 Donors and funding



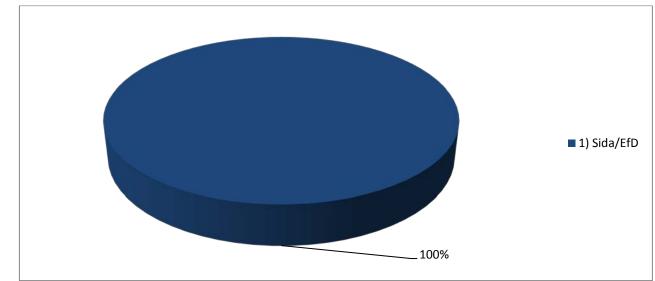


Figure 4: Total center budget in percentage by donor

# 2.5 South Africa

#### 2.5.1 Message from our coordinator

2010 has been a great year but not just because of the successful World Cup in South Africa. It has been full of great achievements for EPRU (EfD South Africa) too. Over the past four years, EPRU has strived to produce policy-relevant research in areas that are of great importance for the country: community-based wildlife conservation and poverty mitigation, climate change, marine protected areas and coastal management, sustainable and responsible investment. In 2010, a great deal of the research EPRU has undertaken during these years has turned into a number of actual peer reviewed publications, both in local and international journals. This is a very encouraging development and is testimony of the quality of our research EPRU has produced in all our fields of interest. In addition, it is exciting to see that our promising junior research fellows, who have been trained and supervised patiently by the senior fellows, have actively contributed to our publications. This indicates that the effort of local capacity building in which EPRU is fully committed is showing clear signs of success.

EPRU has also been active on the policy front. In addition to the usual demand-driven research, we have also offered supply-driven and innovative research to local policy makers. A good example of this is the ongoing project involving the role of social norms in lowering household electricity consumption undertaken by Martine Visser, and Grant Smith, in collaboration with various departments of the City of Cape Town. The results have shown that providing such information to a treatment sample influenced their electricity consumption significantly. The experiment will be extended to pre-paid electricity meters as well. Our fellows have also obtained funding from the Water Research Commission to extend the study to water consumption.

EPRU continues to be strongly involved in the teaching of Environmental and Resource Economics both at the undergraduate and graduate level at the University of Cape Town (UCT). In 2010, we have also participated in the teaching of the Collaborative Masters Programme at the African Economic Research Consortium. This involvement provides us a platform to expose students from various African countries to resource economics within the African setting, and attract talented African students who would like to pursue further research in our fields of interest.

2010 has seen EPRU start diversifying its sources of funds. In addition to Sida's invaluable contribution, we have relied on the support of the African Climate and Development Initiative and the UCT Vice Chancellor Strategic fund. In the coming year, we plan to diversify even further our sources of funding by bidding for larger research projects that will enhance collaboration among EPRU research fellows, with other researchers and, importantly, with key stakeholders.

Finally, I would like to thank Sida for its continued support. The recent signature of the 2011-2014 agreement between Sida and EfD is a breath of air that will help us to meet the challenges of establishing a long lasting centre that strives for excellence and serves the community by producing and disseminating research in natural resource management that helps fight poverty.

Mare Sarr, Coordinator EfD-South Africa

## 2.5.2 EfD South Africa center staff

#### Local researchers and staff

Ph.D, Martine Visser, Coordinator until October 2010 and Research Fellow Ph.D, Mare Sarr, Coordinator from November 2010 and Research Fellow Ph.D, Edwin Muchaponda, Research Fellow Ph.D, Jane Turpie, Research Fellow Anthony Leiman, Research Fellow Ph.D Candidate, Kerri Brick, Junior Research Fellow MS.c. Johane Dikgang, Junior Research Fellow MS.c., Reviva Hasson, Junior Research Fellow Brenda Adams, Administrative officer Domestic research associates Ph.D., Stephanie Giamporcaro, University of Cape Town Ph.D., Anthony Black, University of Cape Town Ph.D., Precious Zikhali, CGAIR, Pretoria Ph.D., Harald Winkler, Energy Research Center, University of Cape Town Ph.D., Andrew Marquard, Energy Research Center, University of Cape Town International research associates Ph.D. Åsa Löfgren, Department of Economics, University of Gothenburg Associate Professor, Gunnar Köhlin, Department of Economics, University of Gothenburg Ph.D Wisdom Akpalu, Farmingdale State College, USA Ph.D Mintewab Bezabih, University of Portsmouth, United Kingdom

Ph.D candidate Andrea Mannberg, Umeå University, Sweden

## 2.5.3 Networks

EPRU has successfully worked with a number of local and national stakeholders on medium-size projects, such as **South African National Parks (SANParksF)** in the wildlife sector, **South African National Biodiversity Institute (SANBI)** on biodiversity issues, **Water Research Unit and, the Department of Water Affairs** in the water sector, **The Department of Environmental Affairs on marine and coastal management, Energy Research Centre (ERC)** on climate change issues, and the **City of Cape Town** on air quality management and energy savings. In the next few years, EPRU plans to bid for larger research projects that will enhance collaboration among EPRU research fellows, with other researchers and, importantly, with key stakeholders.

### 2.5.4 Donors and funding

In 2010, EPRU received funding from the Swedish International Development Cooperation Agency (Sida), the African Climate & Development Initiative and the Vice Chancellor (VC) Strategic Funds – UCT. The lion's share of our funding is provided by Sida. The other two donors are UCT-related.

The African Climate and Development Initiative (ACDI) was conceptualized in late 2009 under the leadership of Dr Max Price, the Vice Chancellor of UCT. It intends to bring together natural scientists, engineers, social scientists, lawyers, economists and urban planners, amongst others, from UCT and beyond, to provide an African perspective, grounded in strong science, addressing issues relating to climate variability and global change affecting the African continent. In line with UCT's strategy to enhance its position as an "Afropolitan" university, funding has been secured from the VC's strategic fund to support research collaboration with partners in Africa or elsewhere in the global South. Grants awarded under this call are intended to strengthen existing collaborative research partnerships by providing top-up funding.

List of Donors	Funding by donor during 2010
1) Efd	SEK 2,638,000
2) African Climate & Development Initiative	R 380,000 → SEK 380,000
3) VC Strategic Funds – UCT	R 370,000 → SEK 370,000
Sida/EfD funding as share of total center budget (including university salaries)	44%

Table 8: List of donors South Africa

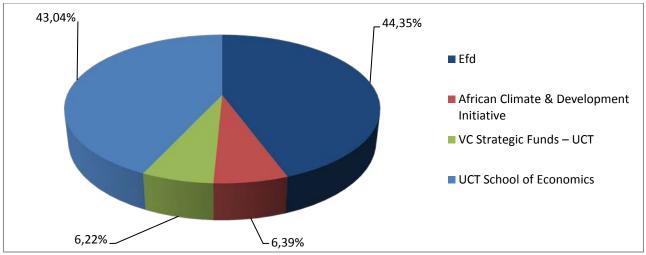


Figure 5: Total center budget in percentage by donor

# 2.6 Tanzania

### 2.6.1 Message from our coordinator

On behalf of the EfD-T secretariat, I wish to take this opportunity, through the annual report, to thank the Sida-through the University of Gothenburg for their continued support to our centre. We also thank the University of Dar es Salaam and particularly the Department of Economics for hosting the EfD-T and the support accorded to the project. I Will also take this opportunity to thank EfD-T chairman of the Governing Board and the board members for their sincere support and their efforts to link the centre with International and local environmental agencies.

During the reporting period (January 2010 – December 2010), the Environment for Development Tanzania (EfD-T) continued to implement its plan. The EfD-T put much focus on the following activities: Research, Training, Supervising MSc and PhD Students and Policy Interaction.

During 2010 research fellows contributed much to the government of Tanzania in drafting and writing the National strategy for Growth and Poverty Reduction II (NSGPR II) or MKUKUTA II in its Kiswahili acronym and as well as MKUZA. This was one of the success areas of the centre in policy interaction in the year 2010. The MKUKUTA II is a roadmap towards implementation of the government policy. We are proud of EfD-T for being part of this. The EfD-T fellows were directly involved in Teaching, supervising and providing technical support in various government documents. Furthermore EfD-T fellows were involved in a series of sensitization workshops for higher learning institutions in Tanzania and training of local government authority. Such kind of training helps these local officers to build network among the environmental and planning officers all over the country in order to share information and their experiences. More of such training at the local authorities levels are planned in the coming years if that nature to more areas especially those with National natural resources reserves.

With regard to international collaboration, EfD-T continued to collaborate with the other EfD centres. EfD-T has also through the Department of Economics managed to have a close working relationship with the National Environment Management Council (NEMC), Ministry of National Resources and Tourism, Vice President Office – Division of Environment, ministry of Finance as well as other international organization in the country such as UNEP and UNDP. We believe that through this collaboration our research agenda have a support of the key stakeholders.

Furthermore for the reporting year 2010 the EfD-T continued to provide financial support of the MSc and PhD students writing on poverty and environmental issues. These students are also having benefits of getting supervision from the EfD-T research fellows. It is my belief that during the coming years the centre will be able to support more students and make full sponsorship for the students to pursue their studies.

Finally, I would like to call upon more collaboration from local and international donors to join the centre's effort in building capacity in the areas of research in environment and natural resources as well as poverty and policy.

Razack Lokina, Coordinator EfD-Tanzania

# 2.6.2 EfD Tanzania center staff

#### Local Researchers and Staff

Ph.D Razack Bakari Lokina, Coordinator and research fellow
Ph.D John K. Mduma, Research Fellow
Ph.D Adolf Faustine Mkenda , Research Fellow
Ph.D Margaret Banga, Lecturer and Post doc Fellow
Ph.D Candidate Wilhelm Ngasamiaku, Junior Research Fellow
Ph.D Candidate Onesmo Selejio , Assistant Junior Research Fellow
Ph.D Candidate Aloyce Hepelwa, Junior Research Fellow
Mr. Salvatory Macha , Project Administrator
Mr. Amosi Mutanaga, Accountant
Domestic research associates
Professor Asmerom Kidane, University of Dar es Salaam
International research associates
Associate Professor Heidi J. Albers, Oregon State University
Associate Professor Elizabeth J.Z. Robinson, University of Gothenburg

## 2.6.3 Networks

The Department of Economics that host EfDT has initiated a plan to transform itself into a school and will establish a number of units. In that plan, EfDT is one of envisaged units. The center also collaborates with the government Departments, Agencies and other organs and work closely on the issues related to environment and poverty. Currently the EfDT is working jointly with the Prime Ministers Office – Environment division in organizing a Training on poverty-environment linkages under the financial of UNDP Tanzania through the Ministry of Finance and Economic Affairs. Also the Center has been working with Ministry of Natural resources and Tourism and The National Environment Management Council (NEMC) in various aspects.

<u>http://www.udsm.ac.tz/</u>University of Dar es Salaam <u>http://www.nemctan.org/</u>National Environment Management Council (NEMC) <u>http://www.mof.go.tz/</u> Ministry of Finance and Economic Affairs (MoFEA)

## 2.6.4 Donors and funding

Since EfD center Tanzania launched in 2007 to date, we are continued to receive support from Swedish International Development Cooperation Agency (Sida) through the EfD Initiative based at the Unit of Environmental Economics at Gothenburg University. We also get support from United Nations Environment Programme (UNEP) trough Vice President Office (VPo), United Nations Development Programme (UNDP) trough Ministry of Finance and Economic Affairs (MoFEA). The EfDT center had received extensive support in the area of office space and facilities from the University of Dar es Salaam and the Department of Economics in particular.

List of Donors	Funding by Donor during 2010
1) University of Dar es salaam	4%
2) UNEP/Vice President Office	14%
3) UNDP/Ministry of Finance	19%
4) EfD	63%
Sida/EfD funding as share of total center budget (incl eg univ salary)	63%

Table 9: List of donors Tanzania

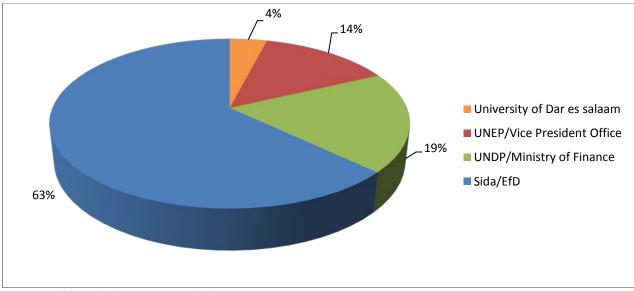


Figure 6: Total center budget in percentage by donor

# **3 POLICY OUTREACH AND COMMUNICATION**

In this report we would like to high-light a few things from each center's policy-interaction activities; We start off with lifting one policy interaction example from each country. Each center also present their policy seminars, workshops and conferences during 2010. Most of the EfD centers are also involved in and/or give courses to civil servants and other non-academics. This is a very hands on way to share expert knowledge and experience with decision makers. Policy-briefs are discussed in section 7: Communication. Also full list of policy briefs published during 2010 is provided in Appendix 2: Publications.

# 3.1 Central America selected policy work during 2010

# **3.1.1** Success factors for rural drinking water supply identified by EfD Costa Rica researchers

Why can some communities succeed in solving collective problems such as provision of drinking water while others fail? Róger Madrigal, EfD Research Fellow, conducted fieldwork in 41 Costa Rican rural villages in order to identify success and failure factors. He made a substantial effort to present the results in an accessible way to people from all the communities as well as to academic peers and high level policy makers.

"The necessity of going back to communities and showing the research results is something I learned from **Nobel laureate Elinor Ostrom**," says **Róger Madrigal.** 

"She always stresses it. And I agree. As a researcher you have an ethical responsibility. You can't just take information from people in order to write an academic paper. You should also give the results back to the people you interviewed. That's the only way you can build trust, and it is also important for the impact of your research," says Madrigal.

Madrigal spent two months with Elinor Ostrom at Indiana University in Fall 2008, before she received the Nobel Prize in Economics (Sveriges Riksbank Prize in Economic Sciences in Memory of Alfred Nobel 2010). Madrigal notes:

"She gave a lot of support regarding the design of the research project and the methods as well as on how to deal with communities. She always insists on devolving and giving back, which has really influenced my research."

Hence, Madrigal and his team took the challenge to move from tables and regressions for journals to accessible information translated to Spanish.

#### Sorted out key messages

"It was difficult. As scholars we are not familiar with communicating our ideas to non-experts. Of course we could not use the traditional scholarly approach of PowerPoint presentations and papers. Instead, we sorted out key messages and printed them on small cards that we used at a workshop for all the investigated drinking water community organizations," says Madrigal.

The preparation of accessible material and practical arrangements required a total of three full weeks of work. A one-day workshop was held on March 6th, 2010 at CATIE in Turrialba, a location suggested by the community representatives. Most communities (2/3) wanted to commit resources to attend the meeting.

"That reflects their interests in the results of the study, and created more pressure and responsibility for our team to deliver something useful for them," says Madrigal.

#### "The only way you can build trust"

For each community, Madrigal wrote an individual four-page report about the results. Thus, each community could review the evaluation of their performance in private. The top-three performance communities were awarded a diploma during the workshop, and all participants discussed what makes them successful.

"It was a lot of work. But it's the only way you can build trust, and it was very rewarding to see how communities use our results," says Madrigal.

The 41 investigated drinking water community organizations provide water to more than 60 percent of the rural population. On average each of them comprises 200 households. The aim of the research was to understand how geophysical characteristics of watersheds and infrastructure as well as governance and socioeconomic attributes of local users affect three key dimensions of performance in rural communities: financial health, infrastructure condition, and user satisfaction.

#### The human capital - a key factor

"One important key factor that we found to affect performance is the human capital of the people in charge of water provision, their formal education, experiences, and leadership. This evidence allows us to recommend policy makers to support capacity building," says Madrigal.

He and his colleagues found that the capacity of local leaders to generate appropriate incentives to involve the community in sustainable solutions for collective-action problems is one of the most important mechanisms that can be linked to high performance.

#### Working rules and accountability improve performance

Equally important are working rules created by the local communities, and not least that these rules are enforced. Yet another mechanism linked to high performance is local accountability. Downward accountability to the consumers exerts pressure on water committee members to act according to the interests of water users.

"Our research work meant that for the first time these communities were evaluated on their performance. They were eager to see how they were doing compared to other communities, and requested us to come back next year and do some exercises to track changes over time. This reflects the necessity of performance benchmarking standards and yardsticks," says Madrigal.

He has presented the project as well as its results to top managers of the rural water sector in different meetings and forums since 2008. What remains now is a meeting to present the final results.

#### Publications

High-quality research, with the potential of being published in high-ranked journals, is of course an equally important objective of the project. In 2010, Madrigal and his research colleagues Francisco Alpízar and Achim Schlüter published an EfD/RFF Discussion Paper based on the results; see "Determinants of Performance of Drinking-Water Community Organizations, A Comparative Analysis of Case Studies in Rural Costa Rica". Some other papers are forthcoming.

See also a policy brief and an opinion article, published in La Nacion, a Costa Rican newspaper.

#### By Karin Backteman

#### 3.1.2 Policy seminars, workshops and conferences during 2010

#### Seminar series in climate change

The year 2010 was very active in terms of seminars, workshops and conferences. As a high-light, EfD-CA presented on March 23, the seminar "Consequences of Copenhagen: What are the challenges and opportunities?" With this first seminar, EfD-CA launched a series of seminars on environmental issues, targeted to the public and private sector and civil society.

The objective of this seminar was to analyze the outcome of negotiations on the Climate Change Summit held in Copenhagen in December 2009. It provided a space for participants to learn how to build a decision-making framework based on uncertainty and risk minimization, and expand the opportunities posed by carbon markets and competitive implementations of carbon neutrality within companies.

The main speaker was Álvaro Umaña, former Chief Negotiator of the Costa Rican delegation to the Climate Change Summit (COP15). Umaña was the first Minister of Environment and Energy of Costa Rica (1986-1990) and is a recognized researcher. Besides, Lawrence Pratt, Deputy Director for Latin American Center for Competitiveness and Sustainable Development (CLACDS) at INCAE appeared as a guest speaker. Mr. Pratt is also a founder and project director of the Center Ecobanking and Sustainable Markets Intelligence.

Furthermore, between November 29 and December 10, 2010 the Framework Convention United Nations Convention on Climate Change (UNFCCC) held its 16th Conference of the Parties (COP16) and the sixth session of the Meeting of the Parties to the Kyoto Protocol (MOP6) in Cancun, Mexico. Francisco Alpízar and Carlos Muñoz from EfD-CA participated as part of a delegation from CATIE. They both attended several informal meetings with representatives of organizations and delegations. They also were present at numerous official and unofficial side events during the Conference, including Forests Day 4 where CATIE's Director General gave one of the key note speeches. As a remark "It was exciting to have the opportunity to attend three meetings of the Costa Rican delegation, listened to their concerns and strategies, and provided small advice. Needless to say it was a thrilling to greet people like Sir Nicholas Stern, Connie Hedegaar, Zhenhua Xie, Mario Molina, Marco Gonzalez, and many others in Cancun" said Carlos.

The final results of the negotiations at the COP16/MOP6 are contained in the Cancun Agreement which includes many of the elements of the Copenhagen Agreement. It is widely recognize this agreement advances the agendas on climate change on a step-wise approach rather than a comprehensive agreement that is legally binding; a so-called "balanced package."

#### Participation in WCERE 2010

Between June 28 and July 2, EfD-CA actively participated in the 4th World Congress of Environmental and Resource Economists (WCERE 2010), in Montreal, Canada. Seven people from EfD-CA attended the congress, including six researchers (mostly thorough scholarships) and a person responsible for the information booth. "I saw no other group in Latin America that had such presence" said Francisco Alpízar.

At the event EfD-CA presented five different paper results and EfD research fellow Juan Robalino served as facilitator in one of the sessions.

According to Laura Villalobos, a young researcher at EfD-CA and speaker in the Congress "One of the most valuable things of this event was to meet people from around the world, that you know are doing similar research," said Villalobos. "It is important to make contact to exchange ideas, emails, essays, etc. and work among research professional networks, and universities".

#### Workshop on benefits of Coffee Certification

On November 17, 2010, María A. Naranjo presented the results and conclusions from the research project "Adoption of sustainable management practices by Costa Rican coffee growers". The activity was

in charge of Naranjo with support from Carlos Muñoz center fellow and Joselyne Hoffmann, communications liaison for EfD-CA.

The results were based on the latest EfD-CA discussion paper by Allen Blackman and María A. Naranjo titled "Does Eco-Certification Have Environmental Benefits? Organic Coffee in Costa Rica."<sup>1</sup> Information was carefully presented in a simple way according to the audience who receive a Spanish version of a policy brief written for this purpose together with a copy of the data collected during the research.

Key participants such as Buenaventura Gamboa, representing the Organic Farmers Association of Turrialba (APOT)<sup>2</sup> and Gabriela Soto, CATIE's organic coffee certification expert participated in the workshop, sharing with us their point of view and contributing to the validation of our results.

According to Gabriela Soto, the results indicate that producers are reducing negative practices, but are not making sufficient efforts to maximize the benefits of applying positive practices. "Organic is not just what I don't do, but what I do to improve. During what we call the 'organic coffee crisis', we see that the producer reduce inputs for productivity and did not applied other practices to improve. They stopped the use of several things, including organic fertilizers. Therefore productivity is very low. Costa Rica's Coffee Institute (ICAFE) data show that premium is still increasing, but productivity is low and profitability of organic coffee is the worst of all certifications."

### 3.1.3 In service training

The international course on Economic principles for environmental management took place from July 19 to July 30, 2010 at EfD - CA Headquarters, Turrialba Costa Rica. The 25 participants enrolled in the program came from several countries in Latin America.

The course aimed at contributing to the understanding of the causes and effects of environmental degradation in the region through a multidisciplinary approach. Participants were able to propose economic solutions suitable to the social, cultural, and political environment of their home countries. Due to the importance of the water issues in the national and global agenda, the course emphasized the development of Payment for Ecosystem Services (PES) schemes that seek to improve the availability and quality of drinking water.

<sup>&</sup>lt;sup>1</sup> Blackman, Allen and Maria A. Naranjo. (2010). "Does Eco-Certification Have Environmental Benefits? Organic Coffee in Costa Rica". EfD Discussion Paper 10-25. Environment for Development Initiative and Resources for the Future, Washington DC, November 2010.

<sup>&</sup>lt;sup>2</sup> Asociación de Productores Orgánicos de Turrialba (APOT).

# 3.2 China selected policy work during 2010

## 3.2.1 EfD research addresses Beijing's congestion and air pollution

Beijing is the world's most congested city as measured by average vehicle speed. It is also one of the most air polluted cities, with a substantial part of the emissions coming from vehicles. To find effective policy instruments to address these serious urban challenges, Environment for Development in China/the Environmental Economics Program in China (EEPC) and Beijing Transportation Research Center are collaborating in a research program.

Dr. **Ping Qin**, EfD research fellow in China, returned to Beijing in 2010 after completing her PhD studies at the University of Gothenburg in Sweden and working at Resources for the Future in Washington DC for one year.

"It was terrible to go to work in the morning in Beijing. When I returned to China, I stayed with a friend in the east part of Beijing whereas Peking University, where I work, is in the west part. I had to spend one hour in the overcrowded subway system every morning. That is a very bad, exhausting experience. Several friends of mine now want to buy a second home or rent a temporary place so they don't have to spend so much time travelling," says Ping Qin.

According to World Bank (2007), the costs of health damages associated with urban air pollution in China, i.e. sickness and premature death, ranged from 1.2 to 3.8 percent of GDP in 2007, which makes air pollution the costliest pollution faced by the country.

Ping Qin is the principal investigator in one of the projects of the new research program on urban transportation and environmental policies in Beijing. She and Professor **Jintao Xu** will analyze the social costs of air health damages associated with urban air pollution in the capital.

Qin and Xu will also analyze the costs of congestion in terms of value of time. For this they need to know for instance how much Beijing inhabitants are willing to pay to save transportation minutes and avoid crowding and pollution.

"Today we don't know enough about the impact of the policy instruments in place in Beijing, such as the low subway fare policy. Nor do we know enough about the potential impact of some suggested and hotly debated policies, like congestion charges and environmental taxes. We hope this collaborative research program will give important answers to these questions," says Qin.

The starting point of the research program was an international workshop on urban transportation management and environmental policy, organized by EfD/EEPC and co-sponsored by the Beijing Transportation Research Center. It was held in Beijing 15-16 August 2010 and brought together participants from the Beijing Transportation Commission, Kagawa University of Japan, Resources for the Future in Washington DC, University of California at Berkeley and other US universities, the World Bank, and several municipal government agencies in Beijing.

Besides EfD research fellows Ping Qin and Jintao Xu, the transportation research program engages EfD associates Professor **Peter Berck** and Dr. **Lunyu Xie**. Their research includes:

• Analyses of the distributional welfare impacts of various transport policies, and analyses of the effect of these policies on travelers' choice of transport mode.

• Analyses of the optimal pricing of subways/buses, and analyses of optimal pricing of congestion fees.

• Studies to better understand consumer preferences regarding different car models. This is important in order for policy makers to effectively intervene in the automobile industry through regulatory policies aimed to alleviate traffic and reduce emissions from the transportation sector. In China the city of Beijing ranks number one in terms of the society cost paid for city congestion, according to the 2009 Futian Index.

#### 7 million cars in Beijing in 2015

"In Beijing alone, we now have 4.5 million cars. The government expects the city to have 7 million cars in 2015," says Qin.

Prior to the 2008 Olympics, a driving restriction program based on odd-even license plates was introduced in Beijing. Evidence of reduced congestion and mobile source pollution induced the Beijing municipal government to continue with a similar but less restrictive program after the Olympics.

"In the initial one-year period it seemed effective and was claimed to be a success. But the international experience is not optimistic. Research has shown fairly conclusively that this type of program does not reduce vehicle miles traveled or improve air quality. For example, it has been implemented in Mexico City for ten years and has proved not successful. Rich people can buy a second car. In Beijing the second-hand car market has become very active," says Qin.

The low subway/bus fare policies implemented in Beijing have shown to be unsuccessful to decrease car driving as well. Subways and buses were already overcrowded before the fare reduction, and could barely hold any more passengers during rush hours. The fare was already low before the policies, and the reduction was probably not large enough to attract people who can afford a car. Instead, it is rather an incentive to low income people to take the subway or bus instead of walking or biking.

"In addition, the low fare policies imply a heavy financial burden to the government. The National Development and Reform Committee now want to know the impact of an increased subway fare before it might be implemented in Beijing. The NDRC commissioned the Beijing Transportation Research Center to do a study on this, and they in turn wanted us to do it," says Qin. By Karin Backteman

## 3.2.2 Policy seminars, workshops and conferences during 2010

The following four international workshops have been organized or co-organized by EEPC during 2010.

Land Tenure Workshop (Jan 24-25, 2010), Urban Transportation Management and Environmental Policy (Aug 15-16, 2010), Forest Tenure and Regulatory Reforms: Experiences, Lessons and Future Steps in Asia (September 24-25, 2010), Beijing Forum (November 5-6, 2010)

In addition, EEPC has hosted a series of policy seminars at department level to help broaden the knowledge horizon of the students and faculty members in terms of environmental issues and methods used to analyze policies.

1.	Environmental decisions for now through the distant future by Milton Russell, an economics and a former Assistant Administrator of the U.S. Environmental Protection Agency, Apr. 19, 2010.
2.	Lessons from US EPA, on the perspective of Clean Water Act and Superfund by Jessica Kao, a senior attorney with the US EPA Region 9's Office of Regional Counsel, and Kathleen Johnson, the director of the Office of Public Affairs in the USEPA Region 9, Apr. 28, 2010
3.	Natural resource management – from a perspective of the benefit ability by Li Wenjun, a professor at Peking University, Apr. 29, 2010
4.	Collective Forest Tenure Reform in China: An Economic Analysis on the Choice and Performance of Forest Tenure Types by Xu Jintao, a forest economics professor at Peking University, May 13, 2010
5.	Do roads lead to grassland degradation or restoration? by Scott Rozelle, a professor at Stanford University, May 20, 2010
6.	The allocation of pollutants emission allowances – from a perspective of environmental equity by Wang Qi, an associate professor at Peking University, May 27, 2010
7.	Los Angeles watershed study – A breakthrough in large scale watershed simulation-optimization and Modeling fragility of lake ecological system to human interference – Lake Yilong study by Zou Rui, a research scientist at Tetra Tech Inc., Jun. 3, 2010
8.	Why weak patents? Rational ignorance or pro-applicant tilt? By Lei Zhen, an assistant professor at Pennsylvania State University, Jun. 3, 2010
9.	The development of emissions trading in the U.S. by Dr. Roger Raufer, an independent consulting engineer Jun. 17, 2010
10.	Next steps for emissions trading in China? By Dr. Roger Raufer, an independent consulting engineer, Jun. 21, 2010
11.	Is the half-life of dioxin infinite,or does it just seem that way by Dr. Don Barnes, a former Director of the Science Advisory Board (SAB) at US EPA, Nov. 11, 2010
12.	Reduced carbon emissions from deforestation and biodiversity conservation – a global assessment of tradeoffs and synergies by Juha Siikamki, a research fellow of Resources for the Future, Nov. 18, 2010
13.	Field experiment as an alternative method for data collection: its application in Chinese context By Gong Yazhen, an assistant professor at Renmin University
14.	'Colorful' water research in the context of global water scarcity by Liu Junguo, a professor at Beijing Forestry University, Dec. 9, 2010 15. Introduction to risk analysis by Xu Jianhua, an associate professor at Peking University, Dec.
	15. Introduction to fisk analysis by Xu Jannua, an associate professor at Peking Oniversity, Dec. 16, 2010
16.	The development of carbon emission trading in Japan by Wang Jingtian, an graduate student at Peking University, Dec. 23, 2010
17.	The development of urban transportation in Tokyo by Fan Mingming, a graduate student at Peking University, Dec. 23, 2010

## 3.2.3 In service training

There were two in-service training given by Dr Jianhua Xu during 2010. On July 7, 2010, a speech was given on risk management to the civil servants in Crisis Management Division, Beijing Municipal Government. On October 17, 2010, she gave a lecture titled "environmental protection and sustainable development" to the civil servants from the various governmental agencies in Henghang, Hunan Province, China. This training program was organized by the School of Public Policy and Management,

Tsinghua University, from 11 to 19 October 2010.

# 3.3 Ethiopia selected policy work during 2010

# 3.3.1 EfD Ethiopia co-organized African Regional Dialogue on forests, governance and climate

Women's participation in decision making and strong land tenure rights and governance are essential if REDD+ and other climate change mitigation and adaptation measures are to achieve climate goals and provide local benefits. This was a key message from over 80 delegates at the Africa Regional Dialogue, which was organized by EfD Ethiopia together with Rights and Resources Initiative as a pre-event to the seventh African Development Forum.

Some 80 delegates from twenty African states, representing communities, governments, researchers, women's groups, parliamentarians, and NGOs participated in the Africa Regional Dialogue on Forests, Governance and Climate Change in Addis Ababa, Ethiopia, from 11 to 12 October 2010.

"The outcome of this regional dialogue was then reflected, via six appointed spokespersons, at the Seventh African Development Forum (ADF), which was held just after," says Alemu Mekonnen (left), Coordinator of EfD Ethiopia and the host of the Africa Regional Dialogue. Mekonnen also noted: "The outcome from the Seventh ADF will in turn feed into the ongoing international climate change negotiations in Cancun and beyond."

The dialogue delegates observed that strong and socially appropriate land tenure systems and governance are required for effective adaptation and mitigation, and also that land tenure and governance systems are notably weak and inequitable across the continent. Therefore, major reforms are necessary.

In order to effectively mitigate and adapt to climate change in Africa, while ensuring equity, livelihoods, rights, and sustainable development in forest areas, the group made 10 Forest Governance Recommendations: For instance, pilot programmes on REDD+ and climate change should take into consideration the rights of indigenous peoples and local communities and focus on capacity building of small and medium size enterprises, alternative energy (solar, wind, water etc.) for food security, and poverty reduction.

The group also recommends that for climate change measures to be successful, African regional institutions, donors, governments and civil society should facilitate the effective participation and representation of women in decision-making processes and bodies related to REDD+ and climate change. They should also ensure that women benefit equally from the REDD funding.

Dr. Mekonnen, who has extensive experience as a forest researcher and is coordinating the EfD Center in Ethiopia, was contacted by the Coordinator of RRI, Andy White, in early 2010. The Rights and Resources Initiative (RRI) has convened several international gatherings to explore the rights, tenure and governance dimensions of forests and climate change mitigation actions. The persons that Mekonnen and both Jeffrey Hatcher and Solange Bandiaky from RRI visited together, to hear views and to invite, included Josue Dione, Director of the Food Security and Sustainable Development Division at the UN Economic Commission for Africa.

"Josue Dione told us that our planned regional dialogue would link nicely with the seventh African Development Forum, which UNECA was to arrange together with the African Union and African Development Bank. This is how our dialogue became a pre-event to this important forum that brought together hundreds of delegates from all over Africa," says Mekonnen.

Hence, all participants at the Africa Regional Dialogue were invited to also attend the Seventh African Development Forum, which was held immediately after, 13-15th October, in the same compound where

the Dialogue took place, the United Nations Conference Center. For EfD Ethiopia, this also meant that influential people from different parts of Africa came to know about the center.

One of the main speakers at the Forum was the Ethiopian Prime Minister Meles Zenawi. He is the African Union's spokesperson on climate change, for instance in the United Nations Climate Change Conference in Cancun, Mexico, held from 29 November to 10 December 2010.

The Ethiopian Prime Minister is also, together with his Norwegian counterpart Jens Stoltenberg (who also spoke at the ADF VII), co-chairing the High-Level Advisory Group on Climate Change Financing. This group set out to solve what many see as the main barrier to achieving an international climate agreement – how to finance expenses related to climate issues – and issued its findings before the UNFCCC meeting in December 2010. The suggestions included a tax on air flights.

By Karin Backteman

# 3.4 Kenya selected policy work during 2010

### 3.4.1 The environment-poverty reduction nexus needs more attention in Kenya

EfD Kenya notes in its commissioned report for World Wide Fund for Nature (WWF) that environmental issues are recognized as important at very high levels of planning in Kenya. Still, the environment-poverty reduction nexus has not received its due attention in terms of policy prioritization, money allocation, political and civil society support, and actual implementation.

In the Vision 2030, which is the development blueprint for the country, the Kenyan government claims to strive for social and economic development in a "clean and secure environment", including an "increased forest cover and a reduced number of environment-related diseases".

"Though there have been considerable efforts, we still have some challenges in mainstreaming environment in development. Environmental issues are still not as prioritized as they ought to be," says Dr Paul Guthiga, one of the EfD Kenya research fellows behind the report to WWF.

The report shows that goals of poverty reduction, improved livelihoods and economic development are intricately intertwined with environment and natural resource management. For most poor households, environment and stocks of natural resources are critical for livelihoods and income generation. For instance, environmental assets amount to 26 percent of national wealth in developing countries, as opposed to 2 percent in OECD countries, according to the World Bank. Thus, according to the report authors, "capturing and integrating environmental concerns into development plans, government budgets, development programmes and projects, and in private initiatives is no longer optional".

The World Wide Fund for Nature has identified EfD Kenya as a strategic partner in the work to transform environmental governance in East Africa. The recommendations provided by EfD in June 2010 were based on assessments of environmental mainstreaming into planning and budgetary processes in Kenya, and of the impacts of trade and investment policies on environment and natural resource management in the country.

For the report, Paul Guthiga and his colleagues <u>Wilfred Nyangena</u>, <u>Tom Kinara</u>, <u>Geophrey Sikei</u> and <u>Maurice Ogada</u> conducted an extensive review of research reports, budget documents and development plans, and also interviewed a number of employees in various ministries.

"Among the problems we found is that Ministry staff are often reshuffled, and they often do not have the skills to articulate environmental concerns in planning processes. It's clear that there are not enough environmental economists to put enough value on the environment," says Guthiga.

One example of this is what happened to the Yala Swamp, a wetland in western Kenya. Because of pressing poverty, the government is eager to increase food security, tax revenues and employment. Hence, the wetland was drained and used for agriculture. No one was there to give counter arguments by putting an economic value on the swamp in terms of providing water to people and livestock, being a breeding ground for fish, and preventing flooding among other ecosystem services. "Sometimes the government is too eager to get investments even if it is at the expense of the environment," says Guthiga.

#### Environmental Impact Assessment for all deserving projects

One intervention to address the root causes of unsustainable exploitations of environmental resources is to undertake an Environmental Impact Assessment for all deserving projects and compel private investors to embrace environmental responsibility. This is a requirement by law in the

Environment Management and Coordination Act (EMCA) of 1999, but direct economic return often overrides environmental concerns. The fact that environmental mainstreaming is not given enough priority in terms of staff and money can be exemplified by the process of preparing the District Environmental Action Plans (DEAPs). A DEAP is supposed to, according to EMCA, explain the environmental problems and solutions and lay out a plan of action for the next five years. "This requires for instance stakeholder meetings and data collection, such as water sampling. But very little money is given. For example, the current DEAP (2009-2013) of Kwale, a coastal District of Kenya, was only allocated about 6 615 Kenya shillings. The district is huge, 105 000 hectares, but has only one environmental officer. This money, which is less than 100 US dollars, will not even allow the environmental officer to drive to the other end of the district," says Guthiga.

The EfD report, which is intended to help the WWF formulate future strategies, was presented at a WWF workshop in June 2010 that was attended by representatives of the government, the private sector, academia and NGOs. "The workshop meant that they also got to know about EfD. Our host institution KIPPRA is known for economics, and EfD now becomes the KIPPRA flagship for environmental issues," says Guthiga.

#### WWF recommended EfD for cooperation with NEMA

After the workshop, the WWF recommended EfD for cooperation with NEMA, the National Environmental Management Authority. Before contacting EfD-Kenya, NEMA read up on the organization via its website and noted that, they told Guthiga later on, "These are the people who can help us do this". Hence, Guthiga is currently assisting NEMA in analyzing the integration of environmental action plans in overall national planning. "I'm very pleased and hopeful about this cooperation because it opens up a window for change. The EMCA has to be revised to be compatible with Kenya's new constitution, and when the law changes the county governments can be put in charge of the environmental planning and will then hopefully prioritize environmental concerns and thus set aside more resources."

By Karin Backteman

## 3.4.2 Policy seminars, workshops and conferences during 2010

### **Poverty Environment Partnership Meeting**

EfD-K was represented at the 15<sup>th</sup> meeting of the Poverty Environment Partnership (PEP 15) by the center coordinator, Dr. Wilfred Nyangena. The meeting took place in March 2010, in Lilongwe, Malawi, and was co-organized by UK Department for International Development, Organisation for Economic Cooperation and Development (OECD), the United Nations (UN) and the World Bank, in partnership with the Government of Malawi. The meeting was attended by representatives from bilateral donor organizations, UN Development Programme (UNDP), UN Environment Programme (UNEP), the World Bank, the European Commission, developing and industrialized country governments, African stakeholders, international and national non-governmental organizations (NGOs) and research institutions. The meeting convened under the theme "Climate and Environment Mainstreaming and the Green Economy to Achieve the Millennium Development Goals." Wilfred gave a presentation on Kenya's perspective towards a green economy. Using the forestry sector as a case, he showed how undervaluation of the forest sector has affected the government's allocation of resources to the sector. This situation is also experienced in the other sub-sectors of the environment. The following prerequisites were highlighted; the need to, have clear and generally acceptable definition of natural resources e.g. forest; develop skills to capture the non-monetized values of these resources; availability of comprehensive quality data for capturing use and non-use forest values; clearly defined property user rights and tenure regimes to avoid leakages; clear benefit sharing mechanisms and capacity (technical, budgetary allocation etc).

#### EfD-K partners with NEMA and UNEP to prepare the Kenya State of Environment Report

EfD-Kenya actively participated in the preparation of the Kenya State of Environment (SoE) Report. Preparation of the SoE 2010 report was spearheaded by United Nation Environment Programme (UNEP) and National Environment Management Authority (NEMA). Section 9 subsections 2(p) of the Environment Management Coordination Act No 8 of 1999 requires that a State of Environment report is prepared and submitted to the National assembly for endorsement every year. The Act also mandates the Authority to coordinate the exercise and present the report to the National assembly. The SoE report documents environmental issues and potential interventions that need to be undertaken by various sectors towards enhancing the status and quality of the environment. This report also forms the basis for the preparation of operational sector policies, enhancement of the integration of environmental concerns into development processes, and preparation of environmental action plans. EfD-K was tasked to provide guidance on highlighting policy issues under each sector covered in the report and giving possible intervention measures.

**International Society for Ecological Economics (ISEE)** Conference, Olderburg and Bremen, Germany, in August 2010, organized by ISEE

A seminar series on Forest Tenure Reforms in Kenya, at the School of Economics, University of Nairobi in March 2010, organized by EfD-Kenya

ReSAKSS Stakeholders conference on country outlook reports, Nairobi, Kenya, December 2010

Futures Agriculture Consortium (FAC) Climate Change Theme seminar, Nairobi, October 2010

Park Pricing Workshop in Nakuru, October 2010, organized by EFD-Kenya

### 3.4.3 In service training

In 2010, the center recruited a young professional. The YP, who was an employee of government, under the Ministry of Livestock development, was attached to the centre for a whole year and worked on the Forest Management Reforms project. During his tenure, the YP was trained on how to undertake public policy research and analysis. He has since produced a discussion paper from his research work and the same was presented during the Annual meeting in Ethiopia.

# 3.5 South Africa selected policy work during 2010

### 3.5.1 Reporting average electricity consumption makes households consume less

Reporting to people about their own and the average consumption of electricity caused all kinds of households in suburbs of Cape Town to significantly reduce their electricity consumption. This is the conclusion of initial research results from EfD South Africa. Households in the middle income suburbs were the most responsive, followed by lower income suburbs. The upper income suburbs responded the least.

"This initial result is noteworthy because it demonstrates, at least in Cape Town, that higher income households are less responsive to comparative social norms feedback as an instrument to mitigate electricity consumption," says **Grant Smith** (left), Graduate student at School of Economics, University of Cape Town, who conducted the study together with EfD Research Fellow Martine Visser.

The main research result from this natural field experiment is that reporting the average electricity consumption in the city or neighborhood to households decreases consumption substantially.

"This is especially encouraging from an environmental policy point of view. Our result points toward what could quite possibly be a successful policy for future mitigation of electricity consumption in the developing world, and thereby a policy for mitigation of related degradation of the natural environment," says Smith.

The finding extends similar results found in the developed world context of the US to the developing world context of Cape Town in South Africa.

"This is the first study we are aware of to extend this result to a developing world context," says Smith.

#### Possibility to reduce environmental damage

Electricity is a scarce resource in South Africa and is generated largely by coal-fired power stations, which is a fairly dirty technology. If consumption can be reduced, it may be possible to reduce the environmental damage resulting from generating power in this fashion.

Twelve Cape Town suburbs were selected in order to provide an experimental population that represents three major income groups in the city. The experiment was conducted from January to December 2010.

There were five different treatment groups: A control group was composed of households that received no treatment but came from the same neighborhoods as the households in the four active treatment groups. Two city-level groups received feedback about the consumption of an average household in the city in the previous month, to which their consumption in that previous month was compared. Two neighborhood-level groups received the same sort of descriptive norm feedback, except that the feedback was for an average household in their neighborhood. Injunctive norm feedback was added to one group of each kind – one of the two city-level groups and one of the two neighborhood-level groups.

"The injunctive norm feedback was displayed using an emoticon. We reported a smiling emoticon for households consuming less than or at the average and a frowning emoticon for households consuming more than average," says Smith.

The feedback was printed on A4 paper inserts that were then mailed in the same envelopes as households' electricity bills. The inserts also contained treatment group-relevant information together with electricity-saving tips. Each insert was in the household's home language.

"It seems that, within income groups, the differentiated elements of our interventions generally did not exert a noticeable influence on consumption. Instead, it seems like it is receiving a comparative norm report about your electricity consumption that is the key factor," says Smith. According to Smith and Visser it could be expected that households in upper income suburbs would respond more strongly to comparative norm reporting about electricity use:

#### Middle and lower income households responded most

Upper income households are generally better educated and therefore more likely to be aware of the impact of electricity consumption on the natural environment. Households in upper income areas are also more likely to consume more electricity per person, since the cost of electricity generally comprises a smaller portion of their income. It could be expected that they use more than they necessarily need, and hence they may more easily reduce their consumption.

Lower income households, on the other hand, would probably already be very close to conserving as much as they possibly could.

"Contrary to our expectations, it appears that households in the middle income and lower income suburbs responded most dramatically to our treatments. Compared to their untreated peers, households in the middle income suburbs consumed 8.08 percent less and the lower income households consumed 5.75 percent less. Both of these figures are significantly greater savings than the 2.81 percent realized by households in the upper income suburbs," says Smith.

This result has the additional merit of beginning to extend the literature across a larger income spectrum than before. The households in the US-based studies are largely mimicked in terms of income characteristics by households in the EfD South African upper income sample. However, the South African households in the lower income category are located in very poor shanty towns and the South African households in the middle income category are suburbs with exceptionally low income by developed world standards.

"That the effect of reporting comparative norms extends even to these low income households is truly significant. But it does not seem to be a linear relationship across income groups. Rather, the effect seems to peak in the middle income group. Why this is, is something we are extremely interested in getting to the bottom of" says Smith.

Smith and Visser are currently completing analysis on the full year's worth of data for 2010 and hope to be able to comment on further issues such as whether response to the comparative norms weakens with time or remains strong throughout the year.

By Karin Backteman

### 3.5.2 Policy seminars, workshops and conferences

#### **Policy seminars**

EfD/EPRU Researcher Dr Stephanie Giamporcaro presented the findings of the report: "*Environmentally Responsible Investment in South Africa: The state of play*" to investors, media and fellow academics in March 2010. The report presents data on current ERI practices, obstacles and enablers that the respondents identified in integrating environmental considerations in the South African investment industry. The report was based on desk-top and field research conducted in South Africa during 2009, including interviews with 22 of the 34 investment organisations targeted. Some of the key findings that were presented included the fact that there is a lack of investment products that are primarily driven by an environmental focus to clients, and there is a general lack of interest, with social goals being seen as a more important concern. This will need to be addressed through a more binding environmental regulation framework that will lead investors to price environmental risk, and a stronger commitment from all institutional investors to follow the example of the Government Employees Pension Fund (GEPF) to implement responsible investment strategies and mandates. A lively debate discussing the findings took place after the presentation.

#### 45th Annual Congress of the Grassland Society of Southern Africa

The Grasslands Society hosted their 45th congress on Sustainable and Adaptive Practices in Range and Pasture Systems, with an Emphasis on Arid Regions, in Kimberly on 19- 25 July 2010. EPRU was represented by Johane Dikgang, one of the only two participants with an economics background. Johane presented a paper on *"The effect of the Land Restitution Programme on Poverty Reduction among the Khomani San in the Kgalagadi Transfrontier Park Project"*. Johane spoke in a parallel session that focused on community based natural resource management. His presentation gave useful information on some critical driving factors behind unsustainable land uses in arid areas. The society's members appreciated a presentation that made them more aware of the role that economics can play in the grassland field. Multi-disciplinary collaborations between EPRU researchers and Grassland Society members were discussed after Johane's presentation.

#### **Putting a Price on Carbon Conference**

Kerri Brick, EfD research fellow, and Martine Visser, EfD research fellow and coordinator, presented a paper at the Putting a Price on Carbon Conference, held in Cape Town on 23 and 24 March, 2010. The purpose of the conference was to build on the discussions undertaken at a side-event at the 2009 Climate Change Summit where Brick and Visser also presented a paper. The paper presented by Brick and Visser explored meeting a national emission reduction target in an experimental setting. The paper concluded that voluntary cooperation results in insufficient cooperation in the context of meeting a national target. With the introduction of communication, cooperation was significantly improved, indicating that stakeholder participation is important in facilitating compliance. In the context of taxation, when the frequency of free-riding is high, taxation improved cooperation. Conversely, amid high levels of cooperation, taxation dampened cooperative behaviour.

#### South African Biodiversity Planning Forum

The South African National Biodiversity Institute (SANBI) and the Department of Environmental Affairs (DEA) co-hosted and co-sponsored the 2010 Biodiversity Planning Forum from the 2nd to the 5th March 2010. The Biodiversity Planning Forum was established in 2004 to provide an opportunity for individuals, agencies and departments involved in spatial biodiversity planning to share and synthesise valuable lessons from biodiversity planning projects across South Africa. Leading policy makers such as the Chief Executive Officer (CEO) of the South Africa National Biodiversity Institute (SANBI) and the Director General from the Department of environmental affairs and Tourism (DEAT) were present. EPRU Junior Research Fellow Johane Dikgang and Rhodes University PhD student Gladman Thondhlana presented their works on the use of economic incentives in the Kgalagadi landscape. Johane presentation dealt with the question of valuation of Biodiversity Conservation in the Kgalagadi area. A total of around 200 people attended the 2010 Forum from all over South Africa.

#### International Flood-Pulse Symposium

The International Flood-Pulse Symposium was held in Maun, Botswana, in January 2010. This symposium draws international experts in all facets of wetland and integrated river basin management. Although dominated by ecologists, it also draws a range of social and economics-oriented researchers. EPRU Research Fellow Dr Jane Turpie presented two papers, one on *"The Livelihood value of the natural resources of the Okavango Delta, Botswana, and implications of changes in environmental flows and management"*, and another on *"Exploring scenarios to restore the Kirua Swamp in the Pangani River Basin, Tanzania"*. These papers emphasized the importance of taking a multidisciplinary view in the management of freshwater flows to maintain wetland ecosystems, and demonstrated the importance of these systems to local livelihoods.

### 3.6 Tanzania selected policy work during 2010

### 3.6.1 Sustainable growth is key in Tanzania's MKUKUTA 2011-2015

When President Jakaya Kikwete recently signed Tanzania's new National Strategy for Growth and Reduction of Poverty, it was a milestone to celebrate for EfD Research Fellow John Kedi Mduma. Since 2007 he has been involved in monitoring and reviewing the national strategy. Now he is in the middle of designing the Implementation Guide for the forwardlooking strategy for 2011-2015, known as MKUKUTA II in Kiswahili.

The Implementation Guide for Tanzania's new poverty eradication action strategy will give specific guidance on what should be done at all levels of the government- ministries, departments, agencies, as well as local government authorities. The guide is expected to be completed early 2011. The strategy itself – National Strategy for Growth and Reduction of Poverty, NSGRP – is better known in Tanzania by its Kiswahili acronym MKUKUTA, Mkakati wa Kukuza Uchumi na Kupunguza Umaskini Tanzania. John Kedi Mduma, researcher at Environment for Development initiative (EfD) in Tanzania, was assigned as a technical advisor for the review in April 2009 and has been participating in the NSGRP monitoring process since 2007. "We believe that reduction of poverty must be based on sustainable growth. When we started this work, we wanted the new MKUKUTA for the coming five years to be sharper and more focused and specific, and have a stronger emphasis on sustainable growth," says Mduma.

#### The issue of growth is debated

The issue of growth is debated in Tanzania. At the macroeconomic level, Tanzania is doing well, yet at the household level, income poverty did not decline during the period 2001-2007. GDP growth during this period averaged about 7 percent, yet the headcount poverty index/income-poor proportion of the population declined marginally from 35.7 percent to 33.6 percent

"We therefore agreed that two issues should be reviewed in MKUKUTA. First, the issue of income distribution – to answer the question: where has the growth gone? And second, where should the growth efforts/interventions be directed in the next round of MKUKUTA in order to impact poverty reduction? "Several MKUKUTA review studies suggest that the weak link between growth and employment – and the creation of decent jobs in particular – is the main factor behind the slow reduction in income poverty. Thus, in the next five years growth efforts should focus on the sectors that employ a majority of the poor – agriculture being one.

#### Poverty-population-environment nexus

Another important issue addressed in the MKUKUTA review was the poverty-population-environment nexus. Commissioned by the government to fill certain information gaps, EfD Tanzania provided two research studies on this issue. The studies were led by Dr Razack Lokina, EfD Coordinator in Tanzania. Among the finding is that, although the environment issues have been mainstreamed, the funding for environmental issues has not been given enough attention. For instance, some ministries still don't have an environmental unit, though this is a government requirement.

"We also find that the contribution of natural resources is not exploited fully for poverty reduction. The new MKUKUTA sets strategies for raising the contribution of natural resources in poverty reduction, particularly minerals and wildlife," says Mduma. Wildlife and hunting are large sectors of Tanzania's tourism. Optimal pricing of these resources as well as anti-corruption measures – overall issues of governance – can raise their contribution to poverty reduction, according to the new MKUKUTA. **Minerals should be processed** 

Most of Tanzania's minerals are exported raw. MKUKUTA II emphasizes the importance of value addition prior to export. Minerals should be processed to a certain level in Tanzania before they are exported. For example, the famous Tanzanite is currently exported mostly unpolished and uncut, so are

the other gemstones, such as diamonds. In Mdumas' personal view, all contracts with firms mining Tanzania's minerals should stipulate that all processing, polishing, and cutting be done in Tanzania. More processing and marketing of agricultural products will also add value and increase the shelf life of these products – for example selling juice in addition to fresh fruits. The government document - Kilimo Kwanza (Agriculture First) is a guide for development in rural areas and beyond (essentially because Kilimo Kwanza follows a Value Chain Approach – from agro input to agro production, processing, marketing, and distribution). Apart from cereals, processing of agricultural products, especially vegetables and fruits, is crucial for the contribution to growth and poverty reduction.

#### Interventions to address climate change

MKUKUTA review also noted that climate change is severely affecting agriculture production, as well as growth and poverty. "We suggest policies to support adoption of crop varieties and livestock breeds that are resistant to climate change. Climate change also affects the energy supply. "We highlight the need to have alternative sources and gradually reduce Tanzania's dependence on hydropower," says Mduma. The volumes of water fluctuate and are erratic due to several droughts over the last ten years. Therefore the new MKUKUTA recommends speeding up the exploitation of natural gas and other energy sources such as wind and solar. Off-grid distribution – small hydro or thermal plants – seems to be the best strategy for villages far away from the national grid. "We also need to intervene against the health effects of climate change, such as disease outbreaks. Climate change is likely to influence outbreaks of zoonotic diseases, which attack animals, as well as the spread of malaria where it is not endemic. Such outbreaks will have implications for human resources and budgets, and eventually for growth and poverty reduction," says Mduma.

#### Urban planning and employment strategies

Population growth and Tanzania's rapid urbanization are of course highly relevant issues with respect to poverty reduction. Decent shelters in urban areas and urban planning are among the specific goals in the new strategy. Employment is equally important, particularly youth employment. MKUKUTA II states that growth should generate decent jobs in the mineral, tourism and agriculture sectors: Jobs should pay well enough to lift people from poverty, and strategies for labour market regulations are indicated. Mduma enjoys the MKUKUTA work: "Technically I saw a window where I can use my expertise; at the same time by working with the government I have diversified my knowledge and broadened my skills". By Karin Backteman

### 3.6.2 Policy seminars, workshops and conferences during 2010

The year 2010 members of the EfDT in collaboration with other members from the Economics department conducted series of policy Seminar/workshops that involves different groups of participants' at national level as follows:

# Workshop on policy sensitization on public private partnership (PPP) towards implementation of Mkukuta and MDGs.

A team of EfDT members and other members of the Department of Economics University of Dar es Salaam in collaboration with Ministry of Finance and Economic Affairs – Poverty Eradication & Empowerment division (PEED), conducted a technical session on Policy Sensitization with focus on key issues related to Public Private Partnership (PPP) in various zones of the country. This workshop took place in Dodoma at St. Gaspar Conference Centre from 20<sup>th</sup> to 21<sup>st</sup> September 2010 was attended by 40 participants from Mainland and Isles. During the workshop the focus was on deliberations of the PPP Policy as well as the PPP Act towards realization of MKUKUTA II and MDGs goals and objectives. Thus the workshop aims to bring into perspective pertinent issues related to PPP Policy and the Act while learning from global best practices which will bring rapid and sustainable development to the Tanzania economy.

#### Pro-poor growth training workshop for higher learning institutions

The EfDT members and the Department of Economics members in University of Dar es Salaam in collaboration with Ministry of Finance and Economic Affairs – Poverty Eradication & Empowerment division (PEED), under UNDP support conducted a technical session on Pro- Poor Growth with focus on various themes for higher learning institutions. This training workshop took place in Dodoma at St. Gaspar Conference from 22<sup>nd</sup> to 25<sup>th</sup> September 2010. This workshop aims at engaging representatives of research and higher institutes of learning in raising debate on Pro-Ploor growth policies in the context of MKUKUTA II implementation. The first day of the workshop was devoted towards reviewing training manuals developed by members of staff before embarking on pro-poor policy training.

#### Mkukuta II Sensitaization workshop series of higher learning institutions

EfDT and other members in the Department of Economics of the University of Dar es Salaam in collaboration with the Ministry of Finance and Economic Affairs organised a two day workshop on MKUKUTA II Sensitization workshop Series for Higher learning Institutions. The main idea is to introduce participants on what is new in MKUKUTA II and how things would be done differently in the next five years of implementation. The workshop conducted on 18th December 2010. the Workshop conducted at Kiromo View Hotel in Bagamoyo. The workshop was supported by the UNDP Tanzania Country Office under the auspices of the Ministry of Finance and Economic Affairs. There were 30 academicians participants representing all accredited Universities in Tanzania.

#### A workshop on human development approach

EfDT members and other members of the Department of Economics of the University of Dar es Salaam organized a two day workshop on the Human Development Approach. This workshop follows the launching of the 2010 UNDP Human Development Report which was done in Dar es Salaam on 16th November 2010. The aim of the Workshop was to review the concept and the operationalization of the Human Development Approach and the extent that it can be mainstreamed in the curricular of Institutions of Higher Learning in Tanzania. There was 35 participants drawn from Tanzania mailand and isles. The workshop conducted on 19th November 2010 and conclude on 20th November 2010. The Venue of the Workshop was Kiromo View Hotel in Bagamoyo. The workshop was supported by the UNDP Tanzania country office under the auspices of the Ministry of Finance and Economic Affairs.

### 3.6.3 In service training

The Environmental for Development Tanzania (EfDT) in collaboration with the Office of the Vice President - Environment Division organized two days Training workshop on Environmental-Poverty Linkages. The overall focus of this training was on the linkages between poverty- environmental changes: how changes in the quality of the environment affect the poor. Four key dimensions of human poverty are considered: livelihoods, health, vulnerability and governance associated monitoring systems. The training workshop took place in Morogoro region. The target Group are the districts and regional environmental officers, as well as regional secretariat officers responsible of poverty and environmental issues form Morogoro, Dodoma and Singida regions with total number of 25 participants. The facilitators in this workshop were the EfDT members and representative from UNDP and vice president office – Environment division.

The EfDT staff also conduct training to civil servants in government organs and non – governmental institutions as a party of capacity building strategies. We have developed a training manual that aim at developing and facilitating effective mainstreaming of environmental and poverty concerns in policy, planning and monitoring processes in Tanzania through articulating the linkages between poverty and environment on the one hand and economic growth on the other. The main objective is to provide reference to concepts, strategies, policies, and guidelines. The manual itself is intended to:

Impart skills needed by policy makers and practitioners in order to analyze poverty-environment linkages.

Familiarize stakeholders with approaches used in analyzing poverty-environment linkages.

Identify roles and responsibilities of different actors and stakeholders in the continuum of policy processes related to poverty-environment linkages.

Assist in developing poverty-environment indicators for monitoring policies and strategies. Identify approaches to financial resources mobilization for environmental management.

# 4 RESEARCH

Applied, policy relevant research is a core activity for the EfD initiative. Research is a critical input in a long-term strategy to reduce environmental degradation, eradicate poverty and to ensure sustainable use of natural resources. A major challenge in developing countries is, however, the lack of comprehensive research on environmental resource management and poverty alleviation which can inform national strategic plans and policies. Policymakers, farmers, donors, and others need research based information not only to design policies but also to evaluate their efficiency in reaching their objectives.

At the beginning of 2010, about SEK 2 million was allocated to the EfD research fund. This fund supported at least 13 research projects of various sizes across the six centers. Some centers used this funding as seed money to crowd-in other funding. By the end of the year, about 29 research projects had been executed across the six centers. Research projects in 2010 focused on all the six EfD major themes: agriculture, climate change, fisheries, forestry, parks and wildlife, and policy design. However, the bulk of projects dealt with climate change and policy design as can be seen from the figure below.

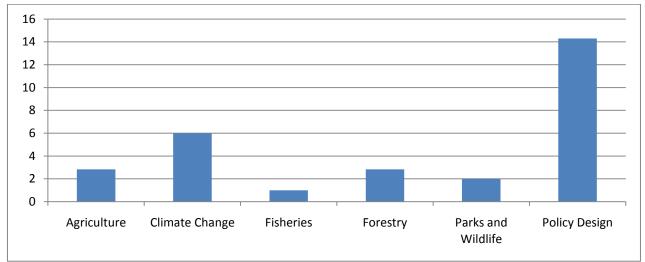
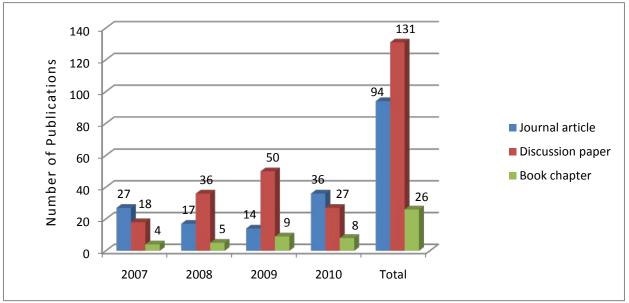


Figure 7: EfD Research projects by theme 2010

EfD-Central America's four research projects which were fully funded by the EfD focused on climate change, fisheries, parks and wildlife, and policy design. EfD-China had eight research projects of which only one was fully funded by the EfD. EfD-China has successfully managed to crowd-in research funding from other sources. The center has demonstrated how beneficiaries from EfD research especially government departments (notably the Chinese Ministry of Science and Technology, the Chinese Ministry of Environmental Protection and the Beijing Municipal Government) can be roped-in to share in the costs of producing policy-relevant research. The focus of the 2010 research projects in China has been on climate change and policy design, which represents a significant shift from the center's traditional focus on forestry. This demonstrates the center's capacity to respond to new research needs. The center in Ethiopia has largely continued with its focus on agriculture, an area of great need in that country. The center had four projects in 2010, two of which also addressed climate change, forestry and policy design aspects of agriculture. EfD-Ethiopia is one of the centers which still heavily relies on full EfD funding. EfD-Kenya had three research projects in 2010 which focused on forestry, climate change and policy design.

These projects received full EfD funding. One of the Kenyan projects demonstrates a serious attempt by the EfD to promote research on forestry and REDD issues. Forestry and REDD will continue to be a major focus of EfD research in the future. The EfD center in Tanzania teamed up with the Tanzanian Forest Research Institute and the Ruvu Fuelwood Project on two research projects co-funded by the EfD in fisheries and forestry. There is more work going on in Tanzania which seeks to directly address poverty issues in that country. EfD-South Africa had seven research projects in 2010. These fell into the following themes: climate change, parks and wildlife, and policy design. Three of the projects were co-funded by the Vice Chancellor of the University of Cape Town as part of the newly established African Climate Development Initiative at that university. The case at EfD-South Africa demonstrates how synergies between EfD research and universities' priorities can be exploited to secure additional financial support from host universities.

In terms of research output, 2010 was a successful year in terms of EfD discussion papers, peer reviewed articles and other outputs. There were 36 peer-reviewed articles, 27 discussion papers and 12 books & book chapters as shown in the figure 8. The figures for these categories represent an overall growth of 4% from the 2009 levels but the really remarkable fact is that the number of peer reviewed articles have increased to such an extent. The peer-reviewed articles mainly focused on agriculture (6), forestry (7) and policy design (15) even though there were outputs on each of the EfD themes. Notable in 2010 is that four of the centers also produced and disseminated policy briefs and other reports.



*Figure 8:Research output by publication type 2007-2010* 

Historically, EfD-Central America and EfD-Ethiopia have been at the forefront in terms of the cumulative number of peer-reviewed publications. It is pleasing to note that EfD-China and EfD-South Africa have drastically increased the number of their peer-reviewed publications in 2010 as shown in figure 9. These two centers jointly produced over two-thirds of peer-reviewed articles in the network. However, the momentum for producing peer-reviewed articles still exists in EfD-Central America and EfD-Ethiopia. This can be seen from the large stock of EfD Discussion papers produced in 2010 as shown in figure 10. It is expected that the outcomes will be better in the future when EfD-Kenya and EfD-Tanzania improve their peer-review output levels. Figure 11 shows the aggregated research output

including Journal articles, all discussion papers and book chapters over a four year period. A full list of research publications and policy briefs are available in Appendix 2

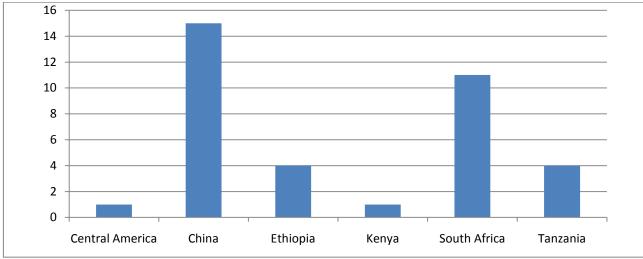


Figure 9: Peer reviewed articles by center 2010

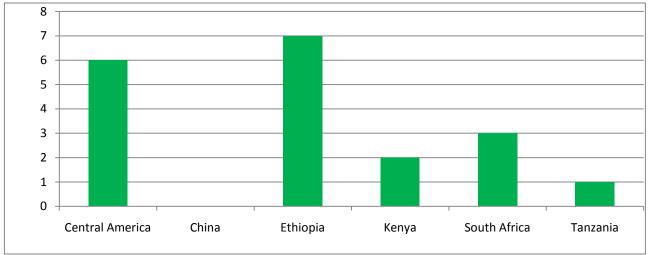


Figure 10: EfD discussion papers by center 2010

### 4.1 Research Projects 2010

Here follows a list of the research projects that were running during 2010 per center. More details can be found about research each project on the website. Both the ones financed by EfD and other partners:

### **Central America**

Impact of uncertainty and pro-social attitudes on household's solid waste management decisions: starting from scratch in a LDC Funding: EfD/Sida EfD theme: Policy Design

**Exploring the potential of safety nets as part of an adaptation to climate change strategy in Central America** Funding: EfD/Sida EfD theme: Climate change, Policy Design

The role of coastal communities on the management of marine turtles in Central America: The case of Ostional Wildlife Refuge Funding: EfD/Sida EfD theme: Fisheries, Parks and Wildlife

Measuring the effects of flood risk on migration flows: An application for Costa Rica Funding: EfD/Sida EfD theme: Climate Change, Policy Design

#### China

**Risk-based cost-effective control of SO2 emissions at regional levels** Funding: Economy and Environment Program for Southeast Asia (EEPSEA)

#### Regional air quality management

Funding: Beijing Municipal Science & Technology Commission (Co-PI)

The climate effect of black carbon and the abatement of black carbon as a buffer for abating CO2 emissions Funding: Chinese Ministry of Science and Technology (Co-PI)

Economic Analysis on Ambient Air Quality Standard for PM 2.5

Funding: Energy Foundation

**Regional Environmental Management Reform: Linking the local, regional and global issues.** Funding: Ministry of Environmental Protection

Regional Environmental Management for Beijing and surrounding provinces (including least cost strategy design for multiple pollutants control at local and regional level, policy study for achieving the objectives, and management framework) Funding: Beijing Municipal Government

**Cost benefit analysis of Beijing's Olympic Air Quality Control** Funding: energy foundation

**Cost-Effectiveness Analysis for controlling Near Ground Ozone in Beijing and its Surrounding Areas** Funding: Beijing Municipal Government

**China's gasoline tax reform** Funding: EfD/Sida Theme: Policy Design

#### Ethiopia

Impact of Climate Change on Ethiopian Economy and Agriculture Funding: EfD/Sida Theme: Agriculture, Climate change

Impact of Biofuel Investment on the External Sector, Growth and Poverty Reduction in Ethiopia: CGE Analysis Funding: EfD/Sida Theme: Agriculture

Impact of land certification on tree growing on private plots of rural households: evidence from the Amhara region of Ethiopia Funding: EfD/Sida Theme: Agriculture

Land Reforms in Asia and Africa - Impacts on Poverty and Natural Resource Management Funding: EfD/Sida Theme: Agriculture, Forestry, Policy design

#### Kenya

The Economics of sanitation in Kibera: Investigating the characteristics of demand by tenants and constraints to investment by structure owners Funding: EfD/Sida Theme: Wellbeing, institutions and basic services

Forest management reforms Funding: EfD/Sida Theme: Forestry

**Climate change: REDD project** Funding: EfD/Sida Theme: Forestry, Climate Change

#### Tanzania

Protecting Peri-Urban forests and livelihoods: Spatial Enforcement Issues and Incentives for Community-Based Initiatives Funding: EfD/Sida and Tanzania Forest Research Institute and the Ruvu Fuelwood Project? Theme: Forestry

Incentives to Cooperate with Marine Protected Areas as a Function of Location: Mnazi Bay Ruvuma Estuary Marine Park Case Study Funding: EfD/Sida and Tanzania Forest Research Institute and the Ruvu Fuelwood Project Theme: Fishery

#### South Africa

Measuring climate change risks aversion Funding: EFD/Sida Theme: Climate change

**Experimenting behavioural economics** Funding: EFD/Sida, African Climate Development Initiative/UCT Theme: Policy design

Small scale farmers, Risk and Climate Change

Funding: EFD/Sida, VC Strategic Funding/UCT, African Climate Development Initiative/UCT Theme: Climate change **Impact of Climate Policy on Environmentally Responsible Investment Behavior** *Funding: EFD/Sida Theme: Climate change* 

#### A Natural Field Experiment with electricity consumption and Social norms

Funding: City of Cape Town Investigators: Dr. Martine Visser, Grant Smith (Masters), Boipuso Modise (Masters),

#### Estimating Optimal Conservation Fees in the Kgalagadi Transfrontier Park between Botswana and South Africa

Funding: EFD/Sida Theme: Parks and wildlife

#### The provision of basic service delivery on well-being

Funding: EFD/Sida, African Climate Development Initiative/UCT Investigators: Policy design

### 4.2 Annual meeting in Ethiopia

The EfD Annual Meeting 2010 in Ethiopia, October 28-31, started with one day at UN Economic Commission for Africa focusing on how to make the most use of environmental economics research for development. Three days of research presentations and discussions followed together with key note speeches and a lecture on a multi-disciplinary approach to analyze Social Ecological Systems, designed by Nobel Laureate Elinor Ostrom and applicable for EfD's planned thematic research collaboration.

"Our objectives of the Policy Day was to disseminate selected work of EfD's research and its potential contributions to a key policy institution, UNECA, and other key stakeholders present at the meeting. We also wanted to share information across EfD centers on successful research-policy interactions, as well as increase our learning on how to translate research to policy more in general", says EfD Director **Gunnar Köhlin**.

The Policy Day was hosted by UN Economic Commission for Africa (UNECA) together with the Ethiopian EfD Center (Environmental Economics Policy Forum for Ethiopia which is housed at the Ethiopian Development Research Institute).

Among the speakers were **Desalegn Mesfin**, *Deputy Director General, Federal Environmental Protection Authority of Ethiopia*, who opened the meeting. **Anders Ekbom**, *EfD Research Fellow and policy analyst at the University of Gothenburg*, spoke about research-policy interactions: models, approaches and lessons learned. **Chantal Line Carpentier**, *Sustainable Development Officer*, *Division for Sustainable Development United Nations Department of Economic and Social Affairs*, spoke about needs and opportunities to strengthen policy-research links on the economics of environment and climate change – perspectives from UNDESA.

Successful cases of EfD research-policy interactions were presented by **Menale Kassie**, former EfD Research Officer and now working for CIMMYT in Kenya, and by the EfD coordinators **Jintao Xu**, Professor at Peking University, and **Francisco Alpizar**, CATIE, Costa Rica.

The following three days of the EfD annual meeting were hosted by **Alemu Mekonnen**, *EfD Research fellow and Coordinator of EfD Ethiopia*, and held at Kuriftu Resort in Debrezeit. Most of the time was devoted to presentations and discussions on ongoing and planned EfD research.

One of the key note speakers was **Roger Sedjo**, *RFF Senior Fellow and Director of RFF's Forest Economics and Policy*. Sedjo spoke on the role forests can play in carbon capture: principles, costs and policies. The other key note speaker was *World Bank Lead Economist* **Klaus Deininger**, who spoke on large scale land acquisitions. *EfD Research Fellow* **Roger Madrigal** from Costa Rica gave a lecture on the Social Ecological System Ontological framework, designed by professor Elinor Ostrom, who was awarded the 2009 Nobel Memorial Prize in Economic Sciences for her analysis of economic governance, especially the commons. Roger Madrigal made a long research visit to professor Ostrom at Indiana University before she received the prize, in order to develop the design of his research project on drinking water management.

"The ontological framework is a conceptual map for analyzing the interactions between humans and ecosystems. It builds on the last decades of findings in the literature of common-pool resources and collective action towards the management of natural resources", says Madrigal: "This framework might help to conduct systematic diagnosis of the structure of the interactions between humans and ecosystems analyzed by EfD's scholars in different parts of the world."

### 4.3 Other joint research workshops during 2010

### 4.3.1 Land Tenure Book Workshop January 2010, Beijing, China

Land reforms have played a central role in the political economy of many countries and have been subject to massive disagreements between different political interest groups and ideologies. In a new research project EfD aims to draw lessons from land reforms in several Asian and African countries. The findings will be presented in a book edited by Professors Stein Holden and Keijiro Otsuka and titled "Land Reforms in Asia and Africa - Impacts on Poverty and Natural Resource Management". The first book workshop was held on Jan 24-25, 2010, at Peking University.

The objectives of this land tenure workshop were to identify researchable topics, good research questions, testable hypotheses, and make a realistic plan for preparing the book chapters. The research, and the book, will focus on a range of impacts including welfare and natural resource management impacts.

Potential research questions include: What are the poverty reduction effects of alternative land reform approaches? To what extent have the reforms enhanced growth and been pro-poor, e.g. benefited the landless, low-caste, and women? How can more socially optimal property rights regimes be defined for agricultural and forest land resources?

Countries to be studied are China, Vietnam, India, Nepal, The Philippines, Ethiopia, Malawi, Uganda, South Africa, and Zimbabwe.

The first workshop was hosted by Professor Jintao Xu, Peking University. He participated together with Senior Economist Simon McCoy, University of Copenhagen, Dr Gunnar Köhlin, University of Gothenburg and the two book editors Professors Keijiro Otsuka, Foundation for Advanced Studies on International Development (FASID)/National Graduate Institute for Policy Studies (GRIPS) and Stein Holden, Norwegian University of Life Sciences

### 4.3.2 Park pricing workshop October 2010, Nakuru, Kenya

Publicly owned national parks, wildlife reserves and other protected areas are major attractions for nature-based tourism (NBT). These attractions are not costless to provide. Financial resources are needed to ensure their sustainable provision. African parks increasingly rely on their own revenues for their management. The concept of "the user pays" is generally believed to be perfectly appropriate for NBT as a private good (even when it is supplied through a public agency). Pricing is a potentially powerful tool to move towards greater efficiency, fairness and environmentally sustainable NBT. To date, pricing policy in NBT is underutilized especially in Eastern and southern Africa. As a result, entrance fees and other charges for access to such areas frequently are below amounts visitors are willing and able to pay, and below amounts required to finance park operating budgets. The setting of fees for NBT is complex

because of multiple pricing objectives, visitor categories, NBT activities and fee instruments. The context of charging fees is often surrounded by philosophical and legislative debates. In most cases, economists can provide a starting point for the administrator of the national parks and wildlife agency, who has numerous interests to serve and criteria to weigh.

The park pricing workshop in Nakuru, Kenya, was held in October 2010 to establish a new research theme on park pricing, initially with emphasis on Eastern and Southern Africa. The workshop was attended by Aloyce Hepelwa (EfD Tanzania), Rahel Bekele (EfD Ethiopia), Goeffrey Sikei (EfD Kenya), Wilfred Nyangena (EfD Kenya), Edwin Muchapondwa (EfD South Africa), Johane Dikgang (EfD South Africa), Gardner Brown (University of Washington), Gunnar Kohlin (GU), Margaret Banga (EfD Tanzania), James Njogu (Kenya Wildlife Services), Moses Chelibei (Uganda Wildlife Authority) and Liberty Nyaguse (Zimbabwe Parks). The different country teams shared details about the pricing frameworks in their countries while Gardner Brown and Edwin Muchapondwa presented the major methodologies for determining optimal park prices. The workshop identified research issues which would form the basis of a future collaborative research program on park pricing. A follow-up workshop was planned for end of April 2011.

# 5 ACADEMIC CAPACITY BUILDING

The EfD Academic capacity component is designed to minimize the shortage of trained environmental economists in developing countries by supporting undergraduate and postgraduate studies in environmental economics and by building the capacity of local public universities through teaching support, research grants, books and other support. Linking research with academia is one of the unique features of EfD. Apart from research, research fellows are teaching and supervising a number of undergraduate and postgraduate environmental economist students. Students are getting a chance to learn evidence based courses. In addition to teaching their university students, African EfD researchers are also assisting the African Economics Research Consortium (AERC) postgraduate economics program by teaching environmental related courses. Research fellows mainly teach environmental economics, natural resource economics and environmental evaluation courses. During 2010 a number of students have attended these courses and many students were supervised by research fellows at the center. Table 7 below summarizes number of courses taught in Environmental Economics, total number of students attending these courses and number of thesis supervised by EfD fellows at respective center.

	Undergraduate courses		Msc Courses			PhD courses		
	Courses	Students	Courses	Students	Theses	Courses	Students	Theses
Central America	2	60	4	48	9			1
China	1	40	1	50	3	2	26	
Ethiopia			2	27	5			
Kenya	4	186	2	33	3	2	14	1
South Africa	1	10	3	46				1
Tanzania	3	136	2	42	3	3	39	4

Table 10: Courses, students and thesis supervision 2010

# 5.1 Central America

One of the priorities at the EfD-CA Center is educational support at different levels. In particular, our objective is to increase the local capacity of people at academic and non-academic organizations (NGO's, public institutes, and civil society organizations) to conduct, critically evaluate and interpret research on environmental and natural resource economics and policy.

Our support for education is built on three pillars: i. strengthening the quality and reach of CATIE's MSc Program in Environmental Socioeconomics, ii. education of people from non-academic organizations, and iii. mentoring of bright young researchers.

The educational support to academic institutions is mainly conducted by the different courses taught at CATIE by EfD-CA scholars as well as the tutoring of students on their dissertations. EfD-CA is planning to continue its strong support of the MSc Program in Environmental Socioeconomics by offering high quality courses updated with recent research results and methodologies. Complementary to this objective, the supervision of MSc and PhD students will continue to be a priority, especially because some of the students have become critical in developing many of our research projects.

In relation to education of people from non-academic organizations, our main contribution will be offering capacity-building courses adapted to the target audience and updated with the most recent findings in policy design and evaluation in the region. In the last two years of operations at EfD-CA, we have trained more than 50 people from all over Latin America in environmental economics and policy issues. The participants in these courses have included government policy makers at different levels, technical staff of NGO's, and local leaders, among others. The presentation of EfD-CA research agenda and results has been very useful as a didactic tool as well as a mechanism to disseminate our work.

Undergraduate courses in environmental economics:	Number of students	Fellow(s) teaching the course	
Course 1: Public Economics I University of Costa Rica	40	Juan Robalino	
Course 2: Public Economics II University of Costa Rica	20	Juan Robalino	
Master courses in environmental economics	Number of students	Fellow(s) teaching the course	
Course 1: Economic Valuation of the Environment - Postgraduate School, CATIE	10	Francisco Alpízar Róger Madrigal	
Course 2: Environmental Economics and Natural Resources - Postgraduate School, CATIE	18	Róger Madrigal Francisco Alpízar María A. Naranjo	
Course 3: Principles of Economics - Postgraduate School, CATIE	10	Adriana Chacón Laura Villalobos	
Course 4: Quantitative Methods - Postgraduate School, CATIE	10	Juan Robalino Adriana Chacón	

# 5.2 China

EEPC in association with the Institute of Environment and Economy (IoEE) at Peking University and with the support of the Environmental Economics Unit of the University of Gothenburg, is devoting to developing productive international scholars and institutions in order to advance its academic exploration in modern environmental economics. We receive students from all over China who are interested in environmental sciences and economics. Our graduate program includes an MSc in environmental economics and policy and a PhD in environmental economics and resource economics.

The MSc program prepares professionals with strong analytical skills and a critical, objective vision, both essential to confronting the interrelated challenges of development and environment protection, whether in the private or public sectors, non-governmental organizations, or in academic institutions.

By incorporating PKU's strength in economics and natural sciences, EEPC will be able to develop a comprehensive curriculum for its PhD program and students will be able to develop their skills in a multidisciplinary environment. With assistance from international collaborators and programs within the university, EEPC strives for the establishment of a top Ph.D program in environmental economics.

Undergraduate courses in environmental economics:	Number of students	Fellow(s) teaching the course	
Environmental management	40	Shiqiu Zhang	
Master courses in environmental economics	Number of students	Fellow(s) teaching the course	
Environmental economics	50	Shiqiu Zhang	
PhD courses in environmental economics	Number of students	Fellow(s) teaching the course	
Advanced Natural Resource Economics	16	Jintao Xu	
Environmental economics	10	Shiqiu Zhang	

### 5.3 Ethiopia

EEPFE has very close academic links with the Department of Economics at Addis Ababa University (AAU). Most of our research fellows are actively involved in teaching and supervision in the graduate program in economics. EEPFE provides book support for School of Economics Library at Addis Ababa University. In addition, it gives grant for MSc thesis on Environmetal and Natural economics.

Master courses in environmental economics	Number of students	Fellow(s) teaching the course
Course 1. Environmental and natural resource economics	17	Zenebe Gebreegziabher
Course 2Environmental Valuation and Policy	10	Alemu Mekonnen

### 5.4 Kenya

EfD Kenya fellows contribute in teaching both undergraduate and post graduate programs in environmental economics at the School of Economics; the University of Nairobi and other affiliates such as the International Development Studies (IDS) and the School of Journalism. The fellows are also involved in the supervision of Masters and PhD thesis programs and provide financial support among others to graduate students undertaking a thesis in environmental and resource economics. Besides teaching and supervision, the EfD-K also incorporates students who are through with their course works to some of its on-going projects. This way, the students are able to identify with ease, their thesis research interests.

Undergraduate courses in environmental economics:	Number of students	Fellow(s) teaching the course	
Resource Economics	68	Wilfred Nyangena/ Philip Cook	
Environmental Economics	68	Wilfred Nyangena	
Environmental Economics	20	Paul Guthiga	
Natural Resource Economics	30	Paul Guthiga	
Master courses in environmental economics	Number of students	Fellow(s) teaching the course	
Environmental Economics	16	Paul Guthiga/Wilfred Nyangena	
Environmental Valuation	17	Paul Guthiga	
Course 3			
PhD courses in environmental economics	Number of students	Fellow(s) teaching the course	
Environmental Economics	7	Wilfred Nyangena/Paul Guthiga	
Resource Economics	7	Wilfred Nyangena	

# 5.5 South Africa

EPRU's research fellows are actively involved in the School of Economics, teaching programmes in environmental and natural resource economics as well as in the broader university (see section 5.2). Our strong involvement in teaching has undoubtedly helped us attract promising postgraduate students. In addition, in order to support talented students to undertake research in our fields of interest, EPRU provides four grants to Masters students. In addition, a significant share of our core budget and individual researchers' budgets has been allocated to fund PhD scholarships. We believe this is an

investment that has a potentially return both for EPRU and more generally for South Africa. Finally, we also award prizes to reward the best Honours and Masters Thesis.

#### Environmental economics teaching exchange

The University of New York held an Environmental Policy and Sustainable Development course at UCT over a two-week period in July, led by Maria Damon (New York University). EfD research fellows Martine Visser and Edwin Muchapondwa lectured on the course. The course explored the ways that economic analysis can help identify underlying problems and formulate effective policy responses to them. Major topics included in the lectures were: approaches for understanding behavior and social preferences in poor communities; what these imply for the management of natural resources; choosing optimal policy instruments for pollution reduction and environmental protection; and relationships between human health and the environment. Students also participated in behavioral experiments related to common property resource management, public goods, and climate risk and went to field trips. An excursion was made to the Kuyasa Clean Development Mechanism Pilot Project. This project involves the retrofitting of solar water heater (SWHs), insulated ceilings and energy efficient lighting in over 2,300 low-cost homes in the Khayelitsha townships. Students were highly motivated by the exposure to such a pragmatic solution to climate change and that will see an immediate impact on the social, health and economic well-being of the targeted beneficiaries.

Honours courses in environmental economics	Number of students	Fellow(s) teaching the course	
ECO4052S -			
Environmental	10	Tony Leiman	
Economics			
Master courses in environmental economics	Number of students	Fellow(s) teaching the course	
ECO5052S - Natural Resource Economics	5	Edwin Muchapondwa, Martine Visser & Tony Leiman,	
Visiting Lecturer, Environmental Economics I Joint Facility for Electives African Economic Research Consortium (Nairobi)	29	Mare Sarr	
Master courses in conservation biology			
Environmental and resource economics module (4 weeks)	12	Jane Turpie	

# 5.6 Tanzania

There are two graduate economics programs at the Department of Economics, Masters and Ph.D. These programs are run in collaboration with the African Economic Research Consortium (AERC). Members of the project are involved in teaching and supervising the students. The project also provides financial support to graduate students who write policy oriented theses in the areas of environmental and resource economics The collaborative MSc and PhD programme in the Department of Economics University of Dar es Salaam is for sub-Saharan Africa. The programmes are conducted through coursework and dissertation. The University of Dar es Salaam is one of the four host universities in the sub region.

EfDT aims at preparing graduate students to be competent in environment Economics and research, policy, and practice as young researchers. Working alongside environmental economists who are prominent scholars and practitioners, graduate students develop the knowledge, skills, values, and habits of mind needed to serve the environment as researchers, teachers, consultants, and collaborators, particularly in area of environment and policy.

The EfDT offer Academic Support in writing thesis/dissertation and research to meet the academic mission of the university. We do this by supporting students' as a capacity building by assisting those writing on environment and poverty to not only meet their learning or research goals, but be innovative in the process; and by fostering relationships with key partners, in formal and informal settings. This is to ensure, wherever possible and appropriate, that MSc and PhD studying on Environmental economics and poverty issues lead to both an academic qualification and recognition by environmental economists. Also to ensure that thesis/dissertation meet relevant external benchmarks for standards and quality.

Undergraduate courses in environmental economics:	Number of students	Fellow(s) teaching the course	
Course 1: Natural Resources Economics University of Dar es Salaam	36	Razack Lokina	
Course 2: Environmental Economics University of Dar es Salaam	15	Razack Lokina	
Course 3: Public Economics University of Dar es Salaam	85	Adolf Mkenda	
Master courses in environmental economics	Number of students	Fellow(s) teaching the course	
Course 1: Quantitative Methods University of Dar es Salaam	21	Razack Lokina & Welhelmin Ngasamiaku	
Course 2: Econometrics University of Dar es Salaam	21	John Mduma, Razack Lokina, & Adolf Mkenda	
PhD courses in environmental economics	Number of students	Fellow(s) teaching the course	
Course 1: Quantitative Methods	13	Razack Lokina	
Course 2: Advanced Microeconomics	13	Razack Lokina & Adolf Mkenda	
Course 2: Econometrics	13	Adolf Mkenda	

# 6 INTEGRATION OF ENVIRONMENT IN POLICY

The main objective of this activity is to provide policy advice and engage in policy dialogue on environment and climate change issues. The policy engagement should be based on research and also include issues such as natural resource depletion and environmental degradation. Main areas of policy interaction are in the economics and policy design of resource conservation, agriculture, energy (e.g. fuel taxes) and transportation, and behavioural economics of protected areas and climate change (Central America), forest policy and tenure reforms, pollution control, environmental indicators, water and soil conservation (China), geographical cover and policies pertaining to forest resources, adaptation to climate change (Ethiopia), sustainable agriculture, land reforms and natural resource management (Kenya), economics of Lake Victoria Fisheries, forest management (Tanzania) and the economics of conservation-oriented regional management (South Africa).

As indicated in the Activities below, the Sida-supported Environmental Economics expert function has contributed during the reporting period by strengthening the policy-engagement skills and exposure of the EfD centers to various national and international initiatives. The EE expert function has interacted with the centres to enhance the integration of environmental considerations into government policies and in international methodology development among donor agencies. Examples include engagement of the EfD centers in natural resource sector reform and participation in Poverty Environment Partnership meetings. Conversely, EfD centers have also contributed to the Environmental economics Expert function's support to Sida in e.g. background analyses to formulation of regional/national development cooperation strategies.

#### **Capacity building**

During the Annual meeting 2010 in Ethiopia, a full one-day session on research-based policy interaction was planned and conducted. It was held in the UN/African Union premises (Africa Hall) in Addis Abeba and was conducted in close collaboration with United Nations Economic Commission for Africa (UN-ECA). Objectives of the Policy session were i) to disseminate selected work of EfD's research and its potential contributions to UN-ECA and other key stakeholders present at the meeting, ii) to share information across EfD centers on successful research-policy interactions; and iii) to increase EfD's learning on how to translate research to policy, and enhance its policy work.

The meeting was well attended with high-level policy makers, planners and analysts from UNE-ECA, Government of Ethiopia (incl ministriers, agencies etc.), donors, and international NGOs. At the meeting a global review of models, approaches and lessons learned from long-run research networks and think tanks on research-policy interactions were presented and discussed. Ways to use impact evaluation to inform policy makers, to make researchers useful in relation to planners/analysts/policymakers, and to influence strategic planning and decision-making, were presented. Needs and capacities among policy makers, and large policy institutions like UN –ECA, for research and research knowledge results, were expressed and discussed. Moreover, empirical examples from EfD centers of highly policy-relevant research, various research-based policy interactions and policy influences (eg land tenure reform, sustainable land management etc.), were presented and discussed.

In addition to outcomes in Policy meeting in Addis Abeba, follow-up meetings were held one-on-one discussions (coaching) were held between EEU's Expert function and EfD center researchers on their policy-research work, specifically Building on the successful research-policy workshop held in Ethiopia in 2009, on the job-trainings with EfD center researchers will be conducted in order to advance their skills in policy advice, and their provision of research-based policy advice.

#### Output:

EfD's work during the reporting period to build capacity on integrating environment in policy has resulted in improved skills and interest for policy interaction among all research fellows within the EfD initiative, and among select policymakers with which EfD centers have collaborated. According to the participants, the Policy meeting in Ethiopia took EfD a step further in its ambitions and practical work to become a more policy relevant research network, which is professional and useful from an academic, as well as from a development policy, point of view. An clear experience was the fact that strong policy-research links create positive synergies between researchers and policymakers, contributed to inform and improve policy making and improve the quality and relevance of EfD's research.

Besides attaining the general objectives outlined above, the Policy meeting in Addis Abeba also served the operational objective of increasing the focus of the research discussions on the follow-up EfD Annual Meeting in Ethiopia on the policy relevance and policy outreach activities of EfD's on-going research, and finding more effective ways to inform policy and interact with policy makers (planners, analysts, decision-makers) in the design and dissemination of EfD's planned research.

Another general output from EfD's work on capacity building for environmental policy integrating is the enhanced policy engagement among EfD centers, i e the increased and improved contacts among EfD researchers with government agencies, ministries and civil society in various policy process where EfD research feeds in effectively, e.g. sustainable land management (SLM), fisheries, eco-tourism, parks and sustainable biodiversity resources management.

Issues for consideration are to follow-up on ensuring sustained policy impact and dialogue among EfD centers on research-policy interaction, and sustain the working relationships between researchers and various practitioners (policy planners, analysts, decisionmakers). Key questions for improved work include: i) How does EfD make the most use of environmental economics research for development?; ii) What are the most promising and viable avenues for conducting environmental economics research that effectively informs and impact on strategic planning and decision-making?; and iii) What is the role and opportunities of impact evaluation (e.g evaluation of the welfare and environmental impacts of land tenure reform)?

### 6.1 Environmental economics expert function support

Activities conducted by the Environmental economics expert function to support EfD centers primarily include a dialogue on ways and means to increase the influence of EfD's research on national and local policy planning and decisionmaking. This applies generally to natural resource sector reform, and support in the EfD centers' general policy outreach. As indicated above in conection to EfD's Annual Meeting, the Environmental economics Expert function has coached and discussed how the centers can advance their policy engagement and work more effectively to influence policy planning and decisionmaking. Besides support to influence national policy processes (sector policy reform, National Development Strategies, Poverty Reduction Strategies etc.), select EfD centers have been involved in, and been linked up with international actors and processes. Examples include participation with EfD resource persons in the Poverty-Environment Partnership's meeting in Malawi with contributions on the international dialogue on analysis and implementation of Green Economy in developing countries.

Moreover, the Environmental economics Expert function has involved EfD centers in providing analytical input to EEU's support to Sida in formulating and implenting country cooperation strategies (eg South Africa, Namibia, Botswana, Ethiopia, Kenya, Tanzania, Ethiopia).

Another specific activity during the reporting period was EfD Kenya's involvement, and collaboration with the Environmental economics Expert function, in World Bank pilot program on SEA in policy and sector reforms: staff from EEU and EfD Kenya collaborated in undertaking an evaluation of the Strategic Environmental Assessment (SEA) of Kenya's Forest Sector reform. The report, commissioned by the World Bank, was co-authored with Drs. Wilfred Nyangena and Paul Guthiga at EfD-Kenya and fed into the planning of the World Bank's Natural Resource Management support Program for Kenya. Interviews with approximately 45 senior government planners, decision-makers and other key stakeholders were conducted in Kenya.

#### Output:

Outputs during the reporting period include i) advancement in EfD's knowledge on research-to-policy integration attained through the special policy session at the Annual meeting, coaching dialogues from the EEU Expert function, and analytical input to the centers' own work on advancing their respective policy-research agenda; ii) increased collaboration between EEU's Environmental economics Expert function, EfD centers, and national and international policy planners and policy makers (e.g. involvement in PEP, World Bank SEA-program etc.; iii) evaluation report of the Strategic Environmental Assessment (SEA) of Kenya's Forest Sector reform; iv) analytical input and advice on measures and tools to enhance research-based policy advice and policy engagement pursued by EfD centers; v) presentations and comments from meetings addressing research-based policy advice and policy influence from research, eg presentations from EfD Annual meeting in Ethiopia 2010.

Issues for consideration include the ad hoc nature of requests for policy advice, and invitations for policy engagement by, government agencies and ministries, as well as donors, and the need for preparedness to act as need and invitations are expressed. This applies also to the possibilities to engage EfD centers in international processes and fora.

# 7 COMMUNICATIONS

Within academia EfD's research results are communicated mainly through EfD discussion papers and other discussion paper series, academic meetings, workshops, conferences, and, not least, articles in scientific journals.

To reach out to decision makers and development practitioners, the EfD centers produce research briefs, policy briefs and book chapters, organize in-service training, write commissioned reports, and organize policy workshops and seminars.

#### A policy interaction and communication strategy – for each research project

In order to enhance the outreach of research based knowledge, we have in 2010 crafted and introduced a policy interaction and communication strategy template for each research project.

The strategy is intended to be a simple but specific tool to support researchers' work, and help them to reach out with their research results to areas of the society where the findings can be used. It aims to remind researchers to think about policy implications and communication already when designing a project, and help them maximize the impact of their research. It also can help researchers to set up and keep their own research agenda, in addition to responding to policy needs. In addition it may help guide researchers/communications officers when for example writing research briefs, policy briefs, press releases, work plans and annual reports.

The idea is to fill in and update the content along the way, and hence, keep the policy interaction and communication strategy as a living document and helpful tool throughout a research project. The strategy includes these steps:

1. Analyze the Policy environment, make a Stakeholder analysis and weigh Strategic considerations.

Set Objectives – decide what should be achieved through interaction and communication.
 Identify Target audiences – prioritize the stakeholders and find key stakeholders.

4. Formulate Messages.

5. Decide on the appropriate Activities and Tools – the ways to get the messages across. 6. Evaluate and revise along the way.

The template was presented to researchers at the <u>fourth EfD Annual Meeting in Ethiopia in October</u> <u>2010</u>. It is available on the internal section of the EfD website.

#### A new research briefs series

In 2010, our partner organization, Resources for the Future (RFF) agreed to extend their collaboration with EfD to give EfD researchers more feedback in writing synopses and briefs of their discussion papers. In the fall 2010, RFF's senior editor and the copy editor for the EfD Discussion Paper series, proposed to introduce a *research brief* series, in addition to EfD policy briefs series. A publication entitled "research brief" comes closer to what kind of brief that EfD researchers actually write today, and can work as an intermediate step on the way to writing policy briefs. We are still discussing the definitions of these publications, and at the time of writing this report we see it this way:

An **EfD Research Brief** is a non-technical summary or synopsis of a Discussion Paper, written in friendly language to be accessible way to a broad audience. The intended readers include decision makers, state and local officials, development practitioners, NGO leaders and staff, students, academics, journalists, and the general public. The Research Brief's content and conclusions should be confined to the primary research scope of the associated Discussion Paper. (Readers will be referred to the Discussion Paper itself for more details.) A research brief will be generated for every Discussion Paper.

An **EfD Policy Brief** summarizes, in an accessible way, a range of assessments of current, well-vetted research on a broad topic. It provides guidance to policy makers on how to think about or approach a specific topic or issue – it may or may not offer specific policy recommendations. Policy Briefs also include a "Further Reading" section with additional, choice information to enhance or expand the readers' understanding of the issues. The intended audience is primarily policymakers and their staffs, but also includes development practitioners, students, academics, journalists, and the interested public.

We plan to use the same template for research briefs that we designed for policy briefs and just change the name on it. It will keep the same features: catchy title and lead-in, concise text, original source identification, further reading, and contact information for the author, EfD, and specific EfD center. We will post them on the EfD website, and centers should actively disseminate them, for instance to development practitioners, and local and state agencies.

### Policy interaction examples from all EfD centers

In 2010 we chose to start the annual meeting with a Policy Day. A few policy relevant research themes were chosen to be presented with their policy implications and impacts by research fellows from some of our centers. Nevertheless, all centers were asked to designate a researcher to be interviewed during the annual meeting about their center's policy interaction story from 2010. Just like last year we present cases of policy interaction from 2010 from each of the centers – on the EfD website, and here in the annual report. Please see chapter 3 or go to > www.efdinitiave.org > the respective Center > Policy Interaction > Interactions.



Figure 11: The blue graph shows visitors per week 1 Jan - 19 Oct, 2010. The green graph shows the same for 2009.

### The website - EfD's window to the world

Website statistics presented at the annual meeting in October 2010 show that EfD research-based knowledge is in demand, and is becoming more and more visible. As can be seen by the graph above, the number of visitors in 2010 is steadily higher than the number of visitors in 2009.

When we compare the same period 2010 and 2009, we find that there are both more visits and more Unique Visitors in 2010 than in the year before. The time period, January 1 – October 19, was chosen for the website statistics presentation at the annual meeting, held in Ethiopia October, 2010.

More than 27 000 people visited our website during the period.



Figure 12: Visits per day 1 Jan – 19 Oct 2010.

The peaks of the graph per day reflect the effect on visits by the monthly EfD Newsletter. In February we gained quite a few new subscribers and as a result, we had more visits than ever on a single day. Then when August newsletter was sent out, the number of visits was even higher – 300 visits on one single day.

This year we have added a new function of File Downloads to the website statistics tool (Google Analytics – customized reporting). During the investigated period (January 1 - October 19, 2010) 255 different files have been downloaded a total of 4,039 times.

The most downloaded files were these:

- First a policy brief on "Policies to increase forest cover in Ethiopia: A summary of the main outcomes of a workshop in 2007". It was downloaded 136 times.
- Second is a journal article by Jesper Stage, "Economic valuation of climate change adaptation in developing countries". It was downloaded 110 times.
- Third is an EfD Discussion Paper by Zenebe Gebreegziabher, Alemu Mekonnen, Menale Kassie, and Gunnar Köhlin,

"Household Tree Planting in Tigrai, Northern Ethiopia". It was downloaded 91 times.h



#### This custom dimension resulted in 110 Total Events via 3 page titles

Figure 13: The EfD Newsletter was sent out on February 26. This graph, illustrating number of downloads per day of a journal article by Jesper Stage, peaks the very same day, indicating a high number of downloads as an effect of the newsletter.

The second most downloaded file, the journal article by Jesper Stage, was published on the website in mid February. The newsletter was sent out on February 26. The graph illustrating downloads of Jesper's article has a high peak on February 26, which clearly shows that the number of article downloads increases a lot the day the newsletter is sent out.

### **EfD News items**

About 60 news items were produced and published on the EfD website during 2010. All news items are available at <u>www.efdinitiative.org/news-press/news</u>

#### EfD in media

About 20 items covering EfD members from 6 countries were published on the EfD in media web page during 2010. Newspaper articles, opinion articles, and other news media items about and by EfD researchers are collected on the page: <u>www.efdinitiative.org/news-press/efd-in-media</u>.

#### **EfD Newsletter**

The EfD Newsletter is a tool to spread the word about EfD work to researchers, policy makers, civil servants, students, and others interested. At the same time it is a tool for increasing the number of visitors to the website. It collects, largely automatically, information from the website and presents our latest publications and news. Via the website, anyone can register as a subscriber. In January 2011 the EfD Newsletter has more than 1 300 subscribers.

#### Social medias

During 2010 the EfD initiative started to explore and make use of Social medias as an additional channel for outreach. Currently the EfD Initiative can be followed in three social media channels

Facebook: <u>www.facebook.com/EfDinitiative</u>

Twitter: <u>http://twitter.com/#/EfD\_initiative</u>

LinkedIn: http://www.linkedin.com/groups/Environment-Development-Initiative

#### Books as tools for outreach

During 2010 researchers at EEU and EfD Kenya have played a key role in the evaluation of the World Bank SEA pilot program, presented in a book: "<u>Strategic Environmental Assessment in Policy and Sector</u> <u>Reform – Conceptual Model and Operational Guidance</u>". Daniel Slunge and Anders Ekbom, at the Environmental Economics Unit, University of Gothenburg, led the development of the <u>conceptual model</u> <u>and the methodology for the overall evaluation</u>, and contributed actively to synthesizing the findings from the six different evaluations. Together with Kenyan EfD research fellows **Paul Guthiga** and **Wifred Nyangena**, they also evaluated the SEA of Forest Sector Reform in Kenya, in early 2010.

The EfD/RFF Book Series is produced in cooperation with Resources for the Future in Washington DC. The first publication in the series was published by RFF Press in 2008: "The Emergence of Land Markets in Africa: Impacts on Poverty, Equity, and Efficiency". When it comes to cross-country comparisons of best practices and policies, Dr Chantal Line Carpentier points out this book as an example. Chantal Line Carpentier, who is Sustainable Development Officer at the Division for Sustainable Development, United Nations Department of Economic and Social Affairs, UNDESA, was invited as an external observer to the fourth EfD Annual Meeting in Ethiopia on October 28-31. For more information on her views, please see: www.efdinitiative.org/centers/ethiopia/news-press/news-archive/2010/how-can-efd-research-be-more-policy-relevant

A recent example of outreach efforts is the ongoing research project in which EfD aims to draw lessons from land reforms in several Asian and African countries. The findings will be presented in a book edited by Professors Stein Holden and Keijiro Otsuka, and titled "Land Reforms in Asia and Africa - Impacts on Poverty and Natural Resource Management". The first <u>book workshop</u> was held on Jan 24-25, 2010, at Peking University.

### **EfD/RFF Discussion Papers Series**

The EfD/RFF Discussion Papers Series is a very important part of the dissemination and publication strategy of EfD. A number of 17 discussion papers published during 2010. The EfD/RFF Discussion Paper Series is produced in cooperation with Resources for the Future (RFF) in Washington DC. The workflow is this: The EfD Secretariat receives discussion papers from their authors. After a first check, the papers are sent over to RFF who has contracted an external copy-editor for language correction and proof editing. The EfD secretariat (DP editor Dr Edwin Muchapondwa) looks over the suggested changes before sending the papers back to the authors. After accepting/rejecting the suggested changes, the authors send the papers back to the EfD Secretariat. The papers are then again sent to RFF to be formatted. Finally, the papers are published on the EfD and RFF websites.

# 8 EfD ORGANISATION AND PROGRAM SUPPORT

### 8.1 Overall structure

#### **Coordination committee**

A coordination committee is in place to oversee the overall planning and organization of the EfD initiative. It consists of the coordinators from all six centers, the EfD Director and Chair of the Research Review Committee. Also Research officer, Communication officer and program officer are attending the meeting, but have no vote. The coordination committee convenes twice a year, during the EfD Annual meeting and the European or World EE Congress. This is an important forum for sharing of experiences and identification of synergies between the centers and components. It is also an important forum to identify the relevant balance between the actors and components in the program. In particular, the Coordination Committee will review the respective roles and responsibilities of the centers and EEU on an annual basis, with the view on achieving long term sustainability of the centers.

#### **EfD Secretariat**

The EfD secretariat is the administrative hub of the EfD centers. The secretariat serves the EfD centers with research and core support administration, central dissemination functions and as a networking support to help share experiences between the EfD centers and other relevant actors.

The program director is responsible for overall planning, coordination and reporting of the program. The research officer is responsible for screening and management of research projects. The program officer is responsible for contracts, reporting, workshop logistics, as well as for day to day administration. The communications officer is responsible for dissemination and networking activities for the program as well as for supporting the centers in developing their own dissemination activities. The representative from EEU's function for Environmental Economics advice (EE expert function) is responsible for supporting the centers in their policy interaction processes and to find synergies with the EE expert function work plan. The financial administration is responsible for financial reports and is integrated with the Department of Economics administration.

### 8.2 Research management support

The fundamental objective of the research management is to make sure that the available research funds within the initiative are used in an efficient way to ensure high quality policy relevant research on poverty-environment topics. During 2010 new review mechanisms were established to improve policy relevance and academic quality of research proposals and outputs. Beginning with the proposals, the centers developed research proposal in close collaboration, or review, of relevant policy making bodies. The center coordinator then sent their prioritized research packages to the EfD research officer who ensured peer review. Research fellows from other centers and research associates have mostly been used for these reviews. The EfD Research Committee compiled the comments on the proposals and performed its own evaluation. Proposals were also presented at the annual meeting where the reviewers acted as discussants. At the end of the annual meeting, the Coordination Committee discussed the quality of the proposals. The centers' research and policy priorities were also discussed after which recommendations for funding allocation were made. The final revisions of the proposals after the annual meeting were cleared by the Research Committee. Research deliverables are also screened by the EfD research officer who organizes a review of the papers before they are sent for copy-editing by the RFF and reimbursement sent to the centers.

In 2010 our ambition has also been to become more instrumental to build research management capacity within the EfD centres. This included assistance in identifying new sources of funds; publicizing

centres in various international organizations and developing high quality research proposals. As can be seen from some of the centers' reports, the core funding from Sida is crowding-in other funding. All centers except EfD-Kenya have managed to attract new sources of funding. The proportion of EfD funding in center budgets in 2010 were as follows: Central America 40%; China 55%; Ethiopia 79%; Kenya 100%; South Africa 78%; Tanzania 63%.

# 8.3 Communication support

The overall objective of our research communication is increased use of environmental economics in policy making processes aimed at facilitating poverty alleviation and sustainable development. On the EfD website we continuously make all EfD output available, such as publications, workshop proceedings, news items, calendar events, press releases and media coverage. Each center has one researcher or administrator appointed to be responsible for web publishing and communication of the respective center. Coordination and support is provided by the EfD Secretariat (Communications Officer Karin Backteman).

# 8.4 Administrative program support

There are several functions that require a joint management and administrative approach within the EfD initiative in order to strengthen our structure and achieve long term sustainability. These consists of both strategic issues and routine reporting:

Strategic questions are prepared by the EfD secretariat with input from the coordinators and other resource persons and brought up to discussion and decision-making in the Coordinators Committee. Examples of such strategic issues during 2010 were:

- Research fund allocation process
- Joint fundraising strategies
- Streamlined reporting structure with EfD website
- Increased support from RFF Editors to researchers in the policy brief process.
- Gender plan for EfD and each center
- Clear ToR and expectations for each staff category;
- Development of accession rules for new centers and for "Center Associates"
- Agreement on a constitution for EfD and by-laws to govern the initiative beyond the project requirements of the Sida-funded project.

### Agreements, planning and reporting

In the summer of 2009 it became clear that repercussions from the reorganization would delay the necessary evaluation of the program to such an extent that it would be impossible to prepare for a new long-term agreement starting already in January 2010. Instead a one year extension was decided on for 2010. This year has therefore been quite a turbulent "in-between-year". Much time was spent in meetings during 2010 between EEU and Sida to try to map out the future for the different components of the program. During 2009, we were encouraged to develop an integrated "Environmental Economics Program" consisting of the EfD initiative, the PhD program in environmental economics and the Environmental Economics helpdesk. We were therefore preparing for one joint agreement, and therefore we also submitted one joint Workplan for EEP during 2010. However, during the year, it became more clear that we were rather going toward more independent components. Still, we are very proud that Sida and University of Gothenburg signed a new four-year agreement at the end of 2010 spanning both the EfD initiative and the continuation of the already initiated PhD training.

Despite the turbulence with regards to the overall agreement with Sida we have managed to maintain the planning and reporting structure vis-à-vis the EfD centers. Each center developed a five year plan that were later updated to become a 1+4 year plan for the general agreement. Each center is then asked to submit an annual work plan (in November previous year), activity and financial reports (end of March the following year ) to the secretariat. The EfD secretariat screens and comments on the workplans and suggested budgets, as well as gather all information from centers to produce both individual and joint center reports.

After requests from the Coordinators Committee, the EfD secretariat reviewed the reporting system during fall 2010 to ensure that sufficient information is provided at fixed times. We have implemented a system that streamlines the activity report with the information that can be obtained on the EfD website. This information also corresponds to the Result Based management Matrix (RBM). Please find the RMB matrix of 2010 for the EfD Initiative and Joint program activities in Appendix 4. The right column indicates where in the report information can be found. (Indicated by chapter nr) Also this column is used for refining the Matrix for future use. Note- the RBM matrix is already revised for 2011, since the program components have been re-organized from the latest agreement period.

Financial reports are audited annually by local external auditors in each EfD center. Finally, the EfD secretariat at EEU is audited. Auditors who visit EEU report straight to Sida. During audit 2010 (2009 accounts), we received a comment from the auditors that *"The rule of audits of received funds has not been forwarded to all receiving organizations."* This has been addressed in the new agreements, where we refer to Sida's latest audit instruction.

# **APPENDIX 1: PUBLICATIONS**

### **Peer reviewed**

### **Central America**

*Madrigal, R,* Alpízar, F; Schluter, A. (2010). Determinants of performance of community based drinking water organizations. To be publish in World Development.

#### China

*Xu, Jintao*, Ran Tao, Zhigang Xu and Michael T. Bennett. (2010) "China's Sloping Land Conversion Program: Does Expansion Equal Success?" *Land Economics*, vol. 86, issue 2 (May): 219-244.

*Xu, Jintao,* W.F. Hyde and Yongjie Ji. (2010) "Effective Pollution Control Policy for China," Journal of Productivity Analysis, Volume 33, Issue 1 (February): 47-66

*Qin, Ping,* Carlsson Fredrik, and *Jintao Xu.* (2010) Forestland Reform in China: What do the Farmers Want? A Choice Experiment on Farmers' Property Rights Preferences. *Land Economics (forthcoming).* 

*Zhang, Haipeng,* Junlin Mu, and *Hang Yin* (2010) Study on the Structure and Influencing Factors of Forestry Rural Household Energy Consumption, *Chinese Rural Economy*, 2010 (7):64-74. (In Chinese).

*Zhang, Haipeng,* (2010) Reform of the System of Collective Forest Property Rights Performance Evaluation: A Survey, *Forestry Economics,* 2010 (2):39-44. (In Chinese)

*Yin, Hang* and *Jintao Xu*, (2010). Empirical Analysis of the Influence of Collective Forest Tenure Reform on Timber Supply, *Forestry Economics*, 2010 (4): 27-30. (In Chinese)

*Liu, Xiaoqiang* and Liqun Wang, (2010). Empirical Analysis on the Influence of Collective Forest Tenure Reform on the Forest Resource, 2010 (6): 40-45. (In Chinese)

*Liu, Xiaoqiang* and Liqun Wang, (2010). Analysis of the Effects of the Ecological Migration on the Peasant Houshold's Income and Expenditure in Duolun Country, Inner Mongolia, 2010 (3):73-76. (In Chinese)

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*Xu, Jianhua*, P. Fischbeck, M. Small, J. VanBriesen, and E. Casman (2010). Closure to "Identifying sets of key nodes for placing sensors in dynamic water distribution networks". *Journal of Water Resources Planning and Management*, 136(2), 295-296

*Xu, Jianhua*, M. Johnson, P. Fischbeck, M. Small, and J. VanBriesen (2010). Robust Placement of Sensors in Dynamic Water Distribution Systems. *European Journal of Operational Research*, 202, 707-716

Carlsson, F. and *P. Qin* (2010) It is better to be the head of a chicken than the tail of a phoenix: a study of concern for relative standing in rural China, Journal of Socio-Economics 39(2), 180-186.

### Ethiopia

Köhlin, G., *Mekonnen, A.* and Westholm, L. (2011). "Climate Change Policy in Africa with Special Reference to Energy and Land Use", Journal of Natural Resources Policy Research, 3(1), 63-76, 2011.

Alem, Y., M. Bezabih, M. Kassie, P. Zikhali "Does fertilizer use respond to rainfall variability? Panel data evidence from Ethiopia" Agricultural Economics 41, 165-175, 2010.

Kassie, M., P. Zikhali, J. Pender and G. Köhlin, "The Economics of Sustainable Land Management Practices in the Ethiopian Highlands", Journal of Agricultural Economics, 61(3), 605–627, 2010

Holden, S. T., Deininger, K. and Ghebru, H. (2009), "Impacts of Low-cost Land Certification on Investment and Productivity", American Journal of Agricultural Economics 91 (2):359-373

#### Kenya

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#### South Africa

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M. Sarr, E. Bulte, C. Meissner and T. Swanson, (2010), "On the Looting of Nations", Public Choice, In Press.

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#### Tanzania

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*Eggert, H.* and *R. Lokina*. (2010). "Regulatory Compliance in Lake Victoria Fisheries" Environment and Development Economics Volume 15(2), 197-217, 2010.

*Elizabeth J. Z. Robinson*, Ajay Kumar Mahaputra, and *Heidi J. Albers*. (2010). Protecting Developing Countries' Forests: Enforcement in Theory and Practice, Journal of Natural Resources Policy Research, Volume 2 Issue 1, 25-3

### **EfD Discussion papers**

#### **Central America**

*Alpízar, Francisco* and *Peter Martinsson* (2010) "Don't Tell Me What to Do, Tell Me Who to Follow! Field Experiment Evidence on Voluntary Donations", EfD Discussion Paper 10-16,

*Alpízar, Francisco* and *Peter Martinsson* (2010) "Paying the Price of Sweetening Your Donation Evidence from a Natural Field Experiment", Discussion Paper, EfD DP 10-06.

*Robalino, J* and *Laura Villalobos* (2010). Conservation Policies and Labor Markets: Unraveling the effects of national parks on local wages in Costa Rica, EfD DP 10-02.

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*Madrigal, Róger, Francisco Alpizar*, and Achim Schülter (2010), "Determinants of Performance of Drinking-Water Community Organizations: A Comparative Analysis of Case Studies in Rural Costa Rica", EfD Discussion Paper 10-03

#### China

*Carlsson, Fredrik*, Mitesh Kataria, *Alan Krupnick*, *Elina Lampi*, *Åsa Löfgren*, *Ping Qin*, Susie Chung and *Thomas Sterner*. (2010). Paying for Mitigation: A Multiple Country Study (China, USA and Sweden)

*Carlsson, Fredrik,* Mitesh Kataria, *Alan Krupnick, Elina Lampi, Åsa Löfgren, Ping Qin,* Susie Chung *and Thomas Sterner*. (2010). The Truth, the Whole Truth and Nothing But the Truth: A Multi Country Test of An Oath Script

#### Ethiopia

Menale Kassie, Bekele Shiferaw, and Geoffrey Muricho (2010), "Adoption and Impact of Improved Groundnut Varieties on Rural Poverty: Evidence from Rural Uganda", EfD Discussion Paper 10-11

Genanew Bekele and Alemu Mekonnen (2010), "Investments in Land Conservation in the Ethiopian Highlands: A Household Plot-Level Analysis of the Roles of Poverty, Tenure Security, and Market Incentives", EfD Discussion Paper 10-09

Akay, Alpaslan, Peter Martinsson and Haileselassie Medhin (2010), "Does Relative Position Matter in Poor Societies? Evidence from a Survey Experiment in Rural Ethiopia", EfD Discussion Paper 10-05

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*Gebreegziabher, Zenebe, Alemu Mekonnen, Menale Kassie*, and *Gunnar Köhlin* (2010), "Household Tree Planting in Tigrai, Northern Ethiopia: Tree Species, Purposes, and Determinants", EfD Discussion Paper 10-01

Kenya

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*Li, Wanxin, Jintao Xu, Hui He.* (2010). Has the Centralized Environmental Governance Regime Worked in China? Environmental Economics Program in China

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*Carlsson, Fredrik, Haoran He, Peter Martinsson, Ping Qin*, Matthias Sutter. (2010). Household Decision Making in Rural China: Using Experiments to Estimate the Influence of Spouses.

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*Cao, J.* (2010). "Reconcile Human Development and Climate Protection: A Multistage Hybrid Climate Policy Architecture". In Post-Kyoto International Climate Policy: Implementing Architectures for Agreement, edited by Joseph E. Aldy and Robert N. Stavins. Cambridge University Press, pp 563-398.

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#### Ethiopia

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*Turpie, J.K*, (2010), "The livelihood value of the natural resources of the Okavango Delta" Policy Paper Series, April 2010, Environmental Policy Research Unit, University of Cape Town, South Africa.

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#### China

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National Environmental Management Authority - NEMA. (2010). State of the Environment Report 2009, Kenya

#### South Africa

Giamporcaro, S, 2010, "Environmentally Responsible Investment, the state of play. A survey of responsible investor practices and opinions", EPRU Research Report March 2010.

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# APPENDIX 2: PRESENTATIONS AT ACADEMIC CONFERENCES, SEMINARS AND WORKSHOPS

Presentations at academic conferences, workshops or seminars	Papers presented	Name of research fellow presenting
Protected Nature Areas Congress – Merida, Mexico	1	Francisco Alpízar (Keynote Speaker)
WCERE 2010 Congress. Montreal, Canada	6	Francisco Alpízar Juan Robalino Laura Villalobos Rebecca Osakwe Luis Diego Herrera Róger Madrigal
21 Century Watershed Conference, EARTH, Limón, Costa Rica.	1	Róger Madrigal
EfD Annual Meeting 2010 in Ethiopia, October 28-31	6	Róger Madrigal Francisco Alpízar Allen Blackman
LACEA - XV Annual meeting, Latin America and Caribbean Economics Association Medellin, Colombia	2	Francisco Alpízar
Seminar. The effect of Copenhagen: what are the challenges and opportunities? Hotel Marriot, Costa Rica	1	Alvaro Umaña
Seminar on Climate Change Alumni Congress, CATIE Campus, April 2010.	1	Alvaro Umaña
Seminar on Climate Change after Copenhagen, University for Peace Campus, May 2010	1	Alvaro Umaña
Presentation at the Presidential house. San José, Costa Rica	1	Francisco Alpízar
University of Costa Rica-OdD, San José, Costa Rica	1	Róger Madrigal

Instituto Tecnológico de Santo Domingo (INTEC), Dominican Republic	1	Róger Madrigal
CASA Seminar: Certification as a strategy to promote the provision of ecosystem services	1	María A. Naranjo
XXXI International Course on Protected Areas. Organized by the Tropical Research and Higher Education Center (CATIE). June 2010.	2	Laura Villalobos Róger Madrigal
Camp Resources XVII at North Carolina. Organized by the United States Environmental Protection Agency, the Center for Environmental and Resource Economics (CEnREP), and the Department of Agricultural and Resource Economics at North Carolina State University	1	Laura Villalobos Diego Herrera
Norwegian Institute for Nature Research (NINA)	1	Juan Robalino
Participation in academic workshops and academic conferences or sem	inars	Name of research fellow presenting
NSSA. National Social Science Association AERE Academic Seminar		Juan Robalino
Course on Applying Game Theory and Behavioral Economics, Montreal Jur Organizer: Beijer Institute of Ecological Economics.	ne 27-28.	Laura Villalobos Diego Herrera Rebecca Osakwe Róger Madrigal
Workshop in Agro-sustainable product chains and dairy cattle in Costa Rica	a.	Adriana Chacón
Presentation on WORKSHOP on impact of Climate Change in coffee growir strategies, Organizer Café Forestal Foundation	ng and adaptation	María A. Naranjo
Gtz REDD Program workshop. National REDD strategy for Costa Rica		Carlos Muñoz Anna Nórden María A. Naranjo
UNFCCC COP 16/CMP 6. Cancun, México		Carlos Muñoz Francisco Alpízar
Forest Day 4. Shaping the Global Agenda for Forest and Climate Change: ti December 2010, Cancun, Mexico	ime to act. 5	Carlos Muñoz Francisco Alpízar
High Level Conference on Agriculture, Food Security, and Soil Carbon: Laur Action. Ministry of Economic Affairs, Agriculture, and Innovation and the V		Carlos Muñoz Francisco Alpízar

December 2010, Cancun, Mexico

Conference on The Role of Trade and Markets in Addressing Climate Change and Sustainable Development. ICTSD. 8-9 December 2010, Cancun, Mexico	Carlos Muñozr
Conference on Areas of Intersection Between Trade and Climate Change Mitigation. WTO and ICTSD. 8 December 2010, Cancun, Mexico	Carlos Muñoz
Presentation to the Board of Directors SINAC, Concessions of services in protected areas of Costa Rica incorporate methodology created by EfD-CA	Francisco Alpízar María A. Naranjo
Policy Mix, NINA. Evaluation on payments for environmental services. INBio, Costa Rica	Juan Robalino
General Comptroller of the Republic. Evaluation on payments for environmental services, San José, Costa Rica	Juan Robalino
Fundraising Workshop, EfD-CA research work in Central America Canada	Juan Robalino
Quality of life workshop with municipalities. Guatemala	Juan Robalino
General Comptroller of the Republic. Study on Coastal development in Costa Rica. San José, Costa Rica	Juan Robalino Laura Villalobos
IV Simposio Mesoamericano de Corredores Biológicos. Sociedad Mesoamericana para la Biología y la Conservación. Hotel Crown Plaza Corobicí, San José Costa Rica.	Irene Burgés
I Congreso Nacional de Desastres: Grandes Desastres ¿Estamos Preparados? Impactos económicos, sociales y otros y del II Foro Nacional de Gestión de Riesgos, Preventec/Universidad Costa Rica and Comisión Nacional de Emergencias (CNE) Hotel Radisson Europa, San José, Costa Rica	Irene Burgés
Academic workshops, conferences or seminars organized by the center	Name of research fellow organizing and presenting
LACEEP-IX Workshop and Short Course, Hotel Bougainvillea, Costa Rica.	Francisco Alpízar Juan Robalino
LACEEP X Workshop and Short Course, Quito, Ecuador	Francisco Alpízar Juan Robalino
LACEEP IV Training Long Course.	Francisco Alpízar Juan Robalino

Workshop on results of the EfD-CA project related to determinants of performance of drinking water community organizations. Representatives from 28 drinking water communities attended.	Róger Madrigal
International Course: Economic principles for environmental management. EfD- CA Headquarters. 25 participants July 19 – July 30.	Róger Madrigal
Workshop: Exploring working opportunities with Alvaro Umaña	Francisco Alpízar Juan Robalino Adriana Chacón María A. Naranjo Carlos Muñoz Irene Burgés Catalina Sandoval
Presentation of results: Analysis of different financing schemes for the National Park	Adriana Chacón María A. Naranjo
Presentation of results: Does coffee certification have environmental benefits? Agroforestry	Irene Burgés

Seminar, CATIE.

#### China

Presentations at academic conferences, workshops or seminars	Papers presented	Name of research fellow presenting
The World Bank Land Conference, Washington DC	1	Jintao Xu
The 4th World Congress of Environmental and Resource Economics, Montreal	2	Jintao Xu
The 8th Forum on Forest Economics, Nanjing, Dec 11	1	Jintao Xu
Economy and Environment Program for Southeast Asia (EEPSEA) 33rd Biannual Workshop, Makati, Philippines, May 24-27, 2010	1	Jianhua Xu
The 16th Annual International Sustainable Development Research Conference 2010 (30May -1 June 2010, Hong kong)	3	Xunzhou Ma, Shiqiu ZhXiuli Zhang Desheng Huang Shiqiu Zhang
Annual conference of East Asian Association on Environment and Resource Economics (EAAERE)	1	Xunzhou Ma, Shiqiu Zhang

International Conference: Environment and Natural Resources Management in Developing and Transition Economies CERDI - Clermont Ferrand – 18 – 19 November 2010	1	Desheng Huang, Shiqiu Zhang
RFF Seminar, Washington DC, Jan 12, 2010	1	Jintao Xu
MegaFlorestais, Wuyishan, Sep 2	1	Jintao Xu
Center for Crisis Management Research, School of Public Policy & Management, Tsinghua University	1	Jianhua Xu
Seminar at Central University of Finance and Economics (Beijing)	1	Ping Qin
International workshop: 2010 Energy, Environment and Development	1	Dan Wu Shiqiu Zhang
The EfD Annual Conference 2010	1	Ping Qin
Academic workshops, conferences or seminars organized by the cen	ıter	Name of research fellow organizing and presenting
Beijing Forum		Jintao Xu Jianhua Xu Shiqiu Zhang
Urban Transportation Management and Environmental Policy		Ping Qin
Forest Tenure and Regulatory Reforms: Experiences, Lessons and Futur	e Steps in Asia	Jintao Xu Ping Qi Jianhua Xu
Ethiopia		
Presentations at academic conferences, workshops or seminars	Papers presented	Name of research fellow presenting
<b>Presentations</b> at academic conferences, workshops or seminars The 4th World Congress of Environmental and Resource Economists held in Montreal, Canada, June-July 2010	Papers presented	

Climate Change and The Copenhagen Accord, at College of Business and Economics held in Mekelle University, 1 January 2010	1	Zenebe Gebreegziabher
8th International Conference on the Ethiopian Economy organized by the Ethiopian Economics Association and held in Addis Ababa June 24- 26, 2010	1	Zenebe Gebreegziabher
Annual Bank Conference on Land Policy and Administration at the World Bank, Washington, D.C., 26-27 April 2010	1	Alemu Mekonnen
Seminar at Resources for the Future in Washington D.C., 28 April 2010	1	Alemu Mekonnen
Sustainable financing of energy infrastructure in eastern Africa, organized by Ministry of Water and Energy and GTZ in Ethiopia, 18 October 2010, Sheraton Hotel, Addis Ababa	1	Alemu Mekonnen and Zenebe Gebreegziabher
Ministerial meeting on green growth plan and strategy for Ethiopia, organized by EDRI, held on 28 September 2010 at Sheraton Hotel in Addis Ababa, Ethiopia	1	Alemu Mekonnen
Determinants of tourist flows in Ethiopia, organized by EDRI	1	Alemu Mekonnen
Participations at academic conferences, workshops or seminars		Name of research fellow <i>participating</i>
Participations at academic conferences, workshops or seminars Green growth with focus on agriculture and forestry in Ethiopia, organize 2010	ed by EDRI in July	
Green growth with focus on agriculture and forestry in Ethiopia, organize		participating
Green growth with focus on agriculture and forestry in Ethiopia, organize 2010	a, July 2010 mong a panel of	participating Zenebe Gebreegziabher Alemu Mekonnen
Green growth with focus on agriculture and forestry in Ethiopia, organize 2010 Green growth plan with focus on power sector held at EDRI, Addis Ababa Adoption of weather-index insurance: learning from willingness to pay a households in rural Ethiopia organized by School of Economics at AAU ar	a, July 2010 mong a panel of	participating Zenebe Gebreegziabher Alemu Mekonnen Zenebe Gebreegziabher
Green growth with focus on agriculture and forestry in Ethiopia, organize 2010 Green growth plan with focus on power sector held at EDRI, Addis Ababa Adoption of weather-index insurance: learning from willingness to pay a households in rural Ethiopia organized by School of Economics at AAU ar 2010	a, July 2010 mong a panel of nd IFPRI in April 13, -Tariff Proclamation	participating Zenebe Gebreegziabher Alemu Mekonnen Zenebe Gebreegziabher Alemu Mekonnen

#### February 2010

ECA, October 11-	Liyousew Gebremedhin Alemu Mekonnen Zenebe Gebreegziabher
ECA, October 11-	Alemu Mekonnen
	Liyousew Gebreineunin
	Zenebe Gebreegziabher Rahel Deribe Alemu Mekonnen
	Name of research fellow organizing and presenting
nainly organized	Alemu Mekonnen Zenebe Gebreegziabher
a, Oct 23-25,	Rahel Deribe
	Alemu Mekonnen
v UNECA, AfDB	Alemu Mekonnen Zenebe Gebreegziabher
	Zenebe Gebreegziabher
nk, 18 October	Zenebe Gebreegziabher
	Zenebe Gebreegziabher
	Zenebe Gebreegziabher
l, held on 28	Alemu Mekonnen Zenebe Gebreegziabher
	RI, held on 28 Ust 2010, epublic of Brazil. nk, 18 October rn Ethiopia nber 2010, Axum

Papers presented	Name of research fellow presenting
	Wilfred Nyangena Paul Guthiga Geophrey Sikei Maurice Ogada
	Wilfred Nyangena Paul Guthiga Maurice Ogada
	Name of research fellow organizing and presenting
	Paul Guthiga
	Name of research fellow participating
1	Ogada Maurice Juma
4	Paul Guthiga Geophrey Sikei Moses Ikiara Ogada Maurice Juma
1	Geophrey Sikei
1	Wilfred Nyangena Geophrey Sikei
1	Wilfred Nyangena

Fourth World Congress of Environmental and Resource Economists (WCERE 2010), June 28 to July 2, 2010, Montreal, Canada       1       Edwin Muchapondwa         International Flood-pulse symposium, Maun, Botswana       1       Jane Turpie         45th Annual GSSA Congress; 19 to 23 July 2010 Kimberley, Northern Cape, South Africa       1       Johane Dikgang         Social Dimensions of Environmental Change and Governance, Berlin (October 2010)       1       Tony Leiman         NYU Abu Dhabi, November, 2010       1       Tony Leiman         International Flood-pulse symposium, Maun, Botswana       1       Jane Turpie         EUROPE-AFRICA Conference on Dynamic Interlinkages between Social and Ecosystem Changes Towards a Europe Africa Partnership. Golden       1       Johane Dikgang         2010 Belpasso International Summer School; September 2010, Volkwagen Stiftung, Hannover-Essen 3-6 November 2010       1       Stephanie Giamporcaro         2010 Belpasso International Summer School; September 2010, Volkswagen Stiftung, Hannover-Essen 3-6 November 2010       1       Stephanie Giamporcaro         2010 Biodiversity Planning Forum; 2 – 5 March 2010; Forever Resorts, Warmbaths, South Africa       Johane Dikgang       Johane Dikgang         2010 Biodiversity Planning Forum; 2 – 5 March 2010; Forever Resorts, Warmbaths, South Africa       Johane Dikgang       Johane Dikgang         2010 Biodiversity Planning Forum; 2 – 5 March 2010; Forever Resorts, Warmbaths, South Africa       Johane Dikgang			
45th Annual GSSA Congress; 19 to 23 July 2010 Kimberley, Northern Cape, South Africa       Johane Dikgang         Social Dimensions of Environmental Change and Governance, Berlin (October 2010)       1       Kerri Brick         NTU Abu Dhabi, November, 2010       1       Tony Leiman         International Flood-pulse symposium, Maun, Botswana       1       Jane Turpie         EUROPE-AFRICA Conference on Dynamic Interlinkages between Social and Ecosystem Changes Towards a Europe Africa Partnership. Golden       1       Johane Dikgang         Global Development Finance, Conference 2010, Valuing Growth Trends in Development Finance, Cape Town, 24-26 November 2010       1       Stephanie Giamporcaro         2010 Belpasso International Summer School; September 2010, Belpasso, Italy       1       Johane Dikgang         Our Common Global Future Interdisciplinary Workshop organized by Volkswagen Stiftung, Hannover-Essen 3-6 November 2010       1       Stephanie Giamporcaro         2010 Belpasso International Summer School; September 2010       1       Stephanie Giamporcaro         Volkswagen Stiftung, Hannover-Essen 3-6 November 2010       1       Stephanie Giamporcaro         2010 Bolodiversity Planning Forum; 2 – 5 March 2010; Forever Resorts, Warmbaths, South Africa       Johane Dikgang         2010 Biodiversity Planning Forum; 2 – 5 March 2010; Forever Resorts, Warmbaths, South Africa       Edwin Muchapondwa & Johan Dikgang         CEEPA's Ninth Biannual Research workshop, 10 – 14 May 2010, Pro		1	Edwin Muchapondwa
Cape, South Africa       1       Johane Dikgang         Social Dimensions of Environmental Change and Governance, Berlin (October 2010)       1       Kerri Brick         Attended via video link from the Graduate School of Business, UCT)       1       Tony Leiman         NYU Abu Dhabi, November, 2010       1       Tony Leiman         International Flood-pulse symposium, Maun, Botswana       1       Jane Turpie         EUROPE-AFRICA Conference on Dynamic Interlinkages between Social and Ecosystem Changes Towards a Europe Africa Partnership, Golden       1       Johane Dikgang         Global Development Finance Conference 2010, Valuing Growth Trends in Development Finance, Cape Town, 24-26 November 2010       1       Stephanie Giamporcaro         2010 Belpasso International Summer School; September 2010       1       Johane Dikgang         Our Common Global Future Interdisciplinary Workshop organized by Volkswagen Stiftung, Hannover-Essen 3-6 November 2010       1       Stephanie Giamporcaro <i>Participations</i> at academic conferences, workshops or seminars       Name of research fellow participating       Johane Dikgang         2010 Biodiversity Planning Forum; 2 – 5 March 2010; Forever Resorts, Warmbaths, South Africa       Johane Dikgang       Ledwin Muchapondwa & Johan Dikgang         The Transboundary Protected Areas Research Initiative (TPARI), hosted by the University of Johane Dikgang       Edwin Muchapondwa & Johan Dikgang       Ledwin Muchapondwa	International Flood-pulse symposium, Maun, Botswana	1	Jane Turpie
(October 2010)       1       Kerri Brick         Attended via video link from the Graduate School of Business, UCT)       1       Tony Leiman         NYU Abu Dhabi, November, 2010       1       Tony Leiman         International Flood-pulse symposium, Maun, Botswana       1       Jane Turpie         EUROPE-AFRICA Conference on Dynamic Interlinkages between Social and Ecosystem Changes Towards a Europe Africa Partnership. Golden       1       Johane Dikgang         Tulip De Beyaerd, Hulshorst, NL, Netherlands, 8 - 12 November 20       1       Stephanie Giamporcaro         Global Development Finance Conference 2010, Valuing Growth Trends in Development Finance, Cape Town, 24-26 November 2010       1       Stephanie Giamporcaro         2010 Belpasso International Summer School; September 2010, Belpasso, Italy       1       Johane Dikgang       1         Our Common Global Future Interdisciplinary Workshop organized by Volkswagen Stiftung, Hannover-Essen 3-6 November 2010       1       Stephanie Giamporcaro         Participations at academic conferences, workshops or seminars       Name of research fellow participating       Kerri Brick, Martine Visser & Johane Dikgang         2010 Biodiversity Planning Forum; 2 – 5 March 2010; Forever Resorts, Warmbaths, South Africa       Johane Dikgang       Ldwin Muchapondwa & Johan         The Transboundary Protected Areas Research Initiative (TPARI), hosted by the University of Johannesburg, South Africa and the International Institute for Social Studies (ISS), si		1	Johane Dikgang
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and Ecosystem Changes Towards a Europe Africa Partnership. Golden       1       Johane Dikgang         Tulip De Beyaerd, Hulshorst, NL, Netherlands, 8 - 12 November 20       1       Stephanie Giamporcaro         Global Development Finance, Cape Town, 24-26 November 2010       1       Stephanie Giamporcaro         2010 Belpasso International Summer School; September 2010, Belpasso, Italy       1       Johane Dikgang         Our Common Global Future Interdisciplinary Workshop organized by Volkswagen Stiftung, Hannover-Essen 3-6 November 2010       1       Stephanie Giamporcaro <i>Participations</i> at academic conferences, workshops or seminars       Name of research fellow participating         Stata Programming Course, University of Cape Town, 11 – 22 January 2010)       Kerri Brick, Martine Visser & Johane Dikgang         2010 Biodiversity Planning Forum; 2 – 5 March 2010; Forever Resorts, Warmbaths, South Africa       Johane Dikgang         The Transboundary Protected Areas Research Initiative (TPARI), hosted by the University of Cape Town, South Africa       Edwin Muchapondwa & Johane Dikgang         CEEPA's Ninth Biannual Research workshop, 10 – 14 May 2010, Protea Hotel Kruger Gate,       Edwin Muchapondwa	International Flood-pulse symposium, Maun, Botswana	1	Jane Turpie
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Johannesburg, South Africa and the International Institute for Social Studies (ISS), sixth       Dikgang         teleseminar of the 2009-2010 teleseminar series, 14 April 2010, University of Cape Town,       Dikgang         South Africa       Edwin Muchapondwa         CEEPA's Ninth Biannual Research workshop, 10 – 14 May 2010, Protea Hotel Kruger Gate,       Edwin Muchapondwa	Stata Programming Course, University of Cape Town, 11 – 22 January 201	0)	
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	2010 Biodiversity Planning Forum; 2 – 5 March 2010; Forever Resorts, Wa Africa The Transboundary Protected Areas Research Initiative (TPARI), hosted by Johannesburg, South Africa and the International Institute for Social Studi teleseminar of the 2009-2010 teleseminar series, 14 April 2010, University	rmbaths, South y the University of ies (ISS), sixth	Johane Dikgang Johane Dikgang Edwin Muchapondwa & Johane
Applying Game Theory and Behavioral Economics to the Environment, Montreal, 27-28 June 2010	2010 Biodiversity Planning Forum; 2 – 5 March 2010; Forever Resorts, Wa Africa The Transboundary Protected Areas Research Initiative (TPARI), hosted by Johannesburg, South Africa and the International Institute for Social Studi teleseminar of the 2009-2010 teleseminar series, 14 April 2010, University South Africa CEEPA's Ninth Biannual Research workshop, 10 – 14 May 2010, Protea Ho	rmbaths, South y the University of ies (ISS), sixth y of Cape Town,	Johane Dikgang Johane Dikgang Edwin Muchapondwa & Johane Dikgang
Social Accounting Matrix seminar. UCT, September 2010	2010 Biodiversity Planning Forum; 2 – 5 March 2010; Forever Resorts, Wa Africa The Transboundary Protected Areas Research Initiative (TPARI), hosted by Johannesburg, South Africa and the International Institute for Social Studi teleseminar of the 2009-2010 teleseminar series, 14 April 2010, University South Africa CEEPA's Ninth Biannual Research workshop, 10 – 14 May 2010, Protea Ho South Africa	rmbaths, South y the University of ies (ISS), sixth y of Cape Town, otel Kruger Gate,	Johane Dikgang Johane Dikgang Edwin Muchapondwa & Johane Dikgang Edwin Muchapondwa

ERSA Training Workshop on Bioeconomic Modelling of Natural Resource Use, Cape Town, 18-19 October 2010	Edwin Muchapondwa Johane Dikgang
Academic workshops, conferences or seminars organized by the center	Name of research fellow organizing and presenting
CEEPA's Tenth Biannual Research workshop, 15– 20 November 2010, Hyatt Regency Oubaai Golf Resort and Spa, South Africa	Edwin Muchapondwa & Kerr Brick
4th annual EfD (Environment for Development) meeting; October 28th – November 1st 2010; Addis Ababa at UNECA conference room and Kurifu resort, Debrezeit, Ethiopia	Edwin Muchapondwa Mare Sarr Jane Turpie Stéphanie Giamporcaro Johane Dikgang
Park Pricing workshop; 24th to 26th October, 2010; Lions Hill Game Lodge, Nakuru, Kenya	Edwin Muchapondwa Johane Dikgang
PhD Proposal Defense Seminar, 21 October 2010, School of Economics, University of Cape Town, South Africa	Johane Dikgang
PhD Proposal Defense Seminar, 30 September 2010, School of Economics, University of Cape Town, South Africa	Kerri Brick

#### Tanzania

Presentations at academic conferences, workshops or seminars	Papers presented	Name of research fellow presenting
Environment for Development Initiative Annual Meeting. Ethiopia. October, 2010	1	Albers John Mduma Aloyce S. Hepelwa Razack Lokina
Scale, location and spatial interactions in the economic analysis of multi-functional natural resources: Lessons for forestry Workshop. INRA – Laboratoire D'Economie Forestiere. Nancy, France. September, 2010	1	Albers
World Congress of Environmental and Resource Economists. Montreal, Canada. June, 2010.	1	Albers Elizabeth Robinson
Sustainability Science for Food, Forests, and Floods: Integrating Climate Adaptation and Pro-Poor Resource Management Workshop. East-West Center, University of Hawaii, Honolulu. May, 2010	1	Albers
Computational Sustainability, NSF Site visit. Cornell University. May, 2010	1	Albers
International Conference: Environment and Natural resources management in developing and Transition Economies, organized by CERDI, France	1	Aloyce S. Hepelwa

November 2010	
Participations at academic conferences, workshops or seminars	Name of research fellow participating
The 4th annual EfD (Environment for Development) meeting with the Secretariat of the EfD initiative. Addis Ababa October 28th – November 1st 2010	Aloyce S. Hepelwa

## APPENDIX 3: IMPLEMENTING STAFF AT EEU

The following persons at EEU are proposed to be responsible for managing and implementing the Environment for Development component during 2011:

Name	Areas of responsibility	Ext.
Karin Backteman	Communications Officer, EfD	2595
Anders Ekbom	Head of Environmental Economics Helpdesk	4817
Edwin Muchapondwa	Research officer, EfD	6391
Gerd Georgsson	Economic controller	1342
Karin Jonson	Program Officer, EfD	4321
Gunnar Köhlin	Director, EfD	4426
Thomas Sterner	Head of EEU and chair of EfD research committee	1377

e-mail: <u>first name.last name@economics.gu.se</u> telephone: 031- 786+ extension.

### APPENDIX 4: RBM MATRIX 2010 WITH COMMENTS

This is the RBM matrix including the EfD program and joint program activities 2010. Note that not all activities listed in "Joint Program Activities" are included in this report. The right column indicates where in the report it can be followed up. (Indicated by chapter nr) Also this column is used for refining the Matrix for future use. Note- the matrix is already revised for 2011, since the program components have been reorganized from the latest agreement period.

Outcome objectives	Activities	Expected Outputs	Indicators	Sources of verification	Comment			
	EFD INITIATIVE CENTER CORE ADMINISTRATION							
Six sustainable and credible centers that enable funding, implementation and policy interaction on environmental economics research related to poverty and sustainability.	Strategic planning and reporting.	Planning and reporting is a useful tool for decision making for all components within the initiative. Research and dissemination activities are simple to conduct and run smoothly, allowing the technical staff to focus on content, rather than format.	Plans lead to action.	Work plan Annual report Meeting minutes Website	2. Center presentations 8.4 Administrative program support			
	Staffing of center, and coordination of activities.	staff who meet centers needs, are recruited Technical and support staff is motivated and empowered, and with a clear sense of purpose	No. of research and support staff Turnover of staff Level of satisfaction among staff	Employment record Staff evaluation	2. Center presentations No, not centrally			

	Coordination between EfD Secretariat and partner EfD centers.	All centers are active partners in the global initiative, bringing lessons and experiences from the local setting to the global discussion.	Participation in Coordination committee meetings	CC-meeting minutes	Available, and distributed to participants
	Hosting of national and international visiting researchers.	Strong scholarly links leading to research collaborations and fundraising.	No. of international and regional collaborations No. of research projects with third party funding No of international and national visitors and length of stay.	List of collaborators/ center EfD research projects List of visitors/ center Budgets and financial reports	<ul> <li>2. Center presentations</li> <li>4.1 EfD research projects</li> <li>Not in report</li> <li>2. Center presentations.</li> </ul>
	fundraising activities to diversify our donor portfolio, including external support.	include additional sources of core and research support	entire EfD budget that is Sida-funded. No of Donors		2. Center presentations. Financial reports to be submitted 31 May 2011.
		POLICY INTERA	CTION AND COM	MUNICATION	
Ongoing interaction between EfD research fellows and policy makers to identify research issues and policy design.		Awareness of the EfD initiative among the target audience.	The EfD centers are called upon on a regular basis to provide policy analysis and advice in strategic policy processes.		3. Policy outreach and communication
pondy designi	Conduct stakeholder analysis by research topic to identify key decision makers	Key stakeholders are indentified and successfully incorporated in research activities	No. of stakeholders actively participating and collaborating in research activities.	List of key stakeholders by topic	2. Center presentaitons (networks)
	Organize planning workshops and personal interviews with stakeholders to build a research agenda and to present results	Stakeholders proactively participate in the construction of a relevant research agenda and in turn benefit from the results of our research.	Level of Stakeholders participation in research activities No. of workshops No. of personal contacts in building	Workshop participation interviews	3. (Policy seminars, workshops and conferences during 2010) Not in report

			a research agenda		
	EfD fellows participation in policy task forces and regional/national	EfD centers are regarded as key source of scientific advice in international, regional and national policy making forae.	Frequency and relevance of invitation and requests No. of requests and	Request-response log-book in Annual report	Has been removed in 2010 report. Did appear earlier.
	processes		responses		
	Capacity building of government and NGO officials	High quality capacity building courses adapted to the target audience and updated with recent research and methodologies	No. of capacity building courses No. of participants	Course syllabus	3. (in service training)
Research results reach our target audience and are communicated in a variety of ways to suit different backgrounds, interests and technical capacities			Level of defined target audience who find EfD disseminated material useful	Follow up survey of users	No, not centrally
	Preparation of policy briefs	EfD material of communication reaches policy makers in attention to their needs, backgrounds and technical capacities. Professional copy editing of EfD policy briefs at RFF is expected to greatly increase the quality of the briefs. Promoted dialogue between EfD researchers and policy makers. Increased use of research based environmental economics knowledge in policy making processes. Policy briefs texts re-used for other material of communications, such as news items on the website, press releases, etc.	No of stakeholders targeted by EfD dissemination activities. No. of policy briefs available on the EfD website.	"Hits" on website Download statistics	Appendix 1: (Policy briefs)

	Production of The EfD/RFF Book series in collaboration with Resources for the Future Press.	Enhanced dissemination of EfD research work to policy makers and researchers and strengthen dialogue between them.	No. of books published Availability of books	Publication and distribution statistics	4. Research 7. Communications Appendix1 (books and book chapters)
	Preparation and issuing of the monthly EfD Newsletter	Enhanced visibility of EfD work to researchers, policy makers and other stakeholders.	No of recipients of the newsletter No. of visitors to the website.	Newsletter send list Website statisitcs	7. Communications
			RESEARCH		
Research supports environmental policy formulation, planning for poverty alleviation, and sustainable utilization of natural resources			Evidence of research inputs in policy plans and utilization of natural resources	National policy plans	3. (Policy interaction stories 2010)
	One thematic research workshop on land reforms.	Research interaction experiences, sharing in-depth research knowledge and skills on thematic research subjects. Outline of new book on the evaluation of land reforms for the EfD book series.	Number of workshops No of participants No of collaborative research/ chapters/books	Workshop proceedings and associated documents	4.3 Workshops 2010
	Continue initiated applied research projects on priority environmental and development issues and start a few new projects.	Environmental economics tools, guidelines and procedures for sustainable use of natural resources and eradication of poverty are made available and used to implement environmental and poverty alleviation policies	No of research papers published on EfD website and other medias Data collected	Website Journals EfD Research data bases	4.1 Research projects 2010 Appendix 1: Publicaitons
	 	Res	earch Management		
High quality and policy relevant			No of peer reviewed journals	Website Journals	Appendix 1 (Peer reviwed)

research					
	Organize project proposals process with stakeholders involvement and implement quality assurance mechanisms Organize quality control mechanism for research outputs	High quality policy relevant research proposals and research outputs developed through active interaction of relevant policy and development institutions	No of peer reviewed journals No of project proposals Nor of accepted proposals No of discussion papers converted to peer reviewed journals No of international Collaborators Involvement of stakeholders and researchers is strong and continuous	Journals Project proposals EfD discussion papers Minutes of research project approval workshops	4.1 Research projects 2010 8.2 Research management support
Research capacity of researchers			No of research associates No of research fellows (Prof/Assistance Prof/Associate prof.) No of joint publications	List of fellow and associates EfD publications	2. Center presentations
	Facilitate interaction and exchange of researchers and postdocs with other centres and international research and academic institutes (e.g., the EEU and RFF)	Development and strengthening of research skills and knowledge	No of visiting EfD researchers to EEU No of visiting EfD researchers to RFF No of post doctoral Fellows	List of visiting fellows List of Post Docs	2. Center presentations
Active domestic and international research interaction			No of local partners and collaborative institutions	List of EfD collaborators	2. Center presentations
	Facilitate visiting research programs between centers and	High quality and policy relevant research results Strengthened ownership of EfD	No of key institution and individuals	Research proposals	Not in report 4.2 Annual meeting Ethiopia

	local and international research institutes	research activities	consulted in developing proposals; No of key institutions and individuals participated in research workshops;	Workshop participation lists	4.3 Other joint research workshops during 2010
	1	ACADE	MIC CAPACITY BUILDIN	IG	
Strengthened capacity in local academic programs in environmental economics.			No. of programs, courses, students, thesis No. of students in working in different organizations with EE.	Course statistics Student follow- up surveys.	5. Academic capacity building
	EfD research fellows are involved in teaching of undergraduate, MSc and PhD courses	High quality courses updated with recent research results and methodologies are offered at the EfD center's Host institutions.	Updated Course syllabus No of courses with lead lecturer from EfD staff. Use of EfD books and papers in teaching No. of course participants	Course evaluations Course syllabus Course statistics	Not in report Not in report 5. Academic capacity building
	Provision of MSc thesis grants in Environmental Economics.	Better quality MSc thesis Higher policy relevance of MSc thesis	No of MSc thesis grants Titles of MSc thesis	List of EfD funded MSc thesis	No in report
	Supervision of undergraduate, MSc and PhD students	Students succesfully complete their dissertation in policy relevant, interesting research	No. of students supervised of EfD fellows	MSc thesis	5. Academic capacity building

	Mentoring future researchers	Research capacities increased at EfD and collaborators by creation of a steady flow of scholars.	, No. of papers or dissemination outlets coauthored by junior researchers.		Appendix 1: Publicaitons
	Maintaining a post doc position in support of research.	Post doc actively participating in research activities and policy interaction.	New input to centers research agendas. Post doc hired	List of research projects involving the post doc	4.1 research projects 2010 Appendix 1: Publications
		EfD P	ROGRAM SUPPOR	9T	
Well functioning central administration, central communication and network support to help share experiences between the EfD centers and other relevant actors.			Level of of satisfaction with the central functions among EfD staff and associates	External evaluation	Available
	Central core support and research administration	Day- to day administrative requests from all centers are efficiently dealt with. The EfD administrative routines are well established and approved of throughout the initiative	Streamlined reporting system	Internal evaluation Agreements Annual activity reports Annual financial reports	Not in report 8.4 Administrative program support
	Facilitate funding to the EfD centers and other collaborators	Payments are made on time according to agreements	No. of transfers from EEU to EfD and other partner organizations.	Transfers Financial reports	
	Central communication functions and support to and collaboration with center dissemination officers.	The communication function at each center is strengthened as well as the entire initiative's communication capacity and activity. More material is published on each Center's section of the EfD website. Outreach is enhanced	No. of articles, policy briefs, news articles published on website No. of "hits"on the EfD website	EfD website	7. Communications

	Organize annual meetings and other joint activities	An annual meeting will be organized. Host country is TBD. Increased exchange of ideas within the initiative Increased network opportunities with potential collaborators Increased research quality	No of new research ideas after meetings.	Meeting evaluations Meeting program Meeting proceedings List of participants	Available, internal use Available on website Available, internal use
EfD centers are strengthened in research management capacity and research interaction	Support centers with advice on e.g. fund raising,linking up with suitable contacts, post doc recruitments and advice on suitable academic conferences	EfD centers research management capacity improved and developed	% decrease of EfD fund share Research results are used by relevant stakeholders No of stakeholders requesting EfD center assistance No. of collaborators	Centers annual reports and statistics on budget, list of PDFs, fund sources, stakeholders, collaborators; Survey among selected stakeholders of their use and adaptation of research results & recommendations EfD website.	2. Center presentations 3. Research 8.2 Research management support Appendix 1: Publications

Outcome objectives	Activities	Expected Outputs/results	Indicators	Sources of verification	Comment
			nt Activities		
		PRO	GRAM MANAGEM	ENT	
Well functioning central administration, central communication and network support to help share experiences between the different components in the Environmental Economics Program			Well run central administration	External evaluation	7. Communications 8. EfD organization and program support
	Oversee the Central administration system . Eg, Oversee planning and reporting, so that it is streamlined for the whole program.	Day- to day administrative tasks. The administrative routines are well established and approved of throughout the program	Streamlined reporting system.	Agreements Annual activity reports Annual financial reports	8.4 Administrative program support
	Financial administration	Salaries Payments are made on time according to agreements	No. of transfers from EEU to EfD and other partner organizations.	Financial reports	Will be submitted by May 31, 2011
	Network support, matchmaking between PhD program, Sida Expert function in EE, EfD centers and international research and policy contacts	There is a fruitful exchange of contacts with the entire program.	No. of intl research collaborators linked up to the program. No. intl visiting research fellows to EEU. No. of EfD research fellows and EEU researchers visiting collaborating organizations	List of collaborators List of visiting fellows	Not in report

COMMUNICATION					
Well communicated Research findings to the research community and to the areas of society where the findings can be used.for , ultimately, promoting, democratic development, human welfare and livelihood.					7. Communications
	Maintain, update and develop the EfD website, including the respective section for each center. (EfD) Maintain, update and develop the EEU website. (EEU)	Updated EfD information is available to policymakers, researchers, students, and the public. Facilitated matching of environmental economics capacity and the need of this capacity. Increased use of research based environmental economics knowledge in policy making processes.	Level of awareness about the EfD initiative. No of stakeholders targeted by information on EfD and EEU research, and policy advice and training services. Updated websites.	Website/s	Not in report
	Publication in scientific journals, EfD discussion paper series and other academic outlets (EfD+EEU)	EfD work is internationally available to scholars and students, and their feedback improves the research quality. Professional copy editing of EfD discussion papers at RFF is expected to greatly increase the likelihood of publication in peer reviewed journals, which increases the impact of the research.	No. of scientific publications No. of EfD discussion papers No. of publication of other types	List of Scientific publications EfD discussion paper series List of other publication types	Appendix 1: Publications

Preparation of press releases (EfD+EEU)	Increased presence in news media/increased media coverage in all EfD countries. Reader friendly and easily accessible EfD material of communication reaches policy makers. Enhanced awareness of environmental economics research findings to a wider audience, and in particular to policy makers and researchers.	No. of Stakeholders targeted by EfD communication activities. EfD press releases are distributed to news desks and to stakeholders in the policy community, and made available on the EfD website. No. of publication in news media No. of press releases	List of publications in news and media List of press releases	7. Communications
Training in presentation techniques for the last enrolled doctoral students in the PhD program (EEU)	Improved communicative skills among PhD candidates and PhDs.	Strengthened communication skills and enhanced research outreach <u>.</u> No.of PhD students participating.	Course syllabus	Not in report
Presenting research using popular writing	Enhanced outreach of EEU/EfD research findings and increased use of research based knowledge in policy making processes for sustainable natural resource management in developing countries.	No. of popular summaries completed.		Not in report

#### **Environment for Development Initiative**

Environment for Development Program for Central America CATIE Costa Rica

Environmental Economics Policy Forum for Ethiopia Ethiopian Development Research Institute (EDRI) Addis Ababa University Ethiopia

Environment for Development Kenya Kenya Institute for Public Policy Research and Analysis (KIPPRA) Nairobi University Kenya

Environmental Economics Program in China Peking University China

Environmental Policy Research Unit University of Cape Town South Africa

Environment for Development Tanzania University of Dar es Salaam Tanzania

Environmental Economics Unit University of Gothenburg Sweden





The KENYA INSTITUTE for PUBLIC POLICY RESEARCH and ANALYSIS



UNIVERSITY OF GOTHENBURG school of business, economics and lav