


The logo for Environment for Development (EFD) features the letters 'EFD' in a bold, green, sans-serif font. The 'E' and 'D' are connected, and the 'F' is positioned between them. The letters are set against a white background with a thin black horizontal line above and below the text.

Environment for Development



EFD INITIATIVE CENTER REPORT 2010: TANZANIA

The main goal of the EfD Tanzania is to support poverty alleviation and sustainable development through increased use of environmental economics capacity in policy making processes.



EfD researchers Elizabeth Robinson and Jo Albers meet with a group of women bee keepers in Kibaha's Ruvu North Forest Reserve. Read about the project on page 12, Protecting Peri-Urban forests and livelihoods: Spatial Enforcement Issues and Incentives for Community-Based Initiatives.

THIS REPORT

This report presents EfD Tanzania, its members and work during 2010. The Tanzanian node of the Environment for Development initiative is based at:
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“As marine protected areas are applied in poor countries, and in particular in Mnazi Bay, Tanzania, managers recognize that the success of the marine protected areas in protecting fish, biodiversity, and reefs stems from the response of local people – whether that response comes from direct enforcement activities or from incentives to cooperate with new restrictions. The specific objectives of this research project are to improve the sustainable management of Mnazi Bay Ruvuma Estuary Park and to reduce poverty in villages adjacent to the marine park.”

From the project description *Incentives to Cooperate with Marine Protected Areas As a Function of Location: Mnazi Bay Ruvuma Estuary Marine Park Case Study*, on page 13.

Women fishing. Photo: Matt Kieffer



Razack Lokina

MESSAGE FROM OUR COORDINATOR

On behalf of the Environment for Development Tanzania secretariat, I wish to take this opportunity to thank Sida, through the University of Gothenburg, for their continued support to our centre. We also thank the University of Dar es Salaam and particularly the Department of Economics for hosting the EfD Tanzania and the support accorded to the project. I also take this opportunity to thank EfD Tanzania Chairman of the Governing Board and the Board members for their sincere support and their efforts to link the centre with international and local environmental agencies.

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

During 2010 research fellows contributed much to the government of Tanzania in drafting and writing the National strategy for Growth and Poverty Reduction II (NSGPR II) or MKUKUTA II in its Kiswahili acronym and as well as

MKUZA. This was one of the success areas of the centre in policy interaction in the year 2010. The MKUKUTA II is a roadmap towards implementation of the government policy. We are proud of EfD Tanzania for being part of this. The EfD Tanzania fellows were directly involved in teaching, supervising and providing technical support in various government documents. Furthermore EfD Tanzania fellows were involved in a series of sensitization workshops for higher learning institutions in Tanzania and training of local government authority. Such kind of training helps these local officers to build network among the environmental and planning officers all over the country in order to share information and their experiences. More of such training at the local authority levels are planned in the coming.

With regard to international collaboration, EfD Tanzania continued to collaborate with the other EfD centres. EfD Tanzania has also, through the Department of Economics, managed to have a close working relationship with the National Environment Management Council (NEMC), Ministry of National Resources and

Tourism, Vice President Office – Division of Environment, and Ministry of Finance as well as other international organizations in the country such as UNEP and UNDP. We believe that through this collaboration our research agenda have a support of the key stakeholders.

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

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

Razack Bakari Lokina
Coordinator EfD Tanzania





FOURTH EFD ANNUAL MEETING COMPLETED

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

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

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

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

Successful cases of EfD research-policy interactions were presented



The EfD Annual Meeting 2010 in Ethiopia was held at UNECA, UN Economic Commission for Africa, in Addis Abeba, and in Debrezeit. In the photo spread (page 6-7) from the left: Rahel Deribe, (lunch break in Africa Hall), Francisco Alpizar, Precious Zikhali and Wilfred Nyangena, group: Lunyu Xie, Edwin Muchapondwa, Ping Qin, and Razack Lokina. Precious Zikhali. Middle row: Ping Qin, Jintao Xu. Bottom row: Roger Madrigal, Razack Lokina, group: Thomas Sterner, Wisdom Akpalu, Peter Berck, and Chantal Line Carpentier, Jo Albers and Alemu Mekonnen, Mare Sarr, Gunnar Köhlin.

by Menale Kassie, former EfD Research Officer and now working for CIMMYT in Kenya, and by the EfD coordinators Jintao Xu, Professor at Peking University, and Francisco Alpizar, CATIE, Costa Rica. Please see all Policy Day speakers in the full program below.

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

One of the key note speakers was Roger Sedjo, RFF Senior Fellow and Director of RFF's Forest Economics and Policy. Sedjo spoke on the role forests can play in carbon capture: principles, costs and policies. The other key note speaker was World Bank Lead Economist Klaus Deininger, who spoke on large scale land acquisitions.

EfD Research Fellow Roger Madrigal from Costa Rica gave a lecture on the Social Ecological System Ontological framework, designed by professor Elinor Ostrom, who was awarded the 2009 Nobel Memorial Prize in Economic Sciences for her analysis of economic governance, especially the commons. Roger Madrigal made a long research visit to professor Ostrom at Indiana University before she received the prize, in order to develop the design of his research project on drinking water management.

"The ontological framework is a conceptual map for analyzing the interactions between humans and ecosystems. It builds on the last decades of findings in the literature of common-pool resources and collective action towards the management of natural resources", says Madrigal:

"This framework might help to conduct systematic diagnosis of the structure of the interactions between humans and ecosystems analyzed by EfD's scholars in different parts of the world."

RESEARCH POLICY INTERACTION

EfD Tanzania works for strengthening the research capacity on environmental economics at the Department of Economics, University of Dar es Salaam and the interface between academia and policy makers in the quest for sustainable development.

EfD Tanzania strives to ensure that faculty members in the Department of Economics and the University at large and policy practitioners interact in environmental policy research and poverty related research. The interaction with the policy makers is also achieved through regular training in environmental economics and policy advice.

The EfD Tanzania has contributed in building capacity for civil servants through regular training on basic tools of environmental and resource economics. The center has been working with the government and

provided a technical support in various issues such as writing of state of the Coast Report-Tanzania Mainland, providing technical support in the preparation and writing of the National Strategy for Growth and Poverty Reduction II (i.e. MKUKUTA II, and MKUZA II) as well as forming a member of Long term Growth and Development Plan (LGDP). EfD Tanzania members have helped to provide technical support on the preparation of TOR for the study of cost and benefit analysis of the partial vs total ban of plastic carrier bags. Essentially EfD Tanzania has proved to be a think tank to the region.

Policy makers and academics from EfD Tanzania and other institutions met for a workshop regarding Tanzania's new National Strategy for Growth and Reduction of Poverty for 2011-2015, known as MKUKUTA II in Kiswahili.



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

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

In service training for e.g. civil servants

The EfD Tanzania in collaboration with the Office of the Vice President - Environment Division, organized a two-day training workshop on Environmental-Poverty Linkages. The overall focus was on the linkages between poverty-environment changes: how changes in the quality of the environment affect the poor. Four key dimensions of human poverty were considered: livelihoods, health, vulnerability and governance associated monitoring systems. The training workshop took place in Morogoro region with 25 participants. The target groups were the district and regional environmental officers, as well as regional secretariat officers responsible of poverty and environmental issues from Morogoro, Dodoma and Singida regions. The facilitators were the EfD Tanzania members and representatives from UNDP and the Office of the Vice President - Environment Division.

The EfD Tanzania staff also conducts training to civil servants in government organizations and non – governmental institutions as a part of capacity building strategies. We have developed a training manual that aims at developing and facilitating effective mainstreaming of environmental and poverty concerns in policy, planning and monitoring processes in Tanzania, through articulating the linkages between poverty and environment on the one hand and economic growth on the other. The main objective is to provide references to concepts, strategies, policies, and guidelines.

Policy links

The EfD Tanzania members have direct interaction with the government departments and organs in different capacities. They have been using their expertise in developing and monitoring policies. Currently EfD Tanzania fellows are participating in the revision of the National Long term Growth and Development Plan (LGDP) 2025.



THE IMPLEMENTATION Guide for Tanzania's new poverty eradication action strategy will give specific guidance on what should be done at all levels of the government- ministries, departments, agencies, as well as local government authorities. The guide is expected to be completed early 2011. The strategy itself – National Strategy for Growth and Reduction of Poverty, NSGRP – is better known in Tanzania by its Kiswahili acronym MKUKUTA, Mkakati wa Kukuza Uchumi na Kupunguza Umaskini Tanzania.

John Kedi Mduma, researcher at Environment for Development initiative (EfD) in Tanzania, was assigned as a technical advisor for the review in April 2009 and has been participating in the NSGRP monitoring process since 2007.

"We believe that reduction of poverty must be based on sustainable growth. When we started this work, we wanted the new MKUKUTA for the coming five years to be sharper and more focused and specific, and have a stronger emphasis on sustainable growth," says Mduma.

The issue of growth is debated

The issue of growth is debated in Tanzania. At the macroeconomic level, Tanzania is doing well, yet at the household level, income poverty did not decline during the period 2001-2007. GDP growth during this period

averaged about 7 percent, yet the headcount poverty index/income-poor proportion of the population declined marginally from 35.7 percent to 33.6 percent

"We therefore agreed that two issues should be reviewed in MKUKUTA. First, the issue of income distribution – to answer the question: where has the growth gone? And second, where should the growth efforts/interventions be directed in the next round of MKUKUTA in order to impact poverty reduction?"

Several MKUKUTA review studies suggest that the weak link between growth and employment – and the creation of decent jobs in particular – is the main factor behind the slow reduction in income poverty. Thus, in the next five years growth efforts should focus on the sectors that employ a majority of the poor – agriculture being one.

Poverty-population-environment nexus

Another important issue addressed in the MKUKUTA review was the poverty-population-environment nexus. Commissioned by the government to fill certain information gaps, EfD Tanzania provided two research studies on this issue. The studies were led by Dr Razack Lokina, EfD Coordinator in Tanzania

Among the finding is that, although the environment issues have been mainstreamed,

the funding for environmental issues has not been given enough attention. For instance, some ministries still don't have an environmental unit, though this is a government requirement.

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

Minerals should be processed

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

In Mdumas' personal view, all contracts with firms mining Tanzania's minerals should stipulate that all processing, polishing, and cutting be done in Tanzania.

More processing and marketing of agricultur-



Dr. John K Mduma and Dr. Adolf Mkenda were involved in providing technical support in the preparation and writing of the National Strategy for Growth and Poverty Reduction II (i.e. MKUKUTA II) and Zanzibar Strategy for Growth and Poverty Reduction (i.e. MKUZA II) respectively.

Furthermore Dr. Razack Lokina was assigned to provide technical support on the preparation of TOR for the study of cost and benefit analysis of the partial vs total ban of plastic carrier bags by the National Environment Management Council (NEMC). Along with that Efd Tanzania researchers, in collaboration with other members of the Department of Economics under the support of UNDP Tanzania Country Office through the Ministry of Finance and Economic Affairs, conducted MKUKUTA II Sensitization Workshop Series of Higher Learning Institutions.

Policy seminars, workshops and conferences

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

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

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

Pro-poor growth training workshop for higher learning institutions

The Efd Tanzania members and the Department of Economics members in University of Dar es Salaam in collaboration with Ministry of Finance and Economic Affairs – Poverty Eradication & Empowerment

al products will also add value and increase the shelf life of these products – for example selling juice in addition to fresh fruits. The government document - Kilimo Kwanza (Agriculture First) is a guide for development in rural areas and beyond (essentially because Kilimo Kwanza follows a Value Chain Approach – from agro input to agro production, processing, marketing, and distribution). Apart from cereals, processing of agricultural products, especially vegetables and fruits, is crucial for the contribution to growth and poverty reduction.

Interventions to address climate change

MKUKUTA review also noted that climate change is severely affecting agriculture production, as well as growth and poverty.

"We suggest policies to support adoption of crop varieties and livestock breeds that are resistant to climate change.

Climate change also affects the energy supply.

"We highlight the need to have alternative sources and gradually reduce Tanzania's dependence on hydropower," says Mduma.

The volumes of water fluctuate and are erratic due to several droughts over the last ten years. Therefore the new MKUKUTA recommends

speeding up the exploitation of natural gas and other energy sources such as wind and solar. Off-grid distribution – small hydro or thermal plants – seems to be the best strategy for villages far away from the national grid.

"We also need to intervene against the health effects of climate change, such as disease outbreaks. Climate change is likely to influence outbreaks of zoonotic diseases, which attack animals, as well as the spread of malaria where it is not endemic. Such outbreaks will have implications for human resources and budgets, and eventually for growth and poverty reduction," says Mduma.

Urban planning and employment strategies

Population growth and Tanzania's rapid urbanization are of course highly relevant issues with respect to poverty reduction. Decent shelters in urban areas and urban planning are among the specific goals in the new strategy.

Employment is equally important, particularly youth employment. MKUKUTA II states that growth should generate decent jobs in the mineral, tourism and agriculture sectors: Jobs should pay well enough to lift people from poverty, and strategies for labour market regulations are indicated.

Mduma enjoys the MKUKUTA work: "Technically I saw a window where I can use my expertise; at the same time by working with the government I have diversified my knowledge and broadened my skills".

About

Tanzania's National Strategy for Growth and Reduction of Poverty, NSGRP

Mkakati WA Kukuza Uchumi Na Kupunguza Umaskini Tanzania, MKUKUTA

The second, new NSGRP/MKUKUTA will be implemented 2011-2015. NSGRP/MKUKUTA is committed to the Millennium Development Goals (MDGs) as internationally agreed targets for reducing poverty, hunger, diseases, illiteracy, environmental degradation and discrimination against women by 2015.

The focus of NSGRP/MKUKUTA is outcome orientated and organized around three clusters: growth and reduction of income poverty, improved quality of life and social well-being, and governance and accountability.

The former NSGRP/MKUKUTA was approved in February 2005 for implementation over five years and is the successor to the Poverty Reduction Strategy Paper.

division (PEED), under UNDP support conducted a technical session on Pro-Poor Growth with focus on various themes for higher learning institutions. This training workshop took place in Dodoma at St. Gaspar Conference from 22nd to 25th September 2010. This workshop aims at engaging representatives of research and higher institutes of learning in raising debate on Pro-Poor growth policies in the context of MKUKUTA II implementation. The first day of the workshop was devoted towards reviewing training manuals developed by members of staff before embarking on pro-poor policy training.

Mkukuta II Sensitization workshop series of higher learning institutions

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

A workshop on human development approach

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

The forest of Kibaha's Ruvu North Forest Reserve is under study by EfD researchers Elizabeth Robinson and Jo Albers. This picture shows the status of the forest and indicates that illegal activities are taking place.



RESEARCH 2010: PUBLICATIONS

PEER REVIEWED

"Sizing Reserves within a Landscape: The Roles of Villagers' Reactions and the Ecological-Socioeconomic Setting"

Elizabeth J. Z. Robinson, Heidi J. Albers, and Jeffrey C. Williams
Land Economics 87(2):233-249 (2011)

"A spatial-temporal analysis of the impact of access restrictions on forest landscapes and household welfare in Tanzania"

Elizabeth J.Z. Robinson, and Razack B. Lokina, 2010
Forest Policy and Economics Journal, 2010, 10.1016/j.forpol.2010.08.003

"Regulatory Compliance in Lake Victoria Fisheries"

Eggert, H. and R. Lokina
Environment and Development Economics Volume 15(2), 197-217, 2010.

Protecting Developing Countries' Forests: Enforcement in Theory and Practice

Elizabeth J. Z. Robinson, Ajay Kumar Mahapatra, and Heidi J. Albers. 2010.
Journal of Natural Resources Policy Research, Volume 2 Issue 1, 25-38.

EFD DISCUSSION PAPERS

The Poverty Demography Trap in Third World Countries: Empirical Evidence from Tanzania.

In this paper, the relation between poverty indicators and demographic variables is explored using household survey data from two regions

in Northern Tanzania (the Lake Victoria area). Asmerom Kidane (2010), "The Poverty Demography Trap in Third World Countries Empirical Evidence from Tanzania", EfD Discussion Paper 10-08, a joint publication of the Environment for Development Initiative and Resources for the Future (www.rff.org), Washington DC. March 2010.

REPORTS

Poverty-Environment Policy Analysis.

K. Kulindwa, R. Lokina & A. Hepelwa. 2010.
Ministry of Finance and Economic Affairs

Mainstreaming Environment Into Mkukuta II Process

Longinus Rutasitara, Razack B. Lokina and Fredrick Yona. June, 2010.



PROJECTS

Protecting Peri-Urban forests and livelihoods: Spatial Enforcement Issues and Incentives for Community-Based Initiatives

This project stems from discussions with forest managers whose existing policies have not created the hoped-for incentives for locals to engage in enforcement of access restrictions by outsiders. This is particularly important for Kibaha's forests because of their proximity to Dar es Salaam, a large city with high demand for charcoal and timber. Forest managers do not have mechanisms for influencing where local villagers harvest NTFPs; they also have little information on which to base their allocation of scarce patrol efforts.

Despite the introduction of participatory forest management (PFM) in many low-income countries, protecting these forests from over-exploitation whilst ensuring that nearby forest-dependent household' livelihoods are not harmed by reduced access to forest resources remains a problem. In Kibaha's

forests in Tanzania, nearby communities that have in the past relied on the forests have lost access to important forest resources and have little incentive to stop more distant individuals and groups from degrading the forests. Forest officials have the incentive, but lack funds and appropriate enforcement strategies to protect the forests. As a consequence, nearby communities are worse off and the forests continue to be degraded. The key problem we therefore address is the issue of enforcing forest access restrictions in low-income countries in the context of limited property rights institutions, whilst reducing the negative impact on nearby communities.

The specific objectives of this research project are to improve forest managers' abilities to control forest resource degradation through the development of spatially-oriented forest management policies; and to enhance the livelihoods of households living near to protected forests through the design of incentive systems

that encourage these households to enforce access restrictions against outsiders whilst allowing them to benefit from improved forest management.

The resulting spatially-explicit policy recommendation will lead directly to improved forest management and to improved livelihoods of local people. First, spatial data on enforcement and illegal activities will identify priorities for enforcement/patrol patterns and will thereby improve resource protection. Second, the extraction analysis will generate spatial policy tools such as the location of permits for fuelwood extraction and government investments in local beekeeping. Such tools will enable policy makers and local communities to create incentives for rural people to enforce access restrictions on non-locals and will enable forest managers to more adequately protect particularly sensitive or vulnerable areas of the forest. The project will be implemented in the forests in Kibaha district, Pwani Region, Tanzania,

RESEARCH PRESENTATIONS AT WORKSHOPS, MEETINGS & CONFERENCES

Environment for Development Initiative Annual Meeting. Ethiopia. October, 2010.

Albers, Mduma, Hepelwa, Lokina

The Bees and the Trees: Enforcement and Poverty Alleviation Projects in Tanzania's Forests.

Scale, location and spatial interactions in the economic analysis of multi-functional natural resources: Lessons for forestry Workshop. INRA – Laboratoire D'Economie Forestiere. Nancy, France. September, 2010.

Albers

Spatial Non-Timber Forest Product Extraction and Enforcement: Policy, REDD, and Econometrics.

World Congress of Environmental and Resource Economists. Montreal, Canada. June, 2010.

Albers and E.J.Z. Robinson

The Bees and the Trees: Using enforcement and income projects to protect forests and rural livelihoods through spatial joint production.

Sustainability Science for Food, Forests, and Floods: Integrating Climate Adaptation and Pro-Poor Resource Management Workshop. East-West Center, University of Hawaii, Honolulu. May, 2010.

Albers

Parks, Buffers and REDD Instruments in an Ecological-socioeconomic Setting



Fishermen, Mnazi Bay, southern Tanzania

including the Ruvu North and Ruvu South Forest Reserves. These forests are near to large urban settlements and so face particular pressure from urban demands for charcoal. The research will be done in collaboration with Tanzania Forest Research Institute and the Ruvu Fuelwood Project.

Incentives to Cooperate with Marine Protected Areas As a Function of Location: Mnazi Bay Ruvuma Estuary Marine Park Case Study

As marine protected areas (MPAs) are applied in poor countries, and in particular in Mnazi Bay, Tanzania, managers recognize that the success of the MPA in protecting fish, biodiversity, and reefs stems from the response of local people – whether that response comes from direct enforcement activities or from incentives to cooperate with new restrictions. In Mnazi Bay, managers are combining enforcement of new regulations on fishing locations and technology

with investments in community-based projects and resource management councils and widespread education efforts. In the terrestrial setting, integrated development-conservation projects (ICDPs) typically failed due to a lack of linkage between the development projects and conservation incentives and goals, leaving the development projects as compensation for losses associated with enforcement of access restrictions. MPA implementation seeks to avoid such failures and induce cooperation by focusing on projects that rely on healthy oceans and mangrove forests in addition to providing new technologies like larger mesh nets.

The specific objectives of this research project are to improve the sustainable management of Mnazi Bay Ruvuma Estuary Park through both the creation of incentives for villages to cooperate with access restrictions, and improved prioritization of MPA spending; and to reduce poverty in villages adjacent to the marine park through improved incentives

created by MPA-sponsored projects linked to MPA access restrictions.

This project will develop models informed by the Mnazi Bay setting to describe the policies needed to establish cooperation amongst villagers to improve the success of MPAs. These models will reflect the spatial characteristics of the coastal fishing setting, the interactions amongst villagers, the role of enforcement, and the creation of incentives for cooperation. By enabling Mnazi Bay MPA managers to prioritize their spending in particular villages and on particular activities more effectively, the project aims to improve both the ecological contribution of the MPA and nearby villagers' livelihoods.

The project will be implemented in Mnazi Bay, on the coast of Tanzania, adjacent to Mozambique. The findings will have relevance to many MPAs that share the characteristics of involving a number of different villages along an MPA coastline.

Computational Sustainability, NSF Site visit. Cornell University. May, 2010.

Albers

Optimal Spatial Invasive Species Management: Economics and Computer Programming

International Conference: Environment and Natural resources management in developing and Transition Economies, organized by CERDI, France, Nov. 2010

Aloyce S. Hepelwa

Environmental and socioeconomic factors influencing crop cultivation. An application of Multivariate Discriminant Analysis (MDA) model in Sigi catchment, Tanzania

The 4th annual EfD (Environment for Development) meeting with the Secretariat of the EfD initiative. Addis Ababa October 28th – Nov. 1st 2010.

Aloyce S. Hepelwa





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ACADEMIC CAPACITY BUILDING

There are two graduate economics programs at the Department of Economics, Masters and Ph.D. These programs are run in collaboration with the African Economic Research Consortium (AERC).

EfD Tanzania members are involved in teaching and supervising the students. The EfD also provides financial support to graduate students who write policy oriented theses in the areas of environmental and resource economics

The collaborative MSc and PhD programme in the Department of Economics University of Dar es Salaam is for sub-Saharan Africa. The programmes are conducted through course-work and dissertation. The University of Dar es Salaam is one of the four host universities in the sub region.

MSC THESIS TITLES AND NAMES

The Impact of Coastal and Marine management Projects on Coastal Communities Sustainable livelihood (The case of MACEMP- Mafia)

Dr. Razack Lokina & Dr. Adolf Mkenda,
Ms. Joyce Gervas

A study on the Sustainable Exploitation of Marine fish Resources” Case Study of Mafia

Dr. Razack Lokina & Prof. Kassim Kulindwa
Mr. Kassimu Eliamini,

Measuring Recreational Benefits: The case study of Jozani forest in Zanzibar

Dr. Adolf Mkenda, Dr. John Mduma
Mr. Goodluck Michael

PHD THESIS TITLES AND NAMES

Environmental sustainability of clean production Process: A micro and Macro level Technical and Environmental efficiency Analysis of manufacturing center in Kenya

Dr. Razack Lokina & Dr Godius Kahyarara
Ms. Mercyline Kamande

Environmental Resources Sustainability Indicators: An Integrated Assessment model for Tanzania Prof. Kassim Kulindwa

Mr. Alyoce Hepelwa

Factors and impact of land conservation Technologies adoption on smallholder agriculture in Tanzania

Dr. R. Lokina, Dr. J. Mduma & Prof. E.J. Robinson
Mr. Onesmo Selejo

Climate change Mitigation and adaptation in Cameroon forest sector: Impact on Rural communities in the context of REDD.

Dr. Razack Lokina & Dr Godius Kahyarara
Ms Tafah Akwi

Under graduate courses in environmental economics

Course 1: Natural Resources Economics*
Course 2: Environmental Economics*
Course 3: Public Economics *

Students

36
15
85

Fellow

Razack Lokina
Razack Lokina
Adolf Mkenda

Master courses in environmental economics

Course 1: Quantitative Methods*
Course 2: Econometrics*

Students

21
21

Fellow

Razack Lokina & Welhelmin Ngasamiaku
John Mduma, Razack Lokina, & Adolf Mkenda

PhD courses in environmental economics

Course 1: Quantitative Methods
Course 2: Advanced Microeconomics
Course 2: Econometrics

Students

13
13
13

Fellow

Razack Lokina
Razack Lokina & Adolf Mkenda
Adolf Mkenda

*) University of Dar es Salaam



THE TANZANIAN NODE IN THE EFD NETWORK

The EfD in Tanzania, through the promotion of policy relevant and academically rigorous research, provides economic analysis that supports national environmental management and policy to reduce poverty and promote sustainable national welfare.

The EfD in Tanzania is among six centers in the EfD initiatives, an international network which is currently funded by the Swedish International Development Co-operation Agency Sida. EfD Tanzania is working in collaboration with the Environmental Economics Unit (EEU) at the University of Gothenburg. The EfD Tanzania is located within the Department of Economics at the University of Dar es Salaam, the largest and oldest university in the country. The Department of Economics is one of the leading economics departments in the region. It offers both undergraduate, Masters and PhD specialization courses in environment and economics. These are analogous by the collaborative courses under the African Economic Research Consortium (AERC) programs in joint electives facility.

The main goal of the EfD Tanzania is to support poverty alleviation and sustainable development through increased use of environmental economics capacity in policy making processes. Specific objectives include:

- Increasing the number of trained environmental economists by creating auspicious working environment for environmental Economists. This is achieved through, among other things, providing research grants for local MA economics and Ph.D candidates writing on environmental and poverty.
- Strengthen the capacity of environmental economics and economics graduates to do applied research on poverty and environmental management.
- Increasing environmental awareness among policy makers and creating better understanding of environmental realities.
- Organizing workshops, conferences, and internal seminars.
- Distribute research publications and policy briefs, build capacity of civil servants and other stakeholders on environmental and development issues with the objective of increasing awareness of the link between environment management and poverty reduction.

EfD Tanzania's Vision

EfD Tanzania vision is to be the leading center for environmental economics and a locus for interactions among researchers, civil servants and policy maker interested in policy oriented environmental research in Tanzania.

EfD Tanzania's Mission

The mission is to conduct a high profile research and to provide quality policy advice to the government and other stake holders based on quality objective research and to engage in capacity building to reduce poverty and contribute to sustainability. Members of the center are building links with government departments and agencies responsible for environmental management and poverty issues.

The EfD Tanzania is located within the Department of Economics at the University of Dar es Salaam, the largest and oldest university in the country. The Department of Economics is one of the leading economics departments in the region. It offers both undergraduate, Masters and PhD specialization courses in environment and economics. These are analogous by the collaborative courses under the African Economic Research Consortium (AERC) programs in joint electives facility.

Staff

LOCAL RESEARCHERS AND STAFF

Razack Bakari Lokina (PhD)

SR. LECTURER, COORDINATOR & RESEARCH FELLOW

Razack Lokina is the Coordinator of EfD in Tanzania. He is a professional environmental economist with a PhD degree who lectures in Microeconomics, Environmental and Natural Resource Economics, Quantitative methods and Econometrics, Project Appraisal and Planning, and conducts research and consultancy in poverty, resource, and environmental economics. He has spent about five years working with applications of environmental economics in various aspects. In a previous assignment he was assigned the responsibilities of a team leader and member of the team in a study on

the current allocation of Monitoring, Control and Surveillance (MCS) resource and placed in the context of the national fisheries (2005). He was also involved in a team of expert in conducting a study on Integrated Ecosystem Assessment, which is a global initiative to protect the mountain ecosystem. Recently he has been involved in the preparation of the State of the Coastal reports. His major task was in data analysis, and report writing. Currently is leading a team of Experts in conducting the Economic Valuation of the Ihefu Wetland an initiative under the VPO funded by UNEP.

Dr. Lokina areas of expertise and research are on Productivity and Efficiency – application of stochastic production function in fisheries, Compliance and Governance: With a focus in fisheries. Others areas are in Forestry Valuation: Application of contingent valuation method on water resources; choice experiment on fisheries and Forestry – Analysis of the effectiveness of Participatory Forest Management in Tanzania Environmental policy – review of policies in Tanzania.

John K. Mduma (PhD)

SENIOR LECTURER & RESEARCH FELLOW

Dr. John K. Mduma is currently a Senior lecturer of economics at the University of Dar es Salaam. His research interests include soil and water conservation, rural labor markets, and applied spatial econometrics. His recent



Razack Lokina

Our networks

The EfD Tanzania has created a good internal and external links in the region. The center works closely with University of Dar es Salaam <http://www.udsm.ac.tz>, the Department of Economics and other government organs.

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

Funders/Donors

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

Total number of staff in full time equivalent:	6.7
Number of donors	4
List of Donors	Funding by Donor during 2010
1) University of Dar es salaam	4%
2) UNEP/Vice President Office	14%
3) UNDP/Ministry of Finance	19%
4. Sida/EfD funding as share of total center budget (incl eg univ salary)	63%

research includes investigation of income polarization and simulation of evolution of poverty in Tanzania. Mduma has been a consultant at the World Bank, Dar es Salaam office, ARTUMAS Groups Inc. (in Gas and Electricity Project in Tanzania) and he is a member of the National Technical Working Group of the Tanzania Panel Data Survey Project. He received his Ph.D. from the University of Bonn in October 2006 and his dissertation dealt with effects of rural labor markets on soil and water conservation in Tanzania. His research has been published in African Study Quarterly, Journal of Applied Sciences, and Journal of Agronomy. His areas of Expertise/Research are in Applied spatial econometrics Resources and Development Economics

Adolf Faustine Mkenda (PhD)

SENIOR LECTURER & RESEARCH FELLOW

Adolf F. Mkenda is a Senior Lecturer of economics at the University of Dar es Salaam and

head of the Economics Department. He holds a PhD from Gothenburg University obtained in 2001, specializing in resource and environmental economics. His PhD thesis was on "Fishery Resources and Welfare in Rural Zanzibar". He has served as a visiting lecturer to the Joint Faculty for Electives for the Collaborative Masters of Economics Program in Nairobi for three years and also taught micro econometrics as a visiting lecturer at the CEEPA (Center for Environmental Economics and Policy in Africa), based at the University of Pretoria, and also at the CMAAE (Collaborative Masters Program in Agricultural and Applied Economics in Eastern, Central and Southern Africa), also at the University of Pretoria. He is currently involved in the use of household budget survey data to assess issues of growth and distribution in Tanzania, and is applying other micro-data in the preparation of the Zanzibar Human Development Report for 2009. He is also using household budget survey data to assess

the scope for environmental fiscal reforms in Tanzania with respect to fuel taxation. Adolf is currently serving as Associate Dean (Academic) for the Faculty of Arts and Social Sciences. He is married with four daughters. Adolf's main area of research interest is in welfare economics and micro econometrics.

Mr. Salvatory Macha

PROJECT ADMINISTRATOR

Mr. Salvatory Macha is a project Administrator of Environment for Development Tanzania (EfD Tanzania), Department of Economics University of Dar es Salaam. In 2005 he completed his MA (Demography) based on Population Resources and Environment, Population Trends and process and statistics. He coordinates all the logistics and gives research support to all EfD Tanzania projects including data gathering and data management. He is also responsible for all training logistics, dissemination of information's and EfD Tanzania webpage editor.



John Mduma



Adolf Mkenda



Salvatory Macha



Mr. Wilhelm Ngasamiaku**ASS. LECTURER & RESEARCH FELLOW - PHD STUD.**

Mr. Ngasamiaku is an Assistant Lecturer, Department of Economics of the University of Dar es Salaam where he has taught Economic Theory (microeconomics and macroeconomics), public sector economics and Mathematics for economists for undergraduate students. Apart from teaching, he also participates in various research and consulting works in his field of expertise. Before joining the Department of Economics, Ngasamiaku worked as a consultant at the World Bank Tanzania Country Office as an Assistant Research Analyst. He is currently a doctorate candidate at the University of Dar es Salaam, under the Collaborative PhD Programme (CPP) for Africa.

Mr. Onesmo Selejio**ASS. LECTURER & RESEARCH FELLOW - PHD STUD.**

Mr. Onesmo Selejio is an Assistant Lecturer and PhD student in the Department of Economics, University of Dar es Salaam. He has taught Microeconomics and Agricultural Economics for undergraduates. Before joining the Department of Economics, he worked with INADES Formation Tanzania (IFTz), an NGO affiliated to IF-International network, dealing with rural economic development and environment issues. He was also a consultant of National Farmers Groups Network in Tanzania for undertaking Rural Marketing Development Project (RMDP) financed by French Development Agency (AFD). Apart from teaching at University of Dar es Salaam, he has been participating in different research and consultant works in areas of his expertise. Currently, Selejio is perusing a PhD programme by Coursework at University of Dar es Salaam under the Collaborative PhD Programme (CPP) for Africa. His area of Expertise and Research is on Agricultural Economics and Environment Economics Rural finance and microfinance issues

Mr. Aloyce Hepelwa**ASS. LECTURER & RESEARCH FELLOW - PHD STUD.**

Aloyce Hepelwa is a holder of BA (Statistics) of the University of Dar es Salaam, MA (Economic Policy Management) of Makerere University Kampala, Regional Master Degree Courses in Environmental Economics and Policy: Center for Environmental Economics and Policy (CEEPA), University of Pretoria. He is in fourth year PhD studies at Vrije Universiteit Brussel (VUB). His PhD is researching on "Environmental Resources Sustainability Indicators: An Integrated Assessment Model for Tanzania".

The PhD project is focusing on the definition and analysis of quantitative indicators for sustainable use of water and forest resources in Tanzania. He is working with the University of Dar es Salaam as Assistant lecturer and is Efd Research Fellow. His research interest is in integrated assessment, valuation and management of environmental resources through use of the GIS based tools.

Mr. Amosi Mutanaga**ACCOUNTANT**

Mr. Amosi Mutanaga is an accountant in the University of Dar es Salaam. He is serving the Department of Economics and work as a part time with the Efd Tanzania. He assists in financial reporting and reimbursement of expenses, accounting expenses and bank transactions.

Margaret Banga (PhD)**LECTURER AND POST DOC**

Banga is a Lecturer at the Institute of Statistics and Applied Economics, Makerere University. She holds a PhD (Economics) from the University of Dar-es-Salaam obtained in 2008. At the PhD level, she specialized in Environmental Economics and her Thesis was on "Economics of Solid Waste Management. The Case of Kampala City, Uganda". Her previous academic qualifications include: MSc (Quantitative Development Economics) from the University of Warwick (UK) and B. Statistics from Makerere University (Uganda). Her research interests are within Environmental Economics and her work so far has focused on Solid Waste. Methodologically she has a focus on Non Market valuation techniques.

INTERNATIONAL ASSOCIATES**Heidi J. Albers****ASSOCIATE PROFESSOR**

Heidi J. Albers currently is working in the Department of Forest Ecosystem and Society at Oregon State University. She is Associate Professor in Applied economics. She has been working in collaboration with the Efd in Tanzania in the area of forest researches. Her Research interest is on Resource management decisions over time (under uncertainty) and space; public-private land conservation; spatial and rural welfare aspects of (international and domestic) biodiversity conservation; spatial and intertemporal land use management in the face of invasive species; and forest management with risk (fire, disease).

Elizabeth J.Z. Robinson**ASSOCIATE PROFESSOR**

Elizabeth Robinson is an associate professor in environmental economics at the Department of Economics, School of Business, Economics and Law, at the University of Gothenburg, and a visiting fellow with the International Food Policy Research Institute (IFPRI) in Ghana. Elizabeth lived in Tanzania for over four years where she worked with Environment for Development Tanzania as a research associate and taught on the AERC Collaborative Economics PhD programme at the University of Dar es Salaam. Elizabeth's research focuses on the intersection of people and the natural environment, in particular how policies and institutions can be designed to protect both resource-dependent livelihoods and the natural resource base. Methodologically, Elizabeth focuses on explicitly spatial and temporal models of resource extraction, on spatial optimal enforcement models, and combining anthropological and economic data collection approaches. Her current research in Tanzania includes: Designing optimal incentives and spatial enforcement mechanisms for managing wildlife and forests; Improving the potential for successful implementation of REDD in Tanzania; and Assessing Tanzania's marine protected areas. Elizabeth's recent research focusing on the interface between people and protected areas has been published in the Journal of Environmental Economics and Management and Land Economics amongst other journals.

DOMESTIC ASSOCIATES**Professor Asmerom Kidane**

Asmerom Kidane is a Professor of Economics and Statistics in the Department of Economics, University of Dar es Salaam. His major research interest is Microeconometrics-especially Economic Demographic modeling. Over the past thirty six years he has published in regional and international journals and presented papers in many conferences. As a graduate student he was an AFGRAD fellow. He has been Visiting Professor in several universities in the USA, South Africa and currently in Tanzania. His Research area is on Economic Demographic Modelling Demography Poverty Trap, Welfare Economics Quality, Reliability and Consistency of African Data.

SPREADING THE WORD

News about research and policy interaction.



Fishermen pull up their boat at the end of a day's fishing in the estuary near Mnazi Bay

2010-12-30

Policy seminars series, workshops

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

2010-12-16

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

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

2010-09-09

EfD Tanzania on the back cover page of MAPAMBANO Magazine Mapambano which literally mean "fighting"

The magazine is published by the Ministry of Finance and Economic Af-

fairs to brief on Tanzania's efforts in fighting against all forms of poverty. The theme of this issue, January – June 2010, covers evaluation of the National Strategy for Growth and Reduction of Poverty (NSGRP) 2005 - 2010 and focuses on NSGRP 2010 – 2015. The increased role of natural resources in poverty reduction stipulated in NSGRP 2010-15 is an area where contribution of the EfD Tanzania would be highly valuable. Dr. John K. Mduma, EfD Tanzania research fellow, was in the technical committee which drafted NSGRP II.

2010-03-26

EfD Tanzania contributes to national strategy for poverty reduction

A sharper and more focused national strategy for growth and poverty reduction for the coming five years – that is the aim of an ongoing rigorous review of Tanzania's first National Strategy for Growth and Reduction of Poverty (NSGRP). EfD researcher John Kedi Mduma is a technical advisor to the review process under the Minister of Finance and Economic Affairs, and EfD Coordinator Dr. Razack Lokina provides research studies, commissioned by the Government, to fill certain information gaps.



WEBSITE VISITORS AND NUMBER OF DOWNLOADS

The website is an important channel for making EfD research work visible – and it is becoming more and more visible. The web statistics for 2010 shows that more than 35,000 people visited our website this year, and the number of visits was 48,000. When we compare 2010 and 2009, we find that there are more visits, more unique visitors, and more pageviews in 2010 than in 2009. File downloads is another web statistics figure. In 2010, 267 different files have been downloaded a total of 4,901 times.

EfD Website

47,695

Visits in 2010

Of all these visits were 72.84 percent new visits, a 32.29 percent increase compared to previous year (36,054 visits.) Unique Visitors: 35,435 an increase of 34.58 percent compared to previous year (26,330 unique visitors.)

133,296

Pageviews in 2010

This is +16.26 percent compared to previous year (114,654 pageviews.)

4,901

File Downloads in 2010

In 2010, 267 different files have been downloaded a total of 4,901 times.

Website Center section of EfD Tanzania

2,835

pageviews in 2010 (179 pages).

Top 7 Most visited Tanzania webpages 2010

Home page Tanzania	582 views	efd-tanzaniacontributes-to-national-	
People	293 views	strategy-forpoverty-reduction	76 views
About	128 views	About-nsgpr-mkukuta	65 views
Climate-changepolicy-research-in-tan...	86 views	Policymaking	64 views

File downloads - Top 5 list of 2010

First a policy brief/workshop summary on "Policies to increase forest cover in Ethiopia: A summary of the main outcomes of a workshop in 2007". It has been downloaded 194 times this year.

Second is a journal article by Jesper Stage, "Economic valuation of climate change adaptation in developing countries". It has been downloaded 119 times this year.

Third is an EfD/World Bank report by Yesuf Mahmud, Alemu Mekonnen, Menale Kassie, John Pender, 2007, titled "Cost of Land Degradation in Ethiopia: A critical review of past studies", report, EfD/WB. It has been downloaded 109 times this year.

Fourth is an EfD Discussion Paper by Zenebe Gebreegziabher, Alemu Mekonnen, Menale Kassie, and Gunnar Köhlin, "Household Tree Planting in Tigray, Northern Ethiopia". It has been downloaded 102 times this year.

Fifth is a job advertisement from CIFOR seeking doctoral students interested in research on REDD for possible collaboration with their four-year Global Comparative Study onReducing Emissions from Deforestation and Degradation (GCS-REDD). It has been downloaded 97 times this year.

Top Landing Pages

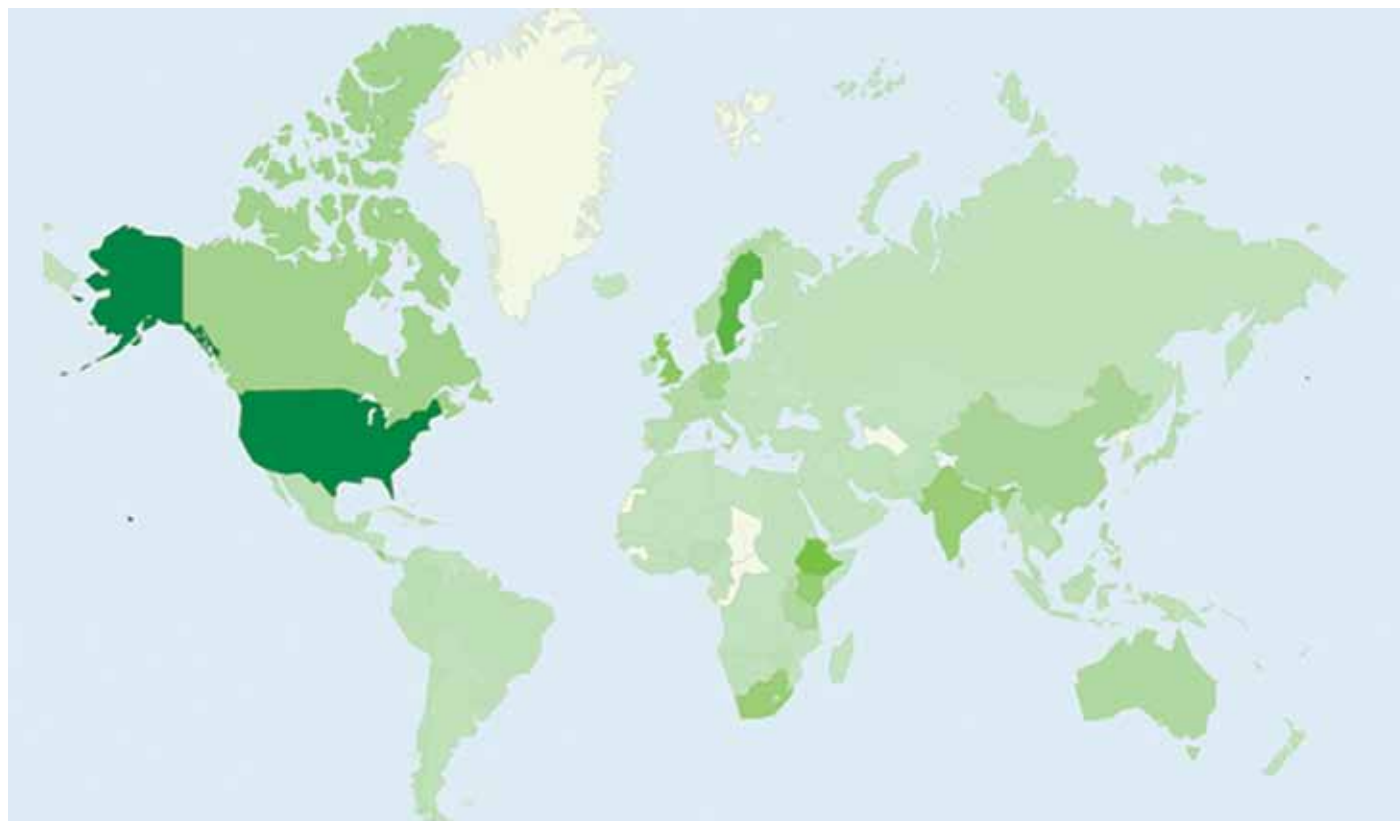
47,660 visits entered the site through 2,949 pages.

The Top Landing pages were:

First page	5,568 entrances
Over-fishing-of-nile-perchin-lake-victoria	724 entrances
Kenyasnatural-resources-need-economic-instruments-efdresearchers-invited-to-public-hearing	611 entrances
Policies-to-increase-forest-cover-in-ethiopia	555 entrances
The-economics-ofsolid-waste-management-	

the-case-of-kampala-uganda	546 entrances
Essays-onenvironmental-policy-making-in-developing-countriesapplications-to-costa-rica	481 entrances
Incentivebased-regulation-of-co2-emissions-from-internationalaviation	479 entrances
The-kenyavision-2030-and-the-environment-issues-and-challenges	479 entrances
Theprogress-of-ghg-markets-opportunities-and-risks	471 entrances
Casestudy-2-zimbabwe-economy-wide-policies-anddeforestation-applied-general-equilibrium-modelling	412 entrances
Unexpert-group-meeting-how-can-researchers-contributeto-productive-and-sustainable-agriculture-in-africa	393 entrances
Job-openings	336 entrances
Eeu-Sweden/Academic-program-phdprogram	300 entrances

Top Countries: People in 190 countries visited the site and as seen in the map below there are few completely white nations on the world map. The darker green color indicates more web traffic.



Greenaccounting-puts-price-on-ethiopian-soil-erosion-anddeforestation 279 entrances
Workshop-on-accounts-of-land-resources-ofethiopia 266 entrances

Top Content

9,660 pages were viewed a total of 133,296 times.

The most visited pages were:

First page	8,615 pageviews
Job-openings	2,083 pageviews
Ethiopia	1,235 pageviews
central-america	1,089 pageviews
EFD/About	1,037 pageviews
Central-america/People	863 pageviews
Policies-to-increaseforest-cover-in-ethiopia	805 pageviews
Overfishing-of-nile-perch-in-lake-victoria	794 pageviews
Kenya	782 pageviews

china	751 pageviews
Researchfellows	728 pageviews
Publications	691 pageviews
Kenyas-naturalresources-need-economicinstruments	681 pageviews
South-africa	663 pageviews
Funding	647 pageviews
The-economics-of-solidwaste-management-the-case-ofkampala-uganda	643 pageviews
People	631 pageviews
South-africa/People	610 pageviews
Tanzania	582 pageviews

Top 20 countries

People in 190 countries visited the site. The Top

Twenty countries were:

United States	9,266 visits
Ethiopia	4,213 visits
Sweden	3,321 visits

United Kingdom	2,968 visits
South Africa	2,212 visits
Kenya	2,182 visits
India	2,119 visits
Costa Rica	1,639 visits
Canada	1,448 visits
Germany	1,361 visits
China	1,090 visits
Tanzania	925 visits
Netherlands	800 visits
Australia	792 visits
Norway	624 visits
Italy	587 visits
France	573 visits
Philippines	558 visits
Vietnam	501 visits
Uganda	484 visits



THE EFD INITIATIVE IN BRIEF

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. Through local capacity building in environmental economics focusing on research, policy advice, and teaching, the EfD centers in Central America, China, Ethiopia, Kenya, South Africa, and Tanzania strive to contribute to better environmental policies and poverty reduction.

The EfD research emanates from the policy priorities of the host countries. This has led to a research focus on natural resources. The research-policy impact is increasing. The “EfD approach” is to build strong long-term collaborations between academics and with key ministries and decision makers. In addition, environmental economists are trained in master and doctoral programs in the respective country.

The Environmental Economics Unit at University of Gothenburg is coordinating the initiative. Resources for the Future in Washington DC is a partner involved in research and publication of the EfD/RFF discussion paper and book series. The EfD initiative started in 2007 and receives core support from the Swedish International Development Cooperation Agency (Sida). EfD builds on the environmental economics capacity building program that Sida has been supporting at University of Gothenburg since 1991 as a tool to implement sustainable development. The program, including EfD, is designed to enable researchers trained abroad to come home and become productive as applied researchers, teachers and policy advisors. By now 20 PhD's have graduated from the doctoral program in Gothenburg, and 17 of these are currently working in developing countries. In addition 7 post docs have been recruited to EfD centers from outside the program.

Research

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

At the beginning of 2010, about SEK 2 million

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

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

Fuelwood Project on two research projects co-funded by the EfD in fisheries and forestry. There is more work going on in Tanzania which seeks to directly address poverty issues in that country. EfD-South Africa had seven research projects in 2010. These fell into the following themes: climate change, parks and wildlife, and policy design. Three of the projects were co-funded by the Vice Chancellor of the University of Cape Town as part of the newly established African Climate Development Initiative at that university. The case at EfD-South Africa demonstrates how synergies between EfD research and universities' priorities can be exploited to secure additional financial support from host universities.

In terms of research output, 2010 was a successful year in terms of EfD discussion papers, peer reviewed articles and other outputs. There were 36 peer-reviewed articles, 27 discussion papers and 12 books and book chapters.. The figures for these categories represent an overall growth of 4 percent from the 2009 levels but the really remarkable fact is that the number of peer reviewed articles have increased to such an extent, from 14 in 2009 to 36 in 2010. The peer-reviewed articles mainly focused on agriculture (6), forestry (7) and policy design (15) even though there were outputs on each of the EfD themes. Notable in 2010 is that four of the centers also produced and disseminated policy briefs and other reports.

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

EFD CENTERS

There are six EfD centers, hosted by universities or academic institutions in each respective country. For more information on each center, please contact the coordinators:

CENTRAL AMERICA

Environment for Development Program for Central America
Centro Agronómico Tropical de Investigación y Enseñanza (CATIE)
Dr. Francisco Alpizar, Coordinator
Email: falpizar@catie.ac.cr
Phone: +506 558 2215 /2624



CHINA

Environmental Economics Program
Peking University
Dr. Jintao Xu, Coordinator
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, Coordinator
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: wnyangena@kippra.or.ke
Phone: +254 20 316282



SOUTH AFRICA

Environmental Economics Policy Research Unit
University of Cape Town
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TANZANIA

Environment for Development Tanzania
University of Dar es Salaam
Dr. Razack Lokina, Coordinator
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 Göteborg University, 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, Göteborg University
Email: gunnar.kohlin@economics.gu.se
Phone: +46 31 786 4426

Professor Thomas Sterner

Environmental Economics Unit (EEU), Göteborg University
Email: thomas.sterner@economics.gu.se
Phone: +46 31 786 1377

Karin Backteman, Communications officer

Environmental Economics Unit (EEU), Göteborg University
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.





Fishermen, Mnazi Bay, southern Tanzania



More information & Contact us

Once you've read this report you might want to know more about our work and the EfD initiative.

For more information please visit www.efdinitiative.org/centers/tanzania

You are most welcome to contact us:

Razack Lokina (PhD), Coordinator of EfD Tanzania

Environment for Development in Tanzania

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Dar Es Salaam, Tanzania .

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