

# **EFD INITIATIVE CENTER REPORT**

# ETHIOPIA 2011/12

Environmental Economics Policy Forum for Ethiopia (EEPFE) works to support poverty alleviation and sustainable development in Ethiopia through an increased use of environmental economics in policy making processes.



# MESSAGE FROM OUR CENTER DIRECTOR

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

The year 2011 has been another year of important achievements for EEPFE building on what has been done in previous years. The main research projects that have been implemented

during 2011 include impacts of biofuel investments on economic growth, poverty and the external sector in Ethiopia; review of common pool resource management institutions in Ethiopia; common property forest management and implications for REDD in Ethiopia; and implications of weather and climate for food security in Ethiopia. On-going research projects in Ethiopia in 2012 include economywide implications of biofuels for GHG emissions and profitability of biofuels; analysis of common pool resource management institutions; natural resource scarcity and human capital; and determinants of agro-forestry practices.

In addition to participation of researchers of the Forum in a number of seminars, workshops and conferences in and outside Ethiopia, the Forum co-organized one workshop on climate change with the Ethiopian Development Research Institute. This workshop was held in Addis Ababa in July 2011.



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

As before, the Forum plans to continue its work on research, policy interaction and training over the coming years building on the achievements in the past. Details of the Forum's work during 2011 (presented in this report for 2011) as well as other information about the Forum can be found at www.efdinitiative.org/centers/ethiopia.



Alemu Mekonnen Director

# THIS REPORT

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

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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 (October27-30). 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

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

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 (October27), brought together more than 80 researchers and policy makers in a dialogue on Opportunities for sustainable natural resource



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.

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



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.efdinititaive.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 Uni-Assessment, spoke about implementation of Elizabeth Robinson, Associate Professor, University of Gothenburg and University of Readsector. Allan Kijazi, Director Tanzania National Parks (TANAPA), spoke about sustainable management of Tanzania's wildlife resources

The importance of giving landholders strong

versity of Dar es Salaam's Institute of Resource Tanzania's REDD+ strategy and key challenges. ing, spoke about experiences of successful forest management in Sub-Saharan Africa and its implications for REDD+ policies and the private and its contribution to development.

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.

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.



Alemu Mekonnen, Director EfD Ethiopia

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

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



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



# RESEARCH POLICY INTERACTION

To achieve its core goal of supporting and enhancing policy making to ensure sustainable development in Ethiopia, EEPFE works closely with various government and non-government agencies. These include the Ministry of Agriculture (MoA), Environmental Protection Authority (EPA), and African Climate Policy Center (ACPC). We undertake periodic workshops and seminars on important policy issues in collaboration with researchers from our host institution, the Ethiopian Development Researcher (EDRI). 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.

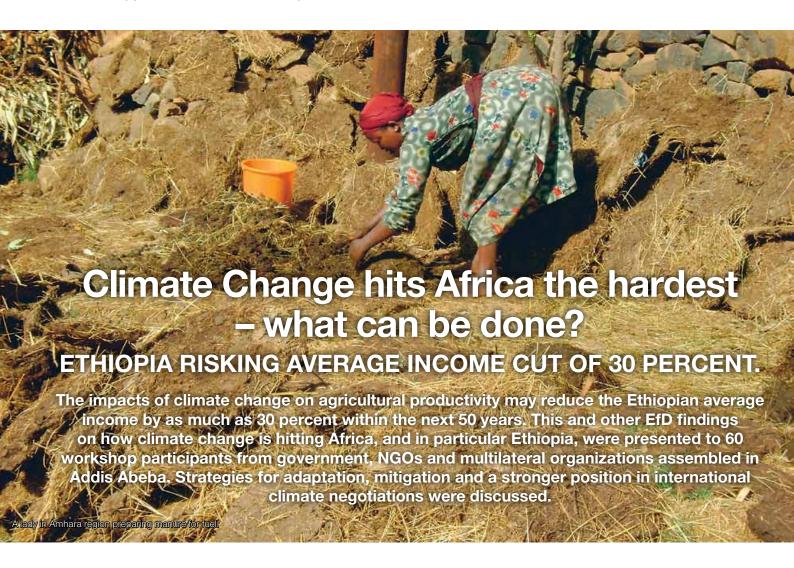
#### AIMING HIGH, GOING GREEN

In February 2011, a high-level dialogue was initiated to prepare the Climate Resilient Green Economy (CRGE) strategic paper for Ethiopia. The strategic document aimed in protecting the country from the adverse effects of climate change and building a green economy. EEPFE Center director Dr. Alemu Mekonnen, served as a member of the Technical Committee that worked on the CRGE paper along with 50 other experts from 20 leading government institutions. This strategy was launched on

November 18, 2011 in Ethiopia before it was also presented at the 17th Conference of Parties (COP 17) to the UN Framework Convention on Climate Change which took place in Durban starting from the 28th of November 2011.

# EFD WORKSHOP ON IMPACT OF CLIMATE CHANGE IN AFRICA

In collaboration with the Ethiopian Development Research Institute



(EDRI), EEPFE organized a workshop on climate change on July 20. 2011. Read more below, and under "Climate Change hits Africa the hardest - what can be done?"

The year 2011 marked a year of significant effort in the dissemination work for EEPFE as resources (particularly discussion paper series) were distributed to various research and higher learning institutes in Ethiopia. This effort is in line with the objective of promoting the increment of the number of environmental economists throughout the country by availing resources. We plan to continue this venture in 2012 and establish the forum's vision in becoming the leading center in environmental economics policy research and a focal point for interaction among stakeholders.

#### POLICY LINKS

The Environmental Economics Policy Forum for Ethiopia (EEPFE) at the Ethiopian Development Research Institute (EDRI) has links and/or interacts with a number of institutions in and outside Ethiopia.

#### **Governmental institution**

- Ministry of Agriculture (MOA)
- Ministry of Water and Energy,
- Environmental Protection Authority
- School of Economics of the Addis Ababa University.

#### Non-governmental institutions

- African Climate Policy Center (ACPC)
- Forum for Environment
- Climate Change Forum-Ethiopia
- GIZ ECO-Ethiopia
- Sustainable Land Use Forum

#### International institutions

- World Bank
- International Food Policy Research Institute (IFPRI)
- Rights and Resources Initiative (RRI)
- Portland State University
- London School of Economics

The Forum also naturally interacts with other centers of the EfD initiative, the EfD secretariat, Resources for the Future and the Ethiopian Development Research Institute.

#### POLICY SEMINARS, WORKSHOPS AND CONFERENCES

• EfD Workshop on Impact of Climate Change in Africa Over 60 representatives from various governmental and non-governmental organizations participated in this informative Climate Change Workshop organized together by EEPFE and Ethiopian Development Research Institute (EDRI) on July 20, 2011. The number of participants

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

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

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

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

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

Mekonnen continues, "This might have contributed to the high number of workshop participants. The topic itself surely also contributed to a high turnout since climate change is increasingly important in Ethiopia.

The workshop gave us the opportunity to inform relevant stakeholders about climate change issues, and present our findings and recommendations."

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

Previous economic studies of climate change impacts in Ethiopia have generally ignored



representing various sectors made the workshop a good area for policy interaction. Government participants included delegates from all the regional Environmental Protection Authority (EPA) offices including from the capital. Five papers were presented to invited stakeholders during the workshop. For detailed information about the content of each paper presented, please check out the press releases on EfD website with presentations attached:

How should Africa use the carbon market?

Dr. Alemu Mekonnen and Dr. Zenebe Gebreegziabher

Climate conventions should consider early onset of climate change in Africa

Dr. Adane Tuffa

Harnessing climate finances for sustainable development in Africa

Dr. Assefa Sevoum

Crop-livestock inter-linkages and climate change implications on Ethiopia's agriculture

Ato Meseret Molla

Climate change to reduce average income of Ethiopia by about 30 percent within the next 50 years

Prof. Jesper Stage

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

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

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

deforestation, encouraging afforestation and reforestation, and improving agricultural and land management systems.

As regards climate conventions and negotiations, EfD researchers are suggesting that African negotiators in future climate negotiations consider making a case for countries that face extreme circumstances ¬- that they receive special funding as compensation. Negotiators should also consider demanding that Clean Development Mechanism (CDM, a marketbased mechanism of the so-called carbon market) criteria should include activities that are relevant to Africa and that match countries' development priorities, which include food and energy security. The CDM was designed to enable developed countries to reduce their emissions through sustainable development projects in developing countries. Yet only about 3 percent of CDM projects that have been

accepted by the United Nations Framework Convention on Climate Change (UNFCCC) are being implemented in Africa, and only one is being implemented in Ethiopia.

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

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



### 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**

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

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

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

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

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

Teklewold, Hailemariam, and Gunnar Köhlin, 2011, "Risk preferences as determinants of soil conservation decisions in Ethiopia", Journal

of Soil and Water Conservation, 66(2):87-96, March/April, 2011.

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

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

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

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

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

S1355770X11000349.

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

#### **EFD DISCUSSION PAPERS**

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

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

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



#### **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**

Yesuf, Mahmud and Hailemariam Teklewold, 2011, "Risk Preferences and Technology Adoption: Case Studies from Ethiopian Highlands" In Bluffstone, Randall and Gunnar Köhlin, 2011, "Agricultural Investment and Productivity - Building Sustainability in East Africa", EfD/RFF Books.

Hagos, Fitsum, 2011, "Fertilizer Use by Small-holder Households in Northern Ethiopia: Does Risk Aversion Matter?", In Bluffstone, Randall

and Gunnar Köhlin, 2011, "Agricultural Investment and Productivity - Building Sustainability in East Africa", EfD/RFF Books.

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

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

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

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

#### **REPORTS**

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



Community kept forest (Junipers)

# PROJECTS 2011

For more information on each project, please see the website.

Impact of Climate Change on Ethiopian **Economy and Agriculture** 

Review of local common pool resource management institutions in Ethiopia

On Adaptation to Climate Change and Food Security in Ethiopia

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

**Common Property Forest Management:** Implications for REDD in Ethiopia

# PROJECTS 2012

#### **Profitability and Economy-wide Impact** of Biofuel Investments in Ethiopia

Theme: Agriculture and Sustainability PI: Tadele Ferede/Zenebe Gebreegziabher

#### **Local Common Property Systems in** Ethiopia: An Empirical Analysis of the Link between User Characteristics, **Resource Characteristics and Institutional Regime**

Theme: Managing the Commons PI: Zenebe Gebreegziabher

#### **Natural Resources Degradation and** Household Welfare in Rural Ethiopia

Theme: Agriculture and sustainability PI: Abebe Damte

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

Theme: Agriculture and Forestry PI: Abebe Damte

#### On Adaptation to Climate Change and Food Security in Ethiopia

Theme: Responses to climate risk Pl: Salvatore di Falco/Alemu Mekonnen

#### **Common Property Forest Management:** Implications for REDD in Ethiopia

Theme: REDD PI: Randall Bluffstone/Abebe Damte

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

Theme: Sustainable Agriculture and Poverty Reduction

PI: Tadele Ferede/Zenebe Gebreegziabher

#### Review of local common pool resource management institutions in Ethiopia

Theme: Management of the commons PI: Zenebe Gebreegziabher











# RESEARCH PRESENTATIONS

#### **ACADEMIC CONFERENCES**

### Land and forest tenure reforms workshop in Ethiopia

- Alemu Mekonnen: Impact of land certification on tree growing on private plots of rural households in Ethiopia
- Mintewab Bezabih: The Role of Land Certification in Dissipating Gender Gaps on Productivity in Rural Ethiopia

### Sustainable Food and Nutrition Security under Changing Climatic Conditions

 Zenebe Gebreegziabher: Efficiency and Productivity of Small Farmers and Implications for Food Security: Evidence in Ethiopia

### CSAE 2011 Conference on Economic Development in Africa

 Rahel Deribe: Efficiency and Productivity of Small Farmers and Implications for Food Security: Evidence in Ethiopia

### Forest Tenure Impact Evaluation Workshop April 21, 2011

 Alemu Mekonnen: Household Forest Values Under Varying Management Regimes in Ethiopia

#### World Renewable Energy Congress – Sweden

 Abebe Damte: Covariates of Fuel Saving Technologies in Urban Ethiopia

#### Interdisciplinary Workshop on the Potential of Small-Scale Biogas Digesters in Sub-Saharan Africa

 Zenebe Gebreegizabher: Biogas for poverty reduction and climate change mitigation: The case of Ethiopia

#### **EEPFE/EDRI Climate Change Workshop**

- Alemu Mekonnen: Carbon Markets and Mitigation Strategies for Africa/Ethiopia: Literature Review and the Way Forward
- Adane Tuffa: Climate Conventions and Implications for Africa/Ethiopia
- Assefa Seyoum: Climate Finance and Implications for Sustainable Development in Africa/Ethiopia
- Meseret Molla: Crop-livestock Interlinkages, Agro-ecology and Climate Change Implications on Ethiopia's Agriculture: a Ricardian Approach
- Jesper Stage: Climate Change and the Ethiopian Economy: A CGE Analysis

#### Ninth International Conference on the Ethiopian Economy

- Zenebe Gebeegziabher and Alemu Mekonnen: Sustainable Financing of Ethiopia's Energy Infrastructure: An Economic Analysis
- Zenebe Gebreegizabher: Stove Adoption and Implications for Deforestation and Land Degradation the Case of Ethiopia
- Tadele Ferede: The Roads out of Subsistence Farming: Growth Dynamics and investments in Human and Environmental Capital in Rural Ethiopia
- Yonas Alem: Poverty Dynamics and Intra-Household Heterogeneity in Occupations: Evidence from Urban Ethiopia

### First Climate Change and Development for Africa (CCDA-I) Conference

Abebe Damte: Fossil fuel in Africa: in the context of carbon constraint future.

#### EfD Annual conference - Arusha

- Tadele Ferede: Distributive effect and food security implications of biofuels investment in Ethiopia: a CGE analysis, and Profitability and Economy-wide Impact of Biofuel Investments in Ethiopia
- Rahel Deribe: Institutional Analysis Of Water Management On Communal Irrigation Systems In Ethiopia: The Case Of Atsbi Wemberta Woreda, Tigray Region And Ada'a Woreda, Oromiya Region
- Abebe Damte: Determinants of Farm Households' Agro-Forestry Technology Adoption in Ethiopia, and Natural Resources Degradation and Household Welfare in Rural Ethiopia

#### Annual Conference - AESE

 Zenebe Gebreegizabher, Land Degradation in Ethiopia: What Do Stoves Have To Do With It?

#### **ACADEMIC SEMINARS**

#### **EEPFE Research Seminar**

 Menale Kassie: Interdependence in farmer technology adoption decisions in smallholder systems: Joint estimation of investments in sustainable agricultural practices (SAPs) in Rural Tanzania

### UNU-WIDER/AERC Climate Change Training

• Abebe Damte, Zenebe Gebreegizabher

#### Workshop in Political Theory and Policy Analysis, IFRI Training

• Zenebe Gebreegizabher



# **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.

As one priority area of EEPFE is to increase the number of trained environmental economists, EEPFE has very close academic links with the School of Economics (SoE) at Addis Ababa University (AAU). We support the seminar series at SoE in AAU and most of our research fellows are actively involved in teaching and thesis supervision in the

graduate program. EEPFE also provides MSc thesis grants to those doing their thesis in the area of resource and environmental economics.

EEPFE also strives to expand the area of environmental economics throughout Ethiopia. In this regard we have initiated dialogue with various higher learning institutions with a master's level program in economics and/ or natural resource management. In addition, EEPFE provides books and publication support to these higher learning institutions and plans to also reach newly established colleges and universities.

#### **MSC THESES**

Ali Yibrie Esmaile

Valuing the Economic Benefit of **Ecotourism Areas with Travel Cost and Choice Experiment Methods: A Case** Study of Semen Mountain National Park, **Ethiopia** 

Supervised by Dr. Alemu Mekonnen

Ashenafi Belayneh Ayenew

**Economic Implications of Climate** Change in Ethiopia: A Computable General Equilibrium Analysis

Supervised by Dr. Tadele Ferede

Bahre Gebru Kiros

**Environmental Resources Collection** Versus Children's Schooling: Evidence From Tigray, Northern Ethiopia

Supervised by Dr. Sosina Bezu

Kidanemariam Abreha Gebretsadik

**Poverty and Farmers' Attitude towards** Risk: Evidence from Hawzen Woreda, Tigray, Ethiopia.

Supervised by Dr. Tekie Alemu

Yibeltal Bantie Kebie.

The Value of Improved Water Supply Service in Motta Town, East Gojjam Zone, Ethiopia: Application of Contingent Valuation Method (CVM)

Supervised by Dr. Alemu Mekonnen

Selamawit Assefa

The Role of Tourism in Economic **Growth: An Emprical Evidence from** 

Supervised by Dr. Abebe Damte

#### **PHD THESES**

Damte, Abebe, 2011

"Rural Energy, Forest Dependency and **Covariates of Fuel Saving Technologies** in Ethiopia", PhD Thesis, Department of **Economics, University of Pretoria.** 

Courses taught by EfD Ethiopia include:

#### **Undergraduate courses**

#### **Graduate courses**

Natural Resource Economics Environmental Valuation and Policy



### SPREADING THE WORD

News about research and policy interaction

Read more on the website www.efdinitiative.org/centers/ethiopia/news-press



Tsehay Ataklt, Communication Officer, in EEPFE booth at the First Climate Change and Development for Africa (CCDA-I) Conference at the United Nations Oct 17-19, 2011

#### 2011-12-15

#### Aiming High, Going Green

Ethiopia launches its strategy for Climate Resilient Green Economy (CRGE) on 18 November 2011. EEPFE center director and senior researcher, Dr. Alemu Mekonnen, was part of the technical committee that worked on green economy aspect of the strategy as representative from our host institution, the Ethiopian Development Research Institute (EDRI).

#### 2011-11-21

### Findings on sustainable agricultural practices presented at EEPFE

Research seminar on the "Interdependence in farmer technology adoption decisions in small-holder systems: Joint estimation of investments in sustainable agricultural practices (SAPs) in Rural Tanzania" was presented by Dr. Menale Kassie in Addis Ababa University on November 14, 2011.

#### 2011-10-20

### First Climate Change and Development for Africa (CCDA-I) Conference

This conference, held between October 17-19, 2011 at the UNECA in Addis Ababa, had the theme 'Development First: Addressing Climate Change in Africa'. It aimed at strengthening Africa's position and participation in international climate change negotiations with a view to ensuring adequate reflection of the continent's concerns and priorities in a post-2012 international climate change regime. EEPFE participated in the conference and exhibition.

#### 2011-08-29

#### EfD researchers attended UNU-WIDER/ AERC Climate Change Training

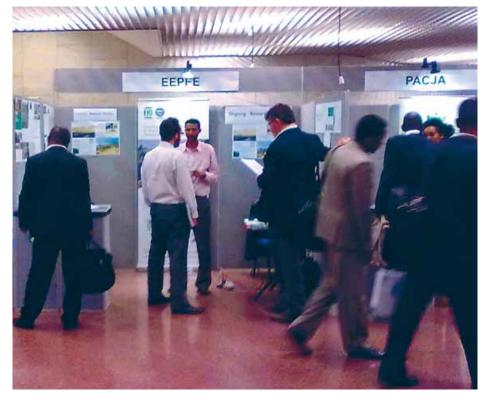
After pursuing an online course for three weeks, Dr. Zenebe Gebreegziabher and Abebe Damte from EfD Ethiopia, attended a fivedays training on Climate Change Science and

Modeling of Biophysical Impacts, arranged by UNU-WIDER and AERC at the University of Cape Town in South Africa.

#### 2011-07-29

### EfD workshop on impact of climate change in Africa

Over 60 representatives from various governmental and non-governmental organizations participated in this informative Climate Change Workshop organized together by EEPFE and EDRI on July 20. Ethiopian news media like the daily-published English newspaper the Ethiopian Herald reported on the workshop.





EEPFE booth at the First Climate Change and Development for Africa (CCDA-I) Conference at the United Nations Oct 17-19, 2011

Zelealem Gebremedhin, Project Manager, in EEPFE booth at the First Climate Change and Development for Africa (CCDA-I) Conference at the United Nations Oct 17-19, 2011

#### 2011-05-17

#### What do policymakers know about the factors influencing people's well-being?

Press release from Environmental Economics Unit, School of Business, Economics and Law, University of Gothenburg, 2011-05-13

#### 2011-04-29

#### Forestry Household Forest Values under Varying Management Regimes in Ethiopia

A half day workshop was organized by EfD in Washington DC on April 21, 2011. Recent developments in forest management institutions in Ethiopia, Kenya and Tanzania were presented. EfD-Ethiopia coordinator, Dr. Alemu Mekonnen presented a paper on Household Forest Values under Varying Management Regimes in Ethiopia.

#### 2011-02

#### **New Report says Forest Land Reform** Stagnating, Posing Risks to Global Efforts to Combat Climate Change and

Rapidly-rising food prices and growing demand for all land-based commodities, like palm oil and biofuels, are driving an intensive global land hunt that threatens the rights of hundreds of millions of local people living in tropical forests, according to a report released today by the Rights and Resources Initiative (RRI).

#### IN THE MEDIA

#### 2011-07-21

The Ethiopian Herald: Workshop discusses on impact of climate change in Africa/Ethiopia This half day workshop incorporated five papers by Dr. Alemu Mekonnen, Dr. Zenebe Gebreegziabher, Dr. Adane Tuffa, Dr. Assefa Seyoum and Prof. Jesper Stage to discuss the impact of climate change in Africa in general and Ethiopia in particular. With every year the world fails to curb carbon emissions, adaptation will become even more vital thus increasing the need for more financial assistance.





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

# THE ETHIOPIAN NODE IN THE EFD NETWORK

The Environmental Economics Policy Forum for Ethiopia (EEPFE) is the Ethiopian node in the EfD network. The Ethiopian Development Research Institute (EDRI) is hosting EEPFE as one of its projects to work on Environment and related issues. EDRI provides financial and administration support services to EEPFE. The forum was founded in 2003. Its goal is to support poverty alleviation and sustainable development through increased use of environmental economics in policy making processes.

More specifically, the forum has the following objectives:

- 1) Increase the number of trained environmental economists by creating a conducive working environment for environmental economics PhD graduates and providing research grants for local MSc environmental economics students;
- 2) Strengthen the capacity of environmental economics graduates to do applied research on poverty and environmental management by linking research fellows with international research organizations and enabling them to participate in international and national conferences;
- 3) Undertake objective research and analysis on impact assessment, environmental management, and poverty with the

- goal of providing advice to policy makers and development agencies;
- 4) Collect and analyze data on sustainable land use with the objective of disseminating results to a wide range of stakeholders through workshops, conferences, internal seminars, distribution of research publications, and policy briefs;
- 5) Increase the knowledge of civil servants and other stakeholders on environmental and development issues with the objective of increasing awareness of the link between environmental management and poverty alleviation.

#### **EEPFE's Vision:**

• To be the leading center for environmental economics policy research and a locus for interactions among

- researchers, civil servants, and policy makers interested in policy oriented environmental research in Ethiopia.
- To provide quality policy advice to the government and other stakeholders based on objective research and to engage in capacity building to reduce poverty and contribute to sustainability.

#### LOCAL RESEARCHERS AND STAFF

#### Ph.D. Alemu Mekonnen

CENTER DIRECTOR AND SENIOR RESEARCH FELLOW

#### Ph.D. Zenebe Gebreegziabher

SENIOR RESEARCH FELLOW



#### **Networks**

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

### Contact us

Economics Policy Forum for Ethiopia (EEPFE)

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### Donors and funding

Sida is the main funding agency for the EfD initiative. Starting from tions, climate finance, carbon trading, and carbon markets with focus on Africa in general and Ethiopia in particular. This is a joint ity Building Foundation (ACBF) and continued in 2011. In addition, Sida financed the Climate Change Workshop co-organized with our host institution, EDRI, which was held in Addis Ababa, Ethiopia, on 20 July 2011.

Number of donors

**List of Donors Funding by donor during 2011** 1) ACBF

Sida/EfD funding as share of total center budget

92 96%

#### Ph D Tekie Alemu

SENIOR RESEARCH FELLOW

#### Ph.D. Tadele Ferede

SENIOR RESEARCH FELLOW

#### Ph.D. Sosina Bezu

RESEARCH FELLOW

#### Ph.D. Abebe Damte

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#### Ph.D. Fantu Guta

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#### Ph.D. Adane Tuffa

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JUNIOR RESEARCH FELLOW

#### M.Sc. Zelealem Gebremedhin.

PROJECT MANAGER

#### M.Sc. Samuel Abera

DATA MANAGER

#### M.Sc. Tsehay Ataklt

COMMUNICATION OFFICER

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ILRI - ETHIOPIA

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#### Ph.D. Mintewab Bezabih

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#### PhD. Menale Kassie

CGIAR

#### **Professor, Peter Martinsson**

DEPARTMENT OF ECONOMICS, UNIVERSITY OF GOTHENBURG

#### Associate Professor, Gunnar Kohlin

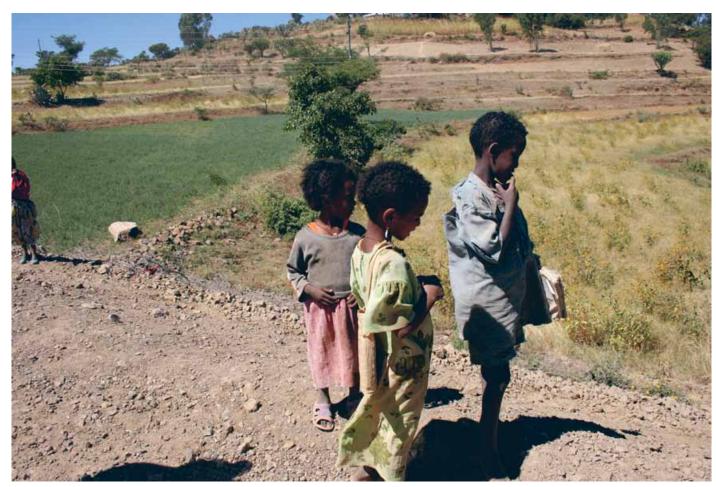
DEPARTMENT OF ECONOMICS, UNIVERSITY OF GOTHENBURG

#### Ph.D. Candidate. Dambala Gelo

UNIVERSITY OF PRETORIA, SOUTH AFRICA

More details of each person are available on EfD website, in the center section of Ethiopia. www. efdinitiative.org/centers/ethiopia





Children on their way to the small town of Adwa in northern Ethiopia (Tigray region)

# 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 Investigacíon y Ensenanza (CATIE)

Dr. Francisco Alpízar, Center Director Email: falpizar@catie.ac.cr

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Environmental Economics Program Peking University Professor Jintao Xu, Center Director Email: xuit@pku.edu.cn

Phone: +86 10 62767629



#### **ETHIOPIA**

Environmental Economics Policy Forum for Ethiopia Ethiopian Development Research Institute (EDRI/AAU) Dr. Alemu Mekonnen, Center Director Email: alemu\_m2004@yahoo.com

Phone: +251 11 5523564



#### **KENYA**

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

Dr. Wilfred Nyangena, Coordinator Email: nyangena\_wilfred@uonbi.ac.ke

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#### **SOUTH AFRICA**

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#### **TANZANIA**

Environment for Development Tanzania University of Dar es Salaam Dr. Razack Lokina, Center Director Email: razack\_lokina@yahoo.co.uk Phone: +255 22 2410252



#### FFD 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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#### **Professor Thomas Sterner**

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#### Karin Backteman, Communications officer

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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

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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 inititiave.

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

You are most welcome to contact us:

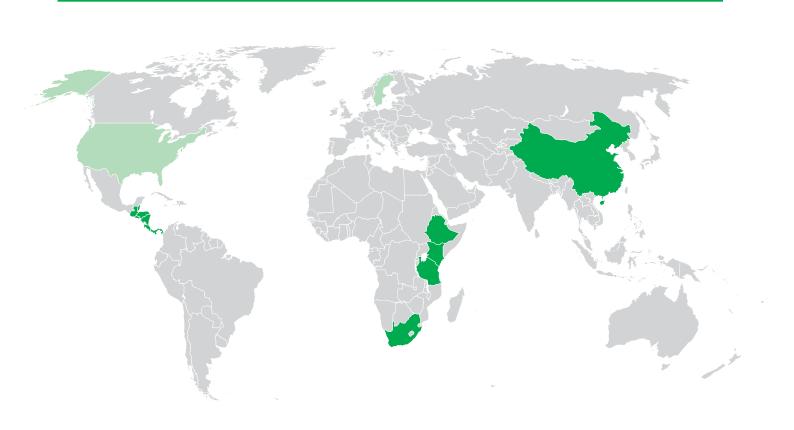
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EfD CENTERS

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















Sida, University of Gothenburg, RFF





