Environment Class 19

2nd April, 2024 at 9:00 AM

4. FORESTS RIGHT ACT, 2006 (09:07 AM)

- The Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forests Rights), Act 2006 implemented by the Ministry of Tribal Affairs.
- Landmark legislation aims to correct historical injustices suffered by indigenous communities regarding the access and use of forest resources.
 - The main provisions are:
 - 1. Recognition of Forest Rights:
 - The act recognizes forest rights to forest-dwelling communities to forest-dwelling communities.
 - This includes individual and community rights such as title rights: and legal recognition over traditional lands (Maximum 4 hectares), which people cultivating or residing in.
 - •b) 2. Use Rights:
 - It provides the right to extract use and manage forest produce to collect Minor Forest Produce including Bamboo, Honey, Wax, etc., lac, tendu, medicinal plants, herbs among others.
 - c)3. Relief and Development Rights:

Rights of Rehabilitation in case of eviction or forced displacement.

- •d) 4. Management Rights: Conservation and Management Rights:
- Right to Protect, conserve and manage any community forest resource.
- e) 5. Habitat Rights.

agrarian

- Habitat rights are given to PVTGs who are pre-agricultural communities These rights are given over a fairly large area.
 embedded in their territory that forms their habitat.
- It includes rights livelihood, and social and cultural practices in their habitat.
- The **Bharia** tribe in MP and the **Baiga community** in Chattisgarh were given habitat rights.
- Thus Forest Rights Act includes both individual rights such as self-cultivation, and habitation.
- As well as community rights such as grazing fishing, access to water bodies, and management of community forest resources among others.

•2. Eliaibility

- Members of scheduled tribes and non-ST forest dwellers who have resided on the forest land for more than three generations or 75 years before December 2005.
- 3. Implementation: This act comes under the Ministry of Tribal Affairs.
- The act was involved with a bottom-up approach involving a three-tier structure.
- i. Gram Sabha: It initiates the process by receiving claims and conducting enquiry.
- ii. Sub-Divisional Level Committee: Reviews the recommendations made by Gram Sabha
- iii. District-level committee: Makes final decision on recognition of rights.
- 4. Critical Wildlife Habitat:
- It is defined as areas within National Parks and Sanctuaries, where certain rights can be modified or resettled for wildlife conservation.
- This will be done on a scientific basis by experts in consultation with local communities with suitable resettlement packages.

GOVERNMENT POLICIES FOR FOREST CONSERVATION (09:43 AM)

- 1. National Afforestation Policy, 1988; 33 percent of forest cover.
- 2. Green India Mission
- Goal is to have
- It is one of the plans of National Action Plan on Climate Change
- Growth in forest or tree covers to 5 Million hectares and increase the quality of forest by another 5 million hectares.
- Joint forest management: This was introduced as part of the National Afforestation Policy.
- This is implemented under an arrangement between village communities (beneficiaries,) and a state forest department, committee called forest protection committee is constituted
- The committee consists of one or two members from each family of the village, this committee with the local forest department, jointly manages the forest block.
- Social Forestry:
- It means the management and protection of forests and afforestation, on barren lands, with the help purpose of environmental social and rural development.
- It can include urban forestry, and the use of the Miyawaki method to increase forest cover in urban areas. It also include rural forestry such as agro-forestry (raising of trees and crops on same land).

Global Initiatives:

UN-REDD & UN-REDD+ (09:57 AM)

- UNREDD (Reducing emissions from deforestation and forest degradation), is the UN knowledge and advisory platform on the forest solution to the climate crisis.
- It was launched in 2008 and uses the expertise of UNEP, FAO, and UNDP as of now UN-REDD supports REDD+ processes.
- The plus refers to the conservation, sustainable forest management, and enhancement of forest carbon stocks.
- It is a framework created by UNFCCC at COP 19, 2013 in Warsaw, Poland.
- It aims to increase the forest cover.
- Parties agree that REDD+ should be implemented in phases:
- 1. Adoptiong National Strategies
- 2. Implementation of National Policies
- 3. Result-based payment
- Forest carbon partnership facility, the global partnership of government businesses, civil society, and indigenous people, helps developing nations in the implementation of REDD+.
- United Nations has declared the current decade 2021-2030 as the UN decade on ecosystem restoration, including restoring both terrestrial and aquatic ecosystems.
- •Ex:The Namami Gange Program is recognized as one of the projects under the objectives of ecosystem restoration.

This involves National strategies, Action plans, policies and measures and result based challenge. REDD+ activities were recognized and supported by UN-REDD.

1700-1000 Water stressed condition 1000-500 Water scarcity condition Less than 500 Absolute scarcity condition

WATER CONSERVATION (10:26 AM) (Imp.)

- As per the Central Water Commission, the per capita availability of freshwater in India will decrease from 1434 cubic metres in 2005 to 1219 cubic metres in 2050.
- Water availability of 1700-1000 cubic mp per person per year, is water stressed condition
- 1000-500 is water scarcity and less than 500 is absolute scarcity.
- India accounts for more than 17 percent of the world's population with about just 4 percent of water resources, out of total water on planet Earth, 97 percent is marine.
- Out of 3 percent fresh water, about 68.7 percent is ice caps, glaciers and permafrost, 30.1 percent ground water, 0.26 percent lakes, 0.05 percent soil moisture, 0.04 percent atmosphere and about 0.006 percent in rivers. (do remember decreasing order of fresh water.)
- India accounts for 25 percent of global groundwater extraction out of which 90 percent is used, in agricultural activities.

INSTITUTIONS (11:02 AM) (There are three bodies under Ministry of Jal Shakti)

- 1. Central Water Commission
- Responsible for research and development and policy formulation in water planning and projects.
- •2. Central Ground Water Board
- To monitor and implement policies for sustainable management of groundwater resources.
- 3. Central Ground Water Authority
- It is a statutory body created under the Environment Protection Act, to regulate the development and management of groundwater resources.

★ Government Initiatives:-

- 1. National Aquifer Mapping and Management Programme:-
 - -> It is a central sector scheme implemented by CGWB (Central Ground Water Board) for sustainable management of ground water resources or aquifers.

2. Atal Bhujal Yojna:-

-> World Bank approved central sector scheme in selected states (Gujarat, Karnataka, Haryana etc.)

3. Watershed Development:-

-> Watershed is an area of land that drains water into a specific water body thus every body of water has a watershed, water also seeps into the ground helping in ground water recharge, watershed management involves a holistic approach focusing on the entire ecosystem and its components including soil, water, vegetation and wildlife.

4. UN Water conference 2023 (in New York):-

-> It was second such conference and the first was held in 1977 in Argentina. However, it does not lead to any binding mechanisms non-binding resolutions by governments, pvt. companies were announced.

SUSTAINABILITY IN AGRICULTURE (11:42 AM)

- Problems due to current agricultural practices:
- a. Biodiversity Loss:
- Monocropping
- Slash and Burn Agriculture
- b. Land degradation
- Excessive fertilisers and pesticides
- Excessive water.
- Intensive Tillage (degradation of soil)
- c. Water Pollution:
- Excessive Pesticides and Fertilisers
- Eutrophication
- d. Water Scarcity
- Water guzzling crops
- e. Air Pollution
- Stubble burning,
- f. Global Warming and Climate Change
- CH4 Emission due to crops such as rice.
- N20 due to animal manure, and the fertilizer industry.
- g. Negative impact on human health.
- Excessive fertilizers and pesticides.
- Monocropping

SUSTAINABLE AGRICULTURE METHODS

- a)Diversification
- b)Millet Cultivation (study this in detail)
- c) Mulching: Covering the soil surface around plants with a layer of material which can include organic matter such as straw, leaves, and wood chips, but can also include inorganic material such as plastic gravel,
- Mulching helps in moisture conservation, temperature regulation, soil erosion control, improved fertility of soil, and enhancing soil organic matter.

Topic for The Next Class: Sustainable Agriculture (Continued)