

## UNIT V

### EMERGING ISSUES

**Global environmental governance – alternate culture systems – Mega farms and vertical farms – Virtual water trade and its impacts on local environment – Agricultural environment policies and its impacts – Sustainable agriculture.**

#### GLOBAL ENVIRONMENTAL GOVERNANCE

Global environmental governance (GEG) is the sum of organizations, policy instruments, financing mechanisms, rules, procedures and norms that regulate the processes of global environmental protection.

##### Challenges

**Proliferation of GEG:** There are too many organizations engaged in environmental governance in too many different places, often with duplicative mandates. Fragmentation can lead to conflicting agendas, geographical dispersion and inconsistency in rules and norms, as the different secretariats have limited opportunity to interact and cooperate.

**Lack of cooperation and coordination among international organizations:** The concern here is about the absence of any meaningful coordination mechanisms for GEG.

**Lack of implementation, enforcement and effectiveness in GEG:** The GEG system has turned into a “negotiating system” that seems to be in a perpetual state of negotiation and is obsessed with continuing negotiations rather than thinking about the implementation of existing agreements.

**Inefficient use of resources:** The concern that is usually raised here is that the system as a whole seems to have significant (even if insufficient) resources, but the duplication and lack of coordination within the system can mean that resources are not always used most efficiently. In spite of this impressive pool of money, particular elements of the system remain chronically under-funded. Geographic fragmentation and duplication of activities can result in higher operational costs and inefficient use of resources. With greater coherence in the system of governance and financing, a great deal more could be achieved with the existing resources.

**GEG outside the environmental arena:** An increasing number of important decisions affecting environmental governance now take place outside the environmental arena, in areas such as trade, investment and international development.

**There is inertia within the system and a desire to maintain the status quo-** Although the UN has engaged in many self-reform initiatives, actors in the system have an incentive to maintain the status quo. Neither national delegates nor international environmental bureaucrats seem motivated to allow meaningful change in the terms of the GEG system

Developing country concerns: Developing countries have legitimate concerns about the state of the international system. They are already distrustful of the international system in general and are especially concerned about the rapid growth of environmental instruments and its possible impacts on their economic growth.

Models:

#### Upgrading UNEP Model

Description: Takes UNEP as a departure point for improving environmental governance and suggests upgrading it to a specialized agency to strengthen its status.

Designs: This model is similar to the previous but distinct in that it seeks the strengthening of UNEP rather than its replacement by a different super-organization. UNEP itself has been both an active participant and a focus of the reform debate. It has faced significant challenges since its creation (limiting legal mandate, lack of funds, location). UNEP would strengthen its role as an “anchor” institution for global environment by drawing on its ability to serve as information and capacity clearing-house and set broad policy guidelines for action within the Global Ministerial Environment Forum (GMEF). Similarly, it has been suggested that UNEP could be upgraded into a decentralized United Nations Environment Organization (UNEO). UNEO would have its own legal identity, and would comprise general assembly, executive structure and secretariat. It would incorporate UNEP and GMEF; take up UNEP’s mandate with respect to its normative function; and serve as the authority for environment within the UN system.

Potential: The current debate on environmental governance seems to converge around the proposal to upgrade UNEP into a specialized agency as a middle ground between making a major change in the system and doing nothing. Upgrading UNEP requires less financial and diplomatic investment than adding a completely new organization. While UNEP has a record of institutional success and learning, its potential to perform when given better legal status, more funds and more staff is promising.

#### Multiple Actors Model

Description: Argues that the system of governance comprises multiple actors whose actions need to be mutually reinforcing and better coordinated. Without better integration of these multiple actors, organizational rearrangement cannot resolve institutional problems.

Designs: Multiplicity of actors and interactions form a multidimensional “system” of global environmental governance. It includes states, international environmental organizations, related international organizations, civil society organizations, and public concern and action. Focus on organizations as a single dimension of governance distracts attention from the fact that institutional will is required to affect decision-making procedures and change institutional

boundaries. First reform proposal is to integrate environment into the larger context of sustainable development and to allow multiple organizations to flourish but create venues for these organizations to interact and “transact.” Preferring environmental to sustainable development governance may result in further marginalization of environmental problems on the international agenda, alienation of developing countries, and continuing regime clashes between environment and other relevant international regimes. A General Agreement on Environment and Development should be negotiated to codify universally accepted sustainable development principles and serve as an umbrella for existing MEAs. The second reform proposal is to create multiple channels of implementation. The quality of global environmental governance will be increasingly determined by the interaction among five entities in implementation and the ability of the system to facilitate their interaction, e.g., through global public policy networks.

Potential: This model adopts a broad definition of the problem of global environmental governance. Accordingly, the solutions proposed are broad and offer directions the system should follow, rather than specific organizational improvements. While organizational thinking leaves an illusion of control over governance, systems thinking acknowledges the messiness and uncertainty of the system. The complexity of today’s environmental threats like climate change and responses to them prove that multiple channels of implementation naturally emerge but can lack direction if one is not provided by the system. Whether the system is mature enough to reverse environmental degradation via strategic directions and normative guidance remains to be seen.

#### Goals

Leadership - The GEG system should grasp the attention and visible support of highprofile political leaders. The key institutions within the system should be managed by leaders of the highest professional calibre and international repute; all working together towards the best interests of the GEG system as a whole.

Knowledge - Science should be the authoritative basis of sound environmental policy. The GEG system should be seen as a knowledge-based and knowledge-producing system.

Coherence - GEG should operate as a coherent “system” with reasonable coordination, regular communication and a shared sense of direction among its various elements.

Performance -The institutions that make up the GEG system should be well-managed; they should have the resources they need and should use these resources efficiently; and they should be effective in implementation. The ultimate purpose of the GEG system is to improve the global environmental condition.

Mainstreaming - The GEG system should seek to incorporate environmental concerns and actions within other areas of international policy and action, and particularly so in the context of sustainable development.

### Evidence of Environmental Degradation

The Millennium Ecosystem Assessment and the work of the Intergovernmental Panel on Climate Change have shown that ecosystem decline and global warming continue, representing real dangers to our planet. This state of affairs is well documented in the Millennium Ecosystem Assessment (2006). For example, despite the feverish discussions about global climate change, carbon emissions continue to rise; global atmospheric CO<sub>2</sub> levels that were around 300 parts per million (ppm) in the early 1900s have now reached approximately 380 ppm. The Millennium Ecosystem Assessment also found that approximately 60 per cent of the ecosystems that it examined were either being degraded or used unsustainably. Since 1980, 35 per cent of the world's mangroves have been lost and 20 per cent of the world's precious coral reefs have been destroyed. A decade after the signing of the Biodiversity Convention, the species extinction rate is still 1,000 times higher than what would be occurring naturally, without human impact. Despite the dozens of global and regional fisheries treaties, an estimated 90 per cent of the total weight of large predators in the oceans such as tuna, sharks and swordfish has disappeared over the last few decades. Estimates suggest that we may still be losing as much as 150,000 square kilometres of forest each year.