

ANNUAL REPORT 2023



Stories from the world of EFD 2023: Vietnam's circular economy plan > EFD centers collaborate on a fisheries management plan for Nigeria > Policymakers and researchers make joint efforts to address biomass dependency in Uganda > Kenya's just transition > Improved air quality in Bogotá

EfD in 2023

Welcome to EfD! We would like to share some of the exciting activities carried out within the global network of environmental economics centers and partners that EfD consists of.

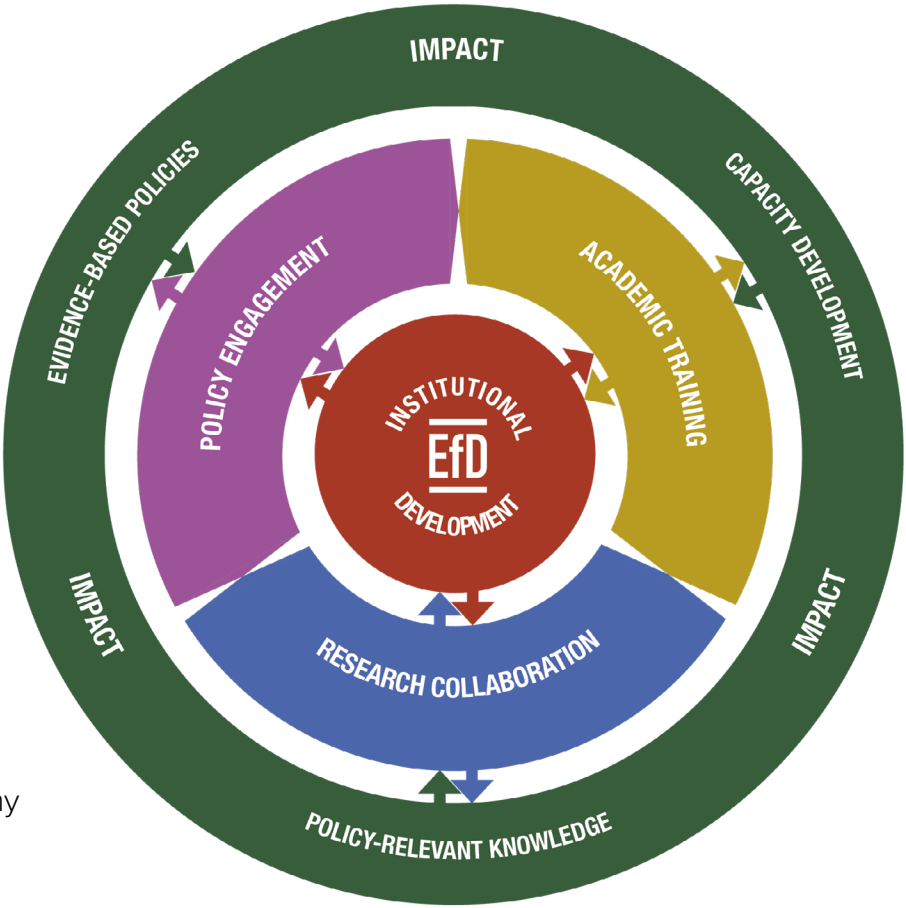
As you can see, the report is organized based on our impact model. It shows how different activities in the organization are jointly achieving impact. In this “decade of action”, as proclaimed by the UN, we all need to focus on maximum impact addressing the local implications of global challenges such as climate change and biodiversity loss. Impact through evidence-based policies is what EfD aims for.

A necessary condition for such impact is a strong interface between academia and the surrounding society through policy engagement. While this has always been a key feature of EfD, it has been strengthened substantially through the Inclusive Green Economy in Practice program.

Policy engagement needs to build on relevant high-quality applied research. Much of the research carried out by the EfD Research Fellows is still focusing on the local challenges in each country. But increasingly there is also South-South-North collaboration in our thematic programs, each led by one of our centers in the Global South. The research presupposes that there is available well-trained capacity in the countries. EfD ensures that through both local and joint courses, with a special focus on our own “Early-Career Program” that trains the next generation of research leaders in the EfD centers.

There is also an extra focus to support women through our Women in Environmental Economics and Development (WinEED) network. Finally, we have the “bull’s eye” of our impact model – institutional development. It is with great pride that I see how the EfD centers have become vibrant research platforms that are institutionalized within their host universities. EfD, as a global network, is growing in the number of researchers engaged, peer-reviewed publications produced, and policy dialogues held. In this report, we share with you how EfD is part of the solution to the daunting challenges the world is facing. Together we can make a difference.

GUNNAR KÖHLIN
EfD Director



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ABOUT EfD

Environment for Development (EfD) is a global network of research centers specializing in environmental economics. We tackle urgent environmental and development issues worldwide. Our mission is to provide scholars with a dynamic research environment that fosters innovation and impactful solutions. EfD supports vibrant research centers across leading academic institutions, spanning 12 locations in the Global South. These centers not only run graduate academic programs but also engage in high-quality policy research and collaborate with key stakeholders and policymakers.

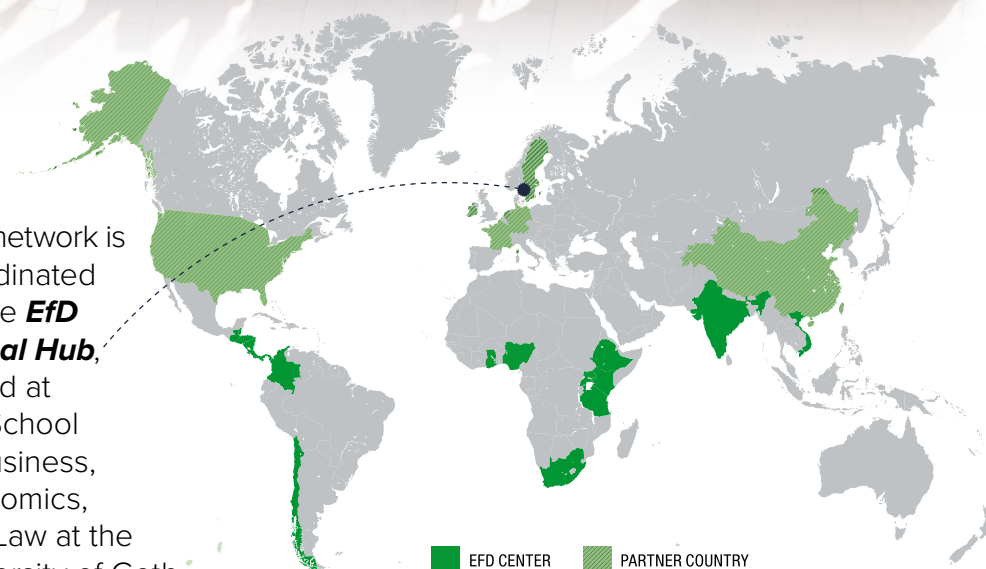
What sets EfD apart?

Our global reach and our ability to combine teaching, training, research and policy engagement. We connect scholars across borders, emphasizing South-South-North interaction.

In East Africa we are implementing a model for structured knowledge transfer between policymakers and researchers.

EfD collaborates in international research groups on critical topics such as sustainable energy transition, emissions pricing, sustainable consumption and production, marine resources, and natural capital.

The network is coordinated by the **EfD Global Hub**, based at the School of Business, Economics, and Law at the University of Gothenburg, Sweden. Since our inception in 2007, we've also forged partnerships with academic institutions in the Global North.



■ EFD CENTER ■ PARTNER COUNTRY

EfD, as a network, is primarily supported by the Swedish International Development Cooperation Agency (Sida). All EfD centers receive external funding for research and policy work from a large number of donors. For details, see our [website](#).

DIALOGUE BETWEEN RESEARCHERS AND POLICYMAKERS

- A COMMON THREAD AT **EfD'S ANNUAL MEETING 2023**

EfD's 17th Annual Meeting, claimed to be the biggest and best conference on the application of environmental economics in the Global South, encompassed an entire week of courses, plenaries, research presentations, and collaborative meetings involving around 200 people from all over the world.

The Annual Meeting in Accra, Ghana on October 5 – 8, featured six keynote presentations, 38 parallel sessions with 121 research presentations, and open sessions with EfD's seven collaborative programs.

In addition, there were three courses and a policy day conducted during the three days preceding the Annual Meeting itself.

THEMES AND KEYNOTE SPEAKERS:

- ▶ **Erik Sterner**, AI for a green transition
- ▶ **Erin Sills**, On carbon offsets from forest conservation
- ▶ **Subrehendu Pattanayak**, How to do Environment and Development Economics research: A view from the trenches
- ▶ **Priya Shyamsundar**, Economics in Conservation Practice
- ▶ **Jyotsna Jalan**, Changing Social Norms: Effectiveness of Participatory Theatre
- ▶ **Edwin Muchapondwa**, Trade-Offs Between Communities' Welfare and Wildlife Conservation in Africa

IGE teamed up with SETI

The Inclusive Green Economy in Practice Program (IGE) had a three-day workshop where 26 civil servants from five countries in East Africa met with 20 researchers from the EfD network, mainly from the Sustainable Energy Transitions Initiative (SETI). The IGE program had a focus on green energy transition this year. Teaming up with SETI ensured that the participants had access to some of the best and most relevant research in this field.

Training for policy impact

There was also a two-day training session for 24 researchers from the EfD centers on Policy Engagement and Science Communication. They took part in presentations, learned about communication, discussed challenges and opportunities, and built a community of practice within EfD for greater policy impact.

Gender was highlighted

The EfD Early Career Fellowship program also met for a three-day course on Gender Analysis in Development Economics. The

19 early career researchers from the EfD network discussed the concept of gender and its relevance to research, equipping themselves with methodologies to analyze gendered impacts. The pre-meeting sessions also included a Policy Day at the University of Ghana.

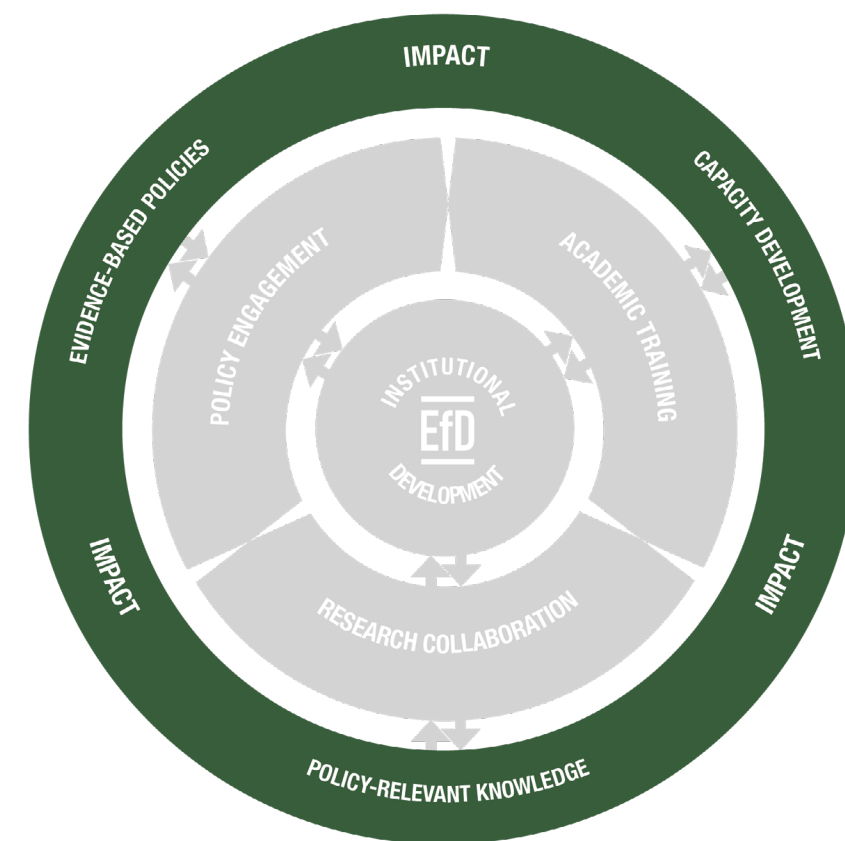
Policy Day

The Policy Day highlighted the important work of EfD Ghana in contributing to the implementation of policies for a sustainable fishing industry. Several senior civil servants and other stakeholders, including the Deputy Minister of Fisheries and Agriculture attended, as well as researchers from the EfD network. The influential dialogue between researchers and policymakers when it comes to fisheries management in Ghana was a common thread throughout the week. Professor Wisdom Akpalu presented his experiences from these policy dialogues in the Policy Engagement and Science Communication course. This was also the theme of the policy day and at the award dinner, where Wisdom Akpalu received the EfD Impact Award.

Annual meeting in Ghana 2023
Photos: Emmanuel Richardson



Impact stories



Efd'S IMPACT

Efd aims at contributing to locally grounded, evidence-based policy-making that benefits people and the environment. We do this by conducting high-quality, policy-relevant research, training the current and next generation of decision-makers, and actively engaging with policymakers and other stakeholders.



EfD RESEARCHERS CONTRIBUTE TO VIETNAM'S CIRCULAR ECONOMY PLAN

EfD Vietnam has made several contributions to the country's National Action Plan for Circular Economy which was presented to the Prime Minister in December 2023, to be implemented in 2024.

Vietnam has currently a very low rate of recycling, reusing, redesigning, etc. For one thing, the country needs to develop infrastructure and technology for a circular economy. In addition, the financial incentives to contribute to a circular economy are poor. For instance, glass manufacturers who need glass scraps as raw material find it less expensive to buy imported glass scraps than to recycle domestic material. One significant challenge is also the lack of data that is needed to guide actions and policies.

The Vietnamese government is creating a National Action Plan for Circular Economy (NAPCE) to take a concerted approach. The first draft of the NAPCE was produced in June 2023 in a consultation workshop organized by the Institute of Strategy and Policy on Natural Resources and Environment (ISPONRE) in Vietnam. The workshop was attended by representatives from ministries, provincial people's committees, development partners, UN agencies, NGOs, businesses, research institutes, media, and other experts.

EfD Vietnam's Director, Pham Khanh Nam participated and shared the center's insights

on material flows in a circular economy and the scientific basis for proposing priority sectors in the NAPCE. He shared, among others, insights into the circularity rate and material flow in Vietnam and how they are distributed across different economic sectors. He also pointed out the challenges of data availability.

Better data and management is needed

Pham Khanh Nam suggested that improving data collection and management systems is essential for developing and implementing effective policies and strategies for circular economy in Vietnam. He also recommended that priority sectors for NAPCE should be based on criteria such as material intensity, environmental impact, economic value, and social benefit.

"We will incorporate the comments and suggestions from the workshop into the final draft of NAPCE before submitting it to the ministry and the Prime Minister for approval," commented Mai Thanh Dung, the Deputy Director of The Institute of Strategy and Policy on Natural Resources and Environment (ISPONRE) at the workshop.

In September 2023, Pham Khanh Nam attended a "writeshop" held by ISPONRE to

finalize the NAPCE.

"My input at the seminar, such as measurements of circular economy, have been implemented in the plan," noted Pham Khanh Nam.

Government and industries most affected

The final version was submitted to the Prime Minister in December 2023. While waiting for the Prime Minister's approval, EfD Vietnam and ISPONRE co-organized a training workshop for government officials in the southern region of Vietnam to train government officials in implementing the upcoming NAPCE.

The plan will mainly affect two key players: government bodies at the provincial level that will have to fulfill their circular economy goals and private actors, mainly in manufacturing, that need to reduce waste and increase the efficiency in using inputs. The NAPCE will be implemented during the first part of 2024.

"Winners will be society as a whole when the resources are used efficiently, and waste is reduced. Losers could be industries or regions that lose their competitiveness if they have costs related to the circular economy while their competitors do not. In some cases, subsidies may be needed," notes Pham Khanh Nam.





TWO EfD CENTERS COLLABORATE ON A FISHERIES MANAGEMENT PLAN FOR NIGERIA

EfD Ghana and EfD Nigeria collaborate in a joint project that transfers knowledge and best practices from Ghana to Nigeria, leading to the development and implementation of Nigeria's first fisheries management plan. The plan will support a more effective data-driven regulation of Nigeria's fishing efforts.

The fisheries sector plays an important role in the Nigerian economy by meeting the protein demand of the growing population, providing employment along the value chain, particularly in rural and coastal communities, with aquaculture as an emerging sector, and contributing to foreign exchange earnings

through exports of fish and fishery products. However, Nigeria struggles with issues it shares with neighboring countries.

"The fisheries sector in Nigeria has many problems, such as overfishing, a weak and outdated legal framework, poor management, and monitoring, among others," says Nnaemeka Chukwuone, EfD Nigeria's Center Director.

EfD partnered with government

EfD Nigeria has studied those problems for a long time. Researchers from the center shared, for instance, their research findings regarding the fisheries sector with stakeholders in January 2022 which resulted in a communique requesting Nigeria's National Assembly to review the country's fisheries law.

In November of that year, EfD Nigeria partnered with government agencies and other stakeholders in Nigeria's fisheries and aquaculture sector to review the Nigeria Sea Fisheries Act of 1992. A document containing recommendations on what should form the new law was produced after a two-day workshop organized by EfD Nigeria, in collaboration with the Federal Ministry of Agriculture and Rural Development and the Nigerian Trawlers Owners Association.

"Implementing a fisheries management plan is important for ensuring the sustainability of fish stocks, supporting local economies, and promoting food security," notes Wellington Omoragbon, Director of the Department of Fisheries and Aquaculture.

Experiences from EfD Ghana

EfD aims to stimulate peer-learning and to take advantage of the knowledge and experiences acquired at the different centers.

A project, titled *Enhancing fisheries policy initiatives in Nigeria based on EfD Ghana experiences: The blueprint for developing Fisheries Management Plan (FMP) for Nigeria* was initiated in 2023. It's motivated by the need to address the challenges posed by open-access fisheries. Drawing on EfD Ghana's successful experiences in designing and implementing a fisheries management plan, the project aims to give Nigerian policymakers, researchers, and stakeholders from Nigeria's Federal Department of Fisheries and Aquaculture and Federal Ministry of Agriculture and Food Security the necessary tools and insights for effective fisheries management.

"EfD has contributed to the capacity development of staff in this regard. The training has equipped our staff with knowledge on how to estimate the Maximum Sustainable Yield of Marine Resources for developing a

management plan, using Ghana as a case study," says Wellington Omoragbon.

Key activities within the project include in-depth interactions between researchers and policymakers from both countries, hands-on training, and peer learning on simple bioeconomic analysis. One of the primary deliverables is formulating a fisheries management plan specifically tailored for small pelagic species in Nigeria. The plan is expected to play an important role in addressing the transboundary nature of fisheries and fostering cooperation among policymakers in the West African region.

"Given the transboundary nature of fisheries, problems like overfishing are shared with Ghana and other neighboring countries. We hope to develop a project to deal more with these issues across countries in the region," says Nnaemeka Chukwuone.

The team has gathered the required data for a bioeconomic analysis and will start the analysis and the development of the plan in March 2024. There are many possible measures. What solutions will be included in the plan will depend on the outcome of the bioeconomic model.

"We aim to have a plan by April, after which we will hold a workshop to validate it, and hopefully, after that, the implementation will start. The Federal Department of Fisheries is working closely with us on this," relates Nnaemeka Chukwuone.



Nnaemeka Chukwuone,
Center Director
EfD Nigeria
Photo: EfD Nigeria

CIVIL SERVANTS AND RESEARCHERS MAKE JOINT EFFORTS TO ADDRESS BIOMASS DEPENDENCY

More than three billion people globally rely on biomass fuels, such as coal, charcoal, and firewood for cooking and heating. EfD's IGE program, a capacity development program that targets civil servants in East Africa, is currently focusing on this issue. The policymakers from Uganda and the researchers in their local support team are a good example of working together to address this problem from several angles.

The civil servants participating in the Inclusive Green Economy in Practice (IGE) program, so-called IGE fellows, in the 2023/24 cohort, focused their work on sustainable energy transition and in particular reducing biomass dependency. The reason for this focus is that biomass dependency is among the most urgent development challenges in Africa. It includes for instance health problems, deforestation, biodiversity loss, climate change, poverty, a burden on women and children who spend time collecting firewood instead of going to school or doing paid work, and security issues. In Uganda alone, the air pollution

caused by firewood burning causes the premature death of around 13,000 people.

Has been on the agenda for decades

However, this problem has been the topic of very many studies and policies over many decades. There are tough hurdles to overcome: Costs for clean cooking technologies, availability of alternative fuels, traditions, and perceptions (that is, that electricity and gas are dangerous to use and that the food will not taste as good) are some of them.

The Ugandan support team (consisting of researchers at EfD Uganda: Edward Bbaale; John Sseruyange; Nicholas Kilimani and Peter Babyenda) authored several op-ed

articles in 2023 to highlight the dangers of biomass dependence. They also conducted a study with focus groups to learn about peoples' perception of a transition to cleaner energy which resulted in a policy brief, now published on [the EfD website](#). Increasing the knowledge about biomass dependency among policymakers and the general public is one cornerstone in addressing the problem.

The IGE model calls for dialogues between policymakers and researchers to match policy needs with scientific evidence. In Uganda, the support team and the 2023 IGE fellows organized two formal policy dialogues in April and July. These attracted several stakeholders including among many others, IGE fellows, other officials from government ministries, departments, and agencies, researchers, NEMA, and Nyabyeya Forestry College.

Realistic solutions and communication are key

The IGE fellows attended several online trainings coordinated by the EfD's Global hub. They also attended a one-week training workshop in Ghana in October where they exchanged knowledge and experiences with the IGE fellows from Ethiopia, Kenya, Rwanda, and Tanzania, the support teams, and other EfD researchers.

Peace Kaliisa from the Ministry of Infrastructure, Rwanda, welcomed this opportunity to meet with researchers and discuss the problems face to face to bridge the research-policy gap:

"The challenge is that we can often not relate to the research. The researchers must look at solutions that are easy to implement, relate to ordinary people, and communicate it understandably."

Several positive outcomes

The team's (IGE Fellows' and EfD researchers') activities have led to several positive outcomes. For one thing, the president of Uganda issued an executive order to ban the production of commercial charcoal.

"Our IGE fellows from the Ministry of Energy and Mineral Development participated in drafting a cabinet memo that led to

the issuing of a presidential executive order restricting the production of charcoal," said Peter Babyenda, Policy Engagement Specialist, EfD Uganda.

In addition, the Ministry of Energy and Mineral Development rolled out the distribution of 1 million free LPG (Liquid Petroleum Gas) cylinders and cooking plates to demonstrate to the public that it is possible to move away from biomass dependence.

"The two IGE fellows from the Ministry of Energy and Mineral Development, Tony Joshua Mwesigwa and Simon Peter Ssekitoleko played an instrumental role in designing this plan and ensuring that it is implemented," said Peter Babyenda.

Just supplying cooking devices doesn't solve the problem though, when fuel is hard to find, so the IGE fellows wrote a concept report on the distribution of free LPG, the construction of LPG refineries across the country, and the need for cost-effective subsidies. The planning department where IGE fellow Tony Joshua Mwesigwa works suggested a model for a reduction in energy tariffs to encourage the shift to the use of electricity to cook.

Tony Joshua Mwesigwa commented that "the IGE course and IGE support team were instrumental in guiding us to come up with the above proposals. Some of them are already being implemented such as reduction in electricity tariff, distribution of free LPG, and the review of energy policy in the country".

FACTS ABOUT THE IGE PROGRAM

The IGE program, arranged by EfD, is a program for capacity development in five African countries: Ethiopia, Kenya, Rwanda, Tanzania, and Uganda. About five high-level civil servants per country, 25 people in all, are enrolled each year in the current program, running from 2023-2027. After finishing the program, they are part of an alumni network, aimed at sharing experiences and knowledge on best practices. The program is funded by the Swedish International Development Cooperation Agency, Sida.

FACTS AND PERCEPTIONS

– A JUST TRANSITION MUST CONSIDER BOTH



Drivers of Matatus (minibuses) risk losing their jobs
Photo: Shutterstock

The impacts of climate change differ greatly between and within countries. Policies for adaptation and low-carbon pathways must consider how different groups in society are affected and ensure that no one is left behind. This is easier said than done. From local to global levels, EfD researchers are investigating facts and perceptions to help overcome the hurdles to much-needed transition policies.

Thousands of informal transportation workers in Nairobi, Kenya, risk losing their jobs when the planned Bus Rapid Transport system is introduced. The system that will increase the efficiency of the public transportation system while reducing congestion and emissions has many winners. However, current policies lack a clear mechanism to deal with those who, like drivers and conductors of minibuses, so called “Matatus”, stand to lose from the transition.

“Researchers can play an important role in identifying how vulnerable groups are affected by transition policies and in finding solutions for making the policies acceptable and inclusive,” says Richard Mulwa, Center Director EfD Kenya.

Richard Mulwa co-authored the report *Incorporating Just Transitions in Kenya's Low-Carbon Economy Development Path*, commissioned by the NGO Climate Strategies.



[Read the full report here](#)

Challenges and recommendations for a Just Transition were highlighted for seven economic sectors, including transportation and urbanization. The report was launched in April 2023 in a workshop in Nairobi with participation from the Matatu Owners' Association, the State Department of Transport, the Kenya Association of Waste Recyclers, and many more.

Include reskilling initiatives

“A Just Transition for the transport sector must pay close attention to the informal workers, take measures to increase access to formal employment, include reskilling initiatives, and give special attention to the specific needs of women workers,” says Richard Mulwa.

Researchers should focus more on questions of political economy and the link between public support and political acceptance of climate policies. This was one of the conclusions coming out of a major EfD project finalized in 2023 (see also page 33 on *High-Level Research Agenda for inclusive Low-Carbon Transitions for Sustainable Development in the Global South*).



Richard Mulwa,
Center Director EfD Kenya
Photo: EfD Kenya

Policy acceptance can increase

Previous research has shown that acceptance of climate policies, for instance, a tax on fossil fuels increases if the resources collected are used for well-defined purposes. However, hardly any research has been done on the social acceptance of carbon policies in East Africa. Michael Ndwiga, EfD Kenya, was part of an international group from EfD who wanted to change this. An online survey was made with more than 4,500 people in Ethiopia, Rwanda, Uganda, Kenya, and Tanzania.

“We found that people in East Africa are roughly as skeptical of climate policies such as taxes as people in the Global North. Only about 25% state they would support a tax on fossil fuels. But if the money collected was recycled back to social programs, more than two-thirds of respondents were in favor of such a policy. While these findings are only indicative, surveys like this might reduce policymakers' reluctance to introduce effective and just policies,” says Michael Ndwiga, who was co-author of that study, which was published in *Climate Policy*, titled *Public acceptability of policy instruments for reducing fossil fuel consumption in East Africa*.



Michael Ndwiga,
EfD Research Fellow
Photo: EfD Kenya

SOCIOECONOMIC AND AIR QUALITY INDICATORS **HELP** **IMPROVE AIR** **QUALITY IN BOGOTÁ**

Bogotá, the capital of Colombia, suffers from heavy air pollution. EfD researchers have studied alternative solutions to evaluate what interventions are most effective. The result of their work is now guiding policies and actions to improve air quality.

The problems with air pollution vary between different sections of the city and are the worst in the southwest of Bogotá, an area with a lot of industries, heavy traffic, and unpaved roads. In addition, poverty and social problems are prevalent in this part of the city.

Air pollution can cause heart- and circulatory problems as well as respiratory diseases. When it comes to small particles, there is no safe level, which underlines the importance of keeping it as low as possible.

EfD researchers Jorge Bonilla and Claudia Aravena conducted a study together with Ricardo Morales from the Engineering Department at Universidad de los Andes. They compared the impact of three different policies – paving roads, fuel substitution in the industry, and renovation of the diesel vehicle fleet – on air quality in Bogotá.

Worst air pollution in poor areas

“Tackling air pollution, measured as particular matter concentration, must be an important goal in cities such as Bogotá,” said Jorge Bonilla.

“We have found that communities suffering from the highest levels of social and economic inequalities are also those that suffer the most from air pollution. Therefore, the study of air pollution must be done using a multidimensional approach, which includes more dimensions of inequality.”

The results from the study were a bit surprising. The researchers found that paving the streets was the most efficient policy to reduce air pollution in Bogotá compared to fuel substitution from carbon to gas in the industry, and renovation of vehicles to EURO VI technology. The problem with streets that are not paved is that airflow and traffic raise dust that carries particular matter and crea-

tes an air pollution problem. This means that paving the streets in this zone will increase the well-being of people who live in, work, and transit through that zone.

The researchers presented the results of this study in a workshop with many influential stakeholders such as representatives from the Secretary of Environment, Secretary of Mobility, Institute of Urban Development of Bogotá, and the Citizenship Board for Air Quality in Bogotá (in Spanish “MECAB”, Mesa de calidad del aire del Bogotá). They have also produced a policy brief and a film on the topic.

Paving roads is not sufficient

“Their work has been very important input for one of our most innovative approaches: for the first time, the Environment Secretariat is investing in specific road improvement projects,” said Carolina Urrutia Vásquez, District Secretary for the Environment in the Mayor’s Office of Bogotá.

“We used their work to include socio-economic criteria to decide which roads, particularly those around schools, childcare facilities, and facilities that offer services to the elderly, would be selected for our investments.”

Paving roads is of course not sufficient to solve problems with air pollution, even though this turned out to be the most effec-

tive measure in this particular context. Air pollution needs to be addressed with many different actions.

Their paper *Assessing Multiple Inequalities and Air Pollution Abatement Policies* was published in Environmental and Resource Economics. The research has not only influenced the paving of roads but also the development of so-called ZUMAs – Zonas por un major aire, that is, better air zones.

“Their work has been central to the development of Bogotá’s ZUMA policy, which was included in the city’s Master or Land Use Plan in 2021, and will guide the city’s planning for the next 12 years,” said Carolina Urrutia Vásquez.

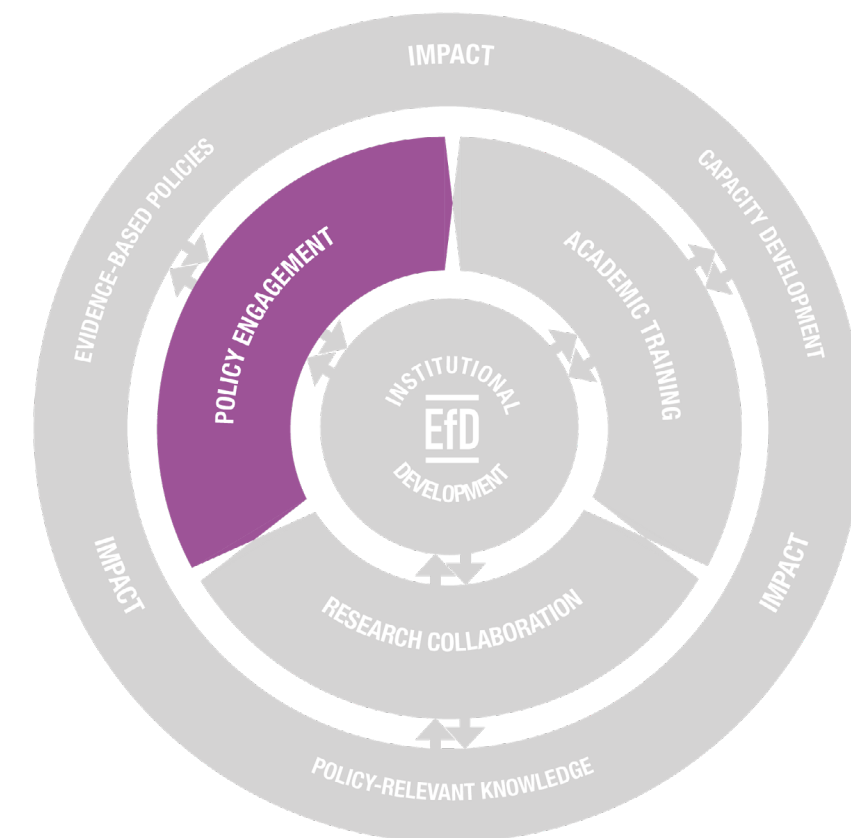
ZUMAs is a tool to focus the city’s interventions in the neighborhoods with the poorest air quality, ensuring that all interventions, including public spaces, road improvement, the selection of schools and childcare facilities, switching to cleaner sources of energy and green spaces are planned in a way that contributes to improving air quality. Eventually, ZUMAs will become the city’s low-emission zones. Instead of using the cookie-cutter approach and establishing these zones around the most congested areas, Bogotá chose to establish ZUMAs in areas where air quality problems from multiple sources have the largest impact on the most vulnerable population.



EfD's Policy Engagement Director Daniel Slunge with Jorge Bonilla and Claudia Aravena receiving their "Certificate of Excellence" for their work on air pollution in Bogotá
Photo: Emmanuel Richardson



Policy Engagement



Efd'S POLICY ENGAGEMENT

Efd's overarching goal is to address the world's most pressing environmental and development challenges. The researchers at Efd are conducting policy-relevant research aimed at supporting the energy transition, facilitating adaptation to climate change and promoting the sustainable management of our natural capital in an inclusive and gender sensitive manner. Key to achieving these objectives is our active engagement with policymakers and stakeholders. The robust local networks of Efd centers with government agencies and other organizations constitute Efd's greatest asset, which can be leveraged at the regional and international levels in collaboration with our partners.

ENGAGING WITH POLICYMAKERS AND SOCIETY - ONE OF EfD'S CORNERSTONES

EfD aims to create impact by conducting high-quality, policy-relevant research, training the current and next generation of decision-makers, and actively engaging with policymakers and other stakeholders. Creating impact is not a simple task, nor is it fully within our control to make it happen. However, by being locally grounded and constantly reaching out and collaborating with actors outside academia, chances to succeed increase.

Key elements of EfD's impact strategy:

- An important selection criterion for EfD-funded research is policy relevance
- Training programs for EfD researchers strengthen their skills in policy engagement
- Collaborative research themes and policy learning initiatives create synergies and learning between countries
- The EfD webpage, newsletter, and social media channels are important vehicles for the network to reach out to a very broad and diverse group of stakeholders in multiple countries
- The EfD Policy Impact Award promotes excellence in policy impact

Participants and facilitators in the Policy Engagement and Science Communication training
Photo: Emmanuel Richardson



Wisdom Akpalu,
winner of the
EfD Policy
Impact Award
Photo: Emmanuel
Richardson



EfD IMPACT AWARD ENCOURAGES POLICY-RELEVANT RESEARCH AND STAKEHOLDER ENGAGEMENT

The EfD Impact Award was presented for the second time at the EfD Annual Meeting in Ghana in October 2023. The winner was Wisdom Akpalu, EfD Ghana, for his work to achieve policy change for sustainable fisheries in Ghana.

The motivation was: "Professor Wisdom Akpalu's research and policy engagement has played an instrumental role in the development and implementation of policies to make fisheries practices in Ghana more sustainable. Policy changes to which Akpalu has made important contributions include the use of video monitors on industrial trawlers, changes in mesh sizes, an alternative livelihood training support program, and the establishment of a Scientific and Technical Committee under the Fisheries Commission. His work on these politically sensitive topics, including harmful subsidies, is solidly built on facts and figures, and he has thereby gained the respect and trust of government officials as well as artisanal fisheries organizations."

An external committee selects the winner of the EfD Impact award. The members are:

- **Chantal Line Carpentier**, Head Trade, environment, climate change, and sustainable development, UNCTAD Division of International Trade and Commodities
- **Pushpam Kumar**, Chief Environmental Economist and Senior Economic Advisor, UN Environment Programme
- **Precious Zikhali**, Senior Economist, the World Bank
- **Ernesto Sanchez-Triana**, Global Lead for Pollution Management and Circular Economy, World Bank
- **Kevin Urama**, Chief Economist and Vice-President, Economic Governance and Knowledge Management, African Development Bank Group



TRAINING EMPOWERS RESEARCHERS IN POLICY ENGAGEMENT AND SCIENCE COMMUNICATION

Twenty-four researchers from EfD centers participated in a policy engagement and science communication training program in 2023. It included five online sessions in May and June and a two-day workshop in Ghana. It provided the participants with a wide range of tools and methods, essential to have an impact on society.

Efd aims not only to produce high-level research but also to make it easily available for policymakers and other stakeholders in society to support evidence-based policies. This requires systematic and efficient stakeholder engagement, as well as communication skills.

“The main goal of the training initiative is to build a community of practice of policy engagement and science communication to raise the impact of the EfD network,” said Daniel Slunge, EfD Policy Engagement Director, and one of the workshop’s facilitators.

The online sessions included topics such as opportunities and risks with policy engagement, models and strategies, evaluating your impact, tools for engagement, and communication with a non-scientific audience. Individual work and peer coaching were also part of the program.

The live sessions in Ghana focused on communication skills such as press releases, policy briefs, media interviews, oral presentations and social media. There were presentations of individual and group assignments, hands-on exercises, and presentations of highly relevant case studies. The workshop also featured a session on AI.

EfD Ghana Center Director Wisdom Akpalu and Rebecca Sackey-Mensah of the Fisheries Commission presented an inspiring case of how research-policy interaction can be very constructive and lead to the implementation of informed and sustainable policies and practices.

“I learned a lot about tools and techniques to communicate research findings, how to work with journalists, and plan my research to involve policymakers from the outset and make my research more useful,” commented Hoa Le Dang, course participant from EfD Vietnam.



Petra Hansson, EfD Global Hub, talks about the reverse pyramid as tool in science communication
Photo: Emmanuel Richardson

IGE Fellows discuss green policies with EfD researchers in Ghana
Photo: Emmanuel Richardson



Key objectives include **strengthening capacities** for an Inclusive Green Economy and promoting environmental-economic policy instruments aligned with Agenda 2030.

Target countries are Ethiopia, Kenya, Uganda, Tanzania, and Rwanda, with the EfD centers and Global Hub as collaborating partners.

The program facilitates peer learning and networking across academic and policy institutions, involving joint work and cross-country exchanges. In 2023, 26 civil servants were enrolled for 12 months, participating in advanced training, workshops, and in-service work both online and in person.

Transformation initiatives are in-service works led by civil servants that aim to promote organizational changes and policies supporting an Inclusive Green

Economy. The thematic focus for the 2023/2024 cohort was on sustainable energy transition, especially reducing biomass dependency and increasing the use of sustainable energy sources. Examples of transformation initiatives include promoting clean cooking transitions, evaluating Result Based Finance, and advocating for a subsidy of liquefied petroleum gas (LPG). General results include an enhanced understanding of IGE, organizational changes, and expanded networks among participants and researchers.

Specific outputs in 2023 include increased knowledge of cleaner energy policies and strengthened connections with business actors.

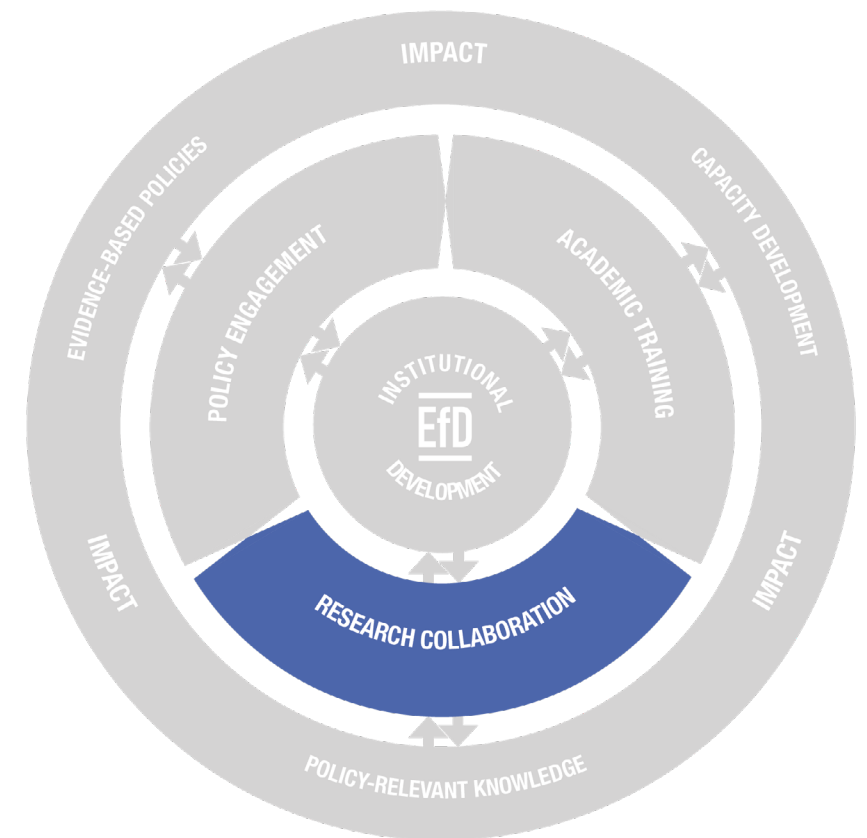
Overall, the program aims to bridge the gap between researchers, planners, and decision-makers, facilitating collaboration towards a more inclusive green economy.

POLICY ENGAGEMENT AND PEER LEARNING PROVIDE THE CORE OF THE **INCLUSIVE GREEN ECONOMY** IN PRACTICE PROGRAM

The Inclusive Green Economy in Practice Program, launched in 2023, targets senior civil servants and policymakers in East Africa, focusing on the environment, economics, and social inclusion. It aims to address global and local environmental challenges, emphasizing public participation and social acceptance of green transitions. The program runs from 2023 to 2027.

Participants and facilitators in the IGE program work with the "problem tree"
Photo: Emmanuel Richardson





EfD'S RESEARCH

One cornerstone at EfD is high-quality, policy-relevant research. This research is instrumental in supporting evidence-based policies crucial for an inclusive and resilient economic development amidst the triple planetary crisis – climate change, pollution and biodiversity loss. EfD provides unique opportunities for research collaborations, South-South as well as South-North, within its thematic collaborative programs.

RESEARCH

THE BACKBONE OF EfD

Research in the field of development and environmental economics is the foundation that all activities within the EfD network emanate from. EfD's collaborative programs provide unique platforms for applied cross-country research and policy analysis.

2 023 started with the implementation of 14 projects that were approved by the EfD Research Committee in 2022. Nine of those were multi-country and synthesis studies on poverty-gender-related environmental research. Five focused on enhancing the capacity of the Sub-Saharan African centers. Two were

awarded to EfD Early Career Fellows. The projects had an equal number of male and female principal investigators. The themes of the projects were multi-faceted: carbon pricing, energy transition, water, gender, fisheries, climate change, agriculture, health, and sustainable consumption.

The research committee approved 17 projects in 2023 for implementation in 2024

on themes, similar to previous years but with an increased emphasis on carbon pricing, energy transition, gender, and agriculture.

EfD researchers had 277 peer-reviewed papers published in science journals in 2023 (231 in 2022). Examples of journals include the Journal of Economic Behavior & Organization, Journal of Environmental Economics and Management, Nature, Global Environmental Change, and World Development. They also published 17 EfD Discussion papers (20 in 2022), as well as book chapters, reports, and other publications.

60 researchers within the EfD network concluded a comprehensive project financed by Canadian IDRC, aimed at developing a research agenda to support a low-carbon transition and gender equity in the Global South (see page 32). A global COVID-19 panel survey was conducted in seven EfD countries and has resulted in several papers (see page 34).

EfD's Collaborative Programs continued

to showcase the benefits of combining expertise at the centers and partner institutions. The Forest Collaborative organized a peer-learning project in which researchers and policymakers from Ghana, Nigeria, and Uganda shared experiences and learned from researchers, policymakers, and other stakeholders involved in community forest management in Nepal and Ethiopia.

The Sustainable Energy Transition Initiative (SETI) teamed up with the Inclusive Green Economy in Practice program to provide the participants in the program with the most up-to-date expertise on this year's theme – sustainable energy transition.

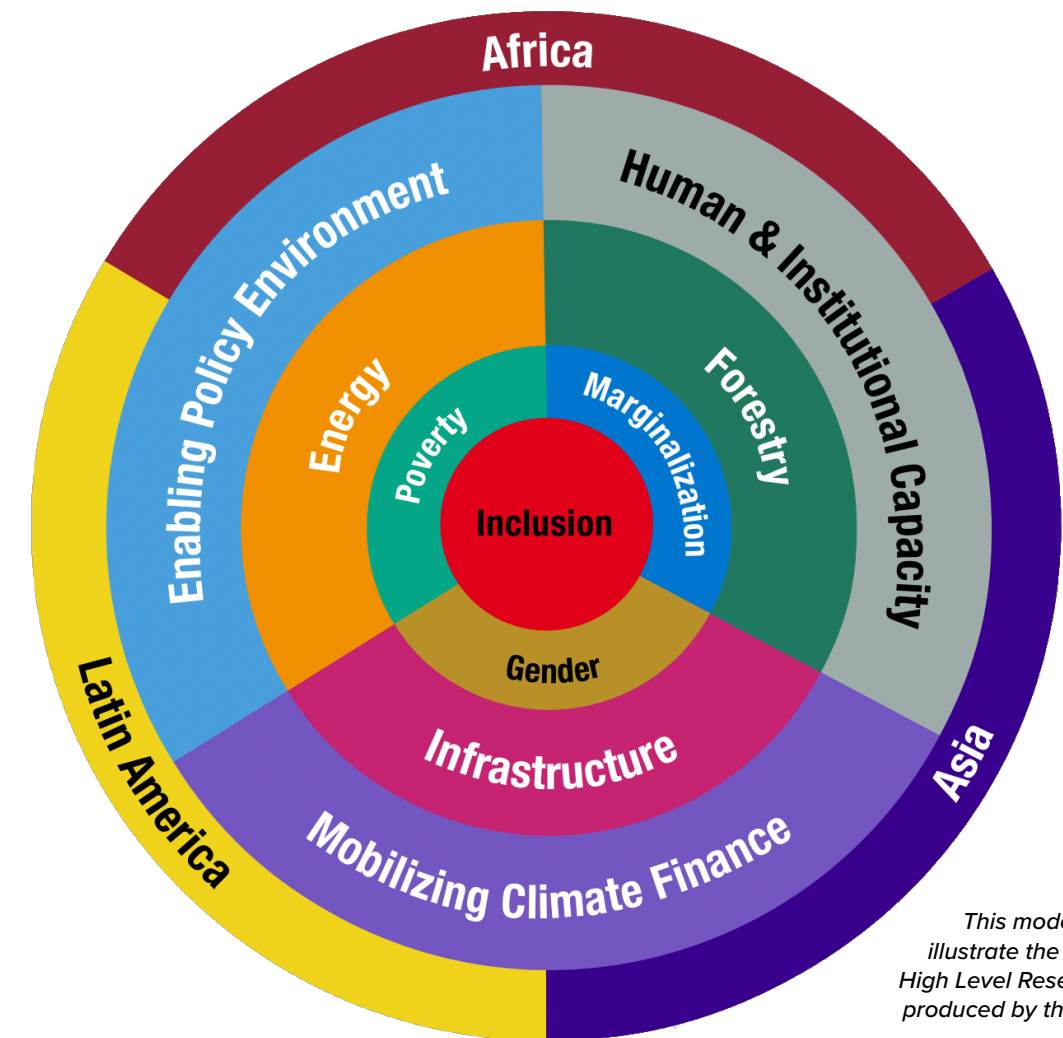
The most high-profile research event during the year is, however, the EfD Annual Meeting, which in 2023 took place in Ghana. Participants from 25 countries attended a comprehensive program with 130 academic presentations and seven keynote speeches, training sessions, and much more.



Photo: Pixabay

GREAT TEAM EFFORT CREATED AN ACTIONABLE RESEARCH AGENDA FOR THE GLOBAL SOUTH

60 researchers from EfD and partner organizations worked intensely for a year and a half to develop a research agenda to support a low-carbon transition and gender equity in the Global South. This work was finished in the spring of 2023. All the reports are available on EfD's website.



This model was used to illustrate the content of the High Level Research Agenda, produced by the EfD network

Canada's International Development Research Centre (IDRC) funded this study to identify high-impact research areas and knowledge gaps. EfD with partners was selected to manage this extensive project with a budget of 1.2 million CAD.

Valuable for funders and researchers

"It identifies the most important research, needed for implementing a low-carbon transition in the Global South," noted Bhim Adhikari, Senior Program Specialist at the funding partner IDRC.

The overarching document, the *High-level Research Agenda for Inclusive Low-Carbon Transitions for Sustainable Development in*

the Global South, ten papers that develop further on specific topics, and seven briefs are all open access and available on the project's webpage.

The papers include regional policy reviews from Asia, Latin America and the Caribbean, and Africa, as well as reports on gender equality, sustainable energy transition, infrastructure, forestry, enabling policy environment, mobilizing investment models, and human and institutional capacity.

The briefs cover the topics of enabling policy, forestry, gender, human capacity development, infrastructure, climate finance, and sustainable energy transitions.

"This is not only valuable to the donors such as IDRC but also to researchers," said Gunnar Köhlin, Director of EfD.

The project included validation workshops in Vietnam, Colombia and South Africa, here is the group that participated in the workshop in Cartagena, Colombia
Photo: EfD Colombia

UNIQUE STUDY COMPARED COVID-19 TO OTHER HEALTH PROBLEMS

A large seven-country study has shed light on how serious people find the COVID-19 pandemic compared to other major public health problems. The results were surprising and provide guidance to healthcare providers as well as policymakers.

Researchers from seven EfD centers plus the EfD Global Hub have conducted an extensive survey, led by Professors Richard Carson, Dale Whittington, and Michael Hanemann. The first results were published in 2023: *Perceptions of the seriousness of major public health problems during the COVID-19 pandemic in seven middle-income countries.*

Respiratory illnesses ranked more serious

The respondents ranked the seriousness of the seven health problems (alcoholism and drug use, HIV/AIDS, malaria, tuberculosis, lung cancer and respiratory diseases caused by air pollution and smoking, and water-borne diseases like diarrhea).

In most countries, respiratory illnesses were seen as a more serious problem than COVID-19. In Africa, people felt that alcoholism and drug use were also more se-

rious than COVID-19. Surprisingly, in six of the seven countries, respondents ranked waterborne diseases as the least serious health problem.

Don't crowd out ordinary healthcare

These findings show that people still care about the health problems they were facing before the pandemic.

"An important lesson for health ministries is to not get too carried away by what media focuses on a particular point in time. It is important to avoid crowding out ordinary health services," says Dale Whittington.

"It's also clear that perceptions of health problems can differ considerably within and across countries and population segments."

EfD Director Gunnar Köhlin notes that a study like this provides unique insights. "It can put novel phenomena, such as the COVID-19 pandemic, into a perspective of the more persistent challenges that countries in the Global South face," he says.

SURVEY SOLUTIONS REVOLUTIONIZES DATA MANAGEMENT FOR EfD

EfD is implementing Survey Solutions, a free digital platform from the World Bank, to streamline and enhance its data management processes. This transformative step promises to revolutionize the way EfD conducts surveys, making data collection more cost-effective, reliable, and user-friendly.

Before integrating Survey Solutions, EfD centers employed varied approaches to data collection, ranging from traditional pen-and-paper methods to costly consultant services.

Centers have received training

EfD Global Hub provides server space at the University of Gothenburg and service and support to the EfD centers' researchers and data managers.

The implementation of Survey Solutions began in 2022 and by 2023, it has been successfully rolled out at centers in Kenya, Vietnam, Chile, and Nigeria. The key to successful adoption lies in the engagement of one person per center being trained on the platform. The centers have also been provided with tablets to use for this purpose.

Continuous support

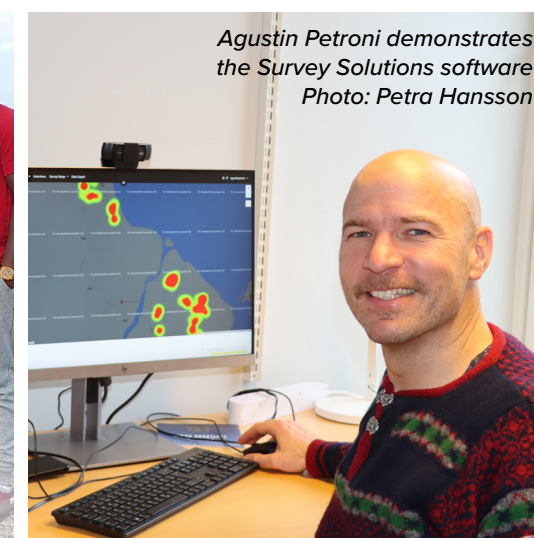
The data is securely stored on the University of Gothenburg's server, providing a safe repository that fulfills all the legal requirements. Moreover, researchers enjoy direct access to the server, eliminating unnecessary hurdles. Data Manager at EfD's Global Hub Agustin Petroni provides support in the adoption phase and continues to assist in designing questionnaires, setting up hardware and survey parameters, and piloting surveys.

The adoption of Survey Solutions helps harmonize questionnaires across centers, promoting standardized practices, and facilitating the re-use of data and future data comparisons.

As EfD embraces Survey Solutions, it takes a significant step forward in the use of cutting-edge technology for impactful research.

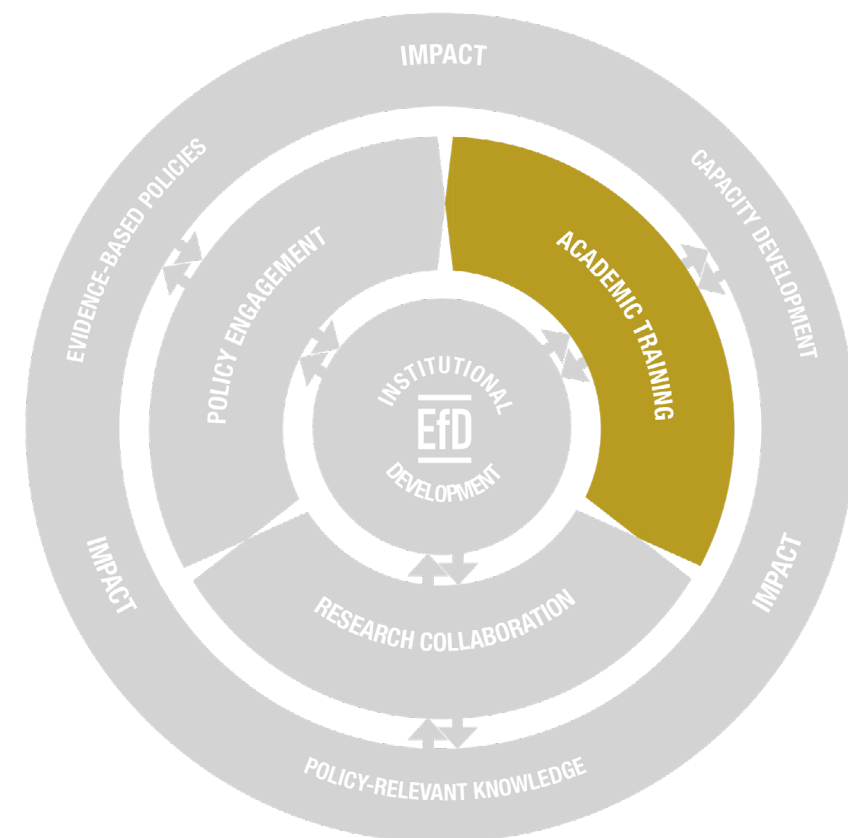


Elly Musembi (far right) and his data collection team in Kenya
Photo: EfD Kenya



Agustin Petroni demonstrates the Survey Solutions software
Photo: Petra Hansson

Capacity Development



EfD'S CAPACITY DEVELOPMENT

Effective policymaking demands both the capacity and locally adapted tools to analyze and support the implementation of policies and investments crucial for transitioning towards an inclusive and resilient development trajectory. Beyond conducting research, EfD is committed to cultivating present and future leaders and experts through comprehensive training programs for students and civil servants alike. To this end, we have established a capacity development program tailored for senior civil servants across multiple countries. Additionally, a collaborative MSc and PhD program at EfD centers will be established, combining a digital learning platform and in-person learning.

EfD BUILDS **ACADEMIC** **CAPACITY** AT SEVERAL LEVELS

EfD pursues academic capacity development in environmental economics and policy at many levels of education and through multiple formats, including master-level training, doctoral education, and training for civil servants.

EfD is creating new collaborative learning activities at the master's level, courses, and learning environments, as well as supporting researchers and teachers with new learning material and innovative ways of teaching, including AI.

In 2023, EfD launched an online learning material: *Policies for climate action and circular economy*. Cross-country learning activities were organized, with master students from across the globe coming together to discuss topics such as what would be a fair international distribution of future emission rights.

Pedagogical seminars were organized for researchers and teachers on topics such as *Educating for sustainable development through co-learning with society*.

25 civil servants in East Africa were trained in policies and frameworks for an inclusive

green economy through the IGE program in 2023. The participants also organized training events where they shared their new knowledge with many of their colleagues.

Four courses were held at the doctoral level:

- **Academic Writing** in Nsukka Nigeria with researchers from EfD Nigeria (14 male and 10 female), in May 2023.
- **Research Writing**, an online course with Ph.D. students from Addis Ababa University and the University of Rwanda (17 male, 3 female) in November 2023.
- **Randomized Control Trials** in Ho Chi Minh, Vietnam with researchers from EfD Vietnam (19 male and 16 female), November 2023.
- **Online Research Mentorship** for EfD's Early Career Fellowship Program (11 female and 9 male) January 1 – December 31, 2023.

RESEARCHERS LEARNED ABOUT **RESEARCH ETHICS AND BEST PRACTICES**

Young researchers in Nigeria in the field of economics participated in a three-day boot camp where they learned how to publish empirical papers that meet ethical requirements and the best practices in research.

About 30 researchers from different areas of economics participated in a boot camp at EfD Nigeria in May 2023. The training was titled: *Academic writing and research ethics in economics postgraduate level*.

The objective was, according to Yonas Alem, EfD Global Hub, who facilitated the training, to provide cutting-edge knowledge on how to write and publish empirical papers in a way that meets the requirements of high-ranking journals.

"The main problem in many countries, especially in developing countries, is lack of awareness. People commit unethical actions because they are not aware, they don't have the training,"

said Yonas Alem.

"The training was an eye-opener to many of us and has given us advantages in our academic pursuit," said Francis Ikechukwu Nwafe, one of the participants.

Another participant, Chinasa Sylvia Onyenekwe commented that she learned a lot about the skills required to publish in top journals, and the need to seek ethical approval before embarking on research projects.

"Now I know that the top journals are not out of my reach."

The EfD Nigeria training was the third of its kind sponsored by the EfD. The first beneficiaries were EfD's young early career researchers, while the second were researchers at the University of Uganda.



Participants and facilitators at the training
Photo: Inya Agha Egwu

EfD ADDRESSES GENDER INEQUALITY FROM SEVERAL ANGLES

Gender inequality presents an important challenge for EfD. Gender awareness is crucial in research and policy initiatives, to ensure a comprehensive understanding of environmental and developmental issues. Moreover, EfD strives to include diverse perspectives and talents, fostering an inclusive environment where all voices are valued.

For an organization like EfD, there is also the question of inequality among economists at all levels from undergraduates to professors. Women economists are highly under-represented. There are also many testimonies of how they have been subject to discrimination.

EfD has stated in its strategy that gender issues have high priority and EfD-funded

research should include a gender perspective whenever it's relevant.

There have been some activities within the EfD network in 2023 that address gender issues. One is a workshop in Nigeria for women economists on how to write funding proposals and how to take on a leading role in research projects. Another example is a training course for Early Career Research Fellows on gender issues in research.

María del Pilar López-Urbe is the leader of EfD's program Women in Environmental Economics for Development, WinEED, aimed at empowering women in environmental economics
Photo: Petra Hansson



Early Career Researchers taking the gender course
Photo: Emmanuel Richardson



TRAINING FOR EfD RESEARCHERS ON GENDER IN RESEARCH

Nineteen researchers from EfD's Early Career Fellowship Program participated in a three-day intensive course on gender and its relevance to research. The Gender in Development Economics course was held in Accra, Ghana, and concluded with participants committed to applying gender studies in their research.

The course, facilitated by Amber Peterman, emphasized that gender analysis is a crucial tool to enhance research quality.

"It gives you a better understanding of the issues and the potential solutions, so doing gender economics is just doing better research," explained Amber Peterman.

The participants brought varying levels of experience in gender economics to the course, which made interactions interesting and meaningful.

"The gender course has increased my interest in gender studies," said Frank Adu-sah-Poku, EfD Ghana.

The course employed a variety of learning tools, including podcasts, newspaper reviews, and the examination of the latest studies in the field. Practical sessions allowed participants to apply their new knowledge to real-world research topics. Amaka Nnaji, EfD Nigeria, described the course as interactive and engaging, noting that "it was easy to learn because we were learning by doing."

The participants concluded the course with the tagline: *Gender equality is not the problem; gender equality is the solution.* This serves as a reminder of EfD's commitment to making gender an integral element of research and for participants to apply the knowledge gained in their work.

TRAINING EMPOWERED WOMEN RESEARCHERS IN NIGERIA

Over 20 women researchers in Nigeria were trained in a workshop at EfD Nigeria in April. It was organized by EfD's program Women in Environmental Economics for Development (WinEED). The workshop focused on grant writing and on taking on a leadership role in research projects.

WinEED is a program established by EfD to support the participation of women in research, especially in the field of environmental economics.

"WinEED aims to build the capacity of women researchers for substantive leadership, including serving as principal investigators and mentors within the

EfD network and beyond," explained Maria Del Pilar Lopez-Urbe, the coordinator of WinEED.

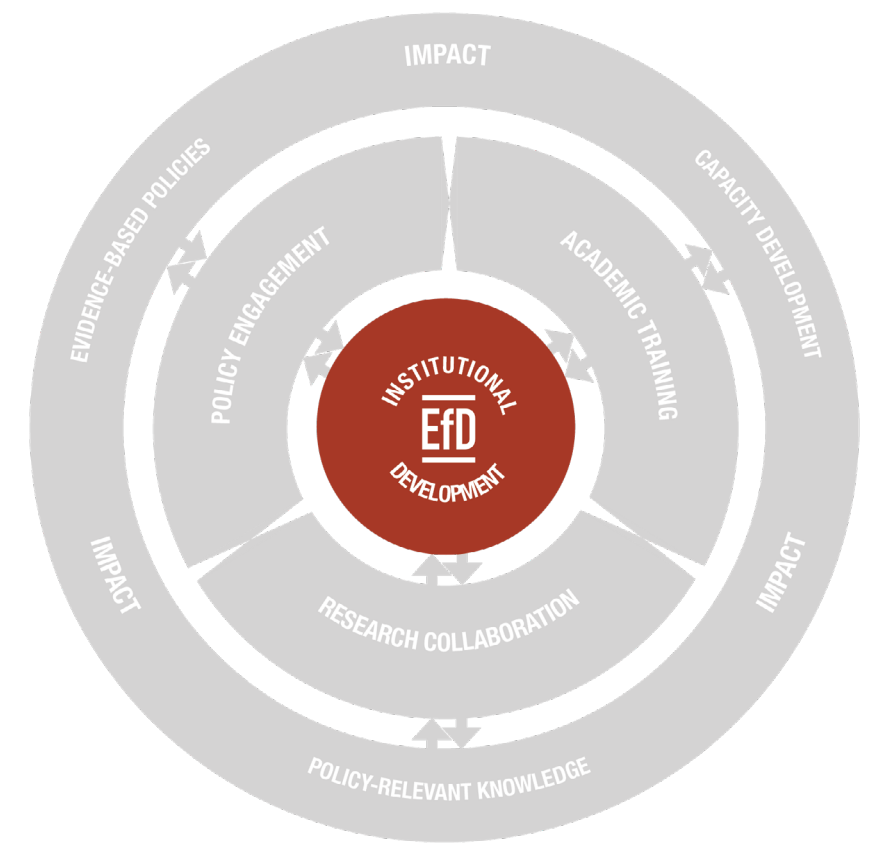
The workshop in Nigeria was very well received by the participants.

"The workshop helped me hone my creativity in writing. I saw how I could develop my ideas to be more impactful, especially in policy formulation," said Chikaosolu Ileka, one of the participants.



Victoria Plutshack, Duke University and María del Pilar López-Urbe, Universidad de los Andes, surrounded by Nigerian WinEED participants. Photo: Agha Egwu Inya

Institutional Development



Efd's INSTITUTIONAL DEVELOPMENT

Efd aims to elevate its centers into internationally acclaimed research environments, capable of administering graduate academic programs, conducting policy research, and fostering meaningful engagement with key stakeholders to inform policies and practices. This vision encompasses capacity development, peer learning, the cultivation of robust partnerships with domestic host institutions, and fostering greater collaboration with academic counterparts from the Global North.

RESOURCES AND REVIEWS

HELP STRENGTHEN THE CENTERS

Centers are the building blocks of EfD. EfD invests in the institutional structures that make good research, capacity development, and policy engagement possible. This includes administrative capacity and systems, data management, and institutional learning between centers.

An expert review committee evaluates each EfD center for re-accreditation every five years. The purpose is to enhance South-South learning, gain insights from center-specific challenges and opportunities, and ensure that centers contribute to the EfD brand.

In 2023, the committee consisting of Edwin Muchapondwa, University of Cape Town, Jo Albers, University of Wyoming, and Ted Horbulyk, University of Calgary visited the centers in Ghana, Nigeria, Central America, South Africa and Uganda, meeting with researchers, students, stakeholders, policymakers, and university officials.

Acting on recommendations

“Our discussions with the expert committee and their recommendations have been very useful,” says Nnaemeka Chukwuone, Center Director at EfD Nigeria, hosted at the Center for the Resource and Environmental Policy Research Centre (REPRC) at the University of Nigeria, Nsukka.

“For example, we are now changing how we organize our research groups to better align with the priorities of EfD’s collaborative research programs. This will help increase international collaboration, which tends to increase research output, for instance, by making better use of data already collected within EfD to enhance our publication record.”

Attractive workplace

Like in Uganda and Ghana, the Center in Nigeria joined the EfD network in 2019

“On the institutional side, I am particularly happy that we now have a center

with bylaws at the same level as academic faculties, which allows us to relate directly with the university management and have our own university accounts, reducing the usual delays in releasing research funds. We have our administrative staff and some facilities, including a server for data collection and management, software, tablets, computers, stable electricity from solar and the internet, thanks to EfD. All combined, it makes us an attractive place to work and meet,” says Nnaemeka Chukwuone.

The capacity of centers to administrate and manage research projects and other activities is pivotal for attracting external funding and a conducive research environment. Low trust in the administrative systems of universities in the Global South can discriminate against researchers from low and middle-income countries.

In 2023, EfD successfully introduced a new financial template to streamline financial planning and reporting.

EfD’s re-accreditation system is inspired by the quality control of centers at University of Cape Town
Photo: Pixabay



Community Forest User Group (CFUG)
Photo: EfD Forest Collaborative

OTHER EVENTS DURING THE YEAR

Policymakers and researchers learn about participatory forest management in Nepal and Ethiopia

EfD organized a study tour to Nepal in November 2023, where researchers and policymakers jointly learned about participatory forest management (PFM). Nepal has been a world leader in this area for decades and the group gained a lot of valuable insights. Visa problems prevented some participants from going to Nepal, so EfD arranged a corresponding tour for them to Ethiopia.

[Read more](#)

EfD Chile helps the government tackle air pollution

The Chilean EfD research team has been working alongside government authorities in the design, evaluation, and application of policy strategies to reduce air pollution in highly contaminated cities. In Chile, one of the most severe environmental problems is air pollution due to the burning of wood for heating and cooking in households. The EfD Chile team has been working for over a decade on different studies that will eventually help in designing, implementing, and evaluating control policies in the country. EfD's team has provided the environmental authorities with the insights needed to create a stove replacement program and has been working alongside them with its design and formulation.

[Read more](#)



Pellet stove offered by the program
(left) and salamander stove (right)
Photo: MMA

EfD India hosts roundtable discussion on a carbon pricing policy for India

A roundtable debated the role of carbon pricing in India's climate change mitigation strategy, particularly in attaining the national target of net zero emissions by 2070, declared at COP-26. The panelists discussed the role of taxes vs. emission trading systems (ETS) in balancing sustainable long-run growth with a transition to clean energy for India. The participants were high-level policymakers, stakeholders and researchers.

[Read more](#)



Round table discussions
Photo: EfD India

Water impacts of the Costa Rican Payment for Ecosystem services scheme evaluated

EfD Central America researchers worked with the National Forestry Financing Fund (Fonafifo) to analyze the impact of the Payment for Ecosystem Services (PES) programs implemented since the 90s on the quality and quantity of water and how to make it more effective in the future.

[Read more](#)



The protection of forests allows the protection of other ecosystem services
Photo: Bárbara Viguera

Government officials were trained in cost-benefit analysis for environmental impact assessment

EfD Tanzania researchers conducted a workshop for National Environment Management Council (NEMC) officials to sharpen their skills in cost-benefit analysis (CBA) which helps them determine whether a proposed project or investment is worthwhile by comparing its costs and benefits. An important task of the NEMC is to review different projects and programs by investors planning to invest in Tanzania. Thus, learning better skills in CBA will help them to select the most cost-effective alternatives.

[Read more](#)



Section of participants of the training on CBA
Photo: EfD Tanzania

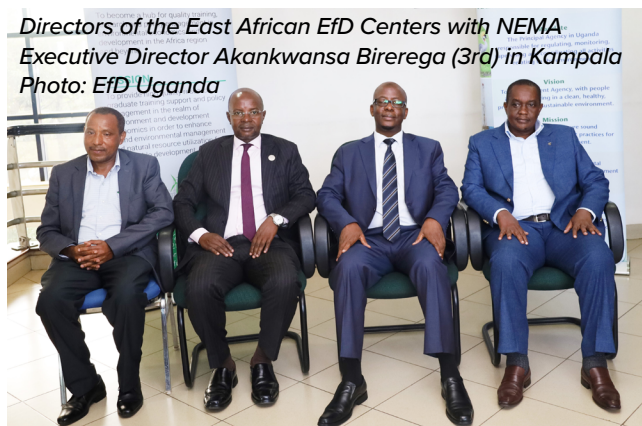


EfD members discussing at NEMA head office in Kampala
Photo: EfD Uganda

EfD centers and policymakers strategize on how to promote sustainable use of Lake Victoria Basin

Lake Victoria is a transboundary natural resource, underpinning the economies and livelihoods of the population of Burundi, Kenya, Tanzania, Rwanda, and Uganda. However, the lake and its surrounding areas are facing many problems including rising lake water levels, moving islands, encroachment, and ecological and biodiversity degradation which may lead to the extinction of several fish species. EfD centers in Uganda and Kenya have convened meetings with researchers, policymakers, and other stakeholders to address those challenges.

[Read more](#)

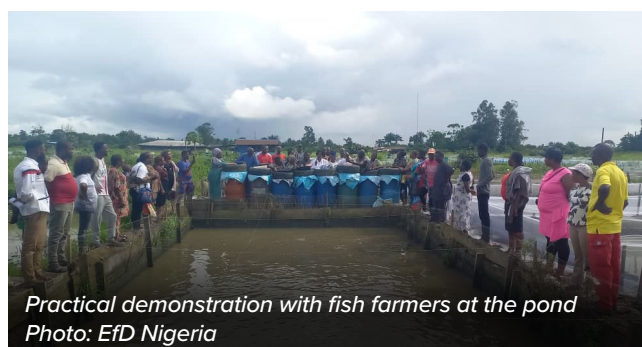


Directors of the East African EfD Centers with NEMA Executive Director Akankwansa Birerega (3rd) in Kampala
Photo: EfD Uganda

EfD Nigeria trains fish farmers on best practices

Over 178 aquaculture farmers from two cooperative societies in Delta State, Nigeria, benefited from a four-day practical training exercise on best management practices in catfish production organized by EfD Nigeria.

[Read more](#)



Practical demonstration with fish farmers at the pond
Photo: EfD Nigeria



EfD participated at COP 28

EfD was featured in two events. At a side event "Towards the establishment of a standardized carbon credit market for ECOWAS" a new IDRC-funded EfD project called *Exploring the Potential and Challenges of Voluntary Carbon Markets in the Global South* was launched. The main event for EfD was a joint side-event with MCC that launched the *Carbon Pricing Incidence Calculator*. This tool allows one to simulate impacts of various carbon pricing instruments and how they affect richer and poorer households. The aim is to contribute to a nuanced debate on carbon pricing instruments. The result shows the attractiveness of carbon pricing as a core instrument of climate policy.

[Read more](#)

EfD started the EfD webinar series

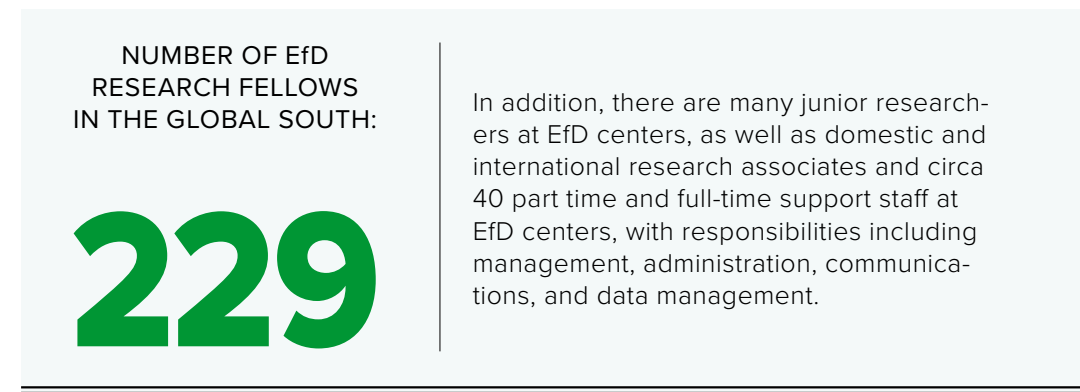
The inaugural webinar in November featured Marc Jeuland, Duke University, and active in the Sustainable Energy Transitions Initiative (SETI) Collaborative Program among others. He talked about *Time-money tradeoffs and the value of the time that women spend obtaining firewood*. The series continues with monthly webinars in 2024. All webinars are open to the public, free of charge and recordings are available afterwards on EfD's website.

[Read more](#)



2023 EfD IN FIGURES

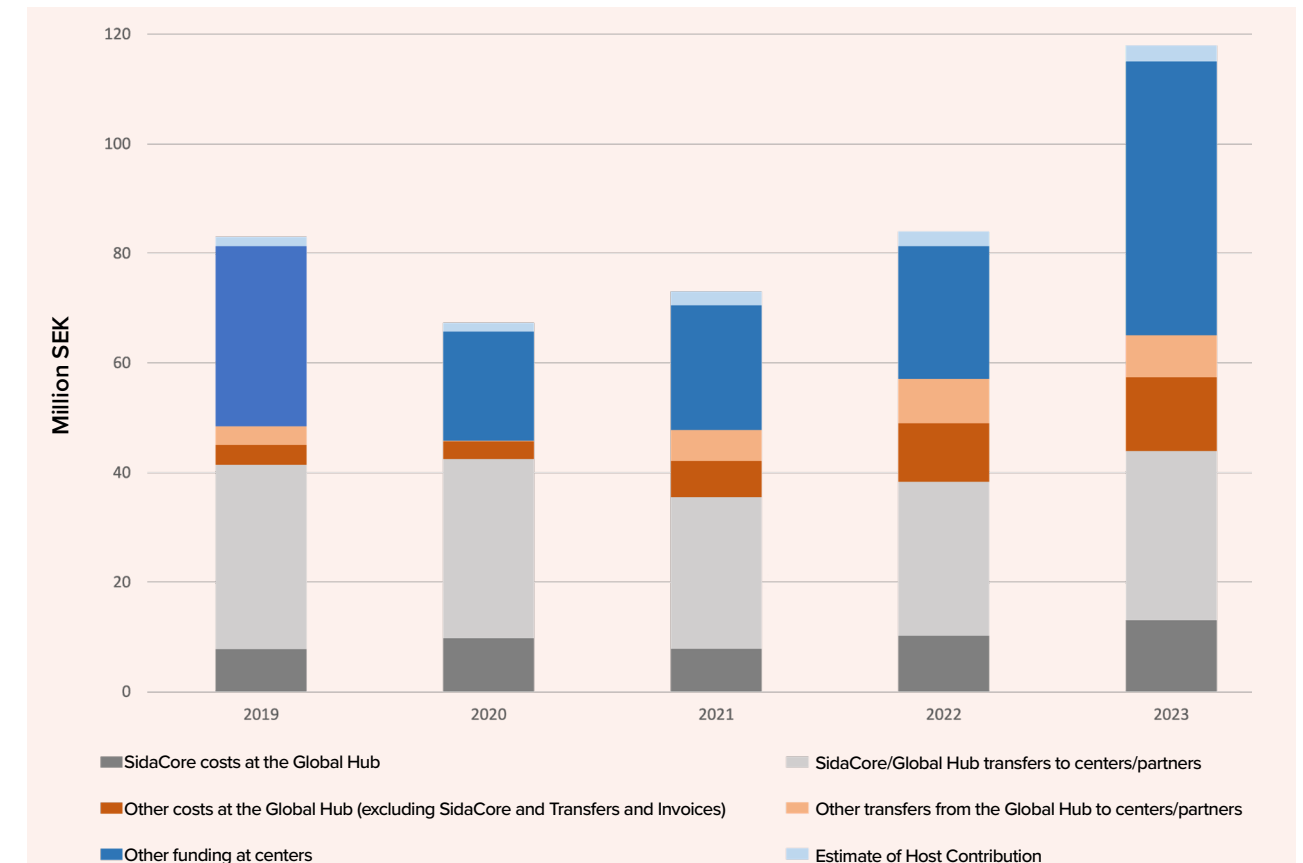
Key numbers in 2023



Outreach activities organized by EfD centers in 2023

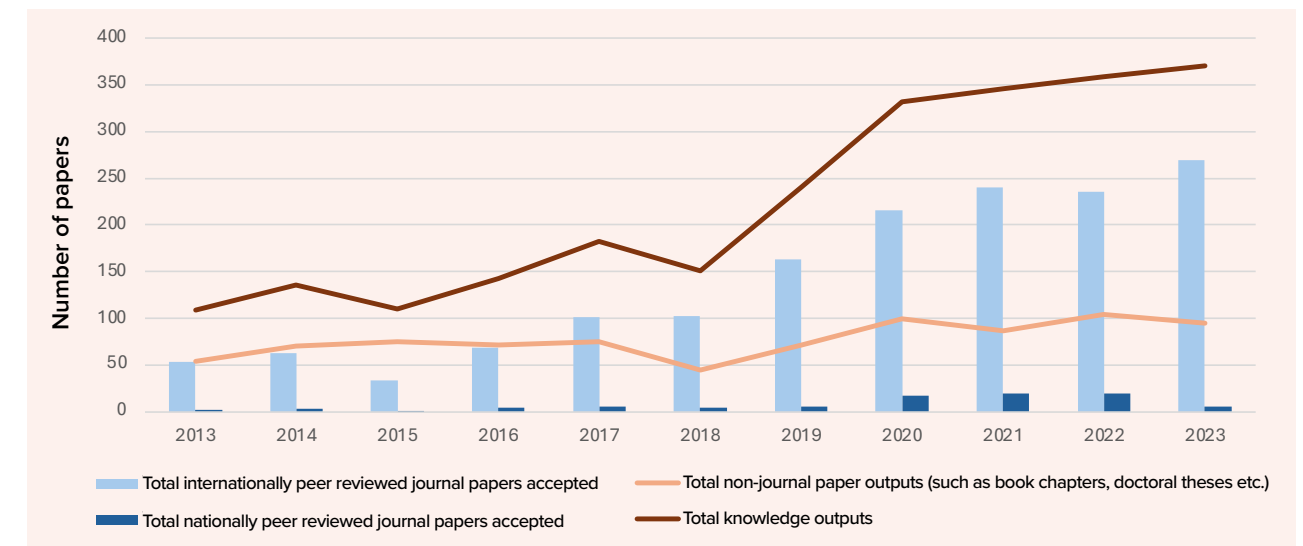


Financial sustainability of the EfD centers and the Global Hub



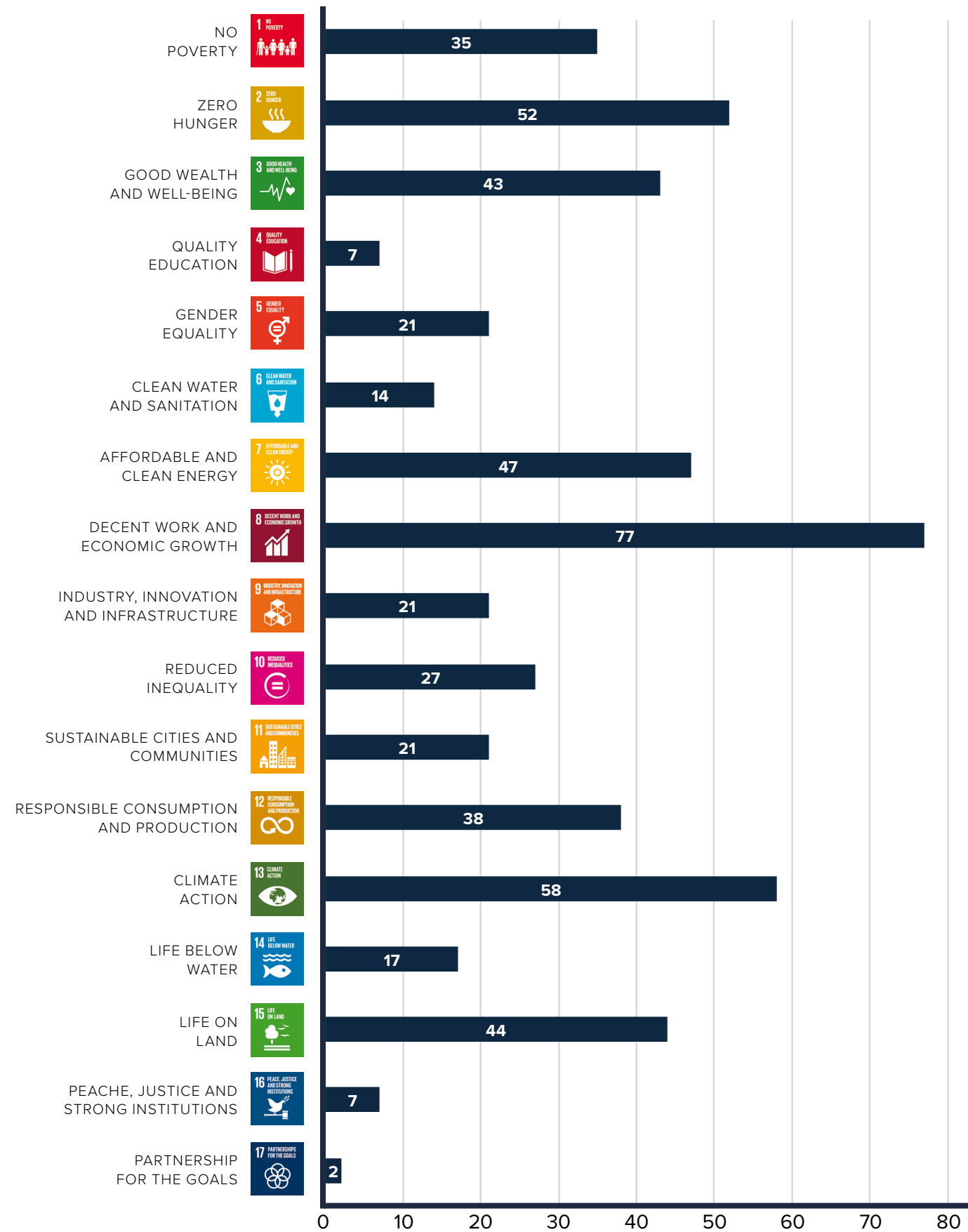
The Global Hub secures funding from various sources for EfD centers and programs. The Sida-supported EfD core program provides support to African centers and collaborative programs in the form of funding for research and policy engagement, and institutional support to foster sustainable and vibrant research environments ('Sida Core/Global Hub transfers to centers/partners'). It also supports centers via network functions such as data management and communications, run from the Global Hub ('Sida Core costs at the Global Hub'). Beyond the core program, the Global Hub involves centers in other programs as well, such as IGE and IDRC ('Other transfers from the Global Hub to centers/partners'). The host institutions of the EfD centers, primarily universities, also contribute to center operations ('Estimate of host contribution'). This is complemented by the centers' ability to attract funding directly for their research and activities ('Other funding at centers'). This multi-faceted funding approach aims to ensure a robust and dynamic operation of the EfD centers.

Knowledge outputs over time at the EfD centers



EfD RESEARCH PER SDG

2023



EfD CENTERS

- EfD Central America** is hosted by the Tropical Agricultural Research and Higher Education Center (CATIE), located in Turrialba, Costa Rica and operates under the Spanish name Unidad Ambiente para el Desarrollo.
[Website](#)
- EfD Chile**, the Research Nucleus in Environmental and Natural Resource Economics (NENRE) is hosted by the University of Concepción, Concepción, Chile.
[Website](#)
- EfD China**, the Environmental Economics Program in China (EEPC) is hosted by the research center China Centre for Environmental and Energy Economics (C2E3), affiliated with the National School of Development, Peking University, Beijing, China.
[Website](#)
- EfD Colombia**, the Research Group on Environmental, Natural Resource, and Applied Economics Studies (REES) is hosted by CEDE (Center for Economic Development Studies) at the Department of Economics, Universidad de Los Andes, Bogotá, Colombia.
[Website](#)
- EfD Ethiopia**, the Environment and Climate Research Centre (ECRC) is hosted by the Policy Studies Institute, Addis Ababa, Ethiopia.
[Website](#)
- EfD Ghana**, the Environment and Natural Resource Research Initiative (ENRRI) is hosted by the Insti-tute of Statistical, Social and Economic Research (ISSER) at the University of Ghana (UG), Accra, Ghana, with the collaboration of the School of Research and Graduate Studies (SRGS) at the Ghana Institute of Management and Public Administration (GIMPA).
[Website](#)
- EfD India**, is hosted by the Center for research on the Economics of Climate, Food, Energy and Environment (CECFEE) located in Indian Statistical Institute, Delhi, India.
[Website](#)
- EfD Kenya** is hosted by the Department of Economics and Development at the University of Nairobi, Nairobi, Kenya.
[Website](#)
- EfD Nigeria**, the Resource and Environmental Policy Research Center (REPRC), is hosted by the University of Nigeria, Nsukka, Nigeria.
[Website](#)
- EfD South Africa**, the Environmental Economics Policy Research Unit (EPRU), is hosted by the School of Economics, University of Cape Town, Cape Town, South Africa.
[Website](#)
- EfD Tanzania** (EfDT) is hosted by the School of Economics, University of Dar es Salaam, Dar es Salaam, Tanzania.
[Website](#)
- EfD Uganda**, the EfD-Mak Centre is hosted by Makerere University, Kampala, Uganda, and managed by the College of Business and Management Sciences (CoBAMS) and the College of Agricultural and Environmental Sciences (CAES).
[Website](#)
- EfD Vietnam**, the Economy & Environment Partnership for Southeast Asia (EEPSEA), is hosted by the University of Economics Ho Chi Minh City, Ho Chi Minh City, Vietnam.
[Website](#)

ACADEMIC PARTNERS

- EfD partners are institutions that work with EfD at the institutional level typically involving several researchers and types of interactions with the network. Examples of activities include co-leading or participating in collaborative research programs, developing larger proposals for research, and contributing to academic training or policy engagement.
- Duke University**, Sanford School of Public Policy, Durham, USA
[Website](#)
- Mercator Research Institute on Global Commons and Climate Change** (MCC), Berlin, Germany
[Website](#)
- Portland State University**, Institute for Economics and the Environment (IEE), Portland, USA
[Website](#)
- Resources for the Future** (RFF), Washington DC, USA
[Website](#)
- The Toulouse School of Economics** (TSE), Environmental and natural resource economics group and the TSE Energy & Climate Center.
[Website](#)
- University of Gothenburg**, Environmental Economics Unit, School of Business, Economics and Law, University of Gothenburg
[Website](#)
- Wageningen University and Research**, Environmental Economics and Natural Resources Group, Wageningen, The Netherlands
[Website](#)
- University College Dublin** (UCD), UCD Environmental Policy, Ireland
[Website](#)

WHAT WE LOOK FORWARD TO IN 2024



2024 is the year when the third generation of the national climate plans, the Nationally Determined Contributions 3.0, will be determined, for submission to the UN by the beginning of 2025. The effects of climate change are alarming all over the globe and vulnerable people in the Global South are hit the hardest. Will the countries in the Global South be able to adapt to impacts of climate change at the same time as they transform their economies to carbon neutrality? There are also important processes to mainstream the values of natural resources and ecosystem services into the national accounts, and to develop carbon markets that also includes the Global South in a fair and equitable way. Our mission, to contribute to evidence-based policies to

address climate change, biodiversity loss and poverty is more urgent than ever.

The magic of EfD happens in the interface between research and policy throughout the Global South as the EfD researchers meet with their counterparts in government, business and civil society. The EfD centers reported that in 2023 almost 4,000 people were reached by organized EfD outreach activities. Hopefully, there will be even more in 2024, along with the resulting impact in terms of improved sustainability and reduced poverty.

2024 is a pivotal year to ensure that the EfD network can continue to deliver at this scale. An extensive external evaluation serves as preparation for a new four-year agreement with Sida, based on a new five-year strategy to be launched, and a new consolidated proposal funded.

These documents will also form the basis for a diversification of funding sources to enable more and better knowledge-based policies to be developed and implemented throughout the Global South. A focal point for EfD in 2024 will be the Annual Meeting to be held in Nairobi, Kenya, October 3 – 6. During four intensive days, the whole network will meet to present, discuss and plan for more collaborations. The EfD Annual Meeting has evolved to the largest and most interesting conference on the application of environmental economics in the Global South. With the African Association of Environmental and Resource Economists (AFAERE) as partners for this meeting we look forward to strengthening both networks and enjoy even more collaborations.

We will continue to develop and strengthen EfD's collaborative programs that

unite researchers from different centers as well as international associates to gain even more synergies and benefits from being a global network of researchers.

In 2024 we will also develop and consolidate the comprehensive capacity building program for civil servants and policy makers on Inclusive Green Economy (IGE) in Eastern Africa. This implies delivering high-quality in-service training, providing evidence-based technical advice, and bringing EfD researchers closer to the civil servants in the program. Furthermore, we hope to disseminate the model for capacity building among policy actors more broadly in the EfD global network, that the IGE program represents, to bridge the gap between researchers, planners, and decision-makers, and inspire to more and better research-policy engagement in the network and beyond.

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