Climate change responses in a context of uncertainty

The importance of social learning and decision-making processes

Climate change presents several challenges to planning and implementation of policies and programmes. There are significant uncertainties regarding future climate change. Precipitation projections from climate models do not converge well for many parts of the world. There may be sudden tipping points with implications for both long-term infrastructure decisions and large investments and shorter-term interventions. Climate change in the future may undermine current decisions; people and businesses may invest in livelihoods and enterprises that will need to alter. Current decisions may need to be adjusted to account for a range of future possibilities. Adaptation decisions will need to be taken pre-emptively to avoid large costs, losses and damage.

The main challenges from climate uncertainty are: the uncertain nature of evidence, the multi-sectoral nature of climate effects, the long cause and effect timeframes, and the likelihood of differential impacts on marginalised groups.

There is a concerted focus on improving climate science and the delivery of climate information services to address some of these issues. However, so far there is limited evidence of uptake of climate information in policymaking and its sustained use through to adaptive management of implementation. There is also scant evidence of whether such climate-informed policymaking and use of climate science can ensure inclusive outcomes at different scales.

A number of approaches have sought to improve decision making and the use of relevant evidence for complex problems in different contexts. Social learning is one approach that facilitates knowledge sharing, joint learning and co-creation experiences between particular stakeholders around a common issue, taking learning and behaviour change beyond the individual to networks and systems. Through a facilitated iterative process of working together, in interactive dialogue, exchange, learning, action and reflection, and ongoing partnership, new shared ways of knowing emerge that lead to changes in practice.

Climate uncertainty refers to that which is not known or well understood about how the climate will change over different timeframes.

WHY IT IS IMPORTANT

Significant uncertainties around future climate change challenge the implementation of policies and programmes. Mobilising action that can respond to climate change and be flexible enough to learn from new experiences as well as adapt to unknowns is difficult, given traditional short-term timeframes, sector silos and the predominantly top-down nature of planning cycles. Process-driven approaches, such as social learning, offer a more flexible approach to tackling climate uncertainties. These approaches place the emphasis on building the capacity, knowledge and stakeholder relationships necessary to support first short-term and then longer-term decision making and action, rather than relying only on the outcome of a strategic document or climate information system. As climate finance flows increase, and increasing efforts are made to support national planning, it is crucial that the funds are well spent and that the key challenges of...
such approach: facilitating knowledge sharing, joint learning and co-creation of evidence among stakeholders around a common issue. Through iterative learning and reflection and action cycles, it can catalyse behaviour change and social mobilisation beyond the level of the individual to create systemic change. The four key dimensions of social learning are engagement and participation, capacity building and understanding, iterative reflection and challenging institutions.

There is some evidence on how social learning could support ways to address climate uncertainties, but there has so far not been a systematic attempt to learn from all the different process-driven approaches to assess which works best. The increasing number of examples of practice present a good opportunity to carry out such an assessment.

Our work in this area shows that engagement and participation and capacity building have led to changes that will support addressing climate uncertainties. Significant challenges remain with iterative reflection. There has been some success in addressing the climate uncertainty issues of multi-sectoral planning and including marginalised groups. Real challenges remain with developing effective processes that adequately address the long timeframes of climate change and the uncertainties in evidence. Creating the institutional change necessary to do this is also complex. These are areas that need further research to design processes that can facilitate adaptation that is attentive to longer timeframes and uncertain futures.

Looking ahead
A concerted effort is needed to learn more about the value of different processes for addressing future climate uncertainties. Emphasis should be on how social learning builds the capacity to support first short-term and then longer-term action, rather than relying only on the outcome of a strategic document or climate information system. Such an approach would also allow a more explicitly political approach, with an appreciation of power and incentives, rather than a purely technocratic method.

At IIED, we plan to develop an action-research programme that focuses on the importance of the process of planning. This will draw on social learning and other process-oriented approaches to navigate issues such as power, decision making and institutional openness to change.

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