

## Role of Public Governance in Arena of Climate Change and Food Security

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Synopsis

Climate change, explored in various settings, is adding a new layer of complexity for food security from governance perspective. Changes in production capacity, seasonality, the availability of suitable land and access to water, are all intertwined with issues of governance.

It is a fact that the climate is changing and, given the levels of greenhouse gases already in atmosphere, will continue to do so. Extreme weather events, such as high temperatures, droughts and floods, are already more frequent and severe, and have dire social, economic and ecological consequences. In the coming decades, global climate change will have an adverse overall effect on agricultural production and will bring us toward, and perhaps over, critical thresholds in many regions threatening food security.

Agriculture is sensitive to climate change with outcomes affecting food security and livelihoods of large number of rural poor who will be put at risk and their vulnerability to food insecurity is increased. Responding to the fundamentally interlinked challenges of climate change and food security will be the major governance challenge for the policy makers in 21<sup>st</sup> century. The task of policy makers in agriculture and allied sectors is to dramatically scale up efforts to make agriculture more resilient through governance initiatives to adapt, as well as to mitigate the climate challenge.

Governance is about decision making and the process by which decisions are implemented and its influence cross cuts all sectors of development programmes including agriculture. The policy makers in agriculture and allied departments need to decide their own priorities and bring the informed will of the farmers in to government decision making. In this way good governance in agriculture is not an end in itself but rather a means in enhancing food security and advancing sustainable, productive and profitable agriculture sector.

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Climate change governance is very new. Until recently, most assessments of the impact of climate change on the food and agriculture sector have focused on the implications for production and global supply of food, with less consideration of other components of the food chain. This presentation suggests strategies for mitigating and adapting to climate change in several key policy domains of importance for food security.

The Commission on Sustainable Agriculture and Climate Change has identified critical leverage points and high-priority policy actions. The Commission proposes the following evidence-based actions to achieve food security in the face of climate change and these steps can deliver long-term benefits to farmers and communities in all countries. They include;

1. Integrate food security and sustainable agriculture into global and national policies
2. Significantly raise the level of global investment in sustainable agriculture and food systems in the next decade
3. Sustainably intensify agricultural production while reducing greenhouse gas emissions and other negative environmental impacts of agriculture
4. Develop specific programmes and policies to assist populations and sectors that are most vulnerable to climate changes and food insecurity
5. Reshape food access and consumption patterns to ensure basic nutritional needs are met and to foster healthy and sustainable eating patterns worldwide
6. Reduce loss and waste in food systems, targeting infrastructure, farming practices, processing, distribution and household habits
7. Create comprehensive, shared, integrated information systems that encompass human and ecological dimensions

In this more complex and dynamic world, the need for adaptive policy-making approaches is now more urgent than ever. Therefore, policy makers need ways to formulate policies that can adapt to a range of conditions previously not imagined and can perform even under complex, dynamic and uncertain conditions. Based on the report by Swanson and Bhadwal in 2009, on "Creating Adoptive Policies: A Guide for Policy making in an Uncertain World", IISD and TERI proposed that current government practices can be harnessed to plan for the socio-economic and ecological risks and uncertainties and food security, posed by climate change. The seven policy-making practices that are observed, which make policies more adaptive can be loosely categorized as:

- (a) Planned adaptability - conscious effort to anticipate risk and uncertainty and identify immediate robust actions or actions that can be triggered at an appropriate time in the future; and/or
- (b) Autonomous adaptability - a conscious effort to strengthen the ability of a policy to facilitate stakeholder responses to unforeseen events.

Planned adaptability is the most intuitive to policy-makers. It deals with anticipating what lies ahead through analytic and deliberative processes and identifying robust and built-in policy adjustments that can be triggered at the appropriate time to increase the potential for achieving desired outcomes.

Five of the practices we observed fall into this typology:

- (1) *integrated and forward-looking analysis*
- (2) *built-in policy adjustments*
- (3) *formal policy review -*
- (4) *promoting variation -*
- (5) *multi-stakeholder deliberation -*

Autonomous adaptability is new ground for most policy-makers and is premised on the notion that a policy can be designed and implemented in such a way as to enable it to effectively respond to unforeseen events, events that could not have been anticipated even through careful analysis and deliberation. This can be achieved through four practices:

- (1) *promoting variation;*
- (2) *multi-stakeholder deliberation*
- (3) *enabling self-organization*
- (4) *decentralization of decision-making*

Each of these seven practices are already applied in practice and prove that existing government practices can be harnessed to address the anticipated and unanticipated risks posed by stresses such as climate change.

A wide range of potential adaptation and resilience options exist in climate change arena to address food security which needs to be integrated into the development of agriculture worldwide. We need to work toward what could be termed a climate smart food system that addresses climate change impacts on all dimensions of food security.