

# Evaluating Climate Change Action for Sustainable Development

Juha I. Uitto • Jyotsna Puri  
Rob D. van den Berg  
Editors

# Evaluating Climate Change Action for Sustainable Development

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*Editors*

Juha I. Uitto  
Independent Evaluation Office  
Global Environment Facility  
Washington, DC, USA

Jyotsna Puri  
International Initiative for Impact  
Evaluation (3ie)  
New Delhi, India

Rob D. van den Berg  
King's College London  
and International Development  
Evaluation Association (IDEAS)  
Leidschendam, The Netherlands



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# Foreword

In 2015, the world achieved several crucial milestones for safeguarding the global commons. Most prominently were the adoption of the Sustainable Development Goals and the Paris Agreement on Climate Change. These agreements clearly recognize that the health of the global commons, like land, forests, oceans, and climate, is vital for our future development prospects – a recognition that was embedded in the very creation of the Global Environment Facility (GEF) 25 years ago. It is very timely to reflect on what we have achieved, what is still to be done, and how we can scale up our efforts in helping countries along the way to implementing these agreements.

Thanks to all the support we received from donor countries, partners, and other stakeholders, the GEF was able to invest over US\$14 billion in grants and mobilized over US\$74 billion in additional financing for over 4,000 projects in developing countries. Still, the key drivers of environmental degradation continue to intensify with a growing, and more affluent, global population and rapid urbanization, driving increased demand for food, fiber and materials. The associated pressures on forests, land, and oceans are increasingly being exacerbated by climate change, thereby threatening biodiversity and Earth’s life support systems. If we are to succeed at the scale the problem deserves, we need to change key economic systems – how we produce food; our cities; how we live and move around; and our energy system, how we power our vehicles, industries, and homes. In a nutshell, we have our work cut out for ourselves as never before.

Fortunately, we are not flying in the dark. The GEF stands today on top of a quarter-century of experience dealing with the global environment and the stewardship of the global commons. This body of work offers a tremendous opportunity to learn – both from our successes and our failures. This is what makes the continuous, uninterrupted evaluation and assessments by GEF’s Independent

Evaluation Office so important. If we are to successfully implement the landmark 2015 global agreements to put the world on a low-emission, climate-resilient, and sustainable trajectory it is an imperative to embrace evidence-based learning and monitoring and evaluation as an integral aspect of implementation, so that our approaches and priorities can be refined and optimized even when we are already on the road.

A few lessons are already emerging. First, we need to rapidly break down the sectoral walls that isolate the environment from economics – at the international and national scales – so as to start mainstreaming environmental considerations in the wider decision-making process. Second, we must bring the various lines of funding the GEF provides countries much closer together, making the best use possible of their interlinkages and addressing the systemic nature of the threats. Finally, we must move from just addressing the symptoms of environmental degradation – given we are running out of fingers to stick in the progressively more porous proverbial dyke – and start tackling the key drivers of environmental degradation.

Climate change is arguably one of the most complex of the global environmental phenomena, with its root causes ingrained across almost all sectors and industries. Agriculture, for instance, accounts for a significant share of global greenhouse gas emissions, including through methane emissions from livestock, nitrous oxide from fertilizer use, and land use change. Cattle, palm oil, and rice together contribute approximately half of all food production-related greenhouse gas emissions, requiring solution approaches that take into account the linkages between these individual emission sources. Learning from our past agriculture projects will help us tackle these emission sources at the systemic level.

Against this background, we also have to address the fact we are already locked in a path towards a warmer world irrespective of what we may do today. The Paris Agreement has embraced the utmost priority of promoting greater resilience in the ways we conduct our business and daily lives. This will be particularly important for the poorest and most vulnerable countries. We are confident we can also build our future work on the significant portfolio of climate adaptation work that has accumulated important lessons over the past decade – meaning promoting and replicating approaches that are most effective in helping communities adapt to droughts, sea level rise, and changing seasonal weather patterns.

This book could not come at a better time. We need to make choices that direct our limited resources to their best use on the ground – so as to most effectively help countries fulfill their commitments to achieving the goals and objectives of the 2030 Agenda for Sustainable Development. Evaluations and lessons learned from past projects and programs must be considered by all stakeholders involved, to enable informed decision-making to do justice to the urgency of the problems at hand. The efforts of the Independent Evaluation Office of the GEF to produce useful, concrete, and practical lessons, exemplified in this book and through the

success of the wider Climate-Eval network, will help. I hope that this fresh body of knowledge captured hereinafter will reach an audience beyond the GEF and by doing so undoubtedly become useful to everyone in the broader environment and development community.

CEO and Chairperson  
Global Environment Facility  
Washington, DC, USA

Naoko Ishii

# Foreword

Climate change is among the most difficult challenges facing the world. Its global nature, intergenerational impact, and the massive risks and uncertainty associated with it combine to create an unparalleled need for global collective action. It is also significant in that addressing it will go a very long way toward addressing other environmental problems – air pollution, water risks, soil degradation, and the loss of forests, natural habitats, and biodiversity. At the same time, the world continues to grapple with eradicating poverty and inequalities and spurring economic growth. Going full circle, it is primarily the poor who suffer from climate change and environmental degradation.

Monitoring and evaluating the efforts to address these concerns are particularly important. The stakes are high, and we have an incredibly short window to do things right. And in a time when public financing is decreasing and investment decisions are made without considering overall global environmental and development costs, evaluation is essential for us to understand how we can best make use of these limited resources. Evaluators are in a position to present evidence about how we can make a difference in promoting development that is both environmentally sound and equitable.

Using relatively small resources, what can be done to help decision-makers achieve the revolution needed to address our challenges? Those who have the privilege to manage precious resources have an obligation to help decision-makers get to the right place. Using evidence, evaluators can speak truth to power. It is not only about how money is being used and whether it has a decent return. It is about measuring the results of our action, knowing why and how things are working, or not working. It is about learning.

The book *Evaluating Climate Change Action for Sustainable Development* is a collaborative venture. The chapters provide an interdisciplinary perspective and document emerging and innovative evaluation knowledge and practice of climate change and its links to sustainable development. Such knowledge based on solid

analysis of experiences in the field is indispensable as we move forward. This book is a welcome addition to the literature.

We are still a long way from achieving a resilient and low-carbon economy. We have a role and responsibility to help find solutions to our common global challenges. We, as individuals, have an impact much bigger than we realize. With passion and grit, let us all think bigger and out of the box to make the world a better place, not only for this generation but for the future as well.

President and CEO  
World Resources Institute  
Washington, DC, USA

Andrew Steer



# Preface

Climate change is one of the preeminent challenges facing the world today. The consequences of climate change manifest themselves in multiple ways, including increased variability and intensity of extreme weather events and sea level rise. We are already seeing the impacts of climate change, and the first ones to feel them tend to be poor people and poor countries that are most vulnerable and have the least capacities to cope with them. The search for solutions to mitigate climate change and to adapt to its consequences is urgent. Rigorous evaluation of policies, programs, and projects can help the international community to identify technical solutions, economic strategies, and social innovations that improve our ability to deal with climate change. This is the focus of the present book.

The book has its genesis in the Climate-Eval Community of Practice hosted by the Independent Evaluation Office of the Global Environment Facility. Its overarching goal is to establish standards and norms, support capacity development, and share good practices in evaluations of climate change and development. In November 2014, Climate-Eval with its partners organized the Second International Conference on Evaluating Climate Change and Development in Washington, D.C. The aim of this event was to promote an interdisciplinary exchange of ideas and methods to evaluate climate change and sustainable development. This 3-day event brought together some 300 leading experts and policymakers in the field and included sessions on climate change mitigation, adaptation, and policy, as well as special sessions such as panel discussions and roundtables. Topics discussed ranged from theory of change approaches to evaluation and institutional capacity; to disaster risk reduction, resilience, and tracking adaptation; to monitoring and evaluation of ecosystem-based and natural resource management interventions and climate change funds.

*Evaluating Climate Change Action for Sustainable Development* builds upon a selection of the most relevant and practical papers and presentations given at the 2014 conference. Following the conference, the editors and the authors worked closely together to develop the presentations into a coherent set of articles organized around the three main themes of climate change evaluation: policy,

mitigation, and adaptation. This book aims to provide an authoritative interdisciplinary perspective of innovative and emerging evaluation knowledge and practice around climate change and development. It focuses on lessons learned and gained from evaluating climate change projects, programs, and policies as they link to sustainable development, from the perspectives of international organizations, NGOs, multilateral and bilateral aid agencies, and the academia. Authors share methodologies and approaches used to better understand problems and assess interventions, strategies, and policies. They also share challenges encountered, what was done to solve these, and lessons learned from evaluations. Collectively, the authors illustrate the importance of evaluation in providing evidence to guide policy change and informed decision-making.

This book is written for policymakers, program and project proponents, practitioners, academics, and other informed audiences concerned with climate change, sustainable development, and evaluation.

Washington, DC, USA  
New Delhi, India  
Leidschendam, The Netherlands

Juha I. Uitto  
Jyotsna Puri  
Rob D. van den Berg

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We would specifically like to thank Lee Cando-Noordhuizen who acted as the assistant editor, keeping track of all details and ensuring that the book project was proceeding on schedule. Her professionalism and attention to detail were indispensable.

The Editors

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# Contributors

**Tougiani Abasse** National Agricultural Research Institute of Niger, Niamey, Niger

**Aryanie Amellina** Climate and Energy Area, Institute for Global Environmental Studies, Hayama, Japan

**Babou André Bationo** Environment and Agricultural Research Institute, Ouagadougou, Burkina Faso

**Emilia Bretan** World Bank, São Paulo, Brazil

**Saaka Buah** Savanna Agricultural Research Institute, Wa, Ghana

**Lee Cando-Noordhuizen** Independent Evaluation Office, Global Environment Facility, Washington, DC, USA

**Michael Carbon** Evaluation Office, United Nations Environment Programme, Nairobi, Kenya

**Joanne Chong** Institute for Sustainable Futures, University of Technology Sydney, Sydney, Australia

**Monika Egger Kissling** Evaluation and Corporate Controlling Division, Swiss Agency for Development and Cooperation, Berne, Switzerland

**Nathan L. Engle** Climate Policy Team, World Bank, Washington, DC, USA

**Wiebke Förch** Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH, Gaborone, Botswana

**Yann François** GERES - Group for the Environment, Renewable Energy and Solidarity, Aubagne, France

**Marina Gavaldão** GERES - Group for the Environment, Renewable Energy and Solidarity, Aubagne, France

**Anna Gero** Institute for Sustainable Futures, University of Technology Sydney, Sydney, Australia

**Jasmine Hyman** School of Forestry & Environmental Studies, Yale University, New Haven, CT, USA

**Irene Karani** LTS Africa, Nairobi, Kenya

**Nyachomba Kariuki** LTS Africa, Nairobi, Kenya

**Timo Leiter** Climate Change and Climate Policy Group, Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH, Eschborn, Germany

**Debora Ley** Environmental Change Institute, School of Geography and the Environment, University of Oxford, Oxford, UK

**Takaaki Miyaguchi** Ritsumeikan University, Kyoto, Japan

**Neeraj Kumar Negi** Global Environment Facility, Independent Evaluation Office, Washington, DC, USA

**Jyotsna Puri** International Initiative for Impact Evaluation (3ie), New Delhi, India

**Issa Sawadogo** Environment and Agricultural Research Institute, Ouagadougou, Burkina Faso

**Tonya Schuetz** Independent Consultant, Munich, Germany

**Jacques Somda** Planning, Monitoring, Evaluation and Learning, International Union for Conservation of Nature, Ouagadougou, Burkina Faso

**Philip Thornton** CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS), International Livestock Research Institute (ILRI), Nairobi, Kenya

**Pia Treichel** Plan International, Melbourne, Australia

**Juha I. Uitto** Independent Evaluation Office, Global Environment Facility, Washington, DC, USA

**Rob D. van den Berg** King's College London and International Development Evaluation Association (IDEAS), Leidschendam, The Netherlands

**Ioannis Vasileiou** World Bank, Washington, DC, USA

**Roman Windisch** Quality and Resources Division WEQA, Swiss State Secretariat for Economic Affairs SECO, Berne, Switzerland

**Aaron Zazueta** Independent Consultant, New York, USA

**Robert Zougmore** Africa Program, CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS), Bamako, Mali



# List of Acronyms

AAP	Africa Adaptation Programme
ADB	Asian Development Bank
AFD	Agence Française de Développement
APR	Ambiguous property rights
BAAC	Bank of Agriculture and Agricultural Credit
BMUB	German Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety
BMZ	German Federal Ministry for Economic Cooperation and Development
CAF	County Adaptation Fund
CBD	Convention for Biological Diversity
CCAFS	CGIAR Research Program on Climate Change, Agriculture and Food Security
CC-CBA	Child-Centred Community-Based Adaptation
CCSP	Climate Change Subprogramme
CDM	Clean Development Mechanism
CDM	DOE CDM Designated Operational Entity
CDRF	Capacity Development Results Framework
CGIAR	Consultative Group for International Agricultural Research
CIF	Climate Investment Funds
CMO	Context + Mechanism = Outcome
COP	Conference of the Parties
CPR	Common property resources
CPWF	Challenge Program on Water and Food
CRGE	Climate-Resilient Green Economy
CRM	Climate risk management
CRP	CGIAR Research Programs
CSO	Civil society organizations
CTF	Clean Technology Fund
CWP	Ceramic water purifiers

DFID	Department for International Development
DOLA	Department of Local Administration
DPP	Drought preparedness plan
DRE	Decentralized Renewable Energy
DRE	Decentralized renewable energy
DRR	Disaster risk reduction
EWS	Early warning system
FAO	Food and Agriculture Organization
FAO	Food and Agriculture Organization
FCPF	Forest Carbon Partnership Facility
FGD	Focus group discussions
FSF	Fast-start financing
FSP	Full-sized projects
GACC	Global Alliance for Clean Cookstoves
GEF	Global Environment Facility
GEF	IEO Global Environment Facility Independent Evaluation Office
GERES	Group for the Environment, Renewable Energy and Solidarity, Groupe Energies Renouvelables, Environnement et Solidarités
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH
GNI	Gross national income
HDR	Human Development Report
HMNDP	High-Level Meeting on National Drought Policy
ICIDP	Isiolo County Integrated Development Plan
IDB	Inter-American Development Bank
IDRC	International Development Research Center
IEA	International Energy Agency
IFAD	International Fund for Agriculture and Development
IO	Intermediate outcomes
IPCC	Intergovernmental Panel on Climate change
JCM	Joint Crediting Mechanism
JCM TPE	Third party entity
JICA	Japan International Cooperation Agency
JP	Joint Programme
LDC	Least development country
LFA	Logframe approach
LG	Local government
LI	Livelihood Index
MDB	Multilateral development bank
MDG	Millennium Development Goals
MDG-F	Millennium Development Goal Achievement Fund
MEL	Monitoring, evaluation and learning
METIJ	Ministry of Economy, Trade, and Industry Japan
MOEJ	Ministry of the Environment Japan
MRV	Measurement, Reporting and Verification

MSP	Medium-sized projects
MTS	Medium-term strategy
NAP	National Adaptation Plan
NCPC	National Cleaner Production Centres
NDC	Nationally Determined Contributions
NDMA	National Drought Management Authority
NDP	National drought policy
NESDB	National Economic and Social Development Board
NICFI	Norway's International Climate and Forest Initiative
NLS	New Laos Stove
NPR	No secure property rights
ODA	official development assistance
OECD-DAC	Organization for Economic Cooperation and Development- Development Assistance Committee
OH	Outcome harvesting
OM	Outcome mapping
PAR	Pressure and release
PAR	Participatory action research
PCVA	participatory, climate change vulnerability and capacity assessments
PIN	Project Idea Note
PIPA	Participatory impact pathways analysis
PM&E	Participatory monitoring and evaluation
PPCR	Pilot Program for Climate Resilience
PSH	Passive solar houses
QCA	Qualitative comparative analysis
R4D	Research for development
RBM	Results-based management
RCT	Randomized control trials
REDD+	Reducing Emissions from Deforestation and Forest Degradation
RFD	Royal Forest Department
SDC	Swiss Agency for Development and Cooperation
SDG	Sustainable Development Goals
SDIP	Sustainable Development Implementation Plan
SDIR	Sustainable Development Implementation Report
SEADEP	Socioeconomic Assessment of Domestic Energy Practices
SECO	State Secretariat for Economic Affairs
SGP	Small Grants Programme
SME	Small- and medium-sized enterprises
SNV	Netherlands Development Organisation
STAP	Scientific and Technical Advisory Panel
STAR	System for Transparent Allocation of Resources
TAMD	Tracking Adaptation and Measuring Development
TC	Technical cooperation

TOC	Theory of Change
TPB	Theory of planned behavior
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change
UNIDO	United Nations Industrial Development Organization
USAID	United States Agency for International Development
VCO	Voluntary carbon offset
WB	World Bank
WBI	World Bank Institute
WHO	World Health Organization