

The Raffles Review

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Change, Complexity and Uncertainty



Empowered lives.
Resilient nations.

SOURCE

The report [*Managing Complexity and Uncertainty in Development Policy and Practice*](#) was published by the [Overseas Development Institute](#) in March 2015 for its [Doing Development Differently](#) series. It draws together thinking on uncertainty, elicits insights about how change happens, and highlights tools that provide a more dynamic analysis of change processes.

BIG IDEAS

- 1) People are embedded in complex systems inseparable from their environment where decisions are subject to random influences. They generate and respond to changes in the behaviours of others around them and the larger environment.
- 2) Complexity can be illustrated by the diverse incentives and motives that drive people's behaviours, but can be managed by understanding how change happens and the interactions between people, institutions and systems.
- 3) Collective action problems arise when stakeholders have different immediate interests that harm aggregate, longer-term interests, but can be corrected by institutional responses and reform, with agreement to act collectively in the shared best interests.
- 4) Stakeholder mapping risks presenting a static picture of stakeholder interests that inadequately specify relationships and linkages or how they change over time. *Agent-based modelling* and *multi-agent social simulations* are more sophisticated stakeholder analysis.
- 5) Fundamental reforms and wholesale institutional change often happen in times of crisis, but chance and 'luck' can also play a role in driving 'peace-time' reform agendas. Successes can happen when reform processes allow 'room for manoeuvre'.
- 6) Unplanned changes can take the form of *combinatorial explosions* (bottom-up aggregation meets top-down disaggregation), *information cascades* (change adapts over a network), or *niche construction* (adaptation to change creates niche spaces and strategies).

IMPLICATIONS FOR PUBLIC SECTOR REFORM

In the face of complexity and uncertainty, development practitioners can ensure programmes and policies keep up with change, evolve in response to new inputs, prepare for the multiplicity of possible futures, and allow for strategies to change over time.

- Replace technocratic planning practices with adaptive and iterative programming, which looks for piecemeal, practical solutions that can be scaled up.
- Design policy and programming responses that foster innovation and variation, monitoring and learning throughout, and are flexible enough to adapt to emerging signals.
- Adopt models of 'development entrepreneurship' that draw on private sector approaches like rapid cycles of testing and refinement, and politically savvy programming.
- Embrace experimentation, adaptability, resilience, collective learning and collective problem-solving.
- Disregard the view of development as merely the sum of successful projects, and approach it as the process that enables a society to produce its own varied adaptive solutions.
- Work towards sustainable solutions that foster the capacity of individuals and groups to self-organise, learn and adapt, and that lead to the creation of self-reliant systems and more inclusive outcomes.