Managing Deep Uncertainty in Development and Humanitarian Aid
- An Info-Gap Approach -

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Abstract

The search for ever better outcomes should guide one in planning and action in many areas of human endeavor. However, uncertainty, ignorance, and surprise may jeopardize the achievement of optimal outcomes.

The concept of an innovation dilemma assists in understanding and resolving the planner's challenge. An innovative and highly promising new policy is less familiar than a more standard approach whose implications are more familiar. The innovation, while purportedly better than the standard approach, may be much worse due to uncertainty about the innovation. The resolution (never unambiguous) of the dilemma results from analysis of robustness to surprise (related to resilience, redundancy, flexibility, etc.) and is based on info-gap decision theory.

Info-gap theory provides decision-support tools for managing the challenges of planning and decision under deep uncertainty. We discuss the method of robustly satisfying critical requirements as a tool for protecting against pernicious uncertainty. We also describe the method of opportune windfalling as a tool for exploiting propitious uncertainty.

These ideas will be illustrated by considering three examples: humanitarian assistance for timely recovery from catastrophe, the amelioration of rural poverty, and the paradox of learning.

Selected References (see also info-gap.com)

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