How to scale up innovations to achieve transformative impact

Blog

21 December 2022
Colombo, Sri Lanka
Giriraj Amarnath, Mark Smith

Authors

Giriraj Amarnath[1] , Mark Smith[1]

[1] International Water Management Institute (IWMI), Battaramulla, Sri Lanka

Suggested Citation

Amarnath G., Smith M. 2022. *How to scale up innovations to achieve transformative impact*. CGIAR Climate Resilience Initiative.

Acknowledgments

How to scale up innovations
to achieve transformative impact

From soil-conservation measures and solar-powered irrigation, to index-based weather insurance and microfinance, many innovations exist that have potential to strengthen the resilience of smallholder farmers to climate change. This is important for food security, as households farming less than two hectares contribute up to 31% of global food production. They are also particularly vulnerable to climate shocks, while often having few assets to fall back on in emergencies. However, many potentially valuable interventions have only been piloted at the scale of a few hundred or a few thousand farmers. If they are to have a truly transformative impact they must be scaled up and made available to many millions of farmers. The question is how.

A process and framework for scaling-up change

At IWMI, we believe such transformation calls for four shifts in approach (Figure 1). First, we must *change the narrative* by connecting the top-down goals of globally binding international agreements with local communities. This calls for communication highlighting the benefits of locally led transformative change, the provision of local policy-making spaces, and vehicles through which community voices – including those of the marginalized, women and youth – can contribute views and knowledge. Taking this approach can help to avoid 'maladaptation' from imposed, inappropriate top-down interventions.

Changing the Narrative	Deepening the Analysis	Strengthening the Alliances	The Process of Change: Lesson Learned
• "Top-down" solutions of globally binding international agreements on emission reductions • Bringing "local voices" and policy making 'spaces' • Communicate "Local Led Adaptation" for transformation • Avoiding Maladaptation and need for social equity	• Unpacking Structures of Constraint for transformative progress • Capturing and Sharing Learning for Wider Dissemination • Strengthening Research and Evidence for Informed Policy and Practice	• Learning and experience sharing through participatory process • Fostering collaboration across scales • Foster Multiscale governance • Raising awareness of multiple co-benefits that climate action • Win – Win strategies	• New 'bottom-up' narrative of international climate action • Co-develop policy pathways • Transformative win-win narratives for diverse domains of climate adaptation and mitigation action at multiple societal scales

Amarnath et al. 2022 (Unpublished)

Figure 1: Four shifts in approach are needed to drive change at scale

Second, we need to *deepen the analysis* by undertaking research that unpacks the current constraints to transformative progress, and captures and shares this knowledge. This strengthened research and evidence can help to inform policy and practice going forward.

It can also feed into the third shift of *strengthening alliances* – with knowledge-sharing taking place through participatory processes, and collaboration fostered across scales. This shift also requires multiscale governance and increased awareness of the multiple co-benefits that taking climate action can engender.

Finally, the *process of change* must incorporate *lessons learned* so that the narrative of bottom-up international climate action becomes firmly established, along with co-developed policy pathways. This virtuous circle will result in transformative win-win narratives for diverse domains of climate mitigation and adaptation, at multiple scales across society. We believe this to be true based on knowledge we've gained at IWMI from piloting innovations such as index-based flood insurance (IBFI) and satellite-based flood and drought early warning systems. This experience has also enabled us to shape a framework – the **G4R** Framework – for securing the outlined shifts in approach.

Under the framework, governance institutions hold participatory *cross-sectoral dialogues* that feed into *consensus building* at local level – ultimately linking top-down climate action goals with individuals in communities. Once communities have come to a consensus on what action is appropriate for local change, *joint action* is taken between communities and facilitating entities such as CSOs and NGOs. During this process, *policy filtering* takes place whereby top-level strategies are informed by bottom-up needs and activities, helping to strengthen governance at all levels (Figure 2). Broadly speaking, this framework unites governance and participation, information and learning, infrastructure and technology, and system diversity and connectivity.
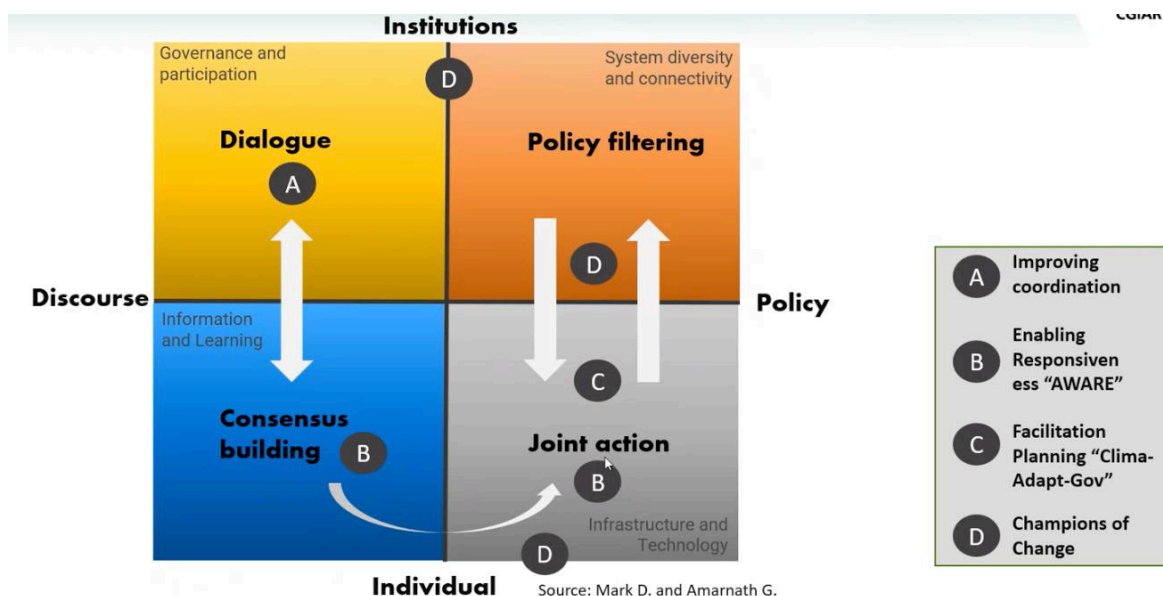

Source: Mark D. and Amarnath G.

Figure 2: The G4R Framework shows the process by which transformative change can be achieved.

For example, a farming community in India that is beset by floods and droughts might feel it needs to know when climate shocks are forecast, so it can take action to avoid the worst impacts. It receives information from institutions on potential ways to achieve this and comes to a consensus that a satellite-based early warning system would be appropriate, so that farmers are better informed on when to sow or harvest crops. Local NGOs, research institutes and extension workers might be involved in helping farmers gain access to the technology required. Then, lessons learned from the process are fed into policy so that different communities choosing to take similar action can learn from each other's experiences and avoid making the same mistakes.

Or, in Zambia, farmers might be opposed to government aims for the nation to become carbon neutral by 2050, which, in turn, are driven by the global climate agenda. A dialogue is established to provide information on why the action is needed and the potential benefits it might bring to farmers. A consensus is reached on a particular action to take – perhaps the provision of funding, technology or infrastructure that could support farmers to decarbonise their operations. Then local organizations contribute to make the action happen. Once implemented, lessons learned are fed into policy making at local and national levels.

Putting our ideas into practise

We are currently putting this framework into practise at IWMI in our leadership of the 'governance for resilience' arm of the program Building Systematic Resilience Against Climate Variability and Extremes (ClimBeR), which is applying science and innovation to support smallholders in Kenya, Morocco, Senegal, Zambia, Guatemala and the Philippines. We are following the process outlined above with a view to improving coordination, enhancing responsiveness to climate shocks, facilitating long-term planning for adaptation and nurturing champions of change across society to achieve transformative impact (A–D on Figure 2).

Specifically, we are building capacity for policies that match local needs with available tools, with the aim of developing governance systems that operate effectively across multiple levels and scales. As part of the work, IWMI is supporting nations to develop an 'awareness platform' – AWARE – to facilitate coordination across ministries to trigger action ahead of extreme climate events. Meanwhile, to help build long-term resilience, a dashboard – ClimaAdapt-Gov – is being developed in each country to guide national, sub-national and non-state actors to shape, rollout, monitor and evaluate a national adaptation strategy for their country. Along the way, we are supporting communities and institutions to identify suitable climate-adaptation champions.

While our focus at IWMI is on water, we believe that the **G4R** Framework can also underpin other transformative programmes on climate adaptation, from strengthening food security, biodiversity and land productivity, to enhancing human health and promoting peace.