Building Pathways to Greener Growth

Day 3: Managing Deep Uncertainty

June 5, 2013, Bogor, Indonesia

Day 3 of the workshop is reserved for participants from Indonesia, the host country. The World Bank, in partnership with the Red Cross/Red Crescent Climate Centre, will present a technical deep dive on how to make good decisions despite deep uncertainty about the future. This will complement the Day 2 technical discussion, Session 6B: Decision Making in a Changing World.

Today more than ever, decision makers need ways to design good policies and projects in the face of deep uncertainties, including climate change.[1] Traditional decision-making, which focuses on predicting the future, can leave societies paralyzed by uncertainty or dangerously vulnerable to natural and manmade hazards. Instead, in a fast-changing and complex world, good decisions are *robust*: they work well in many possible futures even if they are not optimized to any single prediction. Robust decision-making (RDM) is an approach that helps identify robust decisions by focusing attention on the strengths and limitations of plans, rather than on predictions of the future.

Robust decision making methods are not always intuitive or inexpensive: they involve a new way of thinking about decision making. To help make these concepts accessible and practical, the World Bank and the Red Cross/Red Crescent Climate Centre, with support from the German Federal Ministry for Economic Cooperation and Development (BMZ) and Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH, have created "serious games" for managing uncertainty. Blended with technical conversations and group discussion, the interactive games will expose participants to the principles of robust decision-making and basic tools for policy design and implementation in the face of deep uncertainty.

Participants will take part in, and simultaneously help refine, an experimental approach to capacity building that in future could be replicated around the world to the benefit of policymakers, technical experts, development practitioners, and more.

This training activity is part of the World Bank's work on "Data and Decision-Making Tools for Green Growth," an Affiliated Program of the Green Growth Knowledge Platform.

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[1] Deep uncertainty refers to a situation in which analysts do not know or cannot agree on (i) models that relate key forces that shape the future, (ii) probability distributions of key variables and parameters in these models, and/or (iii) the value of alternative outcomes. For more see Hallegatte and others, "Investment Decision Making Under Deep Uncertainty—Application to Climate Change," World Bank 2012: http://documents.worldbank.org/curated/en/2011/11/15534481/growth-green-growth-framework.

8:30-9:00	Arrival and Check-in
9:00-9:45	*Setting the Scene* Ms. Marianne FAY, Chief Economist for Sustainable Development, World Bank *Cost-Benefit Analysis as a Decision Support Tool* Mr. Ulf NARLOCH, Environmental Economist, World Bank
9:45-11:15	*Explanation of the Day and Elaboration on "Serious Game" Play* Mr. Pablo SUAREZ, Associate Director for Research and Innovation, Red Cross/Red Crescent Climate Centre *Game 1: "Rain and Risk"* Facilitated by Mr. SUAREZ *Discussion of Game 1* Facilitated by Ms. Janot MENDLER DE SUAREZ, Visiting Research Fellow, Pardee Center for the Study of the Longer-Range Future, Boston University
11:15-11:30	Break
11:30-12:10	*Predict-then-Act: The Virtues and Limits of Cost-Benefit Analysis* Mr. NARLOCH *"The Cone": The Pitfalls of Prediction* Mr. SUAREZ
12:10-12:30	*Uncertainty and "Deep" Uncertainty* Ms. Nidhi KALRA, Senior Decision Scientist, World Bank
12:30-13:30	Lunch
13:30-15:15	*Game 2: "Robustness in the River Basin"* Facilitated by Mr. SUAREZ *Discussion of Game 2* Ms. MENDLER DE SUAREZ
15:15-15:30	Break
15:30-16:15	*Decision-making under Uncertainty* Ms. KALRA
16:15-16:50	*Discussion of the Day*
16:50-17:00	*Conclusions* Ms. FAY

The Green Growth Knowledge Platform (GGKP) is a global network of researchers and development experts that identifies and addresses major knowledge gaps in green growth theory and practice. Through widespread consultation and world-class research, the GGKP provides practitioners and policymakers with policy guidance, good practices, tools, and data to support a green economy transition.

The GGKP embodies a knowledge partnership among the African Development Bank, Climate & Development Knowledge Network, Environment for Development Initiative, Global Green Growth Institute (GGGI), ICLEI-Local Governments for Sustainability, International Labour Organization (ILO), International Trade Centre (ITC), Nordic Development Fund (NDF), Organisation for Economic Co-operation and Development (OECD), United Nations Department of Economic and Social Affairs (UN DESA), UN Development Programme (UNDP), UN Environment Programme (UNEP), UN Industrial Development Organization (UNIDO), and World Bank. Its founding members (GGGI, OECD, UNEP, and World Bank) comprise the GGKP's governing council. The GG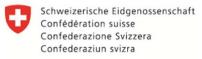KP is financially supported by the Swiss Confederation.