The Environmental economics Policy Research Unit (EPRU) is a collaborative association of academic researchers specializing in environmental and natural resource issues. EPRU works to promote sustainable development and poverty reduction in Southern Africa.
The Environment for Development Initiative (EfD) is the South African branch of EfD. By providing policy instruments to manage scarce natural resources, environmental economists make a difference.

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This report presents EfD South Africa, its members, and work during 2011/12.

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Cover photo: A glimpse over a small South African fishing village. Photo Neil Austen

Park pricing workshop in South Africa. Photo Joep Stevens
The Environment for Development Initiative (EfD) is the South African branch of EfD. By providing policy instruments to manage scarce natural resources, environmental economists make a difference.

“The environment for development initiative”

Over the past four years, EPRU has strived to produce policy-relevant research in areas important to South Africa: community-based wildlife conservation and poverty mitigation, climate change, coastal management, fisheries, and sustainable and responsible investment. Our close collaboration with the South African National Biodiversity Institute, the Department of Agriculture, Forestry and Fisheries, the Water Research Commission, and the City of Cape Town are a few illustrations of our commitment.

In 2012, EPRU was again jointly coordinated by the Director (Mare Sarr) and Research Convenor (Jane Turpie). We continued to meet off-campus on a quarterly basis to discuss our research ideas and outputs, thrash out research problems, and discuss policy interaction issues. These interactions have been important in strengthening the group and improving research.

While endeavouring to develop and improve its policy interaction strategy, EPRU has also been working hard toward diversifying its funding sources. In particular, the group made great strides during 2012 in becoming actively involved in two multidisciplinary groups that have recently formed at the University of Cape Town: the African Climate Change Development Initiative and Aquad’UCT (dealing with water issues), which will bring many opportunities for collaborative and policy-relevant research.

EPRU is raising its research profile by turning important policy-relevant research into high-quality academic papers. In the course of the year, EPRU fellows have published 14 articles in leading international and local peer-reviewed journals, as well as seven discussion papers. Two of our Senior Research Fellows, Edwin Muchapondwa and Martine Visser, together with their Ph.D. students have been particularly productive this year and deserve to be commended and emulated. It is also a pleasure for me to congratulate five of our Junior Research Fellows who secured prestigious two-year scholarships funded by the Carnegie Foundation. In January 2012, we welcomed Anthony Black as a new Senior Research Fellow.

Finally, on behalf of all EPRU members, we would like to thank Sida for its continued support. Our thanks extend to the coordination team of the EfD Initiative for helping us build what we hope will soon become a centre of excellence in the area of natural resource management in southern Africa.

Anthony Leiman & Jane Turpie
Director Deputy Director

MESSAGE FROM OUR CENTER DIRECTORS

“South Africa has very good mining legislation, but making it work has been a problem. Mining can do a lot of environmental damage, not just when it is happening, but once it has finished and the mine is closed” Read more on page 8

A dragline in action on the site of coal mine dumps in the Mpumalanga province. Photo: David Larsen.
The Environment for Development Initiative (EfD) took place in La Fortuna, Costa Rica, between October 25 and 29, 2012. More than 70 people participated at the rendezvous this year, including researchers from all EfD centers around the world and their collaborators, as well as key stakeholders, to discuss and exchange research results from EfD projects, ideas, and proposals.

Decisions and Discussions on Research

The highlight of the meeting this year was the establishment of EfD as an independent legal entity which will be governed by a board with representatives of the EfD centers. The Board will be the highest decision making body and will appoint the Research Committee and the Secretariat. “This is a historic moment!” said Gunnar Köhlin, Director of the Environment for Development (EfD) Initiative, and a professor in the Department of Economics at the University of Gothenburg. “This will enable EfD to become a truly global organization, with the ambition of becoming the largest and most efficient organization to channel funds for research on environmental economics in developing countries.”

The meeting opened with an enthusiastic welcome by Gunnar Köhlin, followed by well-received remarks by Francisco Alpízar, director of the EfD Central America Center (EfD-CA), based in Costa Rica. There were three keynote speeches and a panel discussion. The first keynote speech, by Ed Barbier of the University of Wyoming, was on Structural change, dualism and economic development. The second, entitled Measuring the impacts of environmental policies on the environment and the poor: protected areas and ecosystems services, was by Paul Ferraro, from Georgia State University. Lastly, Birn Sills of North Carolina State University gave a presentation on Understanding REDD: What and how can we learn from pilot projects? (REDD stands for Reduced Emissions from Deforestation and Forest Degradation.)

In addition, there were several very informative presentations during the plenary session and the parallel sessions. These covered a series of issues, including interdisciplinary synthesis research, adaptation to climate change, transportation and congestion, water use and pricing, and fisheries. All of these presentations were given by experts from around the world.

The next EfD Annual meeting will be held in South Africa in 2013.

EfD Policy Day at the Annual Meeting

The Policy Day is becoming a tradition during EfD Annual meetings. This event serves as a stage for researchers, policymakers, and politicians to interact around seminal policy-relevant issues to which EfD researchers can contribute. The 2012 Policy Day kickoff on October 25 brought together more than 55 participants in Santo Domingo de Heredia, Costa Rica. This invited group included both current and former members of the Costa Rican Congress, ministers of the government of Costa Rica, and representatives from seven government agencies. There were also national and international representatives from eight NGOs, five research institutions or universities, and two private corporations.

The central theme of the Policy Day was research and policy interactions in climate change, water, and conservation of natural resources. Francisco Alpízar, the director of EfD-CA, celebrated the presence of a diverse group of people interested in moving forward research-based policymaking. “We are here to position EfD in the national context, to facilitate a dialogue between researchers, policy makers, and stakeholders working on defining policies around these subjects,” said Alpízar. Most importantly, he added, “we are here because we want to help and to hear from you about the issues on which you need our help, researchers at EfD can provide a small contribution to resolving some of the myriad issues we need to confront.”

After Alpízar’s opening remarks, Jose Joaquin Campos, the Director General of the Tropical Agriculture and Higher Education Center (CATIE), gave a presentation about climate-smart territories and stressed the opportunities for CATIE and EfD to support human well-being in Latin America and the Caribbean. Campos praised the quality of work and accomplishments of EfD and wished for an even more productive, successful, and consolidated presence of EfD in the region. This presentation was followed by a talk by EfD director Gunnar Köhlin on The impact of international cooperation through EfD’s research and capacity building. One of his key messages was that, through capacity building, rigorous research, and communication of issues, EfD’s work around the world contributes to well-grounded environmental analysis. This analysis supports key national plans and policies, as he demonstrated with an extended list of examples. Finally, the welcoming session closed with two presentations about cooperation to advance research and capacity building as part of South-South cooperation toward the “green economy.”

One was by Sergio Munamani of the German Agency for International Cooperation (GIZ) Office in Costa Rica. The other was by Dr. Yue Zhai, First Secretary for Science and Technology, based at the embassy of the People’s Republic of China in Costa Rica, who gave his talk in Spanish. The Policy Day continued with three plenary sessions. The first brought up the topic of Opportunities for development: from adaptation and mitigation to climate change, starting with a presentation by Thomas Stemmer. Stemmer is Professor in the Department of Economics at the University of Gothenburg, an EfD Senior Research Fellow, and Visiting Chief Economist at the Environmental Defense Fund (EDF). He spoke about policy options and political feasibility in climate change and other environmental policies. Then, Álvaro Umaña, a Senior Research Fellow at EfD-CA, talked about needed action on water and international negotiations on climate change as an example of a low carbon economy. He was followed by Cola Harvey, Vice President for Global Change and Ecosystem Services, Conservation International (CI). Celia presented a newly launched collaboration between CATIE and CI called Ecosystem-based Adaptation for Smallholder Subsistence and Coffee Farming Communities in Central America: The CASCADE Project.

The second session focused on challenges to cooperation in the green economy and conservation with two presentations. Juan Robalino, another Senior Research Fellow at EfD-CA, presented his work about impacts of conservation policies. After that, Jorge Mario Rodríguez Zúñiga, Executive Director of The National Forestry Financing Fund (FONAFIFO), talked about the future prospects for REDD+ and other Payment for Environmental Services (PES) schemes in Costa Rica. (The plus in REDD+ is for forest conservation, sustainable forest management, and the enhancement of carbon stocks.)

The last session on research and policy interaction on water and climate change consisted of three presentations. First, Roger Magripilis, Research Fellow at EfD-CA, showed the work the center is doing on adaptation to climate change and water governance. Mauriie Ball, from the National Water Laboratory, gave his talk to the audience. For a moment, the participants were stranded under the colonial tile roof of the conference venue, which was at a distance from the nearest area where a delicious lunch was being served. The loud sound of the rain falling did not dim the lively discussions and enthusiastic questions between politicians, civil servants, and researchers alike. More than one person suggested that “this type of meeting should take place more often for all to learn and start speaking in the same language.”

The media was also present during the day and covered a lot of the issues being discussed. Several EfD researchers and other participants were interviewed by both local and international news reporters. To see the list of media coverage for the Policy Day, visit media coverage EfD in media on www.efdinstitute.org.
RESEARCH POLICY INTERACTION

EPRU’s main objectives in terms of policy interaction are (1) to be a resource where high-quality research and economic opinion on environmental policy issues can be sought by policymakers, and (2) to engage with policymakers in respect to agenda setting and policy design, formulation and implementation. EPRU’s work caters to the demands of domestic institutions as well as international organizations.

EPRU research fellows have extensive links with policymakers and practitioners in South Africa and have worked with various government units. EPRU works with a number of local and national policy stakeholders on medium-sized projects, such as the South African National Parks in the wildlife sector, the Department of Water Affairs and Forestry in the water sector, the Department of Environmental Affairs and Tourism on marine and coastal management, and the City of Cape Town on air quality management and energy savings.

POLICY INTERACTIONS

Poverty, resource scarcity and climate variability

The third wave of the University of Witwatersrand’s Agincourt survey was completed in June 2012. This project, initiated by Wayne Twine, has been presented at an ACCES conference where various South African policymakers and academics confirmed about climate change in October this year.

Behavioral project on climate change

Martine Visser, Grant Smith, and Kerri Brick have been involved in a behavioral economics project on climate change as part of a joint initiative by IDEEA4 (a Harvard based Behavioral Economics group) and the Research Unit in Behavioural Economics and Neuroeconomics (RUBEN) at UCT. They have been asked by the Western Cape Provincial Government to work on various interventions aimed at bringing about behavioral change amongst consumers. The pilot phase will be conducted over a two year period. Thereafter, we hope to roll out the intervention and do a full-scale random controlled trial (RCT). Our initial point of focus involves an advanced metering energy savings project which will be coupled with various behavioral interventions aimed at employees of the Western Cape Provincial Government. This is a very exciting project since it involves direct communication with the Premier’s office. We have already had a number of joint meetings with staff from the Premier’s office, the Environmental Department (Climate Change & Waste Management Teams) and Public Works. We have recently also met with officials in the City of Cape Town to discuss the extension of the project to include their employees also.

Water Research Commission on water savings and billing practices

Martine Visser and Grant Smith (a UCT graduate student) are involved in a project with the Water Research Commission (WRC) on water savings and billing practices, where various interventions (including social norms) are being used to elicit behavioral change. This project has involved several meetings with officials in the City of Cape Town. With funding from WRC, a steering committee has been formed, consisting of various stakeholders, policymakers and academics knowledgeable in the area. The team held one workshop with the steering committee in 2012 and will have another in February 2013.

The role of micro financing and insurance amongst informal dwellers

There are very few insurance products accessible to the poor. At the same time, climate change imposes new risks, such as severe weather conditions, which are not well captured by current insurance products. To address this, Martine Visser and Grant Smith (a UCT graduate student) are involved in a project with the Water Research Commission on water savings and billing practices, where various interventions (including social norms) are being used to elicit behavioral change. This project has involved several meetings with officials in the City of Cape Town. With funding from WRC, a steering committee has been formed, consisting of various stakeholders, policymakers and academics knowledgeable in the area. The team held one workshop with the steering committee in 2012 and will have another in February 2013.

South Africa has very good mining legislation, but making it work has been a problem. Mining can do a lot of environmental damage, not just when it is happening, but once it has finished and the mine is closed. In 2011, EID researcher Anthony Leiman was one of a small team who authored a discussion document entitled Financial Provisions for Rehabilitation and Closure in Mining Projects. The project was instigated by WWF in response to a perceived weakness in the application of the country’s mining legislation. The insights obtained from this source document were later used to assess the set-aside fund needed to ensure there would be enough money to mitigate post closure pollution from the Lusthof mine.

According to South Africa’s legislation, a trust fund or something similar has to exist before mining can begin. There is still a moratorium on coal mining in the area. The potential economic benefits of the proposed mining are apparent, since coal in this area is of good quality and close to the surface. Sadly, much of it lies under sensitive wetlands.

“The two biggest problems are dust from old dumps, and water that seeps from old workings. The rock has been exposed to air, and minerals in it, such as sulphur and arsenic, oxidise and dissolve in the rising waters. When this acidic and toxic water decants out of the mine, it flows into nearby rivers and poisons them,” says Anthony Leiman.

Such problems often worsen over time as old mines flood. Such acid mine drainage is a serious and growing concern. Addressing it is costly, and only once the results are approved can a mine get a closure certificate. One result is that many mines simply don’t formally close: though operations cease, the mine is ostensibly open and is registered as such. The group’s research into this problem was later extended by Shaan Hewittson, a master’s student supervised by Leiman with help from EID.

Current legislation requires that, before mining can commence at a new site, a fund has to be set up with sufficient money in place for mine closure to be effected. There is always a chance that the mine will prove a failure, so initially funds have to be in bank guarantee. But as mining proceeds and profits start flowing, a growing amount can be located in an interest earning fund. "The question that our team investigated was whether the rules of thumb widely used to estimate the initial set-aside fund have been underestimating the costs involved. The final document was released to the public a few months ago, and as a result the team leader, my former student Dr. Hugo Van Zyl, and I were asked to give an opinion on the proposed Lusthof colliery," says Leiman.

The proposed mine has a short life expectancy, roughly eight years, and has been heavily opposed by local activists as well as researchers. It also has significant support based on the growing local demand and rising price of good quality coal.

The Chlissiesmeer area in the Malmulanga Province is known as the Lake District of South Africa. It is a very uncommon habitat in South Africa, a combination of grassland, wetland and lakes, and is a noted breeding site for many rare water birds. Unfortunately, the Malmulanga Province, which is home to much of SA’s coal mining, has a history of serious environmental pollution, affecting both its human and wildlife populations. The proposed mine would provide short term benefits, but the ongoing costs of mitigating

70 million ZAR fund needed to address post-closure pollution from proposed mine

Within the unique wetland area Malmulanga Lake District lies the site of a proposed, and controversial, open cast coal mine, the Lusthof colliery. It will require a preliminary ‘set aside’ of about 70 million South African rands (9 million USD) to fund maintenance of water quality in the area’s rivers and lakes for a hundred years after closure, EID research shows. Such set asides to meet mine closure costs are required by South Africa’s mining legislation.

A healthy lake in the Malmulanga Province. Photo Paul Weinberg.
Its long term ecological costs needs to be estimated and their present value calculated. The demand was for a combination of theoretical insights into mine closure costs with the available engineering estimates of the cost of the water treatment needed over the next 100 years to prevent acidic drainage from the mine adversely affecting the Mpumulanga lakes and wetlands. The aim was to give an honest estimate as an input into the impact assessment so that the colliery owners and decision makers could put the short term gains and long term costs into a common context. The most likely scenario is that it will cost ZAR, or about 9 million US dollars at current exchange rates. (See table.)

“We tried to be completely objective in doing this, and to establish what it would cost to keep the water quality acceptable for 100 years after the mining was complete. Based on our estimates, we made recommendations concerning the amount of money that the mine would need to set aside before they were allowed to begin mining,” says Anthony Leiman. The resulting document has been accepted by the Water Resources Management Company (WRMCo) and is now part of the impact assessment process currently under way.

**ESKOM and consumer understanding of billing practices**

ESKOM, the national Energy Service Provider, has contracted with Martine Visser, Grant Smith, and Steven Davies to do research on consumer understanding of billing practices. They initially conducted focus groups in different parts of South Africa with people from various income groups. Subsequently, they have met with policymakers from ESKOM and participated in a workshop organized by ESKOM to give feedback to key stakeholders and policymakers.

**Legal Resource Centre and Award**

Jane Turpie and Martine Visser advised the Legal Resource Centre and Award (NGOs working on behalf of the public and especially poor stakeholders such as farm workers), evaluating work done by others on the classification of rivers in the Olifants River Catchment to determine water allocation to the environment versus other uses. This pertained to an ongoing legal suit dealing with the environmental impacts of coal mining in the Olifants River Catchment, Mpumulanga. The report was submitted to the National Department of Water Affairs and widely distributed amongst stakeholders.

**African Climate Development Initiative**

Martine Visser is part of an interdisciplinary research group at UCT affiliated with the African Climate Development Initiative. The group is currently studying the Berg River District in partnership with the provincial government, the local municipalities and other stakeholders operating within the area. This is part of an initial six-month process that will hopefully evolve into a number of research projects.

**Socio-economic impacts of Marine Protected Areas**

Senior Research Fellow, Jana Turpie, presented a talk on the potential impacts on commercial fisheries of MPAs expansion at the annual meeting of the Marine Protected Area Forum, a meeting of over 70 managers and researchers involved in MPAs in southern Africa. The forum also debated the human dimensions of MPAs in general, and how these should be taken into account in MPA planning, which has hitherto been very much focused on resources alone.

**EID/EPRI study shows how the Khomani San might benefit from ecotourism in Kalahari**

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

EPRU research fellows are involved in teaching a number of environmental and resource economics courses in the School of Economics and the Department of Zoology at the University of Cape Town.

EPRU members also run short training programs for policy makers and civil servants. Such courses inform decision makers of the relevant environmental economic tools available to improve policymaking and analysis. In 2012, members of EPRU gave lectures to civil engineers and civil servants as part of ongoing training in project appraisal and environmental assessment, and to local government through the City of Cape Town’s environmental seminar program.

POLICY SEMINARS, WORKSHOPS AND CONFERENCES

Political Economy of Fisheries in Developing Countries

EPRU SRF Mare Sarr attended a policy workshop on the political economy of fisheries in developing countries organised by the World Bank Agriculture and Rural Development Department (April 12-13, 2012). Five in-depth case studies on the reform of fisheries in Bangladesh, Chile, Indonesia, Sénégal and South Africa were presented. The discussion focused on the issues of use rights and the importance of the political economy and the institutional framework in determining reform outcomes. A number of NGOs and civil society groups for policy makers and analysts from the World Bank.

Teaching Course in the Albertine Rift Valley

EPRU SRF Jane Turpie, taught a course in economic valuation and environmental policy instruments as part of curriculum on the economic tools for conservation and infrastructure planning in the Albertine Rift. The course was held in Kasese, Uganda, during June 2012, and involved over 40 participants from the region, mostly from government conservation agencies, but also from other government sectors such as mining and infrastructure.

Workshops

Sue Snyman: International Workshop on Tourism Concessions in Southern Africa (UCIN), Maputo, Mozambique.
Mare Sarr: Workshop on political economy of fisheries in developing countries, the World Bank Agriculture and Rural Department, Washington DC.

Politicising Incentives through the Conservation of Fishery Resources

EPRU SRF Amanda Driver, Frank Matose, Eric Muchapondwa, Johan Sarr and Sue Snyman attended a policy workshop held in Provo, Utah, United States, on the role of incentives in fisheries management. "Evaluating Economic Incentives to Encourage Conservation in Bioregions in Southern Africa in Costa Rica in May 2012. Jo Albers, Jane Turpie, Francisco Alzate, and Roger Madrigal visited marine protected areas and interviewed fishermen along the Caribbean coast of Costa Rica, spent many hours in fruitful discussions on the project, cementing ideas and drawing models in the sand. The project will kick off with a survey in Costa Rica, and data collection in South Africa will begin later in the year.

Evaluating Dry-Lands Ecosystem Services in the Area Surrounding the Kgalagadi Transfrontier Park in South Africa

This project aims to determine how the Kgalagadi Transfrontier Park can promote tourism that generates economic and social benefits to land claimants and as a result maximise the positive spillover effects on the Khomani San people.

Value of Protection and Management of the South African Coast

The objectives of this study are to provide a spatial analysis of the total economic value of the South African coast, focusing on the values generated by different types of protected areas versus other stretches of coast.

Providing Economic Incentives for Biodiversity Conservation in an Emerging Bioregional Context

EPRU SRF Edwin Muchapondwa and co-authors highlighted the importance of incentives in achieving biodiversity protection goals in a paper published during 2012. Many protected areas are not successfully conserving biodiversity, often despite adequate management within their borders. Changes in land use outside protected areas can alter ecological function inside protected areas and result in biodiversity loss, given that protected areas are almost always parts of larger ecosystems. Economic incentives are seen as one of the most promising avenues to influence conservation goals.

Junior Research Fellow Johane Dikgang doing field work in Kalagadi Park

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.

Evaluating Dry-Lands Ecosystem Services in the Area Surrounding the Kgalagadi Transfrontier Park in South Africa

This project aims to determine how the Kgalagadi Transfrontier Park can promote tourism that generates economic and social benefits to land claimants and as a result maximise the positive spillover effects on the Khomani San people.

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

This project strives to determine how the Kgala- gad Transfrontier Park can promote tourism that generates economic and social benefits to land claimants and as a result maximise the positive spillover effects on the Khomani San people.

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Peer reviewed


Book Chapters

EID Discussion papers


Discussion papers


Research briefs
The Environment for Development Initiative (EfD) is the South African branch of EfD.

**Academic conferences**
  - Johane Dlengane: The Effect of the Land Restitution Programme on Poverty Reduction among the Khomani San.

**Academic seminars**
- 19th Annual Conference of the European Association of Environmental and Resource Economists, Prague.

**RESEARCH PRESENTATIONS**

**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.

EFRU’s research fellows are actively involved in the School of Economics, teaching programs in environmental and natural resource economics as well as in the broader university. Our strong involvement in teaching has undoubtedly helped us attract promising Postgraduate students. In addition, in order to support talented students to undertake research in our fields of interest, EFRU provides grants to Masters and PhD students. Finally, we also award prizes to reward the best Honours and Masters Thesis.

**COURSES TAUGHT BY EFD SOUTH AFRICA INCLUDE:**

**Graduate courses**
- Environmental economics (Honours courses)
- Natural resource economics (Master courses)
- Environmental and resource economics module (Master courses)
- Natural resource economics (Ph.D. courses)

**Theses PhD & MSc**
- Anthony Dane: “Personal carbon emissions trading: an experimental analysis” was entered into this contest.
- Katie Gull: “Water supply in the Eastern Cape: an economic case study of land rehabilitation in the Komma River catchment”
- Shaun Hewitson: “A reassessment of the quantum for financial provision of mine closures: A Monte Carlo approach”
Senior Research Fellow Tony Leiman on the SANRAL toll road

The SANRAL toll road issue has become a public debate recently following the furor over tolling in Johannesburg. When SANRAL announced that it wanted to toll the N1 and N2 highways as they come into Cape Town, the city authorities reacted very negatively. Senior Research Fellow Tony Leiman had done work on the topic in earlier days, and knew the city authorities. So, when the legal counsel appointed by the authorities needed an expert opinion, he was approached. He provided a pro-bono evaluation of the economic and welfare dimensions of the tolling proposal.

Coal mining in the Chrissiesmeer Mumpalanga wetlands

Senior Research Fellow Tony Leiman provided advice on a proposal to begin coal mining in the Chrissiesmeer Mumpalanga wetlands. Having recently finished working on proposals for the amendment of national regulations on post-closure mine rehabilitation, he was brought into the process after the mining proposal was met with intense local opposition by communities and NGOs. This required an economic analysis of the costs of meeting the new mining legislation’s requirements for site restoration and maintenance of water quality. First, the engineering requirements were identified. Then, the system of bank guarantees and the details of the required restoration fund were determined. Finally, the costs were assessed.

EPRU provides advice on fisheries management

It has been a matter of concern for some time that much of the institutional memory of fisheries management and policy attempts to conserve the resource has been located in a small number of persons. Many of these are close to retirement or indeed retired, and many of the younger persons have moved into the private sector or emigrated. EPRU members Mare San, Jane Turpie, and Tony Leiman are among those helping to fill this gap.

Political Economy of Fisheries in Developing Countries

EPRU Fellow Mari San attended a policy workshop on the political economy of fisheries in developing countries organized by the World Bank Agriculture and Rural Department (April 12–13, 2012). Five in-depth case studies on the reform of fisheries in Bangladesh, Chile, Indonesia, Senegal and South Africa were presented. The discussion focused on the issue of use rights and the importance of the political economy and the institutional framework in determining reform outcomes. A number of NGOs took part in the workshop together with policy makers and analysts from the World Bank.

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

Although the Khomani San “bushmen” reclaimed land in and around the Kgalagadi Transfrontier Park in 1994, they have never received any direct gains from tourism revenues coming from entrance fees. EPRU researchers demonstrate that one way for the Khomani San community to benefit from tourism is for park visitors to earmark donations on their entrance fees, which could promote a better distribution of park profits amongst stakeholders. Additionally, research shows that the Khomani San community values biodiversity and would be a reliable partner in the conservation effort.
The Environmental-Economics Policy Research Unit (EPRU) is the South African branch of EfD. EPRU is based at the School of Economics at the University of Cape Town. EPRU is a collaborative association of researchers specializing in environmental and natural resource issues.

The unit was established in 2007 to promote sustainable development and poverty reduction in southern Africa. To achieve these goals, EPRU aims to enhance the effectiveness of environmental policymaking by adopting a threefold strategy of research, teaching and policy consultation.

During the last six years, EPRU has built extensive policy-relevant experience in research pertaining to ecosystems management, biodiversity conservation, air quality and water quality. The center also has previous research capacity and experience relevant to the socioeconomicities of agriculture, fisheries and conservation. Specifically, this strain of research has been concerned with farm workers’ wages, land use and rural poverty, and inequality among subsistence fishermen, as well as the role of community-based wildlfe conservation in poverty mitigation.

EPRU has successfully worked with a number of local and national stakeholders on medium-sized projects, such as the South African National Parks in the wildlife sector, the Department of Water Affairs and Forestry in the water sector, the Department of Environmental Affairs and Tourism on marine and coastal management, and the City of Cape Town on air quality management and energy savings. In the next few years, EPRU plans to bid for larger research projects that will enhance collaboration among EPRU research fellows, with other researchers and, importantly, with key stakeholders.

In 2012, EPRU received funding from the School of Economics (University of Cape Town), the Swedish International Development Cooperation Agency (Sida), the Carnegie Foundation, the Fiscal and Financial Commission, Formas and CEEPA.

DONORS AND FUNDING

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<th>List of funding institutions</th>
<th>Funding in ZAR</th>
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THE EPRU NODE IN THE EFD NETWORK

The Environmental-Economics Policy Research Unit (EPRU) is the South African branch of EfD. EPRU is based at the School of Economics at the University of Cape Town. EPRU is a collaborative association of researchers specializing in environmental and natural resource issues.

The unit was established in 2007 to promote sustainable development and poverty reduction in southern Africa. To achieve these goals, EPRU aims to enhance the effectiveness of environmental policymaking by adopting a threefold strategy of research, teaching and policy consultation.

During the last six years, EPRU has built extensive policy-relevant experience in research pertaining to ecosystems management, biodiversity conservation, air quality and water quality. The center also has previous research capacity and experience relevant to the socioeconomicities of agriculture, fisheries and conservation. Specifically, this strain of research has been concerned with farm workers’ wages, land use and rural poverty, and inequality among subsistence fishermen, as well as the role of community-based wildlife conservation in poverty mitigation.

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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.

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.

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:

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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. A new partner to EfD since 2012 is also Universidad de Concepción in Chile. Our associates are based at RFF and several universities across the world. One of them, University of Gothenburg in Sweden, hosts the EfD secretariat.

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Our vision is green economy; sustainable economic growth founded on efficient management of ecosystems, natural resources and climate change impacts.

For more information please contact:

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Sida
Swedish International Development Cooperation Agency, provides the funding for the EfD initiative.
To find out more about our work and the EfD initiative:
www.efdinitiative.org/centers/south-africa
You are most welcome to contact us:

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Private Bag 7701
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