

REPORT 2011/2012



PHOTO BY WILDXPLOER

THE ENVIRONMENT FOR DEVELOPMENT INITIATIVE

The overall objective of the EfD initiative is to support poverty alleviation and sustainable development through the increased use of environmental economics in the policy making process. The EfD initiative is a capacity building program in environmental economics, focusing on research, policy advice, and teaching in Central America, China, Ethiopia, Kenya, South Africa, and Tanzania.



OUR VISION IS GREEN ECONOMY; SUSTAINABLE ECONOMIC GROWTH FOUNDED ON EFFICIENT MANAGEMENT OF ECOSYSTEMS, NATURAL RESOURCES AND CLIMATE CHANGE IMPACTS.

The Environment for Development initiative received its name from our conviction that with proper management the environment can be seen as a source of development and not as a constraint.

Our mission is to contribute to poverty alleviation and sustainable development through increased use of environmental economics' capacity in policy design and policy-making processes pertaining to management of ecosystems, natural resources and climate change impacts. We use environmental economics tools to both identify the roots to environmental problems in modern economies, and to find what social and economic mechanisms can be used to solve them.

The foundation of the EfD initiative is its members, environmental economists in a selection of countries. As

research fellows and associates we work for EfD centers hosted by well-established academic institutions in China, Costa Rica (for Central America), Ethiopia, Kenya, South Africa and Tanzania. EfD have an important partner organization in Resources for the Future (RFF), Washington DC, USA. Our associates are based at RFF and several universities across the world. One of them, University of Gothenburg in Sweden, hosts the EfD secretariat.

The Swedish International Development Cooperation Agency (Sida) is currently a major funder of the EfD research and capacity building program through core administrative support, a research fund, and funds to strengthen academic training and policy interaction.

This report presents the EfD initiative, its members and works during 2011 and on-going work during 2012.



CONTENTS

P.4

Research

P.10Research policy
interaction**P.17**Six centers' research
policy interaction
stories**P.28**Academic capacity
building**P.32**Six efd centers:
central america,
china, ethiopia kenya,
south africa, tanzania
& efd coordination
committee and
secretariat**P.45**Efd centers and
partners**P.46**

Publications 2011

P.50

Efd projects 2012

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.

RESEARCH TOP OUTCOMES

A SUMMARY OF EFD RESEARCH OUTCOMES 2011 IN TERMS OF PEER REVIEWED JOURNAL ARTICLES:

EfD South Africa/Environmental Economics Policy Research Unit (EPRU)

published eleven peer reviewed articles. One of them is published by the Environmental Research Letters. It is titled “Kgalagadi transfrontier park and its land claimants: a pre- and post-land claim conservation and development history” and authored by research fellow and former EPRU coordinator Dr Edwin Muchapondwa and others.



Patet's Wife (Khomani San Bushmen), Johane Dikgang (EPRU, UCT), Patet (Khomani San Bushmen), Gladman Thondhlana (Rhodes University), Willem-Schalk Afrikaner (Research Assistant - Mier Community), & Serina Van Wyk (Research Assistant - Mier Community). The photo was taken about 50 km from the Kgalagadi Transfrontier Park in the Khomani San Farmlands, Mier Local Municipality, Northern Cape Province, South Africa.

EfD Ethiopia/Environmental Economics Policy Forum (EEPFE)

has published twelve peer reviewed articles in 2011. Two main research areas covered by EEPFE this year are impacts of climate change and impacts of biofuel investments on the Ethiopian economy. Gebreegziabher Zenebe, Jesper Stage, Alemu Mekonnen, and Atlaw Alemu, 2011, “Climate Change and the Ethiopian Economy: A Computable General Equilibrium Analysis”, Environment for Development Discussion Paper Series, EfD DP 11-09.



Deforestation for arable land expansion in the Amhara Region.

The EfD Central America/Research Program in Economics and Environment for Development in Central America

published six peer reviewed articles in 2011. In addition the center launched an important new research project, a two-year study on the subject of payments for environmental services (PES). The study is made possible through funding from The Tinker Foundation and is coordinated by EfD Central America. It is called “Eco payments design given behavioral responses: Who gets paid, why, and how do others respond?”



EfD Research fellow Carlos Muñoz interviewing Antonio Montero Alvarado in Monteromos, Nicoya, as part of the EfD-Tinker PES Project called “Eco payments design given behavioral responses: Who gets paid, why, and how do others respond?”

Policymakers, farmers, donors, and others need research based information

EfD China/Environmental Economics Program in China (EEPC)

published seven peer-reviewed papers in international journals. The themes of the research are a diversity; on China's collective and state forest sector reforms, China's environmental and economic policies, risk-based cost-effective control of SO₂ emissions at regional levels, regional air quality management, economic analysis on ambient air quality standard for PM 2.5, and choice model of transportation modes. (PM, particulate matter, for example PM₁₀, particulates, smaller than 10 µm, that can cause health problems.)



Forest in Sichuan.

EfD Tanzania

researchers have managed to publish peer reviewed papers in three international journals and produce a book chapter in RFF press during 2011.



A forest officer from Ruvu forest reserve with a group of beekeepers explaining their prospects to EfD fellow Elizabeth Robinson.

EfD Kenya

published two peer reviewed articles in 2011. In addition EfD Kenya was in partnership with Adams Smith International involved in designing a climate fund mechanism for Kenya. This was part of the development of the National Action Plan for the implementation of the National Climate Change Response Strategy (NCCRS) which the Kenyan government's blue print strategy for addressing the challenges of climate change in Kenya.



Nairobi National Park. Photo: Mkimemia

RESEARCH PROJECTS

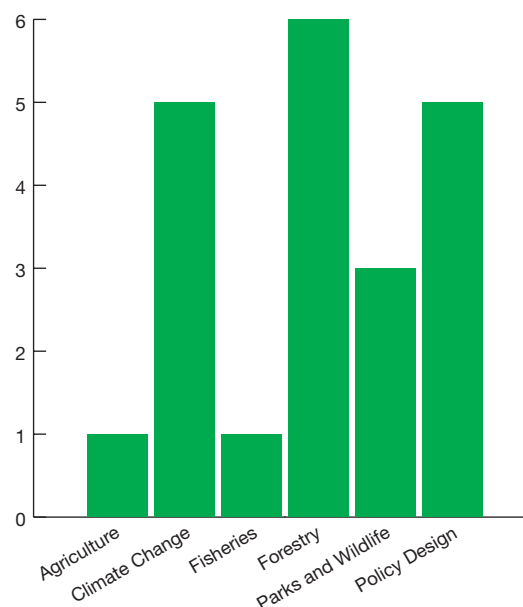
ALL ON-GOING EFD RESEARCH PROJECTS (2012) ARE LISTED IN THE PROJECTS 2012 LIST.

In the 2011 Efd budget, SEK 3.5 million was allocated to the Efd research fund. This fund supported 21 research projects of various sizes across the six centers. Some centers used this funding as seed money to crowd-in other funding.

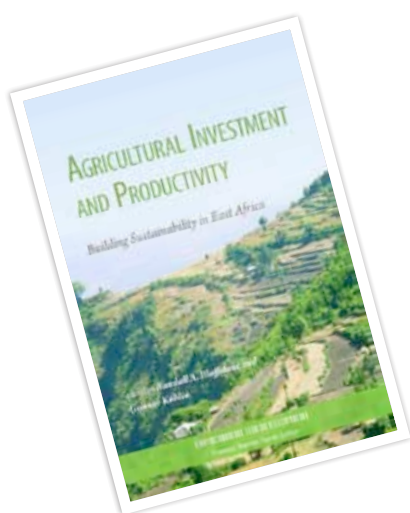
Research projects in 2011 focused on all the six Efd major themes: agriculture, climate change, fisheries, forestry, parks and wildlife, and policy design. However as can be seen from the figure below, a significant proportion of the projects dealt with climate change, forestry, and policy design.

The 2011 Efd Central America's four research projects which were fully funded by the Efd focused on climate change, parks and wildlife, and policy design. Efd China had two research projects focusing on policy design in the transport sector in China. In addition, the center runs other projects for which funding were secured from other sources. Like the previous years, 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. Like the previous year, the focus of the 2011 research projects in Efd China has been on climate change and policy design, in addition to its traditional focus on forestry. Efd Ethiopia had three projects in the agriculture, forestry and climate change themes that were fully funded by the Efd. Efd Kenya had four research projects running in 2011, half of which focused on policy design and the other two on forestry and climate change respectively. These projects received full Efd funding. One of the Kenyan projects

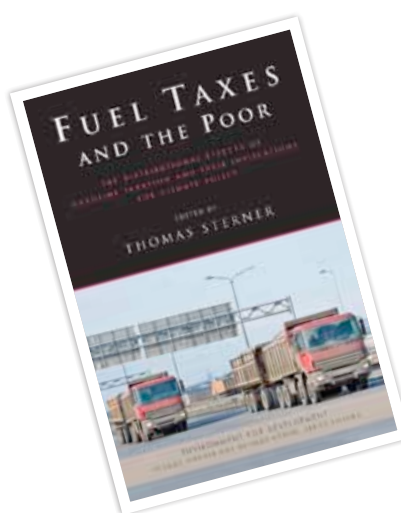
Research projects by theme 2011



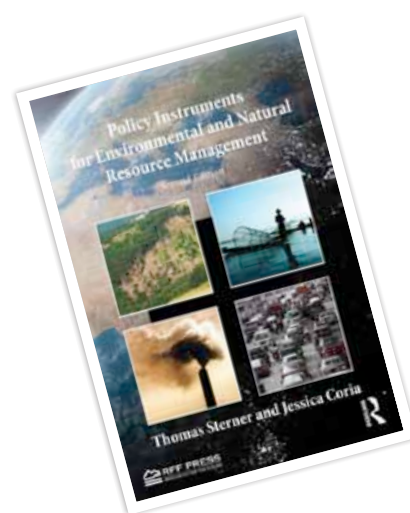
demonstrates a serious attempt by the Efd to promote research on forestry and REDD issues already in 2010. Forestry and REDD continued to be a major focus of Efd research in 2011 as well. Following this, almost all the projects in Efd Tanzania have also focused on forestry and REDD in 2011. There has been more focus on research related to wildlife at Efd-South Africa. Three of the four projects in Efd South Africa focused on parks and wildlife, while one project was in the climate change theme.



Agricultural Investment and Productivity
- Building Sustainability in East Africa
(2011), Efd/RFF Books, Edited By Randall A. Bluffstone and Gunnar Köhlin.



Fuel Taxes and the Poor, The Distributional Effects of Gasoline Taxation and Their Implications for Climate Policy (2011)
Published by RFF Press with Environment for Development initiative. Edited By Thomas Sterner.



Policy Instruments for Environmental and Natural Resource Management by Thomas Sterner and Jessica Coria (2011). Routledge. Published by RFF Press.

PUBLICATION STRATEGY

The research and publication activity within the EfD network remains high

A key indicator of EfD success is of course the output in terms of publications. The table "Numbers of Publications per category 2011" gives a quantitative summary of these outputs by center and publication type, while all references of all types of publications are presented by type and center in the Publications 2011 list.

In terms of work content 2011 has been a consolidation year, indicated for example by the remarkable fact that there were 41 peer reviewed journal articles, 3 books and 16 book chapters published, while only 11 EfD discussion papers. All in all, the table shows that the research and publication activity within the EfD network remains high.

In cooperation with Resources for the Future (RFF) in Washington DC we produce a discussion paper series. This EfD/RFF Discussion Papers Series is a very important part of the research, communication and publication strategy of EfD. It is expected that almost all of the research

articles produced as EfD discussion papers go through intensive peer reviewing process and get published in international journals which will improve the position of the network in terms of publication record of high quality relevant research.

As important is the EfD/RFF Books Series. Three EfD/RFF Books have been published in 2011:

- Policy Instruments for Environmental and Natural Resource Management by Thomas Sterner and Jessica Coria (2011). Routledge. Published by RFF Press.
- Fuel Taxes and the Poor, The Distributional Effects of Gasoline Taxation and Their Implications for Climate Policy (2011) Published by RFF Press with Environment for Development initiative. Edited By Thomas Sterner.
- Agricultural Investment and Productivity - Building Sustainability in East Africa (2011), EfD/RFF Books, Edited By Randall A. Bluffstone and Gunnar Köhlin.

	Peer Reviewed Articles	EfD Discussion Papers	Other Discussion Papers	Book Chapters	Books	Research Briefs	Policy Briefs	Reports
Central America	6	4	1	3	-	5	1	10
China	7	1	4	1	-	1	1	1
Ethiopia	12	3	-	6	-	2	-	1
Kenya	2		1	2	-	-	-	1
South Africa	11	3	1	1	-	-	-	1
Tanzania	3	-	-	3	-	-	-	1
Total all Centers	41	11	7	16	3	8	2	15

Numbers of Publications per category 2011

For full references of all types of publications by type and center, please see the publications list.

EFD ANNUAL MEETING DISCUSSIONS ON RESEARCH

The EfD Annual Meetings are devoted to presentations and discussions on ongoing and proposed EfD research. One of the key note speakers in 2011 was Peter Martinsson, Professor of environmental and behavioural economics, Department of Economics University of Gothenburg. Martinsson spoke on the potential of field experiments in undertaking effective research at EfD. The other key note speaker was Pushpam Kumar, Chief, Ecosystem Services Economics Unit, United Nations Environment Programme (UNEP), who spoke on Economics of Ecosystem Services and the need for effective transdisciplinarity in research.

In line with its objective of promoting high quality relevant research, the EfD used the 2011 workshop as an opportunity to launch the new "Col-

laborative Research Process", which involves a multiple of EfD centers. EfD researchers developed collaborative research projects focusing on various highly relevant research proposals that were consequently evaluated. Decisions on funding have been made by the research committee at the EfD secretariat.

The 2011 annual meeting also served as an important venue through which the views and comments on the future of EfD have been entertained from all the workshop participants. The session was chaired by Francisco Alpizar, Director of EfD Central America, and useful insights were obtained from the floor which helped enormously in the development of the EfD strategic plan for sustainability.



Field trip to Kgalagadi Transfrontier Park. EfD fellow, Edwin Muchapondwa, on the far right, is one of the author of the article "Kgalagadi transfrontier park and its land claimants: a pre- and post-land claim conservation and development history" published by the *Environmental Research Letters* in 2011.



In line with its objective of promoting high quality relevant research, the EfD used the 2011 annual meeting as an opportunity to discussions on ongoing and proposed EfD research

One of the 41 journal articles from EfD 2011

To highlight at least one of the 41 peer reviewed journal articles by EfD members in 2011, we choose to present the one published by the Environmental Research Letters, a journal with an impact factor of 3.049 (frequently cited by other journals).

THONDHLANA, G., SHACKLETON, S. AND E. MUCHAPONDWA, 2011, "K GALAGADI TRANSFRONTIER PARK AND ITS LAND CLAIMANTS: A PRE- AND POST-LAND CLAIM CONSERVATION AND DEVELOPMENT HISTORY", ENVIRONMENTAL RESEARCH LETTERS 6(2) APRIL-JUNE:

Conservation and development challenges of Kgalagadi Transfrontier Park

Kgalagadi Transfrontier Park is located in the Northern Cape Province of South Africa and neighbouring Botswana. The local communities on the South African side, the Khomani San (Bushmen) and Mier living adjacent to the park have land rights inside and outside the park.

The path from a history of land dispossession to being land owners has created conservation challenges manifested through heightened inter- and intra-community conflicts.

The contestations for land and tourism development opportunities in and outside the park have drawn in powerful institutions such as the governments, South African National Parks, private safari companies, local interest groups and NGOs against relatively powerless local communities.

This has consequently attracted national and international interest since it may result in further marginalization of the communities who lack the power to negotiate resource access. Moreover, the social and political system of the San is romanticized while little is reported about the Mier, who are an integral part of the park management system.

To make these issues more accessible to a growing audience of interested parties and to better understand present conservation and development challenges and opportunities, this article synthesizes information on the pre- and post-land restitution history of the park and the adjacent communities.

RESEARCH POLICY INTERACTION

The EfD initiative is built on the premise that if relevant applied research is introduced in policy making processes, then this will result in improved policies and subsequently poverty reduction and a more sustainable development. The experiences over the last decades are that it is of utmost importance for policy impact that there is a close dialogue between researchers and policy makers/civil servants over an extended period. Below are some examples of successful policy interactions.

It has been an important learning experience, not least for the researchers, that the policy interaction entails much more listening – affecting the research design – than dissemination of final results. The ambition within the EfD initiative is to increase the involvement even further in the analysis that lead to national policy documents. This has already been the case in for example Tanzania, where a stronger emphasis on green growth for poverty reduction is an important outcome of the EfD review of Tanzania's forward-looking National Strategy for Growth and Reduction of Poverty for 2011-2015. The review team involved the EfD Research Fellows John Mduma, Adolf. F. Mkenda and EfD center Director Dr. Razack Lokina.

Yet another example is Ethiopia, where EfD Center Director Dr. Alemu Mekonnen was a member of the technical committee for Ethiopia's strategy for Climate Resilient Green Economy which was launched in November 2011, and mentioned at UNFCCC's climate conference in Durban as the only such strategy in Africa. Another ambition is to increase the application of impact evaluation tools on sector programs, as EfD Center Director Professor Jintao Xu and his team have done in the forest sector in China, please see below.

RESEARCH POLICY INTERACTION TOP OUTCOMES

The Climate Change Workshop that was held at UNECA in Addis Ababa on July 20, 2011 was a major policy interaction area as it involved over 60 representatives from governmental, non-governmental, and multilateral organizations/institutions. Regional Environmental Protection Authority offices were also invited to participate on this workshop co-organized by the EfD Ethiopia/The Environmental Economics Policy Forum (EEPFE) and the Ethiopian Development Research Institute.

Commissioned by State Forestry Administration of China, the EfD China/Environmental Economics Program in China (EEPC) finished the second-round survey in eight provinces in 2011. They were surveyed in 2006-2007, with the aim of a comprehensive evaluation of the reform and providing policy recommendations to cope with current problems and future challenges. A drafted plan of reform framework on China's key state forest region was submitted to State Forestry Administration. EEPC has also collaborated with Beijing Transportation Research Center and provided policy recommendations for Beijing Municipal Commission of Transportation.

During 2011 EfD Kenya contributed to the development of the European Report on Development 2012 being coordinated by Overseas Development Institute, European Centre for Development Policy Management, European Union, and German Development Institute. The focus of the report is on 'Effective natural resource management for inclusive and sustainable growth in the context of increased scarcity and climate change: what role for the public and private sector'. EfD Kenya's case study showed how flower productions around Lake Naivasha can contribute to inclusive and sustainable management of natural resources.

EfD research fellows Martine Visser and Grant Smith, EfD South Africa/Environmental Economics Policy Research Unit (EPRU), showed in a study in 2010 that that reporting to people their own and the average consumption of electricity caused all kinds of households in suburbs of Cape Town to significantly reduce their electricity consumption. Given the success of the study, the City of Cape Town requested our researchers to extend the scope of the project. Subsequently Visser and Smith have also obtained funding from the Water Research Commission to do a similar study on demand side management and water consumption in Cape Town. In 2011 a workshop was organized to present the project to a panel of experts who made invaluable comments on the methodology and general issues. Present were two representatives from the City of Cape Town, two representatives from WRC, a representative from a local water consultancy, one from an NGO and three academics with expertise in the area and a civil society representative. The WRC requires such a workshop be conducted every six months.

In 2011 the EfD Central America's host institution, Tropical Agricultural Research and Higher Education Center (CATIE) and The National Forestry Financing Fund (FONAFIFO) signed a Framework Agreement of Cooperation with the goal to promote rural development and a sustainable forestry in Costa Rica. Research results coming from EfD Central America and other programs in CATIE will provide information for key policy decision-making related to Ecosystem Services, REDD+, and future policy innovations within FONAFIFO.

EfD Tanzania organized the EfD Policy Day 2011 at the annual meeting in Arusha in October, and hence created awareness to more than 20 attending government officials and other stakeholders on the need for enhancing environmental and resource management and welfare improvement. About one third of them were members of the EfD Tanzania Research Policy Board, who also gave presentations in addition to those given by EfD researchers. This high-level policy board supports the planning and implementation of the EfD Tanzania work plan and research projects, which enhances both significant policy impact and access to sustained domestic funding.



Alemu Mekonnen, Research fellow and Director of EfD Ethiopia and Ato Getachew Yosef, EDRI director, speaking at the Climate change workshop at UNECA in Addis Ababa July 20, 2011. The workshop was co-organized by the EfD Ethiopia/The Environmental Economics Policy Forum (EEPFE) and the Ethiopian Development Research Institute.



CATIE's Director General José Joaquín Campos and FONAFIFO's Executive Director Jorge Mario Rodríguez signing an agreement. Research results coming from EfD Central America and other programs in CATIE will provide information for key policy decision-making related to Ecosystem Services, REDD+, and future policy innovations within FONAFIFO. Photo: OCI-CATIE



The EfD Policy Day 2011 brought together government officials, other stakeholders and researchers. From left Arnold Mapinduzi, Senior Environmental management officer, The National Environment Management Council (NEMC), Salvatory Macha, EfD Project Administrator, Blandina Cheche, Poverty Environment Coordinator, Vice-President's Office, and Claude Mung'ongo, Professor at the University of Dar es Salaam's Institute of Resource Assessment.



Dr Xuemei Jiang and team members in the survey of Liaoning province: A second-round massive survey of collective forest tenure reform in eight provinces in China.



Lake Naivasha. EfD Kenya's case study for the European Report on Development (ERD) 2012 showed how flower productions around Lake Naivasha can contribute to inclusive and sustainable management of natural resources. The ERD team is led by the Overseas Development Institute in partnership with the Deutsches Institut fuer Entwicklungspolitik and the European Centre for Development Policy Management. © European Commission



A picture of the household survey of the Choice Model of Transportation Behaviors, conducted by Beijing Transportation Commission and EEPIC researcher and students.

	Policy (Research) briefs produced	Policy seminars, workshops or conferences organized by center	Other policy seminars, workshops or conferences that center staff participated in	In-service training courses for civil servants (No. of courses)	In-service training courses for civil servants (No. of participants)
Central America	1 Policy 4 Research	16	22	0	0
China	1 Policy 1 Research	1	0	0	0
Ethiopia	0	7	24	0	0
Kenya	0	0	9	0	0
South Africa	1 Policy	2	1	1	30
Tanzania	0	1	3	0	0
Total all Centers	4 +(5)	27	59	1	30

EfD Policy interaction in numbers 2011



The EfD Policy Day 2011 in Arusha, Tanzania, brought together more than 80 researchers and policy makers in a dialogue on Opportunities for sustainable natural resource use with national and local benefits.

THE EFD ANNUAL MEETING 2011 IN TANZANIA

The EfD Annual Meeting 2011 was held in Arusha, Tanzania (October 27-30). The annual meeting is a forum to bring together researchers from EfD centers and their collaborators and other key stakeholders for exchange of research ideas and discussion of research proposals and results from EfD research projects. About 50 participants attend the meetings each year.

Discussions on Research

One of the key note speakers in 2011 was Peter Martinsson, Professor of environmental and behavioural economics, Department of Economics University of Gothenburg. Martinsson spoke on the potential of field experiments in undertaking effective research at EfD. The other key note speaker was Pushpam Kumar, Chief, Ecosystem Services Economics Unit, United Nations Environment Programme (UNEP), who spoke on Economics of Ecosystem Services and the need for effective transdisciplinarity in research.

In line with its objective of promoting high quality relevant research, the EfD used the 2011 workshop as an opportunity to launch the new "Collaborative Research Process", which involves a multiple of EfD centers. EfD researchers developed collaborative research projects

focusing on various highly relevant research proposals that were consequently evaluated. Decisions on funding have been made by the research committee at the EfD secretariat.

The 2011 annual meeting also served as an important venue through which the views and comments on the future of EfD have been entertained from all the workshop participants. The session was chaired by Francisco Alpizar, Director of EfD Central America, and useful insights were obtained from the floor which helped enormously in the development of the EfD strategic plan for sustainability.

EfD Policy Day at the Annual Meeting

The EfD Policy Day 2011, in Arusha, Tanzania (October 27), brought together more than 80 researchers and policy makers in a dialogue on Opportunities for sustainable natural resource

use with national and local benefits. More than 20 representatives from Ministries, Departments and Agencies participated. About one third of them, were members of the EfD Tanzania Research Policy Board (see table).

"Our objectives of the Policy Day is to communicate selected work of EfD's research and its potential contributions to key policy institutions and other key stakeholders present at the meeting. We also want to increase our learning on how to translate research to policy and make a difference with environmental economics tools, and share information across EfD centers on successful research-policy interactions," says EfD Director Gunnar Köhlin.

In Arusha 2011 the news media was invited for the first time. Two press releases on EfD research findings were issued, titled: Benefit



EfD members Razack Lokina, Selma Oliveira, Kofi Vondolia, and Edwin Muchapondwa.



Ruzika N. Muheto, Director, National Environment Management Council, Tanzania, Razack Lokina, EfD Tanzania Director, Wilfred Nyangena, EfD Kenya Director, and Amon Manyama, Chairman, EfD Tanzania Policy Board.



Felix Mwakyembe, Journalist at the Kiswahili weekly Raia Mwema, interviewing Elizabeth Robinson, Associate Professor, University of Gothenburg and University of Reading.



Professors Randall Bluffstone, Portland State University, and Jintao Xu, Director EfD China/EEPC



Kofi Vondolia, UNEP, Nairobi and EfD Kenya Research Associate.



Professor Thomas Sterner, Dr Ping Qin, Policy analyst Olof Drakenberg, and Dr Yonas Alem at the EfD Coordination Committee meeting in Arusha 2012.

sharing is key for the success of REDD in Tanzania and Wildlife conservation can help poor communities survive. Journalists came, and reports were published in Kiswahili weekly, Raia Mwema, The Guardian, The Daily News, The Citizen, and broad-casted in the tv-channels ITV and Channel Ten. EfD media coverage can be found under the heading EfD in media on www.efdinitiative.org

Julius Ningu, Director, Environment Division, Vice-President's Office, opened the meeting by discussing about greening the economy through better management of wildlife and forestry. Claude Mung'ongo, Professor at the University of Dar es Salaam's Institute of Resource Assessment, spoke about implementation of Tanzania's REDD+ strategy and key challenges. Elizabeth Robinson, Associate Professor, University of Gothenburg and University of Reading, spoke about experiences of successful forest management in Sub-Saharan Africa and its implications for REDD+ policies and the private sector. Allan Kijazi, Director Tanzania National Parks (TANAPA), spoke about sustainable management of Tanzania's wildlife resources and its contribution to development.

The importance of giving landholders strong

use rights and encouraging the commercialization of wildlife, including trade and developing of new wildlife products was discussed by Edwin Muchwapondwa, Associate Professor at the University of Cape Town and in charge of coordinating EfD research in 2011. This was followed by a presentation by Randy Bluffstone, EfD research associate, EfD Ethiopia, on the determinants of agricultural investment and productivity over the long term-implications for East African policy makers. The policy day ended with a closing speech by Amon Manyama, Chairman, EfD Tanzania policy board and head of poverty unit, UNDP Tanzania.

The final panel discussion on Key actions to attain sustainable natural resource use with benefits for local communities – Tanzania and other examples included also (in addition to some speakers mentioned above) Blandina Cheche, Poverty Environment Coordinator, Vice-President's Office, Olof Drakenberg, Policy Analyst and Chairman, EfD Policy Day Committee, Ruzika Mheto, Director, Environmental Planning and Research, National Environment Management Council (NEMC), Aloyce Nzuki, Director, Tourism Division, Ministry of Natural Resources, and Professor Jintao Xu, EfD Research Fellow and Director, EfD China.

During the Policy Day, members of the policy board also took the opportunity to challenge EfD researchers. Several news media reported from the day (see EfD in media on efdinitiative.org) and for example The Guardian reported (October 29, 2011) under the heading Researchers challenged to reach out to ordinary people:

Blandina Cheche, Poverty Environment Coordinator, Vice-President's Office, said research findings could influence positive changes in policy directions and society in general. "But researchers must ensure they bridge the gap between themselves and ordinary people in society and that their research findings reach them in a simple language," said Cheche. She also asked researchers in the country to ensure the research conducted and recommendations are used to address burning issues on the ground: "By doing so, we will be helping people out of the poverty gap." According to The Guardian the board member, Ruzika Mheto, Director, Environmental Planning and Research, National Environment Management Council (NEMC) "concurred with the idea, urging researchers to translate their research into Kiswahili: "Research acts as a stimulus to development in a particular locality but its research findings should reach the grass roots."



Blandina Cheche, Vice-President's Office, Claude Mung'ongo, Professor at the University of Dar es Salaam's, Arnold Mapinduzi, The National Environment Management Council (NEMC), and Salvatory Macha, EfD Project Administrator.



Alemu Mekonnen, Director EfD Ethiopia at the EfD Coordination Committee meeting in Arusha 2012. In the background Adolf Mkenda and Yonas Alem.



EfD Central America Research fellows Francisco Alpizar, Maria Naranjo and Roger Madrigal.



Among the panelists at the EfD side-event to the UN Climate Change conference in Durban 2011 were (second from left) Lena Ek, Swedish Minister of Environment, and (third and fourth from left) EfD's Dr. Martine Visser, Associate Professor at the University of Cape Town, and Mark Purdon, PhD candidate at the University of Toronto. EfD's Thomas Sterner, Professor of Environmental Economics at the University of Gothenburg, gave his presentation from Sweden using technology available – thus saving significant amounts of CO₂.

EFD SIDE-EVENT TO THE UN CLIMATE CHANGE CONFERENCE IN DURBAN

EfD had a noticeable presence at the UN Climate Change negotiations held in Durban in December 2011. EfD hosted an official side-event at the Durban Exhibition Centre entitled “Leading by example – Swedish leadership in global climate change policy”. The side-event was co-organized with FORES, a leading independent Swedish liberal economic think-tank. Drawing attention to Swedish leadership on both domestic and international stages, the session was comprised of two parts: (i) Sweden, Climate Change Negotiations and Fairness and (ii) Engaging Developing Countries. Given the reputations of panelists including Lena Ek, Swedish Minister of Environment, and EfD's Thomas Sterner, Professor of Environmental Economics at the University of Gothenburg, the side-event drew in a strong attendance, between 20-30 individuals, who were interested in learning more about Swedish efforts.

EfD's Dr. Martine Visser, Associate Professor at the University of Cape Town, opened the first session where she presented her research on issues of fairness in the climate change negotiations. Using applied game theory, she demonstrated that individual-country specific contributions are more effective than basing contributions on equity principles alone. This lends credence to a bottom-up approach where emissions targets are based on national policies as opposed to a top-down approach such as the Kyoto Protocol. Mark Purdon, PhD candidate at the University of Toronto and EfD Research Associate, reported in the second session on results from comparative fieldwork into carbon development mechanism afforestation projects in Tanzania, Uganda and Moldova, he argued that projects tend to generate a greater number of genuine, “additional” carbon credits when they were implemented by state forest agencies who were able to maintain latent technical capacity

despite uncertainty about the price of carbon that bedeviled private sector operators.

The second session of the EfD side-event to the UN Climate Change conference in Durban on Engaging Developing Countries was opened by Professor Thomas Sterner. He highlighted the EfD experience, especially the increasing emphasis EfD is placing on climate change – as exemplified in a new PhD Program in Climate Economics starting in Gothenburg in 2012.

Sterner also presented the findings of the book *Fuel Taxes and the Poor, The Distributional Effects of Gasoline Taxation and Their Implications for Climate Policy*, see below:



In January 2012, Thomas Sterner was interviewed in a live talk show in South African television about the findings in the book “Fuel Taxes and the Poor”. This was when the fuel subsidy strike action happened in Nigeria, so the interview was made in the light of this. The show on CNBC Africa/ABN was called “Beyond Market” and was broadcasted via cable throughout Africa and also in England.

FINDINGS FROM 25 COUNTRIES PRESENTED: HIGHER PETROL TAXES WON'T HURT THE POOR

In the poorest countries, it is the middle- and high-income earners who are generally hit harder – the tax is progressive.

The book *Fuel Taxes and the Poor, The Distributional Effects of Gasoline Taxation and Their Implications for Climate Policy*, edited by Sterner and published by RFF Press in 2011, is written as part of the Environment for Development Initiative. It is authored by 35 renowned researchers from China, India, Indonesia, USA, Latin America, as well as many countries in Africa and Europe.

Increased gasoline taxation is a very effective instrument to reduce greenhouse gas emissions and hence, EfD researchers and associates studied data from 25 different countries to investigate the concern that gasoline taxes affect poor people the most. The study, the largest ever of its kind, shows that in high-income countries like the US, gasoline taxes may indeed be regressive and affect the poor more. But in most countries, and particularly in the poorest countries, it is the middle- and high-income earners who are generally hit

harder – the tax is progressive. India, China and many African countries are examples, where cars and fuels are luxury products. In many European countries such as Sweden the petrol tax is roughly neutral.

News media has shown great interest in the book and the critique of fuel subsidies, not least the news media in South Africa, Indonesia, and Sweden, but also magazines like the UN magazine *Africa Renewal*. EfD media coverage can be found under the heading EfD in media on www.efdinitiative.org

ENVIRONMENTAL ECONOMICS AND POLICY GROUP

EfD and GMV Environmental Economics and Policy Group, which hosts Sida's Helpdesk for environment and climate change (former Sida's Environmental Economics Expert Function), has long enjoyed a mutually rewarding working collaboration including capacity development on ways to strategically improve the outreach of research findings to influence policies, sharing of experiences and analytical work.

The expert group has during the year interacted with the centers 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. Conversely, EfD centers have also contributed to the expert group's support to Sida in for example background analyses and training in on Green Economy and environmental economics of Swedish embassy staff. Helpdesk experts were co-responsible for the planning and implementation of the policy day of EfD's Annual Meeting in Arusha, Tanzania. Moreover, helpdesk staff has coached and discussed

how the centers can advance their policy engagement and work more effectively to influence policy planning and decision-making relating to both national policy processes and sector reforms.

In June 2011 the expert group merged the advisory services for Sida under a joint Helpdesk contract between the Center for Environment and sustainability (GMV) at the University of Gothenburg/Chalmers Institute of Technology, and the Swedish University for Agricultural sciences (SLU). Close contacts between the EfD and the Sida's new Helpdesk for environment and climate change remain.

Olof Drakenberg, Policy analyst, Environmental Economics and Policy Group was co-responsible for the planning and implementation of the EfD Policy Day 2011. Here together with Dr. Matern Mtolera, University of Dar es Salaam.



SIX CENTERS' RESEARCH POLICY INTERACTION STORIES

CENTRAL AMERICA

Payments for ecosystem services in Costa Rica Should the squeaky wheel get all the oil?



Teodoro Cascante in San Pedro, Santa Cruz, Guanacast, is being interviewed by Laura Villalobos.

Does it matter who gets paid and why for the efficiency of payments for ecosystem services (PES) programs aimed to reduce deforestation and forest degradation? This is being studied by EfD Central America researchers. They are also studying the socioeconomic impacts of the PES program in Costa Rica. Since 1996 this national program has attracted international attention, and today it is regarded as a model for REDD+ credits.

PAYMENTS FOR ecosystem services (PES) is an environmental policy instrument that gives the owner of a natural resource direct incentives to manage it in society's best interest. Today Costa Rica's PES program is paying forest landowners for ecosystem services, since they conserve forests. But if this payment program is to create additionality, that is, benefits for society that would not be there in the absence of the program, then payments should target landowners at high risk of deforesting their land and those who would not have planted trees without the program.

"The problem is to identify who is at high risk for deforestation, which is expensive; it

requires a deforestation model and lots of information. Policymakers in charge of the program are typically not convinced that targeting high risk landowners will pay off. There are two broad justifications for policymaker's reluctance to focus solely on high risk landowners. First, they frequently argue that leaving forest guardians (that is landowners with no or very little risk of deforestation under current conditions) outside of the payment program is unfair to them and might lead to changes in their behavior. A second aspect is that targeting based on high deforestation risk makes sense as long as the objective is to reduce deforestation and forest degradation. As soon as you have additional objectives, such as reduced poverty and improved livelihood of landowners,

then targeting based on risk of deforestation becomes just one part of a larger equation," says Francisco Alpizar, senior research fellow and director of EfD Central America.



Layli Moreno is interviewing a lady land owner in Peninsula of Nicoya for the Tinker-PES project.

Together with EfD researchers Juan Robalino, Alexander Pfaff and Anna Nordin, Alpizar is conducting interviews and economic experiments with around 400 households of landowners living all over Costa Rica. The study is supported by the Tinker Foundation. The findings will be presented at the next EfD Policy Day in Costa Rica in connection with the annual meeting of EfD in 2012.

"In our experiments we study the responses of people who receive payments and people who don't in order to evaluate how different selection rules affect their behavior. Our preliminary results support the hypothesis that if you pay only the landowners at high risk of deforesting their lands, then some forest guardians will react negatively. We observe people reacting angrily at being excluded from payments because of their already good behavior," says Alpizar.

One important conclusion from the study will be that a combination of incentives that includes both targeting and fairness considerations is needed. If implemented separately, the efficiency of the PES program will be endangered.

For this study, the EfD Center in Central America is cooperating with the National Forestry Financing Fund (FONAFIFO), which is the government institution that implements the PES program in Costa Rica.

In 1996 Costa Rica was the first country in the world to implement a national program for payments for ecosystem services. The program immediately became a common focus of

research around the world, and many of the researchers' suggestions have been implemented by policy makers in different countries, for instance in Mexico.

But the pioneering Costa Rican program was not perfect. It was for example criticized for its narrow focus on forestry and its exclusion of the role of agriculture. Not targeting land owners at high risk of actually deforesting their land was also seen as a problem. And it still is. The program, which is mainly funded through fuel taxes, also receives funding from the World Bank, which together with evaluators has pushed for better targeting.

Both additionality and targeting of PES in Costa Rica have been studied for a long time by EfD researchers Juan Robalino and Alexander Pfaff. In essence they have found that additionality is low, but there is a capacity for improvement through improved targeting.

The World Bank has also requested that FONAFIFO explore the socioeconomic impacts of the PES program. The EfD initiative is funding part of this new study, of which the results will feed directly into policy. It is conducted by EfD researchers Laura Villalobos, Juan Robalino, and Francisco Alpizar. Among the factors that will be studied are income, schooling, and infrastructure. The data comes from around 400 household interviews conducted by EfD. Census data will also be used.

The principal researchers of this field study are very proud because it emerged from a simple discussion to become an innovative project that turned out to be attractive enough to call the attention of the Tinker Foundation out of



Jennifer Hernandez is conducting an interview for the Tinker-PES project in Cartago in January 2012.

many others seeking financial support. The actual field experiments and the survey technique used to collect data have never been applied in Costa Rica before. In this way, this is a groundbreaking study in the country for its use of elements of game theory in a natural field experiment and because it included a payment to the participants and voluntary donations to a public cause.

Francisco Alpizar says that when and if REDD+ (a carbon trading system based on reducing emissions from deforestation and forest degradation) becomes a policy of the world community, it might look very similar to FONAFIFO's program for ecosystem services in Costa Rica.

"It's not simple. Costa Rica has a history of good environmental stewardship, strong institutions and little corruption and still achieving credible credits through reduced greenhouse gas emissions from deforestation and forest degradation (REDD+) in Costa Rica will be difficult. Imagine how much so will it be in countries with a high level of corruption, weak institutions, and no history of protecting nature."



Carlos Muñoz is interviewing Antonio Montero Alvarado in Monteros, Nicoya as part of the EfD-Tinker PES project in 2011.

About REDD and REDD +

Since 2005, the effort to create incentives for reducing emissions from deforestation and forest degradation (REDD) has gained prominence as a way to reduce global greenhouse gas (GHG) emissions. In 2010, the UN climate conference in Cancun established an incentive mechanism for REDD+ (including conservation, sustainable management and enhancement of forest carbon stocks), and opened the door for countries to generate tradable emission reduction credits from forest carbon in the future. Source: Resources for the Future (RFF)

Professor Jintao Xu (third from left), Research fellow and Director of EfD China, and Haipeng Zhang (second from left, EfD research fellow, in Sichuan with local forestry administration.

CHINA

What steps to take to reform the Chinese state forest sector?

Forests have a unique potential to contribute to sustainable economic development and a reduction of China's massive carbon emissions. Forest Tenure Reform in China's collective forests is a process of historical importance with widespread and long-lasting impacts. Currently, the question of what steps to take to reform the Chinese state forest sector is hotly debated.

“OUR CONTRIBUTION will be to provide a comprehensive analysis of different views, and suggest how these can be consolidated into an ultimate future path for state forests,” says Professor Jintao Xu, Director of the Environmental Economics Program in China (EEPC), the Chinese node of EfD.

Professor Jintao Xu, Director of the Environmental Economics Program in China (EEPC), the Chinese node of EfD, is one of China's most prominent experts in forestry economics. He has been conducting research in forestry economics for about 25 years. For the last ten years he has pointed to forests as a major asset for sustainable development in China.

“Many climate change experts basically ignored this sector for long. We have contributed to getting the ideas out, together with foresters and colleagues. And suddenly it happens – national leaders promote the forest sector at world summits,” says Xu.

In recent years most of the research work by

EfD in China has focused on forest policy and on reformation of the state forest sector and the collective tenure system. The purpose of the reform is to establish individual household management and improve farmers' livelihood. Lack of appropriate mechanisms and incentives in the state forest sector, and lack of secure forest tenure for farmers in the collective forest sector, underpin severe poverty in forested areas and unsatisfactory performance of forest resource conservation. Research done by the EEPC has provided academia and government agencies with comprehensive information about the baseline situation in these two major forest sectors. Their policy recommendations have also been highly influential.

The ongoing State Forestry Reform Project focuses on two important issues: 1) how to transform state forest enterprises to improve their financial performance and their performance with respect to forest conservation, and 2) how to modify the relationship between state forest authorities, provincial governments and state forest enterprises. The findings of Xu and his research colleagues Xumei Jiang and Haipeng Zhang, from forestry studies in north-

east China, are to a large extent contrary to the view of the State Forest Administration.

“We need to speed up the reformation of the central government forest policy. Our report will inform the central government about what is happening at the local level, affect their thinking, and make them better prepared for local innovations. My anticipation is that local initiatives will be recognized by the central government in 1-2 years,” says Professor Jintao Xu.

Xu and his EfD research team have also analyzed a potential Chinese forest carbon market, given different scenarios, namely a cap on emissions by 2012, 2030 or 2050. They provided recommendations on the policy needs to effectively develop the market. This work was commissioned by the Forest Carbon Management Office, a proactive department within the State Forest Administration (SFA) that Xu has been working with since its founding.

In late May 2012 EEPC/EfD China, State Forestry Administration and the World Bank will arrange the third international conference on the State Forest Reform.

A lady in Amhara region preparing manure for fuel.

ETHIOPIA

Climate Change hits Africa the hardest – what can be done?

Ethiopia risking average income cut of 30 percent. The impacts of climate change on agricultural productivity may reduce the Ethiopian average income by as much as 30 percent within the next 50 years. This and other EfD findings on how climate change is hitting Africa, and in particular Ethiopia, were presented to 60 workshop participants from government, NGOs and multilateral organizations assembled in Addis Abeba. Strategies for adaptation, mitigation and a stronger position in international climate negotiations were discussed.

AFRICA HAS THE LOWEST average per capita emission of greenhouse gases, and in total only about 4 percent of the world's emissions. Yet the region is particularly vulnerable to climate change and suffers its consequences already. Seventy percent of Africa's population depend on rain-fed agriculture. This makes African countries likely to be the worst affected by the predicted impacts of climate change on agricultural output. Poverty, weak capacity to adapt, and the fact that Africa is already warming faster than

the global average are other factors behind the extreme vulnerability to climate change, caused by other continents.

The continent's vulnerability was cruelly underlined by the drought in the Horn of Africa in 2011. In July, more than 12 million people across Ethiopia, Somalia, and Kenya were in need of food, water, and emergency health-care. The UN officially declared famine in Somalia, and in November death rates, especially for young children, remained extremely high, partly due to continued outbreaks of diseases.

"It could be debated whether the drought crisis in the Horn of Africa is linked to climate change; still it clearly shows the particular vulnerability of poor people to climate variability," says Dr. Alemu Mekonnen, Research Fellow and Center Director of EfD Ethiopia.

"Without doubt, climate change is already a very serious problem in Africa. Climate conventions should consider that people in Africa are suffering from climate change today. Over the globe we need to do whatever we can to slash greenhouse gas emissions," says Mekonnen.

Over grazed land in the Amhara Region



The EfD center in Ethiopia is also called the Environmental Economics Policy Forum for Ethiopia (EEPFE) and is based at the Ethiopian Development Research Institute (EDRI). Mr. Newai Gebre-Ab is the Executive Director of EDRI and also Chief Economic Advisor to the Prime Minister of Ethiopia.

Mekonnen continues, “This might have contributed to the high number of workshop participants. The topic itself surely also contributed to a high turnout since climate change is increasingly important in Ethiopia. The workshop gave us the opportunity to inform relevant stakeholders about climate change issues, and present our findings and recommendations.”

In Ethiopia, up to 80 percent of the population rely on rain-fed agriculture for crop and livestock production. One important EfD finding is that, unless the government carries out policies that support adaptation, climate change can reduce the average Ethiopian income by 30 percent within the next 50 years – a devastating scenario for a low-income economy. This result came out of a study carried out by EfD environmental economists who wanted to analyze the societal costs of climate change when private agents are left to adapt on their own, compared to a situation without climate change. These costs are important to assess and know, in order to be able to fairly evaluate the costs for government policies actually undertaken to address climate change. The baseline for comparison was provided by a model called Computable General Equilibrium (CGE).

Previous economic studies of climate change

impacts in Ethiopia have generally ignored the impacts on livestock production and regional variation. However, the EfD study analyzes the impacts of climate change on both livestock and crop production, and the indirect impacts on economic growth.

The policy implication of the results is that productivity growth matters more for the Ethiopian economy than does climate change. However, even if productivity would grow rapidly, climate change will still have a dramatic impact, and government policies need to target both planned climate change adaptation and productivity growth.

The topics of how Africa should use the carbon market and what mitigation strategies governments should undertake were also discussed in the workshop. Dr. Mekonnen says that Africa should focus on developing clean energy, mitigating emission from livestock, avoiding deforestation, encouraging afforestation and reforestation, and improving agricultural and land management systems.

As regards climate conventions and negotiations, EfD researchers are suggesting that African negotiators in future climate negotiations consider making a case for countries that face extreme circumstances – that they receive special funding as compensation. Negotiators should also consider demanding that Clean Development Mechanism (CDM, a market-based mechanism of the so-called carbon market) criteria should include activities that are relevant to Africa and that match countries’ development priorities, which include food and energy security. The CDM

was designed to enable developed countries to reduce their emissions through sustainable development projects in developing countries. Yet only about 3 percent of CDM projects that have been accepted by the United Nations Framework Convention on Climate Change (UNFCCC) are being implemented in Africa, and only one is being implemented in Ethiopia.

“Africa has not benefitted much from the carbon market mechanisms. One reason is that the existing systems do not take the conditions in Africa into account, for example that the major sources of greenhouse gas emissions are livestock, and firewood used for household energy. When it comes to energy systems, Ethiopia is already green because we use hydro-electricity. Hence, in contrast to China we can’t harness the system and say we will shift from coal energy to a cleaner energy source and therefore receive support,” says Mekonnen.

The newspaper Ethiopian Herald reported about the EfD/EEPFE/EDRI workshop on climate change on July 21, 2011

Dr. Alemu Mekonnen, Research fellow and Director of EfD Ethiopia



KENYA

How can Lake Naivasha roses create inclusive, sustainable growth?



EfD Kenya's case study for the European Report on Development (ERD) 2012 showed how flower productions around Lake Naivasha can contribute to inclusive and sustainable management of natural resources. The ERD team is led by the Overseas Development Institute in partnership with the Deutsches Institut fuer Entwicklungspolitik and the European Centre for Development Policy Management.

Flower production around Lake Naivasha and its role in attaining inclusive and sustainable growth

EfD Kenya researchers Dr. Wilfred Nyangena and Geophrey Sikei are contributing to the European Report on Development 2011/2012. In a context of increasing scarcity and climate change, they studied effective natural resource management for inclusive and sustainable growth. Their case study is about flower production around the Lake Naivasha basin, where water, energy, and land resources are increasingly interdependent and under considerable environmental pressures.

"Water, energy, and land (WEL) are identified, by the team behind the European Report on Development 2012, as the most critical resources needed for inclusive and sustainable growth. Countries need to find adopting strategies that allows these natural resources to contribute more to inclusive, sustainable growth and, at the same time, are low carbon intensive and embrace the aspects of poverty alleviation," says Dr Wilfred Nyangena, Research Fellow and Coordinator of Environment for Development in Kenya, hosted by KIPPRA and the University of Nairobi.

Nyangena and Sikei show in their commissioned report the strong links between water, energy, and land resources around Lake Naivasha,

Dr Wilfred Nyangena, Research fellow and Coordinator of EfD Kenya, at York University presenting findings from the Lake Naivasha study to the team behind the European Report on Development (ERD) 2012.



Close to 2 million Kenyans derive their livelihoods from the Lake Naivasha basin.

the only freshwater lake situated in the Kenyan Rift Valley, approximately 80 km northwest of Nairobi.

Different players compete for the Lake Naivasha basin's resources. Small-scale farmers are growing crops upstream, and flower farmers are active downstream. Both affect water quality and availability. Pastoralists need land and water for their livestock. A geothermal power plant located in the "Hells Gate" National Park south of the lake is producing renewable energy using the earth's heat beneath the Rift Valley, and thus saving carbon dioxide emissions in the process. However, the plant requires water from the lake as well as land. In addition, tourism requires quality water, and the Naivasha Town is growing, causing higher population pressure.

"Our role is to point at changes that can be made to harmonize conflicting interests and to make a better impact from the natural resources use. Ecological integrity, social inclusion, and economic growth are the sought-after benefits characterizing inclusive and sustainable growth, or in other words a green economy," says Nyangena.

In order to shape a "green economy profile," Nyangena and Sikei have mapped all green economy initiatives in the country. They have also, in a desktop meta study, mapped a potential low carbon intensive strategy for the basin area. To begin with, the continued unabated encroachment of agricultural and commercial activities into the basin makes sustainable development more vulnerable to the impacts of drought and to the erratic weather patterns currently being experienced, hence the need to reverse it. In line with the NCCRS 2010, concerted efforts should be made to control river abstraction in the upstream so as to improve availability of water for hydropower production and enhance the quality of water.

The Lake Naivasha basin has been a study site for EfD Kenya for some years now and

hence, their previous work on sustainable land management and payments for ecosystems services also informs this new study.

There is a water management scheme in use in the area, where flower farmers downstream contribute money to agricultural farmers upstream to make them adopt soil conservation and afforestation measures. Deforestation in the upper catchment causes extreme floods during rainy season and low volumes in drought.

"Local government, flower farmers, and small scale agricultural users implement various initiatives to improve the management of the basin. But more is needed, for instance proper implementation of payment for ecological services, enhancement of water resource management and water use efficiency by flower farms, promotion of public-private dialogue, and assistance in coordinating the emerging actors and their initiatives," says Nyangena.

Close to 2 million Kenyans derive their livelihoods from the Lake Naivasha basin. Incomes are relatively higher here than in the rest of the country.

Flower farmers around the basin produce one-fifth of all roses on the EU market. Together these companies generate about ten percent of Kenya's total foreign exchange revenue.

The title of the commissioned EfD report is "The importance of natural resource management for inclusive and sustainable growth: A case study of flower production around Lake Naivasha, Kenya". The final European Report on Development 2011/2012 was presented to the European Commission in March 2012.

Watch the film ERD - WEL Nexus including interviews with Dr Wilfred Nyangena

<http://multivu.prnewswire.com/mnr/prne/erd/53810/>



Geophrey Sikei, EfD Junior Research fellow and Program assistant

The European Report on Development (ERD) is the main output of the "Mobilising European Research for Development Policies" initiative. The ERD 2011/2012 team is led by the Overseas Development Institute (ODI), in partnership with the European Centre for Development Policy Management (ECDPM), and the German Development Institute/Deutsches Institut für Entwicklungspolitik (GDI/DIE).

The report is supported by the European Commission and seven Member States, namely Finland, France, Germany, Luxembourg, Spain, Sweden, and the UK. The report focuses on natural resource management in developing countries in the context of increasing resource scarcity and climate change, and attempt to provide policy suggestions relating to how natural resource management can best promote inclusive and sustainable growth. Time frame: December 2010 - March 2012



Patet's wife (Khomani San Community), Johane Dikgang (EPRU, UCT), Patet (Khomani San Community), Gladman Thondhlana (Rhodes University), Willem-Schalk Afrikaner (Research Assistant - Mier Community), & Serina Van Wyk (Research Assistant - Mier Community). The photo was taken at their craft shops, about 50 km from the Kgalagadi Transfrontier Park in the Khomani San Farmlands, Mier Local Municipality, Northern Cape Province, South Africa.

SOUTH AFRICA

EfD/EPRU study shows how the Khomani San might benefit from ecotourism in Kalahari

In 1994 the Khomani San “bushmen” community successfully reclaimed land inside and outside the Kgalagadi Transfrontier Park. Yet despite ownership of a portion of land still part of the Kgalagadi Transfrontier Park, the Khomani San community has never directly benefited from tourism revenues from entrance fees. EPRU researchers show how voluntary donations earmarked for the Khomani San community by park visitors above their entrance fees can be the first step to a better distribution of park profits among stakeholders. Furthermore, the researchers show that the Khomani San community does value biodiversity conservation in its area making it a reliable partner in conservation.

IN 1913 THE KHOMANI SAN WERE forcefully removed from their land to make way for a national park in the Kalahari, or Kgalagadi, desert in Southern Africa. Today the Kgalagadi Transfrontier Park stretches between Botswana and South Africa but also borders Namibia, with access from all three countries and 25 percent

of its area in South Africa. It is located 904 km from Johannesburg and 1,080 km from Cape Town, with the closest airport in Upington 260 km from the park.

After the first democratic elections in 1994, the South African government initiated a land reform program provided for by the Restitution

of Land Rights Act 22 of 1994.

“This meant a significant change in land ownership in the Kalahari area, with implications for conservation and sustainability issues,” says Johane Dikgang, EfD South Africa/EPRU Junior Research Fellow, who is working on his PhD thesis titled Developing a system for sus-

tainable resource use by the Khomani San in Kgalagadi Transfrontier Park and environment: Valuing sustainable resource use.

The Kgalagadi Transfrontier Park is co-managed by the SANParks, the Khomani San community and the adjacent Mier community. The latter was also given land within the park in May 2002. In addition to land, the vulnerable Khomani San community was awarded the right to sustainable harvesting for cultural, traditional and symbolic purposes, both inside and outside the park.

“The SANParks agency has for sometime been contemplating giving the Khomani San community access to the broader park to exercise their cultural, traditional and symbolic uses in accordance with the land claim agreement but has been concerned about whether such access could result in the overutilization of natural resources within the park. They therefore published a call for interest in research in the Kalahari area to help them decide on the way forward, and this is how we got involved in 2009,” says Johane Dikgang, who is supervised by Dr. Edwin Muchapondwa, Efd Senior Research Fellow and Associate Professor at the University of Cape Town. Muchapondwa has extensive experience in environmental economics research on national parks in Southern Africa.

In addition to the University of Cape Town, the University of Stellenbosch and Rhodes University are also involved in research projects in the area. In 2009 representatives from the Khomani San and Mier communities met with researchers to develop research projects to explore and document resource use and its implications. In 2011 they met again to verify



Edwin Muchapondwa (EPRU/UCT), Johane Dikgang (EPRU, UCT), and Gladman Thondhlana (Rhodes University), together with members of the Khomani San Community. The photo was taken at their craft shops, about 50 km from the Kgalagadi Transfrontier Park in the Khomani San Farmlands, Mier Local Municipality, Northern Cape Province, South Africa.

and share the findings of the research. Fifty-five representatives from the Khomani San and Mier communities attended the workshop, together with researchers from the three universities. SANParks arranged both meetings.

“We were concerned about how to deliver the message. We tried to focus on the implications of the results, not technical details. We drew charts and presented our findings on posters. The Khomani San and Mier representatives were really involved and interactive and could confirm our results,” says Johane Dikgang.

One of his and Muchapondwa’s two studies is about estimating optimal conservation fees in the park. The idea is to ensure that the Khomani San community benefits from the tourism revenues from conservation fees since they are in joint ownership of the park.

“The first thing to investigate is whether the entrance fee, the conservation fee, to the park is optimal. If the optimal entrance fee is more than what is currently charged, it perhaps suggests that there is room to extract more consumer surplus from visitors and channel it to the Khomani San community,” says Johane Dikgang.

Of course, optimal pricing strategies that aim to maximize revenue for particular parks should take into consideration factors such as the presence of competing recreational sites, environmental concerns, spill-overs to local communities, quality of the visitor’s experience and the potential impact on the nature-based tourism industry as a whole.

Dikgang found that revenue could be maximized by increasing conservation fees for local tourists, who tend to be mainly high income earners from major cities in the country. On



Johane Dikgang (EPRU, UCT), Patet (Khomani San) about 50 km from the Kgalagadi Transfrontier Park in the Khomani San Farmlands, Mier Local Municipality, Northern Cape Province, South Africa.

Field trip to Kgalagadi Transfrontier Park



the other hand, the findings also show that the conservation fees charged to international visitors are already optimal.

“It is important for parks co-managed with local communities as a result of the land restitution program to play an active role in contributing positively towards the local economies. Still, the issue is highly debated in many African countries,” says Dikgang.

“Our findings suggest that a review of the pricing strategy in national parks is necessary. Furthermore, there should be encouragement of the park agency to gradually share some of the revenue generated through conservation fees with the local communities. There are two ways in which this might be started. One way is to revise conservation fees to an optimal level and share the increased revenues with the local communities. Another way is to facilitate a voluntary community-bound donation by park visitors in addition to the current conservation fee,” says Dikgang.

Will sharing revenues with the Khomani San community bring about improved conservation? This seems highly likely because another of the duo’s studies is on the valuation of biodiversity conservation by the Khomani San community. The findings show that the Khomani San community, which is relatively new to modern conservation and whose attitudes towards modern conservation have not been evaluated until now, generally attaches a significant economic value to biodiversity in their area. So does the adjacent Mier community, which was studied as comparison. Despite high unemployment and low household incomes, most people in the area are willing to pay to support sound conservation initiatives. However, in order for all members of the communities to support biodiversity conservation unconditionally, mechanisms for fair distribution of the associated costs and benefits should be put in place.

TANZANIA

EfD Tanzania Policy Board gets researchers and policy makers communicating

From left Blandina Cheche, Poverty Environment Coordinator, Vice-President's Office, Claude Mung'ongo, Professor at the University of Dar es Salaam's Institute of Resource Assessment, Arnold Mapinduzi, Senior Environmental management officer, The National Environment Management Council (NEMC), and Salvatory Macha, EfD Project Administrator.

Four years ago, Razack Lokina, Research Fellow and Director of EfD Tanzania, took the initiative to establish a research policy board for his EfD Center. The aim was to facilitate transfer of research findings to decision makers and other stakeholders, as well as to bring in ideas about what types of research are actually needed by society. One of the direct results of the establishment of the board is the EfD participation in the review of Tanzania's National Strategy for Growth and Reduction of Poverty (2005-2010) commonly abbreviated as MKUKUTA in Kiswahili. The ideas to further enhance research policy dialogue are abundant.

A STRONGER EMPHASIS on sustainable growth, interventions to address climate change, and better management of natural resources for poverty reduction are some important outcomes of the EfD review of the second Tanzania's forward-looking National Strategy for Growth and Reduction of Poverty for 2011-2015, or MKUKUTA II (2011-2015).

"The task of reviewing the MKUKUTA is a

result of our collaboration," says Arnold Mapinduzi, Senior Environment Management Officer at Tanzania's National Environment Management Council (NEMC) and original member of the EfD Tanzania Policy Board. Mapinduzi continues, "Our board member Blandina Cheche, Poverty Environment Coordinator at the Vice-President's Office, is coordinating a program designed to mainstream environment in the MKUKUTA. Thanks to Blandina EfD got the task of reviewing."

Another outcome of the board's dialogue is that Dr. Julius K. Ningu, Director of the Environment Division at the Vice-President's Office, held the opening speech (Greening the Economy Through Better Management of Wildlife and Forestry) of the EfD Policy Day 2011 in Arusha, Tanzania, which also started that year's Annual Meeting.

Arnold Mapinduzi recommends EfD to increase the frequency of meetings where researchers



Blandina Cheche, Poverty Environment Coordinator, Vice-President's Office, and member of EfD Tanzania Policy board.



Arnold Mapinduzi, Senior Environmental management officer, The National Environment Management Council (NEMC), and member of EfD Tanzania Policy board.



Dr. Razack Lokina, Research Fellow and Director of EfD Tanzania

The ideas to further enhance research policy dialogue are abundant.

can deliver their messages to various stakeholders, decision makers, and the public:

"Whether in Tanzania or other countries, the EfD initiative is a very important program because it's bringing the essence of environmental economics, the valuing of environment and natural resources, into decision making and development processes," says Mapinduzi.

Mapinduzi has plenty of ideas for better knowledge transfer

One is that EfD researchers could teach staff from NEMC and other ministries the basics of environmental economics, just to give them a rough idea about for instance environmental valuation, accounting and integrated ecosystems assessment. The EfD Tanzania Policy

Board could also organize policy brief sessions for different stakeholders that include policy makers, and sessions to present findings to news media. Like the board collaboration, policy meetings can affect the research agenda so that EfD research is carried out in certain valuable areas at the policy and household levels, he says.

"And through a media session, where you package your presentation in simple ways towards policy makers, you can reach the general public and decision makers.

Whether or not I end up reading a report or academic paper often depends on whether I find it in the news media," says Mapinduzi.

During the Policy Day 2011, members of the policy board also took the opportunity to challenge EfD researchers. Several news media reported from the day and for example The Guardian reported under the heading Researchers challenged to reach out to ordinary people, see page 6, EfD Policy Day at the Annual Meeting.

ACADEMIC CAPACITY BUILDING

The EfD academic capacity building 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, EfD 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.

EfD research fellows mainly teach environmental economics, natural resource economics and environmental evaluation courses. The table “Academic capacity building – Number of courses 2011” summarizes number of courses taught in environmental economics, total number of students attending these courses and number of thesis supervised by EfD fellows at the respective center in 2011. When it comes to teaching, Kenya stands out with almost 410 undergraduate students taking environmental economics courses along with 19 MA students. All centers are involved in PhD programs and there is also a close collabora-

tion between these programs and the specialization courses given at the Environmental Economics Unit, University of Gothenburg. While the actual courses are the responsibilities of the academic institutions, EfD supports with these grants and links and experiences to make the academic programs more grounded in research and policy work.



EfD China: EEPC weekly meeting and discussion.

ACADEMIC CAPACITY BUILDING TOP OUTCOMES

EfD China/Environmental Economics Program in China (EEPC):

Courses on environmental and natural resource economics are continued being given to both undergraduate and graduate students at Peking University. Collaboration with international universities and institutions such as Resources for the Future, University of California, Berkeley, and University of Gothenburg are on sending PhD students and co-authoring papers. Four faculty members including two professors and one associate professor at College of Environmental Sciences and Engineering, and one assistant professor at National School of Development, joined EEPC in 2011.

EfD Kenya

Incorporated one of the MSc students from Nairobi University, School of Economics into the Park Pricing project. The student was assisted to collect the relevant data needed and production of his MSc thesis. EfD research associates were also involved in teaching undergraduate and graduate students and supervision of MSc and PhD students.

EfD South Africa/Environmental Economics Policy Research Unit (EPRU):

Environmental Economics Honours students were involved in an EPRU project on the impacts of climate change on rural municipalities in South Africa. The students were exposed to the problem faced by government, and were tasked with literature reviews and a conducting a research project in teams of two, on different municipalities in South Africa. Information was gathered from the municipalities themselves and the students were evaluated the costs of extreme climatic events and the impacts that dealing with these events had had on municipalities' willingness to prioritize adaptation measures for climate change.

	UNDERGRADUATE COURSES	MSC COURSES	PHD COURSES
Central America	-	7 (102 students)	1 (20 students)
China	2 (60 students)	2 (20 students)	2 (17 students)
Ethiopia	-	-	-
Kenya	2 (410 students)	1 (19 students)	1 (10 students)
South Africa	1 (10 students)	3 (54 students)	1 (4 students)
Tanzania	3 (45 students)	2 (28 students)	-

Academic capacity building – Number of courses 2011

Note: There were no students who took concentration area courses in the masters (MSc) program at the School of Economics of the Addis Ababa University, Ethiopia, during the 2010/11 academic year. However, students who took the concentration area courses in the 2009/10 academic year wrote their MSc theses in 2010/11.



EfD South Africa: Mare Sarr (number three from left) was a Visiting Lecturer in Environmental Economics I, Joint Facility for Electives, African Economic Research Consortium.



EfD Central America: Professor Paul J. Ferraro and participants in the environmental and resource economics training course on Impact Evaluation, organized by EfD partner LACEEP at CATIE campus in July 2011. Twenty-eight practitioners and students from countries across Latin America and the Caribbean completed course.

EfD Ethiopia/The Environmental Economics Policy Forum (EEPFE)

Disseminated 27 discussion papers each to over 10 institutions in Ethiopia targeting higher learning institutions (Addis Ababa University, Jimma University, Gondar University, Bahirdar University, Hawassa University, Dilla University, Arbaminch University), Federal Environmental Protection Authority, Ethiopian Economics Association, EDRI, and others. In addition EEPFE staff supervised 6 master theses. EEPFE also provided master's theses grants and book support to the School of Economics of the Addis Ababa University.

EfD Tanzania

Have supported and facilitated MA and PhD researches: The top outcome is the successfully completion of 3 MA and 1 PhD researches and the development of the training manual on mainstreaming environment and poverty in policy and planning process.

EfD Central America/Research Program in Economics and Environment for Development in Central America:

The Research Program in Economics and Environment for Development at CATIE, with financial support from the Climate Change and Water Program of the International Development Research Centre (IDRC) of Canada, launched a new project called "Strengthening the capacity building and research in environmental economics to study the links between water and climate change". This project is a three year collaboration between LACEEP, EfD Central America, and the CEDE at the Universidad de Los Andes, Colombia. This initiative seeks to promote capacity building for research, analysis, and evaluation of the impacts of climate change and water, using environmental economics principles and tools. The research starts in 2012.

PHD PROGRAM IN CLIMATE ECONOMICS AT THE UNIVERSITY OF GOTHENBURG

The Environmental Economics Unit (EEU) at the University of Gothenburg offers a PhD program in Climate Economics which is intended to build analytic capacity in the area of climate economics in developing countries. This program will be a continuation of the former program but with a heavier emphasis on climate change as the prime environmental problem of our time.

This program, with admission September 2012, is supported by the Swedish International Development Cooperation Agency (Sida). Six full scholarships are open to applicants from developing countries only. The deadline for applications was 1st April 2012 for the academic year 2012/2013.

As before, the program includes one year of general economics courses, followed by one year of specialization courses and two and a half years of data collection and thesis writing. We now offer a full semester of specialization courses on climate economics involving Environmental

Valuation, Natural Resource Economics, Climate and Ecosystem Change and Policy Instruments for Environmental and Climate Economics.

The purpose of the program is to strengthen capacity in developing countries, and in particular the capacity to teach environmental and climate economics at university level and to establish a firm basis for research that can be used for policy advice.

This program is a PhD in economics – but it is also more than that. We believe that climate, as many environmental issues, requires a proper grounding and collaboration with other disciplines and we will work in close collaboration with Physical Resource Theory at Chalmers Technical university to give students a deep understanding of climate and energy issues from the viewpoint of the relevant natural science and technical aspects. More detailed information on http://www.economics.handelshu.se/english/Units+and+Centra/environmental-economics/education/information_for_applicants_to_the_phd_program

NEW CENTER FOR ENVIRONMENTAL ECONOMICS RESEARCH “CEERAC” IS BORN IN GHANA

The acute shortage of local capacity to undertake policy relevant research on natural resources management in sub-Saharan African countries, including Ghana, is seriously threatening the survival of renewable resources including rainforest stocks, capture fish stocks, aquifers, and agricultural soil. To complement the efforts of the Environment for Development initiative and the Center for Environmental Economics Policy in Africa at strengthening crucial local research capacity, Dr. Wisdom Akpalu, a product of the PhD program at the Environmental Economics Unit in Gothenburg and an EfD Associate, has established and is directing a center in Ghana called “Center for Environmental Economics Research & Consultancy (CEERAC)”.

“Institutions such as Environment for Development initiative and the Center for Environmental Economics Policy in Africa have made very significant strides at addressing the problem but an enormous and increasing gap still persists. This is why I have established the Center for Environmental Economics Research & Consultancy in Ghana,” says Dr. Wisdom Akpalu, EfD Associate.

The CEERAC center is strongly committed to undertaking high quality research, disseminate research output to the general public and policy makers, and provide research training to junior researchers.

Over the past three years, with the support of CEEPA, the center organized summer schools in Ghana to provide training in quantitative research methods applied to environment and development economics. The results are very encouraging, yielding four working papers within 2012. Some key findings:

- Research project on optimum reserve size, fishing induced carrying capacity change and phenotypic diversity: We found that a reserve size which maximizes economic rents could collapse fish stocks if fishing impacts on carrying capacity and diversity are not accounted for, but an optimum reserve could improve the resilience of marine ecosystems.
- Research project on access to microfinance and intra household business decision making among female agro-processors: The study found that enterprises with male spousal influence were less efficient than their counterparts that were independently managed by the women.

The center is currently seeking collaborations and core financial support for its initiatives. Please contact Dr. Wisdom Akpalu at akpaluw@ceerac.org if you intend to support our training and research initiatives.

Webpage Center for Environmental Economics Research & Consultancy in Ghana: www.ceerac.org



21 researchers and PhD students from across the globe attend the course Environmental Valuation that was held at the Environmental Economics Unit (EEU), University of Gothenburg 7 November – 9 December 2011.



EfD Associate Wisdom Akpalu was an EEU-Sida PhD scholar, and completed his PhD at the University of Gothenburg in September 2006. Akpalu has established and is directing a center in Ghana called "Center for Environmental Economics Research & Consultancy (CEERAC).

SIX EFD CENTERS

CENTRAL AMERICA MESSAGE FROM OUR CENTER DIRECTORS

THE YEAR 2011 MARKED the beginning of the new phase for Research Program in Economics and Environment for Development in Central America hosted at CATIE (EfD Central America). We have managed to establish a think tank that sets the standard for high-quality policy-relevant research in the Central American region, and more broadly in Latin America. The key to success is a combination of (1) a small but strong in-house team of senior researchers, (2) an active networking effort to attract scientist from top European and North American universities to work with topics prioritized in our research agenda, (3) the creation of a nurturing environment for young researchers, who gradually acquire increasing responsibilities, and (4) the use of EfD funding to enable creative thinking around our prioritized topics and attract other sources of research funding to support the resulting research agenda. These four synergetic elements have created a dynamic and creative environment, and consolidating it into the future is the main goal of our strategic thinking.

An important development in 2011 was Maria Naranjo's appointment as deputy director of EfD. Her energy and exceptional organizational skills led to very successful 2011 from an administrative perspective. Her success was underlined by Francisco Alpizar's sabbatical at Gothenburg University for most of the year. His stay led to much research interaction and many new research projects that will support the center's finances during coming years.

This report presents some of the most important results during 2011 and highlights a few of the interaction stories between our team of researchers and policymakers. These stories capture well the efforts that in both high-quality research and policy incidence. In some cases

success in these two dimensions requires that policymakers get on board a highly technical research program from its very beginning, for example in our work in the field of payment for ecosystem services. In other cases careful navigation among multiple stakeholders with a myriad of diverging interests is required, as in our work with concessions in national parks.

Following our 2011 research agenda, we forged new alliances both in the region and outside Central America. CATIE and the National Forestry Financing Fund (FONAFIFO) signed a framework agreement of cooperation with the goal of contributing jointly to support rural development and sustainable forestry in Costa Rica; to this end our program will work as the liaison between the organizations. Also, we engaged in a three-year partnership between EfD, LACEEP and the Center of Economic Development Studies (CEDE) at University of Los Andes in Colombia, with financial support from the IDRC-Climate Change and Water initiative, to strengthen research capacity in environmental economics, adaptation to climate change and hydrological resources in Latin America. Late in the year, we were able to secure a grant from the German government's International Climate Initiative of the Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU) in support of joint research activities with Conservation International on the project Ecosystem-Based Adaptation for Smallholder Subsistence and Coffee Farming Communities in Central America. The grant will cover five years of research.

In terms of capacity building and the creation of a nurturing environment for academic thinking,

we maintain throughout the year a very active seminar series, as a place to learn about peers' research and share ideas. Our researchers also had the opportunity to participate in two courses in environmental economics through LACEEP. One was taught by Steve Polasky from the University of Minnesota on the Economics of Ecosystem Services and Biodiversity. The second was by Paul Ferraro from Georgia State University on Policy and Program Impact Evaluation. Ferraro joined us again as visiting researcher for six months in January 2012.

None of this would be possible without the commitment of each individual member of our staff, from scientist to administrative personnel. Moreover, having the trust of research partners and funding organizations is both an honor and source of inspiration for the year to come.

In 2012 we will have the pleasure of hosting the Annual EfD initiative's Meeting and Policy Day, so we welcome you in advance to our house and promise to do everything in our power to organize a great event. See you soon!

Francisco Alpizar
Director

María A. Naranjo
Deputy Director



María A. Naranjo, Deputy Director, and
Francisco Alpizar Director

From left first row: Andrea Castro, Francisco Alpizar, Alberto Vargas. Second row: Adriana Chacón, Róger Madrigal, Laura Villalobos, Lizette Delgado.



Local researchers and staff

- Ph.D. Francisco Alpizar, Director and senior research fellow
- Ph.D. Juan Robalino, Senior research fellow
- Ph.D. Alvaro Umaña, Senior research fellow
- Ph.D. Adriana Chacón, Senior research fellow
- M.Sc. Róger Madrigal, Research fellow
- Anna Nordén, PhD candidate
- M.Sc. Maria A. Naranjo, Deputy Director and research fellow
- MALD Carlos L. Muñoz Brenes, Policy Analyst and research fellow
- M.Sc. Laura Villalobos, Research fellow
- BSc. Irene Burgues, Junior research fellow

- BSc. Catalina Sandoval, Junior research fellow
- Susan Burton, Junior research fellows
- BSc. José Fernando Jiménez Pereira
- MBA. Alberto Vargas, Administrative support
- Lizette Delgado, Administrative and secretarial support
- Andrea Castro, Secretarial support

Domestic research associates

- Ph.D. Raffaele Vignola, Associate Research Fellow
- Pablo Imbach, Associate Research Fellow

International research associates

- Thomas Sterner, Senior Research Fellow
- Ph.D. Allen Blackman, Research Associate
- Salvatore Di Falco, Research Associate
- Peter Martinsson, Research Fellow
- Jorge Rivera, Research Associate
- Fredrik Carlsson, Research Associate
- Clara Inés Villegas Palacio, Research Associate

Networks

EfD Central America/Research Program in Economics and Environment for Development in Central America 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 National Forestry Financing Fund (FONAFIFO) which would allow us to continue our work on Ecosystem Services and payments schemes. In collaboration with Alexander Pfaff from The Sanford School of Public Policy 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 Inter-American Development Bank and the Inter-American Institute for Global Change Research.

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 The Nature Conservancy, the National System of Protected Areas (SINAC), and the Forever Costa Rica Association.

Contact us

You are most welcome to contact EfD Central America/Research Program in Economics and Environment for Development:

EfD Central America, Programa IDEA
CATIE 7170, Turrialba 30501, Cartago, Costa Rica
Phone: +506 2558 2624, FAX: +506 2558 2625
Email: efd@catie.ac.cr, www.efdinitiative.org/central-america

Donors and funding

EfD Central America/Research Program in Economics and Environment for Development in Central America offers an attractive opportunity for institutions providing financial support for research and partners interested in our activities and innovative programmatic agenda. We are grateful for the trust and support provided by donors and partners during 2011:

- 1) Latin American and Caribbean Environmental Economics Program (LACEEP)
- 2) The Tinker Foundation
- 3) Duke University
- 4) International Development Research Centre (IDRC)
- 5) Other sources of founding in minor research contracts include: The Nature Conservancy, Conservation International, GIZ, NINA, Interamerican Development Bank, among others
- 6) Swedish International Development Cooperation Agency (Sida) through the EfD Initiative

List of Donors	Funding by donor during 2011
1) LACEEP (IDRC, EPM)	20,90%
2) Tinker Foundation	8,40%
3) IDRC (Water and climate change project)	4,80%
4) Duke University	17,90%
5) Other via EfD	25,10%
6) Sida/EfD funding	22,80%

Sida/EfD funding as share of total center budget (incl. univ. salaries)	22,80%
---	--------

SIX EFD CENTERS



Professor Jintao Xu, Director, and Dr. Ping Qin, Deputy Coordinator

CHINA MESSAGE FROM OUR CENTER DIRECTOR

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 its newly promulgated Guideline of the "Twelfth Five-Year Plan (2011-2015)", has addressed its strong determination and emphasis on clean, green technology and sustainable development, and 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 8 per cent in the coming years.

The Environmental Economics Program in China (EEPC) is a research program focusing on applied policy research. In particular it attempts to identify the areas of climate and environmental policy improvement and address the policy needs in conducting social and economic assessment of ongoing public program. Most of the EEPC works focused on forest policy, in recent years on reforming of state forest sector and collective tenure system. These two themes have been of top priority on the agenda of central government and have merged into the broader national agenda of establishing a new countryside. EEPC's other research arenas include water pricing policies, carbon sequestration monitoring, air pollution

control and urban transportation, industrial enterprise behavior in pollution, etc.

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. 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. By end of 2010, 20 provinces have launched forest tenure reform policies. Policy recommendations made by EEPC researchers are influential during the reform process of China's forest sectors.

During 2011, EEPC has completed its second-round survey in the eight provinces that was surveyed in 2006-2007, with the aim of a comprehensive evaluation of the reform and providing policy recommendations to cope with current problems and future challenges. On state forest sector, EEPC has undertaken in-depth studies and prepared a drafted plan for future reform for the State Forestry Administration. EEPC has also collaborated with Beijing Transportation Research Center and provided policy recommendations for Beijing Municipal Commission of Transportation. In addition, EEPC has been engaged in the monitoring and assessment of carbon accounting induced by agricultural technological changes.

During 2011 the total number of peer-reviewed publication on international journals amounts to 7.

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 Resources for the Future, University of California, Berkeley, and University of Gothenburg. By 2011 EEPC has 4 faculty members including two professors and one associate professor at College of Environmental Sciences and Engineering, and one assistant professor at National School of Development.

Jintao Xu
Director



Professor Jintao Xu, Director

A picture of EEPC/ Efd China

**Local researchers and staff**

- Professor Jintao Xu, Director and Senior Research Fellow
- Professor Shiqiu Zhang, Senior Research fellow
- Ph.D. Jianhua Xu, Senior Research fellow
- Ph.D. Ping Qin Senior Research fellow and Deputy Director
- Min Wang, Senior Research fellow
- Ph.D. Michael Bennett, Visiting scholar
- Ph.D. Haipeng Zhang Visiting scholar
- Ph.D. Xuemei Jiang Visiting scholar
- MSc. Hui He Research fellow

- Jie Li, Research fellow
- Yuanyuan Yi, Communication officer and Research fellow
- Ling Li Administrative assistant

Domestic research associates

- Dr. Jing Cao of Dept. of Economics at Tsinghua University
- Dr. Wanxin Li, School of Public Policy and Management at Tsinghua University and City University of Hong Kong
- Dr. Haoran He, Beijing Normal University

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

Networks

EEPC has close collaboration with a broad range of internal 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 (for example, the Rural Development Institute, <http://rdi.cass.cn>), Chinese Academy of Sciences (for example, the Center for Chinese Agricultural Policy, www.ccac.org.cn), Chinese Academy of Agricultural Sciences (for example, the Institute of Environment and Sustainable Development in Agriculture, www.ieda.org.cn), Chinese Academy of Forestry Sciences (for example, the Research Institute of Forestry Policy and Information, www.lyzc.org.cn/kxs.htm), Tsinghua University (www.tsinghua.edu.cn), City University of Hong Kong (www.cityu.edu.hk), Renmin University of China (www.ruc.edu.cn), Beijing Forestry University (www.bjfu.edu.cn), Beijing Normal University (www.bnu.edu.cn), the National School of Development (the former China Center for Economic Research of Peking University, www.nsd.edu.cn), Center for Economic and Development Research of State Forest Administration, Beijing Transportation Research Center, and so on.

Internationally, EEPC's research network embraces the entire Efd family, the World Bank, the 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 University, University of Rhode Island, and so on.

Contact us

You are most welcome to contact Efd China/Environmental Economics Program in China (EEPC): Efd China

Environmental Economics Program in China
Peking University, Rm 322, Lao Di Xue Lou, Peking University, Beijing 100871, CHINA
Phone: +86 10 62767657, Email: eepc@pku.edu.cn, www.efdinitiative.org/centers/china

Donors and funding

During the year of 2011 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 Ministry of Environmental Protection (MEP).

Through the six 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), National Natural Sciences Foundation of China (NSFC), etc.

Number of donors**4**

List of Donors	Funding by donor during 2011
1) MEP	5.48%
2) The World Bank	9.52%
3) SFA	17.42%
4) RRI	25.89%
5) Efd	41.69%
Sida/Efd funding as share of total center budget (incl. univ. salaries)	41.69%

SIX EFD CENTERS

ETHIOPIA MESSAGE FROM OUR CENTER DIRECTOR

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 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 2011 has been another year of important achievements for EEPFE building on what has been done in previous years. The main research projects that have been implemented during 2011 include impacts of biofuel investments on economic growth, poverty and the external sector in Ethiopia; review of common pool resource management institutions in Ethiopia; common property forest management and implications for REDD in Ethiopia; and implications of weather and climate for food security in Ethiopia. On-going research projects in Ethiopia in 2012 include economywide implications of biofuels for GHG emissions and profitability of biofuels; analysis of common pool resource management institutions; natural

resource scarcity and human capital; and determinants of agro-forestry practices.

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 one workshop on climate change with the Ethiopian Development Research Institute. This workshop was held in Addis Ababa in July 2011.

Members of the Forum also attended expert group meetings held on climate and energy in Africa as well as sustainable development report in Africa organized by the African Climate Policy Center (ACPC) at UNECA and the Food Security and Sustainable Development Division of UNECA, respectively. Members of the Forum also participated in and presented a paper at the first conference on Climate Change and Development in Africa mainly organized by ACPC based at UNECA and was held in Addis Ababa. The Forum's work in particular and those of EfD in general were also introduced to participants of this conference at an exhibition. A staff of the Forum has also been a member of a national level technical committee that was responsible for the production of a green growth strategy for Ethiopia. This became part of the country's Climate Resilient Green Economy strategy which was launched in November 2011 and presented at the 17th COP of the UNFCCC in Durban, South Africa as the only such strategy in Africa.

As before, 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 2011 (presented in this report for 2011) as well as other information about the Forum can be found at www.efdinitiative.org/centers/ethiopia.

Alemu Mekonnen
Director

Alemu Mekonnen, Director





EfD Ethiopia/EEPFE Staff from left Tsehay Ataklt, Zelealem Gebremedhin, Abebe Damte, Alemu Mekonnen, Rahel Deribe, Zenebe Gebreegziabher.

Local researchers and staff

- Ph.D. Alemu Mekonnen, Center director and Senior Research Fellow
- Ph.D. Zenebe Gebreegziabher, Senior Research Fellow
- Ph.D. Tekie Alemu, Senior Research Fellow
- Ph.D. Tadele Ferede, Senior Research Fellow
- Ph.D. Sosina Bezu, Research Fellow
- Ph.D. Abebe Damte, Research Fellow
- Ph.D. Fantu Guta, Research Fellow
- Ph.D. Adane Tuffa, Research Fellow
- M.Sc. Rahel Deribe, Junior Research Fellow
- M.Sc. Zelealem Gebremedhin, Project Manager
- M.Sc. Samuel Abera, Data Manager
- M.Sc. Tsehay Ataklt, Communication Officer

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. 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
- Professor, Randall Bluffstone, Portland State University, USA
- Ph.D. Mintewab Bezabih, University of Portsmouth, United Kingdom
- Ph.D. Klaus Deininger, 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
- Professor, Jesper Stage, Department of Economics, University of Gothenburg
- Ph.D. Menale Kassie, CGIAR
- Professor, Peter Martinsson, Department of Economics, University of Gothenburg
- Associate Professor, Gunnar Kohlin, Department of Economics, University of Gothenburg
- Ph.D. Candidate, Dambala Gelo, University of Pretoria, South Africa

Networks

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

Contact us

You are most welcome to contact EfD Ethiopia/Environmental Economics Policy Forum for Ethiopia (EEPFE)

Environmental Economics Policy Forum for Ethiopia (EEPFE)
Ethiopian Development Research Institute (EDRI),
Blue Building, Near National Stadium, South Wing
Office Numbers 401, 402, 408, 409, Fourth Floor
P.O. Box 2479, Addis Ababa, Ethiopia
Tel: +251-11-5506066/4-251-11-5538632, Fax: +251-11-5505588
Email: eepfe@ethionet.et, www.efdinitiative.org/centers/ethiopia

Donors and funding

Sida is the main funding agency for the EfD initiative. Starting from 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 continued in 2011. In addition, Sida financed the Climate Change Workshop co-organized with our host institution, EDRI, which was held in Addis Ababa, Ethiopia, on 20 July 2011.

Number of donors

2

List of Donors

- 1) ACBF
- 2) Sida

Funding by donor during 2011

7.04%
92.96%

Sida/EfD funding as share of total center budget
(incl. univ. salaries)

92.96%

SIX EFD CENTERS

KENYA

MESSAGE FROM OUR CENTER DIRECTORS

THE EFD INITIATIVE IN KENYA was established and anchored at KIPPRA where it continues to operate from. EfD Kenya's overall goal is to improve the integration and mainstreaming of environmental concerns into the country's planning and development processes. It recognizes the importance of the environmental concerns in achieving economic development and poverty reduction. EfD Kenya therefore continues to make substantial contribution in promoting the use of environmental economics tools to shape policy directions in Kenya. We are delighted to share with you our annual report for 2011, detailing some of the activities we engaged in at the center level.

As promised in our last annual report, we scaled up our networking efforts. We have been able to establish and undertake research interactions and activities with the CGIAR centers that include the International Livestock Research Institute (ILRI) and CIMMYT, and the Ministry of Environment and Mineral Resources (MEMR). With both ILRI and MEMR, we are involved in research projects on Climate Change that are briefly outlined below. Climate change is a serious developmental problem and we at EfD-K strive to be at the forefront to provide research and policy solutions to the complexities of climate change to our economy.

On the research front, we continue to engage actively with our Research Associates on different research projects that focus on the broader EfD themes. In 2011, our centre's research activities were mainly on the Forest

Management Reforms project. This is a project that has been running since 2009 and we were keen to finalize on some of the outputs that were pending. To this end, we have some draft papers that are to be subjected to the EfD discussion papers review process and a draft book chapter. A major research outcome for our center was the involvement in developing the Action Plan for implementation of the National Climate Change Response Strategy (NCCRS) by the Ministry of Environment and Mineral Resources (MEMR). This activity was carried over to 2012. In terms of policy interaction in 2011 our main activity was the participation in production of the European Report on Development (ERD 2012) whose theme was 'effective natural resource management for inclusive and sustainable growth in the context of increased scarcity and climate change: what role for the public and private sector'. In 2011, we also incorporated one (1) MSc. student into one of our projects, the park pricing project where he was assisted with gathering data and production of his thesis. Besides, the Center also actively participated in the preparation of the Kenya State of Environment Report 2010 that was published in 2011 by National Environment Management Authority (NEMA) and United Nations Environment Programme (UNEP). There are other research activities that we were involved in as a center much of which is elaborated in the report.

The center researchers also participated in a number of local and international seminars, workshops and conferences, the details of which can be found in this report. Towards the

end of 2011, the center was mainly involved in transitional arrangement activities in readiness for its relocation to the School of Economics, University of Nairobi beginning 2012. In the coming years the center intends to build on the past successes to upscale its research, capacity building and policy interaction initiatives. It will do this by maintaining a close working relationship with its network members especially KIPPRA and the School of Economics. We hope that you will find this report comprehensible, informative and interesting. Your feedback regarding the information contained here will be highly appreciated. Enjoy your reading.

Wilfred Nyangena
Coordinator

Wilfred Nyangena, Coordinator





MSc. Geophrey Sikei, Junior Research fellow and Program Assistant of EfD Kenya



Moses Ikiara, Executive Director, KIPPRA

Local researchers and staff

- Ph.D. Wilfred Nyangena, Coordinator and Research Fellow
- MSc. Geophrey Sikei, Junior Research Fellow/ Program Assistant

Domestic research associates

- Ph.D. Paul Guthiga – International Livestock Research Institute (ILRI)
- Ph.D Candidate, 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)
- Ph.D, John Omiti, KIPPRA
- Ph.D. Richard Mulwa – Department of Agriculture Economics, University of Nairobi
- Ph.D. Joseph Onjala – Institute of Development Studies (IDS), UoN
- PhD Candidate, Fred Owegi, World Bank and, Wageningen University

- Ph.D. Peter Kimuyu – School of Economics, University of Nairobi
- Ph.D. Jane Mariara - School of Economics, University of Nairobi
- Ph.D. Moses Ikiara, KIPPRA

International research associates

- Ph.D. Candidate, Simon Wagura, Department of Economics, University of Gothenburg
- PhD Menale Kassies – CIMMYT, Nairobi
- PhD Kofi Vondolia – UNEP, Nairobi

Networks

In order to effectively make an impact in its mandate, EfD Kenya has developed good working relationship with other regional and national research and policy oriented organizations in the country. It has gained considerable trust and credibility in the face of both public and private institutions. 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), ICRAF, World Wildlife Fund (WWF), Kenya Wildlife Service (KWS), the CGIAR centers (ILRI, CYMMT) among others.

Contact us

You are most welcome to contact EfD Kenya:

EfD Kenya
Kenyan Institute for Public Policy Research and Analysis (KIPPRA),
Bishops Garden Towers, Second Floor,
Bishops Road, Box 56445-00200, Nairobi, Kenya
Tel.+254-20-2719933/4, Fax.+254-20-2719951
E-mail: nyangena_wilfred@uonbi.ac.ke, www.efdinitiative.org/centers/kenya

Donors and funding

EfD Kenya is mainly supported by the Swedish International Development Cooperation Agency (Sida).

Number of donors	1
------------------	---

List of Donors	Funding by donor during 2011
1) Sida	100%

Sida/EfD funding as share of total center budget (incl. univ. salaries)	100%
---	------

SIX EFD CENTERS

Local Researchers and Staff

- Mare Sarr, Director
- Jane Turpie, Research Convener
- Martine Visser, Senior research fellow
- Edwin Muchapondwa, Senior research fellow
- Anthony Leiman, Senior research fellow
- Anthony Black, Senior research fellow
- Kerri Brick, Junior research fellow
- Reviva Hasson, Junior research fellow
- Johane Dikgang, Junior research fellow
- Sunday Adewara, Junior research fellow
- Byela Tibesigwa, Junior research fellow

- Grant Smith, Junior research fellow
- Sue Snydam, Junior research fellow
- Coretha Komba, Junior research fellow
- Esther Kimani, Junior research fellow
- Letitia Sullivan, Administration officer

Domestic associates

- Stephanie Giamporcaro
- Precious Zikhali
- Harald Winkler
- Andrew Marquard

International associates

- Thomas Sterner
- Åsa Löfgren
- Gunnar Köhlin
- Wisdom Akpalu
- Mintewab Bezabih
- Andrea Mannberg

Mare Sarr, Director



SOUTH AFRICA MESSAGE FROM OUR CENTER DIRECTOR

OVER THE PAST FOUR YEARS, EPRU has strived to produce policy-relevant research in areas that are of great importance for South Africa: community-based wildlife conservation and poverty mitigation, climate change, marine protected areas and coastal management, sustainable and responsible investment. The organization of the Workshop on Park Pricing, the participation to Durban Summit on Climate Change, the close collaboration with the Water Research Commission and the City of Cape in its strategy towards green growth are a few illustrations of our commitment.

In 2011, EPRU has introduced a new governance structure by sharing the coordination responsibilities between a director in charge of the relations with the major donor and UCT administration, and a research convener in charge of research and policy dissemination. EPRU has also introduced the organization of quarterly meeting taking place off campus to discuss current issues, and research ideas and results including policy interaction issues. This

new organization has been an important way to strengthen the group and improve research.

Under the leadership of the Research Convener, EPRU has also strived to develop and improve its policy interaction strategy. It is also working hard towards diversifying its sources of funding. The grant recently awarded by the Fiscal and Financial Commission to undertake research on the impacts of climate change and costs associated with mitigation and adaptation on agriculture and for rural municipalities, is a testimony that this hard work is now bearing fruits.

EPRU is strengthening year after year its research by turning important policy-relevant research into high quality academic papers. In the course of the year, EPRU fellows have published 11 articles in leading international and local peer reviewed journals, 4 discussion papers and 1 book chapter. Two of our leading Senior Research Fellows together with their PhD students have been particularly produc-

tive this year and deserve to be commended and emulated. It is also a pleasure for me to congratulate five of our Junior Research Fellows who managed to secure a prestigious two-year Scholarship funded by the Carnegie Foundation. In January 2012 we welcomed Anthony Black as a new Senior Research Fellow.

Finally, on behalf of all EPRU members, I would like to thank Sida for its continued support. My thanks extend to the coordination team of the Efd initiative for helping us build what we hope will soon become a Centre of Excellence in the area of natural resource management in Southern Africa.

Mare Sarr
Director

EfD South Africa/EPRU's members in February 2012. Standing left to right: Edwin Muchapondwa, Martine Visser, Mare Sarr, Johane Dikgang, Esther Kimani, Byela Tibesigwa, Coretha Komba, Anthony Black, Helanya Fourie, Tony Leiman; Seated left to right: Jane Turpie, Kerri Brick, Stephanie Giamporcaro and Adewara Sunday. (Absent: Reviva Hasson and Letitia Sullivan)



Networks

EPRU has successfully worked with a number of local and national stakeholders on medium-size projects, such as The South African National Parks in the wildlife sector, The Department of Water Affairs and Forestry in the water sector, The Department of Environmental Affairs and Tourism on marine and coastal management, 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.

Contact us

You are most welcome to contact EfD South Africa/Environmental-Economics Policy Research Unit (EPRU):

Mare Sarr
Director, Environmental-Economics Policy Research Unit (EPRU)
Office: +27 (0)21 650 2982, Fax: +27 (0)21 650 2854, E-Mail: mare.sarr@uct.ac.za

Jane Turpie
Research Convener, Environmental-Economics Policy Research Unit (EPRU)
Office: +27 21 701 3420, E-mail: jane@anchorenvironmental.co.za

University of Cape Town, School of Economics
Private Bag 7701, Rondebosch, South Africa
www.efdinitiative.org/centers/south-africa

Donors and funding

In 2011, EPRU received funding from the Swedish International Development Cooperation Agency (Sida), the African Climate & Development Initiative and the University of Cape Town Vice Chancellor (VC) Strategic Funds, the School of Economics (University of Cape Town) and CEEPA.

Number of donors 6

List of Donors	Funding by donor during 2011
1) CEEPA	1.80%
2) African Climate & Development Initiative	2.85%
3) VC Strategic Funds – UCT	5.55%
4) Carnegie Scholarship (UCT School of Economics)	10.50%
5) EfD	35.88%
6) UCT School of Economics (University Salaries)	43.42%

Sida/EfD funding as share of total center budget
(incl. univ. salaries) 35,88%

SIX EFD CENTERS

TANZANIA MESSAGE FROM OUR CENTER DIRECTOR

IN THE FIVE YEARS SINCE the Environment for Development Tanzania was founded, its involvement in research, training, and policy interaction has been both exciting and challenging. Since its inception EfD Tanzania and the Department of Economics at the University of Dar es Salaam (UDSM), joined hands and have been conducting research and running training to mid-level government official at both central and local governments. The center has been a home for environmental economics studies and has created a diverse array of plan and opportunities to address the complex environmental issues facing Tanzania's rapidly changing society with the goal of reducing poverty in improving human lives and environmental conditions. Significant progress has been made in the areas of training and policy interaction. Over the years EfD Tanzania fellows have been involved in different government policy processes and have been working closely with NEMC, Ministry of natural resources and tourism and the office of Vice-President-Division of Environment. Further our collaborative ties have been substantially increased over the years both within Tanzania and abroad.

The mission of the center, as part of institutionalizing research based on environmental Economics and poverty alleviation, the findings and insights from research will be disseminated through presentations at various seminars and workshops, and publications through national and international outlets. In addition, summaries of research findings are planned to be published as short reports and distributed to different governmental and non-governmental organizations. Finally, EfD Tanzania will actively partner with local communities in a set of selective community capacity building initiatives.

I would like to take this opportunity to extend my heartfelt gratitude and appreciation to our partners for the contribution extended to us throughout this period. First and foremost, is the Swedish International Development

Agency (Sida) through the Unit of Environmental Economics at Gothenburg University, the University of Dar es Salaam, and the Department of Economics for continued to host the EfD Tanzania. Furthermore, we thank UNDP/ UNEP, Ministry of Finance, Division of Environment at the Office of the Vice President, and the National Environmental Management Council (NEMC) for continued collaboration in the areas of environmental related researches and poverty analysis. On the training aspect, the year 2011 the center have marked some achievements including all three students of MA and one PhD who received financial support from the center during the thesis writing have graduated this year. It is expected in the coming years the center will continue to build capacity and support the graduate students writing on environmental and natural resources and poverty analysis

This year the center has extended more in terms of policy advice and now there is EfD Tanzania member in the Ministry of Water who is involved in the Water Sector Development Program (WSDP) the largest programs in Tanzania which implement the MKUKUTA II. Likewise other members have been involved with the International Food Policy Research Institute (IFPRI) on a study of fertilizer supply and use in Tanzania.

Nevertheless the EfD Tanzania members have managed to attend and contribute to the international training/workshops among others, the Regional Experts Training course on Ecosystem workshop held in Maputo, Mozambique for three days from 30th November to 2nd December 2011 that drew participants from the Eastern and South African countries that are signatories of the United Nations Environment Programme (UNEP) Nairobi Convention.

Furthermore, the EfD Tanzania secretariat jointly with the EfD secretariat from 26th to 30th October 2011 had organized the 5th annual

meeting in Arusha Tanzania. The meeting apart from researchers from all the centers attracted policy makers from government sectors, agencies and nongovernmental organization as well as the stakeholders dealing with environmental and poverty issues.

EfD Tanzania had hosted number of researchers and graduate students from different Universities. These are, Mark Purdon of the Department of Political Science University of Toronto (Canada). Britta Deutsch of the International Postgraduate Program University of Bonn (Germany); Prof. Till Stellnachell University of Hanover, German/ZEF, Bonn and Prof. Randy Bluffstone from the Department of Economics- Portland State University. We hope that in the coming years we will continue to attract more visiting researchers to work with the EfD Tanzania fellows share experiences as part of capacity building.

Nevertheless in the days to come, we look forward to giving added impetus to building research and policy analysis capacity, while continuing doing research and training on Environment and Natural resources economics that helps build a strong foundation for informed policies in the country.

Razack B. Lokina
Director



Razack B. Lokina, Director

Local Researchers and Staff

- Razack Bakari Lokina (PhD), Senior Lecturer, Director and Senior Research fellow
- John K. Mduma (PhD), Senior Lecturer and Senior Research fellow
- Adolf Faustine Mkenda (PhD), Senior Lecturer and Senior Research fellow
- Aloyce Hepelwa (PhD), Lecturer and Senior Research Fellow
- Wilhelm Ngasamiaku, Assistant Lecturer and Research Fellow (PhD student).
- Onesmo Selejo , Assistant Lecturer and Research Fellow (PhD student).
- Salvatory Macha , Project Administrator

- Stephen Kirama, Assistant Lecturer and Research Fellow (PhD student)
- Amosi Mutanaga, Accountant

Domestic research associates

- Professor Asmerom Kidane, University of Dar es Salaam
- Godius Kahyarara (PhD) Senior Lecturer Department of Economics University of Dar es Salaam

International research associates

- Professor Heidi J. Albers, Oregon State University

- Associate Professor Elizabeth J.Z. Robinson, University of Gothenburg
- Associate Professor, Gunnar Kohlin, Department of Economics, University of Gothenburg
- Thomas Professor Thomas Sterner, Senior Research Fellow
- Mark Purdon PhD in political science at the University of Toronto
- Professor, Jesper Stage, Department of Economics, University of Gothenburg
- Håkan Eggert (Associate Professor) Department of Economics, University of Gothenburg

Salvatory Macha, Razack Lokina, Gunnar Köhlin, Adolf Mkenda, John K. Mduma, Stephen Kirama



Networks

EfD Tanzania center has been working with the International agencies, government departments, and nongovernmental organizations in policy issues more closely with;

- The Vice President office Environment Division. This is the unit that is responsible for Coordinating environmental management for the improvement of the welfare of Tanzanians. <http://www.vpo.go.tz/>
- The International Food Policy Research Institute (IFPRI) is an international agricultural research it also seeks sustainable solutions for ending hunger and poverty and economic of land degradation <http://www.ifpri.org/>
- Minister for Finance <http://www.tanzania.go.tz/ministriesf.html> Ministry of natural Resources and Tourism <http://www.tanzania.go.tz/natural.htm>
- The National Environment Management Council (NEMC) <http://www.nemc.or.tz/>
- Ministry of Water <http://www.maji.go.tz/>
- The Tanzania Forest Conservation Group (TFCG) <http://www.tfcg.org/>
- Institute of Resource Assessments has formed a REDD task force that collaborating with the center in some issues. <http://www.ira.udsm.ac.tz/>

Contact us

You are most welcome to contact EfD Tanzania:

EfD Tanzania
Economics Department University of Dar es Salaam
CASS Tower Block 3rd Floor, P.O. Box 35045
Phone: +255 22 2410162, Fax: 255 22 2410162
Email: efd@udsm.ac.tz, www.efdinitiative.org/centers/tanzania

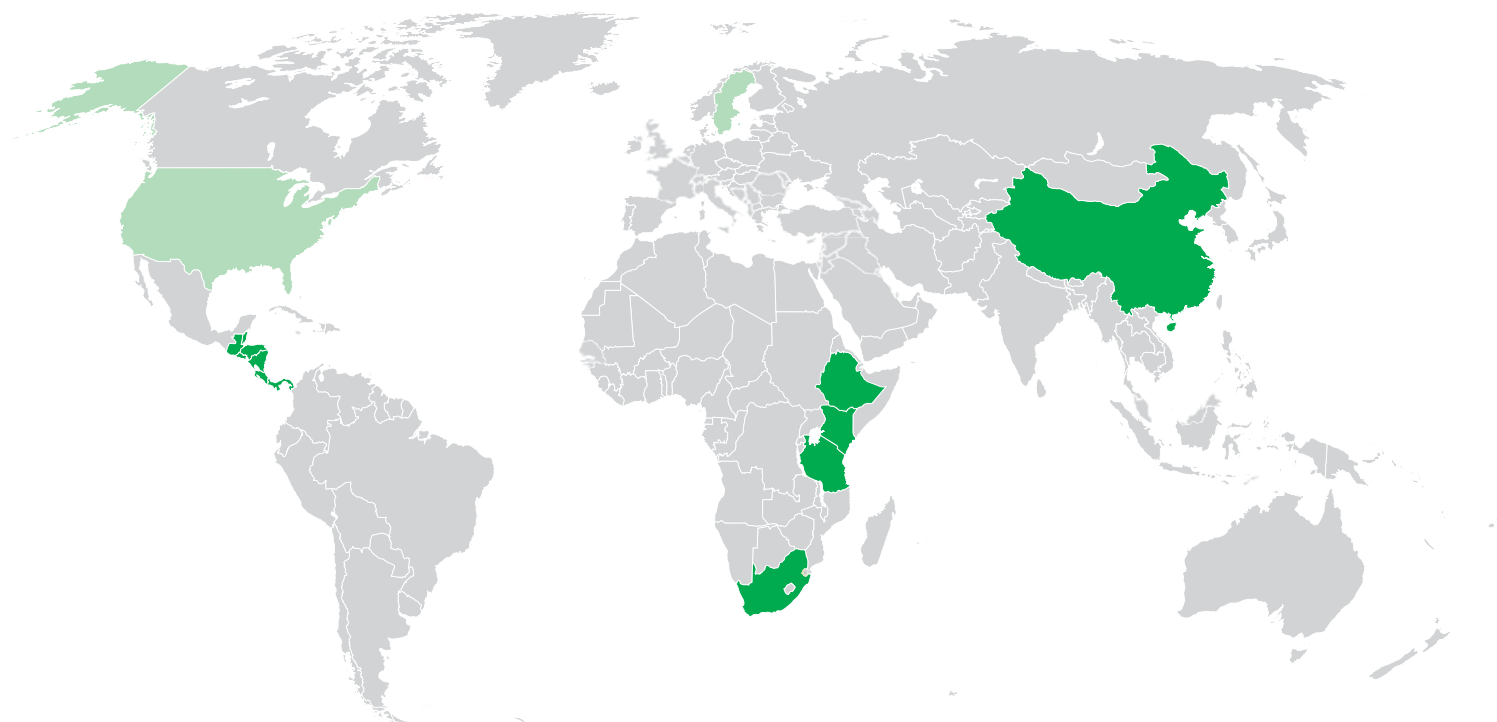
Donors and funding

We sincerely thank the Swedish International Development Cooperation Agency (Sida) Through the EfD initiative based at the Unit of Environmental Economics at Gothenburg University for their continuing Core support, the University of Dar es Salaam and the Department of Economics in particular especially in the area of office space and facilities. We further extend this appreciation to UNEP/ Vice President Office, UNDP/Ministry of Finance and Economic Affairs for the support of Ifehu study.

EfD Tanzania welcome donors and partners interested in supporting our center activities especially on the issues related to Environment Economics and poverty as well as supporting training and policy workshops.

Number of donors	4
List of Donors	Funding by donor during 2011
1) University of Dar es salaam	4%
2) UNEP/Vice President Office	14%
3) UNDP/Ministry of Finance	19%
4) Sida/EfD	63%

Sida/EfD funding as share of total center budget (incl. univ. salaries)	63%
---	-----



EfD Coordination Committee

A coordination committee is in place to oversee the overall planning and organization of the EfD initiative. It consists of the Directors/Coordinators from all six centers, the EfD Director and the Chair of the EfD Research Review Committee. Also the Research officer, the Communication officer and the 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 Environmental Economics Congress. During 2011 this meant a meeting in Rome in late June and twice during the Annual Meeting in Arusha in October 2011. During these meetings issues regarding sustainability and collaborative research were particularly discussed.

EfD Secretariat

The EfD secretariat is the administrative hub of the EfD centers. The secretariat serves the EfD centers with research, communication,

core administrative and financial administrative support and as a networking support to help share experiences between the EfD centers and other relevant actors. The secretariat is hosted by the Environmental Economics Unit, University of Gothenburg, and comprise of:

- Gunnar Köhlin, EfD Director
- Yonas Alem, EfD research Officer, 2012
- Edwin Muchapondwa, EfD Research Officer 2011
- Karin Backteman, Communications Officer
- Karin Jonsson, Program Officer
- Selma Oliveira, Program Officer 2011
- Mona Jönefors and Selma Oliveira, Financial Administrators 2012
- Gerd Georgsson, Financial Administrator 2011
- Anders Ekbohm, Head of GMV's Environmental Economics and Policy group
- Thomas Sterner, Head of the Environmental Economics Unit, University of Gothenburg and Chair of EfD Research Committee

EfD Secretariat contact info

info@efdinitiative.org
 Environmental Economics Unit
 Department of Economics
 School of Business, Economics and Law
 University of Gothenburg
 Sweden
 PO Box 640, SE 405 30 Gothenburg, Sweden
 Visiting address: Vasagatan 1, Building E
 Phone: + 46 31 786 10 00
www.efdinitiative.org

EFD CENTERS AND PARTNERS

There are six EfD centers, hosted by universities or academic institutions in each respective country.

For more information on each center, please contact the Center Director/Coordinator:

CENTRAL AMERICA

Research Program in Economics and Environment for Development in Central America. Centro Agronómico Tropical de Investigación y Enseñanza (CATIE)

Dr. Francisco Alpízar, Center Director

Email: falpizar@catie.ac.cr

Phone: +506 558 2215 /2624



CHINA

Environmental Economics Program
Peking University

Professor Jintao Xu, Center Director

Email: xujt@pku.edu.cn

Phone: +86 10 62767629



ETHIOPIA

Environmental Economics Policy Forum for Ethiopia
Ethiopian Development Research Institute (EDRI/AAU)

Dr. Alemu Mekonnen, Center Director

Email: alemu_m2004@yahoo.com

Phone: +251 11 5523564



KENYA

Environment for Development Kenya

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

Dr. Wilfred Nyangena, Coordinator

Email: nyangena_wilfred@uonbi.ac.ke

Phone: +254 20 316282



SOUTH AFRICA

Environmental Economics Policy Research Unit
University of Cape Town

Dr. Mare Sarr, Center Director

Email: mare.sarr@uct.ac.za

Phone: +27 21 650 2982



TANZANIA

Environment for Development Tanzania

University of Dar es Salaam

Dr. Razack Lokina, Center Director

Email: razack_lokina@yahoo.co.uk

Phone: +255 22 2410252



EFD PARTNERS



UNIVERSITY OF GOTHENBURG
SCHOOL OF BUSINESS, ECONOMICS AND LAW

EEU, Environmental Economics Unit

EEU at University of Gothenburg, Sweden, has initiated the EfD initiative and acts as coordinator and secretariat. For more information please contact:

Associate Professor Gunnar Köhlin

Director of EfD Program, University of Gothenburg

Email: gunnar.kohlin@economics.gu.se

Phone: +46 31 786 4426

Professor Thomas Sterner

Environmental Economics Unit (EEU), University of Gothenburg

Email: thomas.sterner@economics.gu.se

Phone: +46 31 786 1377

Karin Backteman, Communications officer

Environmental Economics Unit (EEU), University of Gothenburg

Email: karin.backteman@economics.gu.se

Phone: +46 31 786 25 95



RFF, Resources for the Future

RFF in Washington DC, US, is an important partner of the EfD initiative. RFF's research fellows will work closely with their counterparts and RFF's communications staff will help to disseminate the new centers' research products. For more information please contact:

Senior Fellow Allen Blackman

Resources for the Future

Email: blackman@rff.org

Phone: +202 328 5073



Sida

Swedish International Development Cooperation Agency, provides the funding for the EfD initiative.

PUBLICATIONS 2011

Peer reviewed

CENTRAL AMERICA

Blackman, A. and J. Rivera, 2011, "Producer-level Benefits of Sustainability Certification." *Conservation Biology*, Volume 25, No. 6, 1176–1185 *Conservation Biology*.

Alpizar, F. and P. Martinsson, 2012, "Paying the price of sweetening your donation- Evidence from a natural field experiment", *Economics Letters* 114, 182–185.

Alpizar, F., F. Carlsson and M.A. Naranjo, 2011, "The Effect of Ambiguous Risk and Coordination on Farmer's Adaptation to Climate Change-A Framed Field Experiment", *Ecological Economics*, Vol 70:12, pp.2317-2326.

Chacón Cascante, A. and A. M. Featherstone, 2011, "On the relationship between openness to trade and efficiency levels in low income countries: Evidence from the Latin American and the Caribbean countries", *International Research Journal of Finance and Economics*, ISSN 1450-2887 Issue 74.

Madrigal, R; F. Alpizar, A. Schluter, 2011, "Determinants of performance in rural water community organizations in Costa Rica", *World Development*, 39 (9).

Christel Cederberg, U. Martin Persson, Kristian Neovius, Sverker Molander, and Roland Clift, 2011, "Including Carbon Emissions from Deforestation in the Carbon Footprint of Beef", *Environmental Science & Technology*, 45 (5), pp 1773–1779.

CHINA

Li, Wanxin, 2011. "Engaging with the Climate Change Regime: China's Challenges and Activities", *The China Monitor*, Issue 66, October 2011, pp 4-9.

Qin, P, F. Carlsson, and J. Xu. 2011. "Forestland reform in China: what do the farmers want? A choice experiment on farmers' property rights preferences." *Land Economics*. 87 (3): 473-487.

Li, Jie, and Xu, Jintao, 2011. *Climate Change in China: Policy Evolution, Actions Taken and Options Ahead*. *Journal of Natural Resources Policy Research*, 1939-0467, Volume 3, Issue 1, 2011, Pages 23 – 35

Blumsack, S. and Jianhua Xu (2011). Spatial variation of emissions impacts due to renewable energy siting decisions in the Western U.S. under high-renewable penetration scenarios, *Energy Policy*, 39(11),6962-6971.

Xu, Jianhua, H. K. Florig and M. DeKay (2011). Evaluating an analytic-deliberative risk-ranking process in a Chinese context, *Journal of Risk Research*, 14(7),899-918.

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.

Bennett, M., A. Mehta, and J. Xu. 2011. "Incomplete Property Rights, Exposure to Markets and the Provision of Ecosystem Services in China". *China Economic Review*, Volume 22, Issue 4 (2011), pp. 485-498.

ETHIOPIA

Zeraï, Bereket, and Zenebe Gebreegziabher, 2011, 'Effect of Nonfarm Income on Household Food Security in Eastern Tigray, Ethiopia: An Entitlement Approach', *Food Science and Quality Management*, 1:1-22.

Bantider, Amare, Hans Hurni, and Gete Zeleke, 2011, "Responses of rural households to the impacts of population and land-use changes along the Eastern Escarpment of Wello, Ethiopia", *Norwegian Journal of Geography*, Vol. 65(1), 42-53.

Andersson, Camilla, Alemu Mekonnen, and Jesper Stage, 2011, Impacts of the Productive Safety Net Program in Ethiopia on livestock and tree holdings of rural households. *Journal of Development Economics* 94 (1): 119 – 126

Hagos, Fitsum, Amare Hailelassie, Seleshi Bekele Awulachew, Everisto Mapedza, and Tesfaye Taffesse, 2011, "Land and Water Institutions in the Blue Nile Basin: Setups and Gaps for Improved Land and Water Management" *Review of Policy Research*, 28(2):149-170.

Kassie , Menale, Bekele Shiferaw, and Geoffrey Muricho, 2011, "Agricultural Technology, Crop Income, and Poverty Alleviation in Uganda", *World Development*, 39(10):1784-1795, October, 2011.

Teklewold, Hailemariam, and Gunnar Köhlin, 2011, "Risk preferences as determinants of soil conservation decisions in Ethiopia", *Journal of Soil and Water Conservation*, 66(2):87-96, March/April, 2011.

Kassie, Menale, Gunnar Köhlin, Randall Bluffstone, and Stein Holden, 2011, "Are Soil Conservation Technologies "Win-Win?" A Case Study of Anjeni in the north-western Ethiopian Highlands", *Natural Resources Forum*, 35: 89-99.

Di Falco, Salvatore, Marcella Veronesi , and Mahmud Yesuf, 2011, "Does Adaptation To Climate Change Provide Food Security? A Micro-Perspective From Ethiopia", *American Journal of Agricultural Economics*, 93(3), 829-846, 7 March 2011.

Agimass, Fitalew and Alemu Mekonnen, 2011, "Low-income fishermen's willingness-to-pay for fisheries and watershed management: An application of choice experiment to Lake Tana, Ethiopia" *Ecological Economics*, 71:162-170, doi: 10.1016/j.ecolecon.2011.08.025.

Akay, Alpaslan, Peter Martinsson and Haileselassie Medhin, 2011, "Does Positional Concern Matter in Poor Societies? Evidence from a Survey Experiment in Rural Ethiopia", *World Development*, Vol 40(2):428-435.

Gebreegziabher, Zenebe, Berhanu Gebremedhin and Alemu Mekonnen, 2011, "Institutions, sustainable land use and consumer welfare: The case of forest and grazing lands in Northern Ethiopia" *Environment and Development Economics*, 17(1): 21-40, doi:10.1017/S1355770X11000349.

Deininger, Klaus, Daniel Ayalew Ali and Tekie Alemu, 2011, "Impacts of Land Certification on Tenure Security, Investment, and Land Markets Evidence from Ethiopia", *Land Economics*, 87(2): 312-334.

KENYA

Guthiga Paul and Andrew Newsham, 2011, 'Meteorologists Meeting Rainmakers: Indigenous Knowledge and Climate Policy Processes in Kenya', *IDS Bulletin*, 42(3),pp.104-109. 74.

Ndiritu Simon Wagura and Wilfred Nyangena, 2011, "Environmental goods collection and children's schooling: evidence from Kenya"

Regional Environmental Change, 2011, vol. 11, No. 3, pp 531-42.

SOUTH AFRICA

Biggs, Duan, Jane Turpie, Christo Fabricius and Anna Spenceley, 2011, "The value of avitourism for conservation and job creation—an analysis from South Africa", *Conservation and Society*, 9, 80-90.

Brick, Kerri and Martine Visser, 2011, "Green Certificate Trading", *Journal of Energy Southern Africa*, 22(1): 42 – 54.

Fischer, Carolyn, Edwin Muchapondwa and Thomas Sterner, 2011, "A Bio-economic model of community incentives for wildlife management under CAMPFIRE". *Environmental and Resource Economics*, 48 (2), 303-319.

Giamporcaro, Stéphanie, 2011, "Sustainable and responsible investment in emerging markets: integrating environmental risks in the South African investment industry", *Journal of Sustainable Finance and Investment*, 1 (2), 121-137.

Hamann, Ralph, Stéphanie Giamporcaro, David Johnston and Schirin Yachkaschi, 2011, "The role of business and cross-sector collaboration in addressing the 'wicked problem' of food insecurity", *Development Southern Africa*, 28 (4), 579-594.

Hasson, Reviva, Asa Lofgren and Martine Visser, 2010, "Climate change in a public goods game: investment decision in mitigation versus adaptation", *Ecological Economics*, 70(2), 331-338

Leiman, Anthony and Alexander Behar, 2011, "A green revolution betrayed? Seed technology and smallscale maize farmers in Zimbabwe", *Development Southern Africa*, 28 (4), 445-460.

Muchapondwa, Edwin and Obert Pimhidzai, 2011, "Modelling international tourism demand for Zimbabwe" *International Journal of Business and Social Science*, 2 (2), 71-81.

Sarr, Mare, Erwin Bulte, Chris Meissner and Tim Swanson, 2011, "On the Looting of Nations", *Public Choice*, 148, 353–380.

Thondhlana, Gladman, Sheona Shackleton and Edwin Muchapondwa, 2011, "Kgalagadi trans-frontier park and its land claimants: a pre- and

post-land claim conservation and development history", *Environmental Research Letters* 6 (2), 1-12.

Whelan, Brendan and Edwin Muchapondwa, 2011, "Enhancing consumers' voluntary use of small-scale wind turbines to generate own electricity in South Africa". *Journal of Energy in Southern Africa*, 22(2), 13-21.

TANZANIA

Robinson, Elizabeth J. Z., Heidi J. Albers, and Jeffrey C. Williams, 2011, "Sizing Reserves within a Landscape: The Roles of Villagers' Reactions and the Ecological-Socioeconomic Setting " *Journal of Land Economics* 87(2):233-249 (2011)

Robinson, Elizabeth J.Z. and Razack B. Lokina., 2011. "A spatial-temporal analysis of the impact of access restrictions on forest landscapes and household welfare in Tanzania" *Journal of, Forest Policy and Economics* 13(1): 79-85.

Banga, Margaret and Razack Lokina, and Adolf Mkenda, 2011, "Households' Willingness to Pay for Improved Solid Waste Collection Services in Kampala City, Uganda" *Journal of Environment & Development* December 2011 20: 428-448, November 8, 2011

EfD Discussion papers

CENTRAL AMERICA

Róger Madrigal, Francisco Alpízar, and Achim Schlüter, 2011, "Individual Perceptions and the Performance of Community-Based Drinking Water Organizations", *EfD Discussion Paper Series*, EfD DP 11-07.

Allen Blackman, , 2011, "Does Eco-Certification Boost Regulatory Compliance in Developing Countries? ISO 14001 in Mexico", *EfD Discussion Paper Series*, EfD DP 11-08.

Martin U. Persson, U. and Francisco Alpízar, 2011, "Conditional Cash Transfers and Payments for Environmental Services: A Conceptual Framework for Explaining and Judging Differences in Outcomes". *EfD Discussion Paper Series*, EfD DP 11-06.

Dora Carias Vega, and Francisco Alpizar, 2011, "Choice Experiments in Environmental Impact Assessment: The Toro 3 Hydroelectric Project and the Recreo Verde Tourist Center in Costa Rica", *EfD Discussion Paper Series*, EfD DP 11-04.

CHINA

Jiang Xuemei, Gong Peichen, Bostedt Göran, and Xu Jintao, 2011, "Impacts of Policy Measures on the Development of State-Owned Forests in Northeastern China: Theoretical Results and Empirical Evidence". *Environment for Development Discussion Paper Series*, EfD DP 11-12.

ETHIOPIA

Zenebe Gebreegziabher, Jesper Stage, Alemu Mekonnen, and Atlaw Alemu, 2011, "Climate Change and the Ethiopian Economy: A Computable General Equilibrium Analysis". *EfD Discussion Paper* 11-09, a joint publication of the Environment for Development Initiative and Resources for the Future (www.rff.org), Washington DC. October 2011.

Menale Kassie, Precious Zikhali, John Pender, and Gunnar Köhlin, 2011, "Sustainable Agricultural Practices and Agricultural Productivity in Ethiopia: Does Agroecology Matter?", *EfD Discussion Paper* 11-05, a joint publication of the Environment for Development Initiative and Resources for the Future (www.rff.org), Washington DC. May 2011.

Alemu Mekonnen and Abebe Damte, 2011, "Private Trees as Household Assets and Determinants of Tree-Growing Behavior in Rural Ethiopia". *EfD Discussion Paper* 11-14, a joint publication of the Environment for Development Initiative and Resources for the Future (www.rff.org), Washington DC. December 2011.

SOUTH AFRICA

Adewara, Sunday Olabisi and Martine Visser, 2011, "Use of Anthropometric Measures to Analyze How Sources of Water and Sanitation Affect Children's Health in Nigeria", *Environment for Development Discussion Paper Series*, EfD DP 11-02.

Kassie, Menale, Precious Zikhali, John Pender, and Gunnar Köhlin, 2011, "Sustainable Agricultural Practices and Agricultural Productivity in Ethiopia: Does Agroecology Matter?", *Environment for Development Discussion Paper Series*,

2011, EFD DP 11-05.

Giamporcaro, Stephanie, 2011, "A Market for Environmentally Responsible Investment? Identifying Obstacles and Enablers of Commodification of Environmental Risks in the South African Investment Industry", Environment for Development Discussion Paper Series, 2011, EFD DP 11-01.

Other discussion papers

CENTRAL AMERICA

M. Ibañez and A. Blackman, 2011, "Does Ecocertification Have Environmental Benefits? Organic Coffee in Colombia" Working Paper, Resources for the Future: Washington, DC.

CHINA

Li, Wanxin, and Higgins, Paul, 2011. "Controlling Local Environmental Performance: an analysis of three national environmental management programs in the context of regional disparities in China." Discussion paper, City University of Hong Kong.

Li, W., Liu J., and Li, D., 2011. "Getting their voices heard: Three cases of public participation in environmental protection in China", discussion paper, Tsinghua University.

Carlsson, Fredrik, Elina Lampi, Wanxin Li, Peter Martinsson, 2011, "Subjective well-being among preadolescents - Evidence from urban China", University Of Gothenburg Working Papers in Economics Nr 500

Xie, Lunyu, Berck, Peter and Xu, Jintao, The Effect of the Collective Forest Tenure Reform in China on Forestation (March 9, 2011). Available at SSRN.

SOUTH AFRICA

Dikgang Johane and Muchapondwa Edwin, (2011), The valuation of biodiversity conservation by the South African Khomani San "bushmen" community, Working paper 257.

KENYA

Daniel Slunge, Anders Ekborn, Fernando Loayza, Paul Guthiga, Wilfred Nyangena (2011), "Can Strategic Environmental and Social Assessment of REDD+ Improve Forest Governance?" University of Gothenburg, Dept of Economics, Working Papers in Economics nr 493.

EfD/RFF Books

Policy Instruments for Environmental and Natural Resource Management by Thomas Sterner and Jessica Coria (2011). Routledge. Published by RFF Press.

Fuel Taxes and the Poor, The Distributional Effects of Gasoline Taxation and Their Implications for Climate Policy (2011) Published by RFF Press with Environment for Development initiative. Edited By Thomas Sterner.

Agricultural Investment and Productivity - Building Sustainability in East Africa (2011), EfD/RFF Books, Edited By Randall A. Bluffstone and Gunnar Köhlin.

Book chapters

CENTRAL AMERICA

Blackman, A., R. Osakwe and F. Alpizar. 2011. Fuel Tax Incidence in Costa Rica: Gasoline versus Diesel in Fuel Taxes and the Poor: The distributional consequences of gasoline taxation and their implications for climate policy, Sterner, T. Ed., RFF Press, Routledge. ISBN 978-1-61726-092-6

Robalino, J., Pfaff, A. and Villalobos, L., 2011 "Assessing the impact of institutional design of Payments for Environmental Services: The Costa Rican experience" In B. Rapidel, F. DeClerck, J. LeCoq and J. Beer Eds. Ecosystem services from Agriculture and Agroforestry: Measurement and Payments. Earthscan Press.

Madrigal, R. 2011. Estimating the Cost and Benefits of Supplying Hydrological Ecosystem Services: An Application for Small-Scale Rural Drinking Water Organizations. In: B. Rapidel, F. DeClerck, J.F. Le Coq and J. Beer (Editors), Ecosystem Services from Agriculture and Agroforestry: Measurement and Payment. Earthscan, London, UK, pp. 161-178.

CHINA

Cao, J., 2011. Is Fuel Taxation Progressive or Regressive in China? In "Fuel Taxes and the Poor, The Distributional Effects of Gasoline Taxation and Their Implications for Climate Policy", Sterner, T. Ed., RFF Press, Routledge. ISBN 978-1-61726-092-6.

ETHIOPIA

Yesuf, Mahmud and Hailemariam Teklewold, 2011, "Risk Preferences and Technology Adop-

tion: Case Studies from Ethiopian Highlands" In Bluffstone, Randall and Gunnar Köhlin, 2011, "Agricultural Investment and Productivity - Building Sustainability in East Africa", EFD/RFF Books.

Hagos, Fitsum, 2011, "Fertilizer Use by Smallholder Households in Northern Ethiopia: Does Risk Aversion Matter?", In Bluffstone, Randall and Gunnar Köhlin, 2011, "Agricultural Investment and Productivity - Building Sustainability in East Africa", EFD/RFF Books.

Di Falco, Salvatore and Jean-Paul Chavas, 2011, "Crop Biodiversity and the Management of Production Risk on Degraded Lands: Some Evidence from the Highlands of Ethiopia" In Bluffstone, Randall and Gunnar Köhlin, 2011, "Agricultural Investment and Productivity - Building Sustainability in East Africa", EFD/RFF Books.

Kassie, Menale, 2011, "Where does investment on Sustainable Land Management Technology Work? Empirical Evidence from the Ethiopian Highlands" In Bluffstone, Randall and Gunnar Köhlin, 2011, "Agricultural Investment and Productivity - Building Sustainability in East Africa", EFD/RFF Books.

Medhin, Haileselassie and Gunnar Köhlin, 2011, "Soil Conservation and Small Scale Food Production in Highland Ethiopia: A Stochastic Metafrontier Approach" In Bluffstone, Randall and Gunnar Köhlin, 2011, "Agricultural Investment and Productivity - Building Sustainability in East Africa", EFD/RFF Books.

Mekonnen, A., R. Deribe and L. Gebremedhin. 2011. Distributional Consequences of Transport Fuel Taxes in Ethiopia in Fuel Taxes and the Poor: The distributional consequences of gasoline taxation and their implications for climate policy, Sterner, T. Ed., RFF Press, Routledge. ISBN 978-1-61726-092-6

KENYA

Agricultural Investment and Productivity - Building Sustainability in East Africa (2011), EfD/RFF Books, Edited By Randall A. Bluffstone and Gunnar Köhlin

Mutua, J., M. Börjesson and T. Sterner. 2011. Distributional Effects of Transport Fuel Taxes in Kenya: Case of Nairobi in Fuel Taxes and the Poor: The distributional consequences of gasoline taxation and their implications for climate policy, Sterner, T. Ed., RFF Press, Routledge. ISBN 978-1-61726-092-6

SOUTH AFRICA

Mare Sarr, Erwin Bulte, Chris Meissner, and Tim Swanson. 2011. Sovereign Debt and the Resource Curse. in Robert W. Kolb (Ed.) "Sovereign Debt: From Safety to Default", April 2011, Wiley.

TANZANIA

Akpalu, Wisdom and Robinson, Elizabeth J. Z. 2011. Political Petrol Pricing: The Distributional Impact of Ghana's Fuel Subsidies, forthcoming in Fuel Taxes and The Poor, T. Sterner (ed), Taylor and Francis.

Sterner, Thomas, Cao, Jing, Carlsson, Emanuel, and Robinson, Elizabeth J. Z. 2011. Conclusions, forthcoming in Fuel Taxes and The Poor, T. Sterner (ed), Taylor and Francis.

Mkenda, Adolf F., John K. Mduma Wilhelm M. Ngasamiaku 2011 "Fuel Taxation and Income Distribution in Tanzania" Fuel Taxes and the Poor, The Distributional Effects of Gasoline Taxation and Their Implications for Climate Policy. Published by RFF Press with Environment for Development initiative. Edited By Thomas Sterner.

Research Briefs

CENTRAL AMERICA

Gsottbauer Elisabeth and Francisco Alpizar, 2011, "Urban local governance, cooperation and emotions: experimental results from Costa Rica", Efd Research brief, Environment for Development Central America. <http://www.efdinitiative.org/centers/central-america/publications-projects/policy-briefs?uid=1a9e98113702a60cd688cf3f03a57e36>

Chacón-Cascante, Adriana, Juan Robalino and José Fernando Jiménez, 2011, "Developing a framework to analyze the relationship between floods and internal migration", Efd Research brief, Environment for Development Central America. <http://www.efdinitiative.org/centers/central-america/publications-projects/policy-briefs?uid=8919e57cae4ec5801f977120ed4cd20b>.

Madrigal, Róger, 2011, "What makes them follow the rules: The case of Ostional turtle-egg harvesters?" (English and Spanish), Efd Research brief, Environment for Development Central America. <http://www.efdinitiative.org/centers/central-america/publications-projects/policy-briefs?uid=b0a91bc4004127c2e690147b57105b8a>.

[=b0a91bc4004127c2e690147b57105b8a](http://www.efdinitiative.org/centers/central-america/publications-projects/policy-briefs?uid=b0a91bc4004127c2e690147b57105b8a).

Madrigal, Róger, 2011, "Perspectivas futuras sobre el co-manejo como alternativa para el uso y la protección de las tortugas en Ostional" (English and Spanish), Efd Research brief, Environment for Development Central America. <http://www.efdinitiative.org/centers/central-america/publications-projects/policy-briefs?uid=5cbdb3d95a35b48b24505067b658b5cfc>.

CHINA

Xu, Jintao, Haipeng Zhang, Jeff Bennett, Xuehong Wang and Mark Eigenraam, 2010. "Ecological Afforestation in China: A Market-based Approach". Submitted to Australia Centre for International Agricultural Research (ACIAR). EEPC research brief, Peking University.

Policy Briefs

CENTRAL AMERICA

Naranjo, María A. and Francisco Alpizar, 2011, "The role safety nets as part of adaptation strategies to climate change in Central America", Efd Policy brief, Environment for Development Central America. <http://www.efdinitiative.org/centers/central-america/publications-projects/policy-briefs?uid=61700378e0f79cb8a5e991e9806bd979>.

CHINA

Xu, Jintao and Xuemei Jiang, 2010. "Key State-Owned Forest Areas in Northeast of China: Reform Paths and Policy Implications". Submitted to State Forestry Administration, PR. China. EEPC policy brief, Peking University.

SOUTH AFRICA

Turpie, Jane, 2011, "Maximising the value of South Africa's coast", Efd Policy Brief, Environmental-Economics Policy Research Unit, University of Cape Town, South Africa.

Reports

CENTRAL AMERICA

PES and other Economic Beasts: Assessing PES within a Policy Mix in Conservation Porras, I., Chacón Cascante, A., Robalino, J. and Oosterhuis, F. "PES and other Economic Beasts: Assessing PES within a Policy Mix in Conservation". Chapter in Ring, Irene and Schröter Schlaack, Christoph (Ed.), 2011. Instrument Mixes for Biodiversity Policies. POLICYMIX Report, Issue No. 2/2011, Helmholtz

Centre for Environmental Research – UFZ, Leipzig, pp. pp. 119-144.

Latin America and the Caribbean: A biodiversity super power Bovarnick, A., F. Alpizar, C. Schnell, Editors. The Importance of Biodiversity and Ecosystems in Economic Growth and Equity in Latin America and the Caribbean: An economic valuation of ecosystems, United Nations Development Programme, 2010. 79

Sistematización de Mecanismos de Compensación, Certificación y Crédito en Centro América y Republica Dominicana: Teoría y Estudios de caso Chacón-Cascante, A. (Ed.) "Sistematización de Mecanismos de Compensación, Certificación y Crédito en Centro América y Republica Dominicana: Teoría y Estudios de caso". Informe preparado para el Programa REDD-CCAD-GIZ.

Reduced Emissions due to Reduced Deforestation and Forest Degradation (REDD and REDD+) Chacón Cascante, Adriana; Robalino, Juan; Muñoz Brenes, Carlos L.; and Grieg-Gran Maryanne. 2011. "Reduced Emissions due to Reduced Deforestation and Forest Degradation (REDD and REDD+)". In Ring, Irene and Schröter Schlaack, Christoph (Ed.), Instrument Mixes for Biodiversity Policies. POLICYMIX Report, Issue No. 2/2011, Helmholtz Centre for Environmental Research – UFZ, Leipzig

Cost based pricing tool to estimate the cost of providing non-essential services in protected areas Naranjo, M.A., Villalobos-Fiat, L., Muñoz, C. (2011). "Cost based pricing tool to estimate the cost of providing non-essential services in protected areas and Institutional Base Line: Case Study National Corcovado and Marino Ballena". The Nature Conservancy, Costa Rica.

Evaluation of the impacts of the Mesoamerican Agroenvironmental Program (MAP): constructing the baseline Chacon, A., Naranjo, M., and Villalobos, L. (2011). Tropical Agricultural Research and Higher Education Center (CATIE),

Climate change impacts on biodiversity and ecosystem services with emphasis on protected areas: Analysis of the Legal Framework and Domestic and International Policy. State of the Art Synthesis 2009-2011. Muñoz Carlos, Herrera Bernal, and Paaby Pia,

2011. Forever Costa Rica Association-BIO-MARCC-SINAC-GIZ.

Climate change impacts on biodiversity and ecosystem services with emphasis on protected areas: Biophysical component. State of the Art Synthesis 2009-2011.

Herrera Bernal, Paaby Pía, and Muñoz Carlos, 2011. Forever Costa Rica Association-BIO-MARCC-SINAC-GIZ.

EfD Central America Center Report 2010
This report presents EfD Central America, its members and work during 2010. For a free hardcopy, please send an email to: info@efdinitiative.org

CHINA

EfD China Center Report 2010

This report presents EfD China, its members and work during 2010. For a free hardcopy, please send an email to: info@efdinitiative.org

ETHIOPIA

EfD Ethiopia Center Report 2010

This report presents EfD Ethiopia/Environmental Economics Policy Forum for Ethiopia, its members and work during 2010. For a free hardcopy, please send an email to: info@efdinitiative.org

KENYA

EfD Kenya Center Report 2010

This report presents EfD Kenya, its members and work during 2010. For a free hardcopy, please send an email to: info@efdinitiative.org

SOUTH AFRICA

EfD South Africa Center Report 2010 80

This report presents EfD South Africa, its members and work during 2010. For a free hardcopy, please send an email to: info@efdinitiative.org

TANZANIA

EfD Tanzania Center Report 2010

This report presents EfD Tanzania, its members and work during 2010. For a free hardcopy, please send an email to: info@efdinitiative.org

EFD PROJECTS 2012

EFD CENTRAL AMERICA

PES

Impact evaluation of the Payments for Environmental Services Program on welfare in Costa Rica

Theme: Policy design and Forestry
Pl: Juan Robalino, Francisco Alpizar

FISHERIES

Understanding the tradeoffs between planned marine conservation policies and artisanal fishing in key coastal areas of Costa Rica

Theme: Policy Design
Pl: Róger Madrigal Ballesteros, Francisco Alpizar

TURTLES

Performance based payments for protecting turtles: understanding the conditions for its success

Theme: Parks & Wildlife and Policy Design
Pl: Róger Madrigal Ballesteros, Francisco Alpizar

SOLID WASTE

Impact of uncertainty and pro-social attitudes on household's solid waste management decisions: starting from scratch in a LDC

Theme: Policy design
Pl: Francisco Alpizar (falpizar@catie.ac.cr)

SAFETY NETS

Exploring the potential of safety nets as part of an adaptation to climate change strategy in Central America

Theme: Socioeconomic dimensions of climate change
Pl: Francisco Alpizar (falpizar@catie.ac.cr) and María Naranjo (mnaranjo@catie.ac.cr)

OSTIONAL

The role of coastal communities on the management of marine turtles in Central America: The case of Ostional Wildlife Refuge

Theme: Fisheries & Parks and Wildlife
Pl: Róger Madrigal Ballesteros (rmadriga@catie.ac.cr)

MIGRATION

Measuring the effects of flood risk on migration flows: An application for Costa Rica

Theme: Socioeconomic dimensions of climate change
Pl: Adriana Chacón (achacon@catie.ac.cr)

EFD CHINA

THEME: CLIMATE CHANGE, POLICY DESIGN

An Experimental Analysis of Auctioning Subsidy for Carbon Emission Reduction: Evidence from China

Pl: Haoran He (haoran.he@economics.gu.se), Yefeng Chen, Qian Weng, Yean Zhou

THEME: CLIMATE CHANGE, POLICY DESIGN

China's Climate Change Policies: Competitiveness and Distributional Effects – An Ex-post and Ex-Ante Analysis

Pl: Jing Cao (caojing@sem.tsinghua.edu.cn) and Mun S. Ho

THEME: POLICY DESIGN

A behavior model of transport mode in Beijing

Pl: Peter Berck (peter.berck@gmail.com) and Jintao Xu (xujt@pku.edu.cn)

THEME: POLICY DESIGN

Automobile demand analysis in Beijing

Pl: Ping Qin (pingqin2009@gmail.com)

EFD ETHIOPIA

THEME: AGRICULTURE AND SUSTAINABILITY

Profitability and Economy-wide Impact of Biofuel Investments in Ethiopia

Pl: Tadele Ferede/Zenebe Gebreegziabher

THEME: MANAGING THE COMMONS

Local Common Property Systems in Ethiopia: An Empirical Analysis of the Link between User Characteristics,

Resource Characteristics and Institutional Regime

PI: Zenebe Gebreegzabher

THEME: AGRICULTURE AND SUSTAINABILITY

Natural Resources Degradation and Household Welfare in Rural Ethiopia

PI: Abebe Damte

THEME: AGRICULTURE AND FORESTRY

Determinants of Farm Households' Agro-Forestry Technology Adoption in Ethiopia

PI: Abebe Damte

THEME: RESPONSES TO CLIMATE RISK

On Adaptation to Climate Change and Food Security in Ethiopia

PI: Salvatore di Falco/Alemu Mekonnen

THEME: REDD

Common Property Forest Management: Implications for REDD in Ethiopia

PI: Randall Bluffstone/Abebe Damte

THEME: SUSTAINABLE AGRICULTURE

AND POVERTY REDUCTION

Impact of Biofuel Investment on Growth, the External Sector and Poverty Reduction in Ethiopia: CGE Analysis

PI: Tadele Ferede/Zenebe Gebreegzabher

THEME: MANAGEMENT OF THE COMMONS

Review of local common pool resource management institutions in Ethiopia

PI: Zenebe Gebreegzabher

EFD KENYA

THEME: AGRICULTURE

Effects of Adoption of Multiple Agricultural Practices on Agricultural Productivity: Evidence from rural Kenya and Tanzania

PI: Wilfred Nyangena

THEME: CLIMATE CHANGE

Climate Change, Food Security and Hunger in the Horn of Africa

PI: Jane Mariara

THEME: PARKS AND WILDLIFE

Deforestation and wildlife extinction: A bio-economic model of multi-species wildlife hunting

PI: Kofi Vondolia

THEME: POLICY DESIGN

Local Capital Mobilization for Sustainable Affordable Housing Finance and Development in Nairobi, Kenya

PI: Chevelle Dixon

THEME: FORESTRY

Data Collection for Land Use Analysis

PI: Randy Bluffstone and Wilfred Nyangena

THEME: CLIMATE CHANGE

Household energy conservation and environmental quality in Kenya: Evidence from Kenya's Electricity Sector

PI: Peter Kimuyu

THEME: CLIMATE CHANGE

Adoption of solar energy to reduce need for other less environmentally friendly forms of energy in Kenya and mitigate climate change

PI: Peter Kimuyu

EFD SOUTH AFRICA

THEME: PARKS & WILDLIFE

Assessment of dry-lands ecosystem services on Khomani San communal land and the possible implications

PI: Edwin Muchapondwa

THEME: FISHERIES

Spatial economics of marine and coastal management: the South African recreational line fishery

PI: Jane Turpie

THEME: CLIMATE CHANGE

Poverty, resource scarcity, and climate variability: constraints to adaptation

PI: Martine Visser

THEME: AGRICULTURE; POLICY DESIGN

Risk and Time Preferences among Western Cape Fruit Farmers

PI: Mare Sarr

THEME: RESPONSES TO CLIMATE RISK

Ambiguity Aversion in the Uptake of New Farming Practices: Experimental Evidence from South Africa

PI: Martine Visser

THEME: PARKS & WILDLIFE

Estimating Optimal Conservation Fees in the Presence of Land Restitution in the Kgalagadi Transfrontier Park between Botswana and South Africa

PI: Edwin Muchapondwa

THEME: PARKS AND WILDLIFE

Value of protection and management of the South African coast

PI: Jane Turpie

THEME: PARKS & WILDLIFE

Evaluation of Dry-lands Ecosystem Services in the area surrounding the Kgalagadi Transfrontier Park in South Africa

PI: Edwin Muchapondwa

EFD TANZAINA

THEME: AGRICULTURE

The Impact of Fertilizer on Cereal Crops Production and Land Conservation in Tanzania

PI: John Kedi Mduma

THEME: AGRICULTURE,

FORESTRY AND CLIMATE CHANGES

Effects of Deforestation on household Time Allocation among the Rural Agricultural Activities: Evidence from Central and Southern Tanzania

PI: Prof. Robert Mabelle, Razack Lokina

THEME: FORESTRY,

CLIMATE CHANGE, POLICY DESIGN

Group decisions over the allocation of REDD payments: A natural experiment from Tanzania

PI: Elizabeth Robinson, Razack Lokina

THEME: COMMON PROPERTY RESOURCE

MANAGEMENT AND ENFORCEMENT

Investments, labor market participation and participatory forest management in Tanzania

PI: Dr. Razack Lokina

THEME: REDD AND COMMON PROPERTY RESOURCE

MANAGEMENT AND ENFORCEMENT

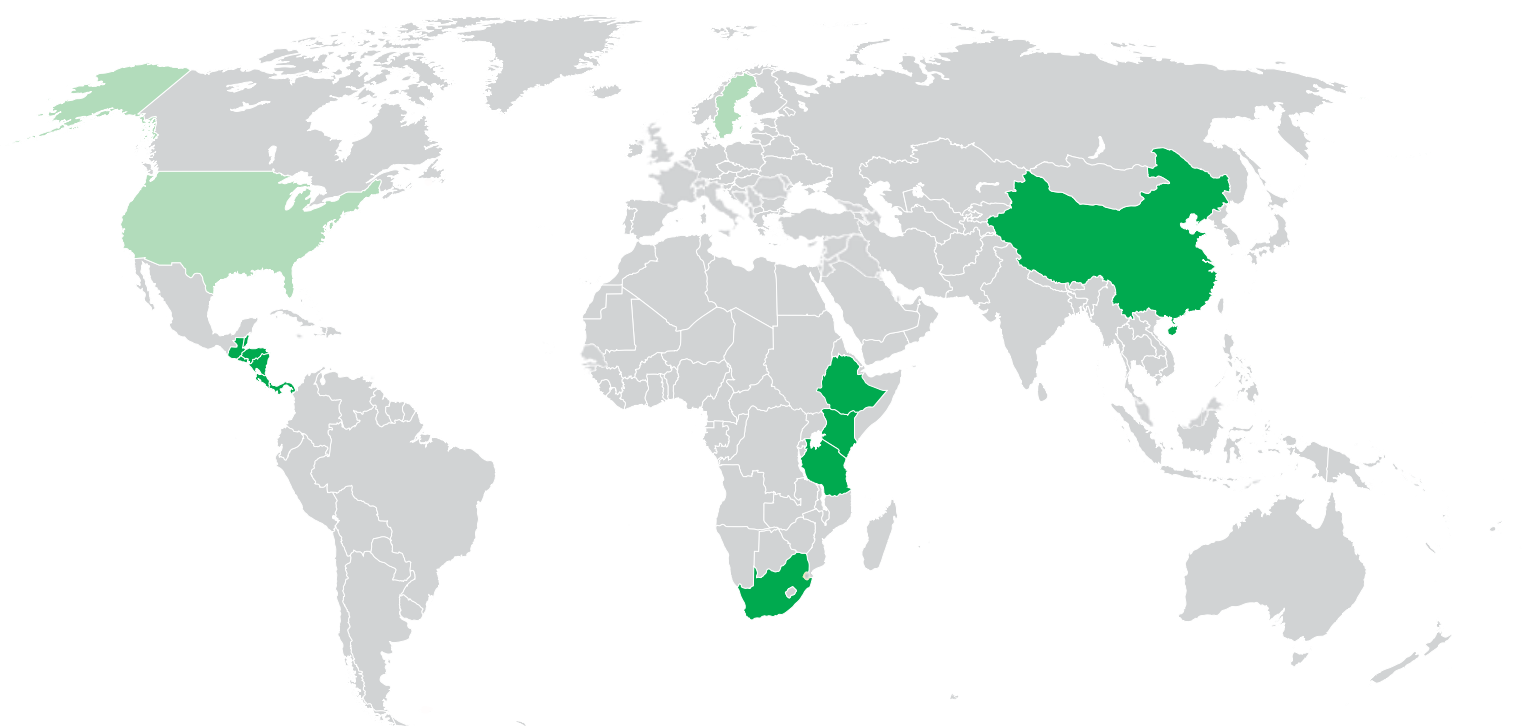
Improving the potential for successful implementation of REDD in Tanzania

PI: Prof. Elizabeth Robinson

THEME: MARINE RESOURCE AND FORESTRY

Assessing Tanzania's Marine protected areas: Incentives, opportunities and constraints

PI: Prof. Jo Albers



EfD CENTERS
Central America, China, Ethiopia, Kenya, South Africa, Tanzania

PARTNERS
Sida, University of Gothenburg, RFF



UNIVERSITY OF GOTHENBURG
SCHOOL OF BUSINESS, ECONOMICS AND LAW

