



Routledge Advances in Climate Change Research

THE PARIS FRAMEWORK FOR CLIMATE CHANGE CAPACITY BUILDING

Mizan R. Khan, J. Timmons Roberts, Saleemul Huq and
Victoria Hoffmeister



The Paris Framework for Climate Change Capacity Building

The Paris Framework for Climate Change Capacity Building pioneers a new era of climate change governance, performing the foundational job of clarifying what is meant by the often ad-hoc, one-off, uncoordinated, ineffective and unsustainable practices of the past decade described as ‘capacity building’ to address climate change. As an alternative, this book presents a framework on how to build effective and sustainable capacity systems to meaningfully tackle this long-term problem. Such a reframing of capacity building itself requires means of implementation. The authors combine their decades-long experiences in climate negotiations, developing climate solutions, climate activism and peer-reviewed research to chart a realistic roadmap for the implementation of this alternative framework for capacity building. As a result, this book convincingly makes the case that universities, as the highest and sustainable seats of learning and research in the developing countries, should be the central hub of capacity building there.

This book will be a valuable resource for students, researchers and policy-makers in the areas of climate change and environmental studies.

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Preface

The 2015 Paris Agreement was widely hailed as a breakthrough in global efforts to address climate change. Little known and barely discussed, however, is Article 11, under which the nations of the world decided to establish the Paris Committee on Capacity Building, and definitively place capacity building as a crucial means to enhance climate action in developing countries. Essentially, the attempt seeks to avoid the way climate and development planning has often been done in the past, which has usually involved experts and consultants from developed countries ‘parachuted in’, drafting up plans for projects and leaving little room for the developing countries to address their own issues. In addressing the short-term goals of developing projects, little real capacity was left behind.

In hindsight, the initiatives on capacity building led by the United Nations Framework Convention on Climate Change (UNFCCC) began with COP7 in 2001. In response, millions of dollars have been spent in developing countries by bilateral and multilateral development agencies, including the UNFCCC Secretariat, the World Bank-managed Global Environment Facility, the US Agency for International Development (USAID) and the UK Department for International Development (DFID). Millions more are pledged for the coming years.

What has been the end result? What do we mean by capacity building and have these efforts made any progress? How much and what capacities have been built? Who led the process? Were capacity-building efforts demand- or supply-driven? Has there been any sustainable system left in place? If not, what are the gaps and lacunae in the process? And how can they be implemented?

The Paris Framework for Climate Change Capacity Building aims at unearthing the often ineffective and unsustainable practices of capacity building in the last decade to address climate change. As an alternative, the book presents a roadmap on how to build effective and sustainable capacity systems to meaningfully tackle the problem.

The importance and salience of such a book emerged from Article 11 of the Paris Agreement adopted at COP21 of the UNFCCC in December 2015, which establishes the Paris Committee on Capacity Building (PCCB)

and stipulates that: ‘Capacity building should be guided by lessons learned, including those from capacity building activities under the Convention, and should be an effective, iterative process that is participatory, cross-cutting and gender-sensitive.’

There have been reports by bilateral and multilateral agencies on their capacity building activities, including the UNFCCC synthesis reports, but there is not a single book in the field dedicated to analysing the end result of past capacity building in addressing climate change.

The main theme of the book is learning from the experiences of the past decades of capacity building activities of bilateral and multilateral agencies in developing countries, revealing the gaps and lacunae in those processes, and proposing a new way forward. Our observation is that activities in this area so far have often been disparate and uncoordinated, one-off, short-term consultancy-based initiatives, supported by different agencies, which have spent millions of dollars, but which often failed to build and leave a sustainable long-term system in place. The book makes the case that universities in developing countries should be the central hub of such activities, since they are long-term institutions that will outlast short-term funding cycles and project termination.

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Abbreviations

ACCC	Adaptation to Climate Change in the Caribbean
ACCRA	Africa Climate Change Resilience Alliance
ADB	Asian Development Bank
AF	Adaptation Fund
AfDB	African Development Bank
AIMS	Aid Information Management System
AR5	Fifth Assessment Report of the IPCC
Art.	Article
ATLAS	Adaptation Assessments, Thought Leadership, and Learning
B2B	Business to Business
BCCRF	Bangladesh Climate Change Resilience Fund
BCCSAP	Bangladesh Climate Change Strategy and Action Plan
BCCTF	Bangladesh Climate Change Trust Fund
BINGOs	business and industry NGOs
BMD	Bangladesh Meteorological Department
BoT	Board of Trustees
BPATC	Bangladesh Public Administration Training Centre
BR	Biennial Report
BUET	Bangladesh University of Engineering and Technology
BURS	Biennial Update Reports
CAES	College of Agricultural and Environmental Sciences
CALIP	Climate Adaptation and Livelihood Protection
CAN-U	Climate Action Network Uganda
CARICOM	Caribbean Community
CBD	Convention on Biological Diversity
CBDR&RC	Common but Differentiated Responsibilities and Respective Capacities
CBIT	Capacity Building Initiative for Transparency
CCA KB	Climate Change Adaptation Knowledge Base
CCAP	Climate Change Action Plan
CCB	Committee on Capacity Building
CCC	Climate Change Centre

CCC	Climate Change Cell
CCD	Climate Change Department
CCIC	Climate Change Information Clearinghouse
CCRD	Climate Change Resilient Development
CCU	Climate Change Unit
CDKN	Climate and Development Knowledge Network
CDM	Clean Development Mechanism
CEDAT	College of Engineering, Design, Art and Technology
CFTM	Climate Finance Transparency Mechanism
CIDA	Canadian International Development Agency
CIF	Climate Investment Funds
CIP	Country Investment Plan
CMA1	First Conference of the Parties serving as the meeting of Parties to the Paris Agreement
COCIS	College of Computing and Information Sciences
COP	Conference of the Parties
COP21	21st Conference of the Parties
CPACCP	Caribbean Planning for Adaptation on Climate Change Project
CPP	Cyclone Preparedness Programme
CREEC	Centre for Research in Energy and Energy Conservation
CSG	Climate Studies Group
CTCN	Climate Technology Centre and Network
CTD	Committee on Trade and Development
CUAS	Cologne University of Applied Sciences
DDAGTF	Doha Development Agenda Global Trust Fund
DDPs	District Development Plans
DFID	Department for International Development
DIE	Deutsches Institut für Entwicklungspolitik
DMCs	developing country members
DNA	Designated National Authority
DoE	Department of Environment
DPM	Disaster Preparedness and Management
DRR	disaster risk reduction
EACREEE	East African Centre for Renewable Energy and Energy Efficiency
EC	Executive Committee
EIF	Enhanced Integrated Framework
ENGOS	environmental non-governmental organizations
ERICCA	Education and Research to Improve Climate Change Adaptation
ERTs	Expert Review Teams
FAO	Food and Agriculture Organization
FSV	Facilitative Sharing of Views
GAR15	Global Assessment Report 2015

GATT	General Agreement of Tariff and Trade
GBM	Ganges/Padma, Brahmaputra/Jamuna, and Meghna Rivers
GCCA	Global Climate Change Alliance
GCF	Green Climate Fund
GCM	General Circulation Model
GED	General Economic Division
GEF	Global Environment Facility
GHG	greenhouse gas
GIZ	German Federal Enterprise for International Cooperation
GNP	gross national product
GOB	Government of Bangladesh
GPB	global public bad
GPG	global public good
HCL	Hydrology and Climate Change
HELCOM	Helsinki Commission
HELIX	High End Climate Impact and Extremes
HFA	Hyogo Framework of Action
HILIP	Haor Infrastructure and Livelihood Improvement Project
HiMAP	High Mountains Adaptation Partnership
HRD	Human resource development
HRTT	Human Rights Task Team
IAR	International Assessment and Review
ICA	International Consultation and Analysis
ICCAD	International Centre for Climate Change and Development
IDA	International Development Association
IDB	Inter-American Development Bank
IF	integrated framework
IFC	International Finance Corporation
IG	intergovernmental organization
IITA	International Institute of Tropical Agriculture
INC	Initial National Communication
INDCs	Intended Nationally Determined Contributions
IPCG	Intergovernmental Panel on Climate Change
IPOs	indigenous peoples organizations
ITTC	Institute for Training and Technical Cooperation
IUB	Independent University of Bangladesh
IWFM	Institute of Water and Flood Management
JITAP	Joint Integrated Technical Assistance Programme
LDCF	Least Developed Countries Fund
LDCs	least developed countries
LUCCC	LDC Universities Consortium on Climate Change
MA	Multilateral Assessment
MACC	Mainstreaming Adaptation to Climate
MAK	Makerere University
MDAs	Ministries, Departments and Agencies

MDBs	multilateral development banks
MDG	Millennium Development Goals
MEAs	multilateral environmental agreements
MF	Multilateral Fund
MoDMR	Ministry of Disaster Management and Relief
MoEF	Ministry of Environment and Forests
MoFPED	Ministry of Finance, Planning and Economic Development
MoLG	Ministry of Local Governments
MOOCs	massive open online courses
MOWCA	Ministry of Women and Children Affairs
MRV	Measurement, Reporting and Verification
MTs	multilateral trade system
MUCCA	Makerere University Climate Change Association
MUCCRI	Makerere University Centre for Climate Research and Innovations
NAPAs	National Adaptation Programmes of Action
NARO	National Agricultural Research Organization
NCCAC	National Climate Change Advisory Committee
NCCP	National Climate Change Policy of 2015
NCCPC	National Climate Change Policy Committee
NCSA	National Capacity Self-Assessment
NDC	Nationally Determined Contribution
NDP	National Development Plan
NEPAD	New Partnership for African Development
NGO	non-governmental organization
NHRAP	national human rights action plan
NIEs	national implementing entities
NORAD	Norwegian Agency for Development Cooperation
NOUs	National Ozone Units
NPA	National Planning Authority
NSDP	National Summary Data Page
NTF	Nordic Trust Fund
ODA	Official Development Assistance
ODPEM	Office of Disaster Preparedness and Emergency Management
ODS	ozone depleting substances
OECD	Organization for Economic Cooperation and Development
OHCHR	Office of the High Commissioner for Human Rights
OPM	Office of the Prime Minister
PCCB	Paris Committee on Capacity Building
PIF	Project Identification Forms
PIOJ	Planning Institute of Jamaica
PLS	Progressive Learning Strategy
PMF	Performance Measurement Framework
PPCR	Pilot Program for Climate Resilience

PV	photovoltaic
PVCs	particularly vulnerable countries
RAN	Resilient Africa Network
RAPs	regional action plans
RCM	Regional Climate Model
REDD	Reducing Emission from Deforestation and Forest Degradation
RINGOs	research and independent NGOs
RPIU	Regional Project Implementation Unit
RSP	Regional Seas Programme
RUFORUM	Regional Universities Forum for Capacity Building in Agriculture
SAP/BIO	Strategic Action Plan for the Conservation of Biological Diversity
SBI	Subsidiary Body for Implementation
SBSTA	Subsidiary Body for Scientific and Technological Advice
SCCF	Special Climate Change Fund
SDC	Swiss Development Cooperation
SDGs	Sustainable Development Goals
SESM	School of Environmental Science and Management
SFDRR	Sendai Framework for DRR
SIDA	Swedish International Development Cooperation Agency
SIDS	Small Island Developing States
SNC	Second National Communication
SPARRSO	The Space and Remote Sensing Agency
SPS	sanitary and phytosanitary
SSTs	sea surface temperatures
STDF	Standards and Trade Development Facility
TBTs	technical barriers to trade
TC	technical cooperation
TFAF	Trade Facilitation Agreement Facility
TNC	Third National Communication
TNGOs	trade unions non-governmental organizations
TRTA	trade-related technical assistance
UAL	Urban Action Innovations Lab
UNCC	Universities Network for Climate Capacity
UNCCD	UN Convention to Combat Desertification
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change
UNISDR	UN International Strategy for Disaster Reduction
UNMA	Uganda National Meteorology Authority
UNSSC	UN System Staff College
USAID	United States Agency for International Development

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UWI	University of the West Indies
VEGA	Volunteers for Economic Growth Alliance
VFTC	Voluntary Fund for Technical Cooperation
WTO	World Trade Organization
YOUNGOs	youth non-governmental organizations

1 ‘Puzzling, confusing, and ... vacuous’

Capacity building from the World Bank to climate governance

Introduction

2016 was the warmest year on record. As was 2015. And 2014. Heated by political fire and extreme weather events, 2017 marks a shift in global approaches to the changing climate. The inauguration of Donald Trump, with his public climate denial and withdrawal from the Paris Agreement, signalled a shift in climate action and diplomacy.

The Paris Agreement, adopted in November 2015 at the 21st Conference of the Parties (COP21) of the United Nations Framework Convention on Climate Change (UNFCCC) marks a vital act in climate change diplomacy. The framework for the implementation of the Paris Agreement was established at the 22nd COP, held in Marrakech, Morocco, in 2016. This was unexpected, when the timeframe for its implementation was put as 2020 – four years later. This shifted the agendas for the following Conferences of the Parties into the ‘implementation COPs’, to work out what the Paris Agreement really means and how it will actually work. Such a rapid entry into force of the Paris Agreement adds momentum to the global community’s efforts to build a zero-carbon, climate-resilient future. Now Parties must adopt procedures for operationalizing the new frameworks, institutions and processes established under the Paris Agreement, and there are many. These include building an ‘Enhanced Transparency Framework’ to see how countries are doing in reducing emissions (mitigation). It includes sorting out the complex systems for delivering finance to help developing countries deal with climate change. Crucial will be a ‘global stocktake’ every five years to assess how countries are doing, and building a 12-member compliance mechanism to which Parties can agree. A clearinghouse for risk transfer and insurance will need to be established, a task force will be set up to devise integrated approaches to deal with climate-induced displacement, and a new market mechanism and a global sustainable development mechanism must be created (Dagnet et al. 2016).

All these initiatives will take collaboration and focus through dozens of major and minor meetings of experts and negotiators. But one area of work has been barely discussed: the need to follow through on promises

2 *Capacity building*

made by the UNFCCC Paris Committee on Capacity Building, adopt a five-year work plan, and develop the Capacity Building Initiative for Transparency (CBIT). The Paris Agreement's decisions to establish the Paris Committee on Capacity Building under Article 11, create the CBIT under Article 13, and in between, to stipulate in Article 12 that countries will promote education, training and public awareness in dealing with climate change, can be regarded as foundational for all the other institutions, mechanisms and processes. To achieve a low-carbon, climate-resilient world, capacity building to reduce greenhouse gas emissions and adapt to its increasing impacts in an open and transparent matter, as stated in the Paris Agreement, is of central importance to facilitate the implementation of all the other provisions and decisions.

This is especially true for the nano-emitters, the least developed countries (LDCs) and Small Island Developing States (SIDS), who are collectively regarded as the particularly vulnerable countries (PVCs), which have been hit first and hardest by the increasing impacts of climate change and have the least capacity to adapt. Subsequent sections of the chapter will explain the salience and argument of the book – why capacity building is important for addressing climate change and how it can be done on a long-term, sustainable basis. We begin by tracing how the concept of capacity building has evolved in the domain of international development cooperation, and then turn to how it is being thought of in humanity's response to climate change. We end this brief introductory chapter with a roadmap for the rest of the book.

A child of the World Bank: where the category of 'capacity building' came from

Looking at the evolution of international development cooperation since the 1950s, capacity building can be said to have its precursor in the concepts of 'institution building', 'institutional strengthening', 'human resource development', 'institutional economics', etc. (Morgan 2006; Kuhl 2009; Keijzer & Janus 2014). Based on the experience of the US-led Marshall Plan to rebuild war-ravaged Europe after the Second World War, the USA and the European countries believed that development could be best pursued in newly decolonized developing countries by building and strengthening their national institutions. But social engineering proved a much more complex phenomenon than physics and mechanics, particularly before and in the initial stage of capitalist development, so thinking began to change. The concept of 'institutional economics' soon evolved as a response to dissatisfaction with traditional technical cooperation, where development of local human capital was not the focus (Thorbecke 2000). The new discipline of 'institutional economics' tried to establish the idea of institution building with some theoretical underpinnings (Booth 2011; Hilderbrand 2002). The

argument was that differences in economic growth and development among developing countries can be explained by the differing quality of the institutions responsible for economic management. But the relevance of politics to institutional change remained unappreciated by the aid agencies, thus, as Shirley argued, the new institutional economics was not good news for development assistance (2008: 76).

The concepts of ‘capacity development’ and ‘capacity building’ have a relatively weak intellectual pedigree within development theory. Capacity development and capacity building may be regarded as an amalgamation of various precursor concepts, including ‘institution building’, ‘institutional strengthening’, ‘human resource development’, ‘organizational development’, ‘community development’, ‘sustainable development’ and ‘institutional economics’, among others (Lusthaus et al. 1999; Morgan 2006; Kuhl 2009; Keijzer & Janus 2014). Due to capacity building’s evolution as a blend of precursors, different disciplines employ a ‘wide range of implicit mental frameworks about capacity’, various relevant actors hold diverse perspectives on capacity building work, and there exists ‘no broadly accepted definition’ of the concept (Morgan 2006). The lack of widely accepted definitional boundaries on ‘capacity’ has led capacity development to be regarded as an ‘umbrella concept’ (Morgan 1998) that can be used to link ‘previously isolated approaches to a coherent strategy with a long-term perspective and vision of social change’ (Lusthaus et al. 1999).

The nature of ‘capacity development’ as a catch-all term has proved to be both advantageous as an ‘integrating force that brings together a large number of stakeholders’, as well as disciplines and aid objectives, and disadvantageous due to the danger of the concept being ‘used as a slogan rather than as a term for rigorous development work’ (ibid.). As approaches to nation-building ranging ‘from the macro and the abstract ... to the micro and the operational’ may currently be packaged and legitimized as capacity development by donors and civil society organizations and thereby garner broad-based support, there has been little movement among these actors to make the concept of capacity any less ‘puzzling, confusing, and ... vacuous’ (Morgan 2006).

Examples of different organizations’ own definitions of capacity development may aid in illustrating how capacity can be broadly understood and stretched to back a wide variety of aid initiatives. Definitions employed by the United Nations Development Programme (UNDP), the World Bank, the Organization for Economic Cooperation and Development (OECD), and the Canadian, German, and American development agencies are provided in Table 1.1.

Across the many definitions, there appears consensus that capacity building should be driven by local demands and contribute to sustainable development of institutions and societies. However, aside from these broad similarities, it seems that various perspectives on capacity building are

4 Capacity building

Table 1.1 Definitions of capacity development by selected development agencies

Agency	Definition
UNDP	Capacity development: ‘the process through which individuals, organizations, institutions and societies develop abilities to perform functions, solve problems and set and achieve objectives’ (UNDP 2006)
World Bank	Capacity development: ‘A locally driven process of transformational learning by leaders, coalitions and other agents that leads to actions that support changes in institutional capacity areas – ownership, policy, and organizational – to advance development goals’ (World Bank)
OECD	Capacity development: ‘The process by which individuals, groups and organisations, institutions and countries develop, enhance and organise their systems, resources and knowledge; all reflected in their abilities, individually and collectively, to perform functions, solve problems and achieve objectives’ (OECD 2006)
CIDA	Capacity building: ‘A process by which individuals, groups, institutions, organizations, and societies enhance their abilities to identify and meet development challenges in a sustainable manner’ (CIDA 1996, in Lusthaus et al. 1999)
GIZ	Capacity development: ‘The self-driven process through which people, organizations and companies mobilize and build out their capabilities in order to achieve capacity’ (GIZ, translation)
USAID	Capacity building: ‘An on-going evidence-driven process to improve the ability of an individual, team, organization, network, sector or community to create measureable and sustainable results’ in terms of effectively ‘apply[ing] its skills, assets and resources to achieve its goals’ (USAID 2012)

simultaneously being employed (Lusthaus et al. 1999). One useful system for grouping these different approaches to capacity building, proposed by Lusthaus, applies the categories of organizational, institutional, systems, and participatory-process definitions. Organizational approaches to capacity development see ‘an entity, organization or even set of organizations as the key to development’ and therefore focus on the capacities of organizations, such as governments, non-governmental organizations (NGOs), and community organizations. Institutional approaches, inspired by institutional economics, understand institutions as ‘the formal and informal “rules of the game”’ and concentrate on building ‘the capacity to create, change, enforce, and learn from the processes and rules that govern society’. Systems approaches regard capacity building as ‘a complex intervention that encompasses multiple levels and actors, power relationships and linkages’ and suggest that capacity development should not create new systems, but should ‘build on what exists in order to improve it’. Finally, participatory-process approaches emphasize the importance of undertaking

capacity development within a 'participatory, empowering partnership for which those involved feel a high degree of ownership' (ibid.).

In 1998, the Canadian International Development Agency (CIDA) consultant Peter Morgan cogently argued that 'capacity building is a risky, murky, messy business, with unpredictable and unquantifiable outcomes, uncertain methodologies, contested objectives, many unintended consequences, little credit to its champions and long time lags'. In 2006, he began a study on capacity with the anonymous quote 'I can't define capacity, but I know it when I see it.' Both statements continue to characterize modern approaches to capacity: it remains a hazily defined goal that all actors can agree is important, but more specific formulations of the boundaries, methodologies, and objectives of capacity building remain deficient or even contradictory.

Capacity first emerged as a prominent concept within international relations with the Marshall Plan, under which the United States endeavoured to rebuild war-ravaged Europe after the Second World War. During this period, and increasingly as the Cold War escalated, the USA and various European nations understood efforts to build and strengthen developing countries' national institutions, especially within newly decolonized nations, as important to shore up political stability. The approach to capacity development as an integral aspect of international security was exemplified by the Truman Doctrine, announced in 1947, which pledged American aid to any democratic nation threatened with 'internal or external authoritarian forces' (U.S. State Department, Office of the Historian n.d.).

In the 1950s, development cooperation by industrialized countries was characterized by an 'industrialization-first', technical assistance-focused strategy with little soft technology transfer. In this period, industrialization was regarded 'as the engine of growth which would pull the rest of the economy along behind it', and development aid therefore consisted largely of investment in 'industrial activities and social overhead projects' (Thorbecke 2000). Accordingly, 'economic growth became the main policy objective' of development cooperation and gross national product (GNP) growth was adopted as 'both the objective and the yardstick of development' (ibid.).

From the 1960s till the 1980s, the aim of strengthening institutions and building human capital replaced GNP growth as the primary objective of development aid. This shift in focus towards institutional capacities and human capital evolved in response to the failures of GNP-oriented development strategies to cope with emergent problems, including unemployment, unequal income distributions, high poverty rates, growing urban congestion, and foreign indebtedness, as well as the increasing prominence of endogenous growth theories (ibid.). The emergent governing discipline, based on the endogenous growth school, identified 'low human capital endowment as the primary obstacle to the achievement of the potential scale economies that might come about through industrialization' and

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therefore prioritized allocation of resources to research and development activities and spillovers of know-how from one firm or industry to others (ibid.).

Another new framework for the development process that rose to prominence in the 1980s and contributed to the modern understanding of capacity building was new institutional economics, based on the concept that ‘appropriate institutions and rules of the game are essential to provide pro-development and anti-corruption incentives’ (ibid.). Under this framework, differences in economic growth and development among developing countries are attributed to discrepancies in the quality of institutions responsible for economic management. New institutional economics, however, was prone to concentrate on the technical and mechanical aspects of institutional change at the expense of nuanced considerations of political conditions and other local circumstances (Shirley 2008).

Out of the endogenous growth and new institutional economics paradigms dominant in the 1980s emerged the concept of capacity development/capacity building, which became ‘the buzzword of development in the 1990s’ (OECD 2006). The World Bank is regarded as the initiator of this concept, although other development agencies later started employing the term ‘capacity development’. Some commentators find no basic difference between these two terms (Vincent-Lancrin 2007), while others argue that there is: capacity building starts from scratch, while capacity development is a process beginning from an existing base (Kuhl 2009; Pearson 2011a).

Drawing on the endogenous growth school, capacity building emphasized ‘the need to build development on indigenous resources, ownership and leadership and by bringing human resources development to the fore’ (OECD 2006). Simultaneously, the collapse of the Soviet influence in Europe and Asia and the ‘sluggish response to the first generation of economic reforms in Africa’ underscored the importance of institutional factors to development, leading to the prioritization of building institutional capacities (Booth 2011). As the development community shifted its focus from an overarching aim of ‘*assistance*’ to a less dependent “help yourself” attitude’ throughout the 1990s, agencies zeroed in on capacity building/development as the organizing theme for aid efforts (OECD 2006).

Since the turn of the millennium, there have been four high-level deliberations on aid effectiveness: in Rome in 2003; in Paris in 2005; in Accra in 2008; and in Busan in 2011. Beginning in particular with the Paris Declaration on Aid Effectiveness in 2005, ‘systems’ development became a focus of aid delivery. Over this period, the shibboleth of development cooperation began to shift from ‘aid effectiveness’ to ‘development effectiveness’ (Mawdsley et al. 2014). The landscape of development cooperation continues to change, with new donors emerging from both the Global North and the Global South, and more prominent participation of other stakeholders, including civil society groups.

Whatever the case, there is as yet no consensus on what capacity building/development actually means or entails. Most of the aid agencies have defined it in their own way. But there appears to be a consensus that capacity building must include individuals, institutions/organizations and systems that collectively enable effective development. However, based on an increasing number of sociological studies, Kuhl (2009) argues that development assistance can no longer be primarily explained by the needs of developing countries, rather, one has to consider the search for acquiring legitimacy for continuing development assistance within the domestic constituencies of the industrial world. Regardless, capacity building and capacity development appear to have come to stay as the primary terms in the jargon of international development. And now the concept has spread to environmental and climate change governance. Since the UNFCCC uses the term 'capacity building', this book will go with it. We will now turn briefly to chart the breadth and spread of the term in the domain of global environmental governance.

Capacity building is an integral part of global environmental governance

Since 1991/1992, the concept of capacity building has become part and parcel of the five 'Rio Conventions' and almost all other environmental agreements and protocols. The reason is obvious: environmental management, particularly of cross-border pollution problems, was a new phenomenon in the last three decades, when countries, particularly developing ones, did not have any experience in dealing with them. Earlier decisions relating to capacity building were taken by the Commission on Sustainable Development at its fourth (1996), fifth (1997) and sixth (1998) sessions and by the United Nations General Assembly at its Special Session to review the implementation of Agenda 21 (1997). The UN General Assembly Resolution (UN, A/RES/50/120 Art. 22) of 1997 refers to the 'objective of capacity-building' as 'an essential part of the operational activities of the U.N.'. So capacity building for environmental management in developing countries has become part of development cooperation, as displayed below by examples of several multilateral environmental agreements with provisions explicitly dedicated to capacity building:

- *The 1987 Montreal Protocol* on protecting the ozone layer in Article 9 called for all its Parties to
 - co-operate, consistent with their national laws, regulations and practices and taking into account in particular the needs of developing countries, in promoting, directly or through competent international bodies, research, development and exchange of information on:

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- a best technologies for improving the containment, recovery, recycling, or destruction of controlled substances or otherwise reducing their emissions;
 - b possible alternatives to controlled substances, to products containing such substances, and to products manufactured with them; and
 - c costs and benefits of relevant control strategies (UNEP 2000).
- *The 1992 Earth Summit* recognized capacity building as one of the means of implementation for Agenda 21, the global blueprint for sustainable development. Chapter 37 of Agenda 21 gave particular focus to national mechanisms and international cooperation for capacity building in developing countries (Chapter 37: 1).
 - *The UN Framework Convention on Climate Change* (UNFCCC) in Article 6 laid out a plan for promoting education, training and public awareness of climate change. We will return to this later.
 - *The Convention on Biological Diversity* (CBD), Articles 13 and 18 discussed the need to build capacity in developing countries, as did the *UN Convention to Combat Desertification* (UNCCD) in its Article 19.
 - *The 2001 Stockholm Convention* Article 10 called for ‘Public information, awareness and education’, by ‘Provision to the public of all available information on persistent organic pollutants, and the development of educational and public awareness programmes [and for] Public participation [and] Training of workers, scientists, educators and technical and managerial personnel.’
 - *The Nagoya Protocol* on sharing the benefits of biodiversity in its Article 22 agreed that

[its] Parties shall cooperate in the capacity-building, capacity development and strengthening of human resources and institutional capacities to effectively implement this Protocol in developing country Parties, in particular the least developed countries and small island developing States among them, and Parties with economies in transition, including through existing global, regional, sub-regional and national institutions and organizations.

In particular, it called for attention to Parties and groups’ ‘capacity to implement, and to comply with the obligations of, this Protocol’; their ‘capacity to negotiate mutually agreed terms’; their ‘capacity to develop, implement and enforce domestic legislative, administrative or policy measures on access and benefit-sharing’; and their capacity ‘to develop their endogenous research capabilities to add value to their own genetic resources’ (Convention on Biological Diversity n.d.).

- The latest global action agenda, the *Sustainable Development Goals* (SDGs) for 2030, prominently highlights the need for capacity building. SDG target 17.9 of the 2030 Agenda for Sustainable Development

is the dedicated target to capacity building and aims to ‘Enhance international support for implementing effective and targeted capacity-building in developing countries to support national plans to implement all the sustainable development goals, including through North-South, South-South and triangular cooperation.’ The means of implementation have been agreed to include the mobilization of financial resources as well as capacity building and the transfer of environmentally sound technologies to developing countries on favourable terms, including on concessional and preferential terms, as mutually agreed. Member States also commit respectively in paragraphs 109b and 109c ‘to strengthen their national institutions to complement capacity-building’ and

ensure the inclusion of capacity-building and institution-strengthening, as appropriate, in all cooperation frameworks and partnerships and their integration in the priorities and work programmes of all United Nations agencies providing assistance to small island developing States in concert with other development efforts, within their existing mandates and resources.

Among the Means of Implementation listed under Chapter VI of the outcome document of the Rio +20 Conference, called ‘The Future We Want’, capacity building is the subject of paragraphs 277–280. Member States commit to emphasizing the need for enhanced capacity building for sustainable development and strengthening technical and scientific cooperation, to call for the implementation of the Bali Strategic Plan for Technology Support and Capacity-building, adopted by UNEP and to invite relevant agencies of the UN system and other international organizations to support developing countries, especially least developed countries, in capacity building to develop resource-efficient and inclusive economies.

Looking at the array of these multilateral environmental agreements (MEAs) and the sustainable development goals agenda, it is clear that there exist several synergies that together form a set of generic needs for capacity building across agreements, such as the capacity for the formulation of action plans and programmes to address the problems in question, developing plans for compliance with the MEAs, including periodic reporting obligations, sustainable management of natural resources and participation in MEA negotiations. The UN General Assembly Resolution 69/237 of 19 December 2014 on building capacity for the evaluation of development activities at the country level requires the UN Secretary General to provide an update on progress made in building capacity for evaluation. Across all these initiatives, it has been agreed that LDCs be given preference in efforts to build capacity. However, there are MEA-specific capacity building needs in each case. The next section will focus on the specific provisions and decisions undertaken within the UNFCCC, the focus of this book.

Capacity building under the UNFCCC, the Kyoto Protocol and the Paris Agreement

Though little discussed, capacity building has been a part of negotiations under the UNFCCC since its inception in 1992. Article 6 of the Convention is dedicated to promoting education, public awareness, and public access to climate change information, public participation in addressing climate change, and training of scientific, technical and managerial personnel. In a similar vein, the Kyoto Protocol in its Article 10 (paras d and e) proposes strengthening research capacity, education and training of personnel in developing countries. Below is a brief timeline of capacity building developments under the recent rounds of the UNFCCC:

- The Marrakech Accords at COP7 elaborated the capacity-building agenda, setting a framework, guiding principles, priority areas, with particularly vulnerable country needs to be given preference (UNFCCC 2001).
- In 2011, COP17 created the Durban Forum on Capacity Building (UNFCCC 2011), a multi-stakeholder forum, which meets annually during negotiations to share ideas and best practices relating to climate change; the fifth meeting of the Forum took place in Bonn in May 2016.
- At COP18, in 2012, Parties adopted the eight-year Doha Work Programme on Convention Article 6, which requested an annual in-session Dialogue on Article 6 issues (UNFCCC 2012).
- In 2014, the UNFCCC Secretariat launched a Web portal on capacity-building activities.
- In 2014, at COP20 in Lima, Parties decided to have an annual Ministerial Dialogue on Article 6, to sensitize the political leadership to the issues of education and public awareness (UNFCCC 2014).
- Finally, at COP21, Parties established the Paris Committee on Capacity Building (PCCB) in order ‘to address gaps and needs ... including with regard to coherence and coordination in capacity building activities under the Convention’ (UNFCCC 2015). The text directs the Subsidiary Body for Implementation to organize annual in-session meetings of the Paris Committee on Capacity Building, develop its Terms of Reference, instructs the Paris Committee on Capacity Building to oversee a work plan for the period 2016–2020; COP21 also establishes the Capacity Building Initiative for Transparency (CBIT) (ibid.), to strengthen national institutions to meet Article 13 provisions.

What is the outcome of all these provisions and decisions in the last decade?

Development cooperation by industrial countries in the form of technical assistance began in the 1950s. Since then, it has appeared under many different names and forms, and this idea of capacity building has gained a certain momentum of its own in development circles and environmental governance negotiations. But what has been accomplished, and what still requires attention?

With long years of experience in attending climate negotiations with the Bangladesh delegation, Khan, a co-author of this book, observed that since 2001 capacity building as a negotiation agenda had almost always been a low-key issue, with no serious disagreements between industrial and developing country delegates. Like motherhood and apple pie, who could be against building the capacity of developing nations to negotiate and manage climate change impacts and plan the shift to the green economy?

Disagreements sometimes surfaced about the role of the UNFCCC in the implementation of capacity building measures. Currently, about 12 organizations within the UNFCCC alone, together with a larger number of other multilateral and bilateral agencies, are involved in capacity-building activities (Dagnet & Northrop 2015). At COP21 in Paris, delegations from the Global North maintained the argument that support for capacity-building initiatives should continue through their national development agencies, and not be taken over by the UN, with substantial control by recipient countries. However, delegates from the Global South have been pushing for a greater UNFCCC role, as there is currently no central agency to ensure coherence and coordination among so many disparate agencies and processes pursuing the capacity-building agenda. The Paris Committee on Capacity Building (PCCB) established under the UNFCCC could potentially play this coordination role, but its budget, authority and remit – in short, its own capacity – are uncertain. Will other existing agencies and parts of the Convention hierarchy and those in development agencies and multilateral bodies give up their own authority and turf to allow the PCCB to effectively coordinate activities? Everyone likes to talk about coordination, but few like to be coordinated, i.e. told what to do.

Second, in the technical assistance programmes of capacity building, private consulting firms – usually from donor countries – have usually been commissioned to do the job. When a lack of capacity is observed in a developing country by an aid agency wishing to help in area X, one or two consultants have typically been ‘parachuted in’: they organize some workshops and training programmes, the project gets done, and it all ends with the submission of a project report. This renders capacity building mainly an input-based, supply-driven, short-term, and ad-hoc exercise. In this classic model, no capacity building ‘systems’ were left behind to carry the task forward (Huq 2016). Such donor-driven exercises by foreign experts

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might even harm local capacity-building initiatives and undermine local knowledge and management systems (Godfrey et al. 2002). Capacity building is a long-term iterative affair, but aid agencies have built-in incentives to grind out project completion reports which document short-term output-based results. There is the contrary experience of some countries which have managed an endogenous process of increasing capacities, where development cooperation played a stimulating, but not decisive, role (Kuhl 2009).

There is virtually no research to date on how much money has been spent on work to build capacity in the area of climate change. Some estimates suggest that one-third to one-fourth of annual foreign assistance in different areas might go to some form of capacity building, with an overwhelming share spent by bilateral agencies (Morgan 2006; Victor 2013). Since capacity building as a cross-cutting issue often remains a component of other projects, it is difficult to quantify the total funding specifically dedicated to capacity building for climate change, but even generous estimates would probably conclude that funding for capacity building in this area remains very poor (Chen & He 2013). That is, most work is done as ‘projects’, without developing the institutional structures in countries that could autonomously handle climate change mitigation and adaptation issues in future years.

Fourth, the private sector is largely absent in capacity-building activities, except perhaps in the insurance sector, which is a direct profit-earning venture (Victor 2013). But the private sector is a major stakeholder in the capacity-building agenda. Significant work is needed to envision and develop ways for private businesses to advance national climate efforts.

Finally, there is a sizeable literature on aid effectiveness, but few such assessments of capacity-building activities. Capacity building involves both software and hardware, as new knowledge, skills and technologies are needed, which can then create an enabling environment for learning and research for individuals and institutions over the long term. Morgan (1998: 6) cogently argued 20 years ago that ‘capacity building is a risky, murky, messy business, with unpredictable and unquantifiable outcomes, uncertain methodologies, contested objectives, many unintended consequences, little credit to its champions and long time lags’. It will take a new perspective on the concept, and a new set of institutional incentives, to build real capacity.

Time for a fresh approach to developing a global strategy on capacity building

The question of aid effectiveness has been a concern in development cooperation since it began decades ago. As development engineering in varied soils is often a process of ‘learning by doing’, themes and strategies for ensuring aid effectiveness have changed consistently. Beginning with

institution building and institutional strengthening in the 1960s and the 1970s, aid organizations have zeroed in on capacity building/development since the 1990s, as a strategy for fostering endogenous growth in developing countries through ‘good governance’ and ‘country ownership’ of exogenous assistance from development partners. Since 2003, there have been four high-level deliberations on aid effectiveness – in Rome in 2003, in Paris in 2005, in Accra in 2008 and finally in Busan in 2011. Beginning particularly with the Paris Declaration on Aid Effectiveness in 2005, ‘systems development’ was given focus in aid delivery, but so far very limited evidence is available on how the recipient countries themselves are managing capacity development strategies (Keijzer & Janus 2014). Meanwhile, the shibboleth of development cooperation is shifting from ‘aid effectiveness’ to ‘development effectiveness’ since Busan in 2011. As mentioned above, the landscape of development cooperation is also changing, with the arrival of new donors from both the Global North and the Global South, and some stakeholders including increased civil society participation.

In such evolving dynamics, the total number of aid projects/programmes has kept increasing, with hardly any capacity-neutral interventions, but things on the ground have changed little (Keijzer 2013). While some analysts hold both the donors and recipients responsible for this (Wood et al. 2011; Keijzer & Janus 2014), others argue that developing country donors are slow learners (Mawdsley et al. 2014) and lag behind the recipient countries in recognizing the principles of effective aid, such as mutual accountability and transparency (Gulrajani 2014). Obviously, inefficiency and ineffectiveness in capacity-building initiatives continue to linger, as stated in the UNFCCC third review (UNFCCC 2016), mainly because of short-lived project-based interventions by so many actors with little coordination among them.

This book is about overcoming the lingering gaps and lacunae in capacity-building activities exclusively devoted to addressing climate change. We would argue that the main indicators used to judge value for money for climate change capacity building should be whether in-country capacity systems and capacity suppliers have been left behind in each target country. This is how one can see the money being spent as ‘investment’ rather than as ‘expenditure’. Tackling climate change issues requires the building of long-term, sustained systems at national levels to carry out capacity-building functions for decades and generations to come. It is time to highlight the discrepancy between investing for capacity building and simply spending money on consultants.

Here the role of universities comes in. Universities are among the most enduring and sustainable institutions in existence, some being almost a thousand years old, and many have outlived empires and political regimes in some of the most fragile states in the world. Under Articles 11 and 12 of the Paris Agreement, investing in universities to set up and sustain capacity-building systems seems to be a no-brainer option (Hoffmeister et al. 2016).

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Every country, even the poorest, has universities which teach environmental science or geography, and they can be brought in to teach climate change issues and train young and not-so-young people for positions in government, non-profits, and the private sector to lead, manage and act directly on climate change. Some universities in developing countries are already taking the lead in developing Master's programmes for students and professionals. Winthrop and McGivney (2016) rightly argue that universities have acted historically as the main arbiters of knowledge and have proved to be powerfully rich soil in societies where the seeds of mass schooling have flourished. So universities have multiplier effects both up and down.

However, most of the universities, especially in the particularly vulnerable countries, lack resources, such as a budget to develop infrastructure, technical aids and even internet facilities for learning; many lack access to global knowledge and databases, have poor library collections, and poor or no research funds. The list goes on. Overcoming these barriers requires funding and appropriate programme development to offer degrees and short-course programmes to impart the specific skills relevant to address climate change. Low-cost, high-impact activities of universities could include global engagement of teachers, research collaborations, access to peer-reviewed knowledge, distance learning, student and faculty exchanges, and so on (Hoffmeister et al. 2016).

Instead of the existing donor-driven workshop and short training-based capacity building programmes led by foreign consultants, we need to create in-country suppliers of capacity building. We would argue that local universities can best play this role. Other knowledge generators, such as private companies, think tanks and NGOs, must join and contribute to this process, but let the universities be the central hub as the coordinator and validator of national capacity-building activities. Wood et al. (2011: xiv) support our point here:

The complex, long-term challenges of capacity development are the most important constraints for most countries, and these do not allow for 'quick fixes' or bureaucratically engineered solutions. However, partner countries can do more to identify priorities for strengthening capacities in targeted areas. Donors and agencies in turn can do more to support those priorities in coordinated ways, to strengthen country systems by using them and to reduce donor practices that undermine the development of sustainable capacity.

This book is exactly about how to address these problems.

Structure of the book

The book is divided into nine chapters. This introductory chapter lays out the context for the book, providing a snapshot of how capacity building

has been used in international development cooperation efforts and in international environmental treaties, regarding climate change in particular. In the process of telling this history we challenge the results/outcomes approach of past and current capacity-building initiatives, upon which donors have spent millions of dollars. What is the end result today? How much capacity and what kind of capacities have been built? Who led the process? Was it demand-driven or supply-driven? Are these efforts adequate to the problem at hand, which is developing the ability of a whole national society to respond to the crisis of climate change? Have any sustainable systems been left in place? If not, what are the gaps and lacunae in standard processes? In this introductory chapter we have argued that with the Paris Committee on Capacity Building established at COP21, it is time to think of a fresh approach to framing a global strategy that can overcome existing inefficiencies and ineffectiveness and devise a long-term sustainable capacity-building system in the developing countries. We suggest local universities as the logical focus of future capacity-building initiatives, and propose taking a new, long-term approach to supporting faculty and staff development, locally-run training programmes and research and educational programme cooperation with universities and agencies around the world.

Chapter 2 traces the evolution of capacity building as the framework of development cooperation since the 1950s, then zeroes in on the agenda of capacity building for climate change since the adoption of the UN Framework Convention on Climate Change (UNFCCC) in 1992 up to COP21 in Paris. In the process, the chapter discusses the evolution of institutions, mechanisms and processes dedicated to promoting the agenda of capacity building, the availability of funding for the purpose, etc. Since decision-making through negotiations among 195 disparate parties under the UNFCCC is very much a political process, this history also teases out the politics and role of actors in the adoption of the main elements and strategies of capacity building in addressing climate change. This chapter highlights the interests of development agencies and consulting firms, NGOs, universities and think-tanks in making capacity building happen in certain ways.

Continuing the historicized approach to capacity building by relevant stakeholders, Chapter 3 first traces experiences with capacity building initiatives in a few other multilateral development and environmental regimes where capacity building has been a significant component of development cooperation. Obviously, learning from their experiences, discovering the similarities and variations among them would be a welcome exercise to chart a new framework of capacity building under the Paris Committee of the UNFCCC. For that purpose, the experiences of capacity building under the regimes of the World Trade Organisation, the Regional Seas Programme in the Baltic and Mediterranean regions, human rights law, disaster risk reduction and the Montreal Protocol have been reviewed.

Taking into account the experiences of these regimes, Chapter 4 is devoted to establishing a capacity-building framework that is up to the task of addressing the challenge of climate change. It first traces the characteristic features of climate change as a complex, long-term, collective action problem, and then proposes capacity building framing elements, strategies and processes at different levels of action – individual, organizational/institutional and systemic. The suggested elements, strategies and processes, including the role of universities in such a framework, look at the demand and supply sides of capacity building and how a demand-driven approach can help create a long-term sustainable system of capacity building. In the process, the issue of ownership of capacity building through the agreed principles of partnership is critically analysed.

Chapter 5 is devoted to understanding the dynamics of climate change impacts in three case study countries: two least developed countries (LDCs), i.e. Bangladesh and Uganda, and a Caribbean small island state, Jamaica. These three country case studies were selected based on the understanding that LDCs' and Small Island Developing States' (SIDS') needs for capacity building are the greatest, and were also undertaken in order to explore realities on the ground in capacity-building activities during the past decade. The chapter analyses country-level information from Bangladesh, Uganda and Jamaica, beginning by presenting the three country profiles, their basic socio-economic parameters, the climate change impacts in these three countries and relevant project profiles, including national adaptation programmes of action (NAPAs) and Intended Nationally Determined Contributions (INDCs) to address the climate problem. A discussion of similarities and differences among capacity-building efforts in the three countries follows.

With findings from the three case study countries analysed, Chapter 6 makes an analytical review of capacity-building activities undertaken by the major bilateral and multilateral agencies, including the World Bank, Global Environment Facility, the Asian Development Bank (ADB), the African Development Bank (AfDB), the UNFCCC Secretariat and its thematic agencies, the Green Climate Fund, and the major bilateral agencies such as AusAid, CIDA, DANIDA, DFID, NORAD, SIDA and USAID. The chapter raises a series of questions about their past spending – how much money has been spent for the purpose, their regional and thematic distributions, whether the money spent so far is regarded as 'investments', or can be written off as 'expenditures', the processes by which spending was carried out and the end result and outcome/impact today. Finally, the chapter lays out the lessons learned from these practices.

The lessons learned from the case study countries and past global practices form the basis on which Chapter 7 establishes the vision of universities as the central hub of capacity building under the Paris Agreement. The rationale for making universities the central hub follows our thesis that universities as higher centres of learning and research are among the

most sustainable institutions in the developing countries. This argument is followed by the presentation of findings from the research on some universities in the three case-study countries, including their strengths and weaknesses, their collaboration with external partners, etc. The chapter ends by elaborating a roadmap of what can be done to make universities the core of a new global capacity-building initiative in terms of their infrastructures, funding, programme development and global networking.

Along with Article 13 of the Paris Agreement, which established an enhanced Transparency Framework for Action and Support, COP21 decided to create a Capacity Building Initiative for Transparency (CBIT). Chapter 8 elaborates how the purpose of CBIT, i.e. to build capacity to ensure accountability and transparency of all climate action under the Paris Agreement, especially greenhouse gas (GHG) emissions cuts by developing countries, can be realized. The tools, modalities and guidelines needed to ensure transparency in the monitoring of GHG emissions and climate finance, in both the developed and developing world, are analysed. This is followed by a snapshot of the state of affairs in transparency of actions in two case countries and the opportunities and barriers facing transparency, with a focus on the institutions and funding for capacity building needed to achieve accountability and transparency.

Chapter 9, the concluding chapter, deals with what is required as means of implementation for the capacity building framework proposed in Chapter 4, itself being a crucial means of implementation of the Paris Agreement and also of Sustainable Development Goal (SDG) # 13 on climate change. It elaborates how the proposed framework will address the many elements of the Paris Agreement to which capacity building is crucial, including adaptation and mitigation, the facilitation of technology development and deployment, access to climate finance, the transparent communication of information and relevant aspects of education, training and public awareness. So the chapter focuses on how to implement the framework, with the means and strategies necessary to enhance a long-term sustainable system of capacity building in developing countries to address climate change.

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Universities as the central hub of capacity building

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Conclusion

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