

Climate change adaptation

Reimagining our place in the world

How society can adapt to climate change is an urgent challenge for the global community. Yet what exactly is that challenge? How can we imagine new ways to respond? Climate change adaptation has long been defined as society's response to an external, changing environment. Dr Andrea Nightingale at the University of Oslo, however, shows that this framing constrains our imagination and puts too much emphasis on technological solutions and managing hazards. When instead climate change is understood as simultaneously a social and environmental problem, the focus shifts to how and when change can occur. Dr Nightingale argues that the global community should be debating key political questions such as, 'who ought to govern change', and 'what knowledges do we need to understand uncertainty and change?' These questions put issues of power, politics, and inclusion at the centre of concerns around governance of climate change. Possibilities for transformative change can emerge out of these debates, particularly if they help people understand better our interconnectedness and become emotionally invested – not just cognitively aware – of how their everyday lives are connected to the global climate problem.

Despite being one of the most severe threats to face humankind, climate change and our response to it remains a contentious issue. Adapting our economic, political, and social systems is becoming ever more urgent, but at the same time more challenging. Decades of warning calls have gone largely unheard, or ignored by society, and with each passing year the scale of the challenge grows. Given this inability of climate science to catalyse enough action, at the University of Oslo, Dr Andrea Nightingale argues it is past time that we reimagine the climate problem itself.

Climate change has been framed as a threat from a global, external, environment by most scientists. The result has been efforts to either modify that external environment to reduce risks, or to improve capacity in society for coping with risks. What climate change means for people and their communities has been difficult to communicate within this framing. This approach is both impractical and politically contentious.

When climate change is understood as a problem of one entangled social-natural system, at local as well as global scales, questions about how we understand our place in the world become more central. This is far more than an existential question. Dr Nightingale shows how environmental change is bound up in political struggles over who ought to govern change, and how problem formulation and novel research can help bring the scale of climate change down to the scale of peoples' lives. When seen through this lens, rather than adjustments and risks, climate change adaptation becomes a far more dynamic and potentially transformative process. Debates shift to how and when change can occur, who is best poised to guide change, and how to make climate change realities more tangible in people's everyday lives.

Together with her collaborators, Dr Hemant Ojha (University of Canberra and Institute for Studies and Development Worldwide, Sydney), Dr Siri Eriksen (Norwegian University of Life Sciences),



A sign board for drinking water. Part of the LAPA programme in Mugu District, west Nepal. The programme is no longer operating due to the new federal system wherein the local municipality chose not to extend this international donor-supported project.

Dr Noemi Gonda (Swedish University of Agricultural Sciences), Dr Dil Khatri (Southasia Institute of Advanced Studies, Kathmandu), and Dr Ben Muok (Jaramogi Oginga Odinga University of Science and Technology, Kenya), and with support from the Swedish Research Council, Dr Nightingale raises new and often difficult questions: What are people assumed to adapt to? Who is authorised to govern change? Who is assumed to have the right knowledge for directing change? Who is presumed to require change? In short, they argue that the conversation needs to move away from its focus on technical solutions to consider the politics and effects of climate change.

A FIVE-PRONGED APPROACH

Dr Nightingale and her colleagues offer five key propositions to explain the process of adaptation and to enable transformative change.

- (1) First, adaptation decisions and actions must be seen within the context of struggles over governing change – that is, whose interests are served and whose authority is legitimised?
- (2) Knowledge and authority must be understood as dynamic and self-reinforcing – that is, knowledge provides the basis for asserting authority (or for challenging it).
- (3) To understand adaptation processes, it is important to identify and understand how different groups are labelled (ie, vulnerable, poor, resilient, etc), and how this narrative affects their own agency.
- (4) Adaptation cannot be separated from pre-existing social dynamics that govern power and knowledge.
- (5) Transformative change becomes possible at the intersection of contested politics and a shift in our emotional responses to social-natural change.

Ultimately, Dr Nightingale argues that no single actor or process can determine the 'correct' adaptation decisions. There is a



Tsum Valley in northern Nepal. The area is considered at high risk due to climate change and already lack of winter snow fall means there is not enough water in the spring for planting. Local narratives also talk of high winds that destroy crops right before they are ready for harvest.

critical need to debate multiple framings of the climate problem, to embrace rather than attempt to reduce uncertainty, to question our subjective labelling of communities, and to identify how power and politics create vulnerability and control the narrative of change. Possibilities for transformative change can emerge out of these debates, particularly if they help people become emotionally invested – not just cognitively aware – of how their everyday lives are connected to the global climate problem.

An interesting facet to this challenge is the way that the politics of uncertainty become part of the climate change discourse and justify technological solutions based on 'hard science' and

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models. Yet adaptation processes will always have unpredictable outcomes and are dependent on the relations that emerge between people and with their ecosystems. Thus, efforts to promote adaptation need to focus more on these relations, rather than possible outcomes. Current attention on how some groups are more vulnerable to climate risks casts people in relatively fixed identities and capabilities in relation to climate change. Successful climate change adaptation strategies must recognise that 'identity' and membership of a marginalised group (eg, indigenous and minority groups, women) are not fixed, but rather inextricably bound up

with both access to and control over resources and political authority. Identity politics and emotions thus become part of the climate challenge. As climate changes, so do the politics of identity and recognition. The desire for recognition of one's own situation (identity politics), combined with struggles over who should govern change, create openings for new emotional, cognitive, and political responses that can help to reimagine our place in the world.

PUTTING THEORY INTO PRACTICE

To date, most climate change adaptation policies, such as those supported by the United Nations Framework Convention on Climate Change (UNFCCC), focus on providing funding and technical support to developing countries, but the often-unstable political contexts create additional challenges.

The Himalayan nation of Nepal offers an example

of the complexities of climate change adaptation. Nepal is considered a country at high risk from climate change owing to its vulnerability to biophysical changes, its poor infrastructure, its weak economic position and reliance on foreign aid, and accelerated rates of socio-political change. In short, both the human and natural environments in Nepal are highly dynamic.

To gain greater insight into the situation, Dr Nightingale spent 13 years (2005–18) collecting field evidence, conducting interviews with politicians and government officials (eg, those making decisions about adaptation policies), experts (those implementing adaptation

programmes), and local stakeholders (those impacted by adaptation programmes, including all manner of social and professional groups such as farmers, merchants, men and women, people of different castes, urban workers, etc), and analysing the contents of key climate change policy documents.

Nepal has long been considered a beacon of participatory resource governance. It has actively encouraged multi-stakeholder participation and consultation in adaptation planning, including the use of bottom-up approaches, the development of new organisations at all levels of governance, and participatory methodologies that map vulnerability at local scales so as to prioritise who should receive support. In fact, Dr Nightingale argues that there is little to fault in the formal institutional designs of Nepal's adaptation policies and programmes. However, despite these attempts at institutional realignment, most adaptation programmes have failed to drive transformative change. Central to this failure are issues of power and politics.

Dr Nightingale argues that it is naïve, if not downright dangerous, to assume that a consultative approach will overcome struggles around power and authority. At national level, planning meetings participants were asked (by both international and local players) to focus only on supposedly 'politically neutral' technical measures to avoid party politics. Informants nevertheless describe being reluctant to support certain proposals for fear it would reveal their political affiliations. These climate adaptation planning processes were concurrent with those on the contentious development of a new federal state system, which was dominating national politics. While the debate on federalism had clear impacts on the debate around climate governance, it was never explicitly addressed, meaning that many of the proposed measures were implemented into a very different context than those imagined by the planning process.

The failure of the international community to recognise the importance of these issues is profound. In another example, jurisdiction over climate programmes was placed under the Ministry of Environment, seen by international actors as the obvious choice for most Global South

countries. However, at that time, this ministry lacked power compared with other ministries who governed the forest and water resources most at risk from biophysical climate change.

Ultimately, this lack of clear authority at the top led to poor engagement at all levels of governance. Communication between groups was blocked by practical issues (such as the different physical locations of programmes and organisations) and from a lack of will to collaborate with those from different political persuasions. For example, the globally celebrated Local Adaptation Plan of Action (LAPA) initiative has been scattered across various projects hosted by different international donors (eg, the UN and the UK) who sub-contract

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out implementation to both national and local NGOs, making coordination nearly impossible. In short, programmes designed to help with climate change adaptation under the same banner are in fact working independently of each other, meaning that activities designed to bring adaptation planning down to the community level are highly uneven in their impact and often fail to reach those most at need.

A CALL FOR CHANGE

Dr Nightingale argues that to be effective, a new understanding of how humans are connected to social–natural change is required for a truly transformative approach to solving the climate crisis. Projects must empower

communities to invest in themselves and manage their own resources, and at the same time realign power and authority at different scales to support adaptation 'all the way down'. The questions posed by Dr Nightingale and her colleagues strike at the heart of political and emotional struggles over environmental change.

Given the magnitude of the climate crisis and near universal agreement that current action is woefully inadequate, Dr Nightingale suggests that we focus on the two domains with the greatest possibilities for a sustainable future:

(1) How environmental change is bound up in political struggles over who ought to govern change, and

(2) How problem formulation and novel research can help bring the scale of climate change down to the scale of peoples' lived experiences.

The former facilitates more realistic governance strategies and highlights the exclusions that result from efforts to 'educate' or 'build capacity' among those assuming to lack those skills. The latter shows how to reconnect our thinking and emotional responses to the change and uncertainty around us. It opens up possibilities for people to engage with climate change at scales that are better aligned with their experiential knowledge and offers the potential for more sustainable livelihoods that begin at the grassroots.



Equipment for a cider press installed as part of an adaptation programme in western Nepal. The press has never been used due to a lack of electricity. Local politics meant that the micro hydroelectricity system installed in the village was not linked to the press. Local people also complained that the programme had given them equipment rather than training to take care of the infrastructure themselves.



Behind the Research

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Research Objectives

Andrea Nightingale's academic interests include political ecology, socrionatures, critical development studies, feminist theory, and methodological work on mixing methods across the social and natural sciences.

Detail

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Bio

Andrea J Nightingale is Professor of Geography, University of Oslo, and Research Fellow, Swedish University of Agricultural Sciences. She has 25 years of experience leading research projects on environmental governance in multiple parts of the world. She has over 50 academic journal articles, and is author of *Environment and Sustainability in a Globalizing World*, Routledge, 2019.

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Personal Response

From a theoretical perspective you make a convincing argument, but how do you translate this to the real world?

/// The questions at the heart of my research are precisely the questions plaguing international donors investing in climate change adaptation. There is widespread recognition that democratic deficits arise from top-down processes and that the realities of climate change on the ground are experienced in highly uneven ways. My work provides concrete leverage points for reimagining responses to climate change. It helps to show the importance of debate and stakeholder involvement in how decisions to manage change are taken. It shows that addressing social inequalities and uneven access to resources must be at the heart of adaptation efforts. By emphasising the need to reimagine our place in the world, my work suggests new forms of education and knowledge production that help people to understand climate change in embodied and emotional ways to compliment the cognitive learning coming out of climate science. //

What practical steps should be made by different players (eg, UN and state organisations, NGOs, etc) to ensure that climate change adaption becomes more inclusive, more sustainable, and truly transformative?

/// Practical steps should be taken at multiple levels. At the international and national level, the UN and other major investors in climate change adaptation need to recognise that, first of all, noone really knows what adaptation ought to be. There is a time lag between changes we make, and understanding whether they had the desired long-term effect. Secondly, managing the future – reducing uncertainty – in the present is nearly impossible. We need governance mechanisms at international, national, and local scales that are more dynamic and that focus on socially and ecologically just processes, rather than outcomes. This suggests more emphasis should be placed on transforming current planning processes and projects to work with uncertainty, as pathways to the future. Thinking through problems as social–natural, rather than just biophysical hazards, will open up new possibilities for response. We need to put social and climate justice concerns in the centre of projects, not as externalities to be managed after projects are in place. And finally, we need to re-engage with artistic and embodied knowledge to gain different understandings of not only environmental change, but also how our emotional attachments to other species and to ecosystems can offer new possibilities for political, economic, and technological change capable of transforming how we live in the world. //