

Chapter 1

Introduction to the Volume: A Strong Case for Data and Observatories in the Context of the Post-2015 Monitoring Agenda

Half a century of development experience has pointed to several shortcomings in our approach to agenda setting. A stark reminder of one of those shortcomings is reflected in theory that purported to view development as progress along pre-determined *stages of growth*. Jagdish Bhagwati of Columbia University was quick to point out some of the contradictions of international aid based on a simplistic reading of how developing societies produced, saved, and invested their output (Bhagwati 2010). A simplistic reading of development led to a disproportionate emphasis on creation of infrastructure (*outputs that included dams and water treatment plants*). The post-2015 monitoring agenda will hopefully reflect the great distance we will have come from when we emphasized outputs to the present time when there has been a discernable shift in emphasis toward development outcomes (*water quality and agricultural productivity*) and impact in terms of human well-being and environmental sustainability (United Nations 2015).

In our most recent book, *Governing the Nexus*, the United Nations University (UNU-FLORES) has documented case studies and global experience to argue that the science-policy divide is at the heart of the disconnect between development and achievement of outcomes and impact both in terms of human well-being and environmental sustainability (Kurian and Ardakanian 2015a). We articulated the science-policy divide in the form of the following question: Why does statistical significance not always correspond with political action. Our research leads us to conclude that there are two important mismatches between the research enterprise and public policy formulation. The first is the absence of robust feedback loops. The second is a lack of imagination about the modalities concerning knowledge translation (Kurian and Ardakanian 2015b).

UNU-FLORES, in its role as a think tank of the United Nations system, recently established the Nexus Observatory¹ initiative to inform discussions on feedback loops and knowledge translation. The Nexus Observatory is an online platform that hosts *inter alia* databases, an online learning portal and dedicated data sets that rely on a consortium comprising UN agencies, member states, and regional universities and training institutes. The Nexus Observatory consortia demonstrate that feedback loops are important in highlighting the relationship between individual behavior,

¹<https://nexusobservatory.flores.unu.edu/>.

resource allocation by public agencies, and environmental outcomes. The scientific robustness of the initiative can be gauged by the extent to which regional consortia can calibrate their response to the impact of global changes such as urbanization, climate, and demography while accommodating for trends such as decentralization and the emergence of Information and Communication Technologies (ICTs) that have had a discernible impact on governance structures and processes (Kurian and Meyer 2015).

The Nexus Observatory initiative also underlines the importance of knowledge translation. Far from being a linear process involving uptake of scientific output, decision-making may entail having to “muddle through” based on important political trade-offs that may neither promote equity nor efficiency goals. While scientists endeavor to achieve precision with their results, an effective bridge to the policy domain could strive to do more in terms of making trade-offs explicit. This change in approach has several implications. First, it means we acknowledge the significance of decentralization—political, fiscal, and administrative—and its potential to affect decisions and development outcomes at scale. Second, it means that once trade-offs are made explicit, individuals and public agencies will be motivated to design incentives that foster synergies that address common challenges such as water scarcity or pollution. Third, for solutions to emerge, data that is reliable, frequent, and sufficiently well disaggregated is important to ensure that decision makers can predict the scale and intensity of the policy challenge and bring to bear a proportionate amount of human and financial resources to realize the achievement of clearly verifiable development outcomes and impact.

Data, its generation, collection, sharing and analysis, and its power to influence decision-making and support coordinated action in support of policy goals is what drives the functionality of the Nexus Observatory. The potential applicability of the Nexus Observatory as a tool for agenda setting and monitoring progress in sustainable management of environmental resources, provided the rationale for establishing the Africa Consortium on Drought Risk Monitoring. Through a focus on risk, it was possible to convince relevant ministries, Non-Governmental Organizations (NGOs), and donor agencies of the need to address issues of infrastructure operation and maintenance to support the delivery of critical public services such as water supply and irrigation. By collaborating with European universities, it also becomes possible to combine in situ data collection by regional partners with the power of remote sensing and earth observations to enable data analytics employing multiple mediums including mobile and GIS. In addition to supporting the development of robust feedback loops between science and policy, we hope such an endeavor will also identify opportunities for strategic engagement with the policy process based on analysis of cases of “success” and “failure” in international development.

This volume provides the theoretical basis for pursuing the idea of a web-based observatory that addresses the science-policy divide in environmental governance. We posit that the absence of disaggregate, reliable, and frequent information at appropriate scales makes it difficult to predict the environmental outcomes of infrastructure construction. Moreover the absence of regional capacity to collect,

analyze, and transmit information to decision makers curtails the ability of governments to respond to disaster risks effectively. As a consequence the possibility of establishing a robust system for monitoring international development goals (e.g. Sustainable Development Goals) is curtailed.

We have organized the volume into three chapters that demonstrate the need for a perspective that treats environmental resources, the services they support, and the risks that disasters pose to effective delivery of services in a holistic manner. This would enable us to reflect critically upon the strength of the poverty-environment nexus while guiding us with the design of programs and projects focused on addressing the challenges of environmental sustainability. In constructing our argument, we draw upon five cases from Philippines, India, Laos, and Honduras to elaborate upon five divides that characterize environmental governance today: (1) infrastructure versus services, (2) centralized versus decentralized government, (3) public versus private management models, (4) short-term versus reliance on long-term planning perspectives, and (5) efficiency versus equity (Kurian and Ardakanian 2015b). The cases we draw upon cover water, soil and waste resources, services and associated disaster risks.

References

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