Transformation: Theory and practice in climate change and development

Summary

There is growing debate on the need for transformational approaches to tackle the challenges facing development in the face of climate change. If current incremental approaches to preventing dangerous climate change and adapting to the change we are already locked into are insufficient, then more radical approaches may be required.

This briefing paper summarises research designed to create a set of characteristics of transformation that can help guide the development of policies and programmes to tackle climate change. It combined a documentary analysis of academic literature on transformation from diverse fields with interviews with climate change and development experts.

The scale of the climate change and development challenge is daunting. Global greenhouse gas emissions continue to grow and climate-related events are causing increasing damage, especially in developing countries. Practitioners, policymakers and academics have increasingly begun to question the potential limits of conventional approaches in delivering adaptation and mitigation. These limits arise both due to systems limits, such as sea-level rises that prevent traditional agricultural practices, and the inability of incremental changes to address structural drivers, such as the carbon lock-in effect of investments in coal and grid-based energy systems.

As a result, there is growing interest in the theory and practice of more 'transformational' approaches as a way of achieving larger step changes to meet climate change and development challenges. However, transformation has its roots in a variety of disciplines, leading to a lack of common definition of the term at an operational level.

This briefing paper is based on research that combined a documentary analysis of academic literature on transformation from diverse fields with interviews with climate change and development experts. The research process distils a set of characteristics of transformation that can help guide the development of policies and programmes to tackle climate change. These characteristics are arranged around three themes – Knowledge, Actors and Spaces.

Knowledge for transformation

- **Innovation and experimentation:** Transformation is commonly interpreted as radical change requiring innovation and testing of new approaches. This entails the generation of new knowledge and a markedly different way of doing things.
- **Power relations:** Successfully negotiating power relations

and helping individuals to be 'empowered' lies at the core of an intervention becoming 'transformational'. Success involves recognising the social and political processes underpinning vulnerability, building inclusive forms of governance, redistributing benefits and more equal access to resources.

BOX 1: Transforming voluntary organisations and their engagement with climate change

The Baring Foundation launched an initiative to support non-environmental voluntary organisations to explore how the impacts of climate change will affect their primary charitable purpose. As a result, the levels of understanding on climate change increased dramatically and organisations succeeded in seeing how climate change impacts their work.

This is considered as being transformational because it:

- contested the entrenched discourse which said that climate change is the remit of environmental NGOs
- spurred a process of reflection; initially the organisations were clear about their work not having any engagement with climate change but as the outreach continued, they reflected on their work and started to see how climate change impacts it
- looked at the organisational cultures/priorities of individual NGOs to frame the knowledge appropriately
- attracted substantial engagement from diverse organisations through keeping a space for sustained collaboration open

See Smerdon, M. (2009) An Unexamined Truth, London: Baring Foundation, www.baringfoundation.org.uk/UnexaminedTruth.pdf

- **Critical reflection, beliefs and values:** Transformation entails being aware of and challenging inherited ways of thinking, assumptions and biases, as well as recognising and negotiating power structures. This involves developing alternatives to entrenched and institutionalised positions, reflecting critically on one's own patterns of behaviour and addressing moral trade-offs in change processes.
- **Keeping the context in perspective:** For transformational initiatives to be successful they must take local and contextual dynamics of power into account and engage with local culture and politics. Those designing climate change and development initiatives must therefore ensure that they understand and mediate between the knowledge and interests of different stakeholders.

Actors in transformation

- **Effective leadership:** Leadership is important to processes of transformation because the need for transformation must be perceived, understood and communicated effectively. Leaders are needed to challenge the status quo and to provide alternate visions of what is possible. Leaders are also important as they can take advantage of policy windows and manage conflicts that may emerge during transformational processes.
- **Vision and future orientation:** A vision for change is crucial in transformation, developed in advance but often through trial periods and experimentation. Preparing strategies in advance enables them to take advantage of crises as opportunities for their uptake. Transformational initiatives are therefore oriented around long-term visions of the future.

BOX 2: Transformation in the Paris health system

The city of Paris invested substantial funds to equip the health system in a short span of time to avoid the high human and financial damage caused by heatwaves such as the one that hit the city in 2003. They invested in risk registers across the city, recalibrated their approach to urban planning, provided special training to health workers, upgraded hospital facilities, developed response plans and protocols, invested in better early warning and developed improved risk communication methods.

This is considered transformational because:

- it contested institutionalised positions on risk management
- there were radical innovations in the training of health workers, in urban planning and hospital infrastructure, etc.
- it greatly reduced the vulnerability of the city to similar events

See Confalonieri, U.; Menne, B. *et al.* (2007) Human health. Working Group II to the IPCC Fourth Assessment Report, www.ipcc.ch/publications_and_data/ar4/wg2/en/ch8.html

BOX 3: Participatory games for a transformed engagement with climate risk

As adaptation to climate change involves dynamic elements that are not easy to grasp using conventional approaches, a communication tool was needed to convey the existence of systemic complexity. Participatory games were designed to better understand feedbacks, non-linearities, trade-offs and unanticipated side effects inherent in risk management decisions.

This was considered transformational because:

- it was a highly innovative process to ensure sharing perspectives of those involved in a decision-making chain – from scientists to farmers
- the games encourage experimentation and simulate the complexities of real operational environments
- the games recalibrated power relations so that experts and non-experts were equal
- it catalysed processes of reflection and engagement
- as polycentric deliberative space, it encouraged collaboration and competition
- it entailed leaders acknowledging that the status quo needed changing

See Suarez, P. and Macklin, C. (2011) 'Games to Explore Forecast-Based Decisions', in Hellmuth, M. et al. (eds), A Better Climate for Disaster Risk Management. Climate and Society No. 3., New York: International Research Institute for Climate and Society, Columbia University, http://iri.columbia.edu/csp/issue3/download

Spaces of transformation

- **Including a diversity of voices:** The involvement of diverse stakeholders in decision-making processes is important for these processes to be transformational as it is important for different bodies of knowledge and experience to be considered in decision-making. The mere participation of voices is not enough but the boundaries of discussion should not be set and stakeholders should be empowered to carry through their collective visions for transformation.
- **Moments of opportunity:** Without the ability to open or recognise policy windows, the aggregation of the other components of transformation may not be employed usefully to effect change. Understanding the sources of stimulus for policy windows is critical to processes of transformation and changes in mass psyche and belief systems are often the determinants of policy windows.

Critiquing transformation?

Whilst it is a term that is increasingly used, 'transformation' remains an elastic term and forms part of the rapidly changing lexicon of terms to describe development responses to climate change. Despite concerns that transformation was the latest buzzword, the research concluded that it has considerable value in underpinning the idea of radical change as a necessary condition to tackle climate change. The research also discovered that the term is being employed exclusively with a positive value, with little attention to 'negative transformation'. Nevertheless, this research summary provides the initial basis for further conceptual understanding of transformation on which to anchor operational guidance in the context of climate change and development.

Further Reading

G8+5 Academies' joint statement (2009) *Climate Change and the Transformation of Energy Technologies for a Low Carbon Future*, www.nationalacademies.org/includes/ G8+5energy-climate09.pdf

Kotter, J.P. (1995) 'Leading Change: Why Transformation Efforts Fail', *Harvard Business Review* 73.2, http://wiki.tafensw.edu.au/sydney/myleadership/images/ e/e8/Leading_change_-_HBR.PDF

O'Brien, K. et al. (2012) 'Toward a Sustainable and Resilient Future', in Field, C.B. *et al.* (eds), *Managing the Risks of Extreme Events and Disasters to Advance Climate Change Adaptation*. A Special Report of Working Groups I and II of the Intergovernmental Panel on Climate Change (IPCC). Cambridge, UK, and New York, USA: Cambridge University Press, ipcc-wg2.gov/SREX/images/uploads/SREX-Chap8_FINAL.pdf

O'Brien, K. and Hochachka, G. (2010) 'Integral Adaptation to Climate Change', *Journal of Integral Theory and Practice* 5.1: 89–102, www.uio.no/english/research/interfaculty-researchareas/milen/nordclad-network/stockholm-phd-course-2010/readings/O%27Brien_Hochachka.pdf

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