Introduction

Frieder Rubik, Anneke von Raggamby and Anna Hirschbeck

WHY IS THE BOOK TMELY AND RELEVANT?

In times of financial crises and pressure to justify public spending, evaluation of projects, programmes and policies increases. Among these evaluations, sustainable development, which has become a socially and politically widely accepted concept throughout Europe, ought to be included to a greater extent. The European Union has not only integrated sustainable development into its objectives in Article 3 (3) of the Treaty on European Union but has also invited its Member States to draw up their own national sustainable development strategies at the Gothenburg European Council. In addition, the recent nuclear disaster in Japan has served as an additional stimulus to promote sustainable development. The evaluation of social and ecological impacts of policies should therefore play an increasing role in evaluation to reflect these accepted social issues. The idea of sustainability evaluations is far from new, and the field has existed for many years. It is, therefore, an appropriate time to step back and take stock. This is not only due to the above mentioned reasons but also because, in practice, it has proven a challenge for sustainability evaluations to equally address all dimensions of sustainable development. Moving from evaluations that are focused on specific areas (for example environmental or economic impacts) towards more integrated sustainability assessments and evaluations continues to be necessary. This need is broadly acknowledged in policy evaluation research and practice.

BACKGROUND OF THE GENESIS OF THIS BOOK

This book has been developed as part of a research project that brings together a number of researchers in a European network on ‘Evaluating Policies for Sustainable Development’ (EPOS). It was funded by the German
Federal Ministry of Education and Research (BMBF) as social-ecological research (SÖF). The objective of social-ecological research is to foster sustainable development, that means ‘the ecological modernization of society without neglecting mankind’s desire for social justice and prosperity’.\footnote{1} It does so by:

- fostering cross-disciplinary pooling of knowledge to provide scientific contributions to solving concrete social problems of sustainability and requiring interdisciplinary cooperation between researchers in the natural and the social sciences, and
- encouraging research to look beyond the science system and take into account the expert knowledge which exists in practice by including social actors such as consumers, municipalities, companies and civil society in the research process in different ways (transdisciplinarity).

Both integrated policy evaluation and social-ecological research are based on the concept of sustainable development and motivated by the notion that ecological, social and economic aspects need to be taken into account in order to find viable solutions for the development of human societies. Evaluation can be a key tool to support sustainable development and to prevent policy measures in one area from causing unwanted impacts in another.

The EPOS project established a network of leading European institutions that are active in the field of policy evaluation with a focus on environment and sustainability. The network provided a platform to discuss and further develop approaches in policy evaluation, to exchange information on different evaluation methods, approaches and experience, and to consider ways to strengthen social-ecological and integrative aspects in evaluation methods. The EPOS network was jointly managed by Ecologic Institute and the Institute for Ecological Economy Research (IÖW). The remaining EPOS-Partners were:

- Centre for European Policy Studies (CEPS), Brussels / Belgium,
- Centre for Evaluation (CEval), Saarland University / Germany,
- Fondazione Eni Enrico Mattei (FEEM), Milan / Italy,
- Impact Assessment Research Centre (IARC) of the Institute for Development Policy and Management (IDPM), University of Manchester / UK,
- Institute for Environmental Studies (IVM), Vrije Universiteit, Amsterdam / The Netherlands,
- Institute for European Environmental Policy (IEEP), London / UK,
The EPOS network discussed and compared policy evaluation approaches both from a research perspective and with a view to improving and applying evaluation procedures in practice. At the centre of discussions were evaluation methods and feedback processes between evaluation and policy development. The project intended to:

- consider policy evaluation from a social-ecological perspective and
- influence the practice of policy evaluation through applying the approach and experience of social-ecological research.

A series of network meetings constituted the core of the project. These meetings were centred on specific issues in policy evaluation. In addition, a summer school in 2008 targeted to young scholars and an international high-level policy conference ‘Sustainable Development in Policy Assessment – Methods, Challenges and Policy Impacts’ on 15 and 16 June 2009 in Brussels have ensured the dissemination of project results and the involvement of the interested public and the scientific community.

This book presents the most interesting contributions to the conference and of the workshops carried out.

THE BOOK’S STRUCTURE

We have structured the book according to the policy-cycle, highlighting different functions that evaluation can play in its phases:

- To begin, contributions examining the perception of sustainability problems are presented, which analyse the relationship between sustainability and assessment.
- The second part of the volume consists of contributions highlighting the role of evaluation and assessment studies during policy formulation.
- The third part is dedicated to policy implementation. It examines sustainability and assessment systems in different application areas.
- The fourth part is oriented towards policy reformulation and chiefly considers monitoring and quality improvement schemes.
- The fifth and last part addresses the quality of evaluations.
PART ONE: PERCEPTION OF SUSTAINABILITY PROBLEMS

Reinhard Stockmann’s (University of the Saarland) chapter Understanding Sustainability Evaluation and its Contributions to Policy-Making, which deals with the question of how the evaluation of sustainability can make a contribution to policy-making, opens the volume. According to Stockmann, since sustainability is a concept used on both the macro and micro level, sustainability must therefore be evaluated at both levels as well. On the macro level, sustainability should be differentiated between the economic, social and ecological target dimensions, and on the micro level between project / programme, output, system and innovation-oriented dimensions. Sustainability evaluation used to link the vision of sustainable development with its implementation has three functions: (1) It can be a management instrument for controlling the entire policy-making process, (2) it can be part of the implementation of policy strategies, and (3) it can be an instrument of social self-reflection.

In their contribution How to select policy-relevant indicators for sustainable development Frank Dietz and Aldert Hanemaaijer (both Netherlands Environmental Assessment Agency, PBL) argue that the operationalisation of the concept of sustainable development in a policy context requires indicators that clearly distinguish between progress and decay. They present a step by step approach to select policy-relevant indicators. Relevant themes have to be chosen, long term goals identified and available means estimated as well as co-benefits and trade-offs analysed before policy relevant indicators can be selected. This approach comes up with a set of sustainability indicators that should support society in two ways: It indicates the possible paths towards long term goals, and the indicators help to reconsider these goals.

In dealing with the question of how to judge sustainability evaluations, Wolfgang Meyer (Centre for Evaluation, Ceval) in his contribution Should Evaluation be Revisited for Sustainable Development?, examines how far the existing evaluation approaches are able to capture criteria for evaluating sustainable development. He identifies seven evaluation perspectives and describes eleven sustainability evaluation criteria, divided into the three dimensions of horizontal, vertical and temporal social integration. On the horizontal scale, most evaluation approaches meet most of the criteria, at least partly, whereas, on the vertical scale this is much less the case, and, on the time scale, almost not at all. None of the existing evaluation perspectives cover all of the sustainability evaluation criteria, yet the scientific and
management approach almost succeeds in meeting them. The sponsor and regulative approach mostly fails.

PART TWO: POLICY FORMULATION:
THE ROLE OF EVALUATION / ASSESSMENT

Candice Stevens (formerly Sustainable Development Advisor to the OECD and consultant for the economics of sustainable development) presents in her chapter *A basic roadmap for sustainability assessments: The SIMPLE methodology* a comprehensive methodology for conducting sustainability assessments. According to Stevens, assessments should follow three basic tenets: be integrated (evaluate economic, environmental and social impacts), intensive (in assessing short and long-term trade-offs) and inclusive (involve all stakeholders). As these three characteristics are rarely met, the author proposes the SIMPLE methodology. It is designed to promote the more widespread and regular conduct of sustainability assessments with regard to a wide range of policies and projects by providing an accessible and comparatively low-cost methodology that is applicable. It consists of six steps: (1) scoping relevance and extent of the assessment; (2) identifying participants; (3) measuring economic, environmental, and social impacts; (4) presenting conflicts across the pillars; (5) listing mitigating measures and (6) enumerating alternative policy paths.

Clive George’s and Colin Kirkpatrick’s (Institute for Development Policy and Management at the University Manchester) chapter *Political challenges in policy-level evaluation for sustainable development: The case of trade policy* compares the two forms of ex-ante evaluation in European trade policy: the European Commission’s general Impact Assessment (IA) and the Sustainability Impact Assessments (SIA) for trade agreements. Both types of assessments follow the principles of transparency and stakeholder consultation, yet SIA studies present potential conflicts with their institutional context. While SIA studies evaluate social, environmental and economic impacts for all interest groups in all countries, most IA studies focus primarily on the economic benefits to the EU with little discussion of their distribution. However, neither IA nor SIA had any measurable influence on policy, a fact that may be explained by the underlying political factors motivating the use of IA and SIA: developing a new method of managing business-government relations and associating civil society.

Katharina Helming and Katharina Diehl (both Leibniz-Centre for Agricultural Landscape Research, ZALF) and Ignacio de la Flor (Grupo de
Transformaciones Agrarias SA, Tragsa) in their chapter *Integrated approaches for ex-ante impact assessment tools – the example of land use* compare the methodological design of recent impact assessment tools in the field of land use. The purpose is to appraise the tools regarding their policy relevance, the methodological consideration of integration and the analysis of sustainable development. The authors develop an analytical framework for a comparative analysis of five selected IA tools in the field of land use that builds on the DPSIR approach. Finally, they apply the framework to the five selected assessment tools by analysing the following six criteria: (1) purpose of the study and envisaged user group; (2) spatio-temporal setting; (3) driving forces and scenario design; (4) land use change simulation; (5) impact analysis of the social, economic and environmental setting; (6) impact valuation. While all tools had difficulties with regard to providing policy relevant results, requirements of sustainable development were generally met, though methodological progress is required to better address the normative aspects of sustainable development and to integrate the perceptions of stakeholders and decision-makers. In addition, integration with respect to land use sectors, spatio-temporal scales and the variety of the covered impact issues was largely achieved.

In his chapter *Politics of (non-)knowledge: Problems of evaluation, validity and legitimacy* Stefan Böschen (University Augsburg) deals with the relationship between knowledge production, non-knowledge and risk policy. Societies are increasingly confronted with the problem of political and technological decision-making under conditions of non-knowledge, and still no answer has been found on how to evaluate, validate and legitimate a process to resolve the conflicts between different approaches to specifying and dealing with non-knowledge. In order to resolve those conflicts about non-knowledge, three aspects have to be taken into account: (1) Different evidential cultures should be combined in a structured way and their different perspectives on risk and non-knowledge evaluated (evaluation); (2) their (in-)compatibility should be analysed with the aim of allowing interaction and showing their relevance for the decision-making process (validation) and (3) legitimate institutional procedures and rules are to be built to consider the consequences of non-knowledge and their allocation (legitimacy).
PART THREE: POLICY IMPLEMENTATION: SUSTAINABILITY EVALUATION / ASSESSMENT SYSTEMS IN DIFFERENT APPLICATION AREAS

Stephen White and Jakub Koniecki (both European Commission) in *How informed should decisions be?* treat the question of how much information is needed before a decision is made by presenting the European Commission’s impact assessment system. The authors present the evolution of the system, how it works and finally ask whether it has provided the necessary evidence. Drawing on an independent evaluation of the Commission’s system in 2007, the Impact Assessment Board reports and an inquiry of consultants who carried out the impact assessments, they come to the conclusion that it has indeed helped. Even though the presentation and depth of analysis varies from policy to policy, as does the internal use of information gained, part of the reason why it has helped, according to the authors, is that it has allowed access to the whole chain of policy-makers (from Commissioner to desk officer) to more information in a systematic manner. Though IA practice is not flawless, the process tends to lead to better information flows in the Commission and better implementation of the decision-making process for those outside.

Anne Meuwese (Tilburg University) investigates in her chapter *Impact assessment in the European Union: The continuation of politics by other means?* the relationship between EU impact assessments (IA) and politics and how the former are used by political decision-makers. The author argues that IAs are meant to motivate decision-makers to regulate in a manner consistent with economic and scientific insights. She shows that although an IA imposes some discipline, the process through which the European Commission uses the outcomes to reach a decision lacks transparency. The main issue she identifies in this context is the fact that the decision criterion or criteria chosen as a basis for the decision usually are not made explicit. Even though these criteria are not applied in a transparent manner, it is likely that decision-makers have made use of them. In order to introduce more transparency into the decision-making process and avoid a collapse of credibility, the author argues for an obligation to disclose the decision criteria that have been used. This may just be a matter of time as we find ourselves in the middle of a process in which the ‘rules of the game’ are being shaped. Currently, tension between political decision-making and IA decision-making is solved on a case by case basis with the decision criteria often being hidden; even this last black box, however, may be opening up.
Bernd Hirschl, Anna Neumann (both Institute for Ecological Economy Research), Katharina Umpfenbach and Timo Kaphengst (both Ecologic Institute) look at the Science-policy interface and the role of impact assessments in the case of biofuels. They treat the question of whether the European Commission’s Impact Assessments (IA) failed within the context of biofuels and what role scientific findings played for them. In fact, for several reasons, such as the incongruence between scientific and political agendas or the difficulty for policy-makers to handle scientific uncertainty, the influence of research on policy making was shown to be rather limited. An evaluation of the biofuel-related IAs shows that the content focus of selected criteria and the level of detail vary greatly among the various IAs carried out and that they inadequately consider only potential ecological and social impacts. Moreover, most of the IAs either made no mention of or only briefly addressed possible negative impacts in third countries and did not really assess several policy options.

PART FOUR: POLICY REFORMULATION: MONITORING AND QUALITY IMPROVEMENT

Markku Lehtonen’s (University of Sussex) chapter Indicators as an appraisal technology: Framework for analysing the policy influence of the UK Energy Sector Indicators deals with the role of indicators in policymaking. Referring to the example of the UK Energy Sector, the author develops a framework for analysing the influence of indicators by distinguishing a rational-positivist model from a discursive-interpretative model of policymaking. He examines the hypothesis that scientific assessments and indicators influence policies largely indirectly. Three levels of indicator influence are identified: the individual, the interpersonal and the collective one. Four types of policy influence (decisions and actions, new shared understandings, increased or decreased legitimacy and professional networks) can be detected on three possible subject areas (the intended policy, other policies and broader non-policy impacts on society). Among the factors that can shape indicator influence, policy factors, producer factors, user factors, indicator factors as well as their salience, credibility and legitimacy to the actors involved are found. The UK energy sector indicators seem to be a particularly striking example of ‘non-use’, though numerous indirect impacts could be identified within the case study.
PART FIVE: QUALITY AND EVALUATION

Anneke von Raggamby (Ecologic Institute), Frieder Rubik (Institute for Ecological Economy Research), Doris Knoblauch (Ecologic Institute) and Rebecca Stecker (University Oldenburg) in their chapter Quality requirements for sustainability evaluations analyse existing evaluation standards and argue for quality requirements complementing those standards in order to consider more systematically sustainability topics. Quality criteria for this kind of evaluation can be divided into two groups: content and process oriented requirements. While the former consists of considering distributive aspects (socially, geographically and inter-generationally), focusing on a long term perspective and applying a holistic approach (by bringing together all three pillars of sustainability), the latter refers to the participation of all stakeholders, the problem of incomplete information and the implicit valuation of results through inconsiderate use of certain methods.

In his contribution Bellagio SusTainability Assessment and Measurement Principles (BellagioSTAMP), Jan Bakkes (Netherlands Environmental Assessment Agency) presents the mentioned evaluation standards by providing comments and practical examples for applying their underlying principles. BellagioSTAMP were developed in 1996 and updated in 2009 by experienced practitioners from various continents and organisations with the aim of offering critical guidance to professionals for compiling, reviewing or managing sustainability assessments. Consisting of eight topics (guiding vision, essential considerations, adequate scope, framework and indicators, transparency, effective communication, broad participation and continuity and capacity), the principles are intended to give easily available and clear insights into the practice of sustainability assessment.

Prof. Thomas Widmer (University of Zurich) focuses in his contribution Evaluation quality in the context of sustainability on the quality of evaluations in the context of sustainability. Today, evaluation standards seek to deliver criteria on evaluation quality. The Swiss Evaluation Society (SEVAL), Europe’s first evaluation society establishing its own standards, developed 27 standards falling into the four categories of utility, feasibility, propriety and accuracy. For addressing the relationship between sustainability and evaluation quality, the author suggests three approaches: (1) sustainability as evaluation criterion; (2) evaluation of objects whose goal is sustainability and (3) evaluations done in a sustainable way. This implies that evaluators have to be sure of the level of sustainability assessment they apply and of not mixing them.
André Martinuzzi (Research Institute for Managing Sustainability, Vienna University of Economics and Business Administration), in his chapter "Developing and mapping a community for evaluating sustainable development," presents the key results of the ‘EASY ECO – Evaluation of Sustainability’ series of European conferences and training (2002 – 2010), in order to map and develop the community of evaluators dealing with sustainable development. The findings show that the fields of work in sustainable development evaluation are broad and share a common objective, but have different implicit understandings of sustainable development and lack an exchange of experiences between communities and disciplines. The sustainable development evaluation community is mainly composed of young professionals with an academic background, working in research in diverse disciplines. While no great demand exists for training and publishing, a majority of sustainable development evaluators still require exchange platforms between evaluators, researchers and decision makers.

FINALLY

We wish to thank all the contributors to this volume, including McKenna Davis and Jonathan Sapp for their proofreading efforts, Stephan Timme for his stylesheeting work and finally the German Federal Ministry of Education and Research (BMBF) for its financial support of this volume and of the project as a whole.

Berlin and Heidelberg, August 2011

NOTE