

The logo for Environment for Development (EFD) features the letters 'EFD' in a bold, green, sans-serif font. Above the letters is a thick black horizontal bar, and below them is a thinner black horizontal bar.


Environment for Development



## EFD INITIATIVE CENTER REPORT

# TANZANIA 2011/12

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.

Three stylized green leaves are positioned in the bottom right corner of the page, arranged diagonally from top-left to bottom-right.

# THIS REPORT

This report presents EfD Tanzania, its members and work during 2011/12. The Tanzanian node of the Environment for Development initiative is based at:

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Razack B. Lokina, Director

## MESSAGE FROM OUR CENTER DIRECTOR

**I**N 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 joined hands and have been conducting research and running training to mid-level government officials at both central and local governments. The center has been a home for environmental economics studies and has created a diverse array of plans 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.

This year the center has extended more in terms of policy advice and now there is an EfD Tanzania member in the Ministry of Water who is involved in the Water Sector Development

Program, 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. On the training and capacity building aspect, the year 2011 the center has marked some achievements. All three students of MA and one PhD, who received financial support from the center during the thesis writing, have graduated this year.

Nevertheless the EfD Tanzania members have managed to attend and contribute to international trainings/workshops, among others the Regional Experts Training course on Ecosystem workshop held in Maputo, Mozambique in 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 had organized the 5th annual meeting in Arusha Tanzania. The meeting attracted researchers from all the centers as well as policy makers from government sectors, agencies and nongovernmental organization and stakeholders dealing with environmental and poverty issues.

EfD Tanzania had hosted visiting researchers and graduate students from different Universities. These are, Mark Purdon, Department of Political Science University of Toronto, Britta Deutsch, International Postgraduate Program, University of Bonn, Prof. Till Stellnachell, University of Hanover, and Prof. Randy Bluffstone, Portland State University.

I would like to take this opportunity to extend my heartfelt gratitude to our partners, the Swedish International Development Agency (Sida) through the Environmental Economics Unit, University of Gothenburg, and the Department of Economics, University of Dar es Salaam. Furthermore, we thank UNDP/UNEP, Ministry of Finance, Division of Environment at the Office of the Vice President, and the National Environmental Management Council for continued collaboration.

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



Mr. Amon Manyama, Chairman, EfD Tanzania Policy Board

## MESSAGE FROM CHAIRMAN POLICY BOARD

**S**INCE THE LAUNCHING of the EfD Center in Tanzania, the governing Board has been providing guidance to the Center in various aspects, including cooperating with research Fellows and strategizing on how to strengthen the EfD impact in the policy processes in Tanzania, mobilizing and establishing co-funding channels, and enhancing communication with key stakeholders. It has been my pleasure to work with Board members and EfD team, which I found to be highly committed and motivated.

I would like to take this opportunity to thank the Board members for their dedication, and the current Donors, Sida through the Unit of Environment Economics at Gothenburg University and the University of Dar es Salaam for continued support to the center. I know it could have been easy for the fellows to conduct their research projects as well as running the center core activities without such support.

As the center continues to fulfill its objectives in research, training and building capacity for young researchers, I will put up greatest efforts as chairman to support the center so that it becomes a center of excellence in research and policy advice on issues related to management of environment for sustainable

development, appropriate resource use and reduction of poverty. The Board will continue to find and devise means to solicit additional co-funding that will support EfD Tanzania to carry out its work plan successfully. In this regard, it is important that that EfD Tanzania finds strategies to strengthening links of its research themes/activities with the national research agenda so as to create room for further collaboration with the government, agencies and non-governmental institutions, and other stakeholders in the environmental management for sustainable development.

Currently, a wide variety of environmental issues, such as global warming and its effects and mitigation measures, environment-poverty nexus, have occupied the center stage in international (for example, recent meetings in Durban in 2011), regional, and national. The messages from those discussions call for a growing necessity for Centers such as EfD and institutions all over the world to cooperate with each other to provide policy options, solutions and advice.

Moving forward, we wish to strengthen our contribution through the angle of research and capacity building in the areas of Environmental and Resources Economics and poverty reduction. As for this, our contribution will argument

those of others players in conservation of nature and maintenance of ecosystem. It is my belief that, in 2012 EfD Tanzania will make the most of its comparative advantage - knowledge and know how, accumulated for over 4 years since its establishment, network outside and inside Tanzania – in carrying out vigorous research and contribute to the conservation of the global environment including mitigation and adaptation to climate change. This is our very mission of EfD Tanzania.

Mr. Amon Manyama  
Chairman, EfD Tanzania Policy Board







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



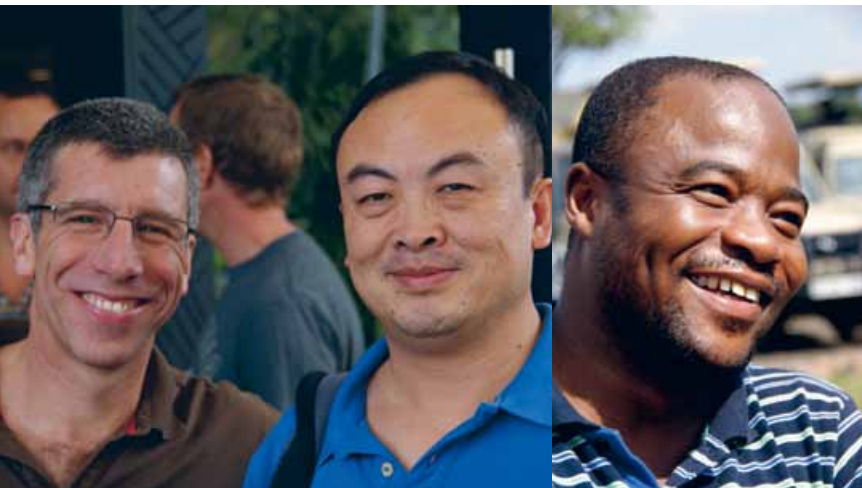
EfD members Razack Lokina, Selma Oliveira, Kofi Vondolia, and Edwin Muchapondwa.



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](http://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](http://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.



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

The EfD center in Tanzania has a governing board that their main task is to advise the center secretariat especially in the issues of policy and networking. The members were picked from government departments and agency.

These EfD Tanzania Policy Board members serve up for the period of three years renewable:

- Mr. Amon Manyama, Chairman, Senior Assistant Resident Representative, Pro-Poor Policy Development and Wealth Creation, UNDP - Tanzania
- Dr. Natu Mwamba, The Deputy Governor Economic and Financial Policies (EFP) in the Bank of Tanzania and
- Department of Economics University of Dar es Salaam
- Mr. Joseph Kihaule, Senior Environmental officer in the Vice President's Office
- Ms. Amina Akida, Principal forest officer, Management information system in the Ministry of Natural Resources and Tourism
- Mr. Servus Sagdays, Assistant Director Poverty Eradication in the Ministry of Finance
- Dr. Longinus Rutasitara, Aid coordination consultancy, External Finance Department in the Ministry of Finance and Senior Lecturer, Department of Economics, University of Dar es Salaam
- Ms. Blandina Cheche, Poverty Environment Coordinator, Vice president's office

## EfD Tanzania Policy Board gets researchers and policy makers communicating

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.

Mr. Ruzika N. Muheto, Director, Environmental Planning and Research, National Environment Management Council, Tanzania, Mr. Amon Manyama, Chairman, EfD Tanzania Policy Board and Senior Assistant Resident Representative, Pro-Poor Policy Development and Wealth Creation, UNDP Tanzania, Dr Julius K. Ningu, Director, Environment Division, Vice-President's Office Tanzania, Mr. John Chikomo, Executive Director, The Journalists Environmental Association of Tanzania (JET), Dr. Razack Lokina, EfD Tanzania Director and Senior Research Fellow, Senior Lecturer, University of Dar es Salaam.



- Mr. Arnold Mapinduzi, Senior Environmental management officer in The National Environment Management Council (NEMC)
- Dr. Razack Lokina, Research Fellow and Director of EfD Tanzania

### National Strategy for Growth and Reduction of Poverty (MKUKUTA)

EfD Tanzania continues to offer technical advice to Ministries and government Agencies in various issues. It is working closely with the Ministry of Finance in Tanzania in implementation of the second phase of the National Strategy for Growth and Reduction of Poverty (MKUKUTA II). The Water Sector Development Program (WSDP) is among the largest programs in Tanzania which implement the MKUKUTA II.

### Water Sector Development Program

One of the EfD members is directly involved in the Water Sector Development Program (WSDP), especially in preparing an Integrated Monitoring and Evaluation Framework of the water sector, which is aligned to the national poverty monitoring framework. It is the plan of the center to get more involved in the policy issues and make sure EfD stretches its visibility to all sectors by offering technical advice and consultancy services.

### International Food Policy Research

#### Institute study of fertilizer use

EfD Tanzania members keep on interacting with other institutions as some

**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 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



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

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.

members have been involved with the International Food Policy Research Institute (IFPRI) on a study of fertilizer supply and use in Tanzania. This was done to better advise the government of Tanzania on how it might make fertilizer available to farmers at lower cost. The commissioned study seeks to understand the challenges farmers face in using fertilizer. The outcome of the report will provide government with a set of actions it can take to improve fertilizer use by farmers, thereby increasing their production and their incomes from farming. This research is purely to provide information to the government of Tanzania so that it can put in place policies and programmes to improve fertilizer use. The preparation of the report used Kilimanjaro, Iringa and Ruvuma Regions as a study area.

### Policy links

The Efd Tanzania has been interacting with international agencies, government departments, and non-governmental organizations in policy issues. The center have had worked 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/>

- Ministry of 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/>

### Policy seminars, workshops and conferences

The year 2011 Efd Tanzania center continue to participate in the local and international workshop conferences and seminars by presenting the papers and play some important roles in those occasions:

### International Growth Center (IGC) conference

The article Lokina, Razack B., Måns Nerman, and Justin Sandefur, 2011, "Poverty & Productivity: Small-Scale Farming in Tanzania, 1991-2007", was presented in the International Growth Center (IGC) conference 2011. <http://www.theigc.org/node/2251>

The role of agriculture in economic growth and the wider structural transformation of Tanzania is a key concern for policy makers. This paper tries to understand time trends in agricultural productivity. The main finding is that the most important source of consumption growth in Tanzania between 1991 and 2007 has been structural change, i.e. people moving out of agriculture.

Within the smallholder agricultural sector, yields of the most important crop – maize – have been declining during the 2000's, and total factor productivity and adoption of technologies such as improved seeds and inorganic fertilizer have been stagnant at best.

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.







EfD Tanzania in collaboration with the Office of the Vice President, Environment Division, and under support of the UNDP Tanzania Country Office, organized a training workshop on Environmental-Poverty Linkages in Morogoro in January 14th-15th, 2011.

“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.



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



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



### **EfD Tanzania Center Members Adolf Mkenda and Razack Lokina conducted training**

The Regional Experts Training workshop on Ecosystem Based Management held in Maputo, Mozambique for three days from 30th November to 2nd December 2011. The workshop drew participants from the Eastern and South African countries that are signatories to the Nairobi Convention of the United Nations Environment Programme (UNEP). The countries include; Kenya, United Republic Tanzania, Mozambique, Republic of South Africa, Seychelles, Mauritius, Madagascar, Comoro, and France (for the Reunion Island).

The Training Workshop was an interdisciplinary course that focused on the development and implementation of ecosystem approaches to the management of human activities and their impacts on the coastal and marine environment. The course was delivered through lectures and presentations by practitioners with expertise in relevant fields.

Adolf also attended the sixteen meeting of the Ad hoc legal and Technical working group on Intergraded Coastal Zone management protocol to the Nairobi Convention from 5th to 7th December 2011.

### **Training on Poverty – Environment Linkages**

EfD Tanzania in collaboration with the Office of the Vice President, Environment Division, under support of the UNDP Tanzania Country Office, organized two days Training workshop on Environmental-Poverty Linkages.

The overall focus of this training was on the relationship between poverty- environmental changes: how changes in the quality of the environment affect the poor. Four key dimensions of human poverty are

considered: livelihoods, health, vulnerability and governance associated monitoring systems. The training workshop was held in Morogoro at Edema conference center from January 14th -15th 2011. The targeted group was environmental focal persons and planning officers from region and Local Government Authorities ( LGAs) of Morogoro, Dodoma and Singida regions. About 25 officers attended the workshop.

The two days training workshop was divided into four sessions of presentations. Day one first session was on Poverty – Environment linkage and Gender; second session was on Financial for Environment Management. Day two; first session was on Ecosystem approach for Poverty Environment Linkage, and session two was on Governance and Management of the Environment. Various lessons were learnt from the presentations and participants made good remarks comments. Participants got chances to share the experience obtained from their working places in the region/district levels.

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.



Tengeru market near Arusha, Tanzania. Photo: Fanny Schertzer



# 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 2011: PUBLICATIONS

### PEER REVIEWED

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/RFF BOOKS

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

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

Bluffstone, Randall A. and Gunnar Köhlin, Editors, "Agricultural Investment and Productivity - Building Sustainability in East Africa", (2011), Routledge, Published by RFF Press.)

### BOOK CHAPTERS

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.

### REPORTS

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](mailto:info@efdinitiative.org)



# PROJECTS 2011



EfD researcher Elizabeth Robinson meet with a group of women bee keepers in Kibaha's Ruvu North Forest Reserve.

## Improving the potential for successful implementation of REDD in Tanzania

REDD – Reduced Emissions from Deforestation and Forest Degradation – is a new form of payment for environmental services that has the potential to fund forest protection in Tanzania. REDD programs would build on the Government of Tanzania's introduction of new forest laws that have enabled the implementation of Participatory Forest Management (PFM). Because any policy that slows forest degradation does so by limiting resource access by nearby forest-dependent communities, implementing REDD will require understanding those communities forest management/use decisions and their likely response to REDD policies, even if REDD policies funnel monies to those communities.

One of the key – yet neglected – issues for REDD is the change in incentives that it creates for

forest-dependent communities. Before REDD, individual households face private costs and benefits of collecting NTFPs from the forest and make their decision accordingly. After REDD, funds or benefits often accrue to groups and must be shared, possibly at district/ regional/ national level as well as among villagers. How individual behaviour changes in response to such group benefit sharing is critical to the success of such projects. Even direct payments to individuals do not guarantee that the individuals will change behaviour and conserve resources – some monitoring and enforcement are required.

Our project focuses on the incentives that REDD will create for villagers to comply with the regulations that restrict access from forests designated for REDD initiatives. Our emphasis is enforcement; changing incentive structures from the individual to the group; and spillovers and leakages. Indeed, the key challenges that will be faced by

REDD initiatives: enforcing access restrictions; changing villagers' incentives to cooperate with REDD and reduce their use of designated forest resources; and preventing spillovers, or leakages, from REDD forests to less protected forests, are those that have been faced by forest-related initiatives that pre-date REDD but have not been suitably dealt with.

Our proposed project will provide an assessment of the general policy literature to situate REDD amongst the series of similarly-aimed policies and identify general rules for REDD implementation that address the incentives generated. We will assess the Tanzanian forest policy setting and specific REDD proposals to identify policies and locations that are likely to see success from REDD. As a conceptual framework we will build on a body of literature by Albers, Robinson, and co-authors that model show perfect and imperfect forest access restrictions change villagers' incentives



in terms of the quantity and location of forest resource collection. We will use as a case study two locations where REDD is to be piloted – most likely in the Eastern Arc mountains, a biodiversity hotspot where we have worked before; and the Mpingo forests in south-eastern Tanzania where the Mpingo Conservation Project is on-going.

Our overall objective is to show how incentive structures can be designed to create appropriate protection regimes and benefit sharing to enable success of REDD in terms of protecting forests within a landscape; protecting livelihoods; and reducing forest manager/ forest user conflict. We anticipate that our project will improve the wider discourse on REDD by emphasizing issues of leakage and individual versus group incentives and imposed costs; will focus attention on the forest degradation component of REDD, which is particularly important in Africa yet receives little critical discussion; and more specifically will inform NGO and Tanzanian government decisions about modifying REDD protocols for Tanzania

and prioritizing their implementation in areas where they are most likely to succeed.

### **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 households' 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 live-



A forest officer from Kibaha's Ruvu North Forest Reserve with a group of beekeepers explaining their prospects to Efd researcher Elizabeth Robinson.



Preparation for charcoal burnin, Kibaha forest reserve.



EfD Research Fellow and Center Director Razack Lokina

lihoods 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, 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.

### **Investments, Labor Market Participation and Participatory Forest Management in Tanzania**

The goal of the proposed project is to improve environmental sustainability and reduce rural poverty in Tanzania. The project seeks to achieve this goal by focusing on PFM, which has its main goal to increase forest stocks. The proposed project looks at the linkage between forest policies and standard on-farm economic effects. The project is therefore expected to increase understanding about how better forest management impacts critical, standard economic objectives like investments and labor market development

The purpose of the proposed research project is to examine how PFM initiatives affect household investments and participation in labor markets. As a number of authors have noted, accumulation of capital is perhaps the most important factor determining whether the rural poor in low income developing countries are able to improve their situations. Yet little is known about how major forest initiatives like PFM will affect other key focuses on investments that could potentially contribute to fulfilling MDG 1 to halve poverty by 2015.

It is also well-known that participation in labor markets is a critical piece of the poverty reduction puzzle. It is now fairly well-accepted that better functioning labor markets and higher wages reduce deforestation.

Yet little is known about how forestry initiatives like PFM affect incentives to participate in labor markets. Do households experiencing generally considered better PFM engage in more off-farm work? Hire in more labor? At the present time virtually nothing is known about these issues. The proposed project seeks to begin the process of closing this knowledge gap.

The project will test several related hypotheses, all of which deal with the impact of generally-considered better PFM on investments and labor market participation. With regard to investments, the project will examine the relationship between PFM and on-farm investments in trees and animals. Also tested will be whether PFM increases off-farm work and hiring of labor.

The outputs of the project will increase understanding of how PFM affects household behaviors that are critical to improving rural livelihoods. The project will shed light on questions of reconciling environmental protection and challenges to reduce rural poverty.

The project will be conducted in Tanzania and Portland, Oregon USA using existing data collected the EfD project titled Improving the Effectiveness of Joint Forest Management in Tanzania, which was funded in 2007.





Canoes used illegally for fishing were spotted at Mnazi bay and Tanga.



Fishnets used illegally for fishing at Mnazi bay. These types of nets are restricted due to its small size.



### Assessing Tanzania's Marine Protected Areas: Incentives, opportunities, and constraints

Tanzania's seven Marine Protected Areas (MPAs) are governed by the same set of national laws and regulations, but face different opportunities and pressures that depend in part on location, the number of local communities dependent on the marine resources, and tourism opportunities. This newly proposed research project builds on the EFD-funded "Incentives for Villages to Cooperate with Marine Protected Areas As a Function of Location: Mnazi Bay Ruvuma Estuary Marine Park Case Study". We intend to provide specific policy suggestions to MPA managers that will enable them to improve the long-term management of Tanzania's MPAs through an improved understanding of how park policies affect marine-dependent villagers and how these villagers react to park policies; improve the allocation of funding across the MPAs; and reduce conflict between the park managers and marine-dependent communities.

Four observations from Mnazi guide our project. First, whether an enforcement regime focuses on technology, quotas, access restrictions, or permit systems affects conservation and equity outcomes. Second, poverty alleviation projects typically generate low incomes in comparison to lost fisher folk revenues due to restricted access to the fisheries. Third, MPA managers tend not to have the expertise to implement and understand the incentives that poverty alleviation projects create. Fourth, enforcement budgets

tend to be low suggesting actions to induce cooperation through other means are needed.

Our methodological starting point will be a structured comparison of the seven MPAs in Tanzania, in which we will compile data on the park records on tourism revenues; permit revenues; enforcement activities; location of violations; outcome of violations; park and NGO income-generating projects; fish landings and market prices; combined with the production of basic maps of each MPA that identifies fish land sites, middle men purchase points, and fish markets. With these statistics, we will look for trends and responses to policies over time and begin to work with MPA managers to understand their budget allocation across activities and across locations, with the aim of improving those allocations in order to facilitate biomass recovery without burdening local communities. We will then perform statistical analysis and prepare graphs and tables that describe the MPA system-wide variability and trends and relate this MPA system database to information about how the federal park system allocates budgets across MPAs, and the incentives created by those national policies at the MPA level.

We will then explore the hypothesis that the pressure on fisheries is an inverted U shape as a function of distance from markets by developing a framework that links distance to markets with the types of alternative income projects and employment activities available in different settings, the various ecosystem-disrupting

activities including fishing and tourism in different settings, and the role of markets/urban centres. Using that framework, we can evaluate how more spatially differentiated management across MPAs could improve biodiversity conservation and poverty alleviation outcomes.

## PROJECTS 2012

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

Theme: Agriculture  
PI: John Kedi Mduma

### **Effects of Deforestation on household Time Allocation among the Rural Agricultural Activities:**

Evidence from Central and Southern Tanzania  
Theme: Agriculture, Forestry and Climate changes  
PI: Prof. Robert Mabelle, Razack Lokina

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

Theme: Forestry, Climate Change, Policy Design  
PI: Elizabeth Robinson, Razack Lokina

### **Investments, labor market participation and participatory forest management in Tanzania**

Theme: Common Property Resource Management and enforcement  
PI: Dr. Razack Lokina

### **Improving the potential for successful implementation of REDD in Tanzania**

Theme: REDD and Common Property Resource Management and Enforcement  
PI: Prof. Elizabeth Robinson

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

Theme: Marine Resource and Forestry  
PI: Prof. Jo Albers

## RESEARCH PRESENTATIONS

### **ACADEMIC CONFERENCES**

#### **Environment for Development Initiative 5th annual conference October 2011, Arusha Tanzania**

- Adolf Mkenda, Onesmo Selejio
- E.J.Z. Robinson, H.J. Albers, G.Ngeleza, and R. Lokina  
Kibaha Tanzania's Forest Protection, Poverty Alleviation Projects, NTFPs and Charcoal Production: Modeling Multiple Tools, Goals, and Actors

- Mark Purdon and Razack Lokina  
Performance of CDM  
Afforestation in Tanzania
- Elizabeth J Z Robinson Heidi J Albers  
Stephen L Kirama  
The role of incentives for sustainable implementation of Marine Protected Areas: An Example from Tanzania

### **ACADEMIC SEMINARS**

#### **International Growth Center (IGC) Tanzania**

- Razack Lokina,  
Poverty & Productivity: Small-Scale Farming in Tanzania, 1991-2007





Students working at University of Dar es Salaam.

## 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.

There are two Collaborative Graduate programs at the Department of Economics, University of Dar es Salaam. These are the Masters in Economics (M.A Economics) and Ph.D by Coursework and Dissertation. These programs are run in collaboration with the African Economic Research Consortium (AERC). The EfD Tanzania members are involved in teaching and supervising the students. The project also provides financial support to graduate students who write their dissertation in the areas of environmental and resource economics and poverty analysis.

The collaborative MA and PhD programme in the Department of Economics University of Dar es Salaam is for sub-Saharan Africa. The programmes are conducted through coursework and dissertation. The University of Dar es Salaam is one of the four host universities in the sub region. The first two academic years

are devoted for coursework covering, compulsory training in core courses of Microeconomics, Macroeconomics and quantitative methods plus two optional. Students then join colleagues from other host Universities at a joint facility for electives (JFE) in Nairobi for instruction in the optional courses. After coursework (core courses and electives), students get prepared for the comprehensive examinations. During the third and fourth academic years, student work on their research proposals, conducted research; prepare dissertation write-ups and presentations.

The Research Fellows at EfD Tanzania offer Academic support in supervising graduate students writing on environmental and poverty analysis issues. We do this by supporting students' as a capacity building by assisting those writing on environment and poverty to not only meet their learning or research goals, but

be innovative in the process; and by fostering relationships with key partners, in formal and informal settings. This is to ensure, wherever possible and appropriate, that MA and PhD studying on Environment economics and poverty issues lead to both an academic qualification and recognition by environmental economists.

The EfD Tanzania staff apart from promoting academic research tools to graduate students, we also conduct training to civil servants from government Department and agency and non – governmental institutions as a party of capacity building strategies. We have developed a training manual that aim at developing and facilitating effective mainstreaming of environmental and poverty concerns in policy, planning and monitoring processes in Tanzania through articulating the linkages between poverty and environment on the one hand and economic growth on the other.

The main objective is to provide reference to concepts, strategies, policies, and guidelines. Also addresses strategic issues related to planning, implementation and evaluation of environmental policies and strategies and identifies key actors and stakeholders. However, the manual itself is intended to:

- Impart skills needed by policy makers and practitioners in order to analyze poverty-environment linkage
- Familiarize stakeholders with approaches used in analyzing poverty-environment linkage
- Identify roles and responsibilities of different actors and stakeholders in the continuum of policy process related to poverty-environment linkage;
- Assist in developing poverty-environment indicators for monitoring policies and strategies,
- Identify approaches to financial resources mobilization for environmental management.

### PHD THESES TITLES AND NAMES

Mr. Alyoce Hepelwa

#### **Environmental Resources Sustainability Indicators: An Integrated Assessment model for Tanzania.**

Supervised by Kassim Kulindwa

Mr. Wilhelm Ngasamiaku

#### **Environmental Factor and Health Outcomes in Tanzania: The Case of Infant and Child Mortality Using Household Level Data**

Supervised by Adolf Mkenda & Razack Lokina

Mr. Onesmo Selejio

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

Supervised by Razack Lokina, John Mduma & Elizabeth. J. Robinson

Ms Tafah Akwi

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

Supervised by Razack Lokina & Godius Kahyarara

### MSC THESES TITLES AND NAMES

Tumaini Jeremiah Wilhelm

#### **Economic Valuation of Wildlife resources conservation: a case study of West Kilimanjaro range Lands**

Supervised by Razack Lokina & Godius Kahyarara

Malleo Janeth

#### **Economics of mud crabs farming in Pangani: is there significant income contribution to the coastal community**

Supervised by Razack Lokina

Oscar Mkude

#### **Engel Curve Analysis Of Households' Energy Expenditure In Tanzania: An Almost Ideal Demand System Approach**

Supervised by Razack Lokina & John Mduma

John Peter

#### **The Economics Of Residential Solid Waste Disposal: Evidence from Dar es Salaam City, Tanzania**

Supervised by Adolf Mkenda & Razack Lokina

#### **Undergraduate courses in environmental economics:**

Course (Environmental and Resources Economics )

#### **Students**

45

#### **Fellow(s) teaching the course**

Dr. Razack Lokina

#### **Master courses**

Course 1: Environmental Economics I

Course 2: Environmental Economics II

#### **Students**

14

#### **Fellow(s) teaching the course**

Razack Lokina & Adolf Mkenda

Razack Lokina & Adolf Mkenda





Panorama of Dar es Salaam city a few minutes before dusk. Taken from Benjamin William Mkapa Pension Tower, facing south. Photo: Muhammad Mahdi Karim

# SPREADING THE WORD

News about research and policy interaction

Read more on the website [www.efdinitiative.org/centers/tanzania/news-press](http://www.efdinitiative.org/centers/tanzania/news-press)

20011-12-15

## **Razack Lokina Coordinator EfDT and appointed Chairman of Governing Board of the IRDP**

The board of directors is the highest governing authority within the management structure in the Institute of Rural Development Planning (IRDP). This is 4 years office tenure with extension of another two periods. His main task among others is to establish policy and directives that will lead the management of IRDP in the implementing its objectives

2011-12-15

## **EfD Members Adolf Mkenda and Razack Lokina conducted training**

The Regional Experts Training course on Ecosystem workshop held in Maputo, Mozambique for three days from 30th November to 2nd December 2011

2011-12-13

## **John Kedi Mduma – moves further into policy circles in Tanzania**

Dr. JK. Mduma, one of the EfD (Tanzania) fellows, joined the Ministry of Water in June 2011 to provide expertise in monitoring and

evaluation of the Water Sector Development Program (WSDP). Before that, Dr. Mduma was a technical adviser to the Ministry of Finance and Economic Affairs- Government of Tanzania in the preparation of the second phase of the National Strategy for Growth and Reduction of Poverty (MKUKUTA II), which was launched in October 2010. The WSDP is among the largest programs in Tanzania which implement the MKUKUTA II.

2011-12-02

## **REDD may lead to the revival of colonialism**

"If we aren't careful, a system like REDD may lead to a revision of colonialism. The crucial problem is that we in Tanzania don't have the required facts about our own forests," said Professor Claude Mung'ong'o of University of Dar es Salaam's Institute of Resource Assessment to the audience of policy makers and researchers attending the Policy Day of the fifth EfD Annual Meeting 2011.

"I think it is unethical that while developing countries like Tanzania are trying their best to conserve their natural resources and reduce deforestation, the production technologies and

lifestyles of developed countries remain the same," says Professor Mung'ong'o. He warns against excessive optimism about REDD+.

2011-10-18

## **EfD Policy Day: Opportunities for sustainable natural resource use with national and local benefits for Tanzania**

This Policy Day will bring together researchers and policy makers in a dialogue on Opportunities for sustainable natural resource use with national and local benefits. It is arranged by the Environment for Development initiative, 27 October, in Arusha, Tanzania.

2011-10-27

## **Benefit sharing is key for the success of REDD in Tanzania**

Press release in connection with EfD Policy Day Arusha, Tanzania, 27 October 2011

2011-10-27

## **Wildlife conservation can help poor communities survive**

Press release in connection with EfD Policy Day Arusha, Tanzania, 27 October 2011



## EfD Tanzania in media



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

The articles below are available (pdf) on [www.efdinitiative.org/news-press/efd-in-media](http://www.efdinitiative.org/news-press/efd-in-media)

2011-11-02

**Kiswahili Weekly Raia Mwema:  
Watafiti: Maliasili zikinufaisha jamii  
zitaepusha migogoro**

The just concluded Fifth EfD Annual Meeting in Arusha, Tanzania has transpired in the weekly renowned Swahili Newspaper titled; "Raia Mwema" literally translated as A Good Citizen in its publication of 2nd November, 2011, where an article by Felix Mwakyembe one of the long and renowned journalist was published.

A translation is available on <http://www.efdinitiative.org/centers/tanzania/news-press/news-archive/2011/efd-meeting-in-kiswahili-weekly>  
The full article is found in the link: -  
<http://www.raiamwema.co.tz/watafiti-maliasili-zikinufaisha-jamii-zitaepusha-migogoro>.

2011-10-29

**The Guardian:  
Government mulls national climate  
change**

Report on the policy day sessions during the 5 EfD annual meeting in Arusha Arusha Tanzania.

2011-10-28

**The Guardian:  
Researchers challenged to reach out to  
ordinary people**

Report by Lusekelo Philemon on the policy day sessions during the 5 EfD annual meeting in Arusha Arusha Tanzania.

2011-10-29

**Daily News:  
Measures needed to address climate  
change**

Report by reporter Pius Rugonzibwa in the events of the 5 EfD annual meeting held in Arusha.



# THE TANZANIAN NODE IN THE EFD NETWORK

The EfD center Tanzania, in the course of 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 Tanzania is located within the Department of Economics at the University of Dar es Salaam, the 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 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 Gothenburg University. 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 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 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 had built links with government departments and agencies responsible for environmental management and poverty issues. and Development Economics, the Journal of Regional Science, and Conservation Biology.

## 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 Selejio

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### Salvatory Macha

PROJECT ADMINISTRATOR

### Stephen Kirama

ASSISTANT LECTURER AND RESEARCH FELLOW (PHD STUDENT)

### Amosi Mutanaga

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UNIVERSITY OF DAR ES SALAAM

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### Professor Thomas Sterner

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POLITICAL SCIENCE AT THE UNIVERSITY OF TORONTO

### Professor Jesper Stage

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### Associate Professor Håkan Eggert

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## EfD Tanzania Staff

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:

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[www.efdinitiative.org/centers/tanzania](http://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 the 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

- 1) University of Dar es salaam
- 2) UNEP/Vice President Office
- 3) UNDP/Ministry of Finance
- 4) Sida/EfD

### Funding by donor during 2011

4%  
14%  
19%  
63%

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

63%





**“REDD – Reduced Emissions from Deforestation and Forest Degradation – is a new form of payment for environmental services that has the potential to fund forest protection in Tanzania.”**

Read more on page 14.





Arusha Forest ,Tanzania

## THE EFD INITIATIVE IN BRIEF

*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



# 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)

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## 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

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### 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

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### Sida

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





### 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](http://www.efdinitiative.org/centers/tanzania)

You are most welcome to contact us:

Efd Tanzania

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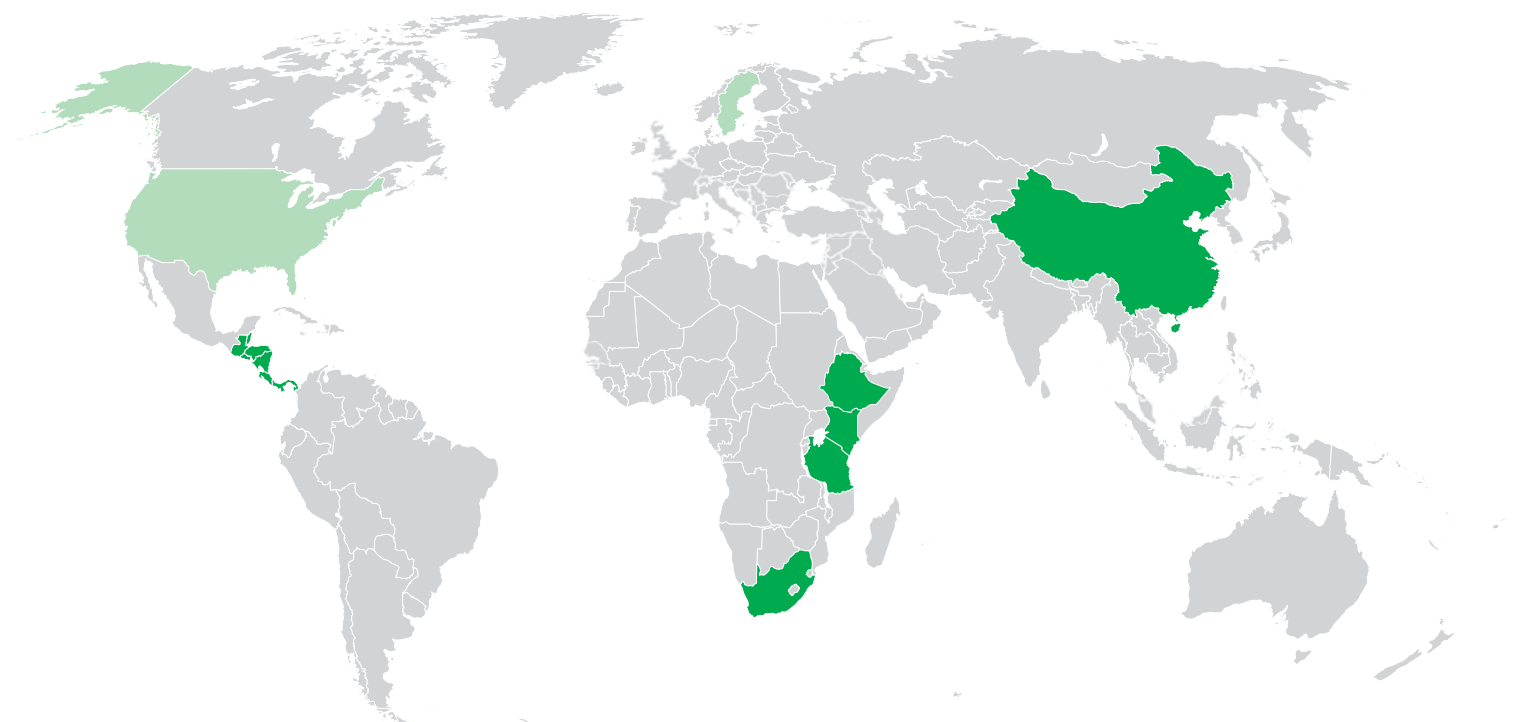
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