## 11

## Policies and Design Processes to Enable Transformation

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## **Highlights**

- Climate change and food security are 'messy' policy issues; policies need to be
  effectively shaped and fit for purpose across different scales, geographic areas,
  and sectors.
- Policy implementation necessitates coordination across multiple perspectives towards a common goal; an anticipatory governance approach can enable this.
- Working against the status quo is not an easy task but can be achieved through truly engaged and inclusive stakeholder processes.
- Redistribution of power entails employing a gendered, socially inclusive lens in the development of food system transformation policies.
- Establishing an enabling policy environment for transforming food systems requires diverse approaches and multiple perspectives.
- Appropriate facilitation and coordination of multi-stakeholder engagements is key to clear communication between participants and to support learning.

### 11.1 Introduction

Working to transform global food systems to meet sustainability and justice outcomes under climate change requires engaging with complex multi-level governance while appreciating specific local contexts. This is complicated by the fact that climate change is a 'messy' policy issue. The contextual nature of climate impacts means policies need to be effectively shaped and fit for purpose across different scales, geographic areas, and sectors, a challenge compounded by human society becoming increasingly complex, interconnected, and interdependent (Rijke et al., 2012). Actions undertaken at one level or in one sector are therefore likely to have significant and unpredictable effects elsewhere (Chapter 17).

Continued awareness of these dynamics is critical for two reasons. Firstly, climate-related policies designed and enacted in isolation of these broader interconnections have the potential actively to undermine agricultural development, food security, human welfare, and ultimately human security (Rüttinger et al., 2015). Policies that are insensitive to local social–ecological, politico-economic, or conflict dynamics may increase conflict risk by distributing resources along the lines of a pre-existing division - for example, by inadvertently providing legitimacy to questionable actors, changing local markets with an influx of resources, or replacing previously existing and functioning social–ecological systems (UNDP, 2016). Secondly, a transdisciplinary lens is crucial for climate action to maximise transformational co-benefits for other societal challenges. As the root causes of climate vulnerability overlap significantly with drivers of conflict and poverty, integrated climate-related policies can simultaneously contribute to poverty alleviation, while building long-term resilient food systems and societies.

A key aspect of implementing policy is targeting the reconstruction of the origins of social–ecological relationships that cause vulnerability and inequality. This requires working against the status quo, which is not an easy task, but one that can be achieved through truly engaged and inclusive stakeholder processes. Mechanisms for implementing transformational changes include participatory scenario planning, tailoring support to countries rather than employing a 'cookie-cutter approach' to challenges, prioritising gender and social inclusion to ensure more equitable outcomes, and creating learning platforms across sectors, actors, and geographies.

In this chapter, we unpack how transformation theory and transdisciplinary approaches around co-creation can mobilise these mechanisms, primarily through the development of anticipatory governance. In the next section, we lay out the theoretical background on transformations, transdisciplinary research, and anticipatory governance. We then examine case study examples that illustrate how policies that enable transformation can emerge from inclusive multi-stakeholder processes that use future-thinking tools to systematically consider the interventions needed at different scales. We discuss the importance of addressing power dynamics and political economy in the context of gender and social inclusion, before concluding with some key take-home messages on implementation and process.

# 11.2 Transformation Theory and Transdisciplinary and Anticipatory Governance

Transformation theory demonstrates that to shift from the current trajectory into an alternative system, it is necessary not only to break down the current dominant regime, but also to expand the foundations of a different future. In food systems, this would entail incentivising climate-resilient and low-emission practices for markets and the public sector, while shifting away from policies that result in

environmental degradation and social marginalisation - for example, subsidies that support deforestation. For institutions and actors to create enabling environments for transformations, they must employ some key capacities, laid out in detail below. These are: (1) adopting a transdisciplinary lens to policy research and development, (2) employing an anticipatory governance approach, and (3) focusing on implementation gaps, co-production across scales, and dealing with power imbalances.

Transdisciplinary research calls for researchers and policymakers to transcend siloed, single-academic-disciplinary research (Chilisa et al., 2017) and move beyond single-actor-driven interventions. Doing so will allow the solving of complex, multifaceted real-world problems in new and productive ways (Chapter 14). These processes increase legitimacy, ownership, and accountability for both the problem and for the possible solutions, given they incorporate diverse scientific and societal actors' perspectives (van Breda & Swilling, 2018).

The second key capacity is anticipatory governance, a concept that stems from an emerging field examining how imaginings of the future are governed in the present, to realise desired transformations (Muiderman et al., 2020). Different perspectives exist particularly in terms of how the future can be known and managed, and how imagined futures should impact policy choices in the present (Vervoort & Gupta, 2018). A socially inclusive, futures-thinking process should create a safe space for diverse stakeholders to express different views and ways of knowing, to inspire action (Pereira et al., 2019).

Thirdly, implementation presents a gap in effective transformative policy. There is often a scale mismatch whereby national governments tend to set policy for implementation at local levels, but the policy is not translated into local contexts, nor does it always come with the necessary finance or capacities. Building buy-in from the beginning is therefore critical to achieving implementation. It is also important to get the process of development right so that the resulting policies do not entrench power inequalities. Transformative processes should therefore embrace co-production, engaging diverse stakeholders across scales to open up new spaces for collaborative, transformative action. Most importantly, encouraging multiple viewpoints and opinions can shed light on pre-existing power dynamics and work towards the productive resolution of conflicts.

# 11.3 Case Studies Operationalising Participatory Futures Methods for Policy Development

# 11.3.1 Participatory Scenarios in Costa Rica to Strengthen National Climate Ambitions

An illustrative example of transformative foresight comes from Costa Rica, demonstrating the importance of including diverse stakeholders, such as NGOs,

citizens, and government representatives, in key policy-making and other negotiation processes to create buy-in and increase ambition. The Ministry of Environment and Energy started applying anticipatory governance practices during 2015 while developing their Intended Nationally Determined Contribution (INDC). There was a discussion about whether existing foresight methods could support transformative ambitions for the INDC, given that the modelling at that time, based on the extrapolation of data about past emissions, did not show a significant decrease in GHG emissions. A participatory process was initiated to work on the desired, transformative futures, involving all major institutions and civil-society representatives. The process used qualitative foresight approaches that allowed for exploration of futures beyond what was possible based on historical data.

This multi-stakeholder platform unearthed potential areas of collaboration or synergies between the participants but also areas of conflict that could be resolved through constructive dialogue. Participants in the visioning process found common ground in ensuring that no one should be left behind as the country adapts to and mitigates climate change. This led to social and economic development goals being placed at the heart of the Nationally Determined Contribution (NDC), enhanced in 2020 by incorporating an inclusive approach to build adaptive capacity, reduce climate vulnerability, and strengthen resilience. This adoption of socially inclusive values helped secure stakeholders' commitment to achieving an outcome to which they could all contribute. In essence, the process was moved from a 'prediction to mitigate risks' approach to an approach of 'mobilising action toward pluralistic transformative futures', which fitted the requirements and ambitions of the INDC and NDC process (Muiderman et al., 2020).

## 11.3.2 Multi-Stakeholder Platforms for Decision-Making in Africa

Two illustrative case examples come from East and West Africa. In East Africa, the Programme for Climate Smart Livestock brought together diverse actors, including academics, government officials, representatives of international institutions, and civil society, to reflect on transformative climate-smart futures for livestock in Kenya, Uganda, and Ethiopia. Futures-thinking was a key tool to engage with national stakeholders. This case exemplified how talking about the future with diverse stakeholders can unearth conflicts and synergies about desired trajectories and enrich the scope of policy development. Emphasising desirable futures for livestock can create a sense of common purpose that guides policy-making and everyday action in the present. Simultaneously, gradual 'back-casting' from the future to the present helps navigate systems complexity, while cultivating a more systemic way of thinking that links social, economic, ecological, and technological systems across space and time (Pereira et al., 2019). Creating such

stakeholder-diverse spaces – where conflict is mediated constructively and the value of productive dialogue is emphasised – is an essential feature of social–ecological transformations. Following the completion of the futures workshops, outcomes were iteratively discussed with participating stakeholders during multiple feedback rounds. This provided the space for stakeholders to further develop some of their ideas, allowing the team to capture many of the nuances that arose from a diverse, multi-stakeholder discussion of this complex topic.

A second case from Africa shows the necessity for national-level policymakers to work collaboratively with local stakeholders to ensure that policy is more responsive to the lived experiences of citizens and can, therefore, be implemented more effectively. The CGIAR Research Program on Climate Change, Agriculture and Food Security established national-level exchange platforms in Ghana, Mali, and Senegal to enable and strengthen discussions on agriculture and climate-related issues (Zougmoré et al., 2019).

Participants from diverse institutions participated in the platforms; Ghana's work is a good example (Figure 11.1). All the platforms had considerable success

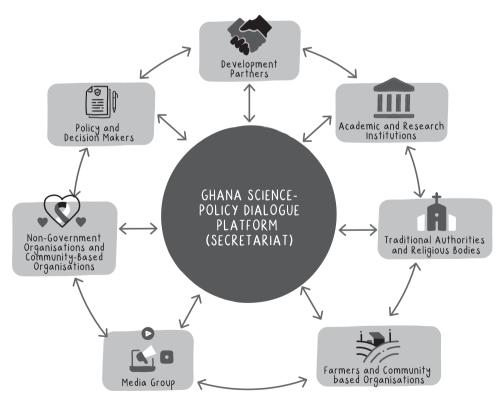


Figure 11.1 Composition of the Ghana National Science–Policy Dialogue Platform on Climate Change, Agriculture and Food Security (source: Zougmoré et al., 2019)

in advancing policies, strategies, or programmes. In Ghana, the platform led to the development of the first National Climate-Smart Agriculture Action Plan, targeted at ensuring ground-level operationalisation in the agriculture and food security focus areas, within Ghana's National Climate Change Policy. The Climate-Smart Agriculture Action Plan is recognised by all stakeholders as the operational policy document for agricultural development in Ghana. This linkage between the national and subnational levels helped ensure that policies designed at the national level would be implemented and avoid the creation of policies that would not reach on-the-ground implementation.

### 11.4 Addressing Power Dynamics and Other Barriers to Transformation

While the above examples provide insights into some of the approaches and their outcomes in particular settings, it is not always straightforward for stakeholders to unite to support transformation. Barriers to transformation can take a variety of forms, be they legal, social—cultural, resourcing, financial, political, and institutional. Power permeates each of these categories. Entrenched power dynamics can lead to transformation failures, particularly in the context of climate-resilient food systems, where the power balance is skewed in favour of a small number of very large enterprises and is concentrated in particular supply chains (Nicol & Taherzardeh, 2020). Social transformation is created through the reallocation of power. Transformation requires power to be enabled, yet power is dynamic, relational, distributed, complex, and multidimensional. Who is involved—and who is not—matters when unblocking potential pathways where power has become entrenched, as well as for broadening power redistribution opportunities.

Redistribution of power entails employing a gendered and socially inclusive lens to food-system transformations. It means going beyond just having more women and marginalised groups 'having a seat at the table' (Chapter 13). Genuine redistribution of power requires upending entrenched power structures and pursuing food systems that prioritise human well-being and ecological sustainability over mere private profit (Bell et al., 2020). Similarly, simply consulting with indigenous and local stakeholders is insufficient for creating true food-system transformation. Deeper transformation requires the operationalisation of indigenous knowledge strands and their dictums, on sufficiency for example, lifestyles, land stewardship, biodiversity conservation, and food sovereignty.

The transformation of agricultural production systems needs to be inclusive and participatory. To achieve this, Lyon et al. (2020) identified the need for an understanding of stakeholders that includes agency, power analysis, and the identification of stakeholders' systems roles, dynamics, interests, moral orientation, alignment with sustainability, and readiness to transform. In some cases,

strategic alliances between stakeholders can produce the pressure necessary to drive the kinds of social–ecological transformations required to support wider system change. For example, food movements that challenge the current corporate regime, combined with movements that support rapid climate-change action could shift the system away from societies embedded in market economies towards economies and markets embedded in society and the environment (Holt-Giménez & Shattuck, 2011).

Policy stakeholders are often those who set the rules of the game and assign responsibilities; they therefore have the greatest opportunity to establish an enabling environment for transformation by shaping the landscape of power. While the specifics might differ across contexts, key components of an enabling environment generally involve creating a suitable mix of policies across agriculture and other sectors, as well as appropriate incentives supported by capacity building for implementation. Appropriate policies include those that reorient the power balance and include measures to mitigate any resultant undesirable impacts on producers and consumers, as well as those distributed along the value chain. Examples of such interventions can be seen in Box 11.1. They can also address issues of the need for decent jobs, orientating to tackle multiple UN Sustainable Development Goals simultaneously, by removing perverse incentives that cause damage in other sectors. Policies, however, require resourcing for their implementation, and this can present another challenge for transformation (Chapter 12).

#### 11.5 Implementing and Financing Transformative Policies

Considerable awareness centres on the need for investing in policy implementation. This includes the need for private-sector action, as well as the reorientation and realignment of public subsidies to accelerate private-sector investment in more sustainable food systems. Such changes are anticipated to help realign the balance of power, by facilitating sustainable finance mechanisms, upscaling suitable technologies, improving access to knowledge and other inputs, and designing context-appropriate safety nets, such as insurance (Makate, 2019). It nevertheless remains unclear how issues such as the elite capture of benefits can be addressed, including issues of gender and other socio-economic inequities.

Meeting targets such as the realignment of US\$300 billion of agricultural subsidies to a climate-change agenda by 2025 and improving 'ease of doing business' in Sub-Saharan African countries (Steiner et al., 2020) will require reconfiguration of the global funding regime. The reallocation of perverse subsidies offers a concrete source of finance for the interventions needed for food-system transformation. There have been various calls to end harmful fishing

#### Box 11.1

## Examples of Steps to Enshrine Multi-Stakeholder Participation for Transformative Policy Implementation

- 1. Establish producer cooperatives, federated into a larger body that can leverage pressure in political negotiations and advocate in particular for small-scale producers and groups who have been traditionally underrepresented.
- 2. Implement quotas for the representation of youth, women, and other groups on the boards of these cooperatives.
- 3. Incorporate in all levels of education the added value of combining indigenous local knowledge and modern scientific expertise to cultivate a new pedagogy around the importance of new, pluralistic knowledge production.
- 4. Tackle political capture and corruption, and separate development agendas from political influences by establishing independent expert bodies tasked with monitoring policy development and implementation.
- 5. Establish far-reaching policies that ensure fair and distributed land tenure and prevent the annexing of productive lands; this will be key to ensure that marginalised groups, like youth or women farmers and those engaged in fishing, have access to these fundamental assets. Supporting small-scale land tenure creates a safety net that builds resilient livelihoods and addresses structural barriers to the market.
- 6. Couple land reform, grazing, and fishing rights with sustainable finance policies, such as redirecting subsidies and tax incentives that favour consolidated, industrialised agri-food systems, and financial support for example, tax credits, specialised insurance schemes, and grants towards small-scale producers. Combining land tenure and finance reforms would address the key structural drivers of de-agrarianisation and promote rural reinvigoration (Chapter 6).
- 7. Implement social protection schemes to ensure that basic needs are met and people can escape poverty, particularly in currently under-resourced rural areas (Chapter 7).

Generating adequate finance to implement the above policies and achieve low-carbon, resilient development remains an important challenge (Chapter 12).

subsidies, which in 2018 stood at US\$35.4 billion (Sumaila et al., 2019) and fossil fuel energy subsidies, which in 2020 stood at US\$5.9 trillion (IMF, 2021). Ending these, moving towards renewables, and reallocating subsidies can enable transformation, rather than maintaining the status quo.

Foreign direct investment is another potential funding stream. Improving business conditions, however, needs to be done cautiously to ensure investment

gains accrue to the people and places where transformation is needed, rather than benefiting foreign interests. Private-sector investment could take the form of microcredit access for smallholders who are seeking to improve their sustainable productivity in a climate-smart way and to access markets. Setting up institutional structures whereby finance is properly channelled to achieve multiple outcomes or co-benefits – for example, finance for female-led agri-processing of adaptive indigenous species for national markets – can promote gender inclusion as well as other social–ecological benefits. Furthermore, this can build capacity to move beyond agricultural production and promote diversification into more locally resilient and/or indigenous species (Agarwal et al., 2017). Finance is thus another locus of power and key leverage point for transformations into climate-smart and inclusive farming systems (Jouffray et al., 2019).

### 11.6 Way Forward

Two characteristics are important in creating an enabling policy environment for transforming food systems. The first is to recognise diversity and include a plurality of perspectives. 'Having a seat at the table' is inherently a political process mired in privilege, which emerges from entrenched power structures. Enabling transformation means moving away from business-as-usual responses and opening up to novelty and innovation. This often requires a radical approach that conventional actors are generally unable to provide. As well as providing more transformative solutions, inclusive governance also requires procedural justice that accounts for all interests. Not only is involving diverse voices essential to a just and fair policy formulation process, but an ongoing iteration of the results allows for learning and adaptation. A true representation of needs allows for easier development of policy that can achieve outcomes across different sectors and address multiple needs in an intersectional and transdisciplinary approach. Collaboration between a wide variety of stakeholders also paves the way for a broader coalition that is ripe to move forward with transformative approaches.

The second is experienced facilitation and coordination. With the need to include multiple voices, particularly of marginalised groups, appropriate facilitation is key to clear communication between different participants and to support learning. While there will still be conflicting perspectives, an enhanced understanding of others' views and identification of common ground can lay a foundation where compromises can be reached and where entrenched power balances can begin to change. This is where transdisciplinary research, participatory futures methods, and anticipatory governance can be useful in bringing multiple voices together. Furthermore, employing stakeholder engagement processes, like participatory scenario planning, in policy processes that are

already underway can strengthen their impact in these spaces. Transformation is not necessarily a fast process, yet in the context of climate change, it does need to be rapid. Similarly, multi-stakeholder, deliberative approaches might necessitate special attention and time investment, but the collective knowledge they produce increases the legitimacy of the final plan. In addition, these approaches can also provide unexpected, insightful ideas for rapid, targeted transformative actions that are likely to be more effective over the long term. Researchers need to improve information-sharing around what works where, when, how, why, and for whom in terms of methods that guide transformation. This is critical for the optimal allocation of finance and other resources to effect the systemic changes needed for a more sustainable food system.

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