



EnvEcon Evaluation 2020

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Reference

EnvEcon, (2020), EfD Initiative Evaluation, 2020 – V1.1, Dublin: EnvEcon

Acknowledgements

Evaluations such as these require a high level of cooperation, competence and commitment from those engaged. We sincerely appreciate the time and effort of Sida, the EfD Initiative unit in Gothenburg, all of the EfD Centres, survey respondents, focus-group participants and, especially, those external stakeholders whom offered their input and insight to allow us to develop and deliver this evaluation.



Preface

This evaluation follows from the 2014 evaluation of the Capacity Building Program (CBP) in Environmental Economics and the Environment for Development (EfD) Initiative led by the Environmental Economics Unit (EEU) at University of Gothenburg (UoG). This evaluation focuses on the period from 2015 to 2019, though acknowledgement is made of prior trends and evidence as part of the assessment of progress. It is important to note that this evaluation is addressing the EfD Initiative only, which has been supported by the Swedish International Development Cooperation Agency (Sida) in the defined evaluation period.

Abbreviations

ADB	Asian Development Bank
AfDB	African Development Bank
CBP	Capacity Building Program
CEA	Country Environmental Analysis
EDI	Equality Diversity and Inclusion
EEU	Environmental Economics Unit
EfD	Environment for Development Initiative
FTE	Full-time Equivalent (staff member or student)
MIMI	Master Indicator Management Information – EfD's system for recording and reporting data
OECD-DAC	Development Assistance Committee of the Organisation for Economic Cooperation and Development
RA	Research Assessment
RAE	Research Assessment Exercise
REF	Research Evaluation Framework
RFF	Resources for the Future
Sida	Swedish International Development Cooperation Agency
SWOT	Strengths, Weaknesses, Opportunities, Threats
ToR	The terms of reference for this evaluation
UoG	University of Gothenburg



1 Executive Summary

Our engagement with the EfD Initiative and, in particular, with external stakeholders as part of this and the prior evaluation, offers sustained evidence that the approach and contribution of the EfD Initiative is substantive, appropriate and impactful. Evidence shows that the Intervention Logic is sustained in terms of the stated aim of contributing to poverty alleviation and the effective management of the environment in the Global South through applied research, institutional development and policy interaction. We find the performance levels are at a point appropriate to this stage of the Network's evolution and development. There is clear evidence, and external recognition, of the alignment of the EfD Centres to local priorities and needs; the importance of the development and availability of local trusted expertise; and the impact – both direct and indirect – that EfD research and EfD individuals, deliver in terms of tangible progress on the EfD Initiative vision. The reputation of the Network has grown substantially since the last evaluation based on considerable work from EfD Secretariat, the Centres and the commitment of many individuals involved in the Network.

The Centres themselves continue to demonstrate the capacity to deliver high-quality outputs, to adapt and be resilient, and to accept and adopt the mission and vision of the EfD Initiative. Our Research Assessment shows the fruits of the Network and the support it provides as, during the period of evaluation, all Centres have moved up a category in terms of the quality of their research output. The quality of their research environments has also generally improved.

At the same time, the EfD Initiative is evolving, and this evolution has seen challenges. From the Secretariat perspective there have been important and hard-won structural changes that now afford the EfD Initiative more flexibility and status in terms of its operation out of the University of Gothenburg. At the Centre level, some Centres have faced natural transitional changes through personnel change, whilst others believe the funding opportunity from EfD may diminish somewhat as more new entrants compete for finite funds. There is the potential for some further innovation in resource use to manage this perception. However, it is also important that the EfD Initiative recognises this as a 'price to be paid' for growth. However, in parallel, what has been achieved in terms of increased scale, capacity and coverage has clear potential value, and the next phase of development must work to realise this value for EfD.

From our independent evaluator perspective, we continue to see the policy need in these regions is substantial, and we recognise the quality and relevance of the EfD work to meeting those needs and enhancing the environment and quality of life for those in the Global South. Furthermore, the style of intervention is very much geared towards building from within, as opposed to simply delivering one-off support. Moreover, the Network is in keeping with good principles of development intervention as, rather than a 'top-down' approach dominating, there is clear progress in encouraging South-South interactions and peer-support, as well as the development of Centres as trusted local capacities that can provide expertise to their national policy processes. This is a critical aspect of the Initiative and supports the "sustainable" clause in the vision statement. We believe sustained support is warranted for this Initiative, and that EfD has demonstrated that it has, and can continue to, deliver and scale substantial returns on the Sida



investment. Nonetheless, the EfD Initiative has undergone many changes at an organizational level, has grown in size, and individual Centres face a myriad of challenges as they seek to navigate a path towards greater stability and impact. These challenges are discussed in more detail in the main body of the report.

While, on the basis of the evidence presented in this report, it is our judgement that the delivery of the EfD Initiative in terms of the Intervention Logic is appropriate and impressive in terms of research capacity developed, the next phase of the development of the Initiative should include targeted support to vulnerable Centres while, in terms of overall strategy, place a much greater emphasis on carrying research through to impact, and leveraging the newly developed scale of the EfD initiative into new major collaborative research projects that change policy. In this regard we make a number of evaluative observations and issue 20 recommendations under 3 headings in our final conclusions. The primary short format recommendations for the executive summary are as follows:

- 1. Enhance and extend centralised services from the EfD Secretariat.
- 2. Consider offering a more tailored menu of individual Centre support across the EfD Initiative.
- 3. Address the comments and recommendations in regard to gender in terms of staff and research.
- 4. Invest more in the methods and execution of impact tracking for EfD research and people.
- 5. Embark on a campaign to execute copy-cat policy and build EfD Network, Centre and researcher reputations.
- 6. Develop two new major policy collaborative proposals. Engage additional partners as necessary.

2 Introduction

This report follows the plan as defined in the Inception report that was approved by Sida in September 2019. A comprehensive methodology has been applied with care in terms of data collection, data collation and critical and structured evaluation. In regard to metrics data, these have been provided from the Secretariat (generally via the MIMI file) and the numbers are taken as given. All data sources, methods and processes are described in the main report or appendices. To improve readability but maintain transparency, in some cases, a summary is provided in the main report, with extended detail in the appendices. This final report has been designed and delivered in keeping with Sida's utilization principle, as was the case for the prior evaluation in 2014. This should enhance the accessibility of the piece and allow for comparative assessment of progress across both the 2014 and current evaluation periods.

EnvEcon would like to acknowledge, and thank, all of the many stakeholders that engaged with us in this process. This includes the Secretariat, the core staff of the Centres, survey and focus-group participants, as well as external collaborators, policy end-users, funding agencies and, of course, Sida. An evaluation of this nature depends on such committed engagement, and the support received has allowed us to generate the requisite evidence base on which to discuss, develop and deliver this evaluation.



3 Evaluated Intervention

The EfD Initiative has clearly defined its vision, goals and the underlying theory of change in a concise and coherent manner. The vision focuses on promoting sustainable economic development, and improved welfare, by utilising environmental economics to support the efficient management of natural resources and the environment. The application of environmental economics to this vision is achieved by building resilient local analytical capacity, developing robust and relevant analyses, and communicating and encouraging positive policy change within the member countries that can contribute to poverty alleviation and the protection and management of natural resources.

The underlying theory of change is that internationally-robust, but locally-grounded, expertise is required to deliver on this vision. To realise this change, the EfD Initiative works to address "gaps" in institutional development, academic capacity building¹, policy research and policy interaction and communication. Closely following the OECD/DAC guidelines (OECD, 2010), EnvEcon assess this Initiative on its performance in the 2015-2019 period with regard to its mission, vision and the aligned priorities of the funding agency Sida.

4 Evidence and Methodology Overview

Our proposed methodology sought to build from the approaches that were successfully employed in the prior 2014 evaluation. The rationale being that the prior evaluation had been well received and that, additionally, a coherent application of a similar methodology in this evaluation would deliver continuity and thereby afford the clients a greater capacity to consider developments and change over time within the EfD Initiative. Nonetheless, in any evaluation, it is important to query and, as necessary, update methodologies to ensure they remain relevant and appropriate. In this regard the team have taken note of critiques and developments in the field of evaluation. Lebel and McLean (2018) offer a comment in *Nature* that is both thematically and methodologically relevant to this evaluation. In brief they query the capacity of conventional approaches (e.g. volume of papers, citations) to evaluating the quality, and more importantly, the impact of research and connected initiatives to deliver positive change. On review of their recommendations we are confident that our 2014 methodology, as updated for this evaluation, remains valid and valuable in the context of their recommendations from 2018. Specifically, with our approach:

- We give an opportunity to Network participants to contribute to the evaluation through site visits, surveys, focus groups and individual meetings.
- We evaluate the quality of the research environments.
- We assess the impact through engagement with external stakeholders.
- We consider the localized priorities and needs in terms of research and policy.

¹ We acknowledge that the capacity building aspect is not formally part of this evaluation. However, it is nonetheless relevant in the broader context of the current EfD Initiative and those prior activities on capacity building that were considered in 2014.



- We consider non-traditional impact and changes (e.g. individuals, connections).
- We consider traditional and non-traditional outputs (e.g. policy reports, campaigns).
- We recognise the field of relevant journals (e.g. those within environmental economics).
- We review impact stories and search for evidence of positive spill overs (e.g. South-South linkages).
- We adopt a systematic, quantitative and qualitative approach underpinned by defined evidence bases.

Having reviewed our approach in line with the recent literature in the field of evaluation, we then developed the inception report (EnvEcon, 2019) which detailed the approach we would follow in delivering the evaluation. As indicated the inception report was accepted in September 2019 by Sida and the University of Gothenburg. In Table 1 we present a summary of the evidence sources and methods employed in this current evaluation.

4.1 Note on Centre groupings and data availability

We define three categories of Centres within this evaluation. These are Centres that have been inducted into EfD in the period of 2015-2018; Centres that have been operating within EfD since the previous evaluation (2014 and before); and new Centres that have only been established and/or accepted into EfD recently (the last 12-18months).

The Centres that were established prior to 2014 participated in the previous EfD evaluation conducted by EnvEcon in 2014 that applied a comparable methodology to this current evaluation. Although these Centres are grouped together for this evaluation, we have identified that there are unique and varying needs and circumstances that can manifest (e.g. personnel loss, political change). Thus, caution is required such that these "older" established Centres are not necessarily assumed to be more financially, politically or institutionally stable than more recent additions to the EfD Network. The previously reviewed Centres are Central America (Costa Rica), China, Ethiopia, Kenya, South Africa, and Tanzania – we refer to this grouping as the "Original 6".

Several Centres are being reviewed for the first time as part of the 2019 EfD evaluation as they have only joined EfD since 2014. Again, it is fully recognized that each Centre has its own unique circumstances, and this has been recognized throughout the evaluation process. The Centres included in this second grouping are Chile², Colombia, India, and Vietnam – we refer to this grouping as the "Additional 4".

There are also then the most recently added Centres, that importantly do not have outputs to report at this juncture. We have engaged them for their input and insights relating to the future development of the EfD Initiative. These are Ghana, Nigeria and Uganda. We refer to these as the "New 3" group. There are two further Centres officially within the Network and these are Resources for the Future (RFF) and the EfD Centre in Gothenburg University. These two

² Chile is an OECD country since 2010 and joined EfD with their own independent funding. They have never received core support and only recently have been granted access to the Research Fund. This special status is of note. It highlights a degree of innovation and efficiency by EfD in their efforts to grow the reach and research of the group whilst carefully managing the distribution of core support funds.



bodies are recognized as part of the EfD Initiative but are not evaluated in the same manner given that they are well established high performing research operations that serve different roles within the overall Network.

Table 1. Description of evidence source categories

Evidence Source/Method	Description
Research Assessment	Submitted data for our Research Assessment (RA) Framework served as a major evidence base on which to assess the quality of the research units, their research environments, research outputs and impact.
Research Outputs	Publications, individual papers, and annual reports were considered as part of the RA process, and also in a broader fashion for establishing a perspective on the EfD Initiative development over the past years.
MIMI Data	The MIMI database was developed in 2015 and provides a coherent structure for recording a wide variety of quantitative data across all the EfD Centres. The updated data in this system for the period 2015-2019 was utilised in the evaluation for key quantitative metrics (e.g. funding dependency ratios).
Centre evaluation questionnaires	Each of the EfD Centres were required to complete an evaluation questionnaire. The questions elicited responses in regard to numerous defined aspects of the evaluation – such as plans for funding diversification, thoughts on strategy and so on. A modified format was created for the three new EfD Centres to gather their perspectives at the outset of their engagement with the EfD Initiative.
Policy impact case studies	The evaluation process required the Centres to compile and report a series of policy impact case studies as part of the review process. These studies were considered in the RA process and broader evaluation.
Mission to Gothenburg	The evaluation team travelled to Gothenburg to engage with Sida and various leaders of EfD Initiative functions. The meeting served to finalise the inception report and to engage on EfD Developments.
Mission to Africa	The evaluation team travelled to Ethiopia to conduct an on-site review of the Centre and associated external stakeholders. This trip also incorporated interviews with EfD Kenya, Tanzania and Uganda.
Mission to Colombia	The evaluation team travelled to the annual EfD meeting in Bogota, Colombia. This trip allowed engagement with the broader Network at all levels, collaborative projects and EfD research presentations. A number of focus groups with the EfD members were also held at this annual event.
Administrative Materials	Work plans, contracts, audit reports, structural organisation, policy documents and so forth have been considered in the evaluation. This has helped to understand the operation and dynamics of EfD.
Web analytics	Analytical data relating to the EfD website (www.efdiniative.org) was obtained in order to quantify the attention and access that the EfD website and materials are attracting on the open web.
Prior evaluations	The prior reviews of Holmberg (2006), Alberts (2010) and EnvEcon (2014) were considered as part of this review, though care has been taken to form fresh and independent perspectives. In addition, prior correspondence and comments from Sida in regard to the EfD Initiative have been considered.
Guidelines	A variety of guidelines and other documents have been requested and reviewed. These include template documentation, material on gender and guidelines for policy interaction and communication.
Strategic plan	The draft strategic plan outline for 2018-2022 has been provided and considered.



In terms of underlying quantitative data, the information available for the evaluation runs up to the end of the 2018 year. As such when data are presented on this time horizon it should be noted that the "New 3" are not yet featuring in these data, and the "Additional 4" are integrating and developing over the time horizon from 2015 to 2018.

5 Evolution of the EfD Program

As part of the 2014 evaluation, a number of recommendations were made regarding structural and procedural development to prepare the EfD Initiative for growth and progression of its mission over subsequent phases. Of these recommendations there was, *inter alia*, recognition of the need for flexibility in terms of operations, staff acquisition and retention; the importance of efficiency and developing external financial resourcing; the need for enhanced methods of identifying and supporting research that delivers policy impact; and the design and application of a careful and considered approach to growing the number of Centres. In this regard, there have been important developments observed and considered in this evaluation. These are described under the subsequent six subheadings.

5.1 Structural Changes and Linkages

EfD started in 2007 and has successfully grown into a Network consisting of 15 Centres in five continents across the globe. The scale and complexity of managing and supporting such a substantial Network has warranted the establishment of a stand-alone EfD management entity within the University of Gothenburg. On January 1, 2019, Environment for Development (EfD), a special unit at the School of Business, Economics and Law, was created directly under the Faculty Board. This EfD Network unit is led by Director Gunnar Köhlin, who now reports directly to the Dean of the School of Business, Economics and Law. The Director is responsible for the operations, promotion and development of the new EfD unit, and is now afforded valuable additional flexibility and responsibility in terms of managing budgets, human resource decisions and so forth. In parallel, the prior EfD Centre in Sweden remains hosted within the Department of Economics at the University and is led by Professor Thomas Sterner.

As part of its institutionalisation, a new Board for EfD was appointed to provide strategic guidance to the Director. The new EfD strategic Board consists of seven members and is constituted to work towards the realisation of EfD strategy and to monitor progress in achieving EfD's objectives. Fundraising is also a key function and value of the EfD Board. Whilst EfD is primarily funded by the Swedish International Development Cooperation Agency (Sida) the ambition continues to be to leverage this support in pursuit of additional resources that can enable further research which will be directed towards greater impact levels. All Board members are leading academics in their fields with high competence, relevant experience and established credibility. These attributes coupled with their own extensive connections (e.g. Kevin Urama was previously Senior Adviser to the President of the African Development Bank) offers the EfD Initiative additional profile when marketing itself as a reputable policy research resource, as well as a new set of pathways to funding opportunities in the next phase.



The executive branch of EfD is broadly guided by four committees which individually work to address those four gaps identified as part of the overall EfD Initiative mission. Specifically, these are the gaps in institutional development, academic capacity building, policy research, and policy interaction and communication. The EfD Coordination Committee (EfD CC), which previously served as EfD's highest decision-making body, and consisted of all EfD Centre Directors (15 individuals), will now focus on the institutional development issues, as this aspect is increasingly important with a growing and increasingly diverse Network. The EfD CC members are uniquely qualified to deal with such issues. The EfD Research Committee remains in place and governs the allocation of research funds. Its role, and the process, are described in more detail later in section 5. The capacity building committee and policy interaction committees then deal respectively with EfD efforts regarding the development of human capital, as well as efforts to translate EfD research into impact via sustained and successful policy interaction efforts. At present there remains some overlap of activities and roles as part of the transition, but the goal is for a clear demarcation in the next phase.

Tangential to the EfD Initiative board and the executive committees on research, policy interaction, coordination and capacity building is EfD International that was established in 2019. EfD International is registered as a charitable organization in the United States with 501(c)(3) status which makes donations tax deductible for American foundations and individuals. EfD International is established as an independent organization with the sole purpose to raise funds to implement EfD's core activities. It is still at an early stage of development and is excluded from the evaluation. Nonetheless, in future evaluations, its role in promoting EfD, and sourcing and competing for new opportunities, should be considered. The elements of the current EfD structure are depicted visually in Figure 1.

Figure 1. Elements of the Current EfD Structure





EfD Centres are principally hosted by reputable academic institutions³. At the individual Centre level, there is an understandable degree of variation amongst the 15 Centres in regard to their exact staffing composition. Broadly, however, the Centres are governed in line with the structure depicted on the left side of Figure 2. Operationally then there is a mix of administrative staff supporting the research arms of the unit (or indeed serving in dual roles).

Figure 2. Common elements of the individual EfD Centres

Organisational Elements of EfD Centres

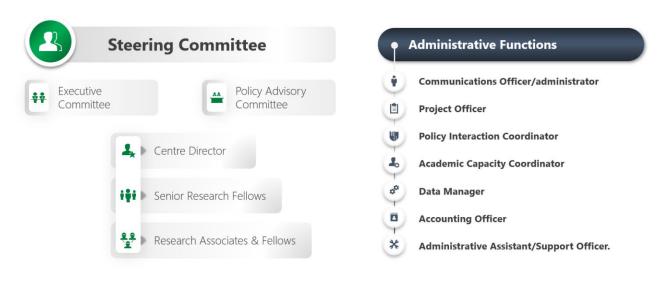


Figure 3: Total staffing by employment status in the EfD Network (all centres except the New 3)

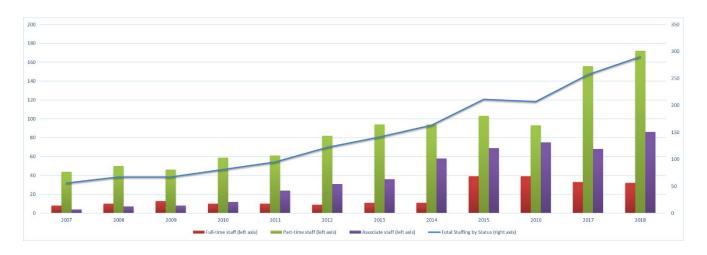


Figure 3 gives an indication of how the overall EfD staffing has evolved over time as the Network has grown. In these data we can observe a jump to a new plateau level for associate staff, as well as strong growth in the part-time staff

³ Two are not based in Universities. EfD Ethiopia is hosted within a Government think tank. RFF is a leading US research institute.



engaged in the Network, in particular, from 2017. This trend will be expected to continue in the next phase as the New 3 Centres come on board and are represented in the data. Figure 4 also highlights the steady growth in associates, researchers and senior researchers, which bodes well for future capacity across the EfD Network.

Overall, we find that there is a good coherence between the structure of the overall Initiative in terms of alignment to the four gaps that the EfD Initiative seeks to address, and a well-aligned sub-structure at the individual Centres that should facilitate the transfer of Network policy and strategy down through to the Centres, as well as enabling a bottom-up flow of information. As part of our engagement on the missions and, in particular, at the annual meeting, it was evident that the systems and structures operate reasonably well, though we do offer recommendations related to communication and coordination between units in Section 8. The data also demonstrate that the scale and capacity of personnel has seen considerable growth indicating a strong pipeline of human capital potential and, indeed, the effective leveraging of funds, resources and reputation to grow the active membership of the EfD Initiative.

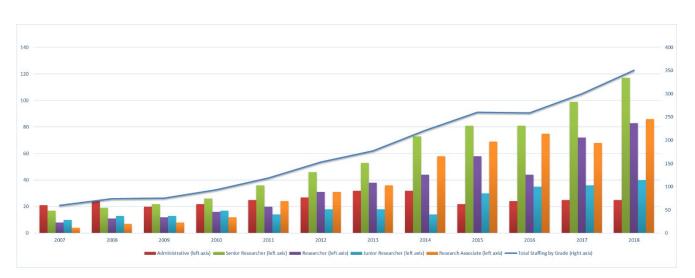


Figure 4: Total staffing by category in the EfD Network (all centres except the New 3)

5.2 Financial Sustainability of the Program

Each Centre aims to develop financial sustainability such that the capacity, connections and policy contributions embodied within the Centre may continue over the long-term. The scale of the challenges and gaps addressed by the EfD Initiative are such that only a long-term stable commitment and engagement could fulfil the considerable potential for positive policy progress in the host countries. At a broader level, the overall EfD Initiative is working to leverage its growing status, capabilities and reputation to secure substantial additional resources that can help to deliver significant policy change in the Global South. This is the primary challenge we see for the future and is therefore an area where we make a number of specific recommendations. As part of the evaluation we have considered metrics for individual Centres, as well as aggregated EfD Initiative figures. In Figures 5, 6 and 7 below we present the aggregate

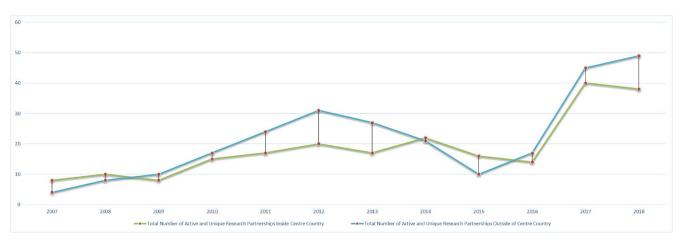


figures exclusive of the data for the EfD Centres in Sweden and the USA. As the "New 3" Centres have no data up to 2018, these figures reflect the funding source progress of only the Original 6 and Additional 4.

Figure 5 demonstrates that the unique number of funding sources in any given year has markedly improved in the period from 2015 to 2018 to more than double the level in the prior evaluation phase to 2014. In addition, we note a steady increase in the reported number of 'first time' funders in the current evaluation phase, which is a good indication of initiative and innovation on the part of the Centres in terms of securing new funding sources. Indeed, Figure 6 also offers encouraging data on the parallel growth of national and international research partnerships within the Network.

Figure 5: Funding Sources of the EfD Network (excluding Sweden and RFF)





On an absolute funding level, Figure 7 shows that EfD funds in the overall Network budget have, allowing for some understandable annual variations, decreased as a share of the overall budget of the EfD Network, averaging less than 50% over the 2015-2018 period. This suggests that the funds continue to be leveraged to good effect across the Network. It is also apparent that, whilst comparatively modest, the host contributions have grown as the Network has developed to roughly 10% of total budget. In particular, we observe that the growth in other external funding has driven a trend toward diminished dependence on Sida funding via EfD with other external funding approaching an average of 50% of total budget over 2015-2018. The funding diversity and absolute funding growth is indicative of



progress towards enhanced financial sustainability. We also note that the Secretariat share of total funds has reduced to 12% of the total budget in 2018, and 22% of the total Sida support. It is also noted that the Secretariat share has now reduced to the same level (23%) as at the outset of Sida support in 2007.

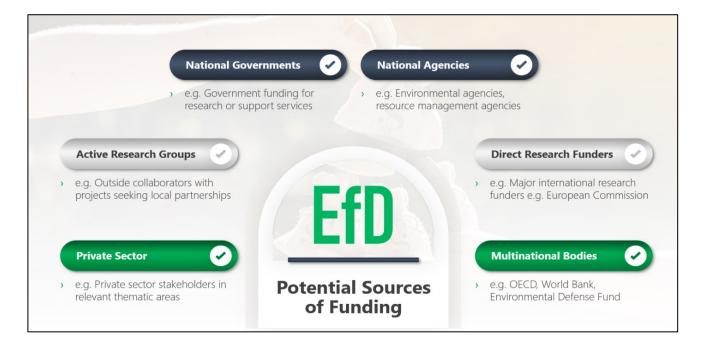
\$0,000,000 50,000,000 40,000,000 20,000,000 10,000,000

2012

Figure 7: Budget Distribution of EfD Network (excluding Sweden and RFF)

2011

Figure 8. Potential sources of funding for the EfD Initiative



Our quantitative assessment findings are supported by the self-reported returns to the questionnaire distributed across all the Centres for this evaluation. Therein, Centres communicate a belief that there has been an overall increase in financial sustainability and a diminished reliance on EfD funding. However, despite these observations, in general, the Centres restate a clear need for the continued support of the Sida if they are to sustain the current level of research output. In short, they argue that they leverage the core support and research funding to far greater effect and would struggle to sustain their successes in the absence of these well targeted funds. This response is expected, but seems



reasonable and, whilst we do recommend that Centres establish goals to further reduce reliance on EfD funding, this is primarily with a view to retargeting those funds within the EfD Network to specific tailored supports (e.g. Centres in particular need, development of new collaborative proposals, and a focus on impact activities). Such efforts and flexibility would, we believe, yield better returns over time, that would enhance the resilience of the overall Network.

We believe the EfD Initiative has the potential to go considerably further in terms of establishing an even more resilient financial base from which to carry out its mission. The previous evaluation recommended a formal mapping process of potential donors and funding sources by the Secretariat, and the full exploitation of all existing contacts and connections to progress new funding opportunities that may further enhance financial sustainability. This recommendation must be revisited with renewed effort. In Figure 8 we identify the broad categories of funding sources to which the EfD Initiative may market its capacities. Each of these groups may have varied priorities in terms of the desired outcomes they wish to see from offering financial support. Therefore, we restate that the EfD Initiative should conduct category-specific appraisals of the potential funding sources and develop explicit strategies to target these with a relevant set of Centres, research proposals and planned outcomes. This recommendation is discussed in greater detail in section 8. Ultimately, the financial sustainability of the program is dependent on the EfD Initiative securing multiple major funding sources that will allow it to sustain the engagement and efforts of a growing Network of researchers, as well as delivering continued high quality research that can be carried through to policy impact.

5.3 EfD Program Research Process

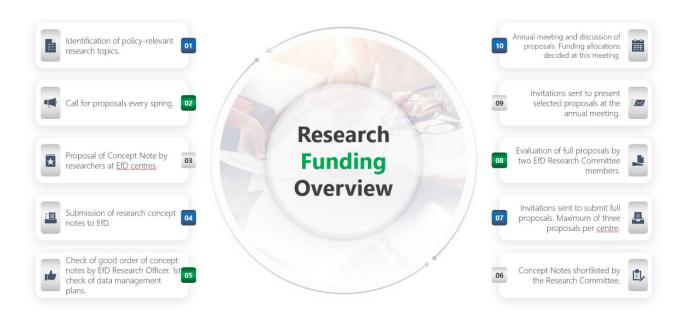
The EfD Board appoints the Research Committee, composed of members with expertise and experience of the EfD Initiative. The Research Committee implements the EfD Program Research Process by screening the research programs of the EfD Initiative and making decisions about the allocation of resources from the Research Fund on the basis of the merits of the individually proposed projects and capacity of each Centre. A similar function is provided in regard to the Collaborative Research Programs. Given the growth in the number of Centres and the finite research funding resource available via EfD, it was crucial that EfD established an effective and efficient means of inviting, reviewing and selecting research proposals for support. Below we consider the operation of the EfD research process.

The research fund is administered within a research cycle as shown in Figure 9. The process is designed to motivate and engage researchers in the Global South in the development of high-quality policy relevant environmental economics research. The initiating stage for research by the Centres is their Policy Research Review which identifies priority policy themes in a given region and aligns these with their capacities and strengths. There is a call for proposals every spring and potential research proposals are first reviewed internally within the respective Centres. Following from this, EfD's Research Committee is presented with concept notes for the research ideas. The Committee then shortlists the concept notes, and further, invites the respective Centre to submit the full research proposals, associated with the selected concept notes, which are then discussed at the annual meeting before a final decision is made on funding support.



Important changes are that it is not only Senior Research fellows that may now submit proposals. Thus, talented young researchers may seek recognition and resources for their ideas at the outset of their careers. Furthermore, the composition of the research evaluation team has been expanded to enhance its performance in reviewing. However, whilst the process seems sound, our evaluation found that in some cases there were reduced levels of satisfaction amongst researchers where they felt the feedback on proposals was limited. Indeed, there was mention made by some of the risk of specific reviews perhaps lacking the specialist expertise to evaluate specific topics. Such comments are not uncommon where proposals are rejected! However, we do recommend that the composition of the Research Committee is regularly reviewed to ensure there is adequate thematic scope and expertise, and also that the membership recognises where there may be increased pressure for reviews on popular topics, which may then warrant additional review capacity to deal with increased submissions in those areas. It was also requested that perhaps additional guidance and feedback would be offered for failed submissions. Whilst this adds a time cost to reviewing (and must be balanced), it was deemed important for training, development and maintaining researcher motivation.

Figure 9. Research Funding Process Overview

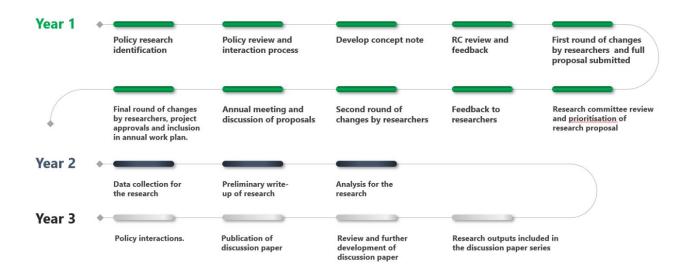


The follow-on from the annual meeting decisions are that final projects approved for funding are incorporated into Centre work-plans and these are implemented starting in Year 2 of the cycle with data collection and research, followed by a progress report generated in July of the same year. Another notable support structure for capacity building in the Centres is that the final EfD Discussion Paper is to be submitted via editorial express in December of Year 3. This discussion paper is peer-reviewed and doubled-checked by the Research Coordinator and Editor. This broader research cycle is illustrated in Figure 10.



Figure 10. EfD Research Cycle Overview

Evolution of the EfD Program Research Process - Cycle Of Research



5.4 EfD Quality Assurance Process for Centres

Considerable expansion of the EfD Network has occurred in the current evaluation period and this offers a range of benefits to the EfD Initiative in terms of scale, geographic scope, expertise and potential. We note that EfD has been careful and cautious with this process. Evidence of this is the design and implementation of a quality assurance process that commences prior to the potential inclusion of a new Centre in the Network. This process considers the following:

- The necessary critical mass of well-trained environmental economists to form a viable and vibrant research Centre locally. In countries where there is a clear demand for an EfD Centre but not a critical mass, the establishment of a Centre must be preceded by a strategic capacity-building effort. Strong connections to graduate academic programs with a specialization in environmental economics are therefore also important.
- A strong interest from an academic institution to host the proposed EfD Centre, as well as clear evidence of
 an effective demand from government to draw on the expertise and capacity of the proposed Centre.
- The availability of adequate resources to sustain the new Centre, both in terms of providing core support and replenishment of the joint research fund.

The specific process, as understood by the evaluation team, is appropriate and we have seen evidence of its implementation in terms of procedural outlines and assessment documents. The process is summarised in Figure 11.



Figure 11 Quality Assurance Process for New Centres



The latest additions to the EfD Network are the Centres in Ghana, Nigeria and Uganda. A broad review was conducted to assess which universities and research groups in Sub-Saharan Africa may meet the requisite requirements. Following this assessment, a call for interest was then made to research institutions in Sub-Saharan Africa and a number of research groups expressed their formal interest in becoming an EfD Centre. Expressions of interest preceded an accreditation process that is described in Figure 12.

Figure 12: Process of accreditation for a new Centre



In addition to the accreditation process, EfD requires Centres to go through a quality assurance process every five years to ensure that the quality of administration, management, and institutional development is maintained. Edwin



Muchapondwa is the current chair of the external quality assurance committee. An assessment of this evaluation process suggests that it offers an accessible and useful means of recording progress and recommending change.

5.5 Focus on: Gender Research and Women in the Network

Gender equality has long been a priority in Swedish development cooperation. Gender issues are considered in this evaluation in respect of both the research undertaken on gender and the role of women within the Network.

As regards staffing in the Centres, other than Central America, it remains male-dominated (Figure 13) and men tend to be more senior. As part of our 2019 survey, EfD Colombia report 8 female researchers out of 19 researchers (42%), and CECFEE (India) has reported a similar proportion of female researchers (48%) along with announcing the hiring of two female visiting assistant professors. In Chile, only 2 out of 17 staff members are female, and the reason cited for the imbalance is a lack of active female environmental economists in their region. Amongst other centres, data for South Africa and Ethiopia show female staff ratios of 0.36 and 0.33 respectively in 2018. Overall, these figures are not uncommon across the world. Indeed, they would compare favourably to many international economics departments.

The Centres were asked whether or not EfD membership has enhanced female participation, progression and recognition within their respective host institution, and also whether the Centres have implemented specific actions with regard to gender in terms of staffing balance, career advancement and progression, and the inclusion of gender issues within their research agendas. EfD Chile noted that participation in the EfD Initiative has enhanced female participation by incentivizing interaction with female postgraduate students in terms of both research and mentoring activities, while EfD Vietnam highlighted that participation in the EfD Initiative has improved the perception on gender equality, in part due to the gender equality training course organized by Sida in Bangkok in March 2017.

There were no noted instances of gender-based discrimination at any of the Centres. Moreover, we find that most Centres are making efforts to address gender imbalance in their staffing and promoting the works of female researchers. Central America and Ethiopia have special support policies for women at their respective Centres while EfD Colombia has made efforts to increase recognition of female researchers by promoting their work at seminars and events. The new Centres in Nigeria and Ghana have implied that they are gender sensitive in terms of staffing.

The Centres also have themes around gender in some of their research work. Central America, Uganda, Ethiopia and India have noted a particular focus on gender issues in their research. Topics addressed include increasing female labour force participation and raising the productivity of female-owned farms. An incomplete EfD research brief (Somanthan, 2019) shared at the time of our final report drafting also included a provisional assessment of gender throughout EfD research. They identified some 274 discussion papers published by EfD between 2008 and 2019. Reviewing these data, we found that, whilst there are some data gaps to be resolved, the ratio of males to females leading research papers is roughly 2 to 1. Although it is worth noting that there are some 753 co-authors connected to those discussion papers where we did not assess gender balance. In terms of gender as a topic, the research brief



sought to classify papers where gender was not a part of the paper and cases where it was either a minor or major part of the work. In approximately 50% of cases gender was a theme in the overall research piece, whilst in 15% of those, there was a strong focus on gender. Given that about 30% of the papers were assessed as having no potential gender angle, we deem this is a good performance given the range of themes that EfD must address as part of its overall thematic mission statement. Nonetheless it also highlights that whilst EfD has performed well on gender research there is considerable untapped potential to deliver further on this agenda.

A significant and important development in relation to gender research and the role of women in the Network has been the establishment of the WinEED collaborative. The Women in Environmental Economics for Development aims to increase diversity in economics across the Global South by supporting and encouraging women in the early stages of their careers to continue, and become leaders, in academia and other research institutions. The goal is to help researchers obtain the tools, skills, collaborators and funding needed to advance their research.

The above findings were from the MIMI data and the returned surveys from the Centres. However, the returns were not necessarily completed by women, and so a Focus group was held at the Annual Meeting in Bogota to provide what turned out to be a very useful exchange of information on some of the issues. From this focus group we found that the Network includes some very impressive female researchers who act as role models and are providing leadership across a number of domains. However, more could be done to ensure these role models are highlighted within EfD and supported in their activities to attract more females to graduate level study and beyond in the field.

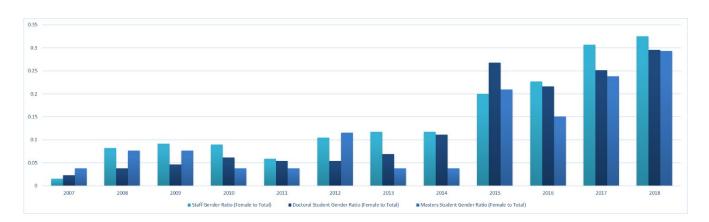


Figure 13. Staffing and Student Gender Ratios in the EfD Network (excluding Sweden and RFF)

We found good evidence of Centre Directors being progressive in terms of facilitating women with childcare arrangements and working from home support, which is particularly valuable in country contexts where maternity leave is not available. We also found good evidence of research on gender-related topics in environment and development. However, it was pointed out that there must be a move beyond a "dummy variable" approach to examining gender in relation to EfD research and to adopt a more comprehensive methodology.



Overall, while performance in relation to gender is good and there is much good intention, it seems that many of the good actions in relation to participation of women in the Network rely on a bottom up approach and so we include gender-related suggestions in our final recommendations which propose further actions at a higher-level in the Network that are desirable when it comes to sharing best practice on inclusiveness and supporting gender research.

5.6 Focus on: Collaboratives

In addition to a Centre-based approach to the Network, EfD has established cross-Centre Collaboratives with the stated objective being to bring researchers from the different EfD Centres together to undertake policy-relevant and high-quality research through better access to data, complementary analytical skills and integration within a large group of policy makers and stakeholders. Seed money is provided to start up research programs and to develop larger research proposals aimed at other donors and funders. At the annual meeting in Bogota, a focus group was carried out with Members of four EfD collaboratives⁴:

- Ocean and Marine Resources
- Sustainable Energy Transitions Initiative (SETI)
- Forest Collaborative
- Ecosystem Services Accounting for Development (ESAfD)

Participants pointed to the rationale of the collaboratives as being capacity building, coherence and synthesis and providing the incentives for collaboration on impactful research through networking, literature reviews, information exchange, spillovers and research informed teaching. A strong example of how the approach of the collaboratives advanced understanding around marine plastic policy was notable, as was the process of developing a position paper to bring what would otherwise be disparate research together. The forestry collaborative provides a good example of a safe environment for people to test out ideas and to collaborate through regular meetings and to facilitate moving into new connected areas of research such as forestry and human health. Special issues of journals are also a target of the collaboratives allowing for softer reviews in advance of more rigorous peer-review. Other positives of the collaboratives include support for proposal development for submission to EfD and other sources of funding, and the mentoring aspect for less experienced researchers, and for providing ballast to PhD supervision.

There is no doubt that collaboratives are a strong addition to the EfD Network and should be carefully nurtured as they offer a great avenue to collaborative research, coordination and delivery of policy impact. The speed of the process and the interaction with the public agencies in order to influence policy through research is a key objective in closing the gaps between academia and policymaking. The view of the participants is that "the seeds are now planted" by the collaboratives and policy impact is seen as the next phase of the work building on the research that is now

⁴ The Women in Environmental Economics for Development collaborative was considered as part of the focus group on women in the Network.



being generated. We would agree, but this promise and potential must be realised in the next phase for the existing collaboratives. However, there has already been some successes in the areas of plastic reduction, participatory forest management, as well as recognition and recorded impact of ESAfD by the United Nations Statistical Division. It emerged that a useful course of action would be to include more policymakers in the collaboratives as part of advisory panels and also to utilise policy impact expertise from across the Network even if it comes from a different context.

The main challenges for the collaboratives is funding support for their activities and the ability to continue to attract and incentivise researchers from institutions from outside of the Network such as Duke, Portland and North Carolina which were all represented but whose Faculty must take time out of their normal schedule to be involved. Providing recognition to their host institutions of their value in this regard would be worthwhile. The importance of recognition from the EfD for the contributions of these committed individuals is of great importance to keep them involved as, perhaps, is the consideration of the inclusion of those institutions in the Network somehow as affiliates. It will also be important to resolve any potential clash in governance arrangements between the Centres and the Collaboratives.

6 The Research Assessment

The best indicator of the success of the EfD Initiative is the increase in research output from the Network. Figure 14 shows good growth of knowledge outputs over time with particularly strong growth in peer-reviewed academic publications⁵. This demonstrates the improved capacity for academic research across the Network and similarly reflects the priorities of EfD researchers. However, to supplement the quantitative findings, we implemented a comprehensive research assessment methodology to study not only the quantity, but also the quality, research environment and impact. A summary of the Research Assessment is provided in this section. The full analysis is contained in Appendix 4.

The Research Assessment toolkit has an underlying methodology that assesses the quality and quantity of scholarly outputs in terms of academic standing. However, given the intervention logic of the program in terms of the development objectives of Sida-funded programs, it is critical to recognise and evaluate the broader impact of the research outputs beyond traditional academic measures. The methodology for the RA is identical to the 2014 evaluation to allow for comparisons to be made. It is based on the principles of the UK Research Excellence Framework (REF6), which encapsulates a broader approach compared to traditional metrics analysis. Specifically, the assessment considers three "profiles" - the quality of the research outputs, the impact of the research outputs beyond academia, and the quality of the research environment. We have utilised a star rating from 0 to 4 to assess these

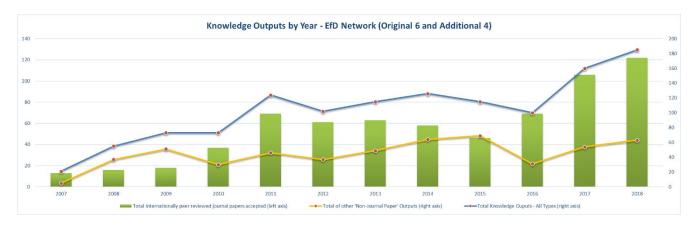
⁵ We note that the EfD Secretariat have now compiled separate data on knowledge outputs from 2015-2018 in a different format from the data reported by centres for compilation into the MIMI file. These Secretariat data have been reviewed at the time of drafting and have been adopted into this chart for the years 2015-2018. We suggest that these records and approaches are fully integrated and harmonised for any future reviews.

⁶ https://www.ref.ac.uk/



attributes. There is, of course, quite a degree of subjectivity about this approach but this is unavoidable and is the norm in research assessment exercises internationally.

Figure 14. Knowledge Outputs over Time in the EfD Network (excluding Sweden and RFF)



The following data were utilised for the research assessment:

- Information on EfD Fellows selected to be included in the submission. This information includes Centre, name, position, year of appointment, details of four publications for consideration, and details of impact for any 'non-traditional' publications returned. In common with most research assessment exercises, Centres were not asked to return all Research Fellows for assessment. 80% of the EfD Research Fellows in each Centre were included.
- Details of publications and other forms of output produced during the publication period 1 January 2015 to 31 October 2019. A period of circa five years was considered an appropriate window to give an overall impression of the productivity rate of a given researcher.
- Up to four impact case studies from each Centre demonstrating the impact of a defined Centre research.
- An assessment of the overall research environment utilising data obtained in the rest of the evaluation process.
- Reflecting that, in the social sciences, the most significant impacts tend to result from the cumulative expertise of an individual researcher, case studies of EfD Fellows who the Network believe encapsulated this idea of impact through cumulative expertise. These are included as illustrative examples.

The criteria for assessing the quality of outputs used were originality, significance and rigour.



6.1 Research Assessment - Output Evaluation

The Centres are categorized in this evaluation using the headings described in section 4.1. Specifically, the "Original 6" and "Additional 4". The three most recently added Centres "New 3" do not have outputs to report at this juncture and so are not included in the research assessment. The two further Centres officially within the Network are Resources for the Future (RFF) and the EfD Centre in Gothenburg University. It is obvious to us, from a quantitative and qualitative assessment, as well as from our site visit to Gothenburg that, if anything, the standard has improved further upon what was already excellent performance so these are not included in this research assessment process.

Ten Centres made returns with a total of 88 Fellows assessed. In all 308 papers were examined and scored. Across the Original Six Centres, in 2014, on average, over 70% of all publications returned were considered to be of a quality that is recognised internationally in terms of originality, significance and rigour. Now 81% of their research submitted for review is deemed to be of international standard (Table 2). The majority of all of the original Centres' research is of international standard. Given the small numbers returned, and the varying numbers of Fellows in the Centres (larger Centres such as China and India will show greater variation), care must be taken when comparing Centres and interpreting the figures presented in Table 2, suffice to say China and South Africa are again performing very well.

Given that a key objective is to build capacity for high-quality research for development intervention, it was our view in 2014 that a score of 50% or more of research output being scored in category 2* or above, i.e. internationally recognised research, would be a very good result. We are seeing clearly the fruits of the Network and the support it provides as, essentially, all Centres have moved up a category in terms of the quality of their research output.

The Additional 4 Centres demonstrate particularly strong research characteristics (Table 3). 87% of their output is in the internationally recognised category for excellence and rigour. Colombia is particularly strong with 84% of its output returned for assessment scoring as internationally excellent or above. This makes it clear that, whilst all Centres are not at the same stage of development in the EfD context, it is not correct to assume that these "older" established Centres are more successful than more recent additions to the EfD Network. It also suggests that the approach to the recruitment of new Centres discussed in Section 5 has been successful in identifying and engaging high quality and high potential Centres that can rapidly deliver quality research with the potential for policy impact



Table 2. The Original Six Centres - Research Output Results

	Quality Profile				
	Percentage of research activity at each quality level				
	Internationally leading 4*	Internationally excellent 3*	Internationally recognised	Nationally recognised 1*	Unclassified or missing 0*
China 2014	0	33	67	0	0
China 2019	42	31	4	5	18
Central America (Costa Rica) 2014	0	14	73	13	0
Central America (Costa Rica) 2019	10	40	20	10	20
Ethiopia 2014	0	11	67	16	6
Ethiopia 2019	8	75	13	0	4
Kenya 2014	0	5	35	40	20
Kenya 2019	0	44	33	14	9
South Africa 2014	0	23	37	22	7
South Africa 2019	13	56	31	0	0
Tanzania 2014	0	13	50	37	0
Tanzania 2019	3	31	37	13	16



Table 3. The New Four Centres - Research Output Results

	Quality Profile				
	Percentage of research activity at each quality level				
	Internationally leading 4*	Internationally excellent 3*	Internationally recognised	Nationally recognised 1*	Unclassified or missing 0*
Chile	4	46	29	7	14
India	8	37	38	16	1
Vietnam	3	59	28	10	0
Colombia	24	60	12	4	0

6.2 Research Assessment - Environment Evaluation

The research environments across the Centres vary somewhat, but there are encouraging developments and changes across the Network. A notable development has been the investment in dedicated video conferencing hardware in the Centres to facilitate high quality remote meetings and interactions on a bilateral (e.g. Centre to Centre) and multilateral (e.g. EfD Network meetings) scale. This specific development should further the extent of South-South interaction, reduce levels of international travel and associated emissions and costs, and strengthen and support the levels of engagement and community within the overall EfD Network as it grows and develops into the future. The latter is a particularly important point, as scale can sometimes come with a sacrifice of those personal bonds and relationships that truly unite a Network behind its vision. Facilitating cheap and regular interaction is an appropriate defence to this risk. There are also spillover benefits to the host institutions that gain sub-priority access to this infrastructure. In addition to this specific development, we also considered the observed and reported environments.

From our mission to Gothenburg, it was clear that the research environment is excellent and stands shoulder to shoulder with some of the best programs internationally. These facilities set a high benchmark for the Centres to aim for and serve as an excellent base for EfD. Outside of Sweden, and indeed RFF in the USA, the EfD Centres would not be expected to meet the standards of excellence one would find in a top university in a well-resourced developed country. However, research environment standards in some Centres are comparable. As part of the evaluation, we



requested a description of the research facility and research infrastructure at each Centre. Our focus for the evaluation is on existing key research infrastructure capacities, and thereafter evidence of improvement on the 2014 evaluation of the Original Six and an assessment of what, if anything, may merit further improvement in the other Centres.

From the reported information, we noted a number of improvements. For example, Tanzania's facilities have improved by adding access to online journal articles. Kenya was operating in very difficult circumstances in 2014. These have improved since then but access to online journals is likely limiting potential. Ethiopia is operating with facilities below competitive international standards as, while internet access has improved, access to online journals has been removed. Central America has improved its access to journals although still reports constraints in this regard. They are operating close to competitive international standards but will soon need replacement of computer hardware. Of the Original Six, South Africa was of internationally competitive standard in 2014 and has kept pace in 2019 while China reports the best standards of the reviewed Centres. Of the New Four, Vietnam and India are operating at a good internationally-competitive standard and Colombia is not far behind. Indeed, we see most Centres operating at, or close, to a research-environment standard that would allow them to be reasonably competitive in terms of having the facilities to engage in internationally-regarded research.

The main impediments for the Centres seem to be access to a full range of journals and the replacement of PCs and peripherals. It is worth noting that, for desk researchers, a good-sized screen (or multiple screens) and well-functioning peripherals are comparatively low-cost pre-requisites to realising productivity potential and reducing errors in work. Beyond this there is an absence of specialized software (e.g. GAMS) in some Centres which serve as a barrier for specific researchers. The consideration of further program level support for software and hardware upgrades is worth considering – this would also fit with the recommendation to develop more tailored support models for the Centres.

Separate from research infrastructure, we also recommend that all Centres make a concerted effort to manage and enhance the quality of shared common spaces, catering standards, cleanliness of bathroom facilities and so on. Whilst these may not at first appear to be of direct relevance to research activities, they are a means of enhancing the quality of the overall working environment such that existing staff are comfortable, and indeed so that potential high-quality new recruits have further reason to choose EfD. They are also critical to attract visiting international researchers.

Overall, when it comes to the Research Environment assessment, in 2014, we rated the Centres between 2* and 3*. We would now rate the Centres between 3* and 4* although if the Ethiopian Centre does not solve the journal access issue it would drop back to a 2* in our view. For the EfD Initiative, and for the Centres themselves, this is a good achievement. In five years, the Centres have moved up one category in terms of delivering, within each host country, a research environment that can address the environment and development challenges in the regions. However, the momentum must be maintained as staying competitive in an international context requires 'running to stand still'.



6.3 Research Assessment - Impact Evaluation

In this section we consider impact in various forms and at varied scales. These include the overall EfD Initiative impact through to the activities of individual Centres and researchers.

EfD Program Impact

Our analysis shows that, overall, the impact of EfD Initiative beyond academia is excellent, as may be expected in a program where development intervention impact is the ultimate defined goal. Our expert judgement is that the EfD Initiative in Sweden should be ranked in the 3* to 4* category in terms of its impact, given that the majority of its work has considerable and, in many ways, outstanding impacts in terms of "reach and significance". Across much of EfD's research we can clearly see the relevance of the work to policy design and change that can and does support poverty alleviation and more effective environmental management by directly targeting local and national needs.

Box 1: Policy Impact of the Centres

Program - centre interaction: Leveraging the network for country-level impacts

EfD is now increasingly leveraging its overall program capacities in order to have greater impact. One example is the cascading effect of the strategic work in Ethiopia. Building on more than a decade of applied research in Ethiopia, the country strategy process was targeted by the EfD Secretariat. This led to a major contribution by the Norwegian Embassy for the EfD centre to identify research needed for the implementation of the Climate Resilient Green Economy strategy. Building on this work, the World Bank involved EfD in the Country Environmental Analysis (CEA). The country environmental analysis (CEA) is a tool the World Bank developed to help inform dialogue with countries, raise awareness of environmental problems affecting poor people, and improve understanding of the linkages between environment and growth sectors. In practice, it is also often used for donor dialogues. This work was coordinated by the EfD Director. After successful completion, the World Bank decided to involve EfD for the CEA also in Tanzania. Once again, the EfD contribution was coordinated by the Secretariat and financed by the Swedish Embassy in Tanzania. This has now led to a ripple effect where EfD as a network is considered as a knowledge partner to the World Bank.

Following its expanded footprint on the African continent, the EfD has also attracted the attention of the African Development Bank as a partner for capacity development. The AfDB's African Development Institute and EfD have agreed on a Strategic Partnership to pursue in-depth, rigorous, policy-oriented capacity development in Africa.



Another example is the work on "Market-based Approaches to Environmental Management: Application on Air, Water and Waste" commissioned by the Asian Development Bank to EfD and with involvement of about a dozen senior experts. This was featured at the EfD Policy Day in Hanoi in 2018 (see picture) where many high-level policy makers attended. Following this interaction, the EfD centre has been invited to rewrite the Vietnamese Law of Environmental Protection, which increases the use of market-based policy instruments.



EfD Centre Research Impact

On an individual Centre level, we also asked each of the Original 6 and Additional 4 Centres to return four case studies for analysis to assist us in understanding their research impacts at local level and beyond. In 2014, all Centres provided four case studies each, however, in this evaluation the number of returns varied by Centre. Tanzania, Ethiopia and Kenya only returned two case studies each out of a maximum of four. China, Central America and South Africa returned three each. Of the New Four, India and Vietnam provided 3 each and Colombia provided one. Interestingly, none provided a case study of a failed effort to influence policy! This is unfortunate, as there are also clearly lessons to be learned from failed policy which should be recorded and remembered. Boxes 1 to 3 provide short examples.

Box 2: Policy Impact Story A

Carbon Pricing: A tool for sustainable growth

Carbon pricing offers an economically efficient approach to emissions reduction and is a promising tool for countries looking to make significant environmental progress without jeopardising economic development. In the Global South, however, there is relatively little experience with pricing approaches such as Carbon Taxes and emission trading programs, and there are major knowledge gaps relating to how such programs should be designed to meet the unique challenges of each country.

Researchers at EfD Centres in Colombia, China, Ethiopia and Costa Rica aim to address this knowledge gap and support policy makers in their countries. EfD has been working through research and engagement with policy makers to address specific topics such as program design, appropriate stringency, implementation issues, and evaluation. These efforts are also helping policy makers see that pricing can not only be a tool for reducing damages and environmental impact but also an opportunity to promote sustainable growth that can help poverty alleviation in developing countries.

Further research is planned to address the specific issues associated with public acceptability and the importance of ascertaining differences in different countries regarding acceptability and how such insights may feed into carbon pricing policy designs in different contexts. This work directly addresses SDG 13: Climate Action. By including the cost of climate change in the price of fuel and other energy-intensive goods and services, a carbon price sends a price signal to industries, households and individuals to encourage a change in behaviour.

Whilst the quality of the case-studies varied, and the ability to measure the impact was deemed difficult across the cases provided, overall, our expert assessment is that the Centres provide good impact in terms of their reach and significance. Despite their small scale, some of their work has the potential to be of a 3* level, namely, very considerable impact in terms of research and significance that is of interest internationally. However, despite this, we felt there was reduced enthusiasm for this part of the evaluation process this time around, and this is a concern. In the recommendations we suggest ways to reinforce and refocus the Centres on both making an impact with their research and then monitoring their successes and failures. This is particularly important for the actual changes that EfD can make, and also in building EfD's reputation and securing resources for further research, action and impact.



Box 3: Policy Impact Story B

Overfishing by foreign owned vessels leaves Ghana with shrinking catch

The increasingly concerning trend in declining domestic catch, one of Ghana's major exports, is due to foreign businesses entering into phony agreements with Ghanaians in order to by-pass Ghana's laws and fish in their waters. This is contributing to overfishing and leaving few profits in and for Ghana. Professor Wisdom Akpalu, senior research fellow at the EfD Centre in Ghana, says that Ghanaians are earning only about 5% of what foreign businesses are making and that Ghana has lost about \$200million within the past 5years due to the impacts of overfishing.

Driving this issue is corruption, a lack of political will, and a shortage of scientific and economic data. The EfD, through collaborative program Oceans and Marine Resources, are helping to address the data gap and improve data collection as well as contribute to more 20 new fisheries studies.

This work addresses SDG 14: Life below water. SDG 4.14: 'By 2020, effectively regulate harvesting and end overfishing, illegal, unreported and unregulated fishing and destructive fishing practices and implement science-based management plans, in order to restore fish stocks in the shortest time feasible, at least to levels that can produce maximum sustainable yield as determined by their biological characteristics.'

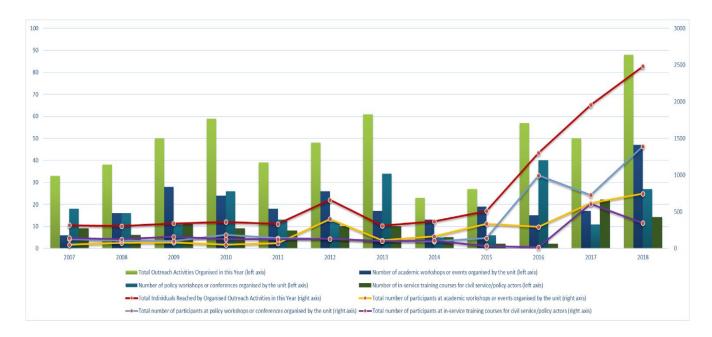


Figure 15 Outreach activity metrics in the EfD Network (excluding Sweden and RFF)

In broader terms we see from Figure 15 and Table 4 that outreach activities to promote EfD activities and research have steadily grown over time and now reach a large number of academics and policy stakeholders via multiple modes.



Table 4. Policy Outreach Activities based on an EfD provided report

Name of Centre	Structure and Type of Policy Activity					
Central America	 Policy research, reports, and briefs. Relevant policy and academic events; policy and project specific policy days. Consultancy work. 					
China	 Opportunistically engages in collaborative programs with stakeholders rather than proactively seeking out new collaborative opportunities. High level of impact in terms of livelihoods and the size of the environmental problems that have seen improvements as a result of policy advice from the Centre. 					
Colombia	 Policy interaction workshop in 2016; NGO's, government institutions, research institutes and academia. 4 channels of communication for policy interaction; community and citizens, public sector professionals, government officials and decision makers, stakeholders. 					
Ethiopia	 Verbal and informal updates with accessible policy makers. Programmed interactions with government and non-governmental agencies. Strategic use of conferences and events; policy panel discussions. 					
Ghana	 Meetings and interaction with policy makers. Tailored projects to meet current needs. 					
India	 Interaction with governments leading think tank and the Department of Land Revenue. Policy seminars and workshops to engage directly with policy makers. 					
Kenya	 Research generation and distribution. Does not have a systematic policy outreach strategy. Rekindling policy connections with stakeholders in specific sectors 					
Nigeria	 Policy reports and interaction. A meeting of stakeholders. Creation of a policy advisory board. 					
South Africa	 Most notable interaction around Cape Town water crisis. Communication through social media and editorial content for popular media (websites, newsletters, etc.) 					
Tanzania	 Engagement with some ministries on project by project basis. Producing policy briefs. Established a policy advisory board. Lacking strategy around a concerted effort to disseminate research results to policy makers and should consider hiring a communications officer. 					
Uganda	 Engagement with major policy projects. Interaction with relevant governmental agencies and important stakeholders. Annual National Policy Seminar. 					
Vietnam	 Established good connections with policy makers and practitioners. Engagement in policy dialogue and direct policy advice. 					

Impact of the Individual

In addition to the impact of specific research, we considered the growing and sustained impact of the individuals that have developed skills, experience and connections through their engagements with EfD. This impact can be more



difficult to track. However, there is great value in establishing a strong cohort of both active EfD policy researchers and indeed EfD alumni across the globe. The EfD experience has been reported to shape people's experience and attitudes alongside their expertise, and many alumni go on to work in relevant development focused contexts. Similarly, for those active EfD researchers, over time, their ongoing work with the Network and at the policy interface will serve to build their reputations such that EfD research and EfD voices become trusted advisors in policy circles.

In the cases below we select a small number of individuals, and summarise from their own words, how EfD has impacted upon them, and how they in turn are working to deliver further impact in their local environments. Figure 16 then provides a summary of the ways in which EfD supports and structures can develop human capital that can, and often will, have broader extended impacts into the future that goes far above and beyond their academic research.

Byela Tibesigwa

Senior Research Fellow at EfD, University of Dar es Salaam



Dr Byela Tibesigwa is the result of what she calls a snowball effect. She did her PhD in Cape Town, where she came in contact with the EfD South Africa Centre. The academic connections she established in South Africa eventually led her to continue her research at the EfD Centre in Tanzania. There her research has been useful for the local policy makers, by, for example, showing the value of pollination in a way that can be included in the national accounts and in contributing to Tanzania's Country Environmental Analysis – a flagship report guiding foreign assistance to Tanzania. Now she sees one of her most important tasks as supporting other junior researchers to continue the snowball effect. In addition to her work on pollination, Dr Tibesigwa focuses her research on the serious inequalities women face in smallholder agriculture production and food security. As a result of climate change, food insecurity is a more serious problem in Tanzania as well

as in other parts of Africa due to low adaptive capabilities, and this is something Dr Tibesigwa would like to address in her research and in her ongoing conversations with local policy makers and development partners.

Haileselassie Medhin

World Resources Institute, Country Director Ethiopia and Deputy Director for Africa



Haileselassie aims to contribute to the realization of Ethiopia's ambitious green growth vision. He completed a PhD program in environmental economics at the University of Gothenburg in 2013, supported by Sida. His research has focused on the application of behavioural and experimental economics to issues of environment and development, and increasingly on the challenges and opportunities for achieving green and climate resilient growth in developing countries. After some time as a post-doc researcher at the Department of Economics in Gothenburg, Haile returned to Ethiopia to become the Director of the Environmental and Climate Research Center (ECRC) (also known as EfD Ethiopia), an independent research Centre within a top think tank in Ethiopia. Part of what motivated him to return was the newly adopted Climate Resilient Green Economy (CRGE) strategy. Dr. Medhin recognized that researchers like himself could

play an important role in the implementation of this progressive strategy by contributing to ex ante and ex post policy analysis. To ensure that EfD Ethiopia's research would have real-world impact, that is, that policy makers would have the information they need at the time they make decisions on important development and environmental issues, Dr Medhin and his team at ECRC established a platform where continuous dialogue would take place with government officials and other stakeholders to build a strong partnership over time. This includes the establishment of an annual CRGE conference that includes key ministries, donors and researchers. Dr. Medhin put great emphasis on ensuring he and his team are available to policy makers when needed and that the researchers have an in-depth understanding of the challenges society is confronted by as well as trade-offs faced by decision makers in implementing new policies. This policy interaction between EfD and the government has included such high profile work as the Country Environmental Analysis for Ethiopia (the World Bank & Government of Ethiopia), the mainstreaming of sustainability in the next 10-year strategy for Ethiopia, and the modelling of the distributional implications of the implementation of a carbon tax in Ethiopia.



Edwin Muchapondwa

Professor, University of Cape Town, South Africa



Edwin's research aims to find a solution for land conflict in South Africa. In many countries, there is a conflict for land between the local communities who are in poverty after losing their ancestral land to colonial powers, and then the agencies who protect wildlife on the same land. Both parties are trying to achieve something important, so his work focuses on finding solutions. Edwin is a researcher in natural resource management who did his PhD at the University of Gothenburg. Originally from Zimbabwe, he became a lecturer at University of Cape Town, where he later established EfD South Africa, EPRU. EfD-support enabled him to do policy research that can simultaneously work to support local communities and wildlife conservation. Edwin has worked in policy advisory roles with institutions such as the South African National Biodiversity Institute, South African National Parks, and Water Research Commission. Elsewhere, he

has worked with UNEP on advising the first Government of South Sudan on sound natural resource management as well as UNEPs global constituency on the use of market-based instruments in watershed management. Edwin has advised the AfDB's African Natural Resource Centre on natural resource management and crafting policy messages to the African Ministers who serve as AfDB's Board of Governors. Edwin encourages the continuation of the EfD model for funding policy research in the Global South, which he thinks is likely to be ignored otherwise.

Francisco Alpizar

Professor, Wageningen University, Holland



The opportunity of a higher education through Sida funding equipped Prof Francisco Alpízar with environmental and behavioural economics tools. He returned to his home country to work at The Tropical Agricultural Research and Higher Education Centre (CATIE), an international institute regionally known for agricultural development and biological conservation in Central America and the Caribbean. As part of CATIE, Francisco redesigned and modernized the MSc program, established a new program in environmental economics that grew to be one of the strongest at CATIE and in the region, and designed and directed a research capacity building program for young Latin American environmental economists (LACEEP) that through 12 years of research funding and networking bridged the capacity gap in environmental economics in Latin America. Given Costa Rica's strong focus on conservation and climate policies, the

EfD Central America Centre, under Francisco's leadership, have made very important contributions. Three examples: Based on Francisco's PhD work on optimal pricing of protected areas in nature-based tourism, he was invited by the Ministry of Environment to test his ideas. Francisco offered much more: he designed a methodology and practical tools to estimate entrance fees to protected areas in Costa Rica. These were approved in 2010 as the official methodology to be used in the country's protected area system. Similarly, Francisco and the EfD team have worked relentlessly with FONAFIFO to evaluate and re-design their payment for ecosystem services. Today's design of the PES system in Costa Rica is a reflection of more than 15 years of work. Finally, Francisco was also called to support the Climate Change Directorate of the Ministry of Environment in the design of a carbon tax for Costa Rica. He produced a new design for the carbon tax, but most importantly a roadmap of studies and analysis (e.g. distributional effects, policy-wide compatibility) to convince policy makers and stakeholders about the importance of correctly pricing fuel in a context of climate change and high levels of local pollution. Recently, Francisco has become the Chair and Professor of the Environmental and Natural Resource Economics Group at the Department of Social Sciences in Wageningen University in the Netherlands. He sits on the EfD Research Committee and is a Senior Research Fellow at EfD Central America.

Figure 16 Modes through which Human Capital Furthers Impact

Human Capital Impact





Online Impact

Appendix 5 presents our summary assessment of web-based metrics for the EfD Initiative. In brief however, the online portal for the EfD Initiative demonstrates strong and steady engagement. Over the period from August 2015 to September 2019 the site registered over half a million page views and key events trigger clear jumps in activity and engagement. For example, the WCERE World Congress drew a substantial influx of users, whilst more regular events such as newsletters and annual meeting developments all trigger additional interest and engagement. Geographically the website visits are from a diverse range of countries (e.g. USA 15%), with some non-EfD countries also registering in the top 10. This is encouraging and suggests the EfD Initiative is maintaining a viable and visible web presence, beyond just Centre participants, which can in turn support broader impact and awareness of EfD and its goals.

6.4 Research Assessment - Overall Rating

Prior to presenting the overall findings of the research assessment, it is important to re-emphasise that the results depend on the evaluation criteria utilised and also depend on peer-review and expert opinion in making a judgment on quality. There is, of course, quite a degree of subjectivity about this approach but it is unavoidable and is the norm in research assessment exercises. Due to issues of the small scale, in the overall profile, we decided not to divide the Centres and rather give an indicative quality standard to the Centres as a whole.

Overall, our opinion is that, while we didn't allocate precise proportions to the different quality standards under the "impact" and "environment" subprofiles, we believe that the addition of these considerations to the assessment of the research under the "output" subprofile would result in an enhancement of the overall research assessment figures, i.e. the EfD Centres would score more highly in a research assessment framework which considers research environment and impact than in one which considers research outputs only. Thus, we believe that the results presented under the output subprofile underestimate the quality of the Centres themselves. Across all the EfD Centres, around 80% of the submitted research activities are considered to be of a quality that is recognised internationally in terms of originality, significance and rigour. This is up from 70% in 2014 which we believe is a good improvement, which also highlights the quality and rapid integration of the Additional 4 centres.

While there has been an overall improvement, our main critique would be the more mixed evidence on impact, which makes it difficult to conclude that impact is improving as much as outputs and quality. We have collected new data in this assessment which also acknowledges individual performance in terms of impact, and are confident this will improve over time. However, in terms of threats, while there is evidence from the Network as a whole of increased outreach activities, the biggest threat we see emerging from the Research Assessment is the concern that, as the Centres improve their research performance, they may become less interested in delivering and recording impact. This would be a problem given the intervention logic of the EfD Initiative. We suggest, therefore, that a much greater emphasis be placed on the need for impact and measurement of impact in the next phase of EfD's operation.



7 Evaluation Conclusions

In this section, we present a concise set of evaluation conclusions in relation to the overall EfD Initiative under the key OECD/DAC headings of Relevance, Efficiency, Sustainability, Effectiveness and Impact. These findings combine the evaluation findings with our own insights and interpretation to offer evaluation conclusions under each heading. We follow these five headings with a summary SWOT table as a precursor to the final recommendations.

RELEVANCE

There is broad agreement that the EfD Centres feel a strong sense of ownership and control over the determination and delivery of research that aligns with local and national needs. Their topics include many that are well aligned with Sida priorities in areas such as climate change, biodiversity, ecosystem service accounting and gender equality. Furthermore, the Centres have, in many cases, embedded themselves into the processes that will underpin key national strategic decisions. This positioning should help their research remain relevant to national needs. As an example, Ethiopia and Tanzania are engaged in country environmental analyses that feed into the broader national strategies.

The EfD Initiative itself, and the goals around addressing "gaps" in institutional development, academic capacity building, policy research and policy interaction and communication, remain necessary and relevant. The approach has evolved somewhat, and management face challenges with a growing membership, however, our evaluation finds that the EfD Initiative remains a highly relevant strategy to address worthy challenges and thereby deliver positive change.

EFFICIENCY

The EfD Initiative has grown in size and impact without a direct proportional increase in funding resources. Metrics presented in section 5 indicate that for comparatively low investments, the EfD Initiative is supporting or generating a considerable level of research output, human capital and impact. The model is also likely to deliver sustained aftereffects through the impacts on human capital discussed in Section 6.

The Centres undergo independent operational evaluations, and financial audits at regular intervals, and it is believed these offer support to ensuring transparent and efficient use of funding resources. The Centres themselves generally state that they are operating in an efficient manner, and that, in fact, resource constraints are one of the major barriers to further productivity. However, this is a separate matter to efficiency. On the basis of the level of funds currently received, we believe that the co-funding, in-kind time and new opportunities realised in the Centres, as well as the levels of research output and outreach activities are indicative of a high level of resource use efficiency within EfD.



SUSTAINABILITY

The objectives of the EfD Initiative with respect to addressing the aforementioned "gaps" represent a long-term sustainable strategy for impact and change. At the core of the EfD is a belief that supporting local researchers to develop and deliver policy research is far more productive and sustainable than "flying-in" experts from the Global North. However, a sustainable strategy does not mean that the financial, institutional and personnel aspects of sustainability can be presumed as being met. In that regard though, the metrics in section 5 suggest that Centres have indeed performed well in terms of funding acquisition and new funding sources. And, whilst some Centres have faced challenging times in terms of institutional change (e.g. Ethiopia) and personnel loss (e.g. Kenya), they have adapted reasonably well and should now hopefully resume their progress.

In the context of sustainability however, we believe there is scope for further South-South collaboration; improved marketing and promotion of the EfD Initiative to new diversified funding sources of scale; and precautionary strategies to mitigate the impact of loss of key personnel over time in the EfD Network.

EFFECTIVENESS

The EfD Initiative has been effective in delivering on its strategies to build resilient local capacity, develop robust and relevant policy analyses, and then to communicate and influence positive policy change. This conclusion emerges from evidence of the scale and stability of the current EfD membership, the scope and quality of the research outputs, and the efforts of the Initiative in communicating research to policy makers. Whilst we believe there can be a stronger renewed focus on the latter task of communicating and monitoring impact, we do not doubt the creation of relevant research, nor the interest of the external stakeholders we engaged as part of the evaluation.

From the Centres themselves there is a clear recognition of the value of associating with the developing global brand that is the EfD Initiative. This reputation boost, along with the research Network and resource support should enable the EfD to remain effective in its mission.

IMPACT

The impact of EfD work is strengthened by the long-term commitment and engagement with institutional partners in the host countries. These longer-term strategies work to address the gaps that separate research from impact by, *inter alia*, building stable and trusted indigenous institutions that can support national policy. As discussed in more detail both in the broader report, and within the Research Assessment of Section 6, we are confident that across a number of criteria from human capital to research output, through to research environment and policy change, the EfD Initiative is having a positive and sustained impact in line with the defined goal of promoting sustainable economic development and improved welfare and poverty alleviation by utilising environmental economics to support the efficient management of natural resources and our environment. However, as part of the overall evaluation of impact, we do also recognise and flag a danger that, as research performance improves and the Network matures, a renewed emphasis must be placed on impact as an 'intervention gap' for EfD.



7.1 SWOT Analysis

STRENGTHS

- The scale of EfD is now a particular strength in so far as the Network encompasses some 15 Centres and close to 400 staff and affiliated researchers. This represents an organisation of considerable scale in the field.
- The scope of EfD is a further strength in so far as the geographic reach of the Network has stretched to include many regions of the globe and numerous countries of importance to environment and development.
- The outputs of EfD continues to grow and the academic deliverables and academic standing represents an important strength for the members in terms of recognition and respect, as well as the breadth of expertise.
- The EfD Network has strengthened the institutional structures in the last phase, with some major developments in terms of the Secretariat and Centre positions within University of Gothenburg. The new Collaboratives are an important development in terms of South-South collaboration and impactful research.

WEAKNESSES

- The impact stories reported were weaker than those developed for the last evaluation. We feel this may not relate mainly to the level of impact but rather a slipping of focus on recording and reporting of policy impact.
- The growth of the EfD Network introduces challenges in terms of competition for the current levels of funding. Whilst "weaning" of Centres off central EfD funds can be an objective, the diminished reliance on EfD funds, may lead to diminished engagement particularly where other priority funding calls the shots.
- EDI-related initiatives, particularly in relation to gender, while impressive, could be better coordinated and made more coherent to have a greater effectiveness across the Network.

OPPORTUNITIES

- The large collaborative research model is a very positive development and one that presents a substantial
 opportunity for the EfD Initiative into the future. A great emphasis on developing the next major
 collaboratives is warranted.
- The private sector represents a potential end user of EfD research, and the Network should consider more direct efforts to target and engage in this arena, as distinct from more traditional bilateral donor funds.
- The policy impact of EfD research will be enhanced where there is a strong channel of communication to the key decision makers. More could be made of direct policy training from the EfD Initiative (including other Centres and partners perhaps) so that EfD can build more valuable connections with key policy makers.
- The EfD Initiative has had policy impact whereby ex-ante research has informed policy, and where ex-post research has confirmed the scale of positive outcomes. Not enough is yet made of policy-transfer initiatives ("Copy-cat" policy) whereby the methodology and analysis for successful policy in one region is adapted and conveyed to policy makers in another region facing similar challenges. This represents an important opportunity for building reputation, designing policy and delivering impact, that should be pursued.



THREATS

- The intervention logic is that improved research capacity, quality and performance is the basis for allowing
 for impact on development at a local level. The capacity is now built in many cases on a reasonable foundation,
 however, if further progress on impact is not made, this could result in a threat to funding.
- An incentive problem exists in most Universities internationally, namely, that career progression relies to a
 large extent on publication of peer-reviewed journal articles while impact carries little weight. With EfD only
 funding part of the Centres, it may be difficult to incentivise the focus on impact. This is a big challenge for
 the next phase of the development of EfD.
- The Network relies on highly-committed individuals who want to make a difference in their countries. It also relies on committed individuals from established universities in the North who give of their time to support the Network as well as the Director and Secretariat who keep it all on track. Without these committed individuals whose work surpasses any monetary incentives provided, the Network could be in danger. Ways will need to be found to bolster the long-term engagement of such key Members of the Network.

8 Recommendations

The following are the recommendations of the evaluation team in respect of the ongoing development and management of the EfD Initiative in the next phase. In each case the recommendation is presented under an individual summary heading with further detail thereafter. In all there are 20 recommendations from the evaluation that have been categorised under three broad areas of operation and evolution, impact and incentive, and linkages and leverage.

8.1 Operation and Evolution

Recommendation 1: Enhance Resource Efficiency via Centralised Services

The EfD Initiative has grown substantially since the last evaluation in 2014. Thus far it would appear to have navigated this period successfully in terms of identifying and integrating the new Centres (three in 2016 and a further three in 2019) whilst still retaining strong links with the original Centres. The core support funding, *inter alia*, provides resources for policy engagement specialists and data managers, although we note that in many Centres these functions are delivered by an individual that also offers support in other areas such as research and administration. The core support of EfD is reported as a very important resource in many Centres, with a belief in some Centres that the policy and data roles must be "local" in order to be most effective. Core support for research proposal development was also seen as crucial in some Centres, whilst others identified the policy outreach role as necessary for promoting their research nationally and securing new opportunities.



The approach to research funding is a good example of innovation within the Network to retain levels of engagement and interaction over time where finite funds are now distributed across a growing membership base. Clearly challenges will arise into the future where funding resources remain static and the Network develops further. A means of managing this outcome would be to centralise certain functions within the coordinating EfD unit entirely, such that the overall resources are not spread too thin by having independent (albeit valuable) functions funded by EfD in many of the individual Centres. Centralised services exist to some degree already – and the following are suggestions where we believe they may be extended or enhanced to positive effect:

Proposal Writing Services

Guidance material including templates, structures and sample content can be provided from the Secretariat to the Centres for proposal development. Furthermore, in the case of major consortium proposals, the coordination and completion of these major proposals could and arguably should be managed by the Secretariat on behalf of all Centres.

Policy Engagement - Material and Guidance

Local connections are important for policy engagement and these relationships should be developed in part by the lead researchers in terms of building recognition and trust in their specific work. This can be a responsibility for all research leads. However, research experience does not necessarily equate to practical policy engagement experience, and the Secretariat may be best placed to offer both centrally developed material and guidance to the local centre on how best to engage and guide policymakers when there is a specific policy proposal of major potential being delivered.

Data Management

In regard to data management, it is recommended that all researchers are required to adhere to their data management plan and that standard metadata templates are defined and delivered for the compilation of all EfD data sets. This could be made a condition of funding (i.e. final payment is contingent on adhering to the data management requirements of EfD). Such an approach would simplify central data management and is a common place approach in other research funding systems internationally. At present EfD's advance payments of funds mean that the 'stick' to enforce compliance is linked to an ineligibility for new research grants until all prior deliverables have been sent. This can work but also allows for more delays in the process.

In parallel, it is recommended that the Centres and the Secretariat routinely maintain their metrics and information file "MIMI" and consider alternative KPIs as necessary. These metrics will be necessary for good management of the EfD Initiative and are valuable for both research funding proposals and future evaluation processes.

EfD Report and Website

A combined EfD annual report, and indeed the EfD main website, has value in a number of contexts for promoting the overall Network. However, the individual Centres should be supported in building their own brand and reputation. In this regard, designing the main report in a manner that allows a Centre section to be readily detached as a standalone piece (electronically) for independent use by Centres would be valuable and is feasible. Furthermore, the Centres should be offered the opportunity to have an independent web address linking to their content on the EfD website.



Recommendation 2: Triple Nexus

In a recent OECD Development Assistance Committee review of Swedish aid (OECD, 2019), Sweden was recognized as an adept, ambitious and influential leader on global sustainable development. Although strongly praised for commitment, contribution levels and a considered approach to how it supports international development, the report did offer some suggestions for further improvements to be considered. Of these, the second recommendation was as follows: "Sweden should now systematically apply its joined-up approach to addressing development, humanitarian and peace needs in all its fragile partner countries" The EfD research program process could be used to filter research topics somewhat to support this ambition, whilst the broader Network may explore new large projects in line with this triple theme in the mould of new collaborative programs supported by groupings of major donors.

Recommendation 3: Examine Criteria for Membership and Expansion

The Network has grown rapidly in recent years, and whilst this has been managed well and the new Centres offer valuable scale, expertise and geographic coverage, there are undoubtedly thresholds to how thinly spread the EfD resources can be whilst still retaining the interest and some influence over individual Centres. This concern was raised by a number of Centres during our evaluation. We would, therefore, recommend an initial phase of consolidation for 2020, and support the development of a strategic plan that will work to identify the regions, skillsets and scale that new membership drives would target. An interim low-cost means of growing the Network may be to consider membership of partners in the Global North that can offer expertise and reputation that may support EfD in securing new major funding of research, as well as guidance on policy impact strategies, without impacting on core funding.

Recommendation 4: Cross-Centre Pollination - People

Many of those engaged referred to the EfD as a "family" and identified not just colleagues but "friends" across the Network. Such a culture is not easily developed. An advantage of this culture is that "friends" are more likely to want to collaborate and to support one another with regard to access to their own connections and concepts for work. A key driver of these relationships seems to be the interactions, visits and hosting of researchers and staff in different Centres over time, as well as the annual events and meetings. Scheduled engagements via the video conferencing technology (e.g. monthly 'young water researchers' chat) may also be considered. As such we would recommend that EfD consider ways to make more of these connections and to strengthen them as much as possible. This should support further South-South collaboration and thereby build resilience and a strong identity across the EfD Network.

This notion could also be extended to include the stakeholders of EfD Centre researchers being put in contact or being engaged in collaborative events. As the EfD reach extends, there is potential for the Network to create connections between funders, researchers, and policy actors to mutually beneficial ends. As an example, EfD could coordinate an event for particularly high potential research topics with the key stakeholders from multiple countries, and donors, all with a view to triggering a new well-resourced collaborative initiative (see recommendations 18 to 20).



Recommendation 5: Review Research Committee and Research Submission Review Details

The research committee is playing a valuable role in managing the allocation of research resources within the EfD Network. Feedback from Centres included requests for more detail in the review of "failed" submissions. The purpose being principally to guide and maintain the enthusiasm of developing researchers within the broader Network. In addition, the composition of the research committee should be reviewed regularly so as to ensure that the appropriate thematic and technical expertise is represented on the board, and that the available expertise in a given area reflects the frequency with which relevant topics are submitted. In short, for popular thematic areas, ensure there are an adequate number of appropriately experienced evaluators. The approach and systems should also be reiterated to all.

Recommendation 6: Apply Strategies to Build Resilience in the EfD Network

Institutions

Institutions face external threats that cannot necessarily be mitigated through strategic planning (e.g. political priority shifts). However, recognizing such threats and maintaining a contingency plan (e.g. alternative operational structure) is recommended to support the future resilience of EfD Centres. For example, this may include forging "soft" collaborative links with other potential host institutions, exploring the possibility of alternative office space to grow into, or identifying the feasibility of operating as a stand-alone entity. The requirements, opportunities and potential will be case specific, but this is worthy of formal consideration and should be guided by the EfD Secretariat.

There has been progress since the last evaluation, where Centres have shifted from "project" status to defined research entities within their host institution (e.g. ECRC in Ethiopia). EfD should consider whether to establish a policy that only permits funding to those Centres that set their own research agenda independently of their host institution. In Universities this should be covered by academic freedom.

Leadership

Centre director 'shadowing' to develop leadership expertise and capacity in staff is recommended. Whilst it can be the case that forced rotation creates problems in institutions, the delegation of some leadership activities and a simple program of shadowing of Centre Directors may be a valuable initiative to be driven by the EfD Secretariat such that individual Centres are better equipped to cope with events such as the departure or disengagement of a Centre director into the future. The rotation of Centre Directors has worked well and not so well in some Centres, indeed in some institutions it was the means of forging an alliance between two units that were brought together to form the Centre (i.e. Uganda where the economic and agricultural units plan alternate leadership).

Engagement of Young Researchers

The Centres face challenges, as do many research operations, with retaining talented young researchers. Some noted that discouragement from the failure of a research project proposal can dishearten and disillusion young researchers from EfD, and queried whether some consideration might be given to the creation of a small award budget that could afford a young researcher the opportunity to redevelop their proposal for alternative funding sources.



Another aspect was to consider whether the feedback from proposal evaluations could be further enhanced to maintain confidence and interest among researchers, as well as giving more explicit guidance to redevelopment. Whilst this may require some more time on the review side, some of the Centres feel this would offer value to the retention of young researchers, and also the development of research topics. Ultimately, the engagement and retention of talented youth is an important aspect for the development of EfD as it matures into a "second generation" entity.

Women in the Network and Gender-related research

While it is clear that the EfD Network takes the issue of gender equality and the importance of gender research seriously, actions tend to be bottom up and a more coherent approach would be beneficial. The promotion of female role models as a beacon for younger researchers and to encourage undergraduate females to continue on into research should be considered. A working group should be established to share good practice on dealing with gender specific and other equality, diversity and inclusion issues in the Network. Good practice and guidance should be shared in relation to areas such as childcare and nursing solutions, norms of behaviour in meetings and the workplace generally, meeting hours and dates, gender balance on search committees, interview and assessment panels, and the mentoring and encouragement of women in writing proposals. There are Centre Directors who have been particularly progressive, and their mentoring of others will be valuable. It is critical that any such committee should have gender balance, recognise other minorities, and assist in helping to promote inclusive working environments. It takes all genders to ensure this happens. For EfD as a whole, committees should have gender representation and, when organising events and other activities, the Secretariat, Centre Directors, Directors of Collaboratives and organisers of events must remain sensitive to the challenges faced by those with childcare or other responsibilities.

While we found good evidence of research on gender-related topics in environment and development, it is important to move beyond a "dummy variable" approach and to adopt more advanced analyses. Consideration might be given to organising an online training course or organising a special session with an invited expert at the next annual meeting. It is also important that the research committee has the expertise to assess gender-related theories and methodologies.

Recommendation 7: Tailored Support Model Matrix

Not all Centres are at the same stage of development and, furthermore, current status can change in both positive and negative senses into the future. As an example of this, the Kenyan Centre is one of the original Centres but has endured a challenging time with staff turnover as a result of retirement and departures. Such events can weaken any research group and, as such, the "established" Centre moniker must recognise that Centres may regress before progressing once more.

Another aspect of this is that not all Centres have the same needs in terms of either centralized support, core support staff, or access to EfD research funds. Whilst none would necessarily wish to lose any funding, where there is a larger Network competing for a static pool of resources, the distribution of those funds may need adjustment to achieve the best impact. There are cases where we believe certain absent services are restricting progress (e.g. journal access) and in such cases, the tailored support model may be sufficiently adaptable to deliver improvements in outcomes.



Recognising that there is a need to keep administrative simplicity, we would propose trialling a tailored support matrix where Centres may request to adjust their support profiles based on needs, with the Secretariat having the final say.

Recommendation 8: Set a 5-year target for core support reduction on Centre by Centre basis

Some Centres suggested they would seek to reduce core support by up to one third in a five-year time horizon. This sort of target setting may be a way to manage expectation and afford time for contingency planning across the Centres as they develop. The 'saved' funding could be reallocated towards further research and impact efforts, new collaborative proposal developments, or to aid Centres in particular need at a given time.

Recommendation 9: Foster where possible flexible working arrangements

Although perhaps outside of the control of EfD, the Initiative may be able to share good practice on policies (formal and informal) for staff within the Network to ensure that researchers are not disadvantaged in career progression due to young family responsibilities and so on.

8.2 Impact and Incentives

The commitment and passion of some of the Centre Directors was apparent through our engagements over the course of the evaluation. This is important if the EfD Network is to maintain its apparent vibrancy and similarly if the Network is to deliver on the policy impact promise of its research. However, with most centres hosted within academic institutions, it is also understood that the career progression of individuals is more directly influenced by academic publications, than actual policy impact. In this section we present recommendations aimed at refocusing efforts on rewarding efforts for policy impact, as well establishing the attributes necessary to deliver greater impact.

Recommendation 10: Incentives for the Individual – Recognising and Supporting Impact

The Network benefits from committed individuals who go beyond what they are monetarily rewarded for in the interests of advancing use of environmental economics for development. The institutions within the Network may be aware of the activities of their EfD researchers, but there is clearly a lack of recognition in the home institutions of those who are part of the Collaboratives and who must negotiate time away from their duties to participate. The Network should establish an approach for recognition which could include

- 1. Write to Department Heads/Deans/University Presidents to formally recognise participation in the Network
- 2. A 'Hall of Fame' recognising the outstanding or long-standing contributions of a Member of the Network
- 3. A Policy-Transfer award with a prize or financial support for excellence in policy transfer, i.e. utilising research and expertise from the Network to transfer and adapt a policy from one jurisdiction to another
- 4. Annual policy impact award based on an intervention or cumulative evidence of impact by an individual.

In regard to the last items above, if the Network is to build upon the academic capacity generated and move onto the next phase of development in terms of impact, there will need to be a focus on incentivising impact over and above



the incentivisation of peer-reviewed outputs for their own sake. This is of critical importance for success over the next 5 years of the development of the EfD Initiative.

In the research assessment, it might have been expected that documents such as policy briefs, reports etc. would have been included where academic papers were not available so as to provide full returns for all Fellows. Given that they generally were not, this might suggest that the most prolific researchers are the most impactful also. Therefore, there will need to be a focus on researchers who are not as productive to see why, to identify what supports can be put in place and whether those researchers less successful in publication might be utilized on more policy orientated work.

Recommendation 11: Building "Trusted" status as advisors

In a number of countries, the EfD Centres are either the leading Centre for high calibre environmental research, or one of very few such entities. Given the high priority of environmental and resource management issues globally, it seems clear from the appraisal of the Centres and engagement with external stakeholders that the Centres, and EfD research, is well recognised and well received in this context in the countries where it operates. However, more can be done to leverage reputation and outputs to deliver policy impact. Impact ambassadors should be chosen by the Network who are individuals who have demonstrated an ability to serve as a trusted advisor to governments. These individuals should be used to advise others in the Network on how to have greater impact with consideration being given to financing of travel costs. In addition, it is critical to track alumni and consider creating an alumni award for those who have had made a continued impact through their subsequent employment. These individuals might be utilised to advise and vouch for Network activities. Finally, 'Horizon Scanning' by the Network is important to anticipate where future policy needs will arise requiring high-quality research and researchers to advise on policy.

Recommendation 12: Civil Servant In-Service Policy Training

Having impact with policy makers involves much more than just doing good research. It is essential to develop relationships to enhance mutual understanding and trust. An effective way to do this is to consider establishing some short training programmes for decision makers in areas such as environment for development, policy design, sustainable development goals etc. However, it is important to acknowledge that it takes particular skills and credibility to have effective engagement with policy makers and this should not be taken lightly. In considering the involvement of institutions and researchers from the North, this could be a fruitful area for collaboration with institutions with expertise in this area.

Recommendation 13: Impact measurement approach

Measuring impact in the social sciences if difficult. It is often hard to say whether a piece of research was used in the development of a policy or whether an individual contributing to policy development was actually responsible. This is one of a number of reasons why the impact agenda has remained high on the agenda of Universities but has not progressed. EfD should develop templates for ensuring that, where researchers do engage with policymakers, that a letter of acknowledgement is provided or some other form of recognition. Moreover, EfD Centres should maintain good records of such policy interaction. These will be particularly valuable in a number of contexts into the future.



Recommendation 14: Copy-Cat Policy Program (CCPP)

EfD should support more policy transfer, i.e. the implementation of high-impact copycat policy across Centres. As an example, where a Centre has had clear success with a strong methodology and evidence-based approach to guiding a policy change that delivered tangible results, this should be promoted as something for other researchers in relevant countries to adapt and apply in their own country. The development of *ex post* analysis material from the case where the policy was initially implemented could serve as a powerful tool for the promotion of such research initiatives in other countries. This approach can include testimonials from peers in the case country to the new cases.

Recommendation 15: Updated Formal Requirement for Policy Page for All Papers

All research paper outputs funded from EfD research funds should have an updated formal requirement for a single-page accompaniment. The single page would outline the policy choices as informed by the research with a particular focus on appreciating the practical implications (such as social and political impediments) of how to implement their policy recommendations (such as allowing for 2nd, 3rd-best etc. approaches that may offer a greater chance for success and implementation). In cases where the paper has no immediate and clear policy relevance in of itself, the page should highlight how the work builds on the existing knowledge base and include recommendations for further research that could deliver policy guidance.

Recommendation 16: Policy communications and branding

EfD demonstrates an impressive array of communication activities. However, there was a lack of evidence of a coherent approach to promoting the Network and the research and outreach activities. It is critical to complete the communications strategy as soon as possible to bring this all together. This is a key element of increasing impact.

Some Centres queried the potential to have their staff allocated a professional "EfD" email address that could be used as part of their work. This would seem to be easily addressed and should be considered by the Secretariat.

Recommendation 17: Policy-Interaction Models

Tanzania operates a Policy Board that offers a structured mechanism to carry research findings to policy actors in a manner that can support impact. Similarly, the ECRC Centre in Ethiopia is now hosted within the Government's "Policy Studies Institute" – this may bring challenges on one level, but also affords a clear channel through to policy actors to influence change and might serve as a template to other Centres. Certainly, all centres, in particular newer centres, should work to establish a structured approach to their own national policy interaction strategy.

8.3 Linkages and Leverage

The EfD Network is now an entity of considerable scope and scale. We believe there is considerable untapped value in this Network attributable to the increased membership, broad global coverage and the still highly-relevant and topical thematic focus for EfD research. We recommend that additional effort is made to cement existing relationships



within and outside of the Network, and that a similar effort is made to leverage the potential of the overall entity to the benefit of the group and to move toward the realisation of greater levels of policy impact globally. Specific related recommendations in this context are as presented below:

Recommendation 18: Scoping Exercise of Key Major Funding Source and their Priorities

The first recommendation in this regard is to conduct a broad scope assessment of the major potential funding sources and their short- to medium-term research priorities. On one level, this can engage with traditional funders e.g. Sida, World Bank, African Development Bank and traditional major donor groups. This may also approach research supporters e.g. European Commission to connect with further research partners and funds in that region.

However, it is also important that the EfD Initiative considers industry as a potential source of funding for defined activities. Increasingly, many major private sector operators are facing challenges in how to manage their response to environmental and resource management challenges, and these are areas where EfD can offer valuable support, whilst also developing useful private sector connections.

Recommendation 19: Alignment Assessment of EfD, Sida and Local Research Priorities

Connected to recommendation 18, the goal here is to consider the alignment of EfD, Sida and local research priorities to see which areas of funder priority research could be well addressed within EfD given the scale, expertise and geographic scope. In essence this action would overlap the findings of the work under recommendation 18 to determine which of those funder priorities map best to the ambitions of EfD, Sida, the centres themselves, and of course the available expertise and research capacities.

Recommendation 20: New Collaborative Impact Program Development from Flexible Fund

This next step would draw upon the experience of the Collaborative Programs and 'Communities of Practice' structure in EfD, whereby large-scale projects along a common theme are developed with EfD at the core, and the inclusion of non-EfD researchers and stakeholders where valuable. In this case a major effort would be made to design and promote two major research and policy impact programs of scale to the funders identified in recommendation 18 and in line with the research priorities reviewed in recommendation 19. The focus must be upon policy impact as opposed to research publications. Whilst the publications can feed into the policy process, it is important from a funding perspective that the outcomes are defined in terms of actual policy and practice changes – not numbers of publications.

We believe this approach may recognise and harness more of the value that exists in the EfD Network above and beyond capable environmental economics researchers. Instead the recognition will be on high-quality research in thematically relevant areas; an international Network of experts and experience; the policy connections and trusted advisor status that can help deliver change; and a commitment to sustainable management of resources and the environment for development in a number of high priority countries across the globe. These should be the goals.

The COP25 in Madrid had a multilateral development banks' (MDBs') pavilion showcasing their planned investments and actions on climate change. EfD should target engagement at COP26 in Glasgow with two major collaborative proposals so as to drive progress on these three recommendations in regard to new linkages and leveraging of EfD.



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