Incorporating stakeholder views in policy planning through scenarios:
ESPA Deltas experience in Bangladesh
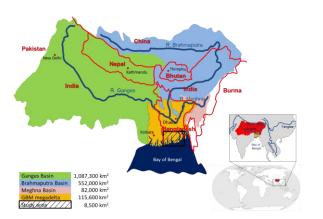
Andrew Allan
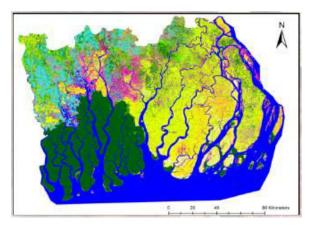**Centre for Water Law, Policy and Science**
University of Dundee

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ESPA Deltas: Project Aims

In Coastal Bangladesh

- To understand the present relationship between ecosystem services and human well-being and health.

- To project how these ecosystem services might evolve over the coming years and decades (up to 50 -100 years)

- **To analyse how policy can influence these outcomes and promote ecosystem services and human well-being and health.**

- **To select robust policies that are effective across the range of uncertainty.**

- **Using participatory approaches.**

Process So far

- Stakeholder mapping process identified main stakeholders at national level mainly (separate process at more local level)
- Around 60 institutions interviewed and actively involved in scenario development process, including:
  - Government ministries and international organisations
  - Donors
  - Academics and experts
  - Representative NGOs
- Main issues in the delta that are of concern to stakeholders derived through interviews 2012-3, and through local level workshops held winter 2013-4

Process So far

- Scenario development process developed, inspired by the IPCC Shared Socioeconomic reference Pathway (SSP) approach that has been used in AR5 process.
  - Adopting a scenario-based narrative of possible (and plausible) futures allows responses to environmental and social changes over time to be explored in a way that accommodates the huge levels of uncertainty involved.
  - Also facilitates integration of stakeholder views with science.
- In ESPA Deltas, the scenario approach allows us to take the issues of concern and project how they *might* look in 2050, on the basis of three differing downscaled climate projections.
- Next slide breaks down issues further, though does not reflect downscaled version

Natural resource management	Food Security	Health / Livelihoods/Poverty	Governance
• Salinity/freshwater • Flow dynamics/ riverbank erosion and sedimentation • Land-use • Coastal defence • Impact of extreme weather events • Conservation effort • Management (local involvement)	• Availability and Access • Water security • Nutrition • Agriculture production systems/R&D • Household equity • Market dynamics • Seasonality	• Migration • Remoteness/Com munication/infras tructure • W.A.S.H • Changes in livelihoods • Utilization of ES • Disease • Frequency and intensity of disasters • Gender	• Coordination & collaboration (sectoral and geographical) • Power structure/Conflict • Human & financial capacity/Awareness/extensi on agents • Role of NGOs/Civil Society/Private sector/farmers' assn, public organizations • Transparency/Access to information/accountability • Land management/zoning and distribution • Transboundary (India, China) • Planning • Maintenance of existing infrastructure • Rules & regulations & local level policy, local courts • Service delivery efficiency

Q2Q (Qualitative – Quantitative):

- Each issue broken down still further (to c. 100 separate elements) by stakeholders
- Stakeholders determined how they expected each element to look in 2050 (e.g. worse? Better? How much?) across chosen scenarios
- Internally and mutually consistent Qualitative (narrative) scenarios agreed (each around 1,500 words)
- Modellable elements quantified and agreed (c.40% of above elements)
- Integrated model run, incorporating multiple biophsyical model inputs, with poverty/health survey results

Proposed policy / management interventions

- Results of modelling runs presented to stakeholders for comment/refinement through series of workshops in 2015
- Attendees (from across sectoral spectrum) will be able to propose interventions (policy, infrastructural, management, legal)
- Re-run model results, incorporating proposed interventions, to be presented 2 months later
    - Crucially, should highlight correlated impacts of interventions across poverty/health, and biophysical environment
- Subsequent re-runs of the modelling work, using same iterative process, will hopefully facilitate better understanding of interventions that work across broadest range of uncertainty, and incorporate stakeholder preferences throughout

Acknowledgements