WCERE 2018
Biodiversity Policy: What Works and What Doesn’t?
Pre-Conference Report
The WCERE 2018 pre-conference on 25 June 2018 was organised by SDSN Northern Europe, a regional network within the global UN Sustainable Development Solution Network, in collaboration with the Department of Economics at the University of Gothenburg, the FRAM Centre for Future Chemical Risk Assessment and Management Strategies, the Swedish Agency for Marine and Water Management and the Swedish Environmental Protection Agency. SDSN Northern Europe is hosted by Gothenburg Centre for Sustainable Development at Chalmers University of Technology and the University of Gothenburg, Sweden. The event was arranged with the support of the European Association of Environmental and Resource Economists.
Biodiversity Policy: What Works and What Doesn’t?

Biodiversity loss has been a central issue on the global environmental agenda for decades, yet less attention has been given to evaluating the effectiveness and cost-efficiency of policy instruments. Some argue that the scientific literature still struggles to provide credible answers to basic questions such as what works and what doesn’t? In what situations? And why? In this workshop, researchers and practitioners jointly discussed how to create better conditions for future policy evaluations, focusing on the use of impact evaluation methodologies.

Background
The tool box available to decision makers with an ambition to promote biodiversity protection has grown over the years.Protected areas, payments for ecosystem services, biodiversity offsets, marked-based certification schemes, concessions and cross-compliance measures are examples of policy instruments that can help foster biodiversity conservation and sustainable use. Though the theoretical basis for these policy instruments are well known and documented, it is crucially important to examine how they are being designed and implemented in practice, and to undertake rigorous evaluation studies to determine whether they have the desired impact. Impact evaluations, where the outcomes of a programme are compared with a counterfactual that shows what would have happened without the programme, are of critical importance when implementing new, or improving current, policies. While impact evaluations have been increasingly used in policy areas such as development and human health, biodiversity-relevant applications continue to lag behind despite the fact that policymakers are increasingly demanding more and higher-quality evidence on the effectiveness of biodiversity conservation.

The purpose of this workshop was to bring together experts and practitioners to discuss and exchange views on the perceived obstacles to wider application of impact evaluation studies in the field of biodiversity. In addition, we argue that they often, due to reasons explored below, lack in quality. Thus, conducting more and better impact evaluations is important to move the debate around policy instruments for biodiversity beyond theoretical discussions and into better-informed, evidence-based implementations.

The relative lack of impact evaluations in this field may be due to difficulties concerning both the understanding of complex interactions in socio-economic-environmental systems, as well as data and methods when analysing biodiversity policy instruments. Several scientific papers have recently discussed this situation (see references at the end of the report). There is also political interest in more empirical evidence on the effectiveness of policy instruments for biodiversity and ecosystem services, as well as of the methods and approaches used to plan for and carry out the evaluations.
For instance, the parties to the Convention of Biological Diversity (CBD) have been encouraged to evaluate the effectiveness of measures undertaken to implement the Strategic Plan for Biodiversity 2011–2020. The parties have also been encouraged to document experiences, including the methods applied. There is currently also a project underway within the OECD Environment Policy Committee examining the use of impact evaluations (and other methods) to assess the effectiveness of policy instruments for biodiversity.

**Key issues discussed**

The objective of this workshop was to discuss practical aspects of impact evaluations of biodiversity policies with the overall ambition to facilitate a first step in conducting more and improved evaluations with regard to Swedish biodiversity policy. The workshop participants discussed the benefits and value-added of impact evaluation methodologies and identified obstacles that may negatively affect the quantity and quality of impact evaluations in the field of biodiversity policy. The obstacles identified were then ranked in order of perceived importance in order to help prioritise how these can be addressed and overcome. The focus of the workshop was to obtain a common understanding of the obstacles and to discuss possible options to overcome them, and to scale up the quantity and quality of biodiversity-relevant impact evaluation studies, as a key ingredient in evidence-based policymaking.
Summary of workshop discussion
At the start of the workshop, each participant highlighted obstacles that may negatively affect the quantity and quality of impact evaluations for biodiversity policies. These included:

Gaps between research and policy objectives. Researchers and policymakers have different perspectives on relevant issues and what type of analysis to use. This is further reinforced by the fact that the most useful policy-relevant knowledge – e.g. repeated studies to create well-tested knowledge – is not always equal to the most publishable knowledge – e.g. journals tend to favour method development. There might also be tension between evaluation of a policy being fully implemented and a policy that is rather incrementally improved.

Gaps between time horizons. Policymakers often need answers quickly, whereas impact evaluations of biodiversity policies tend to require a longer time horizon. Some impacts (e.g. species impacts) begin to manifest after at least a few years. Further, politicians may have a preference to look forward rather than back. Impact evaluations are costly and unpredictable, i.e. impact evaluations might show results that policymakers are not comfortable with.

Lack of coordination. Many evaluations are done in a static, short-term and on a project-by-project basis, which often results in high costs and difficulties in drawing general conclusions. Sometimes the key question for policymakers is: Which policy is best in terms of goal efficiency and cost-effectiveness? Impact evaluations instead evaluate one policy at a time. Coordination is important to ensure similarity of methods when comparisons are made. In addition, policy instruments often have multiple objectives which add complexity to conduct impact evaluations.

Lack of interdisciplinary multi-stakeholder platforms. Impact evaluations of biodiversity policies are sometimes still acting in silos with low integration between different agencies and different disciplines such as the natural and social sciences.

Lack of available and good quality data, as well as poor access to available data due to confidentiality and an absence of requirements to disclose data. The data that is needed includes data on baseline conditions, adequate proxies for biodiversity and data on socio-economic conditions. Many evaluations collect new data but they could be done at a lower cost if already existing data were available. Good evaluations also require a plausible counterfactual or control group, which may be difficult to find, depending on how the policy was implemented.

Lack of trust in the methodology used for impact evaluations. There is a lack of understanding, a common language and technical expertise regarding the different impact evaluation methods, which makes the interest in impact evaluations low.

Lack of planning of impact evaluations, which makes it difficult to organise baseline data collection before policy implementation. Impact evaluations are not included before or after the implementation of a policy.

Costs of undertaking impact evaluations. The costs are generally high but depend highly on the availability of data. It is important to be clear on the objective of the evaluation and to prioritise the cases in which they will be most useful.

These obstacles were then discussed in small groups – consisting of a mix of researchers and practitioners – with the objective to list the three most important obstacles to overcome in order to scale up the quantity and quality of impact evaluations. The following full-group joint discussion regarding obstacles led to three interconnected building blocks for impact evaluations:

- Formulating ‘the right’ policy-relevant and answerable question. At this point, it is important to understand what policymakers already know
and what the key evidence gaps are. High quality impact evaluations are costly and there is no need to carry out impact evaluations for every policy intervention. Here questions such as why one should evaluate, what to evaluate, what the policy goal is, what a meaningful outcome to focus on is and how to evaluate should be answered.

- **Systematic monitoring of areas unaffected by the programme for construction of counterfactual** showing what would have happened to beneficiaries without the programme. The data on these areas is to supplement the data on the areas targeted by the policy and should follow the same protocols. With a systematic approach, baselines and indicators could be created using high-quality accessible data. In addition, this could make available more data collected by public agencies but currently restricted due to data confidentiality.

- **Communication at the right time and to the right audience.** For more and better impact evaluations, more interdisciplinary work is needed to break silos in both the academic and the policy sphere.

Again the participants split into smaller groups to focus on possible ways forward and suggest improvements. The following is a summary of these:

- **Make better use of secondary data** by making it more available for impact evaluations. This could potentially increase both the quantity and quality of impact evaluations as well as the replication of studies to create well-established knowledge about what works and what doesn’t when it comes to biodiversity policy.

- **Increase the use of trial policies,** i.e. incorporate experimental design, to keep the policy window open and to make it easier to credibly evaluate the impact of a policy before going large scale.

**Create impact evaluation platforms,** i.e. multidisciplinary partnerships including scientists, policymakers and practitioners, to encourage frequent communication for more and better impact evaluations and to formulate the policy relevant question, develop indicators and maybe most importantly create common ground and trust. For the purpose of institutional learning and policy development within the government agencies, some evaluation may be conducted in-house. However, for the sake of credibility, it is important to have independent researchers perform the analysis with frequent reality checks with the end user of the results.

**Integrate impact evaluations in the development and implementation of policy.** It is important that a practical evaluation plan is developed already when a new policy reform is decided. The availability of such a plan also supports relevant data gathering and the identification of a plausible control group.

**Create a specific governmental funding window for impact evaluations,** with a focus on interdisciplinary, policy implementation questions and high external validity research.

**Use of new technology** – such as big data and AI – which might increase the availability of suitable data and reduce costs.

**Conduct national inventory of impact evaluations.** This would help to identify gaps and priorities for impact evaluations. For instance, the German Institute of Impact Evaluations, the Campbell Collaborative and 3ie may be consulted for inspiration.

The participants also discussed that impact evaluations are one part of many that might be needed to get the full picture of the impact of a biodiversity policy.
Participants

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6th World Congress of Environmental and Resource Economists (WCERE) Pre-Conference Report

Background
Successful management of many of the environmental, economic and social challenges that humanity is currently facing requires collective action both between and within states. The Paris Agreement and the adoption of the 2030 Agenda for Sustainable Development are examples of agreements that aim to foster such cooperation and collective action. However, implementation of global agreements in practice often requires quite bold policymaking at state level, and here social scientists have a crucial role to play by suggesting and evaluating sound policies that promote greener economies. The need for evidence-based policy advice is larger than ever before and looking ahead, the demand will most likely continue to increase.

One challenge to sound policy making, in particular at Swedish agencies, is that most practitioners responsible for the management of environmental resources and issues are natural scientists. This is a challenge since environmental matters also need to be dealt with from a social science perspective and require the involvement of practitioners with a background in social sciences, not least environmental economists with expertise in the design, implementation and evaluation of policies. However, many aspects of environmental economic policymaking in practice are inherently complex and far from simple textbook models. Moving into the real world adds layers of complexity for example in the form of political restrictions and goals, temporal and dynamic effects, ethical considerations, imperfect information, uncertainty and behavioural constraints. Practitioners need to make decisions within this complex context with limited resources and time.

Hence, the existence of platforms that can facilitate and enable communication on equal terms between the research and policy communities is essential. Large academic conferences such as the World Congress in Environmental and Resource Economics (WCERE) gather experts in environmental economics from all over the world and have great potential to improve the interaction between leading academics and experts at agencies and organisations working with environmental policies. Traditionally, policy sessions at such gatherings are organised such that scientists give policy recommendations. We think that these sessions can be greatly improved if instead an interface for dialogue is created.

The 6th World Congress in Environmental and Resource Economics (WCERE) was an opportunity to improve the interaction between environmental economists at agencies and those in academia. This pre-conference used practitioners’ questions at Swedish agencies as a starting point for such interaction. Academics and experts at agencies and organisations involved in policy work were brought together in five parallel workshops: fisheries management, biodiversity protection, circular economy, climate change and chemicals. The overall aim of the workshops was to strengthen the role of environmental economics in Swedish policy. Each workshop, which consisted of up to 10 experts and a chair, with a balance between practitioners and researchers, aimed to provide participants with new insights by addressing practical problems faced in policymaking and to strengthen networks of environmental economists.
Lessons learned

• Despite the short time available (3-hour workshops), there was room for plenty of new reflections, discussions and building of new networks. Several suggestions for continued collaboration between researchers and agency representatives were made, including joint workshops and studies. As one practitioner said, ‘I wish my everyday work had more time for reflections of this kind.’

• It is important to build up infrastructure and resources for more frequent interaction between scientists and practitioners.

• The participation of international experts was highly appreciated as it broadened the national perspective on the issues discussed.

• The format of mixed and balanced groups worked well and was rewarding to all participants.

• If the goal is to increase the likelihood that the discussions will have a direct impact on the work at the agencies, it is important to address specific issues of direct relevance to them. During these pre-conference workshops, the broader questions in the biodiversity and circular economy workshop led to a more general level of discussions compared to the other workshops with narrow and specific questions well embedded in the agencies work.

• Each workshop chair benefitted from the preparatory coaching on the meeting technique most appropriate for their workshop. The meeting techniques were applied to encourage active participation and make everyone’s voice heard. This was particularly important in the larger groups.

• The participants strongly appreciated that the only thing they needed to do to prepare for a workshop was to read a short background text (see text for each workshop). Remember that each participant is already an expert on the topics discussed at the workshops they were invited to participate in.
References

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