

CHAPTER 11

ENVIRONMENTAL FINANCE

11.1 Green Economy

The concept of Green economy lacks an internationally agreed definition or universal principles. The Rio+20 outcome document identifies green economy in the context of sustainable development and poverty eradication and it affirms that approach will be different in accordance with the national circumstances and priorities for each country.

In simpler terms, Green Economy is an economy that aims at reducing environmental risks and ecological scarcities and that aims for sustainable development without degrading the environment.

In 2008, UNEP launched the **Green Economy Initiative**, a program of global research and country level assistance designed to motivate policy makers to support environmental investments.



The **Greenhouse Gas Protocol (GHG Protocol)** is the most widely used international accounting tool for governments and business leaders to understand, quantify and manage Greenhouse Gas emissions.

Renowned environmental economist **Pavan Sukhdev** was awarded the 2020 **Tyler Prize** for his work in the domain of Green Economy. Established in 1973, Tyler Prize is one of the oldest environmental awards.

Pawan Sukhdev is known for his ground-breaking 2008 report on "**The Economics of Environment and Biodiversity (TEEB)**", which was hosted by UNEP and became the foundation of Green Economy Movement.

TEEB is an initiative to draw attention to the global economic benefits of biodiversity. Its objective is to highlight the growing cost of biodiversity loss and ecosystem degradation.



Payment for Ecosystem Services (PES) are incentives offered to farmers or landowners in exchange for managing their land to provide some sort of ecological service.

Ecosystem Services simply means "the benefits of nature to households, communities and to economies".



Partnership for Action on Green Economy (PAGE) was launched in 2013, in a direct response to the Rio+20 declaration "The Future We Want". PAGE supports nations in framing economic policies and practices around sustainability and seeks to assist countries in achieving Sustainable Development Goals (SDGs).

Natural Capital is the stock of renewable and non-renewable resources (e.g., plants, animals, air, water etc.) that combine to yield a flow of benefits to people.



Natural Capital Accounting is a tool that can help measure the full extent of a country's natural assets. It can give us an insight on the link between economy, ecology and our environment. UN Statistical Commission has adopted the System for Environmental and Economic Accounts (SSEA) as a statistical standard to measure a country's natural capital.



Natural Capital Accounting and Valuation of Ecosystem Services (NCAVES) is a project funded by the European Union and jointly implemented by the United Nations Statistics Division (UNSD), United Nations Environment Program (UNEP) and the Secretariat of the Convention of Biological Diversity (CBD). NCAVES project is aimed at encouraging the practice of ecosystem accounting.

India is one of the five countries, others being Brazil, China, South Africa and Mexico, taking part in the project. Ministry of Statistics and Programme Implementation (MoSPI) is implementing the project along with Environment Ministry and the National Remote Sensing Centre (NRSC) under the Department of Space.

11.2 Sustainable Development

The **Brundtland Commission Report**, also known as "**Our Common Future**", was published in 1987 by the United Nations through the Oxford University Press. The report developed the most widely used definition of sustainable development as "development which meets the needs of current generations without compromising the ability of future generations to meet their own needs".

Accordingly, 17 Sustainable Development Goals (SDGs) were set in 2015 by the United Nations General Assembly and are intended to be achieved by the year 2030. They are included in a UN Resolution called the Agenda 2030.



The **Club of Rome** stimulated considerable attention with its first report to the club, "**The Limits to Growth**". Published in 1972, its computer simulations suggested that economic growth could not continue indefinitely because of resource depletion.

Seabed 2030 project has been launched by the Nippon Foundation of Japan and the General Bathymetric Chart of the Oceans (GEBCO) at the UN Conference in 2017 with the aim of achieving SDG 14 (conserve and sustainably use the oceans, seas and marine resources).

The project aims to bring together all available bathymetric data to produce a definitive map of the world ocean floor by 2030. This will help us understand several natural phenomena related to oceans like ocean circulation, tides and biodiversity hotspots. Further, Seabed 2030 project will also promote better understanding of the impact of climate change on oceans.

11.3 Global Environment Facility (GEF)

The GEF was established in 1991 by the World Bank in consultation with UNDP and UNEP, to provide funding to protect the global environment. World Bank serves as the GEF trustee, administering the fund.



GEF Funds are available to developing countries and countries with economies in transition to meet the objectives of the international environmental conventions and agreements.

GEF serves as a "financial mechanism" to five Conventions:

- 1. Convention on Biological Diversity (CBD)
- 2. United Nations Framework Convention on Climate Change (UNFCCC)
- 3. Stockholm Convention on Persistent Organic Pollutants (POPs)
- 4. UN Convention to Combat Desertification (UNCCD)
- 5. Minamata Convention on Mercury

11.4 Green Climate Fund (GCF)

Parties agreed to establish a Green Climate Fund (GCF) to provide financing to projects, programmes, policies and other activities in developing countries. GCF is based in **Incheon, South Korea** and World Bank was invited to serve as its interim trustee. GCF is intended to be the centrepiece of efforts to raise climate finance of \$ 100 billion by 2020.

GCF has decided to give 50:50 balance between mitigation and adaptation. It also aims for a floor of 50 percent of the adaptation allocation for particularly vulnerable countries, including Least Developed Countries (LDCs), Small Island Developing States (SIDS) and African States.

11.5 Global Climate Finance Architecture



Funds Administered by GEF

- Special Climate Change Fund (SCCF) was created in 2001 to address the specific needs of developing countries under the UNFCCC. Adaptation to Climate Change in the top priority of SCCF.
- "Least Developed Countries Fund" was established to meet the adaptation needs of least developed countries (LDCs). The Fund is administered by GEF.



Funds Administered by European Union

- Global Climate Change Alliance (GCCA) is an initiative of European Union. Its overall objective is to build a new alliance on climate change between the European Union and the poor developing countries that are most affected and that have the least capacity to deal with climate change.
- Global Energy Efficiency and Renewable Energy Fund (GEEREF) is a Public-Private Partnership (PPP) designed to maximize the private finance leveraged through public funds funded by the Eucopean Commission and managed by the European Investment Bank. GEEREF is envisaged as a "fund of funds".
- International Platform on Sustainable Finance (IPSF) was launched by European Union as a part of the international efforts to meet the Paris Agreement Commitments. India is also a part of the initiative.





WORLD BANK

Funds Administered by World Bank

- "BioCarbon Fund Initiative for Sustainable forest Landscapes (ISFL)" is a multilateral fund, supported by donor governments and managed by the World Bank. It promotes and rewards reduced greenhouse gas emissions and increased carbon sequestration.
- "Forest Carbon Partnership Facility" is a global partnership of governments, businesses, civil society and indigenous peoples. It assists the countries in their REDD+ efforts by providing them with financial and technical assistance.
- "Partnership for Market Readiness" is a partnership of developed and developing countries administered by the World Bank, established to use market instruments to scale up mitigation efforts in middle income countries.



•Climate Investment Funds (CIFs), administered by World Bank, has following two multi-donor Trust Funds:

- Strategic Climate Fund (SCF) which focusses on areas like Adaptation, Mitigation-general and Mitigation-REDD. SCF serves as an overarching framework for the following three programs:
- •Forest Investment Program (FIP) which supports developing countries efforts to reduce deforestation nad forest degradation and promotes sustainable forest management.
- •Pilot Program for Climate Resilience (PPCR) which aims to pilot and demonstrate ways in which climate risks and resilience may be integrated into core development planning and implementation
- •Scaling-Up Renewable Energy Program for Low Income Countries (SREP) which aims to demonstrate the economic, social and environmental visibility of low carbon development pathways in the energy sector in low-income countries.
- •Clean Technology Fund (CTF) which aims at promoting scaled-up financing for demonstrations, deployment and transfer of low carbon technologies with significant potential for long term greenhouse emissions savings.